

RESERVED FOR HALL USE.

Boston Public Library.

This Book is to be used within the Railing.









Number 145.

50 Cents.

THE

PHILADELPHIA

Photographer.

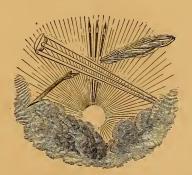
AN ILLUSTRATED MONTHLY JOURNAL,

DEVOTED TO PHOTOGRAPHY.

THE OFFICIAL ORGAN OF THE NATIONAL PHOTOGRAPHIC ASSOCIATION OF THE UNITED STATES.

EDITED BY EDWARD L. WILSON.

January, 1876.



PHILADELPHIA:

BENERMAN & WILSON,

PUBLISHERS,

S. W. COR. SEVENTH AND CHERRY STS.

Subscriptions received by all News and Stock-Dealers.

FIVE DOLLARS PER ANNUM, IN ADVANCE.

Sherman & Co., Printers, Philadelphia.

SUMMARY OF CONTENTS.

PA	GE	P.A.	AGE.
The New Year	1	The Theory of Blisters	14
Address from President Rulofson	1	Belgium Correspondence. By Chas. Waldack	15
Photography in Palestine	2	German Correspondence. By Prof. H. Vogel	17
Full and Running Over	4	French Correspondence. By Prof. E. Stebbing	19
High Powers in Micro-photography. By C. SEILER,		Connecticut Correspondence. By E. T. WHITNEY	23
М D	6	Our Picture	24
Retouching Negatives	8	Acid v. Alkali. By W. W. SEELER	25
Burnishing Made Easy. By E. A. CLEAVELAND,	12	Obituary	26
Promenade Style for Gentlemen. By E. K. Hough	12	The Printer's Corner. By Chas. W. Hearn	26
A Response to Mr. Pearsall. By E. K. Hough	12	Talk and Tattle	28
Hints to Beginners. VIII. By L. T. WILT	13	Society Gossip	28
An Eye-Rest for Sitters. By FREDERICK H. CLARK,	14	EDITOR'S TABLE	30

EMBELLISHMENT.—Competing Promenade Picture. Negatives by LYMAN G. BIGELOW, Detroit, Mich. Prints made at Benerman & Wilson's Philadelphia Photographer Printing-rooms.

ADVERTISEMENTS.

ALBA PLATES. ANTHONY & Co., E. & H. T. Adamantean Plates. BENERMAN & WILSON. Lantern Slides. BIGELOW'S ALBUM OF LIGHTING AND POSING. BULLOCK & CRENSHAW. Photographic Chemicals. BURRELL, D. T. Photo. Chart, etc. CAMEO PRESS, THE UNIVERSAL. CARBUTT, J. Rapid Dry Plates. Collins, Son & Co., A. M. Photograph Cards. COOPER, CHAS. & Co. Dresden Albumen Papers, etc. ENTREKIN BURNISHER. FOREIGN PRIZE PICTURES. FRENCH, B. & Co. Voigtlander Lenses, &c. GENNERT, G. Albumen Papers. GIHON, JOHN L. Opaque and Cut-Outs. HANCE'S PHOTO. SPECIALTIES. HEARN'S PRACTICAL PRINTER. HERMAGIS' PORTRAIT LENSES. HINTS ON COMPOSITION, HOWSONS' PATENT OFFICES. IMPROVED PHOTOGRAPH COVERS. LEWIS, R. A. Collodion.

Long & Smith. Frames, Albums, etc. MAGEE, JAMES F. & Co. Photographic Chemicals. McCollin, Thos. H. Photo. Materials and Frames. MOORE, ALBERT. Solar Printing. Mosaics, 1876. PATTBERG, LEWIS & BRO. Passepartouts, &c. PHOTOGRAPHER'S POCKET REFERENCE-BOOK. PHOTOGRAPHIC PUBLICATIONS. PHOTOGRAPHER TO HIS PATRONS. PROMENADE PRIZE PICTURES. ROBINSON'S PHOTO. TRIMMER AND METALLIC GUIDES. Ross' Portrait and View Lenses. RYAN, D. J. Southern Stock Depot. SAUTER, G. Passepartouts. VOGEL'S HAND-BOOK OF PHOTOGRAPHY. WALLACH, WILLY. Trapp & Munch's Albumen Paper. WAYMOUTH'S VIGNETTING PAPERS. WILSON, CHAS. A. Baltimore Stock Depot. WILSON'S LANTERN JOURNEYS. WOODWARD, D. A. Solar Cameras. ZENTMAYER, JOSEPH. Lenses.

119 South Fourth St. PHILADELPHIA.

Branch Office, 605 Seventh Street, WASHINGTON. D. C.



H. HOWSON,

Engineer and Solicitor of Patents.

C. HOWSON,

Attorney at Law, and Counsel in Patent Cases.

Hearn's PHOTOGRAPHIC Printing Institute,

FOR

PRINTING FOR THE TRADE, AND FOR INSTRUCTIONS IN THE ART OF PRINTING.

THE undersigned, author of the "PRACTICAL PRINTER," and for the past year printer for the Philadelphia Photographer, desires to say that he has leased the spacious and well arranged printing rooms of Messrs. Benerman & Wilson, for the purpose of giving photographers an opportunity of obtaining instructions in all the details of perfect printing, and for printing for the trade.

He respectfully refers to his WORK, many thousand examples of which are before the readers of this Magazine, as a guarantee of his entire ability to at-

tend to both branches well.

Having had the opportunity, during the last year, to see the many pictures from all parts which came to the office of the editor of the "Philadelphia Photographer," he is surprised to see how many photographers there are who make perfect negatives, but who are seemingly totally ignorant of what good work can be obtained from them, judging from their own prints.

If you would increase your trade send your negatives to the Institute to be printed.

If you wish to perfect yourself in photographic printing, come to the Institute and be instructed.

ALL STYLES AND CLASSES OF PRINTING DONE,
BOTH IN

Portraiture and Views.

The Plain, Vignette, Medallion, Plate, or Grey Printing, etc., will meet with careful and prompt attention.

Plain Paper Printing, and printing of all kinds on Porcelain, a specialty.

Retouching Negatives will be a department of itself, and none but first-class artists will be engaged upon this very artistic branch of photography.

Glace work of all sizes and styles will be done expeditiously and in a superior manner.

Please send for my Circular of Prices, etc., which will give full particulars as to all branches of instruction, and of printing for the trade.

Hoping, by prompt and careful attention, to merit your orders, I remain,

Respecfully yours,

CHARLES W. HEARN.

No. 126 N. Seventh St., Philadelphia.



DOUBLE IODIZED PORTRAIT COLLODION.

ANDERSON'S PORTRAIT COLLODION.

WHITE MOUNTAIN LANDSCAPE COLLODION.

NIAGARA FALLS LANDSCAPE COLLODION.

TRASK'S FERROTYPE COLLODION.

HANCE'S BATH PRESERVATIVE.

HANCE'S GROUND GLASS SUBSTITUTE.

HANCE'S DELICATE CREAM GUN COTTON.

HANCE'S SILVER SPRAY GUN COTTON.

HEARN'S COLLODIO-CHLORIDE.

GILL'S CHROMO INTENSIFIER.

CUMMINGS' GRIT VARNISH.

Manufactured from the best chemicals that can be procured in the market, manipulated with the greatest care.

Each article warranted to do the work claimed for it, if used according to the directions plainly printed on the label accompanying each bottle or package. These preparations are noted for their purity and uniformity, and have for years been used in the most celebrated galleries in the United States and Canada.

FULL MEASURE CUARANTEED.

For Sale by all Stock-dealers in the United States and Canada.

A. L. HANCE, Manufacturer, 126 NORTH SEVENTH STREET, PHILADELPHIA.

Read detailed advertisments on succeeding pages.

FROM THE MANY

COMMENDATORY LETTERS

Testifying to the superior qualities of

HANCE'S SPECIALTIES

WE HAVE ROOM ONLY FOR THE FOLLOWING:

"I consider the Cotton the best we have ever used as yet."-R. POOLE, Nashville, Tenn.

"The film of the Cotton you sent me was unusually smooth and firm, being entirely free from glutinosity, and setting like India-rubber. It was quite powdery and crumbled to pieces in my fingers, 'as if rotten.' It dissolved almost instantaneously, and it was 'by far' the very best material I have ever used. I sincerely trust that you will send me the same kind again."—ELBERT ANDERSON, Kurtz Gallery, New York.

"I received your Double-Iodized Collodion all right, and in good shape. Have tried it pretty well. It gives very fine negatives and good detail."—W. E. HART, Watertown, N. Y.

"We take pleasure in recommending Hance's Double-Iodized Collodion as a first-class article, in fact it is the best manufactured Collodion we have tried."—SCHREIBER & SONS, No. 818 Arch Street, Philadelphia.

"The goods by Express came safe to hand. I have tried a part of them and am greatly pleased. Will likely want more goods in your line."—R. POOLE, Nashville, Tenn.

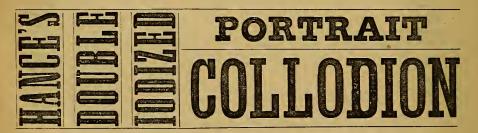
"Your Ground Glass Substitute is the best I have ever tried, and I have tried nearly every kind advertised, as the long row of nearly full bottles will testify. It works like a charm."—J. N. Webster, Barton, Vt.

"I take pleasure in recommending your Cottons and Collodions, before all others I have used. It is a blessing to know where you can get good Cotton."—B. W. KILBURN, Littleton, N. H.

"The last lot of Cotton you sent is the very best I have ever used. Please send me another pound at once."— ELBERT ANDERSON, Kurtz Gallery, New York.

"Have used some twenty-five pounds of your Collodion the past year with unvarying success."—G. W. Hope, Middletown, New York.

"Your Double-Iodized Collodion is the most perfect working Collodion I have used in fifteen years. Every picture I make with it is a success."—R. L. Dale, Boston, Mass.



Has now become the standard Collodion in all first-class galleries. Although but a short time in the market it is rapidly superseding all other makes, and the quantity that has been sold is simply astonishing.

Give it but a single trial and you will be convinced. Can be used as soon as made, but improves with age, and will keep indefinitely.

Price, \$1.50 per pound.

A liberal discount to parties ordering by the gallon. READ ADVERTISEMENTS ON PRE-CEDING PAGES.

1776. PREPARE FOR THE CENTENNIAL. 1876.

PROMENADE PRIZE PICTURES.

JULY COMPETITION.

To enable all photographers to study these

GEMS OF ART,

We offer prints from the competing negatives, for sale at the prices below.

They are the most exquisite things we ever offered, and will teach any one, be he a good or poor operator.

THE GOLD MEDAL

Was awarded for the best six negatives to Mr. Henry Rocher, Chicago, Ill., whose pictures are marvels of beautiful photography. The studies are all mounted in tasteful style, on Collins' Mounts, and printed at our own rooms by Mr. Chas. W. Hearn, and are fine studies in posing, lighting, printing, and toning.

THE SETS INCLUDE:

Nos.	1	to	7,						Studies b	y H. Rocher, Chicago.
**	8	to	16,						**	L. G. Bigelow, Detroit, Mich.
	17	to	22,						"	I. W. Taber, San Francisco, Cal.
4.6	23	to	27,						**	C. M. French, Youngstown, O.
44	28	to	31,						"	Core & Frees, Tiffin, O.
"	32	to	37,						44	E. M. Collins, Oswego, N. Y.
"	38	to	42,						44	J. H. Folsom, Danbury, Conn.
"	43	to	48,						"	E. H. Alley, Toledo, O.
Se	e I	Rev	iew	$_{ m in}$	A	ugi	ast	n	umber Ph	iladelphia Photographer, page 242.

The whole set	of 48, .											. ;	\$12	00
In two Photo.	Covers,												13	50
Selections, per	dozen,.												4	00
" per	two doz	er	1,										7	00
The 21 of Messa	s. Roche	r,	Bi	ge	lo	w	, a	n	d 7	Га	be	r,	6	00
Book Covers a	nd Bindi	nç	Ι,											75

Address all orders to

BENERMAN & WILSON, Publishers,
Seventh and Cherry Sts., Philadelphia.

OHN DEAN & CO.

Worcester, Mass.,

Manufacturers of the

NONPAREIL PLATE,

A substitute for Porcelain. The new NONPAREIL PICTURES have elicited the most general expressions of approval and admiration. The latest improvement simplifies the formula and insures success. Our Plates are stamped. Patented July 29, 1873, and June 16, 1874. All others are spurious.

FERROTTE **ADAMANTEAN**

BLACK, AND PATENT CHOCOLATE-TINTED, EGG-SHELL, AND GLOSSY.

The experience and extensive facilities of JOHN DEAN & CO. enable them to produce the most desirable FERROTYPE PLATES in the market.

> E. & H. T. ANTHONY & CO., Trade Agents, 591 Broadway, New York.

IMPROVED

PHOTOGRAPH COVERS.

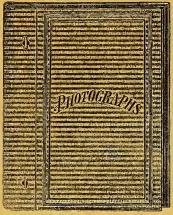


Fig. 1.

The Outside Appearance,

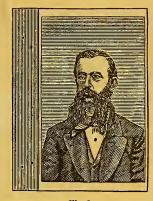


Fig. 2.

A Leaf Showing the Guard.

Frequent inquiries for something at a much lower price than an album, for the holding together and preservation of photographs, has induced us to manufacture an article which we think will meet the want.

IT SERVES ALL THE PURPOSES OF AN ALBUM, FOR

A Series or a Set of Portraits,

A Series or a Set of Landscapes.

A Series or a Set of Photographs of any kind,

MAY BE NEATLY AND CHEAPLY BOUND IN THESE COVERS.

They are made with expanding backs, so that from six to twenty-four pictures may be They are made with expanding backs, so that from six to twenty-four pictures may be inserted in one cover. The pictures are mounted in the usual way, and then strips of linen, or strong paper, of the proper width, are pasted on one edge, by which the picture is inserted and held in place in the cover by a paper fastener. Fig. 1 represents the cover, with the perforations in the back, through which the spreading clasps of the paper fastener bind the whole together. These are so easily inserted or removed, that pictures are readily put in or taken out at any time. Fig. 2 represents the picture, with the guard pasted on ready for insertion. The arrangement is simple, and we are sure will be readily comprehended. For binding together views of your town or city, or portraits of celebrities, they are very neat

The following is a list of sizes and prices, without cards:

For Photograph.			Per dozen.					Per hundred.
Card Size, .			\$1.50					\$10.00
Cabinet Size,								
EXTRA HEAVY COVERS								
5-8 Size,			4.50	o		,		33.00
4-4 "								
8-10 "								
11-14 6								

Larger or special sizes made to order. Furnished with card board at best rates. Samples mailed at dozen price. Send for some.

BENERMAN & WILSON, Photo. Publishers. Seventh and Cherry Streets, Philadelphia.

JAMES F. MAGEE & CO.

MANUFACTURERS OF

PURE

PHOTOGRAPHIC CHEMICALS,

No. 108 North Fifth Street,

PHILADELPHIA.

Stock Dealers only Supplied.

TO PHOTOGRAPHERS!

I have long felt the need of something to show my customers, before sitting, that would give them a clear idea how the various shades of drapery would appear when photographed. After considerable study and expense I have devised a chart comprising thirty-five pieces of silk, woollen, cotton, and lace goods, etc., with the name of each color distinctly printed. Each piece is made into a bow, so as to give the very best effect of light and shade (see cut). The print is $10\frac{1}{2} \times 12\frac{1}{2}$, mounted on 13×15 extra thick tinted eard board.



COPYRIGHTED.

I have placed them within the reach of All, at the very lowest price of \$1.25, by express, or sent by mail, *unmounted*, post-paid, as you wish, thus saving an express bill. All orders addressed to me will receive prompt attention. Also, for sale by the principal stock-dealers.

"HINTS TO MY PATRONS."

The above is the title of a selection of Rules and Hints for the benefit of our sitters and customers, saving a great many questions being asked, and showing them what they are responsible for. I have found these so useful in my own gallery, and wishing that you may all be benefited, I send them FREE with chart, on application, or without chart on receipt of ten cents, post-paid. The above I have printed on 8 x 10 tinted card board, in plain type. They should hang in every studio. All orders to be addressed to

D. T. BURRELL, Brockton, Mass.

BENJ. FRENCH & CO.,

159 WASHINGTON ST., BOSTON,

IMPORTERS AND SOLE AGENTS FOR THE CELEBRATED

Voigtlander & Son AND Parlot LEWSES,

NEW STEREOSCOPIC LENSES.

New Stereoscopic Tube and Lens, made expressly for us, marked with our name (imitation Dallmeyer), with rack and pinion, central stops, for portraits or views. Will work in or out of doors. Also, for instantaneous pictures. Four inch focus, **price per pair**, \$21.00. By taking out back lens, and using only front lens in place of back, you get six inch focus. The great and increasing demand for all these lenses, is sure guarantee that they are the best. Read the following

Testimonials.

"I have tried the Mammoth Voigtlander you sent me, and I consider it the best large instrument I have ever seen, and I have tried those made by other makers, Dallmeyer's included, and they do not compare with the Voigtlander. All my baby pictures were made with half-size Voigtlander lenses."—J. Landy, 208 W. Fourth St., Cincinnati, Feb. 25, 1874.

"The Voigtlander lenses have always been favorites with me. My first experience, in the days of daguerreotype, was with one, since which I have owned and tried many of the different sizes and never saw one but was an excellent instrument. Lately again trying some for my own use and for a friend, I found them to be superior to other eminent makers, particularly in the large sizes."—W. J. Baker, Buffalo, N. Y.

"Twenty-four years ago I bought and commenced using my first Voigtlander lens. It was a good one. Since then I have owned and used a good many of the same brand, of various sizes. They were all and always good. Some of the larger sizes that I have recently bought seem to me better than any I have ever had or seen before."—J. F. RYDER, Cleveland, Ohio, Dec. 18, 1872.

"About a year ago I bought a Voigtlander & Son No. 3 4-4 size lens. Said instrument gives me great satisfaction, being very quick, at the same time has great depth of focus."—E. G. MAINE, Columbus, Miss.

"Have never seen anything equal to the Voigtlander & Son Lens. The No. 5, Ex. 4-4 is the best instrument I ever used. I cannot keep house without it."—D. B. VICKERY, Haverhill, Mass.

"The pair of imitation Dallmeyer Stereoscopic Lenses you sent we are very much pleased with; they work finely."—GOODRIDGE BROS., East Saginaw, Mich.

"After a trial of your imitation Dallmeyer in the field with those of the Dallmeyer Rapid Rectilinear, side by side, I can say that for general views I like yours as well, for some objects far better, on account of their short focal length."—D. H. Cross, Mosher's Gal., *Chicago*.

New Catalogue of Prices Just Issued, to be had on Application.

WILSON'S

Lantern Journeys

By EDWARD L. WILSON,

Editor of the "Philadelphia Photographer."

This work will be found entertaining by all who like to read about the beautiful places and things of this world.

The contents are divided into six "Journeys," each one including a visit to 100 places, making 600 in all, as follows:

- JOURNEY A-Havre, Paris, Versailles, Rouen, Fontainebleau, and Switzerland.
- JOURNEY B—Compiegne, Brussels, Aix la Chapelle, Cologne, Up and Down the Rhine, Potsdam, Berlin, Dresden, Vienna, the Vienna Exposition, the Semmering Pass, Saxony, Munich, and Southwest Germany.
- JOURNEY C—Italy—Lake Maggiore and Como, Milan, Verona, Venice, Florence, Pisa, Rome, Naples, Pompeii, the Ascent of Vesuvius, Puteoli, and the Italian Art Galleries.
- JOURNEY D-Holland, Denmark, Norway, Sweden, Russia, and Spain.
- JOURNEY E-Egypt, Palestine, Syria, Turkey, Greece, and India.
- JOURNEY F-England, Scotland, and the United States of America.

It has been carefully prepared, and will be found amusing, very entertaining and instructive.

It contains 218 pages, Cloth bound, Gilt. Price, \$2.

BENERMAN & WILSON,

Photo. Publishers, Philadelphia, Penna.





PHILADELPHIA

PHOTOGRAPHER.

EDITED BY EDWARD L. WILSON.

VOLUME XIII.

PHILADELPHIA:
BENERMAN & WILSON, PUBLISHERS,
116 NORTH SEVENTH STREET.
1876.

20 × × 0 ? 20 × × 0 ?

Entered according to Act of Congress, in the year 1876,

BY BENERMAN & WILSON,
in the office of the Librarian of Congress, at Washington, D. C.



PHOTOGRAPHIC EMBELLISHMENTS.

January. Promenade Portrait of a Lady. First Promenade Prize series. By Mr. LYMAN G. BIGELOW, Detroit, Mich. February. Promenade Portrait of a Lady. Second Prize series. By Mr. F. B. CLENCH, Lockport, N. Y. March. Landscape View in Ausable Chasm. By Mr. S. R. STODDARD, Glens Falls, N. Y. April. Promenade Portrait of a Lady. Second	July. Cabinet Port GILBERT & BA August. Main Buildi tion. By the COMPANY, Phil: September. Interior of nial Exhibition GRAPHIC COMP. October. Photographi
Prize series. By Mr. G. M. Elton, Palmyra, N. Y. May. Promenade Portrait of a Lady. Second Promenade Prize Picture. By Mr. LYMAN G. BIGELOW, Detroit, Mich. June. Promenade Portrait of a Lady. By Mr. J.	Benermau & W November. View of a George's Hill. Wilson, by Joh December. Cabinet P raphy." By M
H. KENT, Rochester, N. Y.	Mich.

trait of a Lady. By Messrs. 1000, Philadelphia, Pa. 1119 of the Centennial Exhibitive Centennial Exhibitive Centennial Photographic Hall, Centennial Photographic Hall, Centennial, By the Centennial Photographia. 1119 of Photographia Photographia. 1119 of Photographia Photograph

ILLUSTRATIONS ON WOOD.

P	AGE	P	AGE
A Copying Attachment	345	Lecture on Lenses. Illustrated 173, 174, 175,	
A Filtering Tray	20	176, 177, 216, 217, 218, 242, 243, 244, 267, 268,	
A Good Siphon	116	269, 295.	, 296
A New Photometer	22	Multiplying Camera Attachment141,	. 142
An Eye-rest for Sitters	14	Photographic Hall	60
	168	Photographic Hall, Ground Plan	61
Apparatus for Indicating the Quantity of Acid		Radiometer	203
in a Solution	205	Sash Bar for Skylights	103
Baths for Cleaning Plates	266	Skylight Construction	101
Decanting Apparatus	20	Skylight Recommended by L. G. Bigelow	102
		Skylight with Inclined Sidelight	103
Fac Simile of the Work of a Rising Artist	132	Skylight with Side and Top Light	102
Instantaneous Exposing Slide for Lens	92	Vanderweyde System of Lighting	84

ILLUSTRATED BY PHOTO-ENGRAVING.

P	AGE	F	AGE
		Error in Using Background, Russian	
Arrangements of Lines Leads to Hands	310	Error in Using Background, Americau	
Background for Standing Figure	309	Lines Leading to Face	310
Breadth of Light and Shade	308	Lines of Drapery and Accessories Centre Inter-	
By the Sea	310	est on the Face	
	314	Peculiar Composition	313
Disarrangement of Bows	314	Relief of Figure by Lights and Shades of Back-	
Effect of Background Turned the Wrong Way,	313	ground	312

CONTENTS.

PA	GE	F	AGE
Academy of Sciences, San Francisco. Dr. Vo-		Bromide of Silver, New Researches as to the	
gel's Lecture	265	Action of Sensitizers on. Prof. H. Vogel.	177
graphic. Robert J. Chute	37	Brown, W. Letter from	352 208
Accidents in the Printing Department. Ron-	68	Burnishing Made Easy. E. A. CLEAVELAND	19
ERT J. CHUTE	68	Burnet a Humbug, Is.	12 70
Acetate of Lead for Strengthening Negatives. S 1 Acid vs. Alkali. W. W. SEELER	108	Burrin's, D. T. Chart of Ribbons and Dress	
Acid vs. Alkali. W. W. SEELER	25	Goods	31
Acids in a Solution, New Apparatus to Indicate		Butler, H. Landscape Formula	235
the Quality of. Prof. E. STEBBING	203		
Address from President Rulofson	1	Cadwalladar John Photographia Bights	170
the N. P. A. Convention	272	Cadwallader, John. Photographic Rights Cadwallader, John. Resolutions on advance	1.0
Address of Local Secretary, Robert J. Chute, before the N. P. A. Convention		Payment	314
before the N. P. A. Convention 2	273	California Correspondence. J. P. Spooner	105
Address of President Rulofson before the N.P.		Canada Correspondence. RICHARD W. BAR-	
	274	ROW	, 106
	303 304	Cameo Pictures with Dim Margin. TRANSLA-	138
Address by I. B. Webster before the N. P. A	305	Camera, a New. Prof. E. Stebbing	269
Address by Abraham Bogardus before the N.P.A	306	Carbon Process, Dr. Van Monckhoven's. CHAS.	2.00
Address of President Rulofson in Photographic	1	WALDACK	18
Hall 3	314	Carbon Printing Process, Mr. Sawyer and the.	
Advance Column, Our	236	Dr. H. Vogel	17
WALLADER 3	314	Carbon Printing Process during the Dull Sea-	
	67	son, Employment Furnished by the. Prof. H. Vogel	50
Albumen Paper. Charles W. Hearn	164	Carbon Revival, The	65
Alkaline Developer with Iron. Prof. H. VOGEL. 1	113	Carbon Printing, Allen & Rowell's Method of	65 72
Alkaline Development. Prof. E. STENBING 1 Alkaline Development, The New. Prof. E.	154	Carbon Process, Negatives by. Prof. H. Vogel. Carbon vs. Silver Printing. Prof. H. Vogel	76
Alkaline Development, The New. Prof. E.		Carbon vs. Silver Printing. Prof. H. Vogel	113
	$\frac{179}{72}$	Carbon and Collotype Printing. Prof. E. STEB-	110
	166	Carbon Process Under Difficulties. Prof. H.	115
	120	Vogel	346
Animus	256	Carbon Process, About Faults and their Pre-	
Another Secret of Success 3	360	vention in the. Prof. H. Vogel	369
Annual Report of the President of the Photo-		Carbutt, John. Directions to Exhibitors in	
	112	Photographic HallCard of Invitation. Prof. E. STEBBING	125
Applicants for Space in Photographic Hall	288 59	Cartagraphy (Manning) About P A MOTTH	366 238
A Rising Artist	132	Cartography (Mapping), About. P. A. MOTTU. Centennial Photographic Exhibition, The	42
	97	Centennial Exhibition, Preparations for. Prof.	
Art and Chemistry in Photography 2	206	H. Vogel	50
Art Monthly Review and Photographic Port-		Centennial Photographic Diary119, 164	, 219
folio	320	Centennial Lantern Slides	237
	251	Centennial The	$\frac{371}{341}$
Awards, Centennial		Centennial, The	83
11,11,11,11,11,11,11,11,11,11,11,11,11,	1	Chicago Photographic Society4	8, 91
		Chicago Photographic Society	
	307	to the Metallic State. Prof. E. STEBBING	366
Balard, Mons., Death of. Prof. E. STEBBING 1	154	Chromotype, Lambert	377
Roldwin, O. N. W. Cleaniness in Fnotography. 1	135 237	Chute Pobert I Legal Secretary's Call	37 162
Barr, D. P. Alum in Washing Prints	84	Chute Robert J. Lessons in Photographic Hall	346
Barrington, Charles. Report on Excursion of	٠. ا	Chute, Robert J. Local Secretary's Address	273
Philadelphia Photographic Society 3	315	Clarification of Solutions of Gum Lac. TRANS-	
Barrow, Richard W.—Canada Correspondence.		Cleaveland, E. A. Burnishing Made Easy	137
Rools A I Lotter from	06	Cleaveland, E. A. Burnishing Made Easy	12
	350 192	Cleansing the Nitrate Bath, Simple Method of. Prof. E. STEBBING	91
Bedford, Francis. Landscape Photography and	192	Cleanliness in Photography. O. N. W. Bald-	J.
	118	WIN	135
Belgium Correspondence. Charles Waldack.	15	Cleaning Plates, Baths for. S. ROOT	266
Benerman & Wilson's Removal 1	91	Colored Screen for Lighting. PARIS CORRES-	
Bigelow, L. G. Prize Picture Formula 1	157	PONDENT PHILADELPHIA Evening Bulletin.	122
Blessing & Bros.' Price List	107	Collins, Ira T. Inquiry About Printing Bath	344
Blisters, Cure tor. S	107	Turning Yellow, in Sphyux Collodion Paper of Obernetter for Lantern Slides and Transparencies. Prof. H.Vooel, Connecticut Correspondence. E. T. WHITNEY.	011
T. H. LANE 1	109	Slides and Transparencies. Prof. H. VOGEL,	369
	232	Connecticut Correspondence. E. T. WHITNEY.	23
Blisters, Rain Water a Cure for. A. Q. ROUTH. 2	253	Convention, The Coming. Kanroad Rates, no-	040
	14	tel Fares, etc	219
Blistering of Albumen Prints. CHARLES WAL-	17	Contretynes Lambert	$\frac{225}{378}$
Bogardus, A. Dentist and Photographer 2	281	Co-operative Photography, E. K. Hough	331
Boiling Lenses and Burnishing Tintypes. L.		Copyright in Germany. Prof. H. VOGEL	50
	39	Contretypes, Lambert	366
Bovin's New Process. Prof. E. STEBBING	91	Correspondence, Personal. E. K. Hough	67
Boston Photographic Association, 30, 46, 91,	000	Correspondence. FERRIS C. LOCKWOOD	117
111, 143, 188, 212, 3	000	Correspondence, Milwaukee. SIGMUND SINGER	339

PA	GE	PAG	130
Crawford, S. W. Negative Process Crawford, L. W. Texas Correspondence	55	"For the Very Best Photographs go to Smith's."	-
Crawford, L. W. Texas Correspondence	239	J. F. SPOONER	80
Critchfield, W. B. How to Succeed	5 317	French Correspondence. Prof. E. Stebbing.	66
Crystals of Nitrite of Silver in Negative Bath.		19, 78, 91, 115, 154, 179, 203, 269, 36 French, Benjamin. President of the Boston	00
	179 351	Photographic Society	96
	128	Friedl Vac. The Positive Printing Rath 99	61 33
		run and Running Over	5
Darlot's Instantaneous Slides. Prof. E. STEB-		Future of Photography. Prof. H. Vogel 20	65
BING	91		
Davanne, Mons., on Metalic Spots in Paper.	10	Gaffield, Thomas. Glass for the Studio and	
Prof. E. STEBBING Davanne, Mons., On the Progress Made by	19		64 86
Photography in Science and Art. Prof. E.		Gems From Mosaics	62
STEBBING	366	Generous Photographer, A. Prof. E. Stebbing.	78
Decantation, Easy System of. Prof. E. Steb-	99	German Correspondence. Dr. H. Vogell. 17, 50, 76, 113, 152, 177, 346, 36	69
BING	19	German Exhibitors, List of. Prof. H. Vogel. 11	13
Deferred and New Businees of the N. P. A. J. H. FITZGIBBON	163	Geymet's, Mons., Fatty Ink Proofs. Prof. E.	E 1
Developement, Alkaline. Prof. E. Stebbing. 154,	269	Glass and Actinism 28	54 89
Distribution of Rewards at the "Society Belge."		Glass for Skylights. Thomas Gaffield 36	64
Prof. E. Stebbing Distortion in Photographic Prints. Carl	19	Glass for the Studio and Dark-Room. THOMAS GAFFIELD	07
MYERS	86	Glass for the Studio, Violet Colored Proposed.	97
Distortions in Photography, On Various. W.	328	Prof. E. STEBBING	66
C. TAYLOR	020	Glycerine, on the Use of. Dr. Phipson 1;	38
BARROW	55	Gobert, Mons. On Means Employed to Detect Forgery. Prof. E. STEBBING	19
Dry Plate Photography, New Process in. Prof. H. Vogel	113	Getchius, J. C. Heating a Burnisher and Using	~ x
	143		54 97
Dwight, M. C. Letter on Lambert Process	375	Grand Centennial Convention, A 19	46
		Great Universal Exhibition of 1878, The. Prof. E. Stebbing	co
Economy, False. T. D. LYON	242	D. O. E. D. I. C.	69
	179	T 0 0-1 1 1	
Edinburgh Photographic Society's Exhibition. Editor's Table30, 63, 95, 127, 159, 191, 223, 255,	287	Hance, George Cecil. A National Training School of Photography	62
288, 320,	351		79
Election of Officers of the N. P. A., Addresses,	327	Hardy, A. N., Secretary. Boston Photographic	
	223	Association	$\frac{12}{37}$
Eliminating Hyposulphite from Prints. W. H.		Hawley, General Joseph R. Invitation to At-	•
Emperor Dom Pedro, Photographs of. W. H.	80	tend the Convention 29 Hawley, General Joseph R. Address before the	51
RULOFSON	192		72
	339 83	Hearn's, C. W., New Enterprise in Photo-Print-	00
Emulsion Process Improved. A. F. CHASE Enamels. Prof. E. STEBBING	154	Hearn, C. W. The Printer's Corner26, 52, 103, 10	64
Encouraging Words	222	Hearn, Charles W. Albumen Paper 16	$6\overline{4}$
Enlargements in Carbon. Prof. H. Vogel Enlargement of Carbon Diapositives. R. Sch-	151	Hearn, C. W. Answer to Ira T. Collins in	15
LEGEL	138	Sphynx	45 54
Evans, Charles. Secretary Pennsylvania Pho-	010	Heating Apparatus, A New, Prof. E. Stebbing, 26	69
tographic Association47, 90, 111, 143, Excess of Silver in Emulsions, A Simple Test to	212	Heliochromy. Prof. E. Stebbing	79
Prove. Signund Singer	339	largements	36
Prove. Sigmund Singer Executive Committee of the N. P. A., Proceed-		Hesler, A. Alum for Eliminating Hypo	85
	$\frac{145}{203}$	Hoslan A Minnohaha Falls	48 67
Evelashes for Cameras. J. F. Ryder	148	Hewitt, G. W. Gelatino-Bromide Process 18	86
Eye Rest for Sitters, An. FREDERICK H. CLARK.	14	Hewitt, Geo. W., Secretary pro tem. on Philadel-	10
		High Powers in Micro-Photography. C. Seiler	16 6
Fading of Prints. JOHN R. CLEMONS	110	Hittyer, H. B. Fuotography from a Monetary	
Fatty Ink Printing from the Negative, New Process. Dr. H. VOGEL	17	Standpoint 35	$\frac{32}{32}$
Fatty Ink Proofs. Prof. E. STEBBING	19	Hints to Beginners. L. T. WILT	95
Fatty Ink Printing. Prof. E. Stebbing	203	Holterman's Great Negative in San Francisco 25	55
Fatty Ink Printing from Gelatin. Mons Leon VIDAL	205	Holterman's, B. O., Great Negative	50 50
Fatty Ink Proofs from Spain Presentation of a			67
Collection of. Prof. E. STEBBING	269	Hot Weather, Troubles in. GEO. M. URIE 29	31
STEBBING	366		$\frac{53}{42}$
Ferrotype Plates, Rise in Price of, GEM	85	Hough, E. K. A Response to Mr. Pearsall	12
Filtering Tray A Novel Prof E STERRING	96 19	Hough, E. K. Co-operative Photography 33 Hough, E. K. Organization 20	$\frac{31}{02}$
Ferrotype Mounts, Improvement in	169	Hough, E. K. Photographic Rights. Résumé, 14	47
Fire Alarm, A Tiny and Cheap. Prof. E. STEB-		Hough, E. K. Promenade Style for Gentlemen,	12
Fitzgibbon, J. H. National Photographic As-	91	Hough, E. K. To Remove Varnish from Neg- atives or Ferrotypes	08
sociation	129	Hough, E. K. Unlimited Retouching a Neces-	
Fitzgibbon, J. H. Deferred and New Business of the National Photographic Association.	163	How I Rectified a Bath Without Sunning. L.	34
Fitzgibbon, J. H. How to Climb the Ladder	278	W. THORNTON 34	43
Fitzgibbon, J. H. How to Climb the Ladder Fixing Prints. C. F. RICHARDSONFixing Prints. L. T. WILT	$\frac{6}{76}$	How to Make and Use a Small Bath. WM, SNELL	4
TIATUS I HILLS. L. I. WILLI	10	NATE AND ADDRESS OF THE PROPERTY OF THE PROPER	**

1	PAGE	P.	AGE
How to Succeed. W. B. CRITCHFIELD	5	Look Out for Cool Weather	263
How to Climb the Ladder. J. H. FITZGIBBON	278	Lyon, T. D. False Economy	242
How to Come and How to See It	130		
How to Conduct Business	74 17		
How Young Photographers May Succeed. A.		Magic Lantern Slides	82
N. HARDY	37	Matters of the N. P. A	251
•		Mason, J. S. N. P. A. Correspondence	123
		Micro-Photography High Powers in C SETT-	127
Improved Dipper, An	168	Micro-Photography, High Powers in. C. Seil- er, M.D.	6
Improvement by Mons. Leon Vidal. Prof. E.	909	ER, M.D	67
STEBBINGInfant Class, To the. C. M. FRENCH	203 361	Monckhoven's, Dr. Van, Carhon Process. CH.	
Inscriptions on Negatives, How to put	158	WALDACK	265
Insoluble Cement. Prof. H. SCHWARZ	108	Morrison View Lenses, The	$\frac{365}{349}$
Installation Company, The Photographic	126	Mosaics for 1877289,	357
Instrument for Viewing Carte de Visites. Prof.	170	Mosaics, Gems from	62
E. StebbingInsurance, On. Mrs. E. N. Lockwood	179 281	Mosher, C. D. A Fourth of July Suggestion Mottu, P. A. About Cartography (Mapping)	45
International Exhibition at Paris, 1878. Prof.		Mullen, James, Lexington, Ky., New Gallery	238 96
H. Vogel	369	Multiplying Camera Attachment, Jones & Moff-	00
Iodizers and New Formulæ of Messrs. Eder &	940	itt's	140
Toth. Prof. H. VogelIron Acetate, Observations Relative to the use	346	Music hath Charms	223
of. J. D. Rottier, Charles Waldack	55	My Method. J. A. W. PITTMAN	5 71
Iron Developer, Experiments with the. J. D.		My Old and New. G. W. WALLACE	'.
ROTTIER, CHARLES WALDACK	55		
		\	•
		National Photographic Association	39
Jackson, Wm. H. Photo. of the Geological		National Photographic Association, A Word	
Survey of Territorries	128	from the President of the. W. H. RULOF- SON	124
Janssen, Mons. On his Voyage to Japan. Prof.	154	National Photographic Association. J. H.	
E. Stebbing	154 366	FITZGIBBON	129
Jeanrenand, M. Removing Gelatine Pellicle	500	National Photographic Association, The	146
Films	137	National Photographic Association Convention, The	161
Johnson, A. A. Heating a Burnisher	253	National Photographic Association, Deferred	101
Johnson's Patent. Agreement.	383	and New Business of the. J. H. FITZGIB-	
Jones & Moffitt. Multiplying Camera Attach- ment	140	BON	163
Judd, H. M. To Avoid Wrinkles in Printing	158	National Photographic Association, and What	170
Judges' Hall for the Convention. ROBERT J.		it Should do. John Cadwallader National Photographic Association. What has	170
Сните	226	it Accomplished?	193
		National Photographic Association, Proceed-	
		ings of the Seventh Annual Convention.	005
Kent, J. H. Correspondence on his Exhibit Knoxville, Iowa, Correspondence O. N. W.	253	Negatives by the Carbon Process. Poof. H.	523
BALDWIN	135	Vogel	76
DALDWILLIAM	100	New Camera by Mons. Fleury Hermagis. Prof.	
		E. Stebbing.	19
Lambert Chromotype, The	224	New Printing Process in Fatty Inks from the Negative. Dr. H. VOGEL	17
Lambert's Process. LAMBERT	377	New Year and Amateurs. Prof. E. STEBBING.	78
Lambert's Process. LAMBERT	375	New Year, The	1
Lambert's Patented Process. Agreement	382	Next Year	353
Lantern Exhibition, A Beautiful. B. C. J Lantern Slides and Transparencies, Collodion	90	Nitrate of Silver from free Nitrite, Experiments on the Fabrication of. Prof. E.	
Paper of Obernetter for. Prof. H. Vogel	369	STEBBING	203
Lane, T. H. Blisters, How to Produce and How		Nitrite of Silver in Negative Bath. Prof. E.	
to Avoid	109	STEBBING Nordens Gold Bath. Translation	179
Landscape Photography and Its Trials. FRAN- CIS BEDFORD	118	Nordens Gold Bath. Translation	137 224
Landy's Seven Ages of Man.	186	North & Oswald. New Photographic Palace North, Walter C. As a Teacher Notes on the Hudson. Leo Dafts	40
Largest Negative in the World	320	Notes on the Hudson. LEO DAFTS	320
Lea's Objections. M. Carey. Prof. H. Vogel	76	N. P. A. Election of Officers, Addresses, etc	327
Lecture on Lenses, A. Joseph Zentmayer. 173, 215, 242, 267	7 905	N. P. A., Matters of the123, 181, 193, N. P. A., Proceedings of the Executive Com-	201
Letter from Jacob Shew, President Photo-	, 200	mittee of the	145
graphic Art Society, Pacific	283	N. P. A.—Local Secretary's Call. ROBERT J.	
Letter from A. J. Beals	350	Chute	162
Letter from C. D. Mosher	15, 85 351	N. P. A. Convention, The	257
Letter from W. Brown	352	Prof. E. Stebbing	366
Libby, E. P. Answer to Query in August	002	1101111, 01-22-1	000
Sphynx	344		
Lichtdruck. Prof. H. Vogel	346	Obituany	26
Liebert's, Mons., Photographic Establishment, A Visit to. Prof. E. Stebbing	269	Obituary	$\frac{26}{129}$
Lighting, A few Words about. GEO. CROUGH-	230	Organization, E. K. HOUGH	202
TON	138	Origin and Early History of Photography. E.	
Lighting, Some Rambling Thoughts on. F. M.	9.40	H LINCOLN	144
Spencer. Local Secretary of the N. P. A. Appointment	348	Ornamentation of Glass by Hydrofluoric Acid. Translation	137
Local Secretary of the N. P. A., Appointment of Robert J. Chute	146	Our Advance Column33, 71,	
Lockwood, Ferris C. Correspondence Lockwood, Mrs. E. N. Correspondence	117	Our Last Promenade Prize	43
Lockwood, Mrs. E. N. Correspondence Lockwood, Mrs. E. N. On Insurance	221	Our Picture24, 58, 94, 109, 156, 190, 221, 254,	270
Loosening of the Collodion Film, To Prevent.	281	Our Prize Offer for Retouching	83
F. de VILLECHOLLE	138	Our World's Fair	168

PAGE	
	Preservatives on Branida Des Blates Ast
Pacific Railroad, Views by C. R. Savage 320	Preservatives on Bromide Dry Plates, Action of the. Prof. H. Vogel
Painted Photographs. Prof. E. Stebbing 154 Papers at the Convention	President Rulofson, Address from
Parker, James. Inquiry about Skylight 101	
Patent Decision, An Important 149	Prices for Photographs
Pearsall, Alva. Photographic Rights Again 45	Price List, R. E. Wood's
Pennsylvania Day at the Great Exhibition 320	Print Trimming. British Journal of Photogra-
Pennsylvania Photographic Association, 29, 47,	phy
90, 111, 143, 212	Printing Bath, The Positive. VAC FRIEDL 233
Philadelphia, Preparation for. Prof. II. Vogel. 76 Phipson, Dr. The Theory of Blisters 14	Printer's Corner, The. CHARLES W. HEARN.
Phipson, Dr. The Theory of Blisters 14	26, 52, 103, 164
Photo. Sketches from the Centennial Grounds.	Prize of 1000 Francs for the Best Dry Process
Prof. H. Vogel	by the Photographic Society of France,
Photo-Micrographic Proofs. Prof. E. Stebbing, 154	Prize of 2000 France Prof. F. Stronger
Phototype Process, New Progress in. Prof. H. Vogel	Prize for Retouching
Vociet 152 Photographing on Wood 136	Prize for Retouching
Photochromy, etc. Prof. E. STEBBING 115	Prize Picture Formula. L. G. Bigelow 157 Proceedings of the Executive Committee of the
Photochromic Reproductions of M. Leon Vidal, 254	N. P. A. 145
Photo-Criticism	Proceedings of the Seventh Annual Convention
Photo-Engraving 323	of the National Photo. Association272, 303, 325
Photo-Engraving Co., Illustrated Quarterly Cir-	Promenade Prize, Our Last 43
cular 352	Promenade Style for Gentlemen. E. K. Hough 12
Photographic Accidents. Robert J. Chute37, 68	
Photographic Art Society of the Pacific46, 47, 112	Dediameter (Dr. Deef E. Conserver)
Photographic Exhibition of Paris, The. Prof.	Radiometer, The. Prof. E. Stebbing 208
E. STEBBING	Rare Specimen, A
Photographic Hall, Lessons in. R. J. CHUTE 246	Ready-Sensitized Paper, On the Use. C. F. RICHARDSON 249
Photographic Hall, Lessons in. R. J. CHUTE 246 Photographic Hall 58 82 124 157	Reasons for Attending the N. P. A. Convention.
Photographic Hall	Robt. J. Сните
Photographic Patentees, A Plea for. A. St.	Receipt to Clean off Gum Lac, A Good. Prof.
CLAIR	E. Stebbing
Photographic Rights Again. ALVA PEARSALL 45	Reinforcing with Nitrate of Lead. Prof. H.
Photographic Rights. Résumé. E. K. Hough. 147	Vogel 113
Photographic Rights. John Cadwallader 170	Remove Varnish from Negatives or Ferrotypes,
Photographic Rights. E. T. WHITNEY 279	To. E. K. Hough 108
Photographic Sensations on the Pacific 250	Removing the Cliches on Gelatin Pellicles. M. JEAUREMAND
Photographic Society of France, Meeting of the. Prof. E. Stebbing19, 78, 115, 154, 179, 203,	JEAUREMAND
269, 366	Reply to an Article of the British Journal of
Photographic Society of Philadelphia, Outdoor	Photography. J. D. ROTTIER, CHAS. WAL-
Meeting	DACK
Photographic Society of Philadelphia, 28, 45, 89,	Report on the Progress of Photography. A.S.
110, 142, 187, 211	SOUTHWORTH 277
Photographic Technicalities 88	Report of the Executive Committee 275
Photographing the Less Refrangible Rays of	Report of the Treasurer. ALBERT MOORE 276 Reproduction of Reversed Negatives by the Car-
Photographing the Less Refrangible Rays of the Solar Spectrum. Prof. H. VOGEL	bon Process. Prof. H. Vogel 152
Photography an Art, Is? Prof. H. Vogel 369	Resin on Sensitized Paper, Influence of. C. F. R. 250
Photography a Dangerous Profession. Prof.	Resin on Sensitized Paper, Influence of. C. F. R. 250 Resolutions calling the N. P. A. Convention by
E. STEBBING	the Executive Committee 145
Photography and Truth	Response to Mr. Pearsall, A. E. K. Hough 12
Photography, Co-operative. E. K. Hough 331	Retouching, A Prize for
Photography from a Monetary Standpoint. H. B. HILLYER	Retouching, Gold Medal for 97
Photography in Munich. Prof. H. Vogel 369	Retouching Prize Decision
Photography in Natural Colors 96	Retouching Negatives. WM. H. RULOFSON 8 Retouching. H. C. GABRIEL
Photography in the Great Exhibition182, 196,	Retrospective
226, 258	Reversed Carbon Negatives and Pigment Cameo
Photography in Palestine 2	Pictures. Prof. H. Vogel 113
Photography in Science and Art, Mons. Da-	Richardson, C. F. Toning and Fixing 6
vanne on the Progress Made by. Prof. E.	Pictures. Prof. H. Vogel
STEBBING 366 Photography, Lecture on. Dr. H. VOGEL 265	ciety, Facine 40
Photography, Lecture on. Dr. H. Vogel 265 Photography of the Invisible-Ultra Red. Prof.	Robinson Trimmer, The
H. Vogel	Root, S. Baths for Cleaning Plates 266
Photometer, A Newly Constructed. Prof. E.	Routh, A. Q. Rain Water for Blisters 253
Sterbing 269	Rowell & Co., Geo. P. Newspaper Catalogue 351
Photometer, Mons. Leon Vidal's. Prof. E. Steb-	Routh, A. Q. Rain Water for Blisters
BING 269	Vogel
Photometer, New. By Mons. Fleury Hermagis. Prof. E. Stebbing. 19 Photometer, Vidal's. Prof. E. STEBBING. 91 Photomicrographical Proofs by Dr. Fayer. Prof. E. Swipping.	Kuloison, President, Opening Address before
Prof. E. STEBBING	the N. P. A. Convention
Photometer, Vidal's. Prof. E. Stebbing 91	Rulofson, W. H., Con the N. P. A
Prof. E. Stebbing	Rulofson, William H. Retouching Negatives 8
Pigment Print, The. Dr. PAUL E. LIESEGANG, 352	Rulofson, William H. Annual Address 303
Pittman, J. A. W. My Method 5	Vogel.
Prof. E. Stebenson 366 Pigment Print, The. Dr. PAUL E. LIESEGANG, 352 Pittman, J. A. W. My Method	
Platinum Process, Experiments with Willis'	C total Taller Associate to C 3T Co. 2 (1)
New. Prof. E. STEBBING	Sartain, John. Appointment of Mr. Carbutt
Politeness, Gentleness, etc	as Superintendent of Photographic Hall 125 Satisfaction or no Pay
Practice No. 1 and No. 2 H.C.W. 145	Saunders, Irving. Hints for Printers
"Practical Portrait Photography"	Sawyer, Mr., and the Carbon Printing Process.
Premiums for 1877 349	Satisfaction or no Pay 240 Saunders, Irving. Hints for Printers. 85 Sawyer, Mr., and the Carbon Printing Process. Dr. H. VOGEL. 17
reparation and rectification of Emulsions.	Scattered Photography in Our World's Fair 245
Sigmund Singer	Scattered Photography, More 341
Preservation of Positive Paper, Mons. Flenry	Scattered Photography in the Great Exhibition 292
Hermagis on. Prof. E. Stebbing	Seavey, L. W. Lecture on Backgrounds 307
Presents on the Pacific	Secret of Success, Another

P	AGE		AGI
Secrets of Success, One of the	247	Testimonial from Philadelphia Press	6
Seeler, W. W. Acid vs. Alkali	25	Texas Correspondence. E. FINCH. Theory of Blisters. Dr. PHIPSON.	169
Seiler, M.D., C. High Powers in Micro-photog-	c	Theory of Blisters. Dr. Phipson	1
Sensitizers on Bromides of Silver, Action of.	6		
Prof. H. Vogel	113	Tompkins I H Patent Decision	343
Sensitized Albumen Paper, Preservation of. C.		Toning, L. T. WILT.	149
W. HEARN	166	out Sunning Tompkins, J. H. Patent Decision Touing. L. T. WILT Toning and Fixing. C. F. RICHARDSON Training School of Photography, A National.	- (
Shakspeare's Seven Ages of Man. Landy's		Training School of Photography, A National.	
Book	288	_ GEO. CECIL HANCE	363
Sherman, W. H. Eliminating Hyposulphite	80	Transfer of an only ficture on alone. R.	
from Prints	00	SchlegelTranslation. The Photochromic Reproductions	13
the Photographic Art Society of the Pacific.	112		25
Shew, Jacob. Letter to the N. P. A	283	Translations	13
Signs of Life	66	Transparencies and Enlargements, A Word on.	10
Silver Bath for Albumen Paper. L. T. WILT	13	A. HESLER	236
Silver, Carbon or—What?	99	Tunes, How to Photograph. Dr. H. Vogel	1
Silver Prints, Presentation of. Prof. E. STEB-BING	78		
Silver Dinner. J. E. SMALL.	233	Urie, Geo. M. Trouble in Hot Weather	23:
Silver Dipper. J. E. SMALLSimple Toning Bath, A. C. F. RICHARDSON Singer, Sigmund, Milwaukee Correspondence	6	Unlimited Retouching a Necessity. E. K.	20.
Singer, Sigmund, Milwaukee Correspondence	339	Hough	34
Siphon. J. C. GŒTCHIUS	55		
Siphon. J. C. GŒTCHIUS	115	Wildel More Torrest Torrest of	
Skylights. A. N. HARDY	33	Vidal, Mons. Leon. Fatty Ink Printing from	00
Skylight Construction	37 101		20
Skylights, Glass for, Thos, Gaffield	364	Violet-colored Glass proposed for the Studio. Prof. E. Stebbing	360
Skylights, Glass for. Thos. Gaffield	108	voices from the Craft45.	. 8
Small Bath, How to Make and Use. W. SNELL.	4	Vogel, Dr. Address before the N. P. A	304
Small, J. E. N. P. A. Suggestion and Silver	000	Vogel, Dr. Meeting of the Photographic Art	
D1bber	232	Vocal Dr. In San Francisco	255
Smith, D. E. A Suggestion for Memoranda "Society Belge," Distribution of Rewards. Prof. E. Stebbing	41	Vogel's Dr. Lecture on Photography	26
Prof E Sterring	19	Vogel's, Dr., Lecture on Photography	268
Society Gossip28, 45, 89, 110, 142, 187, 211, 315, Solar Printing. VERITAS	368	Vogel's Dr., Reply to President Rulofson	$\frac{26}{264}$
Solar Printing. VERITAS	131	Vogel, Prof. H. German Correspondence. 17,	
Something New, A Chapter or two From	87	50, 76, 113, 152, 177, 346,	369
Somerville, J. C. New Stock House in St. Louis.	128		
South Kensington Musenm Photographs Southworth, A. S. Report on the Progress of	255	Woldack Charles Dr. Von Monokhowenia Con	
Photography Cartha Gardina Charles	277	Waldack, Charles. Dr. Van Monckhoven's Car- bon Process	15
Southworth, A. S. On the Condition of the N.		Waldack, Chas. Blistering of Albumen Prints	17
P. A	326	Wallace, Ellerslie, Secretary. Photo. Society, Philadelphia29, 46, 89, 110, 142, 187,	
Spectra by the Oxyhydrogen Flame, Produc-		Philadelphia29, 46, 89, 110, 142, 187,	212
Spencer, F. M. Some Rambling Thoughts on	73		208
Lighting	348	Waymouth's Improved Vignette Papers	108
Sphynx	344	We Want to Place It on Record	66
Sphynx	105	Weld, James A., Obituary Notice of	63
Spooner. J. P. "For the Very Best Photo-		Weld, James A., Obituary Notice of	223
graphs go to Smith's	280	Wells, R. L. Obituary	26
Star Spangled Banner at the Convention. Rob-	163	What Shall a Photographic Journal Contain? 1	$\frac{134}{279}$
St. Clair, A. Vanderweyde Light	84	Whitney, E. T. Photographic Rights	23
St. Clair, A. Vanderweyde Light St. Clair, A. Using a Siphon. Methyl for Heat-	- T	Who Will Teach Us Art? Guido	97
ing Burnisher	84	why Don't They?—Sure Enough	66
St. Clair, A. A Plea for Photographic Pat-		Wight, V. L. Inquiry for Photo. Tent	86
Stabbing Brof E Franch Correspondence	337	Willard Monthly on the Philadelphia Photog-	10-
Stebbing, Prof. E. French Correspondence.	200	willard I W Catalogue and Price List	$\frac{127}{351}$
19, 78, 91, 115, 179, 203, 269, Strength of Chemicals. O. N. W. BALDWIN	237		$\frac{26}{26}$
Sturgis, Robert Shaw. Resolution on his		Willard's Yankee Doodle 1	191
Death	142	Willis's New Platinum Process, Experiment	
	126	with, Prof. E. STEBBING	78
Substitute for Carbonate of Ammonia, A. Prof.	154	Wilson, Charles A., Manager Photo. Installa-	196
	154 154	tion Co	126
	326	Elevator 2	283
Suggestions for the N. P. A. C. A. GLENN	325	Wilson, Edward L. On Friction 3	307
Superintendent of Photographic Hall, Appoint-		Wilson, Edw. L., Permanent Secretary N. P. A.	
	125		145
Swasey's Scenic Backgrounds Swinging Back for Field Camera, A New.	192		40 13
	115	Wilt, L. T. Fixing Prints	76
		Wilt, L. T. Hints to Beginners. Concluded	99
T 1 T 17 31 (/C 1 1 14 D)		Wing versus Tompkins. Patent Decision. J. H.	
Taber, I. W. New "Spherical" Photos	127	TOMPKINS	149
Tables Turned, The	65	Paper 2	250
Talk and Tattle28, 40, 65, 122, 172,		Wood, R. E. Santa Cruz, Cal., Correspondence, 1	72
Tartaric Acid to the Iron Solution, On the Ad-		Wrinkles and Dodges54, 84, 107, 158, 2	253
dition of. Prof. E. STERRING	179		
Tasker, H. Marvin. Production of Spectra by the Oxyhydrogen Flame	73	Young, L. T. Secretary pro tem. Philadelphia	
Taylor, D. B. Letter Exposing a Fraud	32		317
Taylor, Wm. Curtis. On Various Distortions in			
Photography	328		
Test to Prove Excess of Silver in Emulsion, A	990	Zentmayer, Jos. A. Lecture on Lenses. 173,	67
Simple. S. Singer	339	215, 242, 2	10.

Philadelphia Photographer.

Vol. XIII.

JANUARY, 1876.

No. 145.

Entered according to Act of Congress, in the year 1875,

BY BENERMAN & WILSON,
In the office of the Librarian of Congress, at Washington, D. C.

THE NEW YEAR.

To one and all, we wish a Happy New Year.

We have already made our promises of what we hope to do for our patrons during 1876, and now we begin to do.

Any practical man looking over our pages this month ought to be cheered by the signs of the times. The outlook for our Centennial year gives us much hope. To begin with, we find an unusual number of our working fraternity willing to give of their knowledge for the benefit of the craft. There seems to be a revival in this direction, and it is a most healthful sign. May it continue the year through.

Then our country is undoubtedly to be made alive during nearly all of the year by the great exhibition that is now so near at hand. This is all going to "help business," and we shall each get our full share if we are enterprising and look after it.

As journalists we expect a great profusion of practical pickings for our readers. What a bonanza we shall have in Photographic Hall and in the National Photographic Association Convention, and in the beautiful illustrations we shall gather from the exhibition. Won't the chips from the engraver's boxwood fly? And won't the nimble fingers of our compositors be kept busy with extra work? And won't the

great cylinder presses have to revolve as they have never been asked to before? And won't we all have to be active, all to snatch the good things as they are given us with so little time to take them in, all for the advancement of our beautiful art? And won't it open our minds, and increase our wisdom, and push us upward and forward, and put money in our purses, and make us all more charitable, and better men and better photographers? Won't it? Yea, verily—Happy New Year—Come!

ADDRESS FROM PRESIDENT RULOFSON.

OFFICE OF THE PRESIDENT OF THE NATIONAL PHOTOGRAPHIC ASSOCIATION.

429 MONTGOMERY STREET, SAN FRANCISCO, November 19th, 1875.

FRIEND WILSON: I have to acknowledge the receipt of notice to attend a special meeting of Executive Committee of the National Photographic Association, held October 22d, 1875, and to express my profound regret at not being able to attend. This regret is only equalled by the hope still alive in me, that matters are not (or if so, will not long remain) so discouraging as would appear from the reading of resolution three and four, passed at said meeting. While I recognize with deep concern the apathy which seems to prevail, and fully appreciate

its depressing effects upon the minds of the committee, I would beg most respectfully to call their attention to the other and greater, results growing out of their labor, above and superior to any financial success attainable. And as the rain descends upon the unjust as well as the just, so the stimulating influence of this Association has been felt by the humblest photographer in the land, irrespective of any interest he may have taken in its maintenance. It cannot be that the few paltry dollars required from each member necessary to give life and health to our movements will be long withheld, but if they are, it would be to me an additional incentive to devising a means by which the organization could be maintained at so small an expense that the few who do feel an interest in it can carry it through the season of darkness, waiting for the dawn of better days, which are sure to succeed this season of apathy Would it were in my power to spread before photographers in letters of gold, a simple enumeration of the advantages we have all enjoyed the past few years, the material advancement we have all made as the direct result of combined effort. Not, perhaps, that the National Photographic Association, in its corporate capacity, has done so niuch, but in that it has opened the mouths of its members, furnished a vehicle for conveying their best methods to and fro, warmed into life local societies having kindred objects in view, stimulated honorable generous competition, discouraged and well-nigh crushed out the petty jealousy which has been the bane of our profession. It has established a claim to the gratitude and support of every photographer.

In the most complete confidence that the wisdom of the committee will bear us safely through, I remain truly yours,

WILLIAM H. RULOFSON.

PHOTOGRAPHY IN PALESTINE.

WE have just had a photographic feast which we wish all of our readers could share. It is a stormy December day, and yet we have just finished a most delightful journey through some of the sunny ways of Palestine. We have "bobbed about" from place to place without much regard to distance or time, as one loves to do when journeying abroad, and we must be indulged in telling you a little of what we saw. First, a chat at Jacob's well, with six of his deseendants, clothed in their striped garments and bearing their earthen pitchers of the same form and kind as those borne upon the head of the graceful Rebekah. Now a halt at Jenin, the ancient En-Gannim, where we saw the mountains of Gilboa in the distance. Next a walk through the valley of Scheehem, where Joshua assembled his hosts to choose between blessing and cursing; where the greatest battles of the ancients have been fought, the Mount Ebal on one side, and Gerizim on the other. Now a lunch on the shores of the brook Kedron, under an olive tree, followed by a long rest in an olive grove at Jerusalem. Now we find us under the great arches of the ruined aqueduct over the brook Cherith, at Jerieho, which humbles us with the thought that our modern masons have not improved much in these near two thousand years. Leaving these, we stand trembling beside the great columns of the temple of Jupiter at Baalbee, grand and beautiful in their variety, still impressing us beyond expression, until at Palmyra we find us amid the ruins of the temple still more impressive than the other, wonder-bound, but not weary. Still we relieve us by taking a sail on a fishing-boat on Lake Gennesaret, in company with just such men as our Lord chose for "fishers of men." Now we find us quartered in a hotel at Tiberias, overlooking the Sea of Galilee, our mind filled with thoughts of the once hallowed place. Oh, what a wondrously enchanting view is this! But the camera has revealed all the beauties of these places. Is there an inhabited spot where it has not been? There was up to the time this journey was made, but now we have before us one of the most picturesque scenes-a view of the ruins of the western end of the city of Palmyra-"photographed for the first time." Enough architectural splendor "lies around loose" here to make any modern city, a place visited by all travellers, with only two giant columns left standing to perpetuate the glory of the past. What glories, what grandeur!

And this rainy day has been enlivened thus by means of blessed photography, through a new series of views from 8 x 10 negatives, by the world-renowned prince of photographers in the East, Mr. Frank M. Good, of Winchfield, Hants, England. Mr. Good's work is known to the most of our readers, and he has no rival in the department he has chosen. These pictures are superb examples of photography in every respect, and we congratulate Mr. Good (whose personal acquaintance we have always regretted not being able more extensively to cultivate when in London) on his success, and on his safe return from that dangerous journey.

In a private letter to our good friend and fellow-traveller abroad, Mr. T. N. Gates, he gives some interesting details of his journey, which we quote:

"I received your kind epistle before starting to the Holy Land, which I did about the 7th or 8th of February, and was not home till the middle of July. My fortune was very varied during these many months, sometimes being in clover, and sometimes out. All sorts of weather I experienced, and lost much valuable time in Jerusalem, waiting for it to settle. On the night of Good Friday we had a fall of over ten inches of snow, and not having the means of warming (at least indifferent), it was anything but comfortable. Thank God, through all the changes and chances of travel, I enjoyed good health, and was mercifully preserved in all the dangers. 'On commencing work, which I did first in the Holy City itself, I found all my tools in good working order, and soon began to accumulate good negatives, some prints of which I send you by book post. I wish you could have been with my wife and myself when the several boxes of negatives, some of which had been packed up for months, were opened; at last the last one was looked at and admired, and I had the satisfaction of seeing the results of all my laborious journeyings safely housed, and not one broken. I feel proud (it is doubtless wrong) of my packing after three such trips, and the handling of hundreds of fragile negatives, not one has been broken.

"I think myself most fortunate in having

been the first to gain access to Palmyra, or Zadnor of the Wilderness, where I did some good work. I was, as perhaps I have told you, the first photographer to bring home the shadows of the wonderful rock temples of Petra, or Edom, and in these days of competition and travel, it is something to get one's 'hungry' camera first into a good field not already more than done. I did not find the difficulties more great on this trip than formerly, but the hard riding tires me very much, the more so from not being accustomed to it at home; this, with the heat, rather unfits one for the arduous exercise of the art. Many days I was seated on my horse fifteen weary hours. I was also at times very short of the common necessaries, and, owing to my being rather late, the insect world was much increased; and my nights, that ought to have been my greatest comfort, were, owing to the wretched houses of the Arabs, my curse. Although utterly worn out with fatigue, no rest would these little creatures let me have.

"No one who has not travelled as I have can imagine the intense enjoyment felt on reaching a comfortable convent, where clean beds await the weary traveller. Fortunately there are many of these little heavens in the Holy Land, and I almost felt I could be a monk, to contribute in such a marked manner to the comfort of the traveller.

"I made my first acquaintance with an American color artist, and one of your own townsmen, a charming fellow, Mr. E. Lord Weeks, a man, I believe, well known on your side, and not unknown here. We were much together in the Holy City. I have just received a charming little bit of desert scenery from his brush, which I greatly value as a memento of him.

"I wish much I could afford to come, or rather go, over to the New World, and look up my kind patrons in your wonderful country; I fear it is utterly out of the question. I met one of the leading men of the Exhibition at Philadelphia in Jerusalem; he was very kind to me; unfortunately I have forgotten his name. I am not certain if I shall send anything or not. What do you say? I sent nothing to our own Exhibition this year, feeling it to be such a clique affair. The last time I sent, they

took no notice at all of me and my varied contributions. I don't think I am much more vain than my fellows, but have enough of vanity to wish to see my name in print when the council publish their report."

Mr. Good will permit us to say that we must see both him and his work in Photographic Hall next summer.

FULL AND RUNNING OVER.

THE following articles, with those on other pages, were generously contributed for Mosaics, but came too late for insertion, so we give them place here, with the belief that their mission will not be in the least abridged:

How to Make and Use a Small Bath. by w. snell.

Photographers who have large galleries and do large work, must of necessity use large baths. Those who have galleries in small towns, or travelling saloons, have seldom occasion to use larger than to take a 4-4 or 8 x 10 plate. There are some things to be said in favor of a small bath in preference to a large one. It is at first much less expensive; then it is much easier to handle. and less liable to waste. Where one does his own operating, and has sufficient experience and knowledge of his chemicals to keep them in working order, he should be able to work as successfully with a bath of half a gallon as with one four or six times as large. The bath should be made up right at first, then "left severely alone."

Pure silver and distilled water will make a bath which will not require sunning or boiling. But as this water is not at hand often, good, soft spring water, or from a piece of ice, or river water, will do. Put one or two ounces of silver into a quantity of water sufficient to fill your bath-holder, with a little excess; place it in the sun for six or eight hours, or, what is just as well, place it over the fire in the evaporatingdish, and bring it to a boiling heat. Either method will throw down all impurities in the water. , Filter and add silver, to make it up to 40 grains to the ounce of water by the testing-tube, which every one should have. Not more than 40 grains strong, as

much trouble often meets you at once when made stronger.

Coat a large glass plate on both sides with collodion, and let it remain in the bath over night. Filter the bath again, and try a plate; if it works clear and clean, add no acid. If a little foggy, add two drops of C. P. nitric acid to 50 ounces solution. Now, after using a few plates, it will work all right, and should not be altered for weeks, unless it be to add more of the same solution of which the bath was made.

If you work with care, with clean plates and clean fingers, the bath will not need filtering oftener than once a week, or once in two weeks, according to use. It is a positive evil to be filtering the bath every day. When by use the bath works oily by excess of alcohol and ether, but well otherwise, add a little alcohol to the developer, and use the bath as long as possible. When it fails to make good negatives, pour it into the evaporating-dish, and add eight ounces of water, and place it over the fire; when it gets to a boiling heat, add a few drops of a solution of bicarbonate of soda. This will neutralize the acid, and precipitate the excess of iodide of silver.

Boil down the bath to the same quantity of solution as before adding the water. When cool, filter and test it. Make it 40 grains strong, and if alkaline by litmuspaper, add two drops of acid, or more, so as to leave it slightly acid.

It now should work as well as when new, and can be used with a good collodion until it is reduced to nearly 30 grains. After it has been renewed and boiled down the second time and gives out, it should be discarded for negatives, and can be often used for ferrotypes and for redeveloping purposes. By this method the bath can be utilized to such a degree that there need be but little waste.

REMARKS.

Glass is the most reliable for a bathholder. If it costs a little more at first it is cheapest in the end.

By having two baths much trouble is avoided.

By using a few drops of water in the collodion you will never be troubled with pinholes. An excess of water, or bad cotton, will make the collodion work-in crapy lines.

Much trouble often arises from a bad sample of cotton.

When things work bad the bath should not be condemned at once. Work more carefully. See that the plate is clean. Let the collodion set on the plate well before dipping.

In cold weather the plate will develop woolly, with metallic silver over it. By warming the bath the trouble vanishes. The bath should be kept warm in cold weather. By doctoring the bath frequently with this, that, and the other nostrum, which is often recommended, you will have plenty of trouble and annoyance.

Ferrotype plates should not be dipped in the negative bath.

Baths for ferrotypes should be made and treated the same as for negative use, but can be used with less silver.

How to Succeed.

BY W. B. CRITCHFIELD.

I NEVER sun, but always boil my baths-both negative and printing bathsa half-hour's boiling, the bath being first made a little alkaline, is worth just a month's sunning. I have a bath that has been in use for three years; was never sunned, but boiling water added to the required bulk, and silver to the required strength, and it has not had a week's rest in the three years. By this treatment I can always depend on a negative, the first plate after boiling. I scarcely ever think of trying a plate, but proceed as soon as I have a customer, just as if I had been using the bath all the while, and my desires are generally realized.

I prefer making my collodion, but unfortunately we sometimes get shoddy goods; and, by the way, cheap goods are outrageously dear generally.

When I commenced photography—or rather gem work—five years since, I had never seen a negative made, and as I was rather forced into the business more than of choice (at that time), and no one to show me, in any way or how, to be sure my troubles were numerous; but I thought I would work it out on that line, so I got

me some books, etc.: The Bulletin. Lea's Manual, Mosaics, Vogel's, Ayres's, etc., and the best of all, the Philadelphia Photographer. And at them I went, determined to make the thing scour, as the saying is, and scour it does, nicely now.

If there is any good whatever in my work it is due to those works, and hard study. We now have the Western Photographic News; that is also an excellent little journal, with the true ring of a Western man. I have learned enough, anyhow, from these publications and study, to get four dollars per dozen in our little one-horse Western town, and the people don't complain much either.

When I see a man who says he has no use for books, and that they don't do him any good, and it is expense for nothing, and all that, I set him down at once as an egotistical, self-conceited silver-slopper; generally asking a thousand and one questions, and many of them the most ridiculous imaginable; and his shop never belies him; you can tell just as soon as you step into his-shall I say art gallery?-no, no; you all know how such places are; but their days are being numbered, and rapidly, too. The day will soon be when Cheap John's and his ten-cent pictures are no more. But I am glad to know the photographic hosts are hoisting higher and higher their banners; and higher let them still rise.

The more we read and study, the more real, sound, solid information we get. Real good, sound, substantial reading-matter, well read, is money in the pocket. There is scarce a number of the Philadelphia Photographer but what is worth the year's subscription, and the Mosaics,—it is as the shade of the towering oak to the weary traveller at noonday—every one filled with good things. And for my life I don't see how one gets along without them; it's too much like keeping house without the women, and that's rather thin.

Му Метнор.

BY J. A. W. PITTMAN.

My collodion is composed of alcohol and ether, equal parts; iodide of ammonium, 5 grains; bromide of potassium, $2\frac{1}{2}$ grains; Anthony's snowy cotton, about 4 grains to

each ounce. Developer is of iron 2 ounces; iron and ammonia, 2 ounces; soft water, 64 ounces; acetic acid, 8 ounces.

When my negative bath gets overcharged with alcohol and ether, I add one-third its bulk of water, neutralize with liquid ammonia, boil down to near its original bulk, then add water to make the desired amount, boil a few minutes longer, let it cool, filter, and strengthen to 45 grains, filter again and make decidedly acid with C. P. nitric acid. When I dip a collodionized plate I tip the top of my bath back, so that the plate coats with its face down, thus avoiding any free iodide of silver or other floating particles settling on the sensitive film. I never sun my bath, except just after boiling. I think it works better when thoroughly saturated with iodide of silver. Plates for long exposure should be removed from the bath as soon as they are coated smooth, and while there is yet some free iodide and bromide to take up all of the free nitrate of silver, leaving none to crystallize. I clean the back and edges of my albumenized glass, so that when flowed with collodion the albumen is all covered, thus avoiding any damage to the bath. In filtering I use quite a number of narrow strips of glass, placed perpendicularly around, inside of the funnel, then put in one thickness of good paper and it will filter very rapidly.

TONING AND FIXING.

BY C. F. RICHARDSON.

A SIMPLE TONING BATH.

THE following is only new in the application of heat for preparing the bath for immediate use. It is a very convenient and economical bath, and, being quite neutral, tones readily and without mealiness.

Keep the chloride of gold in an 8-grain solution. About an hour before toning drop into a test-tube a few grains of powdered chalk; measure out sufficient gold solution for the batch of prints (one grain for from two to four sheets of paper being sufficient); pour it on the chalk, and boil briskly over a spirit-lamp, taking care not to boil it over. The advantage of the boiling will be seen by the brisk effervescence between the free acid of the gold and the chalk as soon as

they are moderately warm. Thus in three minutes the solution is as effectually neutralized as by standing cold over the chalk for twenty-four hours.

Add this solution to sufficient water to handle your prints in, and your bath is done. Use the solution over and over, adding fresh gold, neutralized in the same way each time of using. A few grains of acetate of soda may be added if a somewhat darker tone is desired, but don't use much.

FIXING PRINTS.

Too little attention has been paid to a fact announced by Mr. Spiller several years since in relation to the perfect fixing of prints. It is well known that albumenized prints exposed to light rapidly change to a cheese color in the lights, while there is no real fading of the print whatever. Mr. Spiller found that the addition of carbonate of ammonia to the hypo fixing bath aided in dissolving the albuminate of silver remaining in the paper, which seemed to be the principal cause of this discoloration. I have used this since his announcement, and have repeatedly proved the truth of his assertions. It may not absolutely prevent the ugly change, but it very much retards it, so that prints exposed to strong light retain their brightness much longer. It also prevents the possibility of the hypo being acid, and thus causing real fading.

The use of common salt in the hypo will almost invariably prevent blistering in the hypo, which causes those beautiful (?) plumicolored spots on drying.

My formula for the fixing solution stands, therefore, as follows:

Hypo Soda,				4 oz
Carbonate of	Amm	oniu	m,	1 oz
Common Salt,	. ‹			2 oz
Water, .				1 qt

High Powers in Micro-photography.*

Some time ago I exhibited to the Society the camera and apparatus designed by myself for the purpose of making enlarged photographs of microscopic objects, and at

^{*} Read at the December meeting of the Photographic Society of Philadelphia.

the same time explained it, so that it will not be necessary for me to-do so again. My object in reading this paper to-night is to bring to your notice some facts which I have noticed in working with this apparatus.

I desired at some time to photograph blood-disks of various animals, and as they were of a very minute size, it required a power of at least five hundred diameters to show them satisfactorily. In order to get this amplification I extended my camera to its full length of ten feet, while I used an objective of one-fifth of an inch focal distance. But although I used a powerful reflector and a very good condenser, in order to obtain as much light as possible, the image on the ground-glass, or rather, I should say, the piece of plate-glass, flowed with a thin pellicle emulsion and then dried, appeared very dark and misty, and by no means could I obtain a sharp outline of the disks. Nevertheless I exposed a plate for five minutes, and obtained a negative of which I place a print before you. As you see, it is hardly possible to distinguish the outline, much less to measure it.

In thinking about this thing it occurred to me that this want of definition might be caused by the want of depth of the lens, as the blood-corpuscles are not flat disks, but have a certain thickness and rounded edges, while they are depressed in the centre, thus having the shape of an ordi-A lens of no penenary water-cracker. trating power will show, as you can easily understand, no outline if brought to bear upon such a body as the blood-disk, for the real edge or boundary line of vision is considerably below the highest point of the surface, and so either one or the other will be out of focus, and therefore blurred. remedy this defect in my lens I saw there was but one thing to be done, and that was to pass the image through an eye-piece, a combination of a biconvex lens and a planoconvex one, separated from each other by a certain distance. I did introduce the eyepiece into my camera and obtained a much flatter field and much more definition, but so little light at the distance necessary for the desired amplification, that I saw it would take at least ten minutes' exposure on a wet plate to get a negative. Such a length of time, of course, I could not expose, for the light would have failed entirely owing to the movement of the sun. I noticed, however, that at a short distance from the eye-piece I could obtain a small picture of great brilliancy and sharpness. When I saw this, the idea struck me that I might treat this brilliant small picture like a drawing to be enlarged by the photographic lens, and accordingly introduced a Dalmeyer rectilinear lens 4-4. This, when placed in the proper position, gave me on the ground-glass an image of great sharpness and almost as much brilliancy as the small aerial picture which it was copying. Thus I obtained negatives in five seconds sufficiently strong to print and, what is better, of considerable sharpness. Of them I have two prints on the table, one showing birds' blood and the other the blood of the toad.

As the difference in size of the blooddisks in most mammals, as compared with those of man, is very slight, and as it is of very great importance in legal cases for the expert to decide whether a given specimen is blood of man or of an animal, such as sheep or pig, I have endeavored to show this difference, so that it can be measured. In order to do this I placed a micrometer into the eye-piece, which, when in the proper position, will give a sharp image on the negative. Then, by placing two kinds of blood close together on a slide of glass, so that they both are in the field at the same time, I am enabled to obtain an image of the disks and the micrometer, which, as you see in this print, shows a decided difference of size of the disks, and facilitates the labor of the expert to instruct a jury in legal cases. The fact that the micrometer and the blood-disks are obtained on the same negative removes the objection, which might be raised, that the difference in diameter of the disks might be the result of a difference in the power used.

The reflector which I had been in the habit of using, in order to condense the light, was silvered on the convex side, as all mirrors are. This, however, proved to be a disadvantage, as according to the angle in which the light fell upon it there resulted

two or more foci, one from the silvered surface and the others from the surface of the glass. These different foci lying in different planes interfered with each other so as to make a ghost, which proved a serious obstacle to definition and sharpness. I therefore tried to get a reflector with but one reflecting surface, and succeeded with the following formula for silvering:

A.—Arg. nit., . . . 800 grains.

Aqua dest., . . 4 fluid ounces.

B.—Rochelle salt. . 540 grains.

B.—Rochelle salt, . 540 grains.

Aqua dest., . 6 fluid ounces.

Add liquor ammonia to silver solution and form a precipitate, which must just be dissolved with more ammonia. Then add a little more silver until a precipitate is formed which will not dissolve by stirring. To this add twice its bulk of the Rochelle salt solution and dilute with twenty parts of water. Into this immerse the glass, perfectly cleaned, and leave it for several hours. Then take it out, wash it with plenty of water, and dry by setting it edgewise on blotting-paper. When dry, the silver deposit can be polished with cotton and fine rouge, and will give a very good reflector. I am continuing my experiments in this department, and hope to obtain still better results in future than I have hitherto, and if the members of the Society are interested, I will be happy to bring to their notice anything new and interesting that may be developed.

C. SEILER, M.D.

RETOUCHING NEGATIVES.*

MR. PRESIDENT AND GENTLEMEN:

Retouching negatives is a subject of vital importance to photographers, and one upon which a great diversity of opinion obtains. We have enthusiastic admirers of the works of the camera who affect a preference for the photograph pure and simple, free from any embellishment; to them photography is the sum of all good, and every effort to improve it, which involves therein the

honors with any other branch of art, is resisted as pernicious, tending, as they claim, to eradicate the features which distinguish photographs from other pictures, and in support of their position they point to the acrimonious controversy which occurred some years since in the city of London. It seems that at an art exhibition a department was set apart for photographs, to which photographers brought their art works, having availed themselves of all the means at their command to produce fine pictures; but they were met at the door of Photographic Hall by the committee, who informed them that "weaving spiders come not here;" these pictures evince too much care in finishing, too much industry, too much enterprise, in short they show unmistakable evidence of having been tampered with by an artist. "None but photographs admitted here," say they, urging in defence of their zeal the manifest injustice of requiring photographs to compete with these, the result of several arts, the work of many hands. Did these men recognize in this a defeat? On the contrary, they argued that if their productions were too meritorious to entitle them to a place in the lower, they had gained an entrance among the higher walks of art.

We next find them knocking at the door of the inner temple. . Here also they are met by a committee on classification, who discover oil, water-color, India ink, pencil, and photograph combined, saying these pictures belong to no known class; beautiful though they be, they are only photographs, and must be content with a seat below. Thus were they excluded from both the upper and the lower house by committees, whose loyalty to their dictative branches would set up a lion in the path of photographic advancement, and deprive the public of the advantage of the then almost unknown possibilities of our beautiful art. And thus we have ever found it, that the photographer who pushes the retouching of either negative or photograph beyond what has been termed "legitimate photography" meets with opposition from the artist, who asserts that he has been foraging in his domain, and the son of Helios urges that he is poor indeed, when compelled to draw so largely on other sources for the per-

^{*} Read at the November meeting of the Photographic Art Society of the Pacific, by W. H. Rulofson, Esq.

fection of his work. And, Mr. Chairman, it is within the memory of us all, that at an exhibition at the Mechanics' Institute in this city, a committee composed of some of our best known artists, took occasion to condemn the methods by which certain colored photographs were produced, while they had nothing but photographs to work on for the pictures colored by themselves; but that the "end justifies the means" is well attested in that photography has called to its aid some of the best artists of every clime, and found those who are willing to contribute their skill, experience, and culture in imparting to the photograph those characteristics of high art which demand for it a place in every circle of refinement.

So, Mr. Chairman, it will be seen that before we can agree upon the best method of retouching a negative, we must first gain the consent of the stickler for "distinctive photography" that the negative should be retouched at all; and second, if retouched, how far can we carry the process without going beyond the sacred precincts of legitimacy; and in the consideration of this subject let us inquire what is the object held in view in opening a photographic establishment. Is it in order that we shall produce photographs as such? or have we and our families and business necessities like unto other men's, which render success indispensable? An affirmative answer to these questions, coupled with our daily experience with patrons, leaves no room for argument as to the necessity and propriety of retouching negatives. But to settle the point as to how far we may properly carry the process is not so easy. We are constantly told by Mr. A., that with regard to Mr. B., we have made him young; we have made him a flat, baby-faced fellow, taken all the character out of his face, over-retouching it, etc., etc., all of which we know to be true, and modestly assenting seek to excuse our fault on the score of necessity. "Well," says Mr. A., "that is all right, but none of that for me; leave all the character in my face; no retouching on my negative; or, if any, only the least little bit; just enough to remove imperfections in the negative." And so passing round the room he hurls his anathema against all your best pictures, repeating his injunction, to leave everything in his hands.

All this, coming as it does from a gentleman of wealth, education, and refinement, more than likely a distinguished member of a learned profession, would, in nine cases out of ten, mislead the inexperienced photographer, lure him on to certain ruin; but the wary practitioner, who at once recognizes the necessities of the case, takes the negative of this Mr. A. to his best retoucher, points out all the ravages of time, and directs that they be most carefully and thoroughly removed; calls particular attention to the chisellings of thought, and requests that they be most delicately modified, and the youthful perfection of face and form restored to the last degree. He then makes two or three pictures from the negative, thus "over-retouched," for Mr. A.'s inspection. Thus armed he waits his coming, but not long; doubtless he has been in three or four times in the meantime to see "how you are getting along with it," and to call attention to some dozen or two little things he would like to have done which he forgot to mention. "Don't do much retouching, you know. Just a little here, and there, and the other place, you know, but leave all the character in it, all the modulations; these things don't look like anybody." But at last he comes; you hold your breath with apprehension as you see that fearful frown gather upon his stately brow, wondering what will come of it; but you are reassured as his features relax upon your apologetically passing one over the counter, timidly explaining, "it is not quite finished, you know," "only made as an advance proof to look at, you know," "only made as an advance proof, you see, for you to look at, you know." "Yes, yes," says Mr. A., noticing at the same time that you retain one or two more in your hand, "but what did you make so many for till you retouched the negative?" But what did you make so many for till you retouched the negative! And astounding as this expression is, it stops not here, for this same Mr. A. goes on to explain that "this is very good, and if you will just correct this deficiency in hair, take out these ugly shadows from around the mouth and eyes, which I have not," and then

adding a long list of similar corrections, "Now just write them down so you won't forget,—it will be quite satisfactory;" and he goes away thoroughly convinced that over-retouching is an abomination.

And while he complains that every picture in the room is over-retouched, his have not been retouched enough. Every observer of what transpires between the photographer and his customer must discover this one peculiarity,—that which is pronounced too much for all other pictures, is entirely insufficient when applied to their own particular case.

While I am willing to admit these are notable exceptions, it is nevertheless true that events similar to the foregoing enter more or less into the experience of every photographer; and this is only one class of advocates for excessive retouching. There are thousands who boldly confess that they wish their pictures made beautiful; all the lines, wrinkles, freckles, irregularities, and imperfections, not modified, but removed; for this they are willing to pay any reasonable price, but will accept nothing short of this, leaving us no alternative between "legitimate photography," idleness, and poverty, and skilfully retouching negatives, with liberal patronage and consequent prosperity. I think I am justified in recommending the latter.

But the objector, "having put his hand to the plough," refuses to look back; he returns to the contest with the assertion that when so much reliance is placed upon the skill of the retoucher, the duties of the closet and operating-room are neglected, and inferior negatives the result. This, sir, in many cases is but too true; but, Mr. President, I claim that in no case is it necessarily so. I think every conscientious photographer will agree with me, that each negative should be made with as much care as though the art of retouching was unknown. To do less than this would be like unto a machinist who would omit a vital part in the construction of a locomotive, because he knew it was to be intrusted to the hands of a skilful engineer.

Having endeavored, Mr. President and gentlemen, to call your attention to the necessity of retouching negatives, and also to show that there is a demand for a great deal of it, I now proceed to a consideration of the best method of accomplishing the work, and I am admonished by the too great length of this paper, and the fear of occupying too much of your valuable time, to confine myself to an enumeration of the various devices employed, trusting that before an end of this discussion is reached we will be favored with valuable suggestions from those who have devoted time to the consideration of the subject, or made this branch of photography a specialty.

So far as my knowledge extends, there are three methods employed in this city, each possessing some advantage over the other, which we can ill afford to dispense with, and each having some objectionable features, which it is the object of this discussion to overcome.

First on the list I will place the oldest and most commonly employed process of retouching on "gum," which admits more free use of the needle in making erasures, by which more extensive alterations may be made in a negative than by any other means known to me, but which also presents the difficulty of so matching the opacity of the negative in the parts surrounding the pencil-work, that the subsequent varnishing will not lose the opportunity to print in light spots; and I apprehend that the only remedy will be found in selecting a grade of light and shade, and a delicacy of touch, which aims not at producing a finished negative, but makes due allowance for the inevitable changes produced in the thickness of the film by the subsequent varnishing. If the members of this Society are true to themselves, the how to best accomplish this desideratum will be made plain by our many able practitioners. .

Second. Retouching on varnish which has been previously ground with pumice-stone or other grit, one conspicuous advantage of which is that no subsequent process is necessary which changes the value of the work done; the negative passing to the hands of the printer in the same condition that it leaves the retoucher, the film once being matched by the pencil, it so remains. The importance of this can scarcely be overestimated, and at first sight seems to be all that

could be desired, but we are met at every hand by necessities which this method fails to meet, to wit, removing or reducing light portions of the negative, such as changing the lines of a cheek, the mould of a shoulder, the taper of an arm or finger, etc. A varnished negative offers a most unpromising surface for the use of the needle or other reducing agents, besides involving the risk or almost certainty of the film scaling off around the erasure. The grinding also increases the printing power of the negative in the parts ground, destroying its harmony, which, however, might be partially remedied by acting on the valuable hint thrown out by Mr. Winter at our last meeting, in his remarks on strengthening the shadows in the face by applying gum with a small brush. There is much for us all to learn on this subject. Now is the time, this is the place for us to make common cause against ignorance. Let us each enjoy the advantage of our accumulated experience. Let it be our proudest boast that we have contributed to and encouraged a train of thought by which we have all become wiser, better fitted for our difficult duties, without loss to any.

Lastly. Retouching on "chill" or "grit varnish." This method has much which commends it to my favorable consideration. The negative is left, after varnishing with "ground-glass" surface, favorable for retouching; its printing power is uniformly increased; but, as in the preceding process, a radical change in the negative is difficult, if not impossible. As the traveller at the forks of the road, upon inquiring which was the best, "No matter which you take, you will wish you had taken the other," so have I ever found it in retouching negatives. The difficulties present themselves in such vast numbers, with constant accumulating force, that we are periodically seeking refuge from pressing ills by adopting the previously discarded methods, vainly hoping to effect a transfer of advantage of one process and an evasion of the obstacles of both. Having, Mr. Chairman, endeavored to set forth the necessity of retouching negatives, referred to the most commonly practiced methods employed, and called attention to some of the more prominent impediments which hinder our efforts in advancement, I leave a more full and complete elucidation of the details in the hands of those who, by constant devotion to this particular branch, are better qualified for this duty than myself.

In conclusion, sir, might I be permitted to digress for a moment or two? During the success of this Society I have been solicited by members to look with favor upon a plan of "qualified competitive exhibition" of photographs. I felt, and still feel, compelled to refuse adherence to this or any other scheme which would, in my judgment, deprive me, in common with other members, of the largest possible advantages growing out of these meetings, and, in order that I may not be considered supercilious, and hoping some may be found who agree with me, I desire briefly to state a few of the reasons.

First. In order to maintain this organization in its present state of efficiency, its meetings must be both pleasant and profitable. Let me ask, is defeat so pleasant a thing, that we should provide for all but one, or two, or even three of our members being defeated in their efforts to gain a prize at each meeting? Would not the advantage to those gaining the prize be more than offset by the discouragement, discontent, and absence of those who were persistently defeated? I think our very brief experience in this direction justifies the conclusion that it would.

So much for retouching. And on the score of profit, how, Mr. Chairman, can we hope to make these meetings profitable, if we offer a premium for concealing our best methods? For who, with the single desire of gaining a victory over his fellows, would be willing to disclose the means by which he hoped to obtain it? I hold, sir, that the only success worthy of this Society, the only object of calling it into existence or prolonging its days, will be found in our fostering friendly social intercourse, discouraging all business asperity, and securing to those who attend these meetings an amount of pleasure and profit which will prove an adequate compensation for absenting themselves from their friends and fam-

BURNISHING MADE EASY.

As there are so many of the photographic fraternity using the burnisher of some make or other, and as the usual method of using alcohol or water, with soap in solution, is open to serious objections, we propose the following as a substitute:

Take-

Water, 6 ounces. White Castile or Soda Soap, . ½ ounce.

Dissolve by heat. When dissolved take a cloth—or better, a sponge—perfectly clean, and immerse it in the solution, squeeze slightly and dry. When ready to burnish, rub the surface of the photograph with the dry sponge or cloth and burnish; the result will be all that can be desired.

The objections to using the alcohol or water with soap in solution is, that the enamelled surface of the nicer qualities of cardmount is soluble in alcohol, and the enamel of cheaper grades in water; in either case, there is danger of getting particles of enamel on the burnish plate, the heat causing it to adhere and injuring the surface of the next photograph burnished. By using the sponge, there is no danger of raising the enamel, and no liquid being applied, the surface of the card and photograph is uninjured.

E. A. CLEAVELAND.

34 Bromfield St., Boston, Mass.

PROMENADE STYLE FOR GENTLEMEN.

I NOTICE, in the December issue, a letter from Mr. Taber, author of the Promenade style, in which he compares a lady, as thus represented, to a ship under full sail, etc.

The comparison is very truthful and poetical, showing that Mr. Taber had a distinct idea and purpose in view, without which no good thing was ever done.

But unfortunately, ladies, although our best customers, are not our only ones, the other half of humanity generally wanting pictures to match those of their "better halves."

And I wonder who will first be daring enough to undertake for exhibition, a full-length picture of a gentleman with a "go"

about him, and "without any obstacle in accessories to impede his progress."

I have never yet seen a full-length Promenade picture of a gentleman exhibited by any gallery, or published by any magazine, but I can easily imagine that if the lady "looks like a majestic ship under full canvas, proudly sailing before the breeze," the "gent" will look like that same ship with sails close reefed, scudding before the wind "under bare poles," and thus looking anything but interesting or majestic.

Will Mr. Taber or some equally competent artist give us an example of some "fair to average" man under such conditions. And if he succeeds, even passably, I, and doubtless many others, will be converted to the belief, that the Promenade style is practically useful as well as beautiful.

Truly yours,

E. K. Hough.

NEW YORK, Dec. 8th, 1875.

A RESPONSE TO MR. PEARSALL.

-

Your December number, just received, is as ever full of evidence that somebody has been thinking.

The usual pleasure of its reception was somewhat marred in this by the letter of Mr. Pearsall, showing how entirely he has misunderstood my attitude toward him.

But as I hope soon to convince him of his mistake, and as his error has been the occasion of drawing out so full and clear an expression of his views—which are doubly valuable from his widespread artistic reputation—I cannot deeply regret what has had so desirable a result.

That I intended a "poke" at Mr. Pearsall, or an "assault" upon him personally, is impossible, for the few words of which he complains were written fully two weeks before I knew who was the plaintiff in the celebrated suit, as none of the New York papers mentioned names. He says I should have waited until I knew all the facts before criticizing him. As I have never criticized him, that does not apply. But what I did criticize was the business methods that made such a suit necessary or possible, with the sneers and ridicule of the papers

regarding them, those being already established facts open to comment.

Mr. Pearsall is not responsible for those wrong methods any more than I am, or any of us. They are the product of long-established customs, too strong for any of us to resist singly; and the whole question is, are they stronger than the whole of us can resist combined?

I said those methods were "foolish and cowardly," on the same principle that I have heard hundreds of officers and men who were in the first battle of Bull Run declare that terrible rout a foolish, cowardly, and utterly needless disaster. But that did not say by any means those men were themselves fools and cowards; for after acquiring confidence in each other's steadiness, by drilling and disciplining in unison, they proved themselves heroes on a score of bloody battle-fields.

So with photographers, as I have heard scores of them tell. They submit almost daily to petty insults and impositions, consciously and ashamed of themselves, but feeling powerless to resist singly universal customs.

Now I believe firmly that all they need, to take and maintain a higher stand toward the public-of which Mr. Pearsall has so forcibly shown the necessity-is some wellregulated concert of action, that shall give each of them, at least the more respectable ones, assured confidence that he can depend on the simultaneous steadiness and support of his compeers in whatever advanced position is taken. I said I could not deeply regret the error of Mr. Pearsall, which caused him to give us so many of his valuable thoughts, but I do deeply regret that he has been, as I believe, mistakenly betrayed into such pronounced opposition to all united action for, at least, an attempt to improve our business relations with the public.

If I or anybody else had ever advocated any such arbitrary control or domineering compulsion over the business of their brethren as he implies, they would deserve even more decisive rejection than he has given. But as no one within my knowledge has ever made any such absurd propositions, perhaps he will pardon me for gently inti-

mating that he too is slightly culpable for not being fully informed before proceeding to a final judgment.

To correct misapprehension and explain away misunderstanding is always the most laborious part of any endeavor to lead public opinion into new channels.

Meanwhile, I doubt not, our entire fraternity are more than willing to concede Mr. Pearsall full credit for the courage and perseverance that resolved upon and carried through such a disagreeable suit to a triumphant issue. No one but a photographer can conceive how much courage was needed even to undertake such a task, much more to follow it persistently through all opposition and delay. Many hundreds of similar cases have commenced in the "best galleries," and progressed as far as the "impertinent " answer, saying, " Nothing was owed and nothing would be paid, etc.;" at which the "best artists" have grumbled and, like Uncle Toby in Flanders, "swore a little," then let the whole thing drop. But Mr. Pearsall's temper was made of "sterner stuff," and we are all indebted to him for one point of law and justice decided in our favor. He has acted while we have only talked, and good thoughts expressed in vigorous actions are always nobler than in mere words. Let us all agree to act together, and "the day is ours."

Yours very truly,

E. K. Hough.

NEW YORK, December 8th, 1875.

HINTS TO BEGINNERS.

(Continued from page 365.)

SILVER BATH FOR ALBUMEN PAPER.

Water, . . . 1 ounce.

Nitrate of Silver, . . 60 grains.

Liq. Ammonia, . 1 or more drops.

Nitrate of Ammonium, . a few grains.

First dissolve the silver in the water; in warm weather add but a small portion of liq. ammonia, until a brown precipitate takes place, then add the nitrate until the solution is clear, then filter it and add alcohol, one ounce to ten ounces of bath, and when bubbles appear add more alcohol. Always keep the strength of the silver up in the bath, or the prints are apt to be measled,

spotted, and weak. The foregoing bath can be used for years and never color as the oldfashioned baths do by constant use. In adding silver to the bath the liq. am. and nitrate of ammonium must be added in like proportions. The more liq. ammonia used the colder the chocolate tones in the prints. The more nitrate used the warmer will be the prints. In cold weather add more of the liq. am. and nitrate of ammonium. In case fuming is resorted to to hurry the process of printing, more nitrate of ammonium should be added to the bath. After having prepared a box expressly for fuming add one ounce liq. ammonia to one ounce of water, and put it into a very large flat dish; if the dish is as large as the bottom of the fuming-box it would be all the better, as it would distribute the fumes of ammonia more equally; if the box is made perfectly air-tight it will not matter, as the fumes will find the highest level regards time of fuming, no definite time can be given. This can be best determined by experiment, as paper not sufficiently fumed will appear not to print any faster nor deeper; on the other hand, if fumed too much, the prints will show a bronze appearance in the shadows, also print faster and stronger, especially from negatives that are thin in the shadows. The foregoing formula can be modified to work well on any well-known brand of albumen paper.

Toning in next issue.

L. T. WILT.

FRANKLIN, PA., Dec. 11th, 1875.

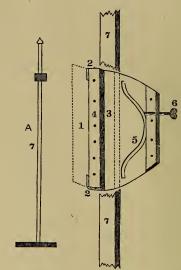
AN EYE-REST FOR SITTERS.

THE following communication, like many others contributed for *Mosaics*, was crowded out of our popular annual, so we give it place here.

A device of this kind is required in every gallery, and this may be suggestive to those who are in the habit of tinkering up something for themselves.

DEAR SIRS: If the inclosed cut is worthy, you may give it a place in the Mosaics. It represents an object for the sitter to look at during exposure. It is very convenient I find; perhaps it will give some one an idea

who has nothing better. I have never found anything to answer as well.



A represents the article complete. No. 1 is a card photograph as an object; it is slid into the slots No. 2, formed by small strips of ferrotype plates tacked to the ends of No. 4. No. 5 is a metal spring, which holds the object on the standard (No. 7) at any height. No. 6 is a screw to regulate the spring. It is not patented that I know of, as I got it up myself. It is free to any one that chooses to use it.

Yours fraternally, FREDERICK H. CLARK.

THE THEORY OF BLISTERS.*

Mr. Bottone thinks that he has at least discovered the true cause of blisters on photographic prints, and with that kindness for which he is so well known he hastened to publish a radical remedy. In his opinion, blisters are the result of endosmose, a phenomenon discovered in the vegetable kingdom by the celebrated French physiologist, Dutrochet, who by it explained the circulation of the sap in the tissue of plants. The production of blisters in albumen prints is the result of endosmose, that is to say, the passage of a liquid less dense through

^{*} From Dr. Phipson's English correspondence, in the Moniteur de la Photographie of December 15th, 1875.

the body of a liquid that is more dense. The remedy has been so successful, that his theory is, perhaps, correct. Here it is:

Sensitize, print, tone, as usual, says he; but, before fixing the print, ascertain the density of your hyposulphite bath. Having poured in another vessel enough water to cover all the prints that you wish to fix in this hyposulphite bath, dissolve in this water enough sea salt to obtain a solution of the same density as the hyposulphite bath. On taking the prints from the bath, place them in this solution. Introduce a thin stream of water in the saline solution, so as to gradually reduce its density; when the salty taste has disappeared from the washing-water continue to wash in pure water. Small blisters may be made to disappear if the surface of the print is dried between two folds of cloth, and then passed between two hard cylindrical rollers. According to Mr. Bottone, it is sometimes possible to get rid of large blisters by pricking the paper back of the blister with a fine needle, and then using the rollers.

BELGIUM CORRESPONDENCE.

THE carbon process is steadily gaining ground. In Belgium, most of the large establishments have adopted it for large work, and a few have discarded silver printing entirely. The great drawback to its adoption for small work is a want of definition, but this seems to be the trouble only during the hot summer months, for the same materials with which it was impossible to make a sharp print during the summer yield prints of sufficient definition since a more moderate temperature prevails. I say sufficient definition; but this definition does not come up to that on albumen paper, and in my opinion it is in many cases an advantage. It is but seldom that on a head requiring a great amount of retouching, the marks of the pencil are not painfully visible in the albumen print, and only the very first establishments can afford to have firstclass retouchers spend sufficient time on a blotchy and freekled head. By making use of the carbon process, the definition is just sufficiently lost to blend the retouching marks. It is in hot weather only that the want of definition is too great for small work, and it is supposed that by certain variations in the manipulations, and by the use of a tissue made with a superior gelatin which absorbs the water less rapidly, the evil will be overcome.

The Ghent Section of the Belgian Association met a few days ago at the laboratory of Dr. Van Monekhoven to witness the operations of the carbon process. The attendance was very numerous and all went away delighted. All the manipulations, with the exception of the sensitizing, were gone through, and the great simplicity of the process was demonstrated to the mind of all present.

As several of the operations have not, to my knowledge, been described before, I will, with the permission of the Doctor, give a synopsis of them. The sensitizing is done in big sheets in a solution containing one and a half to three per cent. recrystallized bichromate of potash. is held in a large dish made of wood and lined with glass, which is cemented to it with marine glue or pitch. These dishes are an article of manufacture, and are similar to the horizontal silver baths. The tissue is passed through the solution, and when it is well permeated with it, which takes from two to three minutes, the dish is tilted so as to cause the liquid to flow to one end. The excess of liquid is then pressed out by means of a squeegee (the tissue being, of course, gelatin side down). This shortens the drying considerably. .If the sheet is large, one end is half turned over a thin strip of wood, to which it is fastened by means of two or three American clothes-It is then hung up to dry. operation can be done in full daylight, the bichromated tissue not being sensitive to light as long as it is wet. It is generally done towards the end of the day. The next morning the tissue is ready for use. In order to simplify the printing, printingframes are used which can hold six negatives of the same size. The negatives are chosen of equal intensity. If any should print quicker than the other, they can be equalized by flowing over the back collodion tinted with red anilin. Three or four samples more or less colored can, for this

purpose, be kept on hand. The printingframes used by the Doctor are cabinet size, and are intended for medallion prints, with tinted borders. They are the invention, if I am not mistaken, of Sarony, of Scarborough. The tinting is done in one frame, and the printing of the picture in another. The tissue is cut of an exact size and put first in the tinting-frame, after which it is removed to the frame containing the negatives. The marks have, of course, to correspond. It is easy to understand that any number of negatives can be printed from at one time with one photometer to measure the exposure. A number of pictures can be developed at one time. The Doctor develops twelve cabinets on a 20 x 24 glass. The glass is first rubbed over with a solution of wax in benzine and allowed to dry. A better plan still is that recommended by Mr. Sawyer, of the Autotype Company. He dissolves sixty grains of wax in twenty ounces ether; pours off the clear part, and dilutes it with five times its volume of benzine. This is poured over the plate and allowed to dry, which takes but a few minutes. The next operation is to flow the glass plate with plain collodion. The collodion should be somewhat thinner than negative collodion. That used by Van Monckhoven is tinted with indigo so as to neutralize the vellow tint of the transfer paper. The collodion being set, the plate is put in a dish of water to wash out the alcohol and ether, after which it is laid on a table. The twelve cabinets are now put in water. This can be done in full daylight if care be taken to keep them face down as long as they are dry. In about a minute they are taken out and laid the one next to the other on the collodionized glass plate. The whole is covered with a piece of rubber cloth, and the water expressed by means of a squeegee, working from centre to edge. The plate is then set up and can be developed at any time. Care should be taken not to let the tissue get dry. If the development has to be delayed long, lay the plates down the one on the top of the other. The development can be done ten or fifteen minutes after the tissue has been transferred to the glass. The plate is laid down in a zinc or copper dish containing water at about 100°. Carbon

printers soon get used to work without a thermometer, appreciating the temperature of the water by putting the hand in it. The dish is tilted forward and back, and the motion of the water soon loosens the paper support, leaving the gelatin sticking to the The unaltered gelatin dissolves gradually, and that only remains undissolved which has been acted upon by the light. The water can be changed two or three times if necessary. When ordinary glass is used, it requires some habit to discern whether the prints have had the right exposure or not; on opal glass it can be seen at once. If the prints are too dark, they can be reduced considerably by increasing the temperature of the water. The plate is next washed under a stream of cold water, and then put in a strong solution of alum, where it is left ten or fifteen minutes. In case the water used is hard, the alum solution should be acidified with a few drops of sulphuric acid to prevent a deposit of alumina. The plate is then rinsed off again and set up to dry before making the final transfer. Dr. Van Monckhoven, however, discovered a means of making the transfer immediately. The plate is put in ordinary alcohol, which brings down the relief in a few minutes by depriving the gelatin of its water. The alcohol can be used over and over again. The final transfer is made in the following manner: The transfer paper, which is coated with gelatin, made insoluble by means of chrome alum, is put in hot water; the gelatin film on the plate is wet with cold water; the transfer paper is laid down on it, and the water pressed out by means of a squeegee. When dry, cut the paper at half an inch from the edge with the point of a knife, when the whole sheet will leave the glass in the easiest manner. The prints have the glacé appearance, which, however, disappears in mounting them. If the glacé appearance is desired to be preserved, two or three thickness of transfer paper can be applied, thus forming a card, or a thin card can be pasted on the back of the first sheet with gelatin. The prints can also be embossed and mounted on the card by putting strong glue to the edges only. If a matt surface is desired, the development can be done on ground-glass.

The great advantage of the process as described consists in the freedom from blisters, lifting of the film, and in the great ease in which the prints separate from the glass, and all this is owing to the use of collodion as a substratum.

On reading this description, the process may seem rather complicated; but on seeing the operations performed, it appears simple enough. I have the conviction that it will not be long before it will be adopted by all conscientious photographers. No doubt some drawbacks exist which will be taken by the unenterprising and conservative of our craft as an excuse to stick to the old methods; but practice and a better understanding of the chemical laws involved will, in time, remove them.

Van Monekhoven thinks that by the use of the best samples of gelatin, a tissue can be made which will give satisfactory results during the hot weather. The Autotype Company manufacture a tissue for transparencies which always gives good results. Why should they not supply tissue of a different color, having the same qualities?

In one of my former letters I described the process of printing transparencies for enlarging by means of the carbon process. The film transferred to glass is liable to blister and wash off. By the use of a collodion substratum as described above, this difficulty is entirely removed.

Much has been said and written on the subject of the blistering of albumen prints. In my opinion the harder and hornier the albumen film is, the more subject it will be A strong silver solution will to blister. produce a harder albumen film than a weak one. If those who get blisters in the hypo bath will reduce the strength of their silver, they will find that the evil will be removed. A few grains of earbonate of soda, of potash, or of ammonia, or a few drops of ammonia in the hypo will soften the film so that no blisters will form if the paper is silvered on too strong a solution. If the blisters only appear in the washing, the old remedy, known to every one, of putting them first in a very strong salt solution will remedy the evil.

CHARLES WALDACK.

GHENT.

GERMAN CORRESPONDENCE.

Mr. Sawyer and the Carbon Printing Process—New Printing Process in Fatty Ink from the Negative—How to photograph Tunes.

THE talk of the day at present with Berlin photographers is centring on the pigment print (carbon printing).

The reports from the Brussels Exhibition, of which I wrote in the October number, have directed the attention of photographers to the earbon process, and it measurably increased after Herr Schaarwächter, of this city, had sent a number of negatives to London, of which he received a series of enlargements in earbon, prepared by Spencer, Sawyer, Bird & Co., which are unanimously considered the most beautiful ever seen. Then it was resolved to invite Mr. Sawyer to come to Berlin, and to demonstrate practically the process. Mr. Sawyer accepted the invitation, and has given four lectures already, with the most perfect success. He is, indeed, at present the man of the day. The most prominent photographers of Berlin were present at these lectures, and have since succeeded so well in pigment printing that you may expect to receive several pictures by the carbon process at the Centennial exhibition. I also was present at the lectures, and saw many things which were new to me.

In principle the process of Mr. Sawyer is like Johnson's, which I described in the second edition of my Handbook (American edition, p. 238), with the exception that the picture is not taken on zine or glass, as therein recommended, but on paper, called flexible support, which, like zinc or glass plates, can also be used several times. This flexible support is paper coated with gelatin, and with a solution of white shellae and borax afterwards, which by a powerful pressure is made as impenetrable as possible. Before using this flexible support, it must be rubbed over with a solution of wax and resin in turpentine, and then, together with the toned pigment paper, dipped into water, so that both prepared sides are touching each other, avoiding air-bubbles; after the squeezer has gone over it, it is to be laid between blotting-paper, or hung up for drying. Ten minutes afterwards we can commence with the development, which is to be done in the usual way with warm water.

The developed picture, which is reversed, is to be dipped in a one per cent. solution of alum, and then transferred on the so-called double transfer paper. This is, in general, a gelatin paper. At first it is placed in warm water till the gelatin side is soft and slippery; then put into cold water, taken out, the squeezer applied, and the paper hung up for drying. When dry, the picture itself will come off from the double transfer paper readily, and may then be retouched, cut, and mounted. The transfer paper, after being coated again with a solution of wax, can be used repeatedly.

Certainly this flexible support will be more agreeable to many than the development on glass; but after all, the latter will retain its worth when it is necessary to make pictures of extreme lustre. These pictures are the most, beautiful which can be attained by the pigment process. For their preparation a solution of one part of wax in five parts of benzin must be poured on a glass plate (opal glass is the most convenient); then coated with raw collodion, and afterwards put in water till all fatty stripes disappear. After this the plate is to be laid in a horizontal position, some water poured over it, and the sheet of toned pigment paper put in cold water till it begins to flatten, after which it is laid on the glass plate, avoiding air-bubbles, rolled with the squeezer, and the whole pressed between blotting-paper about ten minutes; it is then to be dipped into hot water, in which the sheet soon loosens itself, and the picture is developing. It is now dried and retouched, after which it is covered with transfer paper, softened in water, and left to dry. The picture, when lifted at one corner with a knife, springs off easily, and is of an extreme lustre and transparency. Attention is to be given to the coating with collodion, which is not mentioned in my Handbook in the description of Johnson's process.

If we do not want to take off the picture, but wish to keep it on the glass, we have to operate in the same way, with the exception of not coating it with resin before collodionizing the same:

Milky glass pictures, made in this manner, will have the same beautiful effect as chlor-silver collodion pictures, and are, at all events, very durable.

Sawyer's enlargement process is also aiming at the preparation of fine transparent positives. For this purpose Mr. Sawyer is using a special tissue prepared of a peculiar fine color; it is to be applied in the most delicate manner, after being sensitized as usual, and toned with the photometer. Especially it must be remarked that pictures of this kind are to be copied considerably deeper than is the custom generally. The development occurs after pressing it on collodionized glass, and therefore we must be careful to use clean water. The developed picture has to show in the lights all its details. After a good transparent positive is obtained, the preparation of enlargements will meet no further difficulties; it is only necessary to take from the positive in the camera an enlarged negative by means of the usual silver process. This can be done by reflecting the top light on it by means of a looking-glass. In clear weather a few minutes are sufficient to take an enlarged negative. The diapositive is to be placed in such a manner that the negative appears reversed. From this can be copied a pigment picture by means of simple transfer. That the enlargements thus prepared are extremely wonderful, I have mentioned already. It is very likely that in the near future the process of pigment printing will set aside the process of silver printing, for the former is to be greatly preferred ou account of durability. The loss of a little carte-de-visite, in consequence of turning yellow by age, we do not regard very much; but the loss of a large and expensive picture is an important one. It is certain that the process, in its present state, is more easily to be executed than ten years ago. We do not need any more the ugly caoutchouc paper, nor the heavy presses.

Another highly interesting item of news is a new photographic printing process executed in the Government Printing Office at Berlin. There they take at present copies in fatty black ink directly from the negative. For example, they make a negative,

let it dry, paste it on a stone, and roll the ink over it exactly in the same manner as with lithography, and take a print of it. The copies are without any fault. It is astonishing how just those places on which the collodion is plainly visible, take the fatty ink; if I had not seen it myself, I would not believe it. Of the process itself I can, unfortunately, give no explanation. I only know that this process is extensively used. A plate does not stand very many prints, and for this reason they take an impression on the stone from the negative, which by sufficient care can be done just as well as an original print. In the same establishment is also executed a process to take a positive directly from the negative; the collodion negative is strengthened till its lines are projecting in a relief-like manner. Then there is taken a cast of it in a galvano-plastic apparatus, thus obtaining a copper plate in relief, from which copies can be printed on a copper-plate printing press.

I hope to be able to present some specimens of this process at the Centennial exhibition next year.

You are aware there is no lack of photographic news; but one of the queerest and most wonderful is perhaps the trial of photographing musical sounds. The matter seems to be most incredible, but the possibility of it is shown. König, a physician at Paris, has constructed an apparatus consisting of a little drum, over which is stretched a very elastic skin. A stream of gas let through this drum will burn as usual, but as soon as a tune (by singing) strikes the skin stretched over the drum, the gaslight commences to shake in a wonderful manner; and if we look at it in a rotating looking-glass, we observe peculiar figures, which change according to the different tunes; and by applying a burning gas producing a light of great chemical effect, we can photograph these peculiar figures. What kind of gas will answer for this purpose is still this moment an undecided question, but this much is certain, there are in this respect great problems yet to be solved; we may succeed perhaps in photographing speeches instead of stenographing them as usual.

BERLIN. H. VOGEL.

FRENCH CORRESPONDENCE.

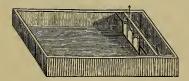
Meeting of the Photographic Society of France
—Distribution of Rewards by the President of the "Society Belge"—A Novel
Filtering Tray—Fatty Ink Proofs—Mons.
Davanne on Metallic Spots in Paper—An
Easy System of Decantation, by Professor
Stebbing—Mons. Fleury Hermagis on the
Preservation of Positive Paper—A New
Camera, by the same, as well as a New
Photometer—Mons. Gobert on means employed to Detect Forgery.

THE monthly meeting of the Photographic Society of France was held on Friday evening the 3d inst. The chair was occupied by Mons. Peligot, the celebrated professor of experimental chemistry. Previous to commencing the business of the evening, the chairman welcomed among them the president of the "Association Belge de Photographie," Mons. G. de Vylder, who had undertaken the voyage from Brussels to Paris for the purpose of distributing the medals and other awards which were assigned to the French exposants in the last photographic exhibition held in that city. In a few but well-chosen words, Mons. G. de Vylder thanked the Photographic Society of France for the aid, advice, and communications given to the Belgian Society when in its infancy-for which, he said, we are indebted for the firm focting we have obtained, and for the success with which our exhibition has been crowned.

With an appropriate speech to each exposant, Mons. G. de Vylder, in the name of his Society, then distributed the medals, and concluded by hoping that the rewards would act as a stimulant to compel the recipients to persevere in the road that they had chosen, for, he said, although much had been done towards the advancement of the photographic art, still, he believed, very much remained to be discovered by the hardy pioneers who were brave and steady enough to seek for it.

A new horizontal filtering tray for the negative bath was presented to the Society by Mons. Guinet. Under the ordinary covering was adjusted an upright ridge of glass to within an eighth of an inch of the top; this ridge was perforated with say four or five

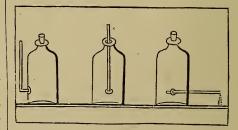
holes, of a bridge-like shape. A filter, which stopped up the holes, was placed on the back



of this ridge. The silver solution is now put into the tray; the latter is then immediately brought from a horizontal to an upright position; the bath runs over the ridge, the ordinary covering for such trays acting as a reservoir, and keeping the liquid from running over. The tray is now placed in a horizontal position, the upright ridge preventing the silver solution from coming into the tray otherwise than by passing through the filter. In a few minutes the liquid will be found on this side of the ridge, and the bath is ready for use.

Mons. Despaquis presented to the Society some very fine specimens of his new process of fatty ink printing.

The Vice-President, Mons. Davanne, gave a verbal description of experiments undertaken by him to discover the cause of spots frequently found on albumenized paper, and proved beyond doubt, and to the satisfaction of all present, that these spots are the result of a certain dust of metallic oxide being deposited on the back of the paper whilst undergoing the operation of satinage. The fruits of Mons. Davanne's experiments were examined with great interest by the members. After a slight discussion, the Society were unanimously of opinion that it would be well to write to the paper manufacturers, asking them to cease the satinage of paper intended to be employed in silver printing, as upon mature reflection the Society is of opinion that the process of satinage is useless, the different baths through which the paper ultimately passes destroying the advantages without being able to counteract the disadvantages. This communication may be of service to the readers of the Philadelphia Photographer, for all who use the silver printing processes are fully aware of the inconvenience which these metallic spots give, and if this annoyance can be overcome by simply requesting the manufacturers to cease the process of satinage, so much the better for both manufacturer and consumer. I was then called upon to give a description of an easy method of deeanting collodion, albumen, or in fact any other glutinous liquids, which I did in the following terms: Gentlemen: If I offer for your appreciation, this evening, a simple means which I have employed with success for the decantation of syrupy liquids, it is owing to your colleague, M. Davanne, who yesterday did me the honor to pay a visit to my laboratory, and in his inspection he admired the simplicity of the decanting apparatus I employ, and spoke so highly of the convenience of it, that through his instigation I have dared to present such a simple bottle before you, in the hope that it may prove useful to chemists and photographers. As for myself, I have tried many another elaborate apparatus, but no other has ever rendered me the service of this simple and primitive one now before you. For my American readers, I will describe the apparatus in the hope that it will be of service to some, if perchance it is unemployed on the other side of the Atlantic. Take a tubular bottle large enough to contain collodion sufficient for a day's work; into the lower hole put a cork, through which has been passed a small bent glass tube, which latter should be a little longer than the bottle is high. See Figs. 1 and 2. The bottle being now filled with collodion is allowed to stand all night, so that all dirt and undissolved cotton may fall to the bottom, a cork being placed in the neck of the bottle, and one in the top of the glass tube, to prevent evap-



oration. (Vulcanized india-rubber corks, tubes, etc., should not be used for collodion, for the sulphur which is in them will be

dissolved, and the silver bath will become contaminated.) The next morning the collodion, being fit for work, is extracted from the bottle by lowering the glass tube (see Fig. 3), previously removing the corks from the bottle and tube. Air-bubbles may be prevented by receiving the collodion on the side of the neck of the collodionizing bottle. The excess of collodion poured on to the plate should be received into another bottle, and set apart until the evening, when, after adding ether and alcohol, of which it has been deprived by evaporation, and some new collodion to replace that used during the day, it is added to what remains in the decanting-bottle, and is fit for use again the next morning. This system has the advantage of suppressing the glass-tap, which often sticks in a disagreeable manner, or, what is perhaps worse, leaks.

Mons. Fleury Hermagis communicated to the Society a method of preserving albumenized paper already sensitized, either before or after printing, by means of the vapors of an essential oil, which method, said Mons. Hermagis, is due to an American amateur, Mr. Dever, and whose idea has been the starting-point for many interesting experiments, which has not only rendered me great service, but many persons to whom I recommended its employment having expressed their entire satisfaction, I thought I was in duty bound to propagate such a valuable idea. The operation is very simple. Take a box about one foot square and two feet high, and about five inches from the bottom construct a false bottom of trellis-work. A few pieces of cotton-wool soaked with lemon essence are dropped through the holes of the trellis-work to the bottom of the box. The proofs to be preserved are put into the box and the lid closed. In this perfumed atmosphere the prints will not turn yellow for several days, which is a great advantage in dull weather, when a sufficient number of proofs cannot be obtained to go to the trouble of toning.

By acidulating paper with citric acid, chloride of silver paper may be kept for fifteen days or even a month, and if a sufficient quantity of acid be used, for four months.

This simple method, which I highly recommend will, doubtless, entice many per-

sons who prefer harmonious tones to make a trial of it; for, it is well known that prints which are not toned and fixed immediately after printing are superior to those operated upon directly after the impression, both as regards beauty and harmony of tones.

The results of experiments made with other essences, were not satisfactory in comparison with the lemon essence. The very bad results with lavender essence may doubtless be attributed in this case to its impurity, for it is rarely to be had perfectly pure. Turpentine had a pernicious influence on ordinary paper, but no action was perceivable on paper previously acidulated with citric acid.

A few of my customers have complained of the bad effect of the vapors from these essences in a laboratory. It is known that fresh paint produces fog. The same, I am assured, is the case with the vapors of lemon and other essences, for they say the vapors diminish very much the sensibility of dry plates. This inconvenience is very easy to be avoided, especially as the cause is known. It would, indeed, be very unhappy if, for such a frivolous reason, an idea like this were thrown aside, a process, too, which offers so many advantages.

Mons. Fleury Hermagis then presented a new camera obscura for dry-plate work, the new feature in it being that there is no bellows (if this can be called new). This is replaced by an Archimedean screw round the lens, which permits it to be drawn in and out (about 21 inches) with the greatest ease. The camera is hinged together in such a way that it falls flat for packing and weighs very little; which is a very great thing in the eyes of young amateurs. But there is a great drawback to the general use of such a camera, which is that only one lens can be employed, and no sensible photographer or experienced amateur would content himself with a single lens in an excursion. Such a camera is very good for a young novice, "pour faire ses premierês armes," but he will soon find that lightness must not always be weighed against convenience, and that if he wishes to do good work he must have a good camera, with two or three lenses of different foci, or a combination lens to do all sorts of work. I should, nevertheless, not think of recommending the latter instrument to any of my pupils or friends.

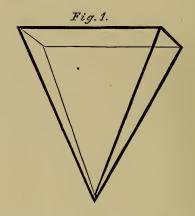
For the last few years construction of photographical instruments (on the continent) have, according to my idea, followed a false "route." They make light instruments without a corresponding benefit, and if they persevere in that direction instead of taking one camera on a tour with a lens or two, we shall be obliged, in order to do the work, to carry several light cameras with lenses to match.

In conjunction with the camera, Mons. Hermagis offered us some (I call it) compensation as a "nouveauté," which was a new photometer of his invention, which he has baptized as "Photometre à prisme." He introduced it to the Society as follows:

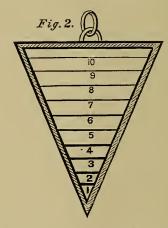
The little instrument which lies before you may justly be called the "corellaire" of my tourist camera, for without a photometer it is absolutely impossible to judge of the time of exposure with any degree of exactitude for dry-plate work. Sufficiently exact for the purpose for which I intended it, I may say that my photometer is far behind that of Mons. Léon Vidal's, which is marvellous in its gradation and in its precision, but which requires an immense amount of care and intelligence in its construction. I desired simply to put into the hands of every operator a simple photometer, having a greater precision than the ordinary ones, formed in general by the superposition of different layers of paper or mica, unequal very often in thickness and coloration, and liable at the same time to be influenced by the temperature or by the light.

My photometer is a simple prism made of yellow glass (Dia. I, side view), framed in such a manner as to become an ornament for a watch chain. Upon the inner surface of this yellow glass prism lines are drawn beginning from 1 to 10; No 1 represents the finest part of the prism, and No. 10 the thickest. A piece of sensitized paper is introduced under the prism and allowed to remain one minute (in the shade it is then examined), and according to the number that the impression has reached, it

is very easy to calculate the photogenic power of the light.



In order to give my readers a correct idea of this photometer, I inclose two sketches, of the exact size of the instrument. No. 1 is a side view of the glass prism before



being mounted; No. 2, the front view of same when framed.

Mons. Gobert, "attaché à la banque," gave a very interesting and instructive lecture on the manner employed at the Bank of France to detect forgeries. He informed us that although the insoluble part of the ink had been erased or scratched off, still the soluble part had penetrated into the fibres of the paper, and although invisible to the forger and to the public eye, still the writing could be easily renewed by a simple chemical reaction, and the forgery detected. He then passed round a piece of paper upon

which had been previously written a certain sum, which had been scratched out and replaced by a larger one. Mons. Gobert dipped this paper into a solution of ferrocyanide of potassium, and after having held it for a few minutes over the fumes of hydrochloric acid all the first made figures became visible.

This chemical reaction cannot always be employed, as a valuable paper might perhaps be spoiled, so photography is called in to bear witness against the forger. A reproduction of the false note is made, and on the negative can be seen the form of the obliterated writing. Mons. Gobert presented several false bank notes, with their reproductions, the authors of which were discovered and condemned through photography; these gents are now at Cayenne, contemplating upon the extraordinary power of that science which discovered so easily what they had taken so much time and pains to hide. It may truly be said here that light was thrown upon their actions.

Prof. E. Stebbing.

Paris, 3 Place Breda.

Connecticut Correspondence.

NORWALK, Ct., December 6th, 1875.

FRIEND WILSON: Went home last evening after a hard day's work at gallery, but journal in hand, and I had such a treat from the December number, that, forgetting my fatigue, I went to work jotting down some reflections from articles I had read, and what I have learned from its perusal; and if the repetition of some of the ideas advanced by others will be of any service to you or your readers, you are welcome to them.

First. The Promenade picture by C. M. French. As with Rocher's picture of "Lady buttoning her glove," in a former number, I was struck with the case, grace, and naturalness of the lady and her surroundings, so in French's picture the balcony scene was new, refreshing, and beautiful, as well as truthful to nature. If it could be improved at all, would suggest lighting the sky overhead in front of the figure. For another pose of figure with same back-

ground, to carry out what Brother Taber intended when he conceived the Promenade style, and give it the go, would suggest the lady without book or glass, holding up her skirt preparatory, to going down that very natural-looking step.

Secondly. I have learned from the article on art and mechanism, by Mr. W. Curtis Taylor, to place a still higher value upon the photographic art. Every one should read that article carefully, especially pages 355 and 356.

Thirdly. From the result of the trial before Judge Morse, in case of G. Frank E. Pearsall, the photographer, against W. W. Schenck, of Brooklyn, the editor congratulates Mr. Pearsall on his victory, and thanks him in the name of the fraternity for bringing the question to a square issue. This is right. We owe Mr. Pearsall many thanks, and we ought to profit by this decision, as well as from the valuable hints we have from Mr. Hough on photographers' rights.

Fourthly. All ought to read carefully and be admonished by the remarks of the editor on page 358, in reference to the Van der Weyde studio.

Fifthly. J. T. Jones, of Pilot Point, Texas, has an article on keeping the Fourth Commandment. When looking at his address, I was prompted to say: Can any good thing come out of Texas? I answer, yes; that is a good thing, and he is a wise man who will follow that advice. Brother Jones, keep your pilot pointing that way, and you'll reach the safe haven at last.

Sixthly. Ah! when you come to the sixthly, that's Webster-the Webstir of our convention, and without that stir, what would a photographic convention amount to? Brother Webster hit the nail on the head when he said, these conventions have helped to elevate the standard of public opinion, of photography, and photographers. I ask, would Judge Morse have rendered such a decision as he did in Pearsall's case six years ago? I think not. So let us, in the inspiring words of Webster, wake up, and revive the song of recruits during the war, as we all turn out for Philadelphia: "We are coming, Father Rulofson, three hundred thousand strong!"

Seventhly. Speaking of Rulofson, I wish I could see him. Did not go to Chicago convention, but heard of him. The meeting at San Francisco was abandoned for the greater, Centennial; and there we all hope to see him, especially since his noble gift towards the Centennial fund. Why, the very fact of our having such a generous President should bring back every backslider, every backpayer, and make every member a drum major, to enlist new recruits to the National Photographic Association.

Eighthly and lastly. I cannot close this without a word for the man who gives us all these good things, and wish him a Happy New Year back again, and plenty of new subscribers for his ever-welcome journal.

E. T. WHITNEY.

OUR PICTURE.

AGREEABLY to promise, we present our readers this month, as a New Year's greeting, the pictures entered by Mr. Bigelow in competition for our first Promenade prize.

We referred to the characteristic features of this work in our August number, and have but little to add to what we there said in regard to its excellence, except that it has grown in favor with us; the more we have seen it the more there seems to be in it to admire and study. Thus we believe it will be with all who may have occasion from time to time to refer to this January number of our magazine for 1876.

There are, probably, few persons capable of fully comprehending all there is in even a little photograph like this. Each time it is examined there is something new discovered, some new beauty, some quality of light and shade, some arrangement of lines that reveals the purpose of the artist, till finally we become familiar with every part, and feel quite well acquainted with it as a whole, as well as with the artist who produced it. This becoming acquainted with pictures is like making the acquaintance of persons, it requires time and repeated interviews; and as we estimate the value of a new friendship by the pleasure which comes to us as our relations become more intimate, as we discover new traits of character or qualities of mind, so we come to admire a picture, be it a simple photographic portrait, or an elaborate painting by some of the masters in art. And there may be no better test of truth and real merit, which all good pictures must possess, than the fact that the more we study them the more we admire. When a picture is wanting in merit or truth, or is seriously deficient in any of its parts, we soon tire of it, it ceases to interest, and instead of giving us pleasure we feel repelled, and turn from it as we would from one whose friendship had no charm for us, or in whom we discovered traits which were not congenial to our sense of right or purity.

This is the way in which we would have every one study and become acquainted with our picture. Do not attempt to satisfy yourself of its merits upon once looking at it, but come to it again and again. At one time consider the composition, follow every line, weigh it with every other line; study the pose, see if you can catch the thought of the artist and the idea he intended to express. At another interview make the lighting the subject for consideration; decide in which direction the light falls upon the subject. Does the face, as it should, receive the strongest light, and is every other part in proper subjection? Next, examine the accessories, and ascertain, if possible, their purpose and the relation they bear to the principal subject as well as to each other. In this way a thorough acquaintance may be made with all the details, and by the time this course of study has been gone through with, the conviction will be impressed upon the mind as to whether or not the picture be a pleasing one and a fit example for imitation.

We have sometimes urged the photographic student not to copy or imitate others, but rather to take the thought, the feeling, the spirit of another's efforts, and mould it into a work of his own; but this is, perhaps, expecting too much. Nearly all students of art are obliged to be imitators at first. The mind must be disciplined before it can compose with discretion; and even when well trained all are not capable of producing original creations. The traveller abroad

sees in the Louvre and other great art galleries of Europe, scores of artists constantly employed copying the grand works that are to be found there. Many have no higher ambition than to be able to make a successful copy of some picture by Raphael, Guido, Murillo, or some other of the great masters, and in this they are not to be discouraged, as by studying and imitating the works of different artists and the various schools of art, they find that for which they themselves have the greatest talent, and are often led into a field of originality which makes them famous, and in their turn copied or imitated by others. These same privileges should be accorded to photographers who are trying to improve. No better practice can be had than to take such work as this and imitate it as nearly as possible. After becoming familiar with the picture as directed, proceed to make one as nearly like it as you can. If one trial is not satisfactory make another; then try it with some sitter, and after having succeeded with a reproduction, as far as your material will allow, vary it as your fancy may dictate. By this method the mind is familiarized with whatever is proper and judicious, and the basis of a correct taste is formed.

Our picture is by Mr. Lyman G. Bigelow, of Detroit, Mich., whose artistic skill, as displayed in this and in some of his late work for which he has been awarded the gold medal in the second Promenade prize contest, stamps him as one of our best photographic artists. The lens used was a Hermagis, "Salomon" style.

The prints were made by Mr. Hearn at the printing rooms (now his own), of the *Philadelphia Photographer*, and will be found fine examples of photographic printing.

POLITENESS, gentleness, consideration for the comfort of your patrons, especially at the time of sitting, together with that virtue which sweetens all our intercourse with each other, viz., cheerfulness, all have an important influence in securing a successful sitting, and win the hearts as well as the cash of those who are capable of appreciating these amiable qualities.

ACID v. ALKALI.

BY W. W. SEELER.

HAVING frequently noticed in the *Philadelphia Photographer* and other publications of a like character the preference expressed for an *alkaline* bath, I think it would be of advantage to those who advocate such a bath to try an *acid* one.

I will preface by stating the results attained by those who made some of the carliest applications of an acid nitrate of silver for albumen paper. At that time the ammonio-nitrate for this purpose was unknown. We used an acid bath composed of plain silver made slightly acid by means of acetic acid, and the results produced, in good hands, would cast in the shade some of the productions of the present day.

When ammonio-nitrate was first used, the greatest trouble to be encountered was the dissolving away of the chloride and albumen surface, not only destroying the sensitized surface, but deranging the bath to such a degree that charcoal or kaolin was in constant use, an expedient which, at the present time, would be wholly unnecessary if the bath is slightly acid and filtered through chloride of silver.

If the nitrate bath is of the proper strength, slightly acid, and fumed over aqua ammonia, the finest results are obtained, and great depth and richness of color developed. With a negative of the proper strength, the deepest shadows will show the bronze or last stage of reduction; nitric acid will act in conjunction with the nitrate of silver in coagulating the albumen surface, and, after being fumed, will not show the slightest trace of acid, thus showing that a much weaker bath can be used without destroying the albumen surface. It will be found that the bath loses its acid properties after having been used a few times, and must be acid again.

One of the best preparations of ammonionitrate is made by dissolving a given quantity of silver in water, and to one-twelfth add aqua ammonia until redissolved, after which add the same quantity to that which has been changed with ammonia, which will cause it to turn brown; now add nitric acid (diluted with three parts water) until it shows a slightly acid reaction on litmus-paper.

This should now be added to the plain solution, and filtered through a small quantity of chloride of sodium until clear.

By adhering to the treatment above given, the vexatious delays incident to a foul bath will be overcome, and the operator will be fully repaid in peace of mind as a sequence of the production of the most satisfactory results.

OBITUARY.

THE following extract from a letter written us by Mr. J. F. Ryder, of Cleveland, Ohio, informs us of another vacancy in the photographic ranks. He says:

"If you have not been advised of it through other sources, and this reaches you in time, please make mention of the death of R. L. Wells, an old photographer of this city, which occurred on the 11th inst, after an illness of several months, from consumption. He was a member of the National Photographic Association, and always ready, with his hands or his money, to do his share in anything for the advancement of the art. He was one of the kindest and drollest of men. Everybody that knew him was his friend.

"A body of photographers performed the last sad rites at his burial."

We have also another record to make of the work of the pale messenger. Mr. O. H. Willard, of this city, died suddenly on Sunday, December 19th, after a brief illness. Mr. Willard was one of the pioneers of photography, but retired from the business several years ago; since which he has devoted his attention to the magic lantern. As an exhibitor he has been very successful. He was a gentleman possessing many estimable qualities, and will be affectionately remembered by a large circle of friends.

THE PRINTER'S CORNER.

BY CHARLES W. HEARN.

As with the arts and sciences people have to study to excel, so it, is with photography. Those who desire to excel must strive to do so, bending all of their energies to that result, and by patience and perseverance to press

on to grander attainments than what the mind has ever as yet conceived as attainable; and, depend upon it, reward shall crowd your labors with success. Let us aim high, and we will reach high.

Suppose our customers are not of the finest, as regards the excellency of their features, the gracefulness of their carriage, etc., is that any, reason why we should not strive to do something extra great, and obtain for them negatives and proofs therefrom that will in every case be strictly firstclass? One of the finest negatives I ever saw was made from a subject that every one would term a "hard" one. Her features were anything but lovely, her complexion just what you don't want (!), and her expression savage, yet the negative, as made by the artist who posed her and superintended the plate manipulation, was one that rendered her features very pleasing, and her face artistically right, being neither as bad as it looked before the negative was "touched," nor as though she had a complexion like unto that of a child, but a very pleasing likeness. The prints produced were among the best that I have ever had the good fortune to see, being of a very rich tone, bordering on to a warm yet clear purple, and showing withal the greatest amount of care. To be sure, the negative and prints were made at one of the very best galleries in the world, but yet that does not alter the case a particle, for what one party is capable of producing we all should strive to accomplish. Let us not set up the cry (which is stale in the extreme) that "we have not the subjects," etc., that some better artist may have, nor that we do not have the negatives, as this one or that one has, to print from, but let us do the best we can under the circumstances. The most delicate part of a watch is not given to a "half-and-half" class of a workman to make, but to the most skilled hand. Depend upon it, that the nicest and most remunerative work in our art is not given to a poor, but to an expert photographer.

We were obliged to lay over a communication from Mr. W. B. Critchfield, of Chariton, Iowa, last month, and even at this issue of the *Philadelphia Photographer*, we will be obliged, on account of many

other letters to the "Printer's Corner," to condense his remarks.

FRIEND HEARN: I would like to know the cause of "black measles," and then the cure.

Mr. Critchfield also makes some excellent remarks on photographic rights, and he earnestly indorses Mr. Hough's views on a society for improvement in photography, or "photographic union," etc. No doubt but what such would be a very excellent idea, for anything that would have the result of elevating the aspirations of those engaged in our art should be encouraged by our support in every way. The time is not so far distant when the societies that are already in working order will so build up our brotherhood, that we will one and all look forward to the monthly meetings with a great interest.

The black measles are generally caused by unequal silvering of the paper. Paper which is floated insufficiently will give it. When floated too long the same results are caused, but produced in a totally different way. In the first instance the process is as follows: The sheet of paper is laid upon the bath; immediately the salt in the albumen commences to take up some of the silver solution, besides other chemical action is going on, which we will, as foreign to the subject under consideration, lay aside. If the solution is cold, or the temperature of the room lower than what we calculate when we make our solution, then a longer time is required to float the paper than when such is not the case. It is for this reason why the black measles come in early morning and not in the middle of the day, for by that time the room has got warmed up, whereas in early morning it is a little cool. In both cases we silver the paper the same time, and hence the complaint: "One sheet of paper is all right, another is not, and both silvered on the same strength of bath, and fumed the same time." In early morning float ten or fifteen seconds more than at noonday, if the morning is colder than what you desire. Keep your solution at about 65° F., and the room you silver in at about the same temperature. When undersilvered the shadows are not strong, but flat. The parts of the sheet where the "measles" ap-

pear is somewhere along some of the sides of the paper, and is never seen in the middle unless the rest of the paper is exceedingly bad, and even then only slightly so. This is because the silver solution is unequally absorbed by the sheet, for some parts of the albumen paper absorbs more readily than others on account of several matters, one of which is the albumen itself being more heavy and repellant at the sides than at any other part of it. Another is the imperfect mixture of the chloride with the albumen. a task which is by no means an easy one to accomplish most perfectly, as all who have had anything to do with albumenizing are aware of. All manufacturers of albumenized paper, however, make the mixture perfect enough to have no deteriorating effect, unless other outside causes exist; for instance, the coldness of the bath or room; for when both the bath and room are "all right," in regard to temperature, it will be observed that "measles" are not so often the cry. The reason why the measles are black, is because the imperfect mixture of the chloride makes the absorption greater at those parts where the specks of salt abound in excess. Perhaps a better explanation of my point could be given if I were to obtain a sheet of the finest of emery paper, and ask my readers to imagine it to be a sheet of (black) albumen paper. Now, I take a fine artist's brush and dip it into equal mixtures of ammonia and sodium (or three-fourth and one-fourth, etc., etc., as the case may be), and very finely touch several places along the sides of this paper with it. It is materially the same with the albumen paper itself, and the undersilvering on a cold bath, with a dry, horny, repellant paper, makes the result as mentioned above, for the places where the chloride abounds most freely on account of imperfect mixture, gets the most sensitive, and consequently darkens the most rapidly. Such is the modus operandi of treating an undersilvered sheet of paper under the circumstances mentioned above.

Now, with an oversilvered sheet the same results occur, but it is because the absorption is permitted to progress too long a time, and the specks of chloride in the albumen paper take so much to itself as to

have the same result, i. e., prints blacker than the rest of the sheet. In the medium time of floating these specks do not absorb so much silver as to show any perceptible bad result; but even then it will show if the solution is cold and the room likewise. In undersilvered paper, where the black measles show, the shadows are weak, showing a case of undersilvering. In oversilvered paper the shadows are more or less bronzed, showing a case of oversilvering.

If not putting you to too much trouble, I wish you would please send me the best formula for a printing bath for the Dresden brand of albumen paper, called extra brilliant pink, and called cross-sword brand, as I am now using it. I have your book called the *Practical Printer*, and find it to be as good as praised; could not get along without it. I am using your formulæ, and find my work much better. Can get out of almost any trouble by referring to your book.

M. T. H.

The formula you desire is as follows:

Crystal. Nitrate of Silver. . 1 ounce.
Distilled Water. . . 9 ounces.
Nitrate of Ammonium. . ½ ounce.

Slightly alkaline with liquid ammonia. Float fifty to sixty seconds. Fume ten minutes.

A very great number of communications have to be laid over until next month, for want of space.

TALK AND TATTLE.

Another correspondent makes a suggestion which we heartily wish might be adopted by every reader of these pages. It is seldom that a photographer can take his journal, sit down and peruse it thoroughly from beginning to end; some of the best, and often longest articles are overlooked or deferred to another time. That time does not always come; some trouble arises; the photographer knows he has seen something in reference to it, but cannot for his life tell where it was; he must either spend much valuable time in searching for it, or work his way out of his difficulty alone, whereas, by adopting the suggestion given below, he

has all such matters where he can call them up at his bidding.

Read what he says:

"As we are now starting with a new year, I will make a suggestion in regard to reading our photographic literature, which we are too apt to read rather hurriedly. And though we often see an item that would be a great help to us if brought into practice, we are almost sure to forget it in the hurry of business unless we make a note of it that we can refer to at the moment when wanted, or if the article is too long, make a memorandum of the subject, page, and volume. This habit has helped me over many a knotty point in daily work, and introduced so many improvements in our rapidly growing art, that I can truly say that no investment has ever paid such handsome returns as the little I have paid for photographic books.

"The articles on development that Mr. Pearsall gave to the fraternity three years ago are too valuable to be estimated in dollars and cents, as they are in requisition in working each plate, and thus on a single page of this journal we get the result of study and practice for years.

"The article by Mr. Hesler in *Mosaics* for 1875, page 110, on the use of sulphuric acid in print washing, has saved me \$5 within the past year.

"These are but two of the many really valuable papers we are receiving with each number of your excellent journal. If the photographer will read, study, and experiment on that which is published this year, he will need no other instructor—not even the secret process vendor.

"AN OLD SUBSCRIBER."

SOCIETY GOSSIP.

Photographic Society of Philadel-Phia.—Stated meeting held Thursday, December 2d, 1875, the President in the chair.

The minutes of the last meeting were read and approved.

The Corresponding Secretary laid upon the table a number of the Year Book of Photography, published by the Photographische Correspondenz, of Vienna. It was accompanied by a letter from the publisher, requesting the names and residences of the officers and members of the Society. On motion, it was resolved that the Corresponding Secretary prepara a list of the officers and members, as requested, and forward the same to the publishers of the Year Book.

The Committee on Subscriptions for the Photographic Hall Building Fund reported progress.

Dr. Seiler read a paper on high powers in micro-photography. A vote of thanks was tendered to him for the communication.

The President introduced to the Society Colonel A. J. Russell, of New York, who had been making a series of views of Philadelphia on dry plates. The results were very good, and, on being interrogated as to formulæ, etc., Colonel Russell said that he used an emulsion prepared by the formula of Mr. Newton, of New York, as follows: Alcohol, twenty ounces; ether, thirty ounces; six hundred grains bromide of cadmium; four hundred grains Hance's "Delicate Cream" cotton. To this were added seven hundred and ninety-two grains fused nitrate of silver dissolved in fourteen ounces of alcohol by heat. This was allowed to stand for six hours and a half, and then one hundred and thirty-two grains of chloride of cobalt dissolved in two ounces of alcohol were added. The glasses were albumenized, coated with the emulsion, and, immediately after setting, plunged into the preservative, composed of alcohol, five ounces; water, seventy-two ounces; and six fluid drachms each of laudanum, tineture of nux vomica, and syrup of squills. Colonel Russell said that he had only worked with dry plates for about three weeks, but that the process had proved itself so reliable that he had secured two hundred and fifty negatives on plates eight inches by ten. The film was dense and required no backing, and exposure but little longer than wet. The only drawback to the process was the difficulty of obtaining a good sample of chloride of cobalt. The sample used was of foreign make. He deemed it necessary to fuse the nitrate of silver, in order to get rid of any traces of acidity. A vote of thanks was tendered to Colonel Russell for his kindness in giving the details of his process.

Mr. Clemons suggested that albumenized

plates for dry work should be coagulated with a wash of absolute alcohol. He also suggested the use of dried albumen redissolved in water as being probably of superior purity. He also mentioned a case in which a jar containing a quantity of white of egg had been inadvertently allowed to stand until fermentation had ensued and a crust of membranous matter formed on top. On removing this crust, a pure inodorous albumen was found below, which he had used successfully for albumenizing paper.

Mr. Sartain exhibited a plan of Photographic Hall.

The Secretary exhibited some negatives and prints presented to him by Mr. W. J. Stillman, of London, made by the washed emulsion process. He also exhibited a negative covered with a granular deposit in the film, which he said he had attributed to impure water in the developer, but, on experimenting, he had been led to believe that the trouble was caused by an old sample of collodion containing a cadmium salting.

On motion, adjourned.

ELLERSLIE WALLACE, JR., Recording Secretary.

PENNSYLVANIA, PHILADELPHIA.—The stated annual meeting of this Association was held at the gallery of Messrs. Mahan & Keller, on Tuesday evening, December 14th, 1875; President John Carbutt in the chair.

The Committee on Room having been unable to make satisfactory terms for a place of meeting was discharged, and the offer of Messrs Mahan & Keller accepted, to make their gallery the place of meeting until otherwise ordered.

A revised copy of the new Constitution and By-Laws was presented, and subjected to some further amendments; among which was the reconsideration of the section relating to the increase of the annual dues, and the readoption of the section in the old by-laws, whereby the dues were fixed at one dollar per annum; after which the new code was adopted as a whole, and two hundred copies ordered to be printed.

The election of officers for the ensuing year being in order, was proceeded with and resulted as follows: For President, H. S. Keller; Vice Presidents, Isaac G. Tyson and Thomas T. Mahan; Secretary, Charles Evans; Treasurer, John R. Clemons; Executive Committee, H. Krips, M. Mc-Laughlin, H. C. Phillips, C. M. Gilbert, David Marston.

Mr. Evans exhibited a very pretty negative, taken from his every-day work, in which the lighting and chemical effects were very superior. Mr. Evans is one of our most careful and intelligent workers, and we shall expect that as a practical man in his new position as Secretary, he will exert a good influence by his example in producing and exhibiting such excellent specimens of his skill.

Boston.—Boston Photographic Association met at the studio of J. W. Black, Friday, December 3d.

The meeting was called to order by Mr. Burnham. He announced to the Society the death of Mr. Blaisdell and Mr. Balch.

On the arrival of President Bowers he assumed the chair, and spoke of his experience with hypo as a fertilizer. He put some waste hypo on some grass and a few hills of corn and waited the result. Wherever he put the hypo it killed vegetation entirely, so he concluded that hypo as a fertilizer was a failure; but it taught him what it would do. He had at his house a brick walk, and the grass troubled him by growing up between the bricks. He gave the walk a wash with hypo, and he has not been troubled with the grass since.

The question-box was opened, and about a dozen questions answered by the members in rotation. In answer to the question, "Is it a success on the whole to collect a deposit in advance," the unanimous answer was, yes.

Question. "How can the meetings of the Association be made profitable and instructive?"

Answer. "Make them of individual interest."

Question. "Is there any advantage in using nitrate of ammonium in the printing silver?"

Answer. "Yes, and that almost every one uses it either by adding the salt direct, or first adding liquid ammonia, and then nitric acid, which forms it in solution."

Mr. Prescott said he had had a pound in the bottom of his negative bath, and it worked well.

Mr. Rowell spoke of the difference between photographs and paintings, and said that faces do not look so sharp to the eye as they do with a lens, and recommends judicious retouching; but said that they were beginning to complain of over-retouching.

Adjourned.

In studying a picture, strive to catch the spirit, the feeling, the expression, the idea conveyed, so as to appropriate and mould it into a work of your own.

Editor's Table.

Mosaics is now ready, and will be found full and interesting. There is a great deal here that will not be found in any other publication. Many of our best photographers, who always say something good when they say anything, seldom write except for Mosaics, and none of our readers should allow any of these good things to escape them. We believe the number for 1876 is particularly fresh and original, and will be found instructive, encouraging, and helpful all the year through. Order early and secure a copy.

A NEW ENTERPRISE IN PHOTOGRAPHIC PRINT-

ING.—Mr. Charles W. Hearn, who has during the past year been employed by the publishers of this journal in printing our photographic embellishments, having bought our interest in the *Philadelphia Photographer* printing rooms, will carry on the business of printing for the trade. Mr. Hearn's reputation, as a photographic printer is second to none, as has been demonstrated both in theory and practice. In theory, by the excellent instruction given in the *Practical Printer*, and in practice by the beautiful work which has been given in our magazine during the past year. Mr. Hearn will still continue to do our

printing, and furnish our readers with the same excellent examples in the future as in the past. In addition to this, he will be prepared to print for photographers who may have large orders that they cannot well execute in connection with their regular work, or for those engaged in landscape photography who find it more profitable to be in the field than to be obliged to give part of their time at least to a printing establishment for the publication of their works. Mr. Hearn will also give instruction in photographic printing, See his advertisement.

SCOVILL MANUFACTURING COMPANY'S TRADE CIRCULARS, just issued, are especially interesting to dealers. They manufacture Samuel Peck & Co.'s Grapho-stereoscopes in great variety, and produce very superior instruments.

RIBBONS AND DRESS GOODS AS THEY APPEAR WHEN PHOTOGRAPHED. - Mr. D. T. Burrill, Brockton, Mass., has produced the best thing we have seen in the way of a chart of photographic drapery. It consists of a very artistically arranged collection of ties and bows of goods of almost every description, which being so arranged as to give light and shadow, reproduces the various shades and textures precisely as they would appear when worn by the sitter. One of these should occupy a conspicuous place in every gallery, and we would suggest that photographers would do well to exhibit them to their patrons, that they may study them at their leisure at home, and be enabled to come all the better prepared for a sitting. See advertisement.

Mr. Burrill sends us also a card, about 8 x 10 size, on which is printed "Hints to my Patrons," which calls the attention of sitters to some of the important points to be observed in connection with the sitting, and his methods of conducting the business.

WILLARD'S MONTHLY.—A revised price current of photographers' supplies, is full of figures interesting to photographers. The following extract should be read and heeded by all:

"Renew your subscription to the journals, pay up for the Monthly, send for Mosaics, 1876, purchase the latest publications on the art, and with a full supply of Willard specialties and general articles, commence the new year—just right."

THE New York *Graphic* issued a photographic number of that paper on the 30th of December, which is devoted entirely to matters of interest to the photographic profession, and especially in connection with the great Centennial Exposition.

Among the art features of the number will be a view of Photographic Hall, a view of the building of the Centennial Photographic Association, portraits of the officers of the National Photographic Association, and portraits of leading photographers.

The literary features will comprise a full History of the Art of Photography; its present condition; a description of the Photographic Building at the Centennial grounds; Biographical Notices, etc., etc.

ANOTHER new gallery, or a new firm in an old gallery, is about to be started in San Francisco, Messrs. I. W. Taber and Thomas H. Boyd have bought the Yosemite Art Gallery on Montgomery Street, and intend to make it one of the best on the Pacific Coast. Mr. Taber stands high as a photographic artist, and we doubt not that his excellent work in Promenades and other original styles for which be is noted will command success for the new firm. We wish them success.

An Enterprising Firm.—We are glad to notice in a Toledo paper an account of the new studio being erected in that city, for Messrs. North & Oswald. It is said they will have the finest place in the State. We wish them every success.

CATCH THE RASCAL.—A fellow pretending to be a Frenchman, and hailing from Paris, has been employed as operator by Mrs. M. E. Parsons, Ypsilanti, Mich., but left recently after stealing from her to the amount of \$350. His name is John de Ivory; he is about 5½ feet in height, and of a dark complexion, his eyebrows being very black and running together. He probably has no beard, as she says he shaved all off before he left. He is an excellent chemist, and smart enough to deceive any one who may not be aware of his real character. Look out for him.

BUTTER AND EGGS.—Mr. John R. Clemons is so widely known as the manufacturer of albumen paper, that it would be entirely superfluous to say anything for or against him in that direction. But we want to call attention to the fact that he has been extending his business. We all know that he has long been a heavy dealer in eggs, which he has been known to hatch by the barrel, but whether the chickens were not produced fast enough, we are not prepared to say; it is sufficient for us to notice that he has added to his list of wares that other useful commodity, butter.

We have always thought it was his purpose to make photographers shell out as much of the needful to him as possible, but now we are satisfied he means to get the very cream of the trade. For a verification of this, see his advertisement in Mosaics.

We would suggest that photographers confine their orders to such quantity as they may want of his excellent paper, till they have seen and digested said advertisement.

PICTURES RECEIVED.—From Mr. J. H. Lamson, Portland, Me., Promenade and Cabinets, very finely executed; Cards and Stereos from Mr. J. W. Husher, Greencastle, Ind., very creditable. In one of Mr. Husher's cards a rather new idea is suggested; the marginal printing is done with a landscape negative, and the effect of rocks, foliage, and sky around the medallion portrait is quite pleasing. From Mr. Folsom, Katonah, N. Y., Stereos of a great boulder of a peculiar kind of granite resting on a number of small points of ordinary limestone. It is quite a curiosity.

More RASCALITY.—We have received the following, which speaks for itself:

SAN FRANCISCO, CAL., December 19th, 1875. DEAR SIR:

You will do me a favor, and perhaps also favor some of the readers of your journal, by publishing the following:

Within the last three months I have heard in numerous ways of a man who is travelling through the New England States, selling a patent screen, and passing himself off as D. B. Taylor, with Bradley & Rulofson, of San Francisco, and as the one who made the prize picture in the July number, 1874, of your journal.

Bradley & Rulofson have received a number of letters of late, inquiring if I have been on a vacation in the East, and have been selling a patent screen, etc. I will here state that I have not, and that this man is an impostor, and I warn all photographers against taking any stock in him.

Hoping this will satisfy all inquiries on the subject, I remain

Yours. etc.,
D. B. TAYLOR,
Operator with Bradley & Rulofson,
San Francisco.

Since we have offered prizes for pictures for our magazine, we have noticed that photographers have been backward in offering samples of their work for that purpose. But now that we have no prize offer on hand, we would be glad to have any of our subscribers who feel disposed make the attempt to show the fraternity what they can do. We would like at least six negatives of the same subject.

Photographic Hall will be fully described, with cuts and drawings, in our next number, together with a list of prospective exhibitors and the particulars as to arrangement, rules for exhibitors, costs to exhibitors, etc. Everything looks bright for it, and the display will be grand. The Berlin and Vienna photographic societies have both responded to the invitation to join in the exhibition, and both will make fine displays. Oh! what a mistake you make in not owning shares in this grand enterprise.

Our readers are perhaps not all aware of the fact that Mr. Robert J. Chute is still connected with the editorial department of our magazine, as he has been for the last two years, and is an able and esteemed co-worker. We place him alongside of any one as a practical photographer in all departments, and therefore in entire sympathy with the class of which we are all proud to be members, and as a writer and teacher he is also well posted. We shall strive together during the Contennial year coming to be more than ever useful to our patrons.

AUTHORS of articles sent for Mosaics often forget to send their names with their articles, and so we cannot send them the complimentary cloth-bound copy of the work which it is our custom to send to all contributors. Will all whom we have omitted to send to on account of their own omission please apprise us?

A GOOD CHANCE is offered of a stock business, in our Specialties. We know the parties, and are assured that ill-health (of body, not of trade) is the cause for wanting to sell.

Since our last issue, we learn that the firm of Messrs. Dreyer, Simpson & Co., mentioned on page 367 of that issue, is a regularly organized firm for arranging and attending to Centennial exhibits. We say this because we do not wish to do any one injustice. Yet we not indorse parties we do not know.

The exhibitors in Photographic Hall will be attended to by a special committee, who will shortly address them, and we recommend intending exhibitors to wait until said parties are heard from.

Specialties.

ADVERTISING RATES FOR SPECIALTIES.—It will be understood that matter under this head is not to be considered as always having editorial sanction, though we shall endeavor to clear it of anything tending to deceive or mislead. Stock-dealers will find this a beneficial mode of advertising, and sure to pay largely. Six lines, one insertion, \$2.00, and 25 cents for each additional line, seven words to a line—in advance. Operators desiring situations, no charge. Matter must be received by the 23d to secure insertion. Advertisers will please not ask us for recommendations. **End We cannot undertake to mail answers to parties who advertise. Please always add your address to the advertisement.

S

ш

⋖

ш

I

PATRONAGE SOLICITED by a water-color artist. Fine at finishing up old copies in ink and colors, to which especial attention is paid. Work firstclass and terms reasonable. Address

> C. A. THORNDIKE, Artist, Lock Box 120, Cleveland, Ohio.



Is the most beautiful work of the kind in the world. It contains nearly 150 pages, hundreds of fine illustrations, and four Chromo Plates of Flowers, beautifully drawn and colored from nature. Price 35 cents in paper cover; 65 cents bound in elegant cloth.

VICK'S FLORAL GUIDE, quarterly, 25 cents a year. Address JAMES VICK, Rochester, N. Y.

Philadelphia, October 11, 1875. Mr. J. R. CLEMONS.

I take pleasure in recommending your New Albumen Paper, as it works at present in my establishment.

F. GUTEKUNST.

CLEMONS' NEW ALBUMEN PAPER. For sale by all dealers. J. R. CLEMONS, Manufacturer, 915 Sansom St., Philada.

WESTERN PHOTOGRAPHIC STOCK DEPOT FOR SALE.-Established twelve years, and doing a Inquire of prosperous business.

E. & H. T. ANTHONY & Co., 591 Broadway, New York.

A man with plenty of vim, shove, and energy, can find as splendid an opportunity for business, in one of our largest cities in the South-west, as was ever offered. A "new broom" can sweep in the best trade of the city, by making superior work. Will sell the whole or a part interest. Address

W. B. I.,

Care "Philadelphia Photographer."

The Backgrounds used in making Rocher's beautiful "Prize" pictures, published in the October "Photograrapher," were from Seavey's Studio.

Popular Backgrounds and Accessories.

PROFILED COLUMN SLIPS PROFILED REVERSIBLE SET GROUND PIECE.

BUSEY CABINET, Background or Profiled Slip.

LANDY'S WAINSCOTING. Papier Mache, elaborate design.

Also, the KURTZ BALUS-TRADE, the most artistic and popular accessory yet produced.

N. B. - All Promenade Backgrounds & Accessories are equally suitable for other purposes.

CAUTION .- My new designs are being copyrighted. Inclose stamp for samples. Address

> LAFAYETTE W. SEAVEY. 8 Lafayette Place, New York.

FOR SALE. -One first-class gallery, in Raleigh, N. C. Also, one neat little gallery in Goldsboro, N. C. Apply to J. W. WATSON, Raleigh, N. C.

A FINE PORTABLE CAR FOR SALE .- It is 20 feet long, in the main body; it has an extension of 10 feet which shoves in when it is moved; it is what is termed a telescope. Sky-light, 9 x 9 feet; side light extends up to the sky-light. Entrance in the side. Tin roof, and everything in complete order and nearly new. It was built by as good a photographer as there was in this section of the country, and cost \$450 when built; will sell it for less than half that amount.

Address

Care of "Philadelphia Photographer."

Two CHILD'S LOUNGES FOR SALE .-- Covered in the best manner with green rep. First quality. \$12.50 each.

BENERMAN & WILSON, Philadelphia.

VIGNETTE PAPERS. USE WAYMOUTH'S

Northern New York Stock Depot,

GLENS FALLS, N. Y.

Photographic goods at New York prices. "CRYSTAL" STEREOGRAPHS,

Of Northern New York scenery.

Photographic studies for artists. Publisher of the "Adirondacks," "Lake George," "Ticon-deroga," etc. S. R. Stoddard, deroga," etc.

Glens Falls, New York.

WAYMOUTH'S VICNETTE PAPERS.

M. B. ATKINSON, Photographic Artist. Photographs on plain or albumen paper finished in India ink, water colors, or crayon; life size and copies; also, porcelain miniatures. Originals sent can be copied at a fair price and promptly attended to. 215 Spruce Street, Philadelphia.

Wanted to purchase a good photographic gallery in working order. Send particulars, with two card portraits to show style of work, to

B., care of David Rees, Photographer, 298 Clapham Road, London, Eng.

For SALE. -Best gallery in Northern Ohio. Handsomely furnished, well supplied with apparatus, and doing a splendid business. Work strictly first-class and prices to correspond. This is an opportunity seldom offered. Will be sold at a bargain if disposed of soon. Address, for particulars,

P. C. Nason,

No. 4 P. O. Arcade, Columbus, O.

SITUATIONS WANTED.

No charge for advertisements under this head: limited to four lines. Inserted once only, unless by request.)

Mr. John L. Gihon will return from South America, to the United States, about the first of January, 1876. He solicits an engagement in some leading gallery. His abilities as a colorist, poser, and operator have been acknowledged, and his experience in the business (embracing a period of twenty years) entitle him to claim a knowledge of all its branches. He will engage upon a stated salary, or upon shares in any pay-ing concern, and is indifferent as to locality. He has arranged with the editor of this journal to retain correspondence until his arrival in the Address John L. Gihon, care of E. L. country. Wilson, Editor Philadelphia Photographer.

By one who has been engaged in all branches of photography for the past fifteen years. Salary not less than \$18 per week, and according to capacity. Address Developer, care of Isaac R. Rowe, 836 Federal Street, Philadelphia.

By a young man, in some good gallery, as assistant operator; has been in the business for two years. Will make himself generally useful about the gallery. Address C. G. Duffee, Box 169, Kittanning, Pa.

A situation as operator, or printer and toner; can retouch. Good reference. Will work for \$5 per week and board. Address R. H. Mann, Delevan, Tazewell Co., Ills.

By a young man, of considerable experience. Is acquainted with retouching, coloring, etc. Reference given. Address F. S. Durand, Akron,

As operator and retoucher. Would take charge of a gallery on shares. Address "Masher," Box 1035, Franklin, Pa.

A painter, well versed in all branches of photographic retouching (crayon excepted). Speaking French, German and English. Seeks employment in some Southern city as retoucher. Best of recommendation and prove work. Answer by advertisement in *Philadelphia Photog*rapher, addressed to H. K.

By a photographer of long experience, in all the different departments of photography; has had charge of A. E. Alden's Springfield Gallery for the last year. Address T. D. Lyon, photog-rapher, with A. E. Alden, Springfield, Mass. Lock Box 1174.

By a young man of steady habits; has had three years' experience in photography. Address Lionell Walworth, care J. F. McCarty, photographer, Brookville, Ind.

As operator, printer, or both—by a young man not afraid of work, and strictly temperate. Address P. J. Vincent, 101 Ruggles St., Boston, Mass.

As operator, by a photographer of seven years' experience; can take entire charge of gallery. Address Geo. A. Ferris, Winnebago, Ills.

As retoucher, by a lady of four years' experience, in a first-class gallery. Address Lock Box 25, Marlboro, Mass.

An operator and retoucher desires a position; has had six years' experience, and is posted in all branches. Address Fred. Hesgen, No. 1481

St., between 77th and 78th, New York.

By a photographer, of twenty years' experience, in some first-class establishment. No objection to going South. Address W. W. Hayt, Sing Sing, N. Y.

By a young mechanic, not afraid of work around a gallery. Has had two years' experience as assistant in operating and printing, also surface and negative retouching. Will work reasonable. Address J. Gaeckle, 89 Bank St., Cincinnati, Ohio.

By a good oil, water color, and ink artist, with some solid parties. Address Artist, Box 981, Elgin, Ills.

By M. A. Kleckner, the well-known landscape photographer of the Lehigh and Wyoming Val-leys. Willing to go to any part of the United States. Address Bethlehem, Pa.; or, Philadelphia Photographer.

By a photographer, well posted in all branches of the art, with ten years' experience, as general assistant, or will take entire charge of a first-class gallery, West or South preferred. Address Photographer, 28 Hart Street, Utica, N. Y.

By a first-class operator; one that has had experience in the largest cities of the country.
Address F. E. Loomis, Lancaster, Ohio.

To take charge of printing or operating, but prefer the former. Address F. H. Lee, care of Wm. Duthie, Esq., Lexington, Mich.

By a practical experienced operator, rapid retoucher, good printer or toner, and careful chemical manipulator. Address O. N. W. Baldwin, P. O. Lock Drawer 15, Ottumwa, Iowa.

In any department of the art. Lewis Sprenkstub, care Albert Moore, 828 Wood St., Philada.

As retoucher in some first-class gallery. H. G. Rupp, Jackson C. H., Ohio.

USE WAYMOUTH'S VIGNETTE PAPERS.

OUR NOVEMBER, 1875

PRIZE 3

QICTURES

Our second PROMENADE PICTURE competition has just been closed, and we are in possession of some of the finest Photographic work ever done in the world!

We offer prints from the competing negatives, for sale at the prices below. They are most useful to every photographer as examples of good negative work, artistic composition and lighting, and superior printing and finishing. We have done *our* part to make them *models* in every respect.

THE



Was awarded for the best six negatives to

Mr. LYMAN G. BIGELOW, Detroit, Michigan,

Whose elegant work is familiar to many of our patrons.

THE SETS INCLUDE:

Nos. 1 to 8—Studies by L. G. Bigelow, Detroit, Michigan.

Nos. 9 to 20—Studies by F. B. Clench. Lockport, N. Y.

Nos. 21 to 28—Studies by G. M. Elton, Palmyra, N. Y.

Nos. 29 to 34—Studies by O. P. Scott, Abingdon, Ill.

Nos. 35 to 40—Studies by E. M. Collins, Oswego, N. Y.

Nos. 41 to 46—Studies by E. H. Alley, Toledo, Ohio.

See review in December number Philadelphia Photographer.

The whole set of 46,													\$10	00
In two Photo. Covers, .									:				11	50
Selections, per dozen, .													4	00
" per two doze	n,									•			7	00
The 28 of Messrs. Clenc	h,	Bi	ge	low	,	and	E	tor	١,				6	00
Book Cover and Binding	,													75

Address all orders to

BENERMAN & WILSON, Publishers, SEVENTH & CHERRY STS:, PHILAD'A, PA.









1876. CATALOGUE OF 1876. HOTOGRAPHIC PUBLICATIONS.

The Only Complete Catalogue in the World of Photographic Books.

There is something for the workers in all branches of the art,—operators, posers, manipulators, printers, painters, retouchers, finishers, and art students—all are provided for.

We always find the photographer who reads what is published pertaining to his profession, to be the photographer who succeeds in his business the best. Above all, those who regularly and continually receive a good photographic magazine are those who are always ahead with new goods, new styles, and new information. We recommend an investment in a part or all of the list below, and will be glad to mail them to you on receipt of price.

CATALOGUE.

The Philadelphia Photographer.

The oldest, best, and most popular Photographic Magazine in America. Thirteenth Year. Please read the prospectus on page three of cover and premium list. Subscription price, \$5 a year, \$2.50 for six months, in advance. Current number, 50 cents. Specimen copies, free.

Photographic Mosaics.

The 1876 edition is just out and is capital. The list of articles is made up of contributions, especially for its pages, on all departments of the art, wholly by practical men. See special advertisement. 144 pages. Paper cover, 50 cents. Cloth, \$1. A few copies of former editions, from 1866, at same price.

Bigelow's Album of Lighting and Posing.

This is not exactly a book, but a collection of 24 large Victoria size photographic studies in lighting and posing, made especially to teach how to light and pose ordinary and extra-ordinary subjects in all the plain, fancy, "Rembrandt" and "Shadow" styles. It is accompanied by an explanatory key of instructions, together with a diagram for each picture, showing how the sitter and the camera were placed in the skylight, their relation to the background, and what blinds were opened and closed at the time of the sitting. It almost supplies a rule by which you can quickly tell how to manage every subject that comes to you. The studies are mounted on folding leaves, so that twelve can be examined at once. Price, in cloth, gllt, \$6, postpaid.

How to Paint Photographs in Water Colors.

A practical Handbook designed especially for the use of Students and Photographers, containing directions for Brush Work in all descriptions of Photo-Portraiture, Oil, Water Colors, Ink, How to Retouch the negative, &c. By George B. Ayres, Artist. Third edition. Differing largely from previous editions. Price, \$2.00.

The Practical Printer.

A capital working manual, giving the fullest information on all styles of photographic printing on albumen and plain paper, and on porcelain. By C. W. Hearn. No book was ever more needed. \$2.50. See special advertisement concerning it.

Handbook of the Practice and Art of Photography.

By Dr. H. Vogel. Second edition now ready, \$3.50. Much enlarged and improved. The best of all photonandbooks. See advertisement,

Photographers' Pocket Reference-Book.

By Dr. H. Vogel, of Berlin. A dictionary of all the terms used in the art, and contains formulas for almost every known manipulation. Altogether different from any work ever published. Cloth, \$1.50. See special advertisement. A splendid, indispensable book.

The Ferrotyper's Guide.

Sixth thousand recently issued. The best work ever published on the ferrotype. Price, 75 cents.

Wilson's Lantern Journeys.

A very entertaining book of travels at home and abroad. By EDWARD L. WILSON. Price, \$2.00.

Burnet's Hints on Composition.

A splendid illustrated work for every art student. Will help you pose, immensely. Price, \$3.50.

Lea's Manual of Photography.

Third thousand. \$3.75 per copy. A capital book of instructions in all branches of the art.

Lookout Landscape Photography.

By Prof. R. M. Linn, Lockout Mountain, Tenn. A pocket manual for the outdoor worker, and full of good for every photographer. 75 cents. Be sure to get it.

Himes's Leaf Prints; or, Glimpses at Photography.

By Prof. Charles F. Himes, Ph.D. Full of useful information for the photographic printer. Illustrated with a whole-size photograph. Cloth, \$1.25.

The American Carbon Manual.

By EDW. L. WILSON. A complete manual of the Carbon process from beginning to end. With a fine example by the process. Cloth, \$2.00.

The Photographer to His Patrons.

A splendid little twelve-page leaflet, which answers all vexatious questions put to you by your sitters, and severes as a grand advertising medium. It is for photographers to give away to their customers. Send for a copy and an illustrated circular. Over 300,000 already sold and in use all over the country. \$20.00 for 1000, \$35.00 for 2000, and so on. Printed and supplied in English, German, and Spanish.

Something New.

Just out. Similar to the "Photographer to his Patrons," but newer. Prices the same.

Pretty Faces.

A leaflet much smaller than "The Photographer to his Patrons," and "Something New," for the same purpose, but costing less, viz.: 1000 copies, \$10.00; 2000, \$17.50, and larger orders at less rates.

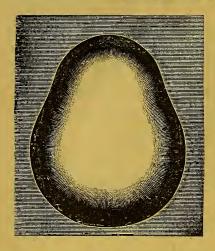
See special advertisements and special offer on outside of cover.

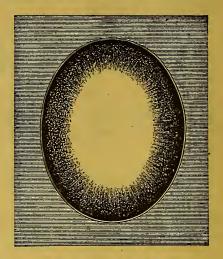
Works found in our old catalogues, and not in the above, are out of print and cannot be had.

Any of the above mailed on receipt of price, postpaid.

BENERMAN & WILSON, Photo. Publishers, Philadelphia.

WAYMOUTH'S





VIGNETTING PAPERS

ARE NOW MADE OF TWO SHAPES, as shown in the drawings above. They consist of finely gradated, lithographed designs, mounted on protecting sheets of non-actinic paper, and are the lightest, neatest, and best means of producing vignette pictures ever offered.

RECENTLY IMPROVED.

Two kinds are now made. Please state which you prefer, when ordering, and READ THE FOLLOWING:

The quality of the "papers" has just been much improved by the substitution of a peculiar French, fibrous, hard calendered paper, which is not only less opaque but has other qualities which produce quickly the most lovely and soft vignettes possible. We consider this a great improvement, as do others to whom we have sent samples. Below we give a letter from one of them, Mr. Ormsby, who has sent us also some exquisite vignettes:

CHICAGO, March 16th, 1875.

The package of Vignette Papers has been received and tried; they are just the thing. They are a great improvement over the others; they will print in a little more than half the time required for the others, and the results are everything that can be desired, as you can see by samples inclosed. Please fill my order and send bill. I like the pear-shape best. Send them all that shape.

E. D. ORMSBY.

FROM PROFESSIONAL AND AMATEUR PHOTOGRAPHERS.

"First-class."—"The sample sent answers perfectly."—"I consider them first-rate articles."—
"They answer the purpose admirably."—"They are the best vignettes I have ever had, and as you can print in full sunlight, they are a great saving of time."—"They could not be better, oblige me with another packet."—"I find them excellent, giving much softer pictures than the old way."—"I have tried one of the Vignette Papers, and like it much; send me packets two and three."—"I am much pleased with them, and shall thank you to send me another packet."—"I did not need any copies of testimonials, having well-known by experience that your Vignette Papers were superior to anything I have ever used."—"I found those you sent before excellent."—"Vignetting Papers received and tested; can't be beat. I use by cutting an opening in a piece of cardboard and tacking to the printing-frame, when I am ready for printing vignettes in the very best manner."—"Waymouth's Vignette Papers I have tried, and they are just what I have been wanting for years."

Any number sent on receipt of price, by any stockdealer, or by

BENERMAN & WILSON, Manufacturers,

(See opposite page.)

PHILADELPHIA:

WAYMOUTH'S VIGNETTE PAPERS.

(DESIGNS COPYRIGHTED.)

OF ALL PICTURES, THE HITTING THE MOST ARTISTIC.

When properly printed. But the clumsy devices generally in use for printing them, or rather for blending the shading about the figure, produce but very few really artistic vignette pictures. Either the shading is too intensely dark, not gradated in tint at all, or it shows an ugly direct, decided line, which is very repulsive. The shading should blend gradually from the dark tint nearest to the figure, off into the white background. The results are then soft, artistic, and beautiful. The easiest and best way to secure them is by the use of

WAYMOUTH'S VICNETTE PAPERS.

THEY ARE NOT CLUMSY; DO NOT BREAK; ARE ALWAYS READY; COST BUT LITTLE, AND ARE EASY OF APPLICATION TO ANY NEGATIVE.

THEY NEED BUT ONE ADJUSTMENT TO PRINT ANY QUANTITY.

They entirely do away with all the old and troublesome methods, either wood, metal, or cotton.

Eighteen sizes are now made, suiting all dimensions of pictures from a small carte figure to Whole-size, Victorias, Cabinets, &c. They are printed in black for ordinary negatives, yellow bronze for thin negatives, and red bronze for still weaker ones. Directions for use accompany each parcel.

PRICES:

T	o of	anch siza	Nos 1	1 to 15, assorted colors\$1 00
tailed and and color	a ha	number	nor na	ackage of fifteen
Noe 1 2 2 4 and 5 asso	rted	sizes and	colors	s for Carles, by humber, ber dozen
" 6, 7, 11, 12, and 13	**	16	•••	Large Cartes and victorias, by number, per doz
" 8, 9, 10, 14, and 15	66	44	44	Cabinets and Whole-size, " " 1 00
" 16, 17, and 18.	66	"	"	Half " " " "

(SEE OPPOSITE PAGE.)

When ordering, state the number and color you want.

BENERMAN & WILSON, Manufacturers, 7th and Cherry, Philada.

FOR SALE BY ALL DEALERS.

Edited by EDWARD L. WILSON, Editor Philadelphia Photographer,

This favorite and only American annual is fairly crammed, with articles prepared expressly for it by the eminent photographers of Europe and America, who are seldom induced to write for anything else.

IT CONTAINS THE FOLLOWING:

Fog.—J. H. FITZGIBBON.
Come, Let us Reason Together.—Geo. B. Ayres.
Experience.—E. T. WHITNEY.
Provoking.—I. B. Webster.
A Suggestion anent the Great Exhibition.—WM.

. HEIGHWAY.
The Eliminating of Hyposulphite from Prints.—
JNO. R. CLEMONS.
A Treatise of Photography.—E. A. KUSEL.
Why not make Solars instead of Contact Prints for
Large Work.—L. V. MOULTON.
Systematic Preservation of Negatives.—WILLIAM H.

Systematic Preservation of Negatives.—WILLIAM H.
TIPTON.
Want of Enterprise.—Forrester Clark.
Lighting the Sitter.—J. S. Hovey.
Theory and Practice.—D. H. Anderson.
Be Punctual.—A. W. Kimball.
Formula for Photographs and Ferrotypes which
gives Lights and Half Tones not Surpassed.—
E. P. Libby.
Exposure and Development of a Negative.—H. B.
HILLYER.

HILLYER.

A Cause for Faded Prints.—E. G. ROBINSON.
How I Sunned a Bath under Difficulties—J. M. DUNN.
A Word to the Weak.—E. H. Train.
How to Clean New and Old Glass Plates.—E. A. Ku-

SEL.

A Good Collodion.—A CONTRIBUTOR.
How to Lubricate Prints for Burnishing.—F. M.
SPENCER.

SPENCER.
Marble Negatives, Stains from the Hands, Negative
Varnish.—Well G. Singhi.
Long's Bath Warmer.
The Cause and Cure for Some of the Difficulties pertaining to Photography.—E. M. Collins.
The Upper Floor.—E. D. Ormsey.
Breakfast for Dinner.—Capt. J. Lee Knight.

Then and Now.—G. D. WAKELEY.
An Item of Real Value.—J. L. Gihon.
Negative Bath.—WM. W. SEELER.
Albumen: Its Preparation for Use in Photography.
—JOHN CARBUTT.
Hints on Composition.—L. G. Bigelow.
A Pair of Suggestions.—G. M. Carlisle.
The Art Privileges of our Great Centennial.—R. J.
Chittee

CHUTE.
The Old Bath.—W. H. SHERMAN.
Art and Mechanism.—W. C. TAYLOR.
Field Work.—C. A. ZIMMERNAN.
Pyroxylin.—Gun Cotton.—H. G. GRIMES.
Dry Plates.—Prof. John Towler. Curtains as a Means for Adjusting Light .- OSCAR G

MASON.

AASON.
An Exposing Shutter.—Frank Robinson.
How to Touch Out Pinholes.—A. B. Stebbins.
Photographic Literature.
Negatives without Collodion or Silver Bath.—G. W.

Negatives without Collodion or Silver Bath.—G. W. WALLACE.
Hands in Photography.—Young Chloride.
The Toning Solution.—An Amateur.
A Chapter of Practical Matters.
Climbing.—Old Argentum.
Poor Negatives, their Cause and Cure.—E. Z. Web-

STER.
On Landscape Photography.—RICHARD W. BARROW. A Cheap and Good Plate-holder.—G. A. Hurlbut. The Way it is Done.—E. M. ESTABROOKE.
TO Correspondents.—A. HESLER.
At the Desk.—J. PITCHER SPOONER.
Lenses—How to Choose and How to take care of them.—R. BENECKE.
The General and I have a Talk.—E. F. PHILLIPS.
Eyes Right.—E. K. HOUGH.
Many Mites from Many Minds.

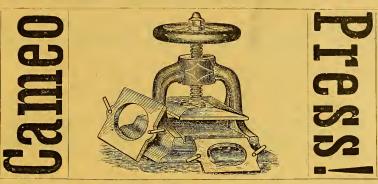
Price, in Cloth, \$1.00; in Paper Cover, 50 cents.

The Best Little Handbook of Photography in the World." For Sale by all Dealers.

No Photographer should be without Mosaics for 1876.

BENERMAN & WILSON, PHOTOGRAPHIC PUBLISHERS, SEVENTH AND CHERRY STS., PHILADELPHIA.

The Universal



EMBOSSING PATENTED JANUARY 9th, 1872.

This Press will cameo all sizes, from cards to cabinets, and is sold lower than any other that will do the same work. It has been greatly improved and made very complete in all its parts.

We furnish a card, victoria, and cabinet size.

PRICE, \$20.00.

MANUFACTURED AND SOLD WHOLESALE AND RETAIL BY

WILSON, HOOD & CO., 822 Arch St., Philadelphia.

CAUTION.—Photographers are cautioned against buying other presses that may use an elastic embossing substance, as they are an infringement on the above.

R. J. Сните, Patentee.

The undersigned, having purchased the entire interest, goodwill, and business of

Photo. Materials & Picture Frames

OF J. HAWORTH,

Desires to inform his friends and the trade generally, that he will continue the business, as heretofore, at the old stand,

624 ARCH STREET, PHILADELPHIA,

Where he hopes, by prompt attention and fair dealing, to merit a continuance of the patronage so largely given to the late firm.

We will still keep a well assorted stock of

PICTURE FRAMES (OVAL AND SQUARE),
VELVET CASES, COLLODIONS,

VARNISHES, PURE CHEMICALS, &c.,

which can be had at the lowest rates; as well as

PASSEPARTOUTS, STEREOSCOPIC VIEWS OF ALL PARTS OF THE WORLD, STEREOSCOPIC INSTRUMENTS, &c.

We also have a full line of CAMERAS of the best makes and latest improvements, CAMERA STANDS, HEAD-RESTS, BACKGROUNDS, and all Accessories necessary to the Photographic Art. We would call the attention of photographers to the fact that we manufacture SQUARE FRAMES, and so can generally ship any frames (especially odd sizes) the same day they are ordered. We would also call attention to the noted ALBU-MEN PAPERS, Morgan's and H. Extra, the best for warm weather, for which I am the agent.

THOMAS H. McCOLLIN.

Successor to Haworth & McCollin, 624 Arch St., Philadelphia.

Gihon's Cut-Outs

Are the very best that are made, and are now without a rival in the market. They are clean cut, most desirable shapes and sizes, and made of non-actinic paper, manufactured specially for the purpose. Each package contains 30 Cut-Outs, or Masks, with corresponding Insides, assorted for five differently sized ovals and one arch-top.

PRICE, \$1.00 PER PACKAGE. Sent by mail on receipt of price.

Parties wishing special sizes, or large lots of a few sizes, may have them cut to order promptly, by addressing the manufacturer. No lot costing less than \$1.00 made at a time.

No printer should attempt to make medallion pictures without them.

THEY HAVE NO EQUAL FOR QUALITY.

Beware of spurious imitations made of common paper, full of holes, badly cut, and odd shapes and sizes. Ask your stockdealer for GIHON'S CUT-OUTS, and see that they are in his envelopes with instruction circular included.

PROMENADE SIZE NOW READY!

SOLD SEPARATELY AT 50 cts. per dozen.

Gihon's Opaque

IS DESIGNED FOR

COMPLETELY OBSCURING THE IMPERFECT BACKGROUNDS OF COPIES, RETOUCHING NEGATIVES,

FAULTY SKIES IN LANDSCAPES,

COATING THE INSIDE OF LENSES OR CAMERA BOXES, BACKING SOLAR NEGATIVES,

COVERING VIGNETTING BOARDS,

AND FOR ANSWERING

ALL THE REQUIREMENTS OF THE INTELLIGENT PHOTOGRAPHER IN THE PRODUCTION OF ARTISTIC RESULTS IN PRINTING.

WHEREVER YOU WANT TO KEEP OUT LIGHT, USE OPAQUE.

It is applied with a brush, dries quickly and sticks.

CUT-OUTS (thirty), \$1.00.

OPAQUE, 50 CENTS.

FOR SALE BY ALL DEALERS.

Address all orders to

JOHN L. CIHON, Inventor,

128 N. Seventh St., Philadelphia, Pa.

G. GENNERT,

53 Maiden Lane, New York,

IMPORTER OF THE CELEBRATED

S. & M. DRESDEN ALBUMEN PAPERS

Rives and Steinbach-White, Pink, and Blue.

Every one says it WORKS THE MOST UNIFORM, ECONOMICAL, and GIVES FINER RESULTS than any other. To satisfy yourself that it is the best, send to your stock-dealer for a sample dozen. Kept by all stock-dealers in the United States.

ALSO,

Hyposulphite of Soda, Sulphate of Iron,

Solid German Glass Baths,
Saxe Evaporating Dishes,

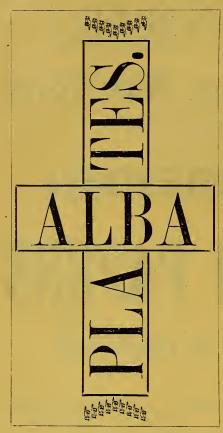
AND French Filter Paper.

SPECIAL ATTENTION IS CALLED TO THE

EXTRA BRILLIANT, OR DOUBLE GLOSSY PAPER,

Which is recognized by the best artists all over the world as the

FINEST ALBUMEN PAPER IN THIS COUNTRY OR EUROPE.



THE LAST PHOTOGRAPHIC INVENTION

Is the New Alba Plate fully described in the current number of this magazine.

If you would revive business!

If you would please your patrons! If you would make money easy!

New Alba Pictures

PHENIX

ALBA PLATES.

DIRECTIONS FOR USE.

As these plates are prepared for immediate use, it is not necessary to apply any coating, such as albumen or gelatine—in other respects they are treated exactly-like porcelain glass.

First, flow with collodio-chloride of sliver; this should not be poured off immediately, but should be allowed to remain on the plate until everything like a small bright speck has disappeared. By thus allowing the collodion to thoroughly combine with the white surface of the plate, the best results are produced. After draining off the excess of the collodion, dry the plate by a gentle heat. Then print under a negative very slightly darker than the picture is desired to be when finished. The plates may be funed with ammonia, or not, as may be preferred, but it is better to fume them a short time, say from one to three minutes.

but it is better to fume them a short time, say from one to three minutes.

After printing, the plates are slightly washed and then put into either a weak solution of salt and water, a weak solution of acetic acid and water, or in mixture of alcohol and water, half and half, long enough to produce a bright reddish color upon the surface—then tone very lightly in a very weak alkaline bath, containing very little gold. Fix in a solution of one connec of hyposulphate of soda, to twelve of water, for five minutes; remove to a saturated solution of salt in water, leaving them in ten minutes. Then wash them for about the same time and in the same manner as negatives are ordinarily treated, and dry by a gentle heat.

N.B.—It is very important that fresh and reliable porcelain collodion, should be used to insure strong, brilliant prints.

PRICE LIST OF ALBA PLATES REDUCED!

1	per box,	of one	dozen	plates	, .	\$1	00	1	4 pe	r box	, of one	dozen	plates,		\$6 00
1	"	"	**	66		1	50	1	$\frac{7}{10}$	"	ш	"	11		8 00
$\frac{1}{2}$	""	6.6	u	"		3	00		10	4.6	t t	"	· · ·		18 00
											-				

As manufacturers of the Alba Plate, and owners of the patent under which they are made, we desire to say to the fraternity, unequivocally, that we will protect any dealer or consumer buying or using these plates, against any party who may claim them an infringement of his patent.

PHENIX PLATE CO., Worcester, Mass.

SCOVILL MANUFACTURING CO., \ New York. General Trade Agents,

Advertising, Enterprising Photographers, Look!

The Photographer to his Patrons.

WHAT IS IT?

HE PHOTOGRAPHER TO HIS PATRONS is a little book or pamphlet of twelve pages, the intention of which is: 1st. To enable the photographer to say a few words in a kindly way to those who have photographs taken, in order that the intercourse between them and their photographer may be pleasant and result in the most successful pictures. Every photographer knows that he is constantly beset with a lot of questions, as to the proper way to dress, the best time to come, and so on, which take a great deal of his time to answer. This little book answers them all, and the mere handing of a copy to the questioner, which he or she can carry away and study at leisure, serves as admirably as a half-hour's conversation.

2d. It is a cheap mode of advertising What could you want better than to have your business card so attractive that people will come and ask for it, hand it around from one to another, discuss it, and then keep it for reference? This is what they do with this little "tract." Witness what those who

have tried it say below.

3d. It is also intended to convey to the public at large the fact that photography is not a branch of mechanics, nor photographers a sort of mechanic themselves, but that both are entitled to respect, the same as the family physician or the minister; that the photographer has rights as well as the public; that he must be trusted, and that he alone is responsible for his results. Moreover, that he must make the picture and not they.

How far the work serves these three ends the reader must judge from the testimonials below, of a

few of those who have been using our little publication in their business.

We believe it will pay you to use it, and that you will assist just that much in elevating your art and your craft, an object which we are all working for.

We get "The Photographer to his Patrons" up in neat style, on the best letter cap paper, assorted tints, green, pink, and buff. Eight pages are devoted to the body of the work, which contains paragraphs or chapters—1, on the object of the work; 2, on photography; 3, when to come; 4, how to come; 5, how to dress; 6, how to "behave; 7, the children; 8, general remarks on coloring, copy-

ing, frames, prices, &c.

All this is inclosed in a cover of the same kind of paper, the pages of which are at the service of the photographer who orders them to have printed thereon anything he may please, which printing

we do without extra charge. We publish this leaflet in English, German, and Spanish.

Cuts for the covers we supply free.

2000 "	**		35	0.0	5000 "	**	"	٠	٠	75	00
	opies, cover included, \$20 00 3000 copies, cover included, \$50 00 5000 " " "										

We invite you to examine the good words which our patrons have sent us concerning this publication.

TESTIMONIALS.

- "I sent one out West to a friend, and she wrote that she was now posted, and when she came here to have a picture made, she would come 'according to directions.' "-A. Bogarbus, New York.
 - "A grand idea."-ELBERT ANDERSON.
- "It is eagerly sought for and read by everybody who visits our Gallery."-J. GURNEY & Son, New York.
- "It assists me greatly."-JAMES MULLEN, Lexington, Ky.
- "The many valuable hints in it cannot fail to be beneficial to both photographer and patron. -Brown & Higgins, Wheeling, W. Virginia.

- "You have conferred a great favor on the fraternity in supplying it, and we hope it will benefit some of the 'know-everythings' in this quarter.''—A. C. McIntyre & Co., Ogdensburg.
- "They are just the thing to post people up on what they ought to know in order to secure good pictures."—J. P. WHIPPLE, White Water.
- "I really think your little book 'hits the nail on the head." "-J. H. LAMSON, Portland, Me.
- "It is the best advertising medium I have ever found."-H. M. SEDGEWICK, Granville, O.
- "I think they are a perfect success, and will do us photographers a great deal of good."-G W. MATHIS.

We will send samples of the book, and special rates, to any who may desire it.

BENERMAN & WILSON, PHOTO. PUBLISHERS, Seventh and Cherry Sts., Philadelphia.

G. SAUTER.

No. 138 South Eighth Street, Philadelphia,

MANUFACTURER AND WHOLESALE DEALER IN

The attention of the trade is particularly called to the superior quality of our Glass and materials and neatness of finish. A large assortment constantly on hand.

BULLOCK & CRENSHAW,

No. 528 Arch Street, Philadelphia,

MANUFACTURERS AND IMPORTERS OF PURE CHEMICALS FOR PHOTOGRAPHY. IMPORTERS OF GLASS AND PORCELAIN, APPARATUS, ETC.

CARBUTT'S RAPID DRY PLATES.

MR. CARBUTT baving an experience of over twelve years in the preparation and use of Sensitive Dry Plates, is now supplying amateurs and the trade with Dry Plates of undoubted excellence, possessing good keeping qualities, both before and after exposure, easy to develop, and for each plate properly exposed and developed a good negative may be relied upon. These plates also produce a first-class quality of transparencies, either for the magic lantern, or to reproduce negatives from.

LIST OF PRICES.—Per Dozen.

Larger sizes made to order.

Sizes not mentioned in the list are cut from and charged as the next size larger. Full instructions for exposure and developing accompany each package or plates.

The above is the price at our works in light-tight wrappers; packing for expressage in metal wrappers and box, five cents per inch the long way of the plate, in addition. Orders to be addressed to

J. CARBUTT, 624 North 24th St., Philadelphia, Pa.

TRY IT AND BE CONVINCED.

The best COLLODION in use is

LEWIS & HOLT'S POSITIVE AND NEGATIVE.

Sold with a Printed Formula accompanying each Bottle.

Being among the first in this country to make COLLODION PICTURES, they can warrant it to be one of the best in use.

ALSO, THEIR

ADAMANTINE VARNISH for Ambrotypes, Negatives, and Melainotypes.

This Varnish, when applied to Negatives, dries in a few seconds perfectly hard, and does not lower the intensity, or soften by the heat of the sun, in Printing. It gives a beautiful gloss and brilliancy to Ambrotypes. For Sale by Stockdealers generally. Prepared by

R. A. LEWIS. R. A. LEWIS,

160 Chatham Street, New York.

HEADQUARTERS FOR THETRADE.

Show Displayers, Velvet Passepartouts. Beveled Matts, Fancy Metal Frames,

Velvet Stands, Velvet Cases. Double Matts, Standard Matts. Fancy Paper Passepartouts.

These goods are entirely of 'our own manufacturing. A large assortment constantly on hand: odd sizes and styles made to order.

LEWIS PATTBERG & BRO., 709 (Formerly) Broadway, New York.

FOREIGN PRIZE PICTURES.

One Dozen Elegant Portraits for \$3!

PRINTED AND FINISHED IN THE BEST STYLE.

No. 1. A South American Composition, by J. L. Gihon, Montevideo. " 2. A South American Composition, 3. A South American Composition, 4. A Holland Lady, three-quarter figure, by P. A. Mottu, Amsterdam. " 5. A Holland Lady, full figure, 6. A Holland Lady, Fancy Dress, " 7. A Russian Lady in Eastern Costume, by A. Bergamasco, St. Petersburg " 8. A Russian Lady in Fancy Ball Costume " 9. A Russian Lady (Bergamasco's Vignettes), "10. A Berlin Lady, standing, by J. Schaarwachter, Berlin. " 11. A Berlin Lady, sitting. "12. A Berlin Lady at a Window,

The Gold Medal was awarded to Mr. Schaarwachter.

BENERMAN & WILSON, Publishers, Philadelphia.

THE ZENTMAYER LENS,

FOR VIEWS AND COPYING.

These Lenses possess pre-eminently, the following qualities:

Width of visual angle, ranging from 80° to 90°; depth of focus; extreme sharpness over the whole field; true perspective; freedom from all distortion in copying; portability and cheapness.

Each mounting is provided with a revolving Diaphragm, containing the stops of the different combinations for which they are designed. The larger ones are provided with an internal shutter for making and closing the exposure.

No.	1,	21/2	inch	focus,	3	x	3	plate,			\$20	00	No.	1	and	l No	. 2	combined,						\$33	00
"	2,	34			4	x	5				25	00	4.	2	66		3		•	•	•	•	•	40	00
"	3	51	"	"	61	v	81	L 66			30	0.0	"	3	"	"	4							55	
	4	0 3	4.6		10		10	2	•	•	49	00	"	4	- 66	"	5	**						75	
																		"						110	
				"																				48	
4.6	6,	18	"	"	20	x	24	t			90	00	1 "	3,	4,	and	5,	**	٠	٠	٠	•	٠	88	00

No. 3, with large mounting to combine with No. 4 and No. 5, \$35.

No. 1 and No. 2, specially adapted for Stereoscopic Views, are furnished in matched pairs. No. 1 and No. 2, single, not to combine with other sizes, \$36 a pair.

Lenses and mountings to form all six combinations, from 2\(\) to 18 inches, \$173.

Zentmayer's Stereoscopic outfits, including a pair of No. 2 Lenses 4 x 7 box, 7 x 10 India Rubber Bath and Dipper, Tripod, Printing Frames, and outside box, \$60.

JOSEPH ZENTMAYER, Manufacturer,

147 South Fourth Street, Philadelphia.

PROMENADE ALL! HERMAGIS'

Celebrated French

PORTRAIT LENSES.

CABINET SIZE, ARE JUST THE LENS FOR THE NEW

PROMENADE PICTURE.

MR. HENRY ROCHER, the renowned Chicago photographer, says of them: "In my opinion they are truly lenses of great capacity, and must surely satisfy every purchaser." Mr. Rocher has purchased two Hermagis lenses of card size and one Salomon style. See further splendid testimonial from Mr. Rocher in Specialties.

MR. F. GUTEKUNST, the celebrated Philadelphia photographer, was sent a Salomon Lens to try for us, and wont part with it. It cuts sharp a 9 inch standing figure, and beats a lens that has been his favorite many years, and where many makes of lenses have failed, on trial, to equal it.

The HERMACIS IS THEREFORE AHEAD

TRY THEM!

These celebrated lenses, are used by MONS. ADAM SALOMON, of Paris, exclusively for making his **WORLD-RENOWNED PORTRAITS**, and by the most famed photographers of Europe, from whom Mons. Hermagis has the Highest Testimonials.

We now have a FULL STOCK on hand.

The Salomon Style, 8 x 10 size, \$160.
For Cabinet Size, extra quick, \$100.
For Cabinet Size, quick, \$90.

For Carte Size, extra quick, \$50.
For Carte Size, quick, \$40.

They are being introduced in America steadily, and are liked wherever they go.

They will be sent on trial to responsible parties C. O. D., and instructions to Express Company to hold money one week for trial. If parties prefer to see the work of a lens before purchasing, we will make a negative and send with details of exposure, etc., and reserve the lens until answer is received (if the time is reasonable), on receipt of \$1 to pay cost. Having a skylight of our own we are enabled to do this.

As Not a single person to whom we have sent these Lenses on trial, as above, has returned them.

BENERMAN & WILSON,

Seventh and Cherry Sts., Philadelphia, Pa.

A. M. COLLINS, SON & CO.,

MANUFACTURERS OF

PHOTOGRAPHIC CARDS AND CARD BOARDS,

OF EVERY DESCRIPTION.

Warehouse:

18 S. Sixth St., and 9 Decatur St.,

PHILADELPHIA.

PROMENADE PHOTOGRAPH CARDS.

SIZE 4½ x 7½. SQUARE CORNERS.

White, Light Buff, Amber, Pink, and Black—Plain.

White, Light Buff, Amber, Pink, and Black, with Gilt Borders.

Light Buff and Amber, with Red Borders.

Thin White, Rose Tint, and Black, with Gilt Beveled Edges.

Light Buff and Amber, with Red Beveled Edges.

Thick Gilt, Beveled Edge Glacé, Black and Rose Tint "J."

Glacé Card Boxes, for the Thick Beveled Edge.

Cards 7 x 10, with Gilt Borders, opening 4\frac{1}{8} x 7\frac{1}{8}.

Cards 7 x 10, with India Tint and Gilt Borders, opening 4\frac{1}{8} x 7\frac{1}{8}.

See detailed advertisement in this number of the "Photographic Times."

PRICE LISTS FURNISHED ON APPLICATION.

Send me 12 Bigelow Albums at once.—P. E. LIESEGANG.

London, Eng., November 1, 1875.

Add 12 Bigelow Albums to our order, and send soon, as we are out. PIPER & CARTER, Publishers Photo. News.

BIGELOW'S ALBUM OF LIGHTING AND POSING.

SELLS ALL OVER THE WORLD. THE WORLD.

WITH AN ENLARGED KEY, AND NEARLY ALL NEW STUDIES.

If you would improve your Lighting and Posing, study Bigclow's Album.

Another Lot Sent to England, October, 1875.

PRICE, \$6.00. FOR SALE BY ALL STOCKDEALERS.

BENERMAN & WILSON, Publishers, Philadelphia, Pa.

PHOTOGRAPHER'S

POCKET

REFERENCE BOOK.

An Alphabetically arranged collection of practically important hints on the construction of the Gallery; selection and trial of lenses and chemicals; approved formulæ for the different photographic processes; tables of weights and measures; rules for avoiding failure, etc.

IT IS A BOOK EVERY PHOTOGRAPHER SHOULD HAVE,

Because it is a ready helper under all difficult circumstances.

For sale by all dealers. Price, \$1.50, post-paid.

BENERMAN & WILSON, Photo. Publishers,

PHILADELPHIA, PA.

HEARN'S

PRACTICAL PRINTER

PHOTOGRAPHIC PRINTING

ON PLAIN AND ALBUMEN PAPER, AND ON PORCELAIN.

Too little attention has heretofore been given to Photographic Printing, which is indeed quite as important a branch of the art as negative making.

It is the hope of both author and publishers to create **REFORM** in this matter, by the issue of this work, and as it is to put money in the pockets of all who read it, the hope is that it will be generally read.

CONTENTS.

INTRODUCTION.

The Printing Room, with a Plan. The Silvering and Toning Room, with a Plan. The Drying Room, with a Plan.

PART I .- ALBUMEN PAPER PRINTING.

The Positive Bath for Albumen Paper. Silvering the Albumen Paper. Drying the Paper. Fuming the Paper. Preservation of Sensitive Albumenized Paper.—Washed Sensitive Paper. Cutting the Paper. The Printing Boards. Keeping Tally. Vignette Printing Blocks. Treatment of the Negatives before Printing. Filling of the Boards. Fitting Vignette Boards to the Negatives for Printing. Medallion and Archtop Printing. Fancy Printing. Vignette Cameo and Medallion Vignette Cameo Printing. Printing the Bendann Backgrounds. Printing Intense Negatives. Printing Weak Negatives. A Few More Remarks about Printing—Treatment of Broken Negatives. Cutting the Prints. Toning Baths. Artistic Toning. Fixing Baths and Fixing Prints. Washing the Prints. Mounting the Prints. Finishing the Prints.

PART II. - PEAIN PAPER PRINTING.

Salting the Paper. Positive Baths for Plain Salted Paper. Silvering Plain Salted Paper. Drying, Fuming, and Cutting the Paper. Treatment of the Negatives before Printing. Printing-in False Backgrounds. General Plain Paper Printing. Further Treatment of the Prints after Printing. Causes of Failures in Albumen and Plain Paper Printing.

PART III .- PORCELAIN PRINTING.

Selection of the Porcelain Plates. Cleaning of the Porcelain Plates. Albumenizing the Porcelain Plates. Making the Porcelain Collodion. Coating, Fuming, and Drying the Plates. Porcelain Printing Boards. Placing the Sensitive Plate on the Board for Printing. Printing Vignette Porcelains. Printing Medallion Percelains. Washing the Porcelains. Toning the Porcelain. Fixing the Porcelain. Final Washing of the Porcelain. Drying and Tinting of the Porcelain. Varnishing the Porcelain. Causes of Failures in Porcelain Printing.

Together with over 50 Wood Cuts, and an elegant Cabinet Portrait, from negatives by Mr. F. Gutekunst, printed by the author, Mr. Chas. W. Hearn.

A THOUSAND COPIES ALREADY GONE.

Mailed Post-paid on Receipt of \$2.50, by any dealer, or

BENERMAN & WILSON, Photo. Publishers, Seventh and Cherry Streets, Philadelphia.

ROBINSON'S METALLIC GUIDES

FOR USE WITH THE ROBINSON PRINT-TRIMMER.

(See advertisement of Trimmer opposite.)

These Guides are made of Stout Iron and are turned in a Lathe, so that they are Mathematically True.

Do not Waste Time with a Knife and Glass, but try Prof. Robinson's Invention

OVAL, ROUND, ELLIPTIC, and SQUARE, of all sizes; various shapes for Stereoscopic work, Drug Labels, etc., etc.

We have the following regular sizes always on hand at 10 cents per inch the longest way of the aperture, the fractions counting as one inch.

Special sizes made to order at 15 cents per inch the longest way of the aperture.

REGULAR SIZES:

	OVALS.		SQUARE	OR ROUND-COR	RNERED.
$\begin{array}{c} 2 \times 2\frac{7}{8} \\ 2\frac{1}{8} \times 3\frac{1}{8} \\ 2\frac{1}{8} \times 3\frac{1}{4} \\ 2\frac{3}{8} \times 3\frac{3}{8} \end{array}$	$3\frac{1}{2} \times 4\frac{7}{8}$ $3\frac{1}{8} \times 5\frac{1}{8}$ $4 \times 5\frac{3}{8}$ $4\frac{3}{8} \times 6\frac{3}{8}$	$5\frac{3}{4} \times 7\frac{3}{4}$ 6×8 $6\frac{1}{4} \times 8\frac{1}{4}$ $6\frac{1}{2} \times 8\frac{1}{2}$	$\begin{array}{c} 2\frac{1}{16} \times 3\frac{3}{4} \\ 2\frac{1}{8} \times 3\frac{3}{4} \\ 2\frac{1}{8} \times 3\frac{1}{8} \\ 2\frac{5}{16} \times 3\frac{1}{16} \\ 2\frac{5}{16} \times 3\frac{3}{4} \end{array}$	$\begin{array}{c} 2\frac{5}{16} \times 3\frac{7}{8} \\ 2\frac{3}{4} \times 4\frac{1}{4} \\ 2\frac{3}{4} \times 4\frac{1}{2} \\ 2\frac{7}{8} \times 4\frac{5}{8} \end{array}$	$3\frac{7}{8} \times 5\frac{1}{4}$ $4 \times 5\frac{5}{8}$ $4\frac{1}{8} \times 5\frac{7}{8}$ $3\frac{7}{8} \times 6$ $4 \times 6\frac{1}{8}$
$ \begin{array}{c} 2\frac{5}{8} \times 3\frac{5}{8} \\ 2\frac{7}{8} \times 4\frac{1}{4} \\ 3\frac{3}{8} \times 4\frac{3}{8} \\ 3\frac{3}{8} \times 4\frac{5}{8} \end{array} $	5×7 $5\frac{1}{4} \times 7\frac{1}{4}$ $5\frac{1}{2} \times 7\frac{1}{2}$ $5\frac{1}{8} \times 7\frac{1}{8}$	7×9 $7_{\frac{1}{4}} \times 9_{\frac{1}{4}}$ $7_{\frac{1}{2}} \times 9_{\frac{1}{2}}$ $7_{\frac{3}{4}} \times 9_{\frac{3}{4}}$	10 1	STEREOGRA: Round Cornered. \$\frac{1}{16} \times 3\frac{3}{4} 3 \times 3	

The above sizes suit the Collins Card Mounts, and photographers knowing that they can be always had at the low price of ten cents per inch, would do well to make their sizes accord, as orders can also be filled more quickly. Ten days is required to make special sizes.

An allowance of ten inches (\$1 worth) of regular sizes of guides will be given with every Trimmer purchased. (See opposite page).

FOR SALE BY ALL DEALERS.

BENERMAN & WILSON, Manufacturer's Agents, PHILADELPHIA, PA.

GIVEN AWAY!!

WITH EACH

PHOTOGRAPH TRIMMER

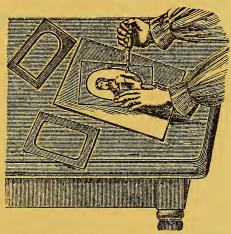
WILL HEREAFTER BE GIVEN Ten Inches of Metallic Guides, your choice from the regular sizes named on the opposite page. The manufacturers and agents finding that they can save money by manufacturing in large quantities, make this liberal offer to the trade, as they want everybody to have these capital inventions in use. They are no humbug and are not glass cutters or anything like them.

THE ROBINSON PHOTOGRAPH TRIMMER

IS A SUBSTITUTE FOR A KNIFE

FOR TRIMMING PHOTOGRAPHS, AND DOES THE WORK MUCH MORE EXPEDITIOUSLY AND ELEGANTLY THAN A KNIFE.

IT SAVES TIME, SAVES PRINTS, AND SAVES MONEY.



The accompanying cut represents the instrument in the act of trimming a photograph. It does not cut, but pinches off the waste paper, and leaves the print with a neatly beveled edge which facilitates the adherence of the print to the mount. Try one, and you will discard the knife and punch at once. For ovals and rounded corners it is worth its weight in gold.

A Trimmer and Ten Inches of Guides Mailed for \$3.50.

Oil the wheel bearings with Sewing Machine Oil.

BENERMAN & WILSON, Manufacturer's Agents,
FOR SALE BY ALL DEALERS. PHILADELPHIA, PA.

BURNETS

Practical Hints on Composition

ILLUSTRATED BY EXAMPLES FROM THE

GREAT MASTERS OF THE ITALIAN, DUTCH, AND FLEMISH SCHOOLS.

By JOHN BURNET, 1822.

THE ABOVE WORK IS THE VERY BEST AUTHORITY ON

POSITION AND COMPOSITION.

Owing to the fact that it has long been out of print, few are privileged to enjoy its advantages. We have reprinted and republished the original work by means of a photolithographic process, thus securing all the charms of the original drawings, and now offer the book to the art students of America for the first time.

It contains about 48 pages, and includes 38 illustrations—sketches of the best pictures by the masters of the schools named above, as follows:

Plate I-Augular Composition.

- Fig.

 1. Shows rectangle, crossed by diagonal line. Used
- Doubling of the lines on clouds. By Cuyp.
 2. Doubling of the lines on clouds. By Cuyp.
 3 & 4. Sky backgrounds, with cows in foreground.
 By Potter.
 5. Domestic group. By Ostade.
 6. Country scene. By Claude.

Plate II-Angular Composition.

- 1. Angel in foreground, group of cattle beyond, with trees. By CLAUDE.
 2. River bank view. By REUBENS.
 3. Huntsman going out in the morning. By Delaer
 4. Embarkation of Prince of Orange. By CUYP.

Plate III-Augular Composition.

- 1. Group of heads in form of diamond. By J. Burnet 2. Home comforts. By Ostade. 3. English pastimes. By J. Burnet. 4. Gambler's quarrel. By Terrburg. 5. Hunter's return. By DeLaer. 6. Lady writing. By Metzu. 7. The drunken father. By Rembrandt.

Plate IV-Angular Composition.

- 1. Awaiting orders. By Terburg.
 2. "School is out." By Ostade.
 3. Italian shepherdess. By DeLaer.
 4. Seducing the God Bacchus. By R.
 5. The "Firstborn." By Corregio. By REUBENS.

Plate V-Circular Composition.

- Fig.
 1. Death of Ananias. By RAPHAEL.
 2. Magdalen and St. Jerome, with child Jesus. By
- 3. Doctors consulting the law. By GUIDO.

Plate VI-Circular Composition.

- By REUBENS
- 1. A country dance. By 2. Death of Gen. Wolfe.
- 2. Death of Gen. Wolfe. By B. West. 3. Christ preaching. By REMBRANDT. 4. Death of St. Jerome. By POMENICHINO. 5. Transfiguration. By RAPHAEL.

Plate VII-Model Compositions.

- Christ and his disciples. By RAPHAEL.
 The sick bed. By REMBRANDT.

Plate VIII-Model Compositions.

- "Landing of Charles II." By West.
 Cattle returning home in a shower. By Burnet.
 Cattle at rest. By Burnet.

- Plate IX-Model Compositions.
- Blind fiddler. By WILKIE.
 Salutation of the virgin. By REMBRANDT.
 A dance. By OSTADE.

It is handsomely bound in cloth. \$20 cannot purchase a copy of the original work. As a help to photographers in making positions it cannot be overestimated. It teaches the practical elements of composition, and supplies the best examples.

PRICE, POST-PAID, \$3.50.

BENERMAN & WILSON, Photo. Publishers, Seventh and Cherry Streets, Philadelphia.

DR. VOGEL'S HANDBOOK.

SECOND EDITION.

THE HANDBOOK OF THE PRACTICE AND ART OF PHOTOGRAPHY,

By Prof. H. VOGEL, Ph.D., Berlin, Prussia.

IS NOW READY.

ALTHOUGH IT IS MUCH ENLARGED WE OFFER IT AT THE OLD PRICE, \$3.50.

It is Elegantly Illustrated, with Photographs and Engravings. Cloth Bound.

The reputation Dr. Vogel enjoys in this country as a practical photographic writer, is first-class, and insures a book of the best quality. That his Handbook is eminently so, we guarantee. It has been re-arranged and revised specially for the American photographer, giving the best German formulæ, &c., and is, in every sense of the word, a Handbook of the practical and artistic departments of Photography. Over fifteen hundred of the first edition were sold, and the demand continues.

IT ILLUSTRATES AND TELLS

How the Ateliers are built and used in Berlin and elsewhere;

How to make the best Photographs;

How to select and use your Lenses;

How to manage your Apparatus;

How to compose the Picture;

How to pose the Sitter;

How to choose Accessories;

How Berlin Cards are Made;

How to do everything in the Art.

TEACHES HOW TO BECOME A PERFECT PHOTOGRAPHER.

The whole includes, under one cover, everything needed for the practice of photography by the beginner, the amateur, and the professional—a complete Handbook. See contents of Book.

The engravings are numerous, elaborate, and expensive. Four photographs, illustrating the lighting of the subject, accompany the work. Please read future advertisements

ASK YOUR DEALER FOR IT.

BENERMAN & WILSON, Photo. Publishers,

S. W. cor. Seventh and Cherry Sts., Philada.

WILSON'S BALTIMORE STOCK DEPOT

THE MOST POPULAR IN THE SOUTH.

QUICK TRANSIT. CHEAP FREIGHTS.

Best Coods! Best Prices!
Best Personal Attention!

Baltimore, the "City of Advantages" now, especially to the Photographer.

BEFORE PURCHASING, SEND FOR PRICE LIST AND CATALOGUE TO

CHARLES A. WILSON,

No. 7 N. Charles Street,

BALTIMORE, MD.

TRY BALTIMORE! IT WILL PAY!!

PLEASE READ OTHER ADVERTISEMENTS.

PHILADELPHIA

PHOTOGRAPHER

THE LIVEST and BEST

Photographic Magazine Published.

ANNOUNCEMENT FOR 1876!

The publishers have a great many good things in anticipation for the year 1876, which they think will render their magazine more beautiful and more useful than ever before; and while they maintain that the beautiful example of photography, which accompanies each issue, is alone worth the subscription price, still more and more effort will be made to make the reading matter everything that it ought to be. Our correspondents from all the leading centres abroad will keep our readers posted on all matters of interest in their several sections, while our unrivalled staff at home will look diligently after your interests here. To make the Philadelphia Photographer the best practical helper which can possibly be obtained, is the aim and earnest desire of its publishers.

We ask your co-operation in extending its usefulness, and offer to all present subscribers, who secure us new ones, the following

For every new subscriber, for one year, \$1, payable in any of our publications, books, or, if preferred, \$1

PREMIUMS

worth of any of our prize pictures, or any other article for which we are agents, advertised in this magazine.

Operators, printers, etc., can secure all their necessary photographic literature in this way, by a little earnest effort.

EACH MONTHLY ISSUE IS A PHOTOGRAPHIC WORK IN ITSELF. NOTICE TO SUBSCRIBERS.

Subscription price, \$5 a year, \$2.50 for six months, 50 cents per copy, postpaid. positively in advance.

. In remitting by mail a post-office order, or draft payable to the order of Benerman & Wilson, is preferable to bank-notes. Clearly give your Post-Office, County, and State.

Canada subscribers must remit 24 cents extra, to prepay postage.

Foreign subscriptions must be accompanied by the postage in addition.

ADVERTISING sheets are bound with each number of the Magazine. Advertisements are inserted at the following rotes:

1 Month. 6 Months. 1 Year.

One Page, . . . \$20 00 \$110 00 \$200 00

Half " . . . 12 00 66 00 120 00

Quarter Page, . . 7 00 33 50 70 00

Eighth " . . 4 00 22 00 40 00

Cards, 6 lines, or less, 2 00 11 00 20 00

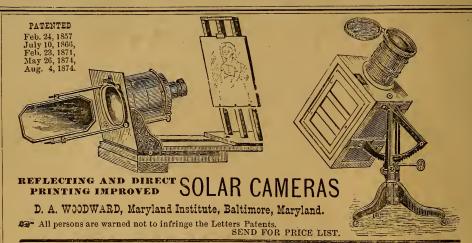
The attention of advertisers, and those having galleries, &c., for sale, is called to our Specialities pages. Terms, \$2 for six lines, and 25 cents for each additional line, seven words to a line, always in advance. Duplicate insertions, 50 cents less each

SURE TO PAY!

Operators desiring situations, no charge.

BENERMAN & WILSON, Publishers,

OFFICE, S. W. COR. OF SEVENTH AND CHERRY STS., PHILADELPHIA.



WESTERN PHOTOGRAPHERS

SHOULD NEVER FORGET THAT THEIR WANTS CAN BE SUPPLIED PROMPTLY AND CHEAPLY BY

LONG & SMITH,

520 MAIN STREET, QUINCY, ILL.

Finest Stock of FRAMES, ALBUMS, etc., in the West.

TRAPP & MUNCH'S

Albumen Paper

Introduced into this country since 1868 has become the leading paper, and is now better known and more appreciated than any other brand.

That this great success is well deserved and due to its excellent qualities may be judged from the fact, that of all the competitors of the Vienna Exhibition, Messrs. Trapp & Munch alone received the

MEDAL OF MERIT

for Albumenized Paper. For Sale at all the Stockhouses.

WILLY WALLACH,

GENERAL AGENT FOR THE UNITED STATES,

No. 4 Beekman St., and 36 Park Row, New York SPECIAL ACENTS:

SCOVILL MANUFG. Co., New York. E. & H. T. ANTHONY, """
G. GENNERT, New York

WILSON, HOOD & Co., Philadelphia. H. W. BRADLEY, San Francisco. G. S. BRYANT & Co., Boston.

GLACÉ! GLACÉ!

J. DE BANES, 872 Broadway, N. Y., finishes Photographs of all sizes, for the trade, in the newest styles. Send in your orders early, so that they can be completed before the opening of the Centennial.

TRY HERMACIS' "PROMENADE" LENSES.

Number 146.

50 Cents.

THE

PHILADELPHIA

Photographer.

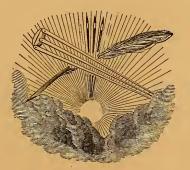
AN ILLUSTRATED MONTHLY JOURNAL,

DEVOTED TO PHOTOGRAPHY.

THE OFFICIAL ORGAN OF THE NATIONAL PHOTOGRAPHIO ASSOCIATION OF THE UNITED STATES.

EDITED BY EDWARD L. WILSON.

February, 1876.



PHILADELPHIA:

BENERMAN & WILSON,

PUBLISHERS,

S. W. COR. SEVENTH AND CHERRY STS.

Subscriptions received by all News and Stock-Dealers.

FIVE DOLLARS PER ANNUM, IN ADVANCE.

Sherman & Co., Printers, Philadelphia.

SUMMARY OF CONTENTS.

PA	GE	PA	AGE
Our Advance Column	33	Our Last Promenade Prize	43
Skill in Printing	33	Photographic Rights Again. By ALVA PEARSALL	44
Unlimited Retouching a Necessity	34	Voices from the Craft. By C. D. Mosher	45
Presents on the Pacific	36	Society Gossip	45
Canada Correspondence. By RICHARD W. BARROW,	36	German Correspondence. By Prof. H. Vogel	50
Skylights. By A. N. HARDY	37	The Printer's Corner. By Chas. W. Hearn	52
How Young Photographers may Succeed. By A. N.		Wrinkles and Dodges	54
HARDY	37	Experiments with the Iron Developer	
Photographic Accidents. ROBERT J. CHUTE	37	Reply to an Article of the British Journal of Pho-	
The National Photographic Association	39	tography	56
Hints to Beginners. IX. By L. T. WILT	40	Our Picture	58
Talk and Tattle	40	Photographic Hall	58
The Centennial Photographic Exhibition	42	Gems from Mosaics	62
A Prize for Retouching	43	EDITOR'S TABLE	63

EMBELLISHMENT.—Competing Promenade Picture. Negatives by F. B. CLENCH, Lockport, N. Y. Prints made at Hearn's Photographic Printing Institute, Philadelphia.

ADVERTISEMENTS.

ALBA PLATES. ANTHONY & Co., E. & H. T. Adamantean Plates. BENERMAN & WILSON. Lantern Slides. BIGELOW'S ALBUM OF LIGHTING AND POSING. BULLOCK & CRENSHAW. Photographic Chemicals. BURRELL, D. T. Photo. Chart, etc. CAMEO PRESS, THE UNIVERSAL. CARBUTT, J. Rapid Dry Plates. COLLINS, SON & Co., A. M. Photograph Cards. COOPER, CHAS. & Co. Dresden Albumen Papers, etc. DEBANES, J., Glace Work. FRENCH, B. & Co. Voigtlander Lenses, &c. GENNERT, G. Albumen Papers. GIHON, JOHN L. Opaque and Cut-Outs. HANCE'S PHOTO. SPECIALTIES. HEARN'S PRACTICAL PRINTER. HERMAGIS' PORTRAIT LENSES. HINTS ON COMPOSITION. HOWSONS' PATENT OFFICES. IMPROVED PHOTOGRAPH COVERS. LEWIS, R. A. Collodion.

MAGEE, JAMES F. & Co. Photographic Chemicals. McCollin, Thos. H. Photo. Materials and Frames. Mosaics, 1876. PATTBERG, LEWIS & BRO. Passepartouts, &c. PHOTOGRAPHER'S POCKET REFERENCE-BOOK. PHOTOGRAPHIC PUBLICATIONS. PHOTOGRAPHER TO HIS PATRONS. PROMENADE PRIZE PICTURES. ROBINSON'S PHOTO, TRIMMER AND METALLIC GUIDES. ROSS' PORTRAIT AND VIEW LENSES. RYAN, D. J. Southern Stock Depot. SAUTER, G. Passepartouts. VOGEL'S HAND-BOOK OF PHOTOGRAPHY. WALLACH, WILLY. Trapp & Munch's Albumen Paper WAYMOUTH'S VIGNETTING PAPERS. WILSON, CHAS. A. Baltimore Stock Depot. WILSON, HOOD & Co. Announcement for 1876. WILSON'S LANTERN JOURNEYS. WOODWARD, D. A. Solar Cameras.

LONG & SMITH. Frames, Albums, etc.

ZENTMAYER, JOSEPH. Lenses.

119 South Fourth St.
PHILADELPHIA.

Branch Office, 605 Seventh Street, WASHINGTON, D. C.



H. HOWSON,

Engineer and Solicitor of Patents.

C. HOWSON,

Attorney at Law, an? Counsel in Patent Cases.

HEARN'S PHOTOGRAPHIC PRINTING INSTITUTE,

FOR PRINTING FOR THE TRADE,

AND

FOR INSTRUCTION IN THE ART OF PHOTOGRAPHIC PRINTING.

The undersigned, author of the "Practical Printer," and for the past year printer for the Philadelphia Photographer, desires to say that he has leased the spacious and well-arranged printing-rooms of Messrs. Benerman & Wilson, for the purpose of giving photographers an opportunity of obtaining

INSTRUCTIONS IN ALL THE DETAILS OF

PERFECT PRINTING,

AND FOR

PRINTING FOR THE TRADE.

He respectfully refers to his work, many thousand examples of which are before the readers of the above-mentioned magazine, as a guarantee of his entire ability to attend to both branches well.

Having had the opportunity, during the past year, to see the many pictures from all parts which came to the office of the editor of the *Philadelphia Photographer*, he is surprised to see how many photographers there are, who make perfect negatives, and seem totally ignorant of what good work can be obtained from them, judging from their own prints.

IF YOU WOULD INCREASE YOUR TRADE, SEND YOUR NEGATIVES TO THE INSTITUTE TO BE PRINTED.

IF YOU WISH TO PERFECT YOURSELF IN PHOTOGRAPHIC PRINTING,
COME TO THE INSTITUTE AND BE INSTRUCTED.

PRINTING

DONE, BOTH IN PORTRAITURE and VIEWS.

The Plain, Vignette, Medallion, Plate, or Gray Printing, etc., will meet with careful and prompt attention.

Plain Paper Printing and printing of all kinds on Porcelain, a specialty.

Retouching Negatives will be a department of itself, and none but first-class artists will be engaged upon this very artistic branch of photography.

Glace work, of all sizes and styles, done expeditiously and in a superior manner.

The attention of Landscape Photographers is especially called to the many advantages derived from sending their negatives to the Institute to be printed. To those who make a specialty of this class of work, it has often become a source of worriment that the negatives which are taken with so much care and trouble yield such miserable results in the printing, owing to the lack of feeling on the part of their assistants. So often has such been the case that they have been obliged to attend to the printing of their own negatives, and lose beautiful viewing days, so as to produce finished work, which will readily find its way to the critical taste of an appreciative public. To all such we especially invite your attention to our work, for such persons can send their negatives here to be printed, and have it done in a superior manner. Please give us a trial order, and we have no fear but that in the future you will find it to your advantage to have all of your printing done at the Institute.

Instruction will be given in all styles of Printing, Toning, etc., at reasonable rates, with the understanding that the parties must furnish all their own chemicals, dishes, frames, etc., used in their experiments, and we will accommodate them with excellent printing, washing, toning, and other space. Send for Circulars.

Having a skylight of our own we shall also do copying for the trade, so send your copy originals to the Institute and have both negatives and prints made.

Special terms upon application.

Prepare for the "Centennial" by having your arrangements perfected for having first-class prints produced from your negatives, at reasonable prices. For further particulars, address

HEARN'S

PHOTOGRAPHIC PRINTING INSTITUTE,

124 NORTH SEVENTH STREET,

PHILADELPHIA, PA.

The Universal



EMBOSSING PATENTED JANUARY 9th, 1872.

This Press will cameo all sizes, from cards to cahinets, and is sold lower than any other that will do the same work. It has been greatly improved and made very complete in all its parts. We furnish a card, victoria, and cahinet size.

PRICE, \$20.00.

MANUFACTURED AND SOLD WHOLESALE AND RETAIL BY

WILSON, HOOD & CO., 822 Arch St., Philadelphia.

CAUTION .- Photographers are cautioned against buying other presses that may use an elastic embossing substance, as they are an infringement on the above. R. J. CHUTE, Patentee.

The undersigned, having purchased the entire interest, goodwill, and business of

OF J. HAWORTH,

Desires to inform his friends and the trade generally, that he will continue the business, as heretofore, at the old stand,

624 ARCH STREET, PHILADELPHIA,

Where he hopes, by prompt attention and fair dealing, to merit a continuance of the patronage so largely given to the late firm.

We will still keep a well assorted stock of

PICTURE FRAMES (OVAL AND SQUARE), VELVET CASES, COLLODIONS, VARNISHES, PURE CHEMICALS, &c.,

which can be had at the lowest rates; as well as

PASSEPARTOUTS, STEREOSCOPIC VIEWS OF ALL PARTS OF THE WORLD, STEREOSCOPIC INSTRUMENTS, &c.

We also have a full line of CAMERAS of the best makes and latest improvements, CAMERA STANDS, HEAD-RESTS, BACKGROUNDS, and all Accessories necessary to the Photographic Art. We would call the attention of photographers to the fact that we manufacture SQUARE FRAMES, and so can generally ship any frames (especially odd sizes) the same day they are ordered. We would also call attention to the noted ALBU-MEN PAPERS, Morgan's and H. Extra, the best for warm weather, for which I am the agent the agent.

THOMAS H. McCOLLIN,

Successor to Haworth & McCollin, 624 Arch St., Philadelphia.

GIHON'S

Are the very best that are made, and are now without a rival in the market. They are clean cut, most desirable shapes and sizes, and made of non-actinic paper, manufactured specially for the purpose. Each package contains 30 Cut-Outs, or Masks, with corresponding Insides assorted for five differently sized ovals and one arch-top.

PRICE. \$1.00 PER PACKAGE. Sent by mail on receipt of price.

Parties wishing special sizes, or large lots of a few sizes, may have them cut to order promptly, by addressing the manufacturer. No lot costing less than \$1.00 made at a time.

No printer should attempt to make medallion pictures without them.

THEY HAVE NO EQUAL FOR QUALITY.

Beware of spurious imitations made of common paper, full of holes, badly cut, and odd shapes and sizes. Ask your stockdealer for GIHON'S CUT-OUTS, and see that they are in his envelopes with instruction circular included.

 $PROMENADE \ SIZE \ NOW \ READY!$

SOLD SEPARATELY AT 50 cts. per dozen.

GIHON'S

IS DESIGNED FOR

COMPLETELY OBSCURING THE IMPERFECT BACKGROUNDS OF COPIES,

RETOUCHING NEGATIVES,
FAULTY SKIES IN LANDSCAPES,
COATING THE INSIDE OF LENSES OR CAMERA BOXES, BACKING SOLAR NEGATIVES,

COVERING VIGNETTING BOARDS,

AND FOR ANSWERING

ALL THE REQUIREMENTS OF THE INTELLIGENT PHOTOGRAPHER IN THE PRODUCTION OF ARTISTIC RESULTS IN PRINTING.

WHEREVER YOU WANT TO KEEP OUT LIGHT. USE OPAQUE.

It is applied with a brush, dries quickly and sticks.

CUT-OUTS (thirty), \$1.00.

OPAQUE, 50 CENTS.

FOR SALE BY ALL DEALERS.

Address all orders to .

JOHN L. CIHON, Inventor,

128 N. Seventh St., Philadelphia, Pa.

G. GENNERT,

53 Maiden Lane, New York,

IMPORTER OF THE CELEBRATED

S. & M. DRESDEN ALBUMEN PAPERS

Rives and Steinbach-White, Pink, and Blue.

Every one says it WORKS THE MOST UNIFORM, ECONOMICAL, and GIVES FINER RESULTS than any other. To satisfy yourself that it is the best, send to your stock-dealer for a sample dozen. Kept by all stock-dealers in the United States.

ALSO,

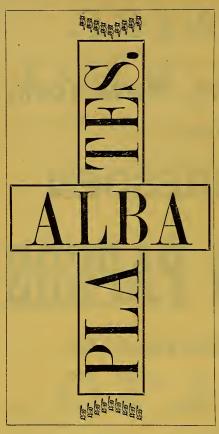
Hyposulphite of Soda,
Sulphate of Iron,
Solid German Class Baths,
Saxe Evaporating Dishes,
AND French Filter Paper.

SPECIAL ATTENTION IS CALLED TO THE

EXTRA BRILLIANT, OR DOUBLE GLOSSY PAPER,

Which is recognized by the best artists all over the world as the

FINEST ALBUMEN PAPER IN THIS COUNTRY OR EUROPE.



THE LAST PHOTOGRAPHIC INVENTION

Is the New Alba Plate fully described in the current number of this magazine.

If you would revive business!

If you would please your patrons! If you would make money easy!

New Alba Pictures

PHENIX

ALBA PLATES.

DIRECTIONS FOR USE.

As these plates are prepared for immediate use, it is not uecessary to apply any conting, such as albumen or gelatine—in other respects they are treated exactly like porcelain glass.

First, flow with collodio-chloride of silver; this should not be poured off immediately, but should be allowed to remain on the plate until everything like asmall bright speck has disappeared. By thus allowing the collodion to thoroughly combine with the white surface of the plate, the best results are produced. After draining off the excess of the collodion, dry the plate by a gent the heat. Then print under a negative very slightly darker than the picture is desired to be when finished. The plates may be furned with ammonia, or not, as may be preferred, but it is better to furne them a short time, say from one to three minutes. three minutes

three minutes.

After printing, the plates are slightly washed and then put into either a weak solution of ealt and water, a weak solution of acetic acid and water, or in mixture of alcohol and water, half and half, long enough to produce a hright reddish color upon the surface—then tone very lightly in a very weak alkaline bath, containing very little gold. Fix in a solution of one ounce of hyposulphate of soda, to twelve of water, for five minutes; remove to a saturated solution of salt in water, leaving them in ten minutes. Then wash them for about the same time and in the same manner as negatives are ordinarily treated, and dry by a gentle heat.

N.B.—It is very important that fresh and reliable porcelain collodion, should be used to insure strong, brilliant prints.

PRICE LIST OF ALBA PLATES REDUCED!

1	per box,	of one	dozen	plates,	. 9	1 00	1 4 pe	er box,	of one	dozen	plates,		\$6	00
1/4	"	"	"	"		1 50	7	66	11	"	**	•	8	00
$\frac{1}{2}$	"	"	"	46	•	3 00	10	"	"	"	"		18	00
	**													

As manufacturers of the Alba Plate, and owners of the patent under which they are made, we desire to say to the fraternity, unequivocally, that we will protect any dealer or consumer buying or using these plates, against any party who may claim them an infringement of his patent.

PHENIX PLATE CO., Worcester, Mass.

SCOVILL MANUFACTURING CO., \ New York. General Trade Agents,

THE PHOTOGRAPHER TO HIS PATRONS.

WHAT IS IT?

HE PHOTOGRAPHER TO HIS PATRONS is a little book or pamphlet of twelve pages, the intention of which is: 1st. To enable the photographer to say a few words in a kindly way to those who have photographs taken, in order that the intercourse between them and their photographer may be pleasant and result in the most successful pictures. Every photographer knows that he is constantly beset with a lot of questions, as to the proper way to dress, the hest time to come, and so on, which take a great deal of his time to answer. This little book answers them all, and the mere handing of a copy to the questioner, which he or she can carry away and study at leisure, serves as admirably as a half-hour's conversation.

2d. It is a cheap mode of advertising What could you want better than to have your business card so attractive that people will come and ask for it, hand it around from one to another, discuss it, and then keep it for reference? This is what they do with this little "tract." Witness what those who

have tried it say below.

3d. It is also intended to convey to the public at large the fact that photography is not a branch of mechanics, nor photographers a sort of mechanic themselves, but that both are entitled to respect, the same as the family physician or the minister; that the photographer has rights as well as the public; that he must be trusted, and that he alone is responsible for his results. Moreover, that he must make the picture and not they.

How far the work serves these three ends the reader must judge from the testimonials below, of a

How far the work serves these three ends the reader must judge from the testimonials below, of a few of those who have been using our little publication in their business.

We believe it will pay you to use it, and that you will assist just that much in elevating your art and your craft, an object which we are all working for.

We get "The Photographer to his Patrons" up in neat style, on the best letter cap paper, assorted tints, green, pink, and buff. Eight pages are devoted to the body of the work, which contains paragraphs or chapters—1, on the object of the work; 2, on photography; 3, when to come; 4, how to come; 5, how to dress; 6, how to "behave; 7, the children; 8, general remarks on coloring, copying frames prices for

ting, frames, prices, &c.

All this is inclosed in a cover of the same kind of paper, the pages of which are at the service of the photographer who orders them to have printed thereon anything he may please, which printing we do without extra charge. We publish this leaflet in English, German, and Spanish.

Cuts for the covers we supply free.

1000 copies, cover included, . . \$20 00 2000 " " " . . . 35 00 Over 500,000 have been sold.

TESTIMONIALS.

- "I sent one out West to a friend, and she wrote that she was now posted, and when she came here to have a picture made, she would come 'according to directions.' ,'-A. Bogar-DUS, New York.
- "It assists me greatly."-JAMES MULLEN, Lexington, Ky.
- "A grand idea."-ELBERT ANDERSON.
- "You have conferred a great favor on the fraternity in supplying it."-A. C. McIntyre & Co., Ogdensburg.
- "It is the best advertising medium I have ever found."-H. M. SEDGEWICK, Granville, O.

We send samples to any who may desire.

BENERMAN & WILSON, Photo. Publishers, Seventh and Cherry Sts., Philadelphia.

G. SAUTER.

No. 138 South Eighth Street, Philadelphia,

MANUFACTURER AND WHOLESALE DEALER IN

PASSEPARTOUTS.

The attention of the trade is particularly called to the superior quality of our class and materials and neatness of finish. A large assortment constantly on hand.

BULLOCK & CRENSHAW,

No. 528 Arch Street, Philadelphia,

MANUFACTURERS AND IMPORTERS OF PURE CHEMICALS FOR PHOTOGRAPHY.
IMPORTERS OF GLASS AND PORCELAIN, APPARATUS, ETC.

CARBUTT'S RAPID DRY PLATES.

MR. CARBUTT having an experience of over twelve years in the preparation and use of Sensitive Dry Plates, is now supplying amateurs and the trade with Dry Plates of undoubted excellence, possessing good keeping qualities, both before and after exposure, easy to develop, and for each plate properly exposed and developed a good negative may be relied upon. These plates also produce a first-class quality of transparencies, either for the magic lantern, or to reproduce negatives from.

LIST OF PRICES.—Per Dozen.

Sizes not mentioned in the list are cut from and charged as the next size larger. Full instructions for exposure and developing accompany each package of plates.

The above is the price at our works in light-tight wrappers; packing for expressage in metal wrappers and box, five cents per inch the long way of the plate, in addition.

Orders to be addressed to

J. CARBUTT, 624 North 24th St., Philadelphia, Pa.

TRY IT AND BE CONVINCED.

The best COLLODION in use is

LEWIS & HOLT'S POSITIVE AND NEGATIVE.

Sold with a Printed Formula accompanying each Bottle.

Being among the first in this country to make COLLODION PICTURES, they can warrant it to be one of the best in use.

ALSO, THEIR

ADAMANTINE VARNISH for Ambrotypes, Negatives, and Melainotypes.

This Varnish, when applied to Negatives, dries in a few seconds perfectly hard, and does not lower the intensity, or soften by the heat of the sun, in Printing. It gives a beautiful gloss and brilliancy to Ambrotypes. For Sale by Stockdealers generally. Prepared by

R.A. LEWIS,

160 Chatham Street, New York.

HEADQUARTERS FOR THE TRADE.

Show Displayers,
Velvet Passepartouts,
Beveled Matts,

Velvet Stands,
Velvet Cases,
Double Matts,
nes,
Standard Matts,

Fancy Metal Frames, Standard M Fancy Paper Passepartouts.

These goods are entirely of our own manufacturing. A large assortment constantly on hand; odd sizes and styles made to order.

LEWIS PATTBERG & BRO., 709 (Formerly broadway, New York.



WESTERN PHOTOGRAPHERS

SHOULD NEVER FORGET THAT THEIR WANTS CAN BE SUPPLIED PROMPTLY AND CHEAPLY BY

LONG & SMITH,

520 MAIN STREET, QUINCY, ILL.

Finest Stock of FRAMES. ALBUMS, etc., in the West.

TRAPP & MUNCH'S

Albumen Paper

Introduced into this country since 1868 has become the leading paper, and is now better known and more appreciated than any other brand.

That this great success is well deserved and due to its excellent qualities may be judged from the fact, that of all the competitors of the Vienna Exhibition, Messrs. Trapp & Munch alone received the

MEDAL OF MERIT

for Albumenized Paper. For Sale at all the Stockhouses.

WILLY WALLACH,

GENERAL AGENT FOR THE UNITED STATES,

No. 4 Beekman St., and 36 Park Row, New York SPECIAL ACENTS:

SCOVILL MANUFG. Co., New York. E. & H. T. ANTHONY, ""G. GENNERT, New York.

WILSON, HOOD & Co., Philadelphia. H. W. BRADLEY, San Francisco. G. S. BRYANT & Co., Boston.

GLACE! GLACE!

J. DE BANES, 872 Broadway, N. Y., finishes Photographs of all sizes, for the trade, in the newest styles. Send in your orders early, so that they can be completed before the opening of the Centennial.

PROMENADE

ALL!

HERMAGIS'

Celebrated French

PORTRAIT LENSES.

CABINET SIZE, ARE JUST THE LENS FOR THE NEW

PROMENADE PICTURE.

MR. HENRY ROCHER, the renowned Chicago photographer, says of them: "In my opinion they are truly lenses of great capacity, and must surely satisfy every purchaser." Mr. Rocher has purchased two Hermagis lenses of card size and one Salomon style. See further splendid testimonial from Mr. Rocher in Specialties.

MR. F. GUTEKUNST, the celebrated Philadelphia photographer, was sent a Salomon Lens to try for us, and wont part with it. It cuts sharp a 9 inch standing figure, and beats a lens that has been his favorite many years, and where many makes of lenses have failed, on trial, to equal it.

The HERMACIS IS THEREFORE AHEAD

TRY THEM!

These celebrated lenses, are used by MONS. ADAM SALOMON, of PARIS, exclusively for making his **WORLD-RENOWNED PORTRAITS**, and by the most famed photographers of Europe, from whom Mons. Hermagis has the Highest Testimonials.

We now have a FULL STOCK on hand.

The Salomon Style, 8 x 10 size, \$160.
For Cabinet Size, extra quick, \$100.
For Cabinet Size, quick, \$90.

For Carte Size, extra quick, \$50.
For Carte Size, quick, \$40.

They are being introduced in America steadily, and are liked wherever they go.

They will be sent on trial to responsible parties C. O. D., and instructions to Express Company to hold money one week for trial. If parties prefer to see the work of a lens before purchasing, we will make a negative and send with details of exposure, etc., and reserve the lens until answer is received (if the time is reasonable), on receipt of \$1 to pay cost. Having a skylight of our own we are enabled to do this.

** Not a single person to whom we have sent these Lenses on trial, as above, has returned them.

BENERMAN &-WILSON.

Seventh and Cherry Sts., Philadelphia, Pa.



DOUBLE IODIZED PORTRAIT COLLODION.

ANDERSON'S PORTRAIT COLLODION.

WHITE MOUNTAIN LANDSCAPE COLLODION.

NIAGARA FALLS LANDSCAPE COLLODION.

TRASK'S FERROTYPE COLLODION.

HANCE'S BATH PRESERVATIVE.

HANCE'S GROUND GLASS SUBSTITUTE.

HANCE'S DELICATE CREAM GUN COTTON.

HANCE'S SILVER SPRAY GUN COTTON.

HEARN'S COLLODIO-CHLORIDE.

GILL'S CHROMO INTENSIFIER.

CUMMINGS' GRIT VARNISH.

Manufactured from the best chemicals that can be procured in the market, manipulated with the greatest care.

Each article warranted to do the work claimed for it, if used according to the directions plainly printed on the label accompanying each bottle or package. These preparations are noted for their purity and uniformity, and have for years been used in the most celebrated galleries in the United States and Canada.

FULL MEASURE GUARANTEED.

For Sale by all Stock-dealers in the United States and Canada.

A. L. HANCE, Manufacturer, 126 NORTH SEVENTH STREET, PHILADELPHIA.

Read detailed advertisments on succeeding pages.

HANCE'S PHOTOGRAPHIC SPECIALTIES

WARRANTED FULL MEASURE, AND CHEMICALLY PURE.

ARE SOLD BY ALL DEALERS, AS FOLLOWS:

HANCE'S BATH PRESERVA-TIVE. A sure preventive of pinholes, stains, &c. It preserves the bath in good working condition, and will be found worth its weight in gold. See special advertisement. \$1.00 per bottle.

COLLODION. This is made by compounding the different iodides according to their equivalents, and producing a new salt. It is being used by some of the best photographers, but its general use is retarded, no doubt, by the extra trouble in making it. The peculiarities of this Collodion are good keeping qualities, its improvement by age, and the richness of effect produced in the negative, the film being perfectly structureless. As it requires time to ripen, I have the advantage of making a quantity and keeping it always ready to supply any demand. \$1.50 per fb.; 80 cts. per ½ fb.

ELBERT ANDERSON'S PORTRAIT COLLODION is made according to the formula used by Mr. Anderson in Mr. Kurtz's gallery in New York. It is especially adapted to portrait work. \$1.75 per lb.; 90 cts. per ½ lb.

HANCE'S WHITE MOUNTAIN COLLODION is adapted more especially to outdoor work, and for quick working, delineating foliage, frost-work, or sky, it stands unrivalled. It is made after the formula used by that celebrated mountain artist, B. W. Kilburn, of Littleton, N. H., whose work is too well known to need any comments. \$1.50 per ib.; 80 cts. per ½ ib.

CURTIS' NIAGARA FALLS COLLODION is another used for landscapes. The wonderfully beautiful views made by Mr. Curtis, of the great cataract, with this collodion, have a world-wide reputation, and are an indisputable evidence that he could have nothing better to produce such magnificent work. \$1.50 per ib; 80 cts. per ½ ib.

TRASK'S FERROTYPE COL-LODION is made especially for positive pictures. Mr. Trask has no superior in this class of work, and this collodion is the result of his practice and experience for years in proving what was BEST. It is made after his formula and ferrotypers will find it all that can be desired. \$1.50 per lb.; 80 cts. per ½ lb. HANCE'S PECULIAR PORTRAIT COLLODION is peculiar in that it is prepared without bromides, and is adapted for use with Black's acid bath. To those using the acid bath this collodion is indispensable. Formula on the bottle. \$1.50 per ib.; 80 cts. per ½ ib.

cummings' grit varnish gives a very fine surface for retouching. Those that use a varnish of this kind will find that this has no superior. By it the retouching is greatly facilitated and the same amount of work on a negative may be done with it in half the time that would be required without it. 40 cts. per 6 oz. bot.

HANCE'S SILVER SPRAY GUN COTTON is now being used by many of the best photographers, and the testimonials I am receiving are sufficient evidence of its excellence. I prepare it with great care, and warrant it free from acid, very soluble, gives good intensity so that no redevelopment is necessary, gives perfect detail, and a film pure and structureless. 50 cts. per oz.

HANCE'S DELICATE CREAM GUN COTTON is adapted to those who like a very delicate, soft-working collodion, giving all the modelling especially in the Rembrandt style, and with light drapery. Its sensitiveness renders it particularly adapted for children, or any work that requires short exposure. 80 cts. per oz.

GILL'S CONCENTRATED CHROMO INTENSIFIER is intended to strengthen the negative. It imparts a beautiful tone and gives excellent printing qualities. 50 cts. per bottle.

HANCE'S GROUND-GLASS SUBSTITUTE is simply what its name implies, a substitute for ground-glass for any purpose that it is used for in the gallery. To the landscape photographer a bottle of it is indispensable. If he breaks his ground-glass, he has only to coat a plate, such as he is sure to have with him for negatives, with the substitute, and in a few moments his ground-glass is replaced and his work goes on. It is equally useful in the printing room, and any photographer who has once used it will never again be without it. 50 cts. per bottle.

HEARN'S COLLODIO-CHLO-RIDE.—The best for Porcelain pictures. \$2.25 per ½ lb. bottle, and \$4.00 per lb. bot-

tle Try it, and get good porcelains.

HANCE'S GROUND GLASS SUBSTITUTE

Is an indispensable article in the photographic gallery. There are so many uses to which it can be applied that a photographer having once given it a trial, will never be without it, as there is nothing known that will take its place. There are a few base imitations in the market, but they are not used a second time, and will soon die a natural death.

The Substitute is in the form of a varnish, is flowed and dried the same as varnish, but dries with a granulated or ground-glass surface. Wherever ground glass is required, Hance's Substitute answers every purpose.

FOR VIGNETTE GLASSES.

- " A RETOUCHING VARNISH,
- " SOFTENING STRONG NEGATIVES.
- " THE CELEBRATED BERLIN PROCESS.
- " GROUND GLASS FOR CAMERAS.
- " GLAZING SKY AND SIDE LIGHTS.
- " OBSCURING STUDIO & OFFICE DOORS.
- " PRINTING WEAK NEGATIVES.

For skylights it must be flowed before glazing. The Substitute being very thin it will cover a large space. It is economical, and makes a surface equal to the finest ground glass. It can be easily removed by rubbing it with cotton wet with alcohol. GIVE IT A TRIAL.

PRICE, 50 CENTS PER BOTTLE,

Large quantities, for Studio Lights, etc., supplied low.

HANCE'S DELICATE CREAM GUN COTTON

IS THE KING COTTON, AND HAS NO PEER.

Prepared with particular care, warranted free from acid, and very soluble. I take particular pride in this cotton. It has made its way steadily and surely into most of the principal galleries in the country, where parties prefer to make their own collodion, and its superior qualities are shown in the medals awarded at the Vienna Exhibition, for photographs made with collodion in which it was used.

It is especially adapted to the Rembrandt style, and light drapery. Its sensitiveness renders it particularly adapted for children or any work that requires short exposure.

PRICE, 80 CENTS PER OUNCE.

Read next page.

Delicate

Cream

Gun Cotton

lance's

COMMENDATORY LETTERS

Testifying to the superior qualities of

HANCE'S SPECIALTIES

WE HAVE ROOM ONLY FOR THE FOLLOWING:

"I consider the Cotton the best we have ever used as yet."-R. Poole, Nashville, Tenn.

"The film of the Cotton you sent me was unusually smooth and firm, being entirely free from glutinosity, and setting like India-rubber. It was quite powdery and crumbled to pieces in my fingers, 'as if rotten.' It dissolved almost instantaneously, and it was 'by far' the very best material I have ever used. I sincerely trust that you will send me the same kind again."—ELBERT ANDERSON, Kurtz Gallery, New York.

"I received your Double-Iodized Collodion all right, and in good shape. Have tried it pretty well. It gives very fine negatives and good detail."—W. E. Hart, Watertown, N. Y.

"We take pleasure in recommending Hance's Double-Iodized Collodion as a first-class article, in fact it is the best manufactured Collodion we have tried."—SCHREIBER & SONS, No. 818 Arch Street, Philadelphia.

"The goods by Express came safe to hand. I have tried a part of them and am greatly pleased. Will likely want more goods in your line."—R. Poole, Nashville, Tenn.

"Your Ground Glass Substitute is the best I have ever tried, and I have tried nearly every kind advertised, as the long row of nearly full bottles will testify. It works like a charm."—J. N. Webster, Barton, Vt.

"I take pleasure in recommending your Cottons and Collodions, before all others I have used. It is a blessing to know where you can get good Cotton."—B. W. KILBURN, Littleton, N. H.

"The last lot of Cotton you sent is the very best I have ever used. Please send me another pound at once."— ELBERT ANDERSON, Kurtz Gallery, New York.

"Have used some twenty-five pounds of your Collodion the past year with unvarying success."—G. W. HOPE, Middletown, New York.

"Your Double-Iodized Collodion is the most perfect working Collodion I have used in fifteen years. Every picture I make with it is a success."—R. L. Dale, Boston, Mass.



Has now become the standard Collodion in all first-class galleries. Although but a short time in the market it is rapidly superseding all other makes, and the quantity that has been sold is simply astonishing.

Give it but a single trial and you will be convinced. Can be used as soon as made, but improves with age, and will keep indefinitely.

Price, \$1.50 per pound.

A liberal discount to parties ordering by the gallon. READ ADVERTISEMENTS ON PRE-CEDING PAGES.

1776. PREPARE FOR THE CENTENNIAL. 1876.





F. B. CLENCH,

BOSTON TUBEC LIDENT TOPKPORT, N. Y.

Philadelphia Photographer.

Vol. XIII.

FEBRUARY, 1876.

No. 146.

Entered according to Act of Congress, in the year 1876,
By BENERMAN & WILSON,
In the office of the Librarian of Congress, at Washington, D. C.

OUR ADVANCE COLUMN.

A WORD TO ALL.

OUR readers doubtless well remember the interesting chapters of communications which we published a year ago or more, under the head of Filterings from the Fraternity. Those were so well received, and, we believe, productive of so much good, that we have now another invitation to extend to the fraternity at large, and especially to those who so generously communicated their methods and processes in response to our former call.

It is our desire to show during this Centennial year, as far as possible, the real, substantial advance that has been made in every department of our art up to this time.

To this end we cordially invite all to communicate to us the changes they have made from time to time in their processes, formulæ, manipulations, or general methods of working or conducting their business. We are sure there are few who have been long in the practice of photography who have not changed many times their modes of working in the various departments; at least this has been the case with the progressive men, as it is only by dropping the old and following the new or better way that true progress is made.

Now it is our purpose to note these transitions, with the help of our correspondents, giving the old formulæ or methods, together with the new, and such observations on the better results obtained, as experience may have proved to be really progressive.

Let this apply to all parts of the work, from the cleaning of the glass to the delivery of the finished picture; giving us that process, in every department, which has been proved to be the best. In this way we believe we can arrive at the real advance of our art at this important period in our country's history, and mark a period in the history of photography, which may be referred to in the future as one of the important stages of its progress. How many will accept this invitation to be enrolled among the honorable number who shall stand as the exponents of advanced thought, advanced methods, and advanced work in the art of photography in the year one thousand eight hundred and seventy-six?

SKILL IN PRINTING.

THE printing has long been considered the most mechanical part of the photographic work. It may be made purely so, thereby producing work of all grades and qualities according to the conditions to which it may be subject. On the other hand it may be made as artistic, and as productive of uniform results, as any other

3 100

work in any department of photography can be.

A mere mechanical printer will treat all negatives alike; the weak, the intense, the clean, the streaked, all are printed on the same paper and subjected to the same treatment; the result is that there are as many varieties and qualities of prints as there are varying circumstances of light, shade, subject, chemicals, etc., under which the negatives were made; for in this case the prints are but a reflex of all these uncontrollable variations. With the artistic printer this is all changed. He expects variety in negatives, and proceeds accordingly. He studies their qualities, retouches and masks, if necessary. He prepares his paper to correspond with the varying conditions of the negatives; he prints from each negative according to its individuality; he masks one part of the background, and prints in deeper on another part, as may be required to give the best effect; he tones down the intense lights of the face or drapery, by exposing those parts while the rest is protected; and in various ways controls the work as it progresses, so as to produce the best possible result. Printing in this way is as much an art as that of negativemaking, and requires as much study and well-directed skill to do justice to the work. There has been much improvement in the printing department since the appearance of the Practical Printer, and the agitation of the subject through the journals; but we know there is still much room for further improvement, and there are many who require help in this direction.

To meet this requirement, Mr. Charles W. Hearn, the author of the *Practical Printer*, has established himself in the former printing-rooms of the *Philadelphia Photographer*, which he proposes to conduct as a Printing Institute; where he will do work for the trade, or give instructions in printing. This opens a way for all who feel disposed to place themselves under an efficient tutor, and improve their knowledge of this department of the art, to do so.

Mr. Hearn has earned a wide reputation by the excellent instruction given in his book, and the superior work he has produced, examples of which have been given in the issues of this magazine during the past year; and we are sure no printer who sees room for improvement could make a better investment than to place himself under Mr. Hearn's instruction.

We trust his efforts, and the efforts of all who are striving to improve the quality of photographic printing, may be crowned with success, and that ere long the artistic printer will be considered as indispensable as the artistic poser or retoucher.

Mr. Hearn's address is 124 North Seventh Street, Philadelphia.

UNLIMITED RETOUCHING A NECESSITY.

THE paper on retouching read by President Rulofson, before the Photographic Society at San Francisco, and published in the January Photographer, is a very remarkable article, and in some respects seems to herald a "new departure" in photography. Heretofore, so far as I know, all instructions and recommendations on that subject have carefully deprecated excessive retouching, frequently using such phrases as "much too little is better than a little too much," "don't destroy the characteristic lines," "leave somewhat of the natural texture," etc. But in that article, if I understand him rightly, the author goes the "entire porcine quadruped," without limit or reservation, except the limit of our skill, and the more or less importunate demands of the public.

Reduced to its lowest terms and expressed in somewhat syllogistic form, his teaching seems to be, making money is necessary to photographic existence.

Photographers cannot make money now without elaborate and even excessive retouching. Therefore, unlimited retouching is justifiable, as no one will deny photographers their right to existence.

That reads all straight, and admitting the premises, which few will deny, the conclusion is irresistible. Yet somehow the spirit of the article seemed to breathe at first like the old man's celebrated advice to his son, "Make money, my boy—make it honestly if you can—but make money."

That interpretation would evince some-

what of moral abandon that did not seem creditable from such high authority. I turned back to the eloquent and stirring address of the President to members of the National Photographic Association, and read it again. That seemed to speak from a most earnest spirit, animated by the noblest motives. I could not at once quite reconcile the seeming discrepancy.

I thought the subject over at intervals for several days, and believe I have found the basis of reconciliation. I have formed the conclusion that Mr. Rulofson takes this bold stand for elaborate and unlimited retouching, not because he is more unscrupulous than others, but more courageous and far-seeing.

He foresees the inevitable, and is too wise to resist it. He is a man of the world, practiced in business, and knows so well how irresistible are the tides and currents of its fashions, that he will neither stem them himself nor advise others to, believing that in a contest so unequal, even the strongest would be overwhelmed without doing any good.

He therefore advises them to look after their own welfare by giving the public what it wants, and is willing to pay for, thus, "taking at the flood those tides that lead to fortune."

I have been one of those who still retain some lingering respect for the unsophisticated photograph, and therefore have had some hesitating scruples about making work so entirely deferring to the vain wishes of each customer, as to be measurably ridiculous to everybody else.

But Mr. Rulofson's forcible statements of what we all must recognize as undeniable truths, go far to remove all prejudice. It is true that we deal with individuals, not communities. We are paid to please them one by one, not en masse. If unlimited retouching will really please them, let us exhaust all the resources of the art at present known. Then invent yet more elaborate methods.

I for one am a full convert to the "new departure," and henceforth renounce all shame, except for not going as fast and far as others. I have already bought new magnifying glasses for my tired eyes, and would have negotiated for "capacity" if I had known anybody having any to spare in the retouching line. But as most of my photographic acquaintances complain of a "plentiful lack," instead of a surplus, I must try to acquire more by spontaneous development.

Of course all scruples being removed, there will be a perfect carnival of retouching, for with untrained and unskilful hands we shall try to fully meet the vain requirements of Mr. A. and others of his kind, and there will be a flood of pictorial portrait abominations, removed from the best possibilities of photography, even farther than the coarse crudeness of its early efforts; as perfumed and painted courtesans of the city, despite their splendid toilets and polished lures, are much farther removed from all that is noble, sweet, and pure, in perfect womanhood, than are the rudest and most ignorant country hoydens, each wanting their noblest qualities; the photograph truth, the women virtue.

But like a raging fever, the retouching mania must run its course. We photographers are but the humblest servants of the public in the domain of art, and must not dictate, but obey.

Then let us give the public a surfeit of falsehood, until cloyed with the sweet poison, it turns itself to demand the plainer, but more wholesome fare of truth.

Or if the love of lying flattery is so inherent in human nature that no amount can cloy, let us believe the universal law of compensation will turn the seeming evil into lasting good.

As one immediately beneficial result, it will do away with the custom of showing unfinished proofs, for if such wholesale work upon the negative becomes the fashion, the folly of showing any but a finished picture will become daily more apparent. If finished proofs only are shown, it will prevent or largely restrain us from another mistake into which the "fatal facility" of the present method leads us, that of showing the lot, and throwing the onus of choice upon the customer; because, as we can only afford to fully finish the very best, we must needs descriminate for ourselves, and that alone will be a "powerful developer" to

the artistic judgment. Then last, but not least, so much extra work will compel higher prices, and also the rule of advance pay, to cover the finished proof at least, for reasons too apparent to resist, and thus permanent good will be accomplished.

NEW YORK, January 22d, 1876.

PRESENTS ON THE PACIFIC.

SAN FRANCISCO, December 28th, 1875. EDITOR PHILADELPHIA PHOTOGRAPHER.

DEAR SIR: Christmas eve we made a presentation to our employers, Messrs. Bradley & Rulofson, and thinking an account of it might prove of interest, we send it to you in the hope of finding a space in the next number of your Journal.

Respectfully, etc.,

THE EMPLOYES.

The famous artists of San Francisco were the recipients of some very handsome presents from their employés on Christmas eve. H. W. Bradley was presented with a rich silver flower-stand, and W. H. Rulofson with a massive silver pitcher. One of the attachés, in making the presentation to Mr. Rulofson, delivered the following address:

"MR. RULOFSON: Although to give is pleasant, to receive is much pleasanter," so an old song commences, and verily so, for what can be pleasanter than to receive from those who, by giving, exhibit thereby the spirit of friendship and esteem they entertain for the recipient-what can be pleasanter than to be made the recipient of a gift from employés, who contribute their mite out of their weekly earnings, not as an inducement for favors, they ask none, but as a token of their good will towards him who rules them. And in that light, Mr. Rulofson, we, the employés of your establishment, beg leave to present you with this silver pitcher and goblets as a small token of our high regard and esteem, and hope you will receive the same in the same spirit as tendered. We have chosen to present you with a pitcher, deeming it the most suitable, it being in name what you are yourself-a pitcher-as all of us who have been pitched into by you can testify. Wishing you a Merry Christmas and Happy New Year, we remain with the best wishes for the welfare of yourself and family, and the prosperity of the firm of Bradley & Rulofson, Your Employes.

CANADA CORRESPONDENCE.

WE have been having the most peculiar weather in this part of the world for this season. Talking of seasons, permit me to wish you the compliments of the season, and success to your Centennial, not forgetting the *Philadelphia Photographer*.

We have had our harbor frozen over, the thermometer below zero to the tune of 28 degrees, and now we have no ice, no snow, and the weather, for the last week, like spring Asfor "light," it has been wretched. I have not done a stitch of work outdoors for one whole month, except once or twice.

I have been working Newton's dry process lately and succeeded first-rate, until I took to trying the addition of the six grains for the purpose of increased sensitiveness, and then I failed utterly. I should like to ask Mr. Newton whether it would not be better to wash such a plate in ice-water or distilled water before putting it in the preservative. I think it seems to work better so, though I cannot say what effect the washing has, as I am no chemist.

I tried the Newton process first without the increase of silver, and I was surprised at its rapidity, as I had a good negative with only thirty-five seconds' exposure in the early part of last month. I call that pretty fast for that time of year.

There is one thing I found with this dry process, which, in my estimation, is rather against it for winter work, and that was it worked too quick in the snowy part of the picture for the other parts. The snow was overdone when the rest of the picture was not sufficiently exposed. I should like Mr. Newton to tell me why this was so, as I worked exactly according to his recipe all through. Snow and ice, of course, always work themselves out on a plate slightly faster than the other parts of the landscape, but not so fast as they did in this case.

We are busy in this country just now preparing our wares for exhibition at Philadelphia, i. e., those who are chosen to ex-

hibit, and so you won't hear from me again for some time.

I hope to make myself personally acquainted with you some time during the Centennial, and to have the pleasure of meeting some of your best artists there before I go home to Old England in the fall.

Things are pretty bad here as regards business, but I trust they will brighten before spring. Labor is scarce, and you will have observed, I dare say, that the corporations of our cities are providing work for those out of employment. The photographers complain, as well as the rest, of the dull times, and I fancy many of them will find it hard work to get through without trouble till better times come. Mind, I think it would be better for the most of them if they took to some other trade, and it certainly would be a benefit to the good artists if some of the weeds were plucked, for cheap photographs, like most cheap things, are dear and nasty. Pardon my soliloquy.

> Yours faithfully, RICHARD W. BARROW.

SKYLIGHTS.*

BY A. N. HARDY.

If there should be some poor forlorn artists perusing this little book, seeking for light on dark subjects, and wishing some one would only tell him what to do, I will point him to a light at an angle of sixty-five degrees, where will be found only the pure and unadulterated, and that which is the most constant, unchanging, and most easily managed. No need to build an extra shade on the roof, to obscure the sun's rays; neither of the numerous and expensive inside curtains with their perplexing strings and pulleys; ground glass and blue glass, all ean be cast aside; no customers scolding, because the light hurts their eyes, or finding fault, because there is a "black eye," "dirty nose," or white spot on the top of the head.

With a "skylight on end," as some speak of our light, combined with the sidelight, which extends the whole width of top light, and within two feet of the floor, we have only to use our double reflectors, covered with white and orange cloth, which may be used either side next the sitter, as the subject may require, and a white tissuepaper screen three feet wide and eight feet long, sliding on wires over head, are all that are required to obtain any and every effect of light.

The light works quickly, is easy for the eyes, and always ready for business.

HOW YOUNG PHOTOGRAPHERS MAY SUCCEED.*

BY A. N. HARDY.

Do good work. If you are not by nature a superior photograph operator, employ some one that is. Keep the other threads of your business well in hand, from the finances to the minutest details of the work. Treat your customers well. Do all you can to serve them in a polite and obliging way without servility.

Insist, without many words, on keeping your place as head of your business, and expect patrons to submit to the reasonable regulations of your studio.

Learn from all sources the best methods of doing business or work.

Increase your prices as fast as you improve your work and style of carrying on business. You can do it in the face of any amount of competition.

This method has brought one photographist to a successful business, and it will others, if they perseveringly follow it.

PHOTOGRAPHIC ACCIDENTS.

BY ROBERT J. CHUTE.

Many of the failures in photography are said to be accidental, or result from some cause apparently unforeseen by the operator. This may be really true in some cases, but many of the so-called accidents are due to a want of care in the preliminary parts of the work. They may occur in compounding the chemicals, in manipulating, or in finishing. Even in the æsthetic department, where it is supposed the photographer has all before his eyes and under control, some defect in composition, pose, or lighting, is said to have been accidentally over-

^{*} Written for Mosaics.

^{*} Written for Mosaics.

looked. But an accident that occurs in this way is no accident; it is rather an evidence of carelessness or a want of training on the part of the operator. No one is to be censured for being the victim of this carelessness or inefficiency, for it is human; it is something to which we are all liable; but he who fails to profit by such lessons, wrongs himself and loses all the advantages that come from improvement and progress.

I may enumerate some of the accidents that are most common to our everyday work. In preparing the negative bath, the operator accidentally slops in fifty drops of nitric acid where he only intended to put in five, and the consequence is, in the absence of collodion, etc., prepared for an acid bath, his negatives are sadly undertimed and wanting in detail. In coating his plates he accidentally leaves his collodion bottle uncorked every time-this accident often grows into a fixed habit that is hard to break up-the consequence is the evaporation of the ether soon causes the collodion to become thick, and wavy; crapy films, with various attendant evils, are the result. The prepared plate is placed in the holder, taken under the light, and set down against the camera-stand or any convenient leaningplace, while the sitter is being posed; accidentally the plateholder is knocked over, and the negative comes out filled with spots and pinholes; the negative may be otherwise so good that the photographer concludes to keep it, and those blotches are forever an eyesore to him as well as to all others who may examine the picture. This accident, or a recurrence of it, may be avoided by providing a box or stand, in or upon which the plateholder may be placed, or it may be laid flat upon the floor, a table, or shelf, so that the film side of the plate will be down. In this way it is safe, as "he that is down need fear no fall." In flowing the plate with developer the bottle is accidentally tipped too much, and solution enough for a half dozen plates is splashed into the sink, carrying with it all the free nitrate of silver on the surface which was so necessary to the proper development of the image. The consequence is a weak, imperfect negative, the inferior qualities of which seriously affect. the resulting picture.

In manipulating about the dark-room, hypo solution is accidentally spilled or dripped upon the floor; this happens from day to day till a sufficient quantity has accumulated to form a crystallized coating, which, becoming ground up by the feet, forms an impalpable dust, that settles upon and fills with pinholes every plate prepared.

The bath is accidentally left uncovered at night, so that dust—probably the same dust just referred to—accumulates upon the surface; and in the morning, by another accident of memory, or neglect, this disagreeable scum is not removed, and is taken out on the plates a little at a time, to mar the work and perplex the operator nearly all the day through.

By accident, the filter which has been used for the bath, by being placed in close proximity to the hypo, the developer, or the ammonia bottle, becomes contaminated with one or the other of these encmies to the good behavior of the bath, and after it has been renovated, filtered, etc., the luckless photographer, at a time when he expects all to go well, finds himself, or more particularly his work, hopelessly obscured in fog. This fogging may also occur from keeping a bottle of ammonia in the dark-room, which, from the heat of summer without, or from that of winter within, accidentally forces out the stopper and fills the apartment with its fumes.

Under the skylight, such accidents as getting the wrong view of the face, letting the head be too high or too low, allowing the sitter to look nowhere, giving the eyes a wrong direction or bad expression; leaving the hands to take care of themselves, instead of carefully placing them in graceful and expressive positions; blundering against the camera and upsetting it, in an intense study of effects, thereby frightening the sitter, or making the whole performance seem such a burlesque as to render an agreeable or happy expression afterwards difficult to secure; getting too much top-light for one style of features, and too much side-light for another; overexposing on a bright day, and underexposing on a dull one; missing the focus, because it was too much trouble to use the glass or adjust the swingback;

making the exposure without having the dark-slide drawn, thereby necessitating a second sitting with its diminished chances of success.

All of these accidents are liable to occur, and most photographers of experience have doubtless met with some of them.

Many are disposed to call all these adverse incidents "bad luck," or unforeseen circumstances over which they had no control, and there let the matter rest without any consideration as to whether or how they might remedy the evil.

There is very little of that "scapegoat" called luck in existence. The more correct terms for good luck or bad luck, are good management or bad management; it is at least so in photography; and the man who looks every failure square in the face, and turns inwardly upon himself and his own resources to find the remedy, is he who will soonest conquer himself, and in doing this conquer nearly all other difficulties.

The accidents I have referred to, without saying how they may be avoided, are such as suggest their own remedy. The cause of a difficulty is often the most suggestive of a cure. For instance, if you drop a negative and break it, the lesson to be learned is not how you may mend the broken plate, but the accident itself is a warning to be more careful in the future.

THE NATIONAL PHOTOGRAPHIC ASSOCIATION.

WHAT SHALL WE DO WITH IT?

This question we want to press home to every member, and gain from each a response that will serve as a guide for future action.

Our readers have all had the opportunity of being stirred by the resolutions of the Executive Committee in the November number of this journal, the appeal of Mr. Webster in the December number, and the address of President Rulofson in that for January.

If these have failed to awaken any interest, or call forth an expression of the purpose or determination of the members of the Association in reference to its maintenance (but little evidence of which has as yet reached

us), we almost despair of making any impression by anything we may say at this time. And yet we feel it to be incumbent upon us to make one more effort to arouse the members from the apathy that seems to have fallen upon them. Can it be that the Association is to be permitted to languish just at a time when it was in the condition for its greatest usefulness? Remember that at Chicago it was nearly cleared from debt; its permanent existence seemed assured, and the bright promise for the future led us all to hope that the hardest struggle of its life was over. For prudential reasons the convention for 1875 was postponed; this may have been a mistake, but be that as it may, the necessity for organization, and that organization a national one, is as great now as it has ever been.

Who has been helped by the conventions and exhibitions that have been held? Who believes there is yet room for improvement, that the work of the National Photographic Association is to fraternize its members, to assist them individually, and to elevate the whole body photographic to a higher level, both as regards the quality of the work produced, and the estimation in which they are held by the public? Who is willing to do his part towards maintaining this great and good institution? Who will give us his pledge at once and unreservedly, that he will do this?

The time for the convention which has been appointed at Philadelphia, during the great Centennial Exhibition, is fast approaching, and whatever is to be done cannot be much longer delayed. The dues for 1875 have not been paid, and the Executive Committee find their hands tied from a want of funds, and the assurance that any steps they may take, or expense they may incur, will be backed up by the great body of the members.

We cannot but believe there are enough of the substantial members of the Association—we think we could count them by hundreds—who are deeply sensible of the good it has done, and who are willing to help sustain it, who, if they would but act promptly upon what they feel would be for the best interests of the Association, would place the question of its future success at

once beyond all doubt. How many of these will give it the desired encouragement?

Like all democratic institutions, the governing power is the great body itself; but if this body has become inanimate, cold, indifferent, devoid of life or energy, what can be expected of the head? How many then will arouse in this matter, and signify their determination to sustain our President and Executive Committee in such measures as will insure the proper arrangements being made for our Centennial convention? It will make no difference if you all speak at once. We want the answer prompt and decisive to the question: Are you willing to do your part towards sustaining the National Photographic Association? Do not turn from this page or allow anything else to take your attention from this subject until you have answered the above question. The existence of the Association depends upon your action. It is worth saving. You will regret it, if you fail to do the little required of you at this time.

This Centennial year will be productive of sentiments and expressions of loyalty to the glorious principles of republican government transmitted to us by our fathers, and a determination to hand them down unimpaired, if possible, to the generations that are to follow. Now, if we are loyal to what we consider good in our government, shall we be any less loyal to any other good? If the National Photographic Association is good, let us be loyal to that; if it has encouraged, strengthened, and lifted us up in the past, and promises to help us still more in the future, let us rally to its support. It is true, it is not threatened with an enemy from without, but it is threatened with one from within, which is even more dangerous, viz., inactivity. Let us throw off this incubus, and determine to act well our part in a work which promises to advance our own individual interests as well as that of our fraternity at large, and even beyond that must surely have an important bearing upon the art, industry, and general progress of our time.

PLEASE read our Magic Lantern Slide advertisements. It will help business.

HINTS TO BEGINNERS.

TONING.

Water, . . . 2 ounces.
Chloride of Gold, . . 15 grains.
Whiting, . . . a teaspoonful.

Put the gold into the water, then add the whiting, and pour on boiling water until the yellow disappears, let stand until cool, then filter; for use take one part of the stock solution, and add four parts of water, keep warm while toning, and keep adding of the stock solution whenever the solution tones too slow; if it tones too fast add more water. This toning can be used again and again; filter each time after toning. If sepia (or warm) tones are desired, wash the prints before toning in a weak solution of salt (or add a few drops acetic acid, No. 8, to every pint of water). The salt should be dissolved some time before the prints are washed. If the prints are weak in silver the salt, not being properly dissolved, will make the prints spotted. The beauty of the tone in the resulting picture depends greatly upon the condition and appearance of the prints; if prints appear weak before toning they will still be weaker after toning. Prints should invariably look a shade stronger before being toned than required when finished.

Fixing in next issue.

L. T. WILT.

FRANKLIN, PA.

TALK AND TATTLE.

There has been a great deal said about apprentice systems and other methods of giving us a better educated class of photographers. But nothing has yet been devised to meet this want in the aggregate. It has seemed to be a difficult problem to solve. Practical photographers have but little disposition to take apprentices other than as they may make them useful to themselves, and then it may prove that it is for their advantage to keep the apprentice in one department, where he has but little opportunity to learn anything beyond.

Photographic colleges seem as yet impracticable, and but little can be hoped for in that direction.

But the best solution of this question we

have yet found, suggested itself a few days ago on receipt of a subscription for the Philadelphia Photographer for 1876 from an Indianapolis photographer, which he wished to present as a New Year's gift to his operator. This, we believe, is the best and only real practical method of educating photographers. If all employers would follow this example, and place in the hands of their employés the means of improving themselves intellectually in relation to their business, we would soon have a better class of operators coming forward to improve the standard of our art. Every photographer should have in his gallery, besides the current photographic literature of the day, a collection of such works on art, science, chemistry, etc., as relate to photography, and place them in the way of those who might be benefited, and encourage their reading of them. Many men, apparently, employ help in their galleries on about the same principle as they would hire a man to shovel dirt, etc., viz., that their value consists in keeping at it, dig, dig, dig! · A book in the hand or a minute spent in solving a problem, is time wasted. But this, we think, is a mistake. The man of tact and foresight will encourage his help in a disposition to study and improve their minds, and place in their way, as has our Indianapolis friend, the means of doing so.

It gives us a great deal of pleasure to see such men as Mr. Walter C. North and Mr. L. G. Bigelow answering the calls of those in need of help, and going to give them instruction. They are, either of them, a photographic college in themselves, and happily of the kind that can travel. From Mr. North we have a letter, from which we make the following extracts to show the good work he is doing:

"BLOOMFIELD, IOWA, December 28th, 1875.
"I have been here five weeks with T. A. Dunlap, posting him up in the ways he should walk, and to say that we have been busy would hardly begin to express it; we have been rushed. Saturday night we had fifty-seven negatives not retouched yet, and dozens to print from besides.

"Inclosed is T. A. Dunlap's subscription for 1876. He is already a subscriber. He

is a good man, and deserves success for having me come from Cleveland here to give him instructions. He has already taken in cash and orders enough from negatives I have made to pay all the expenses of my coming, and they were pretty heavy too."

Thus we see what a man can do who has studied for improvement and progress in his profession. Mr. North has come to be one of our best teachers, and we doubt not there are many other photographers, who, like Mr. Dunlap, would find it to pay to have him come and show them how good work is done. There is no want more apparent among a large class of photographers than this artistic culture, which seems so indispensable to the attainment of any high degree of excellence. It is something, too, which seems very difficult for some to acquire, and there is probably no better way to be helped in this direction than to secure the services of such a teacher as Mr. North. The people only require to be shown good work to secure their patronage, and many photographers only require a litle help to put them in the way of overcoming all their difficulties.

Mr. North's address is, care of E. Decker, Cleveland, Ohio.

A THOUGHT suggested by one of our correspondents last month, is put into practical form by another as follows:

ONEIDA, N. Y., January 16th, 1876.

DEAR EDITOR: "An Old Subscriber," under the heading of "Talk and Tattle," in the January number of the Philadelphia Photographer, calls the attention of photographers to the value of making a note of what is read, that is thought new and valuable, for future reference. The idea is certainly a valuable one, and I offer my method of doing this.

I have a narrow-paged blank book with pages numbered, and an index. The index reads like this.

On Baths, .		page	51
Developers, .		4.6	32-45
Albumenizing,		"	36
Enlargements,			37
Retouching, .		4.6	40

And so on, including all the different processes of picture taking. To use this book,

I follow this plan; for instance, in January number of *Philadelphia Photographer*, I find on page 12 an item of interest about "Burnishing." I look in the index of my blank book, and find "Burnishing, page 54." Turning to page 54, I make this note, "*Philadelphia Photographer*, 1876, page 12." It takes but a moment, but might save hours of future search. In this way, a person can, if perplexed on any point, in a very short time, run through all of value that has been written on that point in the different publications taken.

This is one practical way. Let us have others. Yours for improvement,

D. E. SMITH.

A GOOD WORD FROM NEW YORK.

NEW YORK, January 14th, 1876.

MESSRS. BENERMAN & WILSON.

GENTLEMEN: I have again to thank you for a copy of *Mosaics*.

I still wish another copy in paper, for which please find fifty cents within.

I have just received the Philadelphia Photographer for January, good as ever. I have taken the Photographer regularly, pretty much since it started, when I have been in business, and have read it always. When I was in Brazil and the West Indies, I used to have all the back numbers sent with each puckage of goods, so that I kept full volumes of it, and I do not remember ever getting a number from which I did not get some idea which I could put to immediate use, worth more than the number cost, often many times its cost. Do you wonder that I feel an interest in it?

I see more evidence in this number, that the subject of "Rights" is gaining ground, and perhaps after all like the little lump of leaven hidden in seven measures of meal, it may yet leaven the whole.

I wish it might be acted upon directly at the Centennial meeting of the National Photographic Association. Do you think an effort thereto would meet any hearty sympathy?

Yours very truly,

E. K. Hough.

We have often wondered why Mr. Hough, a New York photographer, was so live and so much interested in the craft. The above explains it.—ED.

THE CENTENNIAL PHOTOGRA-PHIC EXHIBITION.

This will also serve as the exhibition of the National Photographic Association; and all who are intending to participate, should be making ready without delay.

Now, we would urge upon photographers all over our country, especially those who have exhibited at the National exhibitions, to determine at once, apply for space, and prepare their work. This, remember, will be the grandest opportunity we have ever had, and if our exhibitions heretofore have been interesting and beneficial, how much more so must be this grander collection. If any doubt or have misgivings as to the practicability or usefulness of photographic exhibitions, we would call their attention to the following extract from a paper read at a recent meeting of the Edinburgh Photographic Society by Mr. Alexander Asher, which will show how much of the advancement on this side of the water is held to be due to our exhibitions. He says:

"The followers of the older arts (painting and sculpture) are upheld and advanced in their progress by the facilities given in their schools of art and annual exhibitions, and they are stimulated to greater efforts in their future labors by the comparisons they are there enabled to make of the works of their brethren, and by the appreciation and encouragement bestowed by a discriminating public on their exhibitions; and if these exhibitions are still considered a necessity for the advancement of progress in relation to arts of such antiquity, how can it be expected that our photographic art can make telling progress if year after year goes on without any special inducement being offered to assist us out of the ruts of a contented or non-progressive art practice?

"We have a striking illustration of the increased impetus that can be given by these exhibitions, in promoting art progress in connection with photography, in the United States, where, until within the last few years, they had no special organization for such a purpose. Now they have a very flourishing National Photographic Association, holding an annual congress and exhibition by rotation in the various cities of the Union; and it is said that to our West-

ern brethren, who thought their work left nothing to be desired, their exhibitions came like a new revelation; they found that their most valued productions looked tame, commonplace, and comparatively worthless when placed beside the works of masters in the art, the result being that many of them began at once to aim at higher efforts, and every year's successive exhibitions have shown that great progress and success have been achieved through their aid. To come nearer home, it will be remembered that a very great stimulus was given to the artistic abilities of the photographic profession by the exhibited portrait work of M. Adam Salomon at the Paris International Exhibition of 1867; and certainly nothing up to that time had ever been exhibited that could be at all compared with these picturesthey were simply perfect.

"It is not within the province of this paper to treat of the technical difficulties that stand in the way of the artistic photographer being able to give due embodiment to his pictorial fancies or compositions, on account of the non-plastic nature of the materials with which he has principally to deal, but we need not be discouraged-their optical, chemical, and mechanical difficulties can all be overcome. 'Nil desperandum!' must be our motto, feeling assured that the more attempts we may make to secure more artistic feeling and sentiment in our work will be most valuable to us as a means of art education, and will, at the same time, serve to unite in a large measure the higher qualities of art and the truth of photography. Without appearing to be invidious in quoting names, we have only to look at the works of the late O. G. Rejlander to learn what has been done in this direction. We can see at a glance what a field is open for cultivation—the production of such a class of subject or genre picture. In these pictures we see that variety of true expression and feeling, natural ease of pose, and originality of sentiment, can be successfully secured by photographic agencies; and what has already been so well done is within the reach of all who will make studious efforts to obtain like results."

We thus see the estimation in which our National Association is held abroad. Shall we forfeit the high reputation it has gained by failing to give it proper support? See article on another page.

A PRIZE FOR RETOUCHING.

One of our correspondents has suggested that we offer a prize for retouching. This we have thought favorably of, and hereby make the following offer to our subscribers in all parts of the world. We will give a gold medal for the best six double negatives of not less than two-inch heads, plates not larger than whole size, that display the most artistic retouching on one end, and the subject untouched on the other.

We will allow each artist to be his own judge of what constitutes artistic retouching. The retouching must be well supported by artistic posing, lighting, and other qualities which constitute a first-class negative.

We shall reserve the right for the judges to exclude any work which may appear to have been used simply as a retouching basis, without regard to its merits as enumerated above.

All negatives entered for competition must be carefully packed, with mounted prints for each, and sent to us, express paid, before the 15th of April, 1876.

Each accepted competitor will receive one picture from each of the others admitted to competition.

We trust a general interest will be taken in this, and that we may have a lively contest, which will improve us, and do us all good.

OUR LAST PROMENADE PRIZE.

To say we were quite disappointed with our last competition, but expresses what we really felt. The wide interest we hoped to excite, and the far-reaching good we aimed to accomplish, were reduced to a circle so small that the result seemed scarcely to compensate for the effort. We have no complaint to make against those who did compete; they did well and nobly their parts, and deserve the highest praise for their efforts. They will receive the reward, which might have been extended to five times as many, which comes from every effort to rise above mere mediocrity, and

encouraged by the benefit they are conscious of having received, they go on from one success to another until they win the highest attainable positions in our art. But where is the man who did not compete, who never makes an effort to improve himself? We may say he is in obscurity; little is known of him; he wraps his seclusion about him, and lives and dies on the same level. The end at which he commenced his journey is just as high, and sometimes higher than that at what he concludes it. We are sorry for these; we wish we could make them see in what direction their interest lies; but if the examples of others fail to make an impression, we have but little hope that any words of ours will reach them.

It is not merely competition for prizes that we may offer that we would urge, but competition wherever an opportunity presents itself, whether a prize be offered or not; at fairs and exhibitions of any sort where he may have an opportunity to bring his work before the public, the photographer should be among the foremost exhibitors.

Many appear to be fearful that their work will not be as good as that of others in a competition or exhibition. But this is a fear that works injury to all who are influenced by it. The only way to be benefited is to resolve to make the effort and do the best you can. A few trials will make you hopeful, and give you the assurance that substantial success can only be won by fearless, patient, and persistent effort.

On another page we offer a Prize for Retouching, the competition for which we trust will be freely participated in, and a more uniform standard of artistic merit be developed in this department. To this end we cordially invite all to participate, believing that much good will result from a generous competition.

PHOTOGRAPHIC RIGHTS AGAIN.

EDITOR PHILADELPHIA PHOTOGRAPHER.

DEAR SIR: I have read with considerable interest your articles and those of Mr. Hough on "Photographic Rights," and I hope you will agitate the matter and persevere in it until every photographer throughout the

country shall adopt prepayment, and the public thereby made to recognize the justice of the same. My experience has been such (and I know of many others) that I am fully convinced it is the only sound business method on which to conduct photographic portraiture, especially now when a mania for sitting over seems to have taken possession of the public, no matter how particular one may be in the first sitting. It is not necessary to enumerate the evils or injustice practiced on the photographer, for they are patent in every establishment. On commencing business here, four years ago, I resolved to build it up on the foundation of prepayment or not at all. Though somewhat timid at first, I have persevered in it till I have the gratification of knowing it has become a recognized fact with my patrons; and I am positive any photographer that reaches this point will never go back to the old régime, for there is an untold satisfaction after a hard day's work in knowing it has not been in vain, and particularly so when he counts over the dollars in the till. One point has been gained by a lawsuit which is well enough as far as it goes, but to enforce it, experience proves there would be interminable lawsuits, and in the end loss of patronage; whereas prepayment precludes the possibility of the former, if not the latter. My method at first was for the salesman to ask the money in advance; there being nothing about the place to indicate such a rule, he met with all kinds of objections. Then a large sign, stating terms, etc., was placed in a conspicuous place, and he succeeded better. This led to printed receipts for money in advance, which were filled out and handed the customer, with still better success. Finally, I had "all sittings for small photographs must be prepaid; other sizes a deposit required," printed on the appointment cards, tickets for sittings, billheads, envelopes for proofs, etc. I would add, the salesman was instructed not to be arbitrary in the demand, wishing the rule to become well known first, so there could be no excuse for coming not prepared to pay. Those that do not now are very rare. In the meantime I have raised my prices, and, as far I am able to judge, making due allowance for general

depression, neither this nor prepayment has affected my patronage.

I have not written you with a desire to rush into print, but to help along what I consider one of the most vital questions of the photographic business. Do with this as you see fit.

Very truly, etc.,
ALVA PEARSALL.

BROOKLYN, January 19th, 1876.

VOICES FROM THE CRAFT.

Pardon me for troubling you with a few lines. I would like to make a suggestion, through your valuable journal, to all photographers throughout the United States and Canada to close their galleries for two weeks, commencing July 1st, and all meet together at the great Centennial in Philadelphia and celebrate the Fourth of July, the nation's centennial birthday of American independence. Why, it will be the grandest triumphal day in the history of America in this century, and such a feast of glory and knowledge can never be enjoyed again in this world by this generation.

Do not let us lose the golden opportunity and regret it when too late. It will be the best cash investment we ever made, and let us encourage and inspire our employés to commence now to save up money to see the world's great show, as the Fourth of July will be the greatest day of the season. I will put my name down to close up my gallery for two weeks, and encourage all my employés to go and get that knowledge and education that money can never buy, nor Chicago flaming fires destroy.

C. D. Mosher.

CHICAGO, ILL., January 18th, 1876.

SOCIETY GOSSIP.

PHOTOGRAPHIC SOCIETY OF PHILADEL-PHIA.—Stated meeting held January 6th, 1876; the President in the chair.

The minutes of the last meeting were read and approved.

The Committee on Subscriptions for Photographic Hall reported progress.

The resignations of Messrs. Albert Moore and W. L. Shoemaker were read and accepted.

Under the head of verbal communications, the Secretary said that his attention had been recently called to some samples of permanent printing which were of so inferior a character, that while not wishing to underrate the value of permanency in the various photo-mechanical processes, he felt convinced that they were being employed for book illustration to a far greater extent than was advisable or proper in the present crude state of the processes. In the case of copies of engravings, etc., etc., the results seemed to be more satisfactory, but it was not so with direct views from nature, as was evident from some proofs laid on the table.

Mr. Sartain remarked upon the superior qualities of the French photo-engravings, and suggested that one cause of their uniform success might be in the quality of the pigment used, which was known as "Frankfort black," and made from the skins and seeds of grapes. He also suggested the use of asbestos paper, which had a very fine surface for this kind of work.

Dr. Seiler exhibited a pneumatic plateholder of his own construction.

Mr. Carbutt gave an account of some experiments which he had recently made, at the suggestion of Mr. Young, with caustic potash in collodion. When added in the proportion of about one-quarter of a grain per ounce, it rendered the collodion at first slightly viscid, and then rather more fluid than before, giving a film of remarkable density, and complete freedom from "oystershell" markings, and so tough that it would bear the application of Schlippe's salt as an intensifier without any signs of cracking, which was not the case when the potash had not been added.

Mr. Young exhibited some transparencies developed with a solution containing glycocol as a restrainer. This was made by steeping 100 grains of gelatin in water enough to dissolve it when heated, and then adding 10 grains of caustic potash when the mixture had been brought to the boiling-point. Half an ounce of this solution with three fluid drachms of acetic acid No. 8, was added to 16 ounces of 15-grain developer.

Conversation ensued upon the merits of dried albumen. Mr. Carbutt said that the foreign article would not always make a clear solution when redissolved, but that whites of eggs prepared by Ackland's formula would always redissolve easily into a clear liquid. Dr. Seiler stated that albumen from the eggs of Arctic water-fowl was now shipped to Europe in large quantities as an article of commerce.

Mr. Sartain presented a plan of Photographic Hall, and gave some interesting details relative to the art department of the Centennial Exhibition.

Mr. Young offered the use of his lanterns and gas-bags for an exhibition of slides at a future meeting of the Society. After some consideration, it was resolved that a special meeting be held on the last Friday in January, at 8 P.M., for the exhibition of slides by calcium light.

On motion adjourned.

ELLERSLIE WALLACE, JR.,
Recording Secretary.

SAN FRANCISCO, CAL., January 8th, 1876.

I notice with pleasure that you devote some space in the *Photographer* to the meetings of our youthful Society, and, as you have been so kind in publishing the same, I send you the record of our last meeting, which, I hope, will likewise find a space in your valuable paper.

I am happy to say that our Society is in a flourishing condition, being strengthened at every meeting by new members, who see the advantage of joining the meetings of those in "search of light," and verily so, for where, I ask, could they gain it better than by attending meetings of photographers congregated together for interchange of ideas and opinions of the modus operandi of photography, and to point out to each other the means of overriding the obstacles besetting photography in all its branches, and by so doing remove the veil of secrecy with which photographers have been accustomed to enshroud themselves.

On the 5th of next March we will have passed the first year of our existence, and although at one time seeming as if "going down," by the action of one or two members, who thought to benefit, through the Society, individually (and personally), instead of collectively, I am happy to say, we are stronger than ever., "United we stand—divided we fall."

Regarding Centennial matters, I am sorry to say that our subscription towards Photographic Hall is not as large as we (and you) would have liked to see it, but adversity has for the last few months stared into our face; first, the death of the lamented William C. Ralston, a kind patron to our art; then the Bank of California disaster, inducing every one to economize their means during the threatened financial panic; then the Virginia City fire, calling upon us Californians, their neighbors, for aid and assistance. All this had to be overcome, thereby making money very scarce. Had your subscription list been started before all this took place, I am sure that California would at least have subscribed some three thousand dollars, but under these circumstances, I think, one thousand dollars will be about all we can raise, although we should like to be able to make it double that amount.

Respectfully and fraternally,
Yours truly,
GEO. B. RIEMAN,
Sec. Phot. Art Society of Pacific.

Boston, January 7th, 1876.

The Association met at the studio of J. W. Black.

The meeting was called to order by President Bowers at 8 o'clock.

At the request of Mr. Rowell, the Secretary read Mr. Pearsall's letter in the December number of the *Philadelphia Photographer*.

Mr Southworth thought Mr. Pearsall had established no new principle—the principle would not be denied in any business whatever that, if you use a person's time, he is entitled to pay for it, and can collect it in any court; but a sum of \$24 would generally cost \$124 to collect, besides the worriment of mind a person must necessarily have. It was his practice when in business, when a case of this kind came up, to say, "Better let it go."

Speaking of art and art culture, he said a man cannot come rough from the farm and make refined pictures; he must first learn what is beautiful and refined, and the one that understands this the best is the one that will excel; also a knowledge of human nature is necessary.

In regard to societies he thought there

was but one mind on that subject, and that was, they must necessarily do good. The great improvement in photographs in the last few years was, in a great measure, due to societies.

Mr. Bowers thought Mr. Pearsall had a wrong idea in regard to societies endeavoring to regulate the private business of its members, as he had not seen anything of the kind in any with which he was connected.

Mr. Rowell said his idea was similar to Mr. Southworth in regard to business; and in regard to societies, a body of men coming together must necessarily get new ideas, and he thought it the duty of every member to contribute his mite. The association of men should bring a certain amount of refinement, and said, you should associate with the best men you can find.

Mr. Southworth spoke of a picture which he saw (made by Mr. Burnham) as one of the finest photographs he had ever seen.

Speaking of ideal pictures, Mr. Black said: Look at almost any photograph of a loved friend, and what do you see—nothing but a map, a face, but without soul; and the advantage the artist has in being able to put that expression in the face which it is impossible to do with the camera, and how the public expect us to do for \$5 and in fifteen minutes, what Rouse, or a like artist, would charge \$500 for doing, and take weeks of study.

Mr Southworth said, as our next meeting would be our annual one for the election of officers, and as this year would be an important one for photographers on account of the exhibition, we should have for a President one who is competent, and has ample time at his disposal, and would nominate for President for the year ensuing Mr. George H. Loomis.

Adjourned.

PENNSYLVANIA, PHILADELPHIA.—January 11th, 1876.—The stated meeting of the Pennsylvania Photographic Association was held at the gallery of Messrs. Mahan & Keller. The newly elected President, H. S. Keller, in the chair.

Minutes of last meeting read and approved.

The report of the retiring Secretary was read, and a vote of thanks tendered to him.

The Treasurer read his report, and Messrs. Wolf, Marston, and Hagaman were appointed a committee to audit accounts.

Resignation of William Snell read and accepted.

Mr. David Marston was called upon to give his method of printing and toning, and answered all questions put to him, and gave his formula, as follows:

SILVERING SOLUTION.

Nitrate of Silver, . 1 ounce (troy).

Water, . . . 12 "

Alcohol, . . . 1½ "

Float seventy seconds; fume twenty minutes in dry weather, and fifteen minutes in damp weather; after using the solution, add a few grains of bicarbonate of soda, and set in the sunlight.

Prints are soaked about ten minutes in a tray of water, and then washed in running water for about fifteen minutes, and afterwards treated to a solution of 2 ounces salt to a gallon of water, and then taken direct to the toning bath.

Acetate of Soda, . 80 grains.

Water, . . . I quart.

Gold Solution, . 2 ounces (1 gr. to oz.)

The toning bath I use about four times, adding gold solution each time.

FIXING BATH.

Hyposulphite of Soda, . 8 ounces. Water, . . . 1 gallon.

A vote of thanks was tendered Mr. Marston, who promised to bring prints, at the next meeting, made on Clemons paper by his formula.

Mr. H. C. Gabriel accepted the invitation to give a treatise on retouching at the next meeting.

Adjourned.

CHARLES EVANS, Secretary, 814 Chestnut Street.

PHOTOGRAPHIC ART SOCIETY OF THE PACIFIC.—General meeting held Friday, January 7th, 1876, at the rooms of Jacob Shew, Esq., 513 Montgomery Street.

At 7.30 P.M. the meeting was called to order by President Jacob Shew.

The Secretary not being on time, Mr. A. K. Kipps was chosen to act as Secretary pro tem.

Mr. Rulofson, as chairman of the Centennial Committee, reported that owing to the present financial situation only \$650 had thus far been collected towards Photographic Hall, but expressed the hope to collect that much more during the present month, and asked for further time, which was granted. The Secretary making his appearance, and apologizing to the meeting for his tardiness, took his seat and read the minutes of last meeting, which were approved as read.

Messrs. Joseph Thwait and William H. Rulofson, Jr., were elected members of the Society—the Secretary casting the vote.

Mr. Hunt, in behalf of the committee appointed at previous meeting to report upon "spots in prints," and other difficulties in photographic printing, reported that owing to lack of time the committee had only a partial report to submit.

The committee attributed the fault directly to manipulation, or to the chemicals used.

They think that the paper used is often tainted with metallic impurities, and that these latter are also obtained, to a small extent, when the paper is passed through metallic rollers; also, that if the hyposulphite of soda is not strong enough, the hyponitrate of silver, obtained by the action of the silver nitrate on the albumen, will not be dissolved, but will turn brown. They recommend plentiful washing and running water to a bath. The use of free nitrate should be avoided and weak hyposulphite used. Owing to the presence of sulphuretted hydrogen in the atmosphere, exposure to the air should be avoided as far as possible.

The black spots in photographs they state to be sulphate of silver, which can be avoided by the use of strong hyposulphite in fixing. They further claim that "fading" is sometimes produced by the paste used, which turns acid and acts on the silver, and they recommend more attention to washing before placing in the hyposulphite bath.

On motion, the report was referred back to the committee to complete, and a vote of thanks tendered to the committee for the interest they had evinced in the matter.

A recess was then taken, during which time a number of Panama, Alaska, Yosemite, and other views were exhibited by means of an oxyhydrogen lantern, which produced an effect at once beautiful and surprising. The delicacy of tone and fineness of finish being remarkable considering the number of times the views were magnified. The plates were of two kinds—the handsomest being those taken by the "dry tannin" process. Those made by wet collodion were darker and not so clear in outline.

On conclusion of exhibition, a vote of thanks was tendered to Mr. Rulofson and Mr. Jones, his assistant, for their entertainment, and it was decided that at the next meeting all other galleries should contribute some transparencies for exhibition that evening.

The Secretary was instructed to extend an invitation to Mr. Muybridge to attend next meeting, and that any contribution on his part would be thankfully received.

In conclusion, Mr. Rulofson spoke again on Centennial matters, and the important part to be taken by photographers in the coming exhibition, and urged upon additional subscription.

In connection with his remarks, he displayed one of the Centennial stock certificates neatly framed, which was greatly admired as a perfect specimen of the engraver's art.

A vote of thanks was tendered to Mr. Jacob Shew for the kind use of his rooms, after which the meeting adjourned to meet again at the same place on the first Friday in February.

CHICAGO PHOTOGRAPHIC SOCIETY held its regular monthly meeting at their rooms, 158 State Street, Wednesday evening, January 5th, 1876. It being the annual meeting, the first business in order (after reading minutes of last meeting) was election of officers for the ensuing year. An informal ballot resulted, 12 votes cast. For President, Hesler received 5, Ormsby 4, and scattering, 3. Hesler declined to serve in this or any other office, stating that, if there were any honors, he had had his share, and was

quite willing others should enjoy them. Ormsby also declined to serve as President, whereupon a second vote was taken, resulting in the election of P. B. Green, a most excellent landscape photographer, and an active working member of the Society. G. A. Douglass was elected Vice-President; O. F. Weaver, Secretary; Denslow, Treasurer; and C. W. Stone, Chairman of Finance Committee.

The old officers hold over until next meeting, when the newly elected officers will be installed and assume the honorable and responsible positions awarded them.

The election being disposed of, miscellaneous business was opened by Mr. Hesler, who introduced one of the Cross dippers, stating that he had of late been using one of them, and wondered how he or any other photographer ever had got along without their use; they are durable, cheap. The foot or plate support is similar to any other dipper, but the little button that is held by a silver spring and slides down on top of the plate thus holds it firmly in place, so it cannot fall off in the bath, and enables it to be slid in the bath face down: this is its great usefulness; used in this way no specks or dirt in the bath can lodge on the face of the plate, thereby preventing the necessity of frequent filtering of the bath, and always giving a clean plate. He also strongly recommended, as a great saving of specks and spots in the varnish and collodion, the use of the Cross filtering and flowing bottle. No one aspiring to do good, clean work with economy, can afford to be without these dippers and bottles. They should be in every gallery, one each for collodion, varnish, and albumen. He then stated that he had recently received a letter from Mr. Rulofson, President of the National Photographic Association, authorizing him to present to the Chicago Photographic Association a number of his splendid Yosemite views, which were received with thanks to the generous donor.

Mr. Hesler then introduced the subject of the call for subscriptions to the Centennial Photographic Hall; that this Society should at least take one share for each member. So far, with one exception, Chicago photographers had done nothing. He knew they

all, like himself, felt poor; but he intended to do to the extent of his ability. All should feel it a duty and a privilege to take at least one share, to show to the world that photographers of this city were alive to public enterprise. It had occurred to him that every photographer could, by offering to some of their known liberal patrons, who would take one share of stock, five dollars' worth of photographs; some might thus be induced to subscribe who would not otherwise, and the outlay to the photographer would hardly be felt. Photographers from little country towns west of us were contributing, and, for the honor of Chicago, he hoped her sun-painters would not fall behind them.

P. B. Green replied, that he did not think it the duty of photographers to give of their means at all; that if the National Photographic Association Executive Committee had not been a pack of fools and stockjobbers, photographers would have had room allotted them in the Art Hall; that he was credibly informed by the Illinois State Commissioners that room in the Art Hall had not been denied to photographers; and that, as room had been furnished for other exhibits, so it would be for photographers without their paying for it, etc.; also, that the Governor of Michigan was going to rip up the exclusive privilege granted to a certain company for making and selling photographs, and that it should be open and free to all who chose to make and sell photographs, etc. "It was a put up job," etc., etc.

This was followed by other parties accusing Mr. Hesler of mercenary motives in the matter; admitting that, when they did anything of the sort, they exacted and got the pay before they did the work, and they did not wish the valuable time of the meetings taken up by matters foreign to their interest, etc., etc.

Mr. Hesler replied that, as to the insinuations thrown out against himself, they were too mean and contemptible and unjust to reply to; but as to calling the Executive Committee of the National Photographic Association "a set of fools and stockjobbers," he thought it very unjust, unfair, and untruthful. He had known most of them for many years, and had never met a

more earnest and upright set of men. They had given of their time, money, and best energies for the good and advancement of our art, and that, too, with true honesty of purpose; and if this is the way they were to be treated, he would let them in future have it all their own way, and bid them a hearty good-by.

After a few further remarks, opposing any subscription to the Photographic Hall, the meeting adjourned.

A. HESLER.

EVANSTON, ILL.

GERMAN CORRESPONDENCE.

Preparations for the Centennial Exhibition— Employment furnished by the Carbon Printing Process during the dull season— Copyright in Germany—Photography of the invisible Ultra-red—Action of the Preservatives on Bromide Dry Plates.

Two subjects are, at this writing, absorbing the attention of photographic circles in this city, namely, the exhibition at Philadelphia, and the pigment printing process. The first is really giving us more trouble than pleasure. Many hoped to be able to take as late as November, or even December, some fine pictures for the exhibition.

On several occasions invitations were extended to some of our most beautiful actresses, and they willingly appeared, dressed in the newest and most charming styles of dress that the ingenious Paris fashion only can produce. The finest backgrounds were especially prepared for that purpose; the most stylish furniture procured; operators and cameras were in readiness; in short, there was no lack of anything but light. For weeks the sky has been covered with a thick, misty veil, and the sun appears for a few moments, only to hide itself again. Five minutes, at least, in position is necessary in order to take a large picture. Under our present unfavorable circumstances the production is good for ordinary use, but not for the purpose of exhibition.

It is a pity to see here, designed for the Exposition, second-rate pictures, which, as Christmas gifts, have made a show on many a table, and which bear the names of the best firms on their face. Oh, how I do envy our colleagues in the southern hemisphere—at Chili, New Zealand, Australia, and Cape

Town-who at Christmas time enjoy midsummer weather! There we could do business, even if we were to act according to the wish of my worthy colleague and contributor to your journal, Mr. J. T. Jones, and avoid the "immoral practice of Sunday labor," a practice which, however, is followed on the whole European continent, from St. Petersburg to Madrid, and from Stockholm to Palermo, and that, too, without the "immoral influence" delineated by Mr. Jones being acknowledged by the artist; and still less by the "reckless and idle persons," who, in the opinion of my worthy colleague, congregate in the galleries on that holy day.

I hope the time will soon arrive when our brethren in the South, who have abundance of sunshine, shall be able to pack the light in barrels and send it to the cloudy North; then the photographers would be delighted. But now only liquids can be shipped in barrels, which, unfortunately, serve only for the illumination of the inside, but not of the outside of man.

While under the circumstances abovementioned it was hard, nearly impossible, to take a large picture direct from life, the pigment printing process has proved almost invaluable to the photographers, for it enabled them to reproduce large negatives from little pictures. The process is, indeed, of the most simple conception. We make a very strong positive on pigment paper, transfer it on transparent glass, and then make an enlarged collodion negative in the camera by means of the common (damp) process. This negative can be copied either by means of silver print or pigment print; it produces, indeed, very soft harmonious half-tones, which cannot be received from collodion positives. Of course, in the preparation of these pigment pictures, the utmost care must be observed. The Autotype Company prepares for that purpose a very fine colored paper-the special tissue, and all other materials. The development water and the washing water must be kept especially clear, for each impurity in the picture will be enlarged also.

During this month the photographers have attained what they have been endeavoring to gain for the last ten years,

namely, the passage by the Reichstag, of the bill of copyright, which will be in force from July next. The protection, however, afforded to photographers by this bill is only a limited one, for it gives protection only against mechanical copying (fac-similes) and similar processes; but to draw and to lithograph is allowed. The bill also permits the taking of lithographs of the same for bonbons, soap, and for ornamenting other technical articles. The protection granted photographers against copying will last only five years. Our Reichstag has not the high opinion of photography which exists in America, and, consequently, the wishes of photographers are but little heeded.

Though during the last three months the weather has been very unfavorable, I took advantage of every smiling look of the sun. I have continued my trials in spectral photography, and succeeded not only in taking the red, but the ultra-red also, with bromosilver. Of course, it took a long time, but anyhow I succeeded; and as soon as the more favorable season appears, I may hope to fix on the photographic plate the invisible ultra-red light with all its dark lines.

Meanwhile I also persisted in my trials of dry plates, and made it especially my study to carefully observe the effect of the preservatives on bromide silver plates. Till now we know only the effect on iodine silver and iodine bromo-silver, and we know that by coatings of tannin, morphine, gallie acid, and blood alkali the sensitiveness of the dry iodine bromo-silver considerably increases. In previous experiments I had observed that they have the same favorable effect on bromo-silver, and Carey Lea also stated that coatings of glycerin or resin are without effect on bromo-silver plates, and that toning even reduces their sensibility.

I tried morphine, a very good sensitizer for iodine bromo-silver. This showed with pure bromo-silver nothing of a sensitizing action; even morphine bromo-plates several days old were less sensitive than old pure bromo-plates. It is the same with pyrogallic acid. Gallic acid poured on the plate reduces the sensitiveness in a very remarkable manner, also gum solution. This result is not without interest, because gallic acid and

gum are often recommended for coating bromo-plates. I further tried albumen in preparation of Fothergill plates:

- (a) Albumen, . . . 25 eubic cent., Water, . . . 14 " Ammonia, . . . 5 drops,
- (b) Water, . . . 100 cubic cent., Luna cornea, . . 6 grammes.

properly shaken and filtrated.

were mixed with ammonia, till solution (a) had no precipitate remaining, after which 20 cubic cent. of solution (a) were mixed with 25 drops of solution (b), and bromo-silver plates coated with the preparation and dried.

The result was, that the albumen plates were less sensitive than the pure bromosilver plates. Different was the result when the albumen solution, after pouring it on, was washed off again; then plates showed more sensitiveness than pure bromo-plates. Solution of luna cornea has, in sensitizing, the same strong effect on bromo-silver as on iodide-silver; but the effect of bromo-calium on bromo-silver is not nearly so strong as the effect of iodide-calium on iodide-silver. Both salts reduce the sensitiveness of the corresponding silver-salt, but iodide-calium in a considerably higher degree.

I tried tannin in a solution 1.50. The tannin bromo-plates were considerably less sensitive than the clear bromo-silver plates; the result was thus similar with that attained by Lea. Very remarkable was the troublesome fixation of the tannin plates. It was a long while before the bromo-silver disappeared on them in the hypo solution; and this was much more remarkable, as I had all the plates before the development softened with alcohol and earefully washed with water. Consequently I came to the conclusion that some tannin, in spite of this management, must have been retained and the soaking in of the chemicals perhaps rendered difficult. This circumstance was also sufficient to explain the less sensitiveness, in so far as the infiltration of the developer could have been hindered by the

Therefore, I tried to remove the tannin entirely before the development by washing

the toned tannin plates repeatedly with alcohol. For comparison, at the same time clear bromo-silver plates were treated with alcohol in the same manner, and both together developed. Then, indeed, the tannin plates showed in the clearer lights a greater intensity than the clear bromo-silver plates.

This experiment throws light on many phenomena. Up to this time we believed that in the preservation of dry plates, etc., the object was the keeping the film porous and to facilitate the filtration of the chemicals; but tannin with bromo-silver shows just the contrary of this. Further it is shown by this experiment that the seemingly lessened sensitiveness of the tannin bromo-plates is only to be attributed to the circumstance that tannin renders the filtration of the developer on these plates difficult.

Yours truly,

DR. H. VOGEL.

THE PRINTER'S CORNER.

BY CHARLES W. HEARN.*

OWING to the multiplicity of letters that I have received of late, I will devote the "Printer's Corner" of this issue solely to the answering of them, after first asking the forgiveness of those parties whose communications have been obliged for a time to be laid aside on account of rush of other work.

NEW BRIGHTON, PA.

I desire to ask advice on the following question, viz.: Our pictures when burnished have such a high finish that we cannot touch out the small white specks or defects without its showing when the card is held at a certain angle. We use india-ink and gumwater. What is the preparation you use to overcome this, if you have no objection to tell?

Respectfully yours,

Touch out the spot before burnishing a very little warmer than desired, using considerable gum or rock-candy with the color.

Do not use india-ink alone, but mix with other colors, to make a warmer tone. If touched out with india-ink before burnishing, the spot will show as black as a coal by contrast with the rest of the photograph, because the color of the picture changes to a warmer tint, which partially but not entirely disappears after a few weeks, and becomes more like the tone of the picture before it is burnished. In burnishing photographs which are touched out, use a light pressure, and not too hot a burnisher. If you still desire to touch out after burnishing, then use more gum in your colors. Powdered mica can also be used by mixing it carefully with the color.

In relation to your question in regard to the Institute, I sent you circulars. I do not answer such through the "Printer's Corner," as it is foreign to its subject.

NEWTON, N. J.

I am in trouble with my printing and toning, and I don't know what to do, as I have tried everything that I know of, and it makes the same work. My silver solution stands 60 grains strong. I silver five minutes in a room where it is warm. The bath is just alkaline, and it takes 40" to turn red litmus blue. I use a "sal soda" toning bath. The prints turn mottled when they are put in the rinsing water, and when they are put in the toning bath turn a dirty red, and it takes a long time to tone

Sometimes I see the mottled appearance while they are printing. The paper I use is the "cross-sword brilliant" pink. I have silvered in the morning and at night, but at all times with the same results. It shows the mottled appearance on part of the print, and not on the other, as you will see by the print inclosed. Hoping that you will tell me, so I can get over my trouble, I remain,

Very respectfully yours,

P. S.—How can I get a black tone?

1st. My correspondent's queries are entirely answered in the "Printer's Corner" of last month's issue of the *Philadelphia Photographer*. Let him silver about $1\frac{1}{4}$ to $1\frac{1}{2}$ minutes, and he will find that his trouble

^{*} Conductor of Hearn's Photographic Printing Institute.

will entirely disappear. His paper was utterly spoiled by oversilvering. 2d. See Practical Printer.

DETROIT, MICH.

Will you please give me your formulæ for silvering and toning, and the kind of paper the December number of the *Philadelphia Photographer* prints were printed upon? How do you clear up your printing bath when discolored?

By answering the above questions you will confer a very great favor upon

Yours respectfully,

J. M.

The paper used was "Clemons's New," and was silvered and toned according to my formulæ in the *Photographic Mosaics* for 1876. Look it up!

Here is an extract frem a private letter, that was sent to me by the editor of this magazine for the "Corner," viz.: "In neutralizing the gold solutions for toning bath, which is the best mode for doing so, by adding the bicarbonate to the gold before or after it is mixed to the toning bath? I have been in the habit of adding as much gold as necessary to the old bath from time to time, and neutralizing with saturated solution of bicarb. soda, until the last batch I toned, when I added the soda to the chloride previous to mixing in the bath, and I think my prints were not as bright as usual. Does it make any difference?"

The above correspondent works his bath best when the soda is added to the gold solution when it has been placed in the bath. This is wandering from the regular, and, indeed, almost universal custom; for, as a general rule, the way he last mentioned (and which worked worse with him) is decidedly the better way of the two.

ATTICA, N. Y.

I send you by mail to-day one cabinet photograph and one card. I wish you would look them over close, and see where they can be improved.

These were made on Extra Brilliant paper, silvered by formula from your book (silver, 40 grains; nitrate ammonia, 40 grains;

water, 1 ounce; made alkaline with ammonia, and 1 grain alum to every ounce of solution), floated about 90 seconds, fumed 10 minutes, washed, acidified, and toned with your sal soda and salt bath; they are about my average.

How would you arrange for damping paper before silvering, and how long leave the dish of water under the sheets? I see in testing solution after silver, that after nitrate ammonia is added it tests stronger than with silver alone. Does that amount to anything as strength? How do they look after fixing? I fix from 7 to 10 minutes in bath made of three common handfuls of soda to about 2 gallons of lukewarm water.

If not too much trouble, I wish you would please answer my questions, and let me know about the prints I send, and you will ever so much oblige me.

Yours, etc., M. T. H.

Your prints I must beg leave not to criticize in this "Corner." By close study of good work you, as well as the rest of us, can always improve.

1st. You need stronger silver during this cold weather, especially on extra brilliant paper.

2d. Any box with a flat dish of water in the bottom will do for dampening the paper. Over night will be long enough.

3d. It is for the reason that the common actino-hydrometer varies so that I, with so many others, have given it up for solutions that are so liable to change as the printing bath. Use Pile's test-tube and solution. Nitrate of ammonium in the bath makes a brighter and richer print, tones prettier, etc., but does not really add to the strength of the bath.

4th. What do you mean by how do they look after fixing?

After refraining from doing so for months, I will now insert an extract from a letter, out of scores that have been the result of the starting of the "Printer's Corner." It has always been our object to make them of interest, and such letters always do us good by showing us that our efforts have been in the right direction.

SYCAMORE, ILL.

DEAR SIR: I thank you very much for the kind words of encouragement and praise bestowed on my work. What I have learned has been at the expense of hard labor and study of the subject. To you I am indebted more than to any one else for what I know of printing. Your articles in the *Photographer* are admirable, as they treat of principles and not a mere routine, following which all are bound to come to grief.

Since reading the November number, I think my prints will show improvement, as I have been using my toning bath now every day only mixed 20 or 30 minutes before toning. I think the print in November number is very brilliant and beautiful. Shall strive to emulate.

Respectfully yours,

G. W. T.

P. S.—It has just occurred to me, as I have just purchased Pile's test, to ask that "if the volumetric test and the hydrometer agree, how good a test is this of the purity of the solutions?"—G. W. T.

If the hydrometer and Pile's test-tube agree, you may be certain that your bath is very pure.

I will now insert a letter, which I will let remain unanswered until next month, at which time I will probably dwell at some length upon it.

MILFORD, MASS.

DEAR SIR: Your favorable criticism on the print I sent you encourages me to express myself more fully regarding one defect in silver printing, viz., coarseness.

Your judgment was correct as to the toning bath I use. I do use the sal soda chloride of sodium bath, for convenience; it will work, after mixing, in half an hour, or balf a century, for all I know to the contrary, and as I do sometimes get fine prints, I was not prepared to denounce the bath. Furthermore, I think I can tell most of the time when the paper is removed from the floating bath, when that defect is to appear. But what makes it? This is (to me) a symptom.

The paper when hung up looks as though there was a deposit of fine sand or dust (but there is no sand or dust), and on different brands, double albumenized, same effects. Also when there has been great variation in strength of bath.

Now (confidentially) comes probably an idle conjecture. Do the manufacturers, in trying to get a brilliant surface, use something which is very soluble? That's all I can think of. Do you remember some years ago of a brand of Swiss (imported) paper we used to get? Very light, rather hard surface, and brilliant, very. It seems to me now that there is nothing like it or as good to be had. I met a photographer the other day who had been in Germany. He said we do not have as nice paper as the largest galleries do there. Do you give these ideas any credence, or are they idea whims?

I do my own operating, and it's hard enough, and yet a pleasure to get occasionally a nice negative. But the revulsion of feeling when one sees a print from it is not to be described in words. A vicious silence, if not an ugly word, is a common refuge. In fact, a "so so" negative makes the best print. The idea of making your negative to suit your paper!

Dear sir, your pardon for so ventilating my heat, but my concern in this matter is not more apparent than real. And yet I may be all wrong, all wrong. Am I?

WRINKLES AND DODGES.

A CORRESPONDENT gives us a plan for heating a burnisher, and another for working a siphon, as follows:

FOR HEATING A BURNISHER.

For 14-inch roll (Entrekin) get 3 zenith burners, No. 1, solder across centre of an 8 x 10 tin reservoir an inch deep, with oilcan feeder one end; use refined petroleum or kerosene oil, it saves immensely compared with alcohol; 25 cents' worth here did as much heating for me as \$2.50 worth of alcohol. No chimney, no burners, no smoke; it heats for me in 5 to 7 minutes; larger burnishers will need more, and smaller size a less number of burners. Cost here for burners, 35 cents each; reservoir, 25 cents.

SIPHON.

Take any length rubber hose, or size required for business in hand, press one end tightly on a wood roller, almost anything will do. rolling up till just enough is left to reach in the solution; be sure you keep it there, and commence un winding, keeping the end not in solution held tight, pass it in the bottle or hold over the vessel used; in this way you will find the solution to pass over and out readily. I think this is more feasible than the one with glass tube intervening, but that is very good.

J. C. GOETCHIUS, Titusville, Pa.

The following hints will no doubt be useful to some one:

If you see fit you can insert in one of your valuable publications as you think best.

If an 18×22 sensitized sheet of paper be raised quickly from the solution you will find a loss of about 12 drops of solution as it is hung up to dry.

Take an 18 x 22 sensitized sheet of paper by one corner, raise it up slowly from the bath, and you will save 10 or 12 drops of solution.

I have tried drawing the sheet over a smooth surface or round glass rod, thus saving the solution, but it destroys the delicate gloss.

H. C. WILT, Franklin, Pa.

DRY-PLATE workers may find some encouragement in the following from Mr. Richard W. Barrow, an intelligent amateur photographer, in Kingston, Ont. He says:

"I have succeeded beyond my expectations in dry-plate work, which I commenced at the end of last month to prepare for. I use Newton's emulsion with the chloride of cobalt, and it does work beautifully; only, if I may so presume as to give advice to those working it, I would advise them to try Col. Stuart Wortley's strong developers, published with his uranium rapid dry plates, and given in Anthony's Nov. Bulletin in Canon Beechey's process. It warrants nearly a half less length of exposure, and brings up a stronger picture. In fact I have brought up some with it (in less than five minutes' developing) to full printing intensity in a

much less time than Newton's own formula of developer can give."

THE old, old story. Any one not satisfied with his process may try this:

The negative bath 40 grains of silver to the ounce of water, just enough C. P. nitric acid to keep from fogging, filter, and it is ready for use.

When overcharged with alcohol and ether add pure water to twice the bulk, filter, and boil down to the original bulk; if too strong add pure water to 40 grains; if too weak add silver to strength desired; filter, and you have a better than new bath. Collodion: To 5 ounces ether, 5 ounces alcohol, 50 grains iodide ammonium, 25 grains bromide cadmium, 60 grains gun cotton any reliable brand; you have a perfect working collodion from now till all used up. Developer: Sulphate of iron 15 grains to the ounce of water; acetic acid, enough to flow well. I have worked this simple formula when the more complicated ones did no better.

Go on with the Centennial. I'll try and see some of our Eastern friends at the big show.

Yours respectfully,

S. W. CRAWFORD.

EXPERIMENTS WITH THE IRON DEVELOPER.

(Continued from page 55 of our last volume.)

Continuation of the Report made to the Ghent

Section of the Belgian Photographic Society,
by Messrs. Rottier and Waldack.

4. Observations relative to the Use of Iron Acetate.

When we introduce a small quantity of iron acetate into a developer, with a base of sulphate of iron, we communicate to it very generally a very remarkable increase of sensibility. Owing to the presence of this salt in a developer, it is possible to obtain negatives that are very intense and of harmonious tone, but unfortunately almost always slightly foggy.

This fact explains the result of an experiment of old date, made known at one of the meetings of the Ghent section by a member of our association.

Having taken an iron developer of medium composition (5 per cent. sulphate, 5 per cent. acetic acid), our colleague introduced a few iron nails, and after having allowed it to stand for a certain number of hours, he remarked a notable increase of activity in the developer which had thus been modified. It is superfluous to remark that in thus operating our colleague has produced in his developer the formation of a small quantity of acetate of iron, which is the probable cause of the effects that he has observed.

To obtain good results by means of the acetate, it is indispensable that the quantities of this salt contained in the developer should be kept within certain limits; if the reagent contains proportions that are too small of the acetate the effect produced is not appreciable; and if, on the contrary, the developer contains too great a quantity it acts with such intensity that the silver deposit formed on the negative does not serve to make the image, but is almost exclusively produced in the body of the liquid, yielding a foggy negative.

Moreover, let us hasten to add, that the extreme sensibility of the acetate, used even in suitable quantity, often gives rise to serious troubles; a developer which seemed capable of producing satisfactory negatives very often develops only very defective ones.

The acetate of iron, which produces in some cases very remarkable effects, cannot, therefore, be absolutely recommended; precisely on account of this excessive sensibility, to which it owes, without doubt, the property of developing at times very intense negatives, its action is frequently too quick to allow the formation of vigorous images

Whatever advantages it may have in certain cases, the acetate does not offer that certainty and regularity of action which render sulphate of iron and ammoniacal sulphate of iron so precious to the photographer.

5. Conclusions.

It is seen that our experiments have led us to some results easily summed up in a few words: 1st. Developers act very differently according as they contain little or much sulphate of iron; when a certain limit of concentration is not exceeded, strong developers give more vigor than weak ones, and require a shorter exposure; the weak developer, however, produces a finer silver deposit than the concentrated reagents.

2d. The presence of an acid in the developer can modify the color which the film gives by reflection. The greater number of organic acids tried by us have given to the films a more or less decided black tint.

3d. When in the developers certain salts of iron are substituted for the iron sulphate, these compounds do not all act in the same manner as the sulphate; the acetate, notably, allows in certain cases the shortening of the time of exposure

J. D. ROTTIER, CHAS. WALDACK.

Reply to an Article of the British Journal of Photography.*

On page 55 of the last volume of the *Photographer*, we published notes of the experiments of Messrs. Waldack and Rottier with the non-developer. An article was written in reply by the editor of the *British Journal*, last June, which appeared in the *Times* last month. To this Messrs. Waldack and Rottier respond as below, and then give the final record of their experiments which precedes this.—Editor P. P.

The British Journal of Photography (volume 22, 787), has recently published the results of some experiments, made by an anonymous observer, in the use of iron salts for developers. Examining successively all the points sketched by us in the first part of the report published in the Bulletin of the Belgian Photographic Association, first year, No. 4, page 128, the author of the article alluded to has undertaken a series of experiments for the purpose of verifying our conclusions, and his results are at variance with the greater part of ours.

Thus in observing the influence of differ-

* From the Bulletin of the Belgian Photographic Association (second year, 1875, No. 3).

ent quantities of sulphate on the vigor of the negatives, he does not succeed in reproducing the effects that we have remarked, and he concludes from his observations that the intensity of the image does not increase with the concentration of the developer.

According to us, on the contrary, the quantity of sulphate of iron contained in the developer exercises a manifest influence, not only on the physical nature of the deposit, but also on the vigor of the image; we have remarked, among other facts, that if a developer containing 17 per cent. of iron sulphate produces a negative lacking detail in the shadows, the time of exposure, etc., being equal, another developer containing 6 per cent. of sulphate gives a satisfactory negative.

But as we have already observed, these effects cease to show themselves when large doses of sulphate are used.

Let us add that we have obtained these results with neutral as well as acid developers; the presence, however, of acetic acid in the developer, exercises a slight influence on the nature of the silver deposit and on the intensity of the negative.

The effect produced by the introduction of divers acids into the developers have also attracted the attention of our English colleague. In this, as in the preceding direction, he has obtained results different from ours; in his opinion citric acid is about the only organic acid capable of giving black deposits; whilst, in our experience, tartaric, citric, malic, and especially pieric, have produced black deposits of silver.

It is thus seen, that in presence of these results and making allowance for the exceptions that we have met with, we were justified in saying that the organic acids tried by us produced, in general, negatives black by reflection.

It will be remarked that we placed tartaric acid among those that have given us black deposits, whilst, according to our honorable opponent, the presence of this body in a developer causes the formation of beautiful images, very white by reflection and very suitable for obtaining positives on glass.

The author of the article alluded to above

has finally studied the influence exercised by the acetate, the nitrate, etc., of iron, when substitution is made in the developer of one of these salts for the iron sulphate.

In regard to the acetate, our English coworker has remarked that instead of developing satisfactory negatives, this compound gives very defectives images. The second portion of our report, which only appeared after the publication of the article of the British Journal, is a sufficient reply to the remarks contained therein on this subject.

Let us now say a word concerning the action of the nitrate of iron. By substituting this compound for the iron sulphate we have invariably obtained images that were pale and without vigor, and we have remarked that this salt requires a time of exposure longer than the sulphate; whilst, according to the English journal, these two substances act with the same degree of intensity. It is proper to add that our experiments have been made solely with nitrate obtained by precipitating a solution of sulphate of iron by barytic nitrate.

The complete divergence that exists between our results and those of our opponent, shows that in photography, more than in anything else, it is necessary to make allowance for the special conditions in which operators are found, and which, as is seen, lead to opposite results.

The observation just presented by us equally applies to the modus operandi of the ammoniacal sulphate of iron. In our first experiments, we ascertained that this body requires a shorter time of exposure than the simple sulphate; on this point, we agree not only with our English correspondent, but also with a very great number of photographers. This compound, however, does not constantly show this property, and in the majority of cases we have observed that it requires exactly the same time of exposure as the ordinary sulphate of iron.

To cite another new example of the differences which may be caused by the conditions in which photographic experiments are made, when each operator uses his collodion, his silver bath, etc., we shall say a word in relation to the recent discussion at Berlin, between Messrs. Gertinger and Beyersdorff, members of the Photographic So-

ciety of that city, who have undertaken the study of the properties of the new developer with ferrous phenate, presented by M. Kruger, under the name of carbolate of iron. According to Mr. Gertinger, this developer allows a certain reduction in the time of exposure, whilst Mr. Beyersdorff has not been able to observe any difference worthy of remark between the effects of the ordinary developer and those of the carbolate of iron.

J. D. ROTTIER,

CHAS. WALDACK.

OUR PICTURE.

OUR second Promenade prize set, though numbering but few competitors, was productive of some good things.

One of the series we give this month, as a very happy illustration of the new Promenade style, as well as an excellent example of artistic photography. It is from the studio of Mr. F. B. Clench, Lockport, N.Y. Mr. Clench is one of our most painstaking and progressive artists. He sent us some very pretty pictures in competition for our cabinet prize in 1874, which we refer to now as beautiful specimens of photography. These competitions have improved him, as they do all others who participate, and we now have this later product of his skill in the beautiful promenade picture before us. It is seldom we have seen more of feeling and sentiment put into so many different attitudes of the same subject, and all equally successful. Grace and ease characterize every pose, the lines are well arranged, the accessories well chosen, and the lighting such as to give a beautiful and perfect modelling of the face and figure.

An examination of our picture will show that Mr. Clench has given a great deal of attention to details. The utmost care is evinced in the excellent carriage of the figure, keeping it in harmony with the sentiment expressed. The hands have been very carefully placed; the folds of the drapery are so disposed as to be very natural, and yet form proper lines for the balance of the composition. All these minor points, which play so important a part in the make-up of the whole, show that a trained mind has directed the execution of

the work. The graceful and charming subject, who did her part so well in helping Mr. Clench to secure at least ten different positions, all equally perfect, deserves a great deal of credit for her assistance in producing these excellent pictures.

We trust our picture will inspire in those who are striving for improvement, a determination to persevere, to follow every good example, with the thought ever before them that the same way in which others have risen by works of merit to honorable positions in our art is open to them, and it only requires that they shall be faithful, diligent, and progressive, always ready to be instructed, always ready to try any method of study or work which promises to improve their capacities, or expand their resources, to secure for themselves like honor and success.

The prints were made by Mr. Hearn, at his Printing Institute, which it is his purpose to make illustrative of the most advanced methods, and the highest artistic effects of which the printing department is susceptible. Examine our picture well, study all its points, and it cannot fail to be suggestive and do you good.

PHOTOGRAPHIC HALL.

ALTHOUGH the photographers of America have not yet subscribed enough funds for the erection of *Photographic Hall*, it is hoped that they will yet be moved to do so, and the Centennial authorities are proceeding with the work. The contract has been given for building it to Messrs. Doane & Co., and at this writing its huge skeleton is to be seen reaching towards the sun, and before another issue of our magazine occurs, it will be nearly finished; the contract requires that it shall be ready for exhibits April 1st.

On this we congratulate the photographic fraternity of America with our whole heart. It is a concession made to their art which has never been made at any previous World's Fair, and it is a mighty evidence which testifies more loudly than words ever can, to the fact that photography is growing into favor and popularity with the public, and that it is steadily reaching upward to a place among the arts. We are quite ex-

cited over the matter, and perhaps a little overwhelmed. If we are, attribute it to our earnest desire to see this thing consummated. We have wrought for it for years, and we are to have our desire. How grand it is!

Yet we must not imagine that Photographic Hall is going to be an Aladdin's palace (though to many of us it will be as full of riches as that), for it is to be built of wood, and plaster, and iron, and glass, and bronze, and it is to be beautifully painted, and as the architect's specifications tell us, it is to have piles, and pipes, and sleepers, and trusses, and sheathings, and rafters, and purlins, and plates, and porches, and a lantern, and ribs, and panels, and joists, and ships, and jamb-blocks and imposts, and plinths, and cappings, and studs, and pilasters, and mitres, and bay windows, and top lights, and Louvre ventilators, and cornices, and pediments, and upset eyes, and hexagonal sleeves, and pendants, and bases, and zones, and small ornaments, and carvings, and what not, just like any other building of beauty, and is to cover a space 258 feet long, east to west, by 107 feet wide, north to south.

It will be beautiful in exterior, as the very handsome woodcut presented herewith will prove. The interior arrangement will be as follows:

The hanging screens are twenty-eight in number, four of them are 19 feet long, and twenty-four are 24 feet long each, and as both sides are equally good for an exhibit, and as a band of 10 feet of pictures may be reckoned, it furnishes forty-eight spaces of 240 square feet each, and the four screens of 19 feet long each furnish eight spaces of 190 square feet each. The walls of the building furnish 5320 feet more, together 18,360 square feet. Add to this the surface of the T-shaped termination of the screens towards the middle avenue, and we get 720 square feet more, making a total of 19,080 feet. Now this estimate is based on the assumption that pictures will not be hung nearer the floor than two and a half feet, but if only half of that should be covered (at the option of exhibitors, of course) it would add about 800 square feet more.

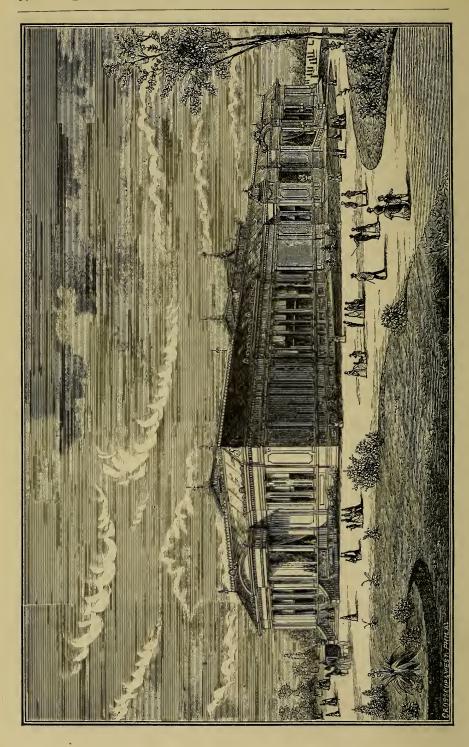
The screens stand 16 feet apart, and in some cases floor space can be gained for exhibits between them, and floor space will be had for the same use all along the middle avenue between the ends of the screens. The T-shaped termination of the screens towards the middle avenue is available for pictures, and will be from two feet to two and a half feet wide. These ends of the screens being covered with pictures will greatly improve the effect in viewing the middle avenue along its entire length, as in sharp perspective it has the appearance nearly of a continuous wall of pictures. The main purpose of it however is to stiffen and strengthen the screens.

It will be seen from this that there will be an exhibition of photography here, such as the world never saw, if there is more enterprise shown in filling the space allotted than there is in subscribing for the stock to build it. In this matter do your best, or your foreign friends will beat you. You have read Dr. Vogel's statement that there will be a very elegant and interesting collection sent from Germany. It will leave Berlin in February, we believe. Dr. Horning, editor of the Photo. Archiv., in Vienna, writes us that a fine collection is coming from his city. He says: "I hope to be able, according to the invitation of our American coworkers, to excite an animated participation of our photographers, and I shall be glad if I can succeed, to enable me to show you my esteem for the extraordinary exertions you have made in the interest of our art."

M. Adolph Braun, the renowned carbon art printer and publisher, has applied for 265 square feet of space, and promises to make a famous exhibit. Many French, English, and other foreign exhibitors will join in the display. It will altogether be a superb one. More on this score again. Meanwhile, get ready, or you will be crowded out. Apply for space now. Begin to get ready now. Some of our patrons applied for space so long ago that they have forgotten it. We therefore add a list of American applicants so far, that you may see to it that you are not left out.

LIST OF PERSONS WHO HAVE APPLIED FOR SPACE IN THE PHOTOGRAPHIC DE-PARTMENT OF THE CENTENNIAL EX-HIBITION.

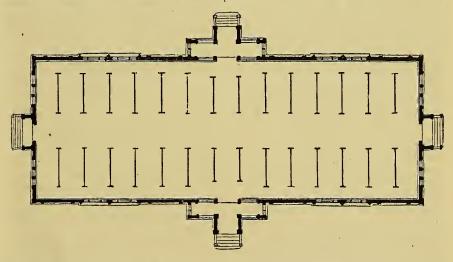
Wilson, Hood & Co., Crider & Bro., Leopold



Schlesinger, R Newell & Son, August Semmendinger & Co., Charles Bierstadt, Gilbert & Bacon, P. E. Chillman & Co., William Curtis Taylor, G. W Pach, F. Gutekunst. James Cremer, Schwind & Krneger, Benerman & Wilson, National Photographic Association, W. Irving Adams, Scovill Manufacturing Co., Samuel Peck & Co., Schreiber & Sons, E. & H. T. Anthony & Co., Broadbent & Phillips, Suddards & Fennemore, George Ran, J. F. Ryder, Gerlach & Fromhagen, Joseph Waldhart, Lena W. Lawton, F. A. Wenderoth & Co., John R Howell, L. D. Sibley & Co., Charles D. Mosher, Albert Levy, Jesse A. Graves, David O. Hara, Adolph Newman, Alman & Co., Leo. Van Loo, T. R. Burnham, Daniel Bendann, Alexander Beckers, John P. Doremus, John Reed, E. P. Spahn, W. Kurtz, L. Jillarcy, H. Jarger, Edward Boettcher, Theodore Gubelman, E. H. Hart, Alexander Myers. James Landy, Nason Novelty Co., Henry Rocher, R. S. De Lamater, Frank Robbins, J. D. Rice, Irving Saunders, Charles P. Fisher, Thomas T. Sweeny, Matthew Bolles, R. H. Vance, B. F. Reimer, R. E. Wood, Francis Therenin, Charles Paxon & Son, C. D. Mosher, H. C. White, Charles Volkmar, Sr., Mrs. F. S. Dunham, James W. Turner, C. D. Fredricks & Co., Julius Hell, J. P. Bass, A. Hesler, C. Gentile, Charles Pollock, William L. Clark, J. W. Black, W. Balch, Allen & Rowell, A. N. Hardy, Goldsmid, D. A. Woodward, C. Seiler, J. H. Kent, Alfred Freeman, J. J. Reilly.

In a few weeks you will hear from Mr. John Sartain, Superintendent of the Art Bureau, who will instruct you as to your exhibit. Until then do not worry. Mr. Sartain is a gentleman well known as an artistengraver in art circles all over the world, and we are happy that photography has such a man to look after it. He is an active member of the Photographic Society of Philadelphia, un enthusiastic lover of photography, and we can all trust him to rule for the best good of our art. He is perfecting his arrangements, and we shall publish them as they are made-if necessary in an "extra." Of the rules concerning the receiving, unpacking, hanging, repacking, and reshipping or sale of the pictures, full particulars hereafter. Get ready now-seeing to it that you apply for space. Blank applications for space may be had from the Bureau of Art, 904 Walnut Street, Philadelphia.

We also give a drawing of the ground plan of the building, that it may be understood. Refer to the description.



Augustus Marshall, George K. Warren, David W. Butterfield, J. A. French, C. E. Watkins, La Fayette W. Seavey, Copelin & Son, Joseph M. Hirsh, Alfred Jones, I. M. Mora, J. L. McCormick, S. R. Stoddard, Napoleon Sarony, A. G. Alexander, E. G. Okerlund, A. F. Dotterer, G. & W. P. Evans, J. Emmett Harding, G. W. Thorne, Thomas Lewis, William Walls, J. H.

We must not close without first complimenting Messrs. Crosscup & West, 702 Chestnut Street, Philadelphia, on the very handsome engraving of Photographic Hall. They have done splendidly. Besides the size herewith, they also have other sizes smaller, duplicates of which you can

obtain at a low price of the engravers. Brand it upon your boards! It will make not only a beautiful but an appropriate design for the back of your cards, and cardmounts—for your bill-heads, your letterheads, and your envelopes and circulars. Let all your patrons know that we are going to have a Photographic Hall, and urge them to visit it.

In due season look for a photograph of our hall in this.

The first exhibit (which has already arrived) for Photographic Hall, is from the Pacific Shore—views by Mr. J. J. Reilly, San Francisco. Well done! Nothing like being in time!

GEMS FROM MOSAICS.

To our younger brethren I would say, privately, remember you do not know it all with a few years' experience, and you will find it out so; the longer you work at photography the more you will be convinced there is no certain rule to go by (even if you have plenty of brains), for changes are all the time taking place, not only in the action of light but of chemicals, and the circumstances by which we are surrounded that we really have no control of. So all we have to do is persevere, and when you get into a fog, do not despair, for often before you know it the mist will disappear, and all will be bright and brilliant again without you knowing the reason why, is often the experience of an old operator.

J. H. FITZGIBBON.

The problem of the day to solve is, why are photographers as a class so universally poor? My theory is that owing to there being so many in the business, together with high rents, expensive help, and resittings without cash in advance, are among the principal reasons why so few are making money in the photograph business.

E. T. WHITNEY.

To make a success of photography, in any of its branches, constant care and attention is required. Everything must be done at the right time and in the right way. All who expect to succeed in making the business remuncrative must be attentive to the minor points, upon which a few words may

here be added. 1st. Never allow yourself, under any circumstances, to "take a drink of alcoholic stimulants," for if you do, you place yourself at the mercy of a foreign influence, and not only render yourself disagreeable to your lady sitters, but you also become careless of generalities, so essential to success. Never leave your work-room at night without knowing that all (and that means every particular) things are in order for the next day. Leave nothing for morning, for you may be detained by some unforeseen circumstance, and thus be late yourself.

I. B. Webster.

Much discretion should be used in lighting and placing the face to be photographed; some persons have a very good-shaped nose, but have ugly protruding jaws or cheekbones; by taking such a face nearly profile, and throwing the side towards you partly in shadow, and lighting the further side rather brilliantly, you will obtain a very pleasing picture of such a person. Whereas, if you take such a face nearly front, and with the ordinary lighting, you will get a disagreeable-looking and generally unsatisfactory likeness. It is wonderful how much deformity may be concealed by judicious posing and lighting.

J. S. HOVEY.

Composition is the art of conveying impressions by the representation of objects in certain harmonious relations. As applied to photography, there are three things necessary: 1st. That the disposition of each object or figure means something, and fulfils its part in telling the story or conveying the sentiment; 2d. That the whole, as made up of its parts, is pleasing in its general outlines; 3d. A proper disposition of light, so that the main figure will be well supported.

To do this in the photographer's studio requires skill and ingenuity of a high order; and especially is this true in the arrangement of the different objects which compose his picture, because he is limited to a ridiculously short perspective on account of the want of depth in his lenses. Now, because of this, it behooves a positionist to use but few objects, and these with artistic precision. Ah, here's the rub!

L. G. BIGELOW.

Editor's Table.

PICTURES RECEIVED. - Promenades from E. A. Scholfield, Mystic River, Conn.; Promenades and Cabinets from Messrs. Hastings, White & Fisher, Davenport, Iowa; Davis Bros., Portsmouth, N. H.; A. C. McIntyre & Co., Brockville, Ont. These are all excellent, and some of them giving especially fine effects. We hope they will all continue their efforts for improvement. Promenades, Cabinets and Cards from Mr. A. G. Da Lee, Lawrence, Kansas; Cabinets and Cards from Mr. C. M. French, Youngstown, Ohio; very successful. Cards from Messrs. E. D. Ormsby, Chicago; H. Butler, Vermilion, D. T.; A. S. Barber, Willimantic, Conn.; M. H. Albee, Marlboro', Mass.; James McKeown, Anderson, Ind.; J. B. Leisenring, Fort Dodge, Iowa; Louis De Planque, Corpus Christi, Texas; C. M. Marsh, Havana, N. Y.: these are fine specimens of sunshine and shadow; W. Langdale, Wingham, Can. To all these we would say, persevere in the good work, let no day or week pass without showing some advance, and occasionally let us see what progress you make. Stereos from Messrs. A. C. McIntyre & Co., Brockville, Ont. A fine series of views Among the Thousand Islands on the River St. Lawrence. These are very finely executed in every respect, and are deserving a place in any collection. A series also from Mrs. E. W. Withington, Ione City, Cal., giving views in and about that place, which cost hard work.

SCOVILL MANUFACTURING CO.'S Catalogue and Price List Circular, for Glassware, illustrates their New Patented Graduate, "Absolutely Accurate," also Fine Glass Funnels; first quality Collodion Vials; Collodion Filters; Developing Glasses; Pouring Bottles; Glass Pans; German Solid Glass Baths; Lewis's Solid Glass Baths; American Optical Co's. Patent Glass Baths; to the superior quality of which they invite special attention.

Encouraging words from such veterans in photography as the writer of the following letter, indicate the sort of appreciation we like There are men who know it all, who think it useless to take a journal, and who usually remain on the same level on which they started; but the progressive man, like Mr. Webster, finds a good photographic magnzine more and more

useful the higher he rises in the art. Read what he says:

NORWICH, CONN., December 15th, 1875.

DEAR SIR: I hope you will pardon me for not sending the inclosed remittance long since, but I will not waste time on excuses, presuming that you may still find some use for the money.

I hope you will send me the Photographer another year, and I will try to be more punctual in the future. The Photographer is, to me, one of the necessaries of life, for through its columns I seem to look in upon my fellow-craftsmen in their manifold avocations, and glean each item of interest and progress as it comes from their skilfal hands. And no photographer, unless he be dead, can afford to do without the Photographer. for it is the leaven which gives life to the whole fraternity, and editorially as well as typographically, it is an honor to both publishers and patrons.

I hope to send ten dollars in a few days, for one share of Centennial stock, if no more. And if the expense would not be too great, I think I would be tempted to take a small space for exhibition, although I feel that it would be quite absurd for me to do so except as an advertisement local.

Now, friend Wilson, if there is anything which I can say or do, whereby your prosperity or happiness can be enhanced, please command and I shall be most happy to respond to the best of my ability. In the meantime please accept my kindest regards.

I remain. yours truly, E. Z. Webster.

Mr. A. S. Barber, Willimantic, Conn., offers his gallery for sale. Parties looking for business will do well to investigate it. See "Specialties."

We had a pleasant call a few days ago from Mr. G. M. Elton, the enterprising photographer of Palmyra, N. Y. Mr. Elton was one of the competitors for our last Promenade prize, and we hope soon to show our readers an example of his work.

WE omitted to notice last month a pretty group of heads of a child in eight different positions, entitled "Which way do I look best?" by Mr. D. T. Burrell, Brockton, Mass. We would also state that Mr. Burrell has made us agents for the sale of his excellent Drapery Chart. Price \$1.25. See advertisement.

BURNET'S Hints on Composition has already run to the second edition. This is a good indication of its value. We believe it will benefit any photographer who will study it carefully, and try to practice what it teaches.

A VERY flattering notice of the gallery and work of Mr. A. G. Da Lee, Lawrence, Kansas, appears in a local paper, and indicates a good reputation. We are glad to see such evidences of prosperity.

We have had the pleasure of several calls from our good friend, Mr. L. G. Bigelow, of Detroit, who has been on a professional visit of two weeks to this city. Mr. Bigelow is an able instructor, well qualified to impart that knowledge which is so much wanting among photographers.

"THE MAGIC LANTERN."-This little magazine is now able to "go it alone," and, as has been noticed, is withdrawn from this cover. The main reason is, that many of our readers are not interested in the Lantern at all, and it is useless expense to us, and perhaps a bore to them (as some say) to put it in the Philadelphia Photographer. We therefore withdraw it. We will continue to publish it though, and will mail it to any address on receipt of \$1.00. will be unusually interesting and useful this year. The January and February numbers will be sent to all subscribers for the year. It will be seen by our advertisements, that we are more largely than ever "in" the lantern slide trade, and will be glad to fill all orders promptly that may come to us.

NEW NUMBERS.—There is at least something new in Boston, besides many things good. The streets have been renumbered. The well-known and popular house of B. French & Co. is now No. 319 instead of 159 Washington St. Remember. Voigtlander lenses, etc.

PHOTOGRAPHS OF POPE PIUS IX.—By permission of the owner, we have made card and cabinet pictures of a very fine portrait of Pope Pius IX, seated in his pontifical garments and state chair, taken in his library, at the Vatican in Rome. The original was brought by Cardinal McCloskey as a present from the Pope to one of

our Centennial authorities. The papal benediction and autograph of His Holiness are at the bottom of the pictures. We can supply the trade with any quantity. Samples sent by mail for 15 and 30 cents. Prints by Hearn.

MR. JOSEPH ZENTMAYER, the famed optician, delivered an admirable lecture on *Leuses*, at the Franklin Institute recently, and we hope to print it in our next issue, with diagrams.

MESSRS. HURST & Son, taxidermists, Albany, N. Y., have sent us a new series of their Stereoscopic Studies of Natural History, which, if possible, exceed anything we have seen done by them. They are all of monkeys of various kinds, in all sorts of attitudes, and most mirth-provoking. Among them "The Par," "The Band," "The Sick Twins," "The Barber," "The Artist and his Friends," "Crowded Room at a Fashionable Watering Place," and the "Taxidermist's Dream," are among the best. Every dealer in the land ought to sell "stacks" of them.

THE Philadelphia Press says of us:

"The January number of the Philadelphia Photographer is No. 145 from the beginning, and the initial number of the thirteenth annual volume. It is satisfactory to know that the best, beyond all comparison, of the periodicals which make photography their specialty is published in Philadelphia. Mr. Edward L. Wilson has edited it from the first with equal ability, good sense, and tact. Permitting well-informed and questioning correspondents reasonable access to his pages, he has thus been able to place a great deal of practical knowledge before his readers, and his monthly is the official organ of the National Photographic Association of the United States. In the present number there is photographic correspondence from Belgium, Germany, and France. The attraction of a photograph of high merit every month as a frontispiece has been a popular feature from the first. In the present number this is a competing promenade picture (portrait of a handsome young lady tastefully and simply attired) executéd by Mr. Lyman G. Bigelow, of Detroit, and printed by Mr. Charles W. Hearn at the Philadelphia Photographer's printingrooms." Yes, and Dr. R. Shelton Mackenzie, editor of the Press, wrote the first article in our Vol. I.

Shall we have a Convention of the National Photographic Association in 1876? Members please answer.

Specialties.

ADVERTISING RATES FOR SPECIALTIES.—It will be understood that matter under this head is not to be considered as always having editorial sanction, though we shall endeavor to clear it of anything tending to deceive or mislead. Stock-dealers will find this a beneficial mode of advertising, and sure to pay largely. Six lines, one insertion, \$2.00, and 25 cents for each additional line, seven words to a line—in advance. Operators desiring situations, no charge. Matter must be received by the 23d to secure insertion. Advertisers will please not ask us for recommendations. & We cannot undertake to mail answers to parties who advertise. Please always add your address to the advertisement.

For Sale, Immediately.—A photograph room (not ferrotype), on one of the best streets in the City of Boston; has been established five years; is well stocked, and has a nice run of patronage; is now doing a paying business; has a sound lease of five years from next April, at a reasonable rent. To be sold for no fault of the rooms, or its results. This is a good opportunity for a young gentleman, who is energetic and a good photographer. Address

PHOTOGRAPHER, Box 1166, Boston, Mass.

Wanted.—A second-hand 4-4 box, with swing-back, and four 1-4 size lenses (good quality), to make four or eight T. T.'s on a 5 x 7 plate.

Address -M. Thomas,

Box 625, Shamokin, Northumberland Co., Pa.

BUTTER AND EGGS.

Mansfield, Pa., December 31, 1875. Mr. Jno. R. Clemons,

Manufacturer of Albumen and Plain Paper, 915 Sansom Street, Philadelphia.

I am delighted with your "new" albumen paper. I have printed and toned it after it had been silvered over two weeks repeatedly, and in damp weather, kept in a room without fire to keep the air dry, yet it printed quickly and toned easily, and I was unable to select the finished prints from those on fresh paper.

You can "sail in 'Centennially'" and diurnally on your new papers, both plain and egged, and win. If any of your customers find any fault with them, and you want to give them a "blessing" by proxy, refer them to me.

Very truly yours,

F. M. SPENCER.

For Sale.—A photographic press, as good as new, with bed 23½ x 30, Lewis make. For particulars, apply to G. W. Pach,

858 Broadway, N. Y. City.

RICHARDSON'S SENSITIZED ALBUMEN PAPER prints rapidly, keeps well before and after toning, and tones readily in any bath. Giving brilliant prints with great certainty; it is both convenient and economical. The albumen neither blisters nor softens in any weather. Sent post-paid on receipt of price, sample sheet, 25 ets.; half doz., \$1.35; one doz., \$2.40. Double albumenized, one sheet, 30 ets.; half doz., \$1.50; one doz., \$2.70, white or pink.

C. F. RICHARDSON, Wakefield, Mass.

For Sale.—A photograph gallery, that will inventory for \$2000 or \$2500. I will sell the whole at a fair price; or, I will sell goodwill, permanent fixtures, and negatives alone, with the privilege of buying as much of the furniture, stock, etc., as the purchaser may wish. Quick or you lose it. For particulars, address

A. S. BARBER, Agt., Willimantic, Conn.



This is a beautiful quarterly journal, finely illustrated, and containing an elegant colored frontispiece, with the first number. Price, only 25 cents for the year. The first number, for 1876, just issued. Fuck's Flower and Vegetable Garden, 35 cents; with cloth covers, 65 cents.

Address James Vick, Rochester, N. Y.

Hance's Double Iodized Collodion.—The following testimonial, from Mr. Notman's College operator, will show the estimation in which my collodion is held by one who commenced using it with some degree of prejudice against. If Mr. Notman's elegant work has been made with an inferior collodion, what may we expect from this which is pronounced so much better? Read what he says:

HARVARD COLLEGE, CAMBRIDGE, MASS., Jan. 22, 1876.

MR. A. L. HANCE.

DEAR SIR: Five pounds of collodion received and works O. K., except that there is much trouble to keep the film from peeling, but otherwise it works quick, and I am much pleased with the result. I want no other collodion if you continue to furnish me as good. It is far better than any I ever used for portraiture. The cause of peeling may be accounted for by the collodion being new. I have no doubt I could introduce it in Montreal if it were not for the price. We get Anthony's new negative collodion for \$1 per pound, and it works well, but I must say the sample you sent me is far better. Could you not furnish our firm (Mr. Not-

man's) at a lower price?

Enclosed find money order for \$7.50. Please receipt the bill and return it. Yours, &c.,

B. F. BALTZLY.

Hance's specialties, including his celebrated
Double Iodized Collodion, are for sale by all
dealers.

ALFRED L. HANCE,

126 N. Seventh St., Philadelphia.

USE WAYMOUTH'S VIGNETTE PAPERS.

FOR SALE. - A photograph gallery, in Lynchburg, Va. Everything complete. Cheap for cash. Address, soon, J. W. EDWARDS,

Box 204, Lynchburg, Va.

FOR SALE. - A model ground-floor photograph gallery, established eight years. Size, 20 feet front, 32 feet operating room. Apparatus for pictures from Gem to 14 x 17. Everything in complete order. Any one wishing a permanent growing business, plenty of money and health, will find this a desirable investment. Particulars obtained by addressing

MISS H. H. FLANAGAN,

Box 80, Woodstown, N. J.

The Backgrounds used in making Rocher's beautiful "Prize" pictures, published in the October "Photograrapher," were from Seavey's Studio.



۲

5

ш

Н

⋖

ш

I

Popular Backgrounds and Accessories.

PROFILED COLUMN SLIPS. PROFILED REVERSIBLE SET GROUND PIECE.

BUSEY CABINET, Background or Profiled Slip.

LANDY'S WAINSCOTING. Papier Mache, elaborate design.

Also, the KURTZ BALUS-TRADE, the most artistic and popular accessory yet produced.

N. B. - All Promenade Backgrounds & Accessories are equally suitable for other purposes.

CAUTION .- My new designs are being copyrighted. Inclose stamp for samples. Address

LAFAYETTE W. SEAVEY,

8 Lafayette Place, New York.

Northern New York Stock Depot, GLENS FALLS, N. Y.

Photographic goods at New York prices. "CRYSTAL" STEREOGRAPHS,

Of Northern New York scenery.

Photographic studies for artists. Publisher of the "Adirondacks," "Lake George," "Ticonderoga," etc. S. R. STODDARD, deroga," etc. Glens Falls, New York.

FOR SALE .- Best gallery in Northern Ohio. Handsomely furnished, well supplied with apparatus, and doing a splendid business. Work is strictly first-class and prices to correspond. This at a bargain if disposed of soon. Address, for particulars,

P. C. Nason, No. 4 P. O. Arcade, Columbus, O.

SITUATIONS WANTED.

No charge for advertisements under this head: limited to four lines. Inserted once only, unless by request.)

By a first-class operator, printer, toner, and retoucher; understands lighting and posing thoroughly. No objections to the West. Address "Photo.," care of Macwabb, 815 Broadway, New York City.

By a lady colorist. Has studied with some of the best German artists in Boston, and is competent to do first-class work. Address A. L. Merriam, 43 Lawrence Building, Boston, Mass.

As retoucher, by a young lady of several years' experience, in a first-class gallery in Bos-ton or vicinity. Address Lock Box 25, Marlboro, Mass.

By an operator and retoucher, in Iowa or Illinois. Seven years' experience in first-class galleries. Address, with terms, Jno. A. Robertson, Aledo, Mercer Co., Ill.

By a thoroughly reliable and competent young man. Can do first-class work in every respect. Address J. W. Keeran, 602 S. Madison Street, Bloomington, Ill.

In Buffalo, Philadelphia, or Baltimore, by A. J. Shepler, Coshocton, Ohio.

By a first-class artist, to retouch negatives, or work in oil, water colors, and India ink. Terms, \$20 per week. Address G. J. Canfield, Ingersoll, Ont.

By an experienced American operator, either on salary or shares. Southern Illinois preferred. Address A. St. Clair, Paris, Ont.

As operator or general assistant, or to take full charge of a gallery. Best of reference. Address S. B. P., 130th St., and Third Avenue, Harlem, N. Y.

In a good gallery, by a young man who understands all the different branches; is A-No.-1 negative retoucher and crayon artist, can work in ink some. Will work on moderate salary, with view of steady employment. Address C. C. Snydam, Decatur, Ills.

By a young man of steady habits to work under instruction; has been working in a first-class gallery. Wages no object. Can give good reference. Address Robert H. Swan, Metamora, Franklin Co., Ind.

As printer and toner, or will work as assistant in either branch of the business. Address J. D. Davis, 23 Walling St , Providence, R. I.

As retoucher, printer, or general assistant. Address L. B. Kitzmiller, Gettysburg, Pa.

By a young man, as assistant operator, or is willing to make himself generally useful. A gallery in New York state preferred. Good reference given from last employer. Address W. G. S., care of C. H. Scofield, Photographer, 132 Genesee St., Utica, Oneida Co., N. Y.

By a young man, as printer, toner, and assistant operator; can make himself generally useful; has had about five years' experience. Can speak German. Good references. Address August Gerding, Ottawa, LaSalle Co., Ills.

A lady desires a situation in a photograph gallery, understands negative retouching. Would go to a country town. Address, stating terms, M. A. M., 822 North Twentieth St., Phila., Pa.

USE WAYMOUTH'S VIGNETTE PAPERS.

OUR NOVEMBER, 1875

PRIZE

PICTURES

Our second PROMENADE PICTURE competition has just been closed, and we are in possession of some of the finest Photographic work ever done in the world!

We offer prints from the competing negatives, for sale at the prices below. They are most useful to every photographer as examples of good negative work, artistic composition and lighting, and superior printing and finishing. We have done *our* part to make them *models* in every respect.





Was awarded for the best six negatives to

Mr. LYMAN G. BIGELOW, Detroit, Michigan,

Whose elegant work is familiar to many of our patrons.

THE SETS INCLUDE:

Nos. 1 to 8—Studies by L. G. Bigelow, Detroit, Michigan.
Nos. 9 to 20—Studies by F. B. Clench. Lockport, N. Y.
Nos. 21 to 28—Studies by G. M. Elton, Palmyra, N. Y.
Nos. 29 to 34—Studies by O. P. Scott, Abingdon, Ill.
Nos. 35 to 40—Studies by E. M. Collins, Oswego, N. Y.
Nos. 41 to 46—Studies by E. H. Alley, Toledo, Ohio.
See review in December number Philadelphia Photographer.

The whole	set	of 46, .													\$10	00
In two Pho	oto.	Covers,													11	50
Selections,	\mathbf{per}	dozen,													4	00
		two doz														
The 28 of 1	Mes	srs. Clen	ch,	В	ige	lov	7,	and	E	lto	n,				6	00
Book Cove	r an	d Bindin	o.													75

Address all orders to

BENERMAN & WILSON, Publishers, SEVENTH & CHERRY STS., PHILAD'A, PA.









1876.

WHAT follows is a Catalogue of the best Photographic Publications, sent to remind all live photographers of the fact that good practical information is as essential to them as good lenses and pure chemicals. There are some "artists" who "get along" without any of these, but they do not progress, neither do they succeed. Do not be of their number. There is too much going on in photography in these "quick acting" times to enable any photographer to afford to do without reading and being posted. In anything you undertake you should take every precaution to be as bright as your neighbor, or he will get ahead. Keep alongside, any way. We wiii mail you any of the works named below, post-paid, on receipt of price. Order now.

1876

WILL BE A YEAR OF JUBILEE FOR PHOTOGRAPHERS THAT SHOULD NOT BE NEGLECTED.

THE CENTENNIAL EXHIBITION

Will present opportunities for study and improvement which should not be overlooked, and the study of the best books will not only do you good before, but after the inspection of Phetographic Hall. READ! READ!! READ!!!

BENERMAN & WILSON.

Photographic Publishers,

Philadelphia, Pa

hiladelphia Photographer. THE BEST PHOTOGRAPHIC MAGAZINE IN THE WORLD.

EACH NUMBER EMBELLISHED BY PHOTOGRAPHY.

THE THIRTEENTH VOLUME of our Magazine promises to be the most popular and brilliant of any that has preceded it. We have many good things in store for it. It shall he our endeavor to make it all the richer and more interesting on account of the Centennial. We expect to embellish it with some of the choicest gems the Exhibition can produce and add interest to its pages from month to month, by giving a sort of compendium of all that relates to the Tropic produce and add interest to its pages from month to month, by giving a sort of compendium of all that relates to have our old friend by. Voerst, here during six months of next year, at least, and our readers may expect some of the fruits of his genius and talents to add to its interest and usefulness.

But while we intend to provide all these home attractions, we do not propose to neglect whatever may transpire abroad, but shall present as usual correspondence from such well-known writers as Prof. Strebbing, Mr. W. J. Stillman, Mr. Chas. Waldack, and others. With all these good things in prospect for the year 1876, we hope to render our magazine more beautiful and more useful than ever before; and while we maintain that the heautiful example of photography, which accompanies each issue, is alone worth the subscription price, still more and more effort will be made to make the reading matter everything that it ought to be. Our correspondents from all the leading centres abroad will keep our readers posted on all matters of interest in their several sections, while our unrivalled staff at home will look diligently after your interests here. To make THE PHILADELPHIA PHOTOGRAPHER the best PRACTICAL HELPER which can possibly be obtained, is the aim and earnest desire of its publishers. We ask your co-operation in extending its usefulness, and offer to all present subscribers, who secure us new ones, the following

PREMIUMS.

For every new subscriber, for one year, \$1.00, payable in any of our publications, books, or, if preferred, one dollar's worth of any of our prize pictures, or any other article for which we are agents, advertised in this Magazine.

The subscription price of the Philadelphia Photographer is \$5 a year, \$2.50 for six months, 50 cents per month.

Each number, remember, contains a handsome photograph.

Photographic Mosnics.

THE Centennial anniversary year of American Independence finds our little Annual in its eleventh year. It is developing rapidly for its age and size, and this year takes quite an interest in the Centennial. It is full and running over with fresh contributions from the most wide-awake members of the fraternity in all parts of the country. We here give a list of the

bers of the fraternity in all parts of the country. We here give a list of the

CONTENTS.—Review; Eighteen Hundred and Seventy-slx; Discoveries, Inventions, and Improvements; Work in the Studio; The Dark Room; The Printing Department, Landscape Photography; Dry-plate Work; Apparatus; A 1r. Advances; The National Photographic Asociation; Our Publications; Our Prize Offer; Items of Interest; Obtinary; The Art Progress; Fog; Come, Let us Reason Together; Experience; Provoking; A Suggestion Anent the Great Exhibition; Centennial Album of Photographic Studies; The Eliminating of Hyposulphite from Prints; A Treatise on Photography; Why not make Solars instead of Contact, etc.; Systematic Preservation of Negatives; Want of Enterprise; Lighting the Sitter; Theory and Practice; Be Functual; Formulæ for Photographs and Ferrotypes, which give Lights and Half-tones not surpassed; Exposure and Development of a Negative; A Cause for Faded Prints; How I Sunned a Bath under Difficulties; A Good Collodion; A Word to the Weak; How to Clean New and Old Glass Plates; Long's Bath Warmer; Albumen, its Preparation and Use in Photography; An Item of Real Value; The Negative Bath; How to Lubricate Prints for Burnishing; Then and Now; A Pair of Suggestions; How to Obtain Boiling Water in Winter; An Excellent Ware for Photography: Then now Composition; The Causes and Cure for some of the Difficulties pertaining to Photography; Art and Mechanism; Breakfast for Dinner; Field Work; Marble Negatives—Stains from the Hands, etc.; Pyroxylin—Gun-Cotton; The Old Bath; The Upper Floor; Dry-Plates; The Art Privileges of our Great Centennial; Curtains as a Meansof Adjusting Light; An Exposing Shutter; How to Touch out Finholes; Photography The Touch out Finholes; Photography The Touch out Finholes; Photography Literature; Negatives without Collodion or Silver Bath; Hands in Photography; The Toning Solution; A Chapter of Practical Matters; Climbing; Poor Negatives, their Cause and Cure; On Landscape Photography; A Cheap and Good Plateholder; The Way

Price, bound in Cloth, \$1. Paper Cover, 50 Cts. 144 pages.

OUR BOOKS.

THE PRACTICAL PRINTER. By Chas. W. Hearn.

This very useful book is indispensable in the printing department. No one who wishes to be up with the times in printing, can afford to be without it. Its rapid sale and the favor with which it has been received, are the best recommendations we can give. Price, \$2.50.

BIGELOW'S ALBUM OF LIGHTING AND POSING.

This excellent work still maintains its popularity. It contains 24 beautiful photographs from life in different lights and positions, with an explanatory key, which makes it the most practical helper the Photographer can have. Price, \$6.00.

DR. VOGEL'S HANDBOOK OF PHOTOGRAPHY. Second Edition.

This is a really standard work, and the most complete hand-book ever published. The new edition has been thoroughly revised, and much additional matter introduced, together with new illustrations, new photographs, and a new arrangement all through. Now is the time to study up, and this book is ap-plicable to any department. Price, \$3.50.

DR. VOGEL'S PHOTOGRAPHERS' POCKET REFERENCE-BOOK.

This is in every sense a reference book. It is alphabetically arranged, and any process or formulæ in photography may be found at a moment's notice. All is arranged in a concise and practical form. It is particularly useful in the chemical department. Price, \$1.50.

THE FERROTYPERS' GUIDE.

This little work is by a practical ferrotyper, and gives just the instruction necessary to those who wish to do good work in this branch of our Art. Price, 75 cents.

LINN'S LANDSCAPE PHOTOGRAPHY

Is an excellent companion in the field, and may help you over many difficulties; can be carried in the pocket. Price, 75 cts. GLIMPSES AT PHOTOGRAPHY. By Prof. Himes.

This work treats of some of the peculiar styles of printing, such as leaf-printing, etc., etc. Price, \$1.25.

WILSON'S LANTERN JOURNEYS.

To those who use the lantern this book is indispensable. It contains just the information required about six hundred different views, and enables any exhibitor to make his entertainments enjoyable and instructive. Price, \$2.00.

BURNET'S HINTS ON COMPOSITION.

We have reproduced this work by photo-lithography, and sell it at the low price named, while a copy of the original work could not be bought for five times that amount. It is fully illustrated, and supplies in a very attractive form, the art knowledge, in reference to composition, that so many photographers are seeking after. Price, \$3.50.



Announcement for 1876!

WILSON, HOOD & CO.,

No. 822 ARCH STREET, PHILADELPHIA.

We having completed our annual account of stock, have replenished all departments needing it, and are now ready to fill promptly all orders intrusted to our care. We call

your attention to a few of our specialties.

Innumerable experiments have been made to produce a Photographic Negative Glass, that should combine the two qualities of excellence and cheapness, but until now without suc-We can now offer you a glass that excels the French for polish, freeness from bubbles, straightness, and uniformity, at a less price than French glass has ever been sold. It is not susceptible to atmospheric action, and never rusts or stains. It will be known and sold

ARTISTS' BRAND OF SULPHATED GLASS.

AT FOLLOWING PRICES:

$6\frac{1}{2} \times 8\frac{1}{2}$, and 7×9 , per box of 50 ft., \$4 2	25 11 x 14, per box of 50 ft.,	\$5 50
8 x 10, and 9 x 11, " " 4 7	75 13 x 16, " "	5 75
10 x 12, per box of 50 feet, 5 0	00 14 x 17, " "	6 00
Larger sizes furnished.	Sample Orders solicited.	

We are agents for the sale of

THE MULTISCOPE

It is a combination of a slide—which will hold four dozen views—with a stand which will fit any Holmes' Hand Stereoscope. They supply a long felt want, are strongly made, and can be purchased at \$12.00 per dozen. Descriptive Circulars furnished when desired.



We have been appointed by the manufacturers, Agents for the sale of

THE GORHAM HEATING STOVE.

REVERSIBLE SUPPORT.

Patented July 13, 1875, August 17, 1875, and Patent pending.

Always ready and perfectly safe. Just the thing for drying plates, boiling baths, or any purpose for which you require an instantaneous heat. It burns

which you require an instantaneous neat. It burns non-explosive fluid. Alcohol, two tablespoonsful, will burn one-half hour; will boil a pint of water in five minutes. The stove is made of spun brass, and support of Russia sheet-iron, with wire gauze covering a packing of Asbestos, which serve as a permanent vaporizer, causing the alcohol to light instantly. The flame is easily extinguished with the brass cap, which accompanies the stove. Will send to any address, post-paid, on receipt of \$1.

We take pleasure in notifying you that we have reduced the prices of

BLACK WALNUT OVAL, METAL RIM FRAMES

TO FOLLOWING PRICES, PER DOZEN:

No. 1—4 x 5, \$3.85; $5\frac{1}{2}$ x $6\frac{1}{2}$, \$4.75; $6\frac{1}{2}$ x $8\frac{1}{2}$, \$5.75; 8 x 10, \$7.25. No. 2—8 x 10, \$8.00; 10 x 12, \$9.50.

No. 3—8 x 10, \$8.75; 10 x 12, \$10.75; 11 x 14, \$12.25. No. 4—8 x 10, \$9.50; 10 x 12, \$11.50; 11 x 14, \$14.00. No. 5—8 x 10, \$12.00; 10 x 12, \$13.75; 11 x 14, \$15.50.

Above are the only sizes and styles we shall in future keep in stock.

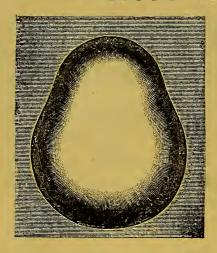
We also continue the manufacture of Monogram Chemicals, Wilson's Head-Rests, Bergner's Print-Cutters, Tables, Chairs, etc.

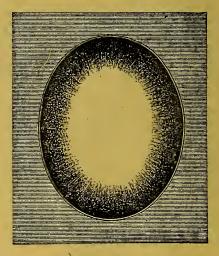
Yours, very truly, Soliciting your continued favors, we are

WILSON, HOOD & CO.

JANUARY 1, 1876.

WAYMOUTH'S





VIGNETTING PAPERS

ARE NOW MADE OF TWO SHAPES, as shown in the drawings above. They consist of finely gradated, lithographed designs, mounted on protecting sheets of non-actinic paper, and are the lightest, neatest, and best means of producing vignette pictures ever offered.

RECENTLY IMPROVED.

Two kinds are now made. Please state which you prefer, when ordering, and READ THE FOLLOWING:

The quality of the "papers" has just been much improved by the substitution of a peculiar French, fibrous, hard calendered paper, which is not only less opaque but has other qualities which produce quickly the most lovely and soft vignettes possible. We consider this a great improvement, as do others to whom we have sent samples. Below we give a letter from one of them, Mr. Ormsby, who has sent us also some exquisite vignettes:

CHICAGO, March 16th, 1875.

The package of Vignette Papers has been received and tried; they are just the thing. They are a great improvement over the others; they will print in a little more than half the time required for the others, and the results are everything that can be desired, as you can see by samples inclosed. Please fill my order and send bill. I like the pear-shape best. Send them all that shape.

E. D. ORMSBY.

FROM PROFESSIONAL AND AMATEUR PHOTOGRAPHERS.

"First-class."—"The sample sent answers perfectly."—"I consider them first-rate articles."—
"They answer the purpose admirably."—"They are the best vignettes I have ever had, and as you can print in full sunlight, they are a great saving of time."—"They could not be better, oblige me with another packet."—"I find them excellent, giving much softer pictures than the old way."—"I have tried one of the Vignette Papers, and like it much; send me packets two and three."—"I am much pleased with them, and shall thank you to send me another packet."—"I did not need any copies of testimonials, having well-known by experience that your Vignette Papers were superior to anything I have ever used."—"I found those you sent before excellent."—"Vignetting Papers received and tested; can't be beat. I use by cutting an opening in a piece of cardboard and tacking to the printing-frame, when I am ready for printing vignettes in the very best manner."—"Waymouth's Vignette Papers I have tried, and they are just what I have been wanting for years."

Any number sent on receipt of price, by any stockdealer, or by

BENERMAN & WILSON, Manufacturers,

(See opposite page.)

PHILADELPHIA.

DO YOU USE

WAYMOUTH'S VIGNETTE PAPERS.

(DESIGNS COPYRIGHTED.)

of all pictures, the Wignette is the most artistic.

When properly printed. But the clumsy devices generally in use for printing them, or rather for blending the shading about the figure, produce but very few really artistic vignette pictures. Either the shading is too intensely dark, not gradated in tint at all, or it shows an ugly direct, decided line, which is very repulsive. The shading should blend gradually from the dark tint nearest to the figure, off into the white background. The results are then soft, artistic, and beautiful. The easiest and best way to secure them is by the use of

WAYMOUTH'S VICNETTE PAPERS.

THEY ARE NOT CLUMSY; DO NOT BREAK; ARE ALWAYS READY; COST BUT LITTLE, AND ARE EASY OF APPLICATION TO ANY NEGATIVE.

THEY NEED BUT ONE ADJUSTMENT TO PRINT ANY QUANTITY.

They entirely do away with all the old and troublesome methods, either wood, metal, or cotton.

Eighteen sizes are now made, suiting all dimensions of pictures from a small carte figure to Whole-size, Victorias, Cabinets, &c. They are printed in black for ordinary negatives, yellow bronze for thin negatives, and red bronze for still weaker ones. Directions for use accompany each parcel.

PRICES:

In parcels containing of	ne of	each size.	Nos.	. 1 to 15, assorted colors\$1 00	0
Assorted sizes and colo	rs, by	number,	er pa	package of fifteen 1 00	0
Nos. 1, 2, 3, 4, and 5, ass	orted	d sizes and	colors	rs, for Cartes, by number, per dozen 50	0
" 6, 7, 11, 12, and 13	"	"	"	Large Cartes and Victorias by number per doz	5
" 8, 9, 10, 14, and 15	**	46	"	Cabinets and Whole-size,	0
" 16 17 and 18	66	46	66	Half " " " " 19	5

(SEE OPPOSITE PAGE.)

When ordering, state the number and color you want.

BENERMAN & WILSON, Manufacturers, 7th and Cherry, Philada.

FOR SALE BY ALL DEALERS.

1876! TOGRAPHIC 1876! SHOTOGRAPHIC MOSAICS

Edited by EDWARD L. WILSON, Editor Philadelphia Photographer,

ETC., ETC

This favorite and only American annual is fairly crammed with articles prepared expressly for it by the eminent photographers of Europe and America, who are seldom induced to write for anything else.

Price, in Cloth, \$1.00; in Paper Cover, 50 cents.

"The Best Little Handbook of Photography in the World." For Sale by all Dealers.

No Photographer should be without Mosaics for 1876.

BENERMAN & WILSON, PHOTOGRAPHIC PUBLISHERS, PHILADELPHIA.

BURRELL'S PHOTOGRAPHIC DRAPERY CHART.

I have long felt the need of something to show my customers, before sitting, that would give them a clear idea how the various shades of drapery would appear when photographed. After considerable study and expense I have devised a chart comprising thirty-five pieces of silk, woollen, cotton, and lace goods, etc., with the name of each color distinctly printed. Each piece is made into a bow, so as to give the very best effect of light and shade (see cut). The print is $10\frac{1}{2} \times 12\frac{1}{2}$, mounted on 13×15 extra thick tinted eard board.



COPYRIGHTED.

I have placed them within the reach of ALL, at the very lowest price of \$1.25, by express, or sent by mail, *unmounted*, post-paid, as you wish, thus saving an express bill. All orders addressed to me will receive prompt attention. Also, for sale by the principal stock-dealers.

"HINTS TO MY PATRONS."

The above is the title of a selection of Rules and Hints for the benefit of our sitters and customers, saving a great many questions being asked, and showing them what they are responsible for. I have found these so useful in my own gallery, and wishing that you may all be benefited, I send them FREE with chart, on application, or without chart on receipt of ten cents, post-paid. The above I have printed on 8 x 10 tinted card board, in plain type. They should hang in every studio. All orders to be addressed to

D. T. BURRELL, Brockton, Mass.

Or, BENERMAN & WILSON, Photo. Publishers, Trade Agents, seventh & cherry streets, Philadelphia, Pa.

PROMENADE PRIZE PICTURES.

JULY COMPETITION.

To enable all photographers to study these

GEMS OF ART,

We offer prints from the competing negatives, for sale at the prices below.

They are the most exquisite things we ever offered, and will teach any one, be he a good or poor operator.

THE GOLD MEDAL

Was awarded for the best six negatives to Mr. Henry Rocher, Chicago, Ill., whose pictures are marvels of beautiful photography. The studies are all mounted in tasteful style, on Collins' Mounts, and printed at our own rooms by Mr. Chas. W. Hearn, and are fine studies in posing, lighting, printing, and toning.

THE SETS INCLUDE:

No	s.	1 t	0	7,						Studies l	by H. Rocher, Chicago.
66		8 t	0	16,						66	L. G. Bigelow, Detroit, Mich.
"		17 t	0	22,						44	I. W. Taber, San Francisco, Cal.
46		23 t	o	27,						**	C. M. French, Youngstown, O.
"		28 t	0	31,						66	Core & Frees, Tiffin, O.
66		32 t	0	37,						44	E. M. Collins, Oswego, N. Y.
"		38 t	0	42,			٠.			"	J. H. Folsom, Danbury, Conn.
56		43 t	0	48,						44	E. H. Alley, Toledo, O.
	200	D.	O 11	iom	in	Α.		net	m	umbor Ph	iladalahia Photographer paga 212

The whole set of 48,	12 00											
In two Photo. Covers,	13 50											
Selections, per dozen,	4 00											
" per two dozen,	7 00											
The 21 of Messrs. Rocher, Bigelow, and Taber,												
Book Covers and Binding,	75											

Address all orders to

BENERMAN & WILSON, Publishers, Seventh and Cherry Sts., Philadelphia.



ROSS' PORTRAIT VIEW LENSES.

We have now successfully introduced to the American Photographers the Ross Lens, and by our increased sales we know they are appreciated. At the convention held at Buffalo, July 15, many fine photographs were exhibited by photographers, and ourselves, made with the Ross Lens, which attracted great attention.

While Ross & Co. are the oldest manufacturers of Photographic Lenses in existence, they also keep up with the requirements of the fraternity, by constantly manufacturing new combinations and improving on those already in existence. They have lately perfected, and will soon furnish us stock of, a new series of Card Lenses, extra rapid, peculiarly adapted for babies, and people who will not be quiet. We will give notice of their arrival.

WE HAVE NOW IN STOCK

Portrait Lenses, from 1-4 to 15 x 18.

Cabinet Lenses, Nos. 1, 2, and 3.

Card Lenses, Nos. 1, 2, and 3.

Triplets, Nos. 1, 2, 3, 4, 5, 6, and 7.

Symmetricals.

Instantaneous Doublets, all sizes.

Medium Angle Doublets, all sizes.

Large Angle Doublets, all sizes.

Stereographic Lenses. all sizes.

New Universal Lens.

Numerous testimonials pronounce them to be the best, as well as the cheapest Foreign Lens ever offered to the American Photographer. We will mail price-list on application, and promptly fill all orders.

STEINHEIL'S SONS' NEW APLANATIC LENSES.

We now have a full stock of these Celebrated Lenses, at the following prices:

No.	1, 1-4	size	$, \dots, 3\frac{1}{2}$	inch	focus,	\$25	00	No.	5, 10-12	size	, 13 }	inch	focus,\$70	00
٠.	2, 1-2	6.6	5 1	"	***	30	00		6,13-16	""	16		"110	00
6.6	3,4-4		7	6.6	***	45	0.0	6.6	7, 18-22	- 66			200	00
"	4,8-1	0 "	104	. "	"	60	0.0	**	8,20-24				350	00

Nos. 1 & 2 are in matched pairs for Stereoscopic Work.

We feel sure that at least one of these leases is needful for the successful prosecution of your business, and so solicit your orders.

WILSON, HOOD & CO., THE UNITED STATES, 822 Arch St., Philadelphia, Pa.

The only genuine brand of DRESDEN ALBU-MEN PAPER is the CROSS-SWORD BRAND, all others are superannuated. We keep a full assortment of Single and Extra Brilliant always on hand.

CHAS. F. USENER'S Celebrated PORTRAIT LENSES are unexcelled. Before purchasing be sure and try a Usener.

CHARLES COOPER & CO., Wholesale Agents,

Manufacturing Chemists and Importers,

191 Worth Street, New York.

D. J. RYAN'S



SOUTHERN

Photographic Ferrotype

STOCK DEPOT,

Savannah, Geo.

FIRST-CLASS STOCK
AT NORTHERN PRICES,

Saving Time, Freight, Insurance, Drayage, &c.

SEND FOR PRICE LIST.

OHN EAN & CO. Worcester, Mass.,

Manufacturers of the

Nonpareil Plate,

A substitute for Porcelain. The new NONPAREIL PICTURES have elicited the most general expressions of approval and admiration. The latest improvement simplifies the formula and insures success. Our Plates are stamped. Patented July 29, 1873, and June 16, 1874. All others are spurious.

ALSO, THE CELEBRATED

FERROTYP **ADAMANTEAN**

BLACK, AND PATENT CHOCOLATE-TINTED, EGG-SHELL, AND GLOSSY.

The experience and extensive facilities of JOHN DEAN & CO. enable them to produce the most desirable FERROTYPE PLATES in the market.

> E. & H. T. ANTHONY & CO., Trade Agents, 591 Broadway, New York.

IMPROVED

PHOTOGRAPH COVERS.



The Outside Appearance.

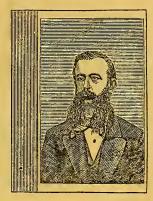


Fig. 2.

A Leaf Showing the Guard.

Frequent inquiries for something at a much lower price than an album, for the holding together and preservation of photographs, has induced us to manufacture an article which we think will meet the want.

IT SERVES ALL THE PURPOSES OF AN ALBUM, FOR

A Series or a Set of Portraits, A Series or a Set of Landscapes, A Series or a Set of Photographs of any kind,

MAY BE NEATLY AND CHEAPLY BOUND IN THESE COVERS.

They are made with expanding backs, so that from six to twenty-four pictures may be inserted in one cover. The pictures are mounted in the usual way, and then strips of linen, or strong paper, of the proper width, are pasted on one edge, by which the picture is inserted and held in place in the cover by a paper fastener. Fig. 1 represents the cover, with the perforations in the back, through which the spreading clasps of the paper fastener bind the whole together. These are so easily inserted or removed, that pictures are readily put in or taken out at any time. Fig. 2 represents the picture, with the guard pasted on ready for insertion. The arrangement is simple, and we are sure will be readily comprehended. For binding together views of your town or city, or portraits of celebrities, they are very neat

The following is a list of sizes and prices, without cards:

For Photograp		Per hundred.									
Card Siz	e,					\$1.50					\$10.00
Cabinet S	Siz	e,				2.25	٠.				13.50
EXTRA HEAVY C	oν	ΕR	S.								
5-8 Size,						4.50			,		33.00
4-4 "											
8-10 "						8.00					56.50
11-14 "						9.00					65.00

Larger or special sizes made to order. Furnished with card board at best rates. Samples mailed at dozen price. Send for some.

BENERMAN & WILSON, Photo. Publishers, Seventh and Cherry Streets, Philadelphia.

JAMES F. MAGEE & CO.

MANUFACTURERS OF

PURE

PHOTOGRAPHIC CHEMICALS,

No. 108 North Fifth Street,

PHILADELPHIA.

Stock Dealers only Supplied.

THE ZENTMAYER LENS.

FOR VIEWS AND COPYING.

These Lenses possess pre-eminently, the following qualities:

Width of visual angle, ranging from 80° to 90°; depth of focus; extreme sharpness over the whole field; true perspective; freedom from all distortion in copying; portability and cheapness.

Each mounting is provided with a revolving Diaphragm, containing the stops of the different combinations for which they are designed. The larger ones are provided with an internal shutter for making and closing the exposure.

No.	1,	2 1	inch	focus,	3	x	3	plate,			\$20	00	No.	1	an	l No	. 2	combined,					\$33	00
	2,	34		**	4	x	5	**			25	00	"	2		- 64	3	**	•	•	•	٠	40	00
	3.	51		66	64	x	84	١ ،،			30	0.0	4.6	3	"		4	46					55	
6.6	4	03			10	_	19	2	•	٠	49	00	1 "	4		- "	5	**					75	
	4,	0			10	A	14		•	•	44	00		5	"	"	6	4.6	•				110	00
**	5,	12	4.6	"	14	X	17				60	00	66	1,	2,	and	3,	**					48	00
																							88	00

No. 3, with large mounting to combine with No. 4 and No. 5, \$35.

No. 1 and No. 2, specially adapted for Stereoscopic Views, are furnished in matched pairs. No. 1 and No. 2, single, not to combine with other sizes, \$36 a pair.

Lenses and mountings to form all six combinations, from 2½ to 18 inches, \$173.

Zentmayer's Stereoscopic outfits, including a pair of No. 2 Lenses 4 x 7 box, 7 x 10 India Rubber Bath and Dipper, Tripod, Printing Frames, and outside box, \$60.

JOSEPH ZENTMAYER, Manufacturer,

147 South Fourth Street, Philadelphia.

BENJ. FRENCH & CO.,

159 Washington St., Boston,

IMPORTERS AND SOLE AGENTS FOR THE CELEBRATED

Voigtlander & Son Darlot LEWSES,

NEW STEREOSCOPIC LENSES.

New Stereoscopic Tube and Lens, made expressly for us, marked with our name (imitation Dallmeyer), with rack and pinion, central stops, for portraits or views. Will work in or out of doors. Also, for instantaneous pictures. Four inch focus, **price per pair**, \$21.00. By taking out back lens, and using only front lens in place of back, you get six inch focus. The great and increasing demand for all these lenses, is sure guarantee that they are the best. Read the following

Testimonials.

"I have tried the Mammoth Voigtlander you sent me, and I consider it the best large instrument I bave ever seen, and I have tried those made by other makers, Dallineyer's included, and they do not compare with the Voigtlander. All my baby pictures were made with half-size Voigtlander lenses."—J. LANDY, 208 W. Fourth St., Cincinnati, Feb. 25, 1874.

"The Voigtlander lenses have always been favorites with me. My first experience, in the days of daguerrectype, was with one, since which I have owned and tried many of the different sizes and never saw one but was an excellent instrument. Lately again trying some for my own use and for a friend, I found them to be superior to other eminent makers, particularly in the large sizes."—W. J. Baker, Buffalo, N. Y.

"Twenty-four years ago I bought and commenced using my first Voigtlander lens. It was a good one. Since then I have owned and used a good many of the same brand, of various sizes. They were all and always good. Some of the larger sizes that I have recently bought seem to me better than any I have ever had or seen before."—J. F. RYDER, Cleveland, Ohio, Dec. 18, 1872.

"About a year ago I bought a Voigtlander & Son No. 3 4-4 size lens. Said instrument gives me great satisfaction, being very quick, at the same time has great depth of focus."—E. G. MAINE, Columbus, Miss.

"Have never seen anything equal to the Voigtlander & Son Lens. The No. 5, Ex. 4-4 is the best instrument I ever used. I cannot keep house without it."—D. B. VICKERY, Haverhill, Mass.

"The pair of imitation Dallmeyer Stereoscopic Lenses you sent we are very much pleased with; they work finely."—GOODRIDGE BROS., East Saginaw, Mich.

"After a trial of your imitation Dallmeyer in the field with those of the Dallmeyer Rapid Rectilinear, side by side, I can say that for general views I like yours as well, for some objects far better, on account of their short focal length."—D. H. Cross, Mosher's Gal., Chicago.

New Catalogue of Prices Just Issued, to be had on Application.

WILSON'S

Lantern Journeys

By EDWARD L. WILSON,

Editor of the "Philadelphia Photographer."

This work will be found entertaining by all who like to read about the beautiful places and things of this world.

The contents are divided into six "Journeys," each one including a visit to 100 places, making 600 in all, as follows:

- JOURNEY A-Havre, Paris, Versailles, Rouen, Fontainebleau, and Switzerland.
- JOURNEY B-Compiegne, Brussels, Aix la Chapelle, Cologne, Up and Down the Rhine, Potsdam, Berlin, Dresden, Vienna, the Vienna Exposition, the Semmering Pass, Saxony, Munich, and Southwest Germany.
- JOURNEY C—Italy—Lake Maggiore and Como, Milan, Verona, Venice, Florence, Pisa, Rome, Naples, Pompeii, the Ascent of Vesuvius, Puteoli, and the Italian Art Galleries.
- JOURNEY D-Holland, Denmark, Norway, Sweden, Russia, and Spain.
- JOURNEY E-Egypt, Palestine, Syria, Turkey, Greece, and India.
- JOURNEY F-England, Scotland, and the United States of America.

It has been carefully prepared, and will be found amusing, very entertaining and instructive.

It contains 218 pages, Cloth bound, Gilt. Price, \$2.

BENERMAN & WILSON,

Photo. Publishers, Philadelphia, Penna.

A. M. COLLINS, SON & CO.,

MANUFACTURERS OF

PHOTOGRAPHIC CARDS AND CARD BOARDS,

OF EVERY DESCRIPTION.

Warehouse:

18 S. Sixth St., and 9 Decatur St.,

PROMENADE PHOTOGRAPH CARDS.

SIZE $4\frac{1}{8} \times 7\frac{1}{8}$. SQUARE CORNERS.

White, Light Buff, Amber, Pink, and Black—Plain.

White, Light Buff, Amber, Pink, and Black, with Gilt Borders.

Light Buff and Amber, with Red Borders.

Thin White, Rose Tint, and Black, with Gilt Beveled Edges.

Light Buff and Amber, with Red Beveled Edges.

Thick Gilt, Beveled Edge Glacé, Black and Rose Tint "J."

Glacé Card Boxes, for the Thick Beveled Edge.

Cards 7 x 10, with Gilt Borders, opening 4½ x 7½.

Cards 7 x 10, with India Tint and Gilt Borders, opening 4½ x 7½.

See detailed advertisement in this number of the "Photographic Times."

PRICE LISTS FURNISHED ON APPLICATION.

Send me 12 Bigelow Albums at once.—P. E. LIESEGANG.

LONDON, ENG., November 1, 1875.

Add 12 Bigelow Albums to our order, and send soon, as we are out. PIPER & CARTER, Publishers Photo. News.

BIGELOW'S ALBUM OF LIGHTING AND POSING.

SELLS ALL OVER THE WORLD.

WITH AN ENLARGED KEY, AND NEARLY ALL NEW STUDIES.

If you would improve your Lighting and Posing, study Bigelow's Album.

Another Lot Sent to England, October, 1875.

PRICE, \$6.00. FOR SALE BY ALL STOCKDEALERS.

BENERMAN & WILSON, Publishers, Philadelphia, Pa.

PHOTOCRAPHER'S

POCKET

REFERENCE BOOK.

An Alphabetically arranged collection of practically important hints on the construction of the Gallery; selection and trial of lenses and chemicals; approved formulæ for the different photographic processes; tables of weights and measures; rules for avoiding failure, etc.

IT IS A BOOK EVERY PHOTOGRAPHER SHOULD HAVE,

Because it is a ready helper under all difficult circumstances.

For sale by all dealers. Price, \$1.50, post-paid.

BENERMAN & WILSON, Photo. Publishers,

PHILADELPHIA, PA.

HEARN'S

PRACTICAL PRINTER

PHOTOGRAPHIC PRINTING

ON PLAIN AND ALBUMEN PAPER, AND ON PORCELAIN.

Too little attention has heretofore been given to Photographic Printing, which is indeed quite as important a branch of the art as negative making.

It is the hope of both author and publishers to create **REFORM** in this matter, by the issue of this work, and as it is to put money in the pockets of all who read it, the hope is that it will be generally read.

CONTENTS.

INTRODUCTION.

The Printing Room, with a Plan. The Silvering and Toning Room, with a Plan. The Drying Room, with a Plan.

PART I .-- ALBUMEN PAPER PRINTING.

The Positive Bath for Albumen Paper. Silvering the Albumen Paper. Drying the Paper. Fuming the Paper. Preservation of Sensitive Albumenized Paper—Washed Sensitive Paper. Cutting the Paper. The Printing Boards. Keeping Tally. Vignette Printing Blocks. Treatment of the Negatives before Printing. Filling of the Boards. Fitting Vignette Boards to the Negatives for Printing. Medallion and Archtop Printing. Fancy Printing. Vignette Cameo and Medallion Vignette Cameo Printing. Printing the Bendann Backgrounds. Printing Intense Negatives. Printing Weak Negatives. A Few More Remarks about Printing—Treatment of Broken Negatives. Cutting the Prints. Washing the Prints. Acidifying the Prints. Toning Baths. Artistic Toning. Fixing Baths and Fixing Prints. Washing the Prints. Mounting the Prints. Finishing the Prints.

PART II.-PLAIN PAPER PRINTING.

Salting the Paper. Positive Baths for Plain Salted Paper. Silvering Plain Salted Paper. Drying, Fuming, and Cutting the Paper. Treatment of the Negatives before Printing. Printing-in False Backgrounds. General Plain Paper Printing. Further Treatment of the Prints after Printing. Causes of Failures in Albumen and Plain Paper Printing.

PART III.-PORCELAIN PRINTING.

Selection of the Porcelain Plates. Cleaning of the Porcelain Plates. Albumenizing the Porcelain Plates. Making the Porcelain Collodion. Coating, Fuming, and Drying the Plates. Porcelain Printing Boards. Placing the Sensitive Plate on the Board for Printing. Printing Vignette Porcelains. Printing Medallion Percelains. Washing the Porcelains. Toning the Porcelain. Fixing the Porcelain. Final Washing of the Porcelain. Drying and Tinting of the Porcelain. Varnishing the Porcelain. Causes of Failures in Porcelain Printing.

Together with over 50 Wood Cuts, and an elegant Cabinet Portrait, from negatives by Mr. F. Gutekunst, printed by the author, Mr. Chas. W. Hearn.

A THOUSAND COPIES ALREADY GONE.

Mailed Post-paid on Receipt of \$2.50, by any dealer, or

BENERMAN & WILSON, Photo. Publishers, Seventh and Cherry Streets, Philadelphia. Edition ready and already.

BURNETS Practical Hints on Composition

ILLUSTRATED BY EXAMPLES FROM THE

GREAT MASTERS OF THE ITALIAN, DUTCH, AND FLEMISH SCHOOLS.

By JOHN BURNET, 1822.

THE ABOVE WORK IS THE VERY BEST AUTHORITY ON

POSITION

Owing to the fact that it has long been out of print, few are privileged to enjoy its advantages. We have reprinted and republished the original work by means of a photolithographic process, thus securing all the charms of the original drawings, and now offer the book to the art students of America for the first time.

It contains about 48 pages, and includes 38 illustrations—sketches of the best pictures by the masters of the schools named above, as follows:

Plate I-Angular Composition.

- Pig.

 1. Shows rectangle, crossed by diagonal line. Used by CUYP.

 2. Doubling of the lines on clouds. By CUYP.

 3 & 4. Sky backgrounds, with cows in foreground. By POTTER.

 By POTTER.
- 5. Domestic group. By OSTADE. 6. Country scene. By CLAUDE.

Plate II-Augular Composition.

- 1. Angel in foreground, group of cattle beyond, with trees. By CLAUDE.
 2. River bank view. By RECDENS.
 3. Huntsman going out in the morning. By DELAER
 4. Embarkation of Prince of Orange. By CUYP.

Plate III-Angular Composition.

- 1. Group of heads in form of diamond. By J. Burnet 2. Home comforts. By Ostade. 3. English pastimes. By J. Burnet. 4. Gambler's quarrel. By Terburg. 5. Hunter's return. By DeLAER. 6. Lady writing. By METZU. 7. The drunken father. By REMBRANDT.

Plate IV-Angular Composition.

- 1. Awaiting orders. By Terburg.
 2. "School is out." By Ostade.
 3. Italian shepherdess. By DeLaer.
 4. Seducing the God Bacchus. By Reubens.
 5. The "Firstborn." By Corregio.

Plate V-Circular Composition.

- Fig.

 1. Death of Ananias. By RAPHAEL.

 2. Magdalen and St. Jerome, with child Jesus. By
- 3. Doctors consulting the law. By GUIDO.

Plate VI-Circular Composition.

- 1. A country dance. By REUBENS.
 2. Death of Gen. Wolfe. By B. West.
 3. Christ preaching. By REMBENDT.
 4. Death of St. Jerome. By DOMENICHINO.
 5. Transfiguration. By RAFHAEL.

Plate VII-Model Compositions.

- Christ and his disciples. By RAPHAEL.
 The sick bed. By REMBRANDT.

Plate VIII-Madel Compositions.

- 1. "Landing of Charles II." By West.
 2. Cattle returning home in a shower. By Burnet.
 3. Cattle at rest. By Burnet.

Plate IX-Model Compositions.

- Blind fiddler. By Wilkie.
 Salutation of the virgin. By REMBRANDT.
 A dance. By OSTADE.

It is handsomely bound in cloth. \$20 cannot purchase a copy of the original work. As a help to photographers in making positions it cannot be overestimated. It teaches the practical elements of composition, and supplies the best examples.

PRICE, POST-PAID, \$3.50.

BENERMAN & WILSON, Photo. Publishers, Seventh and Cherry Streets, Philadelphia.

DR. VOGEL'S HANDBOOK.

SECOND EDITION.

THE HANDBOOK OF THE PRACTICE AND ART OF PHOTOGRAPHY,

By Prof. H. VOGEL, Ph.D., Berlin, Prussia.

IS NOW READY.

ALTHOUGH IT IS MUCH ENLARGED WE OFFER IT AT THE OLD PRICE, \$3.50.

It is Elegantly Illustrated, with Photographs and Engravings. Cloth Bound.

The reputation Dr. Vogel enjoys in this country as a practical photographic writer, is first-class, and insures a book of the best quality. That his Handbook is eminently so, we guarantee. It has been re-arranged and revised specially for the American photographer, giving the best German formulæ, &c., and is, in every sense of the word, a Handbook of the practical and artistic departments of Photography. Over fifteen hundred of the first edition were sold, and the demand continues.

IT ILLUSTRATES AND TELLS

How the Ateliers are built and used in Berlin and elsewhere;

How to make the best Photographs;

How to select and use your Lenses;

How to manage your Apparatus;

How to compose the Picture;

How to pose the Sitter;

How to choose Accessories;

How Berlin Cards are Made;

How to do everything in the Art.

TEACHES HOW TO BECOME A PERFECT PHOTOGRAPHER.

The whole includes, under one cover, everything needed for the practice of photography by the beginner, the amateur, and the professional—a complete Handbook. See contents of Book. The engravings are numerous, elaborate, and expensive. Four photographs, illustrating the lighting of the subject, accompany the work. Please read future advertisements

ASK YOUR DEALER FOR IT.

BENERMAN & WILSON, Photo. Publishers,

S. W. cor. Seventh and Cherry Sts., Philada.

WILSON'S BALTIMORE STOCK DEPOT

THE MOST POPULAR IN THE SOUTH.

QUICK TRANSIT. CHEAP FREIGHTS.

Best Coods! Best Prices!
Best Personal Attention!

Baltimore, the "City of Advantages" now, especially to the Photographer.

BEFORE PURCHASING, SEND FOR PRICE LIST AND CATALOGUE TO

CHARLES A. WILSON,

No. 7 N. Charles Street,

BALTIMORE, MD.

TRY BALTIMORE! IT WILL PAY!!

PLEASE READ OTHER ADVERTISEMENTS.

PHILADELPHIA

PHOTOGRAPHER

THE LIVEST and BEST

Photographic Magazine Published.

ANNOUNCEMENT FOR 1876!

The publishers have a great many good things in anticipation for the year 1876, which they think will render their magazine more beautiful and more useful than ever before; and while they maintain that the beautiful example of photography, which accompanies each issue, is alone worth the subscription price, still more and more effort will be made to make the reading matter everything that it ought to be. Our correspondents from all the leading centres abroad will keep our readers posted on all matters of interest in their several sections, while our unrivalled staff at home will look diligently after your interests here. To make the Philadelphia Photographer the best practical helper which can possibly be obtained, is the aim and earnest desire of its publishers.

We ask your co-operation in extending its usefulness, and offer to all present subscribers, who secure us new ones, the following

For every new subscriber, for one year, \$1, payable in any of our publications, books, or, if preferred, \$1

PREMIUMS

worth of any of our prize pictures, or any other article for which we are agents, advertised in this magazine.

Operators, printers, etc., can secure all their necessary photographic literature in this way, by a little earnest effort.

EACH MONTHLY ISSUE IS A PHOTOGRAPHIC WORK IN ITSELF. NOTICE TO SUBSCRIBERS.

Subscription price, \$5 a year, \$2.50 for six months, 50 cents per copy, postpaid. positively in advance.

In remitting by mail a post-office order, or draft payable to the order of Benerman & Wilson, is preferable to bank-notes. Clearly give your Post-Office, County, and State.

Canada subscribers must remit 24 cents extra, to prepay postage.

Foreign subscriptions must be accompanied by the postage in addition.

ADVERTISING sheets are bound with each number of the Magazine. Advertisements are inserted at the following

rates; 1 Month. 6 Months. 1 Year.

One Page, . . . \$20 00 \$110 00 \$200 00

Half " . . . 12 00 66 00 120 00

Quarter Page, . 7 00 38 50 70 00

Eighth " . . 4 00 22 00 40 00

Cards, 6 lines, or less, 2 00 11 00

The attention of advertisers, and those having galleries, &c., for sale, is called to our Specialties pages. Terms, \$2 for six lines, and 25 cents for each additional line, seven words to a line, always in advance. Duplicate insertions, 50 cents less, each.

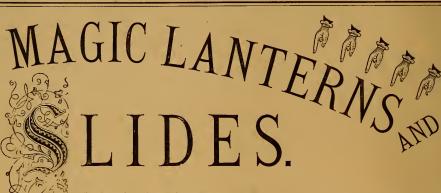
SURE TO PAY!

AF Operators desiring situations, no charge.

BENERMAN & WILSON, Publishers,

20 00

OFFICE, S. W. COR. OF SEVENTH AND CHERRY STS., PHILADELPHIA.



The attention of those interested in the Magic Lantern is called to the fact that we are MORE EXTENSIVELY ENGAGED in the sale of

LANTERN SLIDES AS A SPECIALTY,

Than any other house in America. Our continuous contact with photographic men gives us special advantages in this line, and as MANUFACTURERS AND DEALERS we offer the very best opportunities to secure

MUCH FOR YOUR MONEY,

AS WELL AS SUCH GOODS AS WILL PUT MONEY IN YOUR PURSE, NAMELY:

A GOOD LANTERN, THE BEST of SLIDES.

FOUR CATALOGUES MAILED ON RECEIPT OF 25 CTS.

DO NOT BUY UNTIL YOU HAVE CONSULTED HEAD-QUARTERS!

USE WILSON'S

Kantern

Journeys,

A Lecture Book describing graphically, as an eyewitness, 600 beautiful places and things in all parts of the world.

SUBSCRIBE FOR THE

Magic Pantern.

A Monthly Journal, devoted to the interests of lantern lovers.

\$1 per year, post-paid.

Special estimates and other information given gladly. No substituting of Slides. Prices very low.

PROMPTNESS OUR RULE.

BENERMAN & WILSON, Photo. Publishers,
SEVENTH & CHERRY STS., PHILADELPHIA.

TRY HERMACIS' "PROMENADE" LENSES.

Number 147.

50 Cents.

THE

PHILADELPHIA

Photographer.

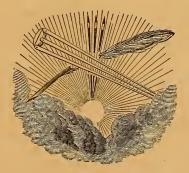
AN ILLUSTRATED MONTHLY JOURNAL,

DEVOTED TO PHOTOGRAPHY.

THE OFFICIAL ORGAN OF THE NATIONAL PHOTOGRAPHIO ASSOCIATION OF THE UNITED STATES.

EDITED BY EDWARD L. WILSON.

March, 1876.



PHILADELPHIA:

BENERMAN & WILSON,

PUBLISHERS,

S. W. COR. SEVENTH AND CHERRY STS.

Subscriptions received by all News and Stock-Dealers.

FIVE DOLLARS PER ANNUM, IN ADVANCE.

CI 0 C 7) 1 1 70 17 13 11

SUMMARY OF CONTENTS.

PAGE	PAGI
Talk and Tattle 65	Photographic Hall 82
Photographic Accidents. By Robert J. Chute 68	Magic Lantern Slides 82
Is Burnet a Humbug? 70	Emulsion Process Improved. By A. F. Chase 83
Our Advance Column 71	Our Prize Offer for Retouching 83
Allen & Rowell's Method of Carbon Printing 72	Wrinkles and Dodges 84
Production of Spectra by the Oxyhydrogen Flame.	Voices from the Craft 85
By Tasker H. Marvin 73	Distortion in Photographic Prints, By CARL
How to Conduct Business 74	Myers
Hints to Beginners. By L. T. Wilt 76	A Chapter or Two from "Something New" 87
German Correspondence. By Prof. H. Vogel 76	•
French Correspondence. By E. Stebbing 78, 91	Society Gossip
Eliminating Hyposulphite from Prints. By W. H.	Our Picture 94
SHERMAN 80	Editor's Table

EMBELLISHMENT.-Out-door Study. Negatives by S. R. STODDARD, Glens Falls, N. Y.

ADVERTISEMENTS.

LEWIS, R. A. Collodion.

Long & Smith. Frames, Albums, etc.

WILSON'S LANTERN JOURNEYS.

ZENTMAYER, JOSEPH. Lenses.

WOODWARD, D. A. Solar Cameras.

ALBA PLATES.

ANTHONY & Co., E. & H. T. Adamantean Plates. BENERMAN & WILSON. Magic Lanterns and Slides. BIGELOW'S ALBUM OF LIGHTING AND POSING. BULLOCK & CRENSHAW. Photographic Chemicals. BURRELL, D. T. Photo. Chart, etc. CAMEO PRESS, THE UNIVERSAL. CARBUTT, J. Rapid Dry Plates. COLLINS, SON & Co., A. M. Photograph Cards. COOPER, CHAS. & Co. Dresden Albumen Papers, etc. DEBANES, J., Glace Work. ENTREKIN, W. G. Burnisher or Planisher. FRENCH, B. & Co. Voigtlander Lenses, &c. GENNERT, G. Albumen Papers. GIHON, JOHN L. Opaque and Cut-Outs. HANCE'S PHOTO, SPECIALTIES. HEARN'S PRACTICAL PRINTER. HEARN'S PHOTOGRAPHIC PRINTING INSTITUTE. HERMAGIS' PORTRAIT LENSES. HINTS ON COMPOSITION.

MAGEE, JAMES F. & Co. Photographic Chemicals. Mosaics, 1876. PATTBERG, LEWIS & BRO. Passepartouts, &c. PHOTOGRAPHER'S POCKET REFERENCE-BOOK. PHOTOGRAPHIC PUBLICATIONS. PHOTOGRAPHER TO HIS PATRONS. PROMENADE PRIZE PICTURES. ROBINSON'S PHOTO. TRIMMER AND METALLIC GUIDES. Ross' Portrait and View Lenses. RYAN, D. J. Southern Stock Depot. SAUTER, G. Passepartouts. Vogel's Hand-Book of Photography. WALLACH, WILLY. Trapp & Munch's Albumen Paper WAYMOUTH'S VIGNETTING PAPERS. WILSON, CHAS. A. Baltimore Stock Depot. WILSON, HOOD & Co. Announcement for 1876.

119 South Fourth St. PHILADELPHIA.

HOWSONS' PATENT OFFICES.

IMPROVED PHOTOGRAPH COVERS.

Branch Office, 605 Seventh Street, WASHINGTON, D. C.



H. HOWSON,

Engineer and Solicitor of Patents.

C. HOWSON,

Attorney at Law, and Counsel in Patent Cases.



DOUBLE IODIZED PORTRAIT COLLODION.

ANDERSON'S PORTRAIT COLLODION.

WHITE MOUNTAIN LANDSCAPE COLLODION.

NIAGARA FALLS LANDSCAPE COLLODION.

TRASK'S FERROTYPE COLLODION.

HANCE'S BATH PRESERVATIVE.

HANCE'S GROUND GLASS SUBSTITUTE.

HANCE'S DELICATE CREAM GUN COTTON.

HANCE'S SILVER SPRAY GUN COTTON.

HEARN'S COLLODIO-CHLORIDE.

GILL'S CHROMO INTENSIFIER.

CUMMINGS' GRIT VARNISH.

Manufactured from the best chemicals that can be procured in the market, manipulated with the greatest care.

Each article warranted to do the work claimed for it, if used according to the directions plainly printed on the label accompanying each bottle or package. These preparations are noted for their purity and uniformity, and have for years been used in the most celebrated galleries in the United States and Canada.

FULL MEASURE GUARANTEED.

For Sale by all Stock-dealers in the United States and Canada.

A. L. HANCE, Manufacturer, 126 NORTH SEVENTH STREET, PHILADELPHIA.

Read detailed advertisments on succeeding pages.

HANCE'S PHOTOGRAPHIC SPECIALTIES

WARRANTED FULL MEASURE, AND CHEMICALLY PURE,

ARE SOLD BY ALL DEALERS, AS FOLLOWS:

HANCE'S BATH PRESERVA-TIVE. A sure preventive of pinholes, stains, &c. It preserves the bath in good working condition, and will be found worth

working condition, and will be found worth its weight in gold. See special advertisement. \$1.00 per bottle.

HANCE'S DOUBLE IODIZED

collobion. This is made by compounding the different iodides according to their equivalents, and producing a new salt. It is being used by some of the best photographers, but its general use is retarded, no doubt, by the extra trouble in making it. The peculiarities of this Collodion are good keeping qualities, its improvement by age, and the richness of effect produced in the negative, the film being perfectly structureless. As it requires time to ripen, I have the advantage of making a quantity and keeping it always ready to supply any demand. \$1.50 per ib.; 80 cts. per ½ ib.

ELBERT ANDERSON'S PORTRAIT COLLODION is made according to the formula used by Mr. Anderson in Mr. Kurtz's gallery in New York. It is especially adapted to portrait work. \$1.75 per ib.; 90 cts. per ½ ib.

HANCE'S WHITE MOUNTAIN COLLODION is adapted more especially to outdoor work, and for quick working, delineating foliage, frost-work, or sky, it stands unrivalled. It is made after the formula used by that celebrated mountain artist, B. W. Kilburn, of Littleton, N. H., whose work is too well known to need any comments. \$1.50 per lb.; 80 cts. per ½ lb.

CURTIS' NIAGARA FALLS COLLODION is another used for landscapes. The wonderfully beautiful views made by Mr. Curtis, of the great cataract, with this collodion, have a world-wide reputation, and are an indisputable evidence that he could have nothing better to produce such magnificent work. \$1.50 per ib; 80 cts. per ½ ib.

TRASK'S FERROTYPE COL-LODION is made especially for positive pictures. Mr. Trask has no superior in this class of work, and this collodion is the result of his practice and experience for years in proving what was BEST. It is made after his formula and ferrotypers will find it all that can be desired. \$1.50 per 1b.; 80 cts. per ½ 1b. HANCE'S PECULIAR PORTRAIT COLLODION is peculiar in that it is prepared without bromides, and is adapted for use with Black's acid bath. To those using the acid bath this collodion is indispensable. Formula on the bottle. \$1.50 per ib.; 80 cts. per ½ ib.

CUMMINGS' GRIT VARNISH

gives a very fine surface for retouching. Those that use a varnish of this kind will find that this has no superior. By it the retouching is greatly facilitated and the same amount of work on a negative may be done with it in half the time that would be required without it. 40 cts. per 6 oz. bot.

HANCE'S SILVER SPRAY GUN COTTON is now being used by many of the best photographers, and the testimonials I am receiving are sufficient evidence of its excellence. I prepare it with great eare, and warrant it free from acid, very soluble, gives good intensity so that no redevelopment is necessary, gives perfect detail, and a film pure and structureless. 50 cts. per oz.

HANCE'S DELICATE CREAM GUN COTTON is adapted to those who like a very delicate, soft-working collodion, giving all the modelling especially in the Rembrandt style, and with light drapery. Its sensitiveness renders it particularly adapted for children, or any work that requires short exposure. 80 cts. per oz.

CHROMO INTENSIFIER is intended to strengthen the negative. It imparts a beautiful tone and gives excellent printing qualities. 50 cts. per bottle.

HANCE'S GROUND-GLASS

SUBSTITUTE is simply what its name implies, a substitute for ground-glass for any purpose that it is used for in the gallery. To the landscape photographer a bottle of it is indispensable. If he breaks his ground-glass, he has only to coat a plate, such as he is sure to have with him for negatives, with the substitute, and in a few moments his ground-glass is replaced and his work goes on. It is equally, useful in the printing room, and any photographer who has once used it will never again be without it. 50 cts. per bottle.

HEARN'S COLLODIO-CHLO-

RIDE.—The best for Porcelain pictures. \$2.25 per ½ lb. bottle, and \$4.00 per lb. bottle. Try it, and get good porcelains.

HANCE'S GROUND GLASS SUBSTITUTE

Is an indispensable article in the photographic gallery. There are so many uses to which it can be applied that a photographer having once given it a trial, will never be without it, as there is nothing known that will take its place. There are a few base imitations in the market, but they are not used a second time, and will soon die a natural death.

The Substitute is in the form of a varnish, is flowed and dried the same as varnish, but dries with a granulated or ground-glass surface. Wherever ground glass is required, Hance's Substitute answers every purpose.

FOR VIGNETTE GLASSES.

- " A RETOUCHING VARNISH.
- " SOFTENING STRONG NEGATIVES.
- " THE CELEBRATED BERLIN PROCESS.
- " GROUND GLASS FOR CAMERAS.
- " GLAZING SKY AND SIDE LIGHTS.
- " OBSCURING STUDIO & OFFICE DOORS.
- " PRINTING WEAK NEGATIVES.

For skylights it must be flowed before glazing. The Substitute being very thin it will cover a large space. It is economical, and makes a surface equal to the finest ground glass. It can be easily removed by rubbing it with cotton wet with alcohol. GIVE 1T A TRIAL.

PRICE, 50 CENTS PER BOTTLE,

Large quantities, for Studio Lights, etc., supplied low.

HANCE'S DELICATE CREAM GUN COTTON

IS THE KING COTTON, AND HAS NO PEER.

Prepared with particular care, warranted free from acid, and very soluble. I take particular pride in this cotton. It has made its way steadily and surely into most of the principal galleries in the country, where parties prefer to make their own collodion, and its superior qualities are shown in the medals awarded at the Vienna Exhibition, for photographs made with collodion in which it was used.

It is especially adapted to the Rembrandt style, and light drapery. Its sensitiveness renders it particularly adapted for children or any work that requires short exposure.

PRICE, 80 CENTS PER OUNCE.

Read next page.

alce's

COMMENDATORY LETTERS

Testifying to the superior qualities of

HANCE'S SPECIALTIES

WE HAVE ROOM ONLY FOR THE FOLLOWING:

"I consider the Cotton the best we have ever used as yet."-R. POOLE, Nashville, Tenn.

"The film of the Cotton you sent me was unusually smooth and firm, being entirely free from glutinosity, and setting like India-rubber. It was quite powdery and crumbled to pieces in my fingers, 'as if rotten.' It dissolved almost instantaneously, and it was 'by far' the very best material I have ever used. I sincerely trust that you will send me the same kind again."—ELBERT ANDERSON, Kurtz Gallery, New York.

"I received your Double-Iodized Collodion all right, and in good shape. Have tried it pretty well. It gives very fine negatives and good detail."—W. E. HART, Watertown, N. Y.

"We take pleasure in recommending Hance's Double-Iodized Collodion as a first-class article, in fact it is the best manufactured Collodion we have tried."—SCHREIBER & SONS, No. 818 Arch Street, Philadelphia.

"The goods by Express came safe to hand. I have tried a part of them and am greatly pleased. Will likely want more goods in your line."—R. POOLE, Nashville, Tenn.

"Your Ground Glass Substitute is the best I have ever tried, and I have tried nearly every kind advertised, as the long row of nearly full bottles will testify. It works like a charm."—J. N. Webster, Barton, Vt.

"I take pleasure in recommending your Cottons and Collodions, before all others I have used. It is a blessing to know where you can get good Cotton."—B. W. KILBURN, Littleton, N. H.

"The last lot of Cotton you sent is the very best I have ever used. Please send me another pound at once."— ELBERT ANDERSON, Kurtz Gallery, New York.

"Have used some twenty-five pounds of your Collodion the past year with unvarying success."—G. W. HOPE, Middletown, New York.

"Your Double-Iodized Collodion is the most perfect working Collodion I have used in fifteen years. Every picture I make with it is a success."—R. L. Dale, Boston, Mass.



Has now become the standard Collodion in all first-class galleries. Although but a short time in the market it is rapidly superseding all other makes, and the quantity that has been sold is simply astonishing.

Give it but a single trial and you will be convinced. Can be used as soon as made, but improves with age, and will keep indefinitely.

Price, \$1.50 per pound.

A liberal discount to parties ordering by the gallon. READ ADVERTISEMENTS ON PRECEDING PAGES.

1776. PREPARE FOR THE CENTENNIAL. 1876.



Announcement for 1876!

WILSON, HOOD & CO.,

No. 822 ARCH STREET, PHILADELPHIA.

We having completed our annual account of stock, have replenished all departments needing it, and are now ready to fill promptly all orders intrusted to our care. We call your attention to a few of our specialties.

Innumerable experiments have been made to produce a Photographic Negative Glass, that should combine the two qualities of excellence and cheapness, but until now without success. We can now offer you a glass that excels the French for polish, freeness from bubbles, straightness, and uniformity, at a less price than French glass has ever been sold. It is not susceptible to atmospheric action, and never rusts or stains. It will be known and sold

ARTISTS' BRAND OF SULPHATED GLASS,

AT FOLLOWING PRICES:

$6\frac{1}{2} \times 8\frac{1}{2}$, and 7×9 , per box of 50 ft., \$4 25 11 x 14, per box of 50 ft	., .	\$5	50
8×10 , and 9×11 , " 4 75 13 x 16, " "		5	75
10 x 12, per box of 50 feet, 5 00 14 x 17, "		6	00
Larger sizes furnished. Sample Orders solicited.			

We are agents for the sale of

THE MULTISCOPE

It is a combination of a slide-which will hold four dozen views-with a stand which will fit any Holmes' Hand Stereoscope. They supply a long felt want, are strongly made, and can be purchased at \$12.00 per dozen. Descriptive Circulars furnished when desired.

> We have been appointed by the manufacturers, Agents for the sale of

THE GORHAM HEATING STOVE.

REVERSIBLE SUPPORT.

Patented July 13, 1875, August 17, 1875, and Patent pending.

Always ready and perfectly safe. Just the thing for drying plates, boiling baths, or any purpose for which you require an instantaneous heat. It burns non-explosive fluid. Alcohol, two tablespoonsful, will burn one-half hour; will boil a pint of water in five minutes. The stove is made of spun brass, and support of Russia sheet-iron, with wire gauze covering a packing of Asbestos, which serve as a permanent vaporizer, causing the alcohol to light instantly. The flame is easily extinguished with the brass cap, which accompanies the stove. Will send to any address, post-paid, on receipt of \$1.

We take pleasure in notifying you that we have reduced the prices of

BLACK WALNUT OVAL, METAL RIM FRAMES

TO FOLLOWING PRICES, PER DOZEN:

No. 1—4 x 5, \$3.85; $5\frac{1}{2}$ x $6\frac{1}{2}$,\$4.75; $6\frac{1}{2}$ x $8\frac{1}{2}$,\$5.75; 8 x 10, \$7.25. No. 2—8 x 10, \$8.00; 10 x 12, \$9.50.

No. 3—8 x 10, \$8.75; 10 x 12, \$10.75; 11 x 14, \$12.25. No. 4—8 x 10, \$9.50; 10 x 12, \$11.50; 11 x 14, \$14.00. No. 5—8 x 10, \$12.00; 10 x 12, \$13.75; 11 x 14, \$15.50.

Above are the only sizes and styles we shall in future keep in stock.

We also continue the manufacture of Monogram Chemicals, Wilson's Head-Rests, Bergner's Print-Cutters, Tables, Chairs, etc.

Soliciting your continued favors, we are

Yours, very truly,

JANUARY 1, 1876.

ILSON, ${\tt HOOD} \ \& {\tt CO}.$

GIHON'S CUT-OUTS

Are the very best that are made, and are now without a rival in the market. They are clean cut, most desirable shapes and sizes, and made of non-actinic paper, manufactured specially for the purpose. Each package contains 30 Cut-Outs, or Masks, with corresponding Insides assorted for five differently sized ovals and one arch-top.

PRICE, \$1.00 PER PACKAGE. Sent by mail on receipt of price.

Parties wishing special sizes, or large lots of a few sizes, may have them cut to order promptly, by addressing the manufacturer. No lot costing less than \$1.00 made at a time.

No printer should attempt to make medallion pictures without them.

THEY HAVE NO EQUAL FOR QUALITY.

Beware of spurious imitations made of common paper, full of holes, badly cut, and odd shapes and sizes. Ask your stockdealer for GIHON'S CUT-OUTS, and see that they are in his envelopes with instruction circular included.

PROMENADE SIZE NOW READY! SOLD SEPARATELY AT 50 cts. per dozen.

GIHON'S

IS DESIGNED FOR

COMPLETELY OBSCURING THE IMPERFECT BACKGROUNDS OF COPIES. RETOUCHING NEGATIVES,
FAULTY SKIES IN LANDSCAPES,
COATING THE INSIDE OF LENSES OR CAMERA BOXES,

BACKING SOLAR NEGATIVES,

COVERING VIGNETTING BOARDS,

AND FOR ANSWERING

ALL THE REQUIREMENTS OF THE INTELLIGENT PHOTOGRAPHER IN THE PRODUCTION OF ARTISTIC RESULTS IN PRINTING.

WHEREVER YOU WANT TO KEEP OUT LIGHT. USE OPAQUE.

It is applied with a brush, dries quickly and sticks.

CUT-OUTS (thirty), \$1.00.

OPAQUE, 50 CENTS.

OF MEETING FOR SALE BY ALL DEALERS.

JOHN L. CIHON, Inventor,

128 N. Seventh St., Philadelphia, Pa.

OU 35 CLOOPER, MOCHIEN

1876! TOGRAPHIC 1876! STOCK S

Edited by EDWARD L. WILSON, Editor Philadelphia Photographer,

ETC., ETC.

This favorite and only American annual is fairly crammed with articles prepared expressly for it by the eminent photographers of Europe and America, who are seldom induced to write for anything else.

Price, in Cloth, \$1.00; in Paper Cover, 50 cents.

"The Best Little Handbook of Photography in the World." For Sale by all Dealers.

No Photographer should be without Mosaics for 1876.

BENERMAN & WILSON, PHOTOGRAPHIC PUBLISHERS, PHILADELPHIA.

BURRELL'S PHOTOGRAPHIC DRAPERY CHART.

I have long felt the need of something to show my customers, before sitting, that would give them a clear idea how the various shades of drapery would appear when photographed. After considerable study and expense I have devised a chart comprising thirty-five pieces of silk, woollen, cotton, and lace goods, etc., with the name of each color distinctly printed. Each piece is made into a bow, so as to give the very best effect of light and shade (see cut). The print is $10\frac{1}{2} \times 12\frac{1}{2}$, mounted on 13×15 extra thick tinted card board.



COPYRIGHTED.

I have placed them within the reach of ALL, at the very lowest price of \$1.25, by express, or sent by mail, *unmounted*, post-paid, as you wish, thus saving an express bill. All orders addressed to me will receive prompt attention. Also, for SALE BY THE PRINCIPAL STOCK-DEALERS.

"HINTS TO MY PATRONS."

The above is the title of a selection of Rules and Hints for the benefit of our sitters and customers, saving a great many questions being asked, and showing them what they are responsible for. I have found these so useful in my own gallery, and wishing that you may all be benefited, I send them FREE with chart, on application, or without chart on receipt of ten cents, post-paid. The above I have printed on 8 x 10 tinted card board, in plain type. They should hang in every studio. All orders to be addressed to

D. T. BURRELL, Brockton, Mass.

Or, BENERMAN & WILSON, Photo. Publishers, Trade Agents,
SEVENTH & CHERRY STREETS, Philadelphia, Pa.



THE LAST PHOTOGRAPHIC INVENTION

Is the New Alba Plate fully described in the current number of this magazine.

If you would revive business!

If you would please your patrons! If you would make money easy!

New Alba Pictures

ON THE

PHENIX

ALBA PLATES.

DIRECTIONS FOR USE.

As these plates are prepared for immediate use, it is not necessary to apply any coating, such as albumen or gelatine—in other respects they are treated exactly like porcelain glass.

First, flow with collodio-chloride of silver; this should not be poured off immediately, but should be allowed to remain on the plate until everything like a small, bright speck has disappeared. By thus allowing the collodion to thoroughly combine with the white surface of the plate, the best results are produced. After draining off the excess of the collodion, dry the plate by a gent the heat. Then print under a negative very slightly darker than the picture is desired to be when finished. The plates may be furned with ammonia, or not, as may be preferred, but it is better to fume them a short time, say from one to three minutes. three minutes

three minutes.

After printing, the plates are slightly washed and then put into either a weak solution of salt and water, a weak solution of nectuc acid and water, or in mixture of alcohol and water, half and half, long enough to produce a bright reddish color upon the surface—then tone very lightly in a very weak alkaline bath, containing very little gold. Fix in a solution of one ounce of hyposulphate of soda, to twelve of water, for five minutes; remove to a saturated solution of salt in water, leaving them in ten minutes. Then wash them for about the same time and in the same manner as negatives are ordinarily treated, and dry by a gentle heat.

N.B.—It is very important that fresh and reliable porcelain collodion, should be used to insure strong, brilliant prints.

PRICE LIST OF ALBA PLATES REDUCED!

ł	per box,	of one	dozen	plates,	. 9	81 00	4 per	box	, of one	dozen	plates, .		\$6 00	
1	. "	44	* 6	4.6		1 50	7	£¢.	""	"	и.		8 00	
1/2	ш	44	6.6	4.6		3 00	10	64	44	"	"	i.	18 00	
5		44	4.6			3 25	**							

As manufacturers of the Alba Plate, and owners of the patent under which they are made, we desire to say to the fraternity, unequivocally, that we will protect any dealer or consumer buying or using these plates, against any party who may claim them an infringement of his patent.

PHENIX PLATE CO., Worcester, Mass.

SCOVILL MANUFACTURING CO., \ New York. General Trade Agents,

THE PHOTOGRAPHER TO HIS PATRONS.

WHAT IS IT?

HE PHOTOGRAPHER TO HIS PATRONS is a little book or pamphlet of twelve pages, the intention of which is: 1st. To enable the photographer to say a few words in a kindly way to those who have photographs taken, in order that the intercourse between them and their photographer may be pleasant and result in the most successful pictures. Every photographer knows that he is constantly beset with a lot of questions, as to the proper way to dress, the best time to come, and so on, which take a great deal of his time to answer. This little book answers them all, and the mere handing of a copy to the questioner, which he or she can carry away and study at leisure, serves as admirably as a half-hour's conversation.

2d. It is a cheap mode of advertising What could you want better than to have your business card so attractive that people will come and ask for it, hand it around from one to another, discuss it, and then keep it for reference? This is what they do with this little "tract." Witness what those who have tried it say below.

have tried it say below.

3d. It is also intended to convey to the public at large the fact that photography is not a branch of mechanics, nor photographers a sort of mechanic themselves, but that both are entitled to respect, the same as the family physician or the minister; that the photographer has rights as well as the public; that he must be trusted, and that he alone is responsible for his results. Moreover, that he must make the picture and not they.

How far the work serves these three ends the reader must judge from the testimonials below, of a

How far the work serves these three ends the reader must judge from the testimonials below, of a few of those who have been using our little publication in their husiness.

We believe it will pay you to use it, and that you will assist just that much in elevating your art and your craft, an object which we are all working for.

We get "The Photographer to his Patrons" up in neat style, on the best letter cap paper, assorted tints, green, pink, and buff. Eight pages are devoted to the body of the work, which contains paragraphs or chapters—1, on the object of the work; 2, on photography; 3, when to come; 4, how to come; 5, how to dress; 6, how to "behave; 7, the children; 8, general remarks on coloring, copying frames, prices he ing, frames, prices, &c.

All this is inclosed in a cover of the same kind of paper, the pages of which are at the service of the photographer who orders them to have printed thereon anything he may please, which printing we do without extra charge. We publish this leaflet in English, German, and Spanish.

Cuts for the covers we supply free.

1000 copies, cover included, . . \$20 00 . 35 00 5000 Over 500,000 have been sold.

TESTIMONIALS.

"I sent one out West to a friend, and she wrote that she was now posted, and when she came here to have a picture made, she would come 'according to directions.' ,'-A. BOGAR-DUS, New York.

"It assists me greatly."-JAMES MULLEN, Lexington, Ky.

- "A grand idea."-ELBERT ANDERSON.
- "You have conferred a great favor on the fraternity in supplying it."—A. C. McIntyre & Co., Ogdensburg.
- "It is the best advertising medium I have ever found."—H. M. Sedgewick, Granville, O.

We send samples to any who may desire.

BENERMAN & WILSON, Photo. Publishers, Seventh and Cherry Sts., Philadelphia.

PROMENADE ALL!

HERMAGIS'

Celebrated French

PORTRAIT LENSES.

CABINET SIZE, ARE JUST THE LENS FOR THE NEW

PROMENADE PICTURE.

MR. HENRY ROCHER, the renowned Chicago photographer, says of them: "In my opinion they are truly lenses of great capacity, and must surely satisfy every purchaser." Mr. Rocher has purchased two Hermagis lenses of card size and one Salomon style. See further splendid testimonial from Mr. Rocher in Specialties.

MR. F. GUTEKUNST, the celebrated Philadelphia photographer, was sent a Salomon Lens to try for us. and wont part with it. It cuts sharp a 9 inch standing figure, and heats a lens that has been his favorite many years, and where many makes of lenses have failed, on trial, to equal it.

The HERMACIS IS THEREFORE AHEAD

TRY THEM!

These celebrated lenses, are used by MONS. ADAM SALOMON, of Paris, exclusively for making his **WORLD-RENOWNED PORTRAITS**, and by the most famed photographers of Europe, from whom Mons. Hermagis has the Highest Testimonials.

We now have a FULL STOCK on hand.

The Salomon Style, 8 x 10 size, \$160.

For Cabinet Size, extra quick, \$100.

For Cabinet Size, quick, \$90.

For Carte Size, extra quick, \$50.

For Carte Size, quick, \$40.

They are being introduced in America steadily, and are liked wherever they go.

They will be sent on trial to responsible parties C. O. D., and instructions to Express Company to hold money one week for trial. If parties prefer to see the work of a lens before purchasing, we will make a negative and send with details of exposure, etc., and reserve the lens until answer is received (if the time is reasonable), on receipt of \$1 to pay cost. Having a skylight of our own we are enabled to do this.

18 Not a single person to whom we have sent these Lenses on trial, as above, has returned them.

BENERMAN & WILSON,

Seventh and Cherry Sts., Philadelphia, Pa.

HEARN'S PHOTOGRAPHIC PRINTING INSTITUTE,

FOR PRINTING FOR THE TRADE,

AND

FOR INSTRUCTION IN THE ART OF PHOTOGRAPHIC PRINTING.

The undersigned, author of the "Practical Printer," and for the past year printer for the Philadelphia Photographer, desires to say that he has leased the spacious and well-arranged printing-rooms of Messrs. Benerman & Wilson, for the purpose of giving photographers an opportunity of obtaining

INSTRUCTIONS IN ALL THE DETAILS OF

PERFECT PRINTING,

AND FOR

PRINTING FOR THE TRADE.

He respectfully refers to his work, many thousand examples of which are before the readers of the above-mentioned magazine, as a guarantee of his entire ability to attend to both branches well.

Having had the opportunity, during the past year, to see the many pictures from all parts which came to the office of the editor of the *Philadelphia Photographer*, he is surprised to see how many photographers there are, who make perfect negatives, and seem totally ignorant of what good work can be obtained from them, judging from their own prints.

IF YOU WOULD INCREASE YOUR TRADE, SEND YOUR NEGATIVES TO THE INSTITUTE TO BE PRINTED.

IF YOU WISH TO PERFECT YOURSELF IN PHOTOGRAPHIC PRINTING,

COME TO THE INSTITUTE AND BE INSTRUCTED.

PRINTING

DONE, BOTH IN PORTRAITURE and VIEWS.

The Plain, Vignette, Medallion, Plate, or Gray Printing, etc., will meet with careful and prompt attention.

Plain Paper Printing and printing of all kinds on Porcelain, a specialty.

Retouching Negatives will be a department of itself, and none but first-class artists will be engaged upon this very artistic branch of photography.

Glacè work, of all sizes and styles, done expeditiously and in a superior manner.

The attention of Landscape Photographers is especially called to the many advantages derived from sending their negatives to the Institute to be printed. To those who make a specialty of this class of work, it has often become a source of worriment that the negatives which are taken with so much care and trouble yield such miserable results in the printing, owing to the lack of feeling on the part of their assistants. So often has such been the case that they have been obliged to attend to the printing of their own negatives, and lose beautiful viewing days, so as to produce finished work, which will readily find its way to the critical taste of an appreciative public. To all such we especially invite your attention to our work, for such persons can send their negatives here to be printed, and have it done in a superior manner. Please give us a trial order, and we have no fear but that in the future you will find it to your advantage to have all of your printing done at the Institute.

Instruction will be given in all styles of Printing, Toning, etc., at reasonable rates, with the understanding that the parties must furnish all their own chemicals, dishes, frames, etc., used in their experiments, and we will accommodate them with excellent printing, washing, toning, and other space. Send for Circulars.

Having a skylight of our own we shall also do copying for the trade, so send your copy originals to the Institute and have both negatives and prints made.

Special terms upon application.

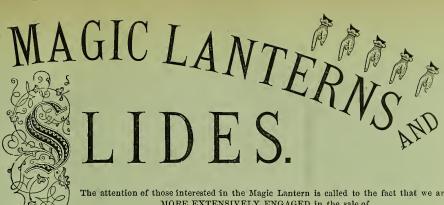
Prepare for the "Centennial" by having your arrangements perfected for having firstclass prints produced from your negatives, at reasonable prices. For further particulars address

HEARN'S

PHOTOGRAPHIC PRINTING INSTITUTE,

124 NORTH SEVENTH STREET,

PHILADELPHIA, PA.



The attention of those interested in the Magic Lantern is called to the fact that we are MORE EXTENSIVELY ENGAGED in the sale of

LANTERN SLIDES AS A SPECIALTY,

Than any other house in America. Our continuous contact with photographic men gives us special advantages in this line, and as MANUFACTURERS AND DEALERS we offer the very best opportunities to secure

MUCH FOR YOUR MONEY,

AS WELL AS SUCH GOODS AS WILL PUT MONEY IN YOUR PURSE, NAMELY:

A GOOD LANTERN, THE BEST of SLIDES.

FOUR CATALOGUES MAILED ON RECEIPT OF 25 CTS.

DO NOT BUY UNTIL YOU HAVE CONSULTED HEAD-QUARTERS!

USE WILSON'S

ecture Book describing graphically, as an eyewitness, 600 beautiful places and things in all parts of the world.

SUBSCRIBE FOR THE

Journal, devoted to the interests of lantern lovers.

\$1 per year, post-paid.

Special estimates and other information given gladly. No substituting of Slides. Prices very low. PROMPTNESS OUR RULE.

> BENERMAN & WILSON, Photo. Publishers, SEVENTH & CHERRY STS., PHILADELPHIA.

WHAT follows is a Catalogue of the best Photographic Publications, sent to remind all live photographers of the fact that good practical information is as essential to them as good lenses and pure chemicals. There are some "artists" who "get along" without any of these, but they do not progress, neither do they succeed. Do not be of their number. There is too much going on in photography in these "quick acting" times to enable any photographer to afford to do without reading and being posted. In anything you undertake you should take every precaution to be as bright as your neighbor, or he will get ahead. Keep alongside, any way. We wili mail you any of the works named below, post-paid, on receipt of price. Order now.

1876

WILL BE A YEAR OF JUBILEE FOR PHOTOGRAPHERS THAT SHOULD NOT BE NEGLECTED.

THE CENTENNIAL EXHIBITION

Will present opportunities for study and improvement which should not be overlooked, and the study of the best books will not only do you good before, but after the inspection of Photographic Hall, READ! READ!! READ!!!

BENERMAN & WILSON,

Photographic Publishers.

Philadelphia, Pa

1876 Photographic Mosnics.

HE Centennial anniversary year of American Independence finds our little Annual in its eleventh year. It is developing rapidly for its age and size, and this year takes quite an interest in the Centennial. It is full and running over with fresh contributions from the most wide-awake members of the fraternity in all parts of the country. We here give a list of the

bers of the fraternity in all parts of the country. We here give a list of the

CONTENTS.—Review; Eighteen Hundred and Seventy-six; Discoveries, Inventions, and Improvements; Work in the Studio; The Dark Room; The Printing Department; Landscape Photography; Dry-plate Work; Apparatus; Art Advances; The National Photographic Association; Our Publications; Our Prize Offer; Items of Interest; Obituary; The Art Progress; Fog; Come, Let us Reason Together; Experience; Provoking; A Suggestion Anent the Great Exhibition; Centennial Album of Photographis Studies; The Elimitating of Hyposulphite from Prints; A Treatise on Photography; Why not make Solars instead of Contact, etc.; Systematic Preservation of Negatives; Want of Enterprise; Lighting the Sitter; Theory and Practice; Be Punctual; Formulæ for Photographs and Perrotypes, which give Lights and Half-tones not surpassed; Exposure and Development of a Negative; A Cause for Faded Prints; How I Sunned a Bath under Difficulties; A Good Collodion; A Word to the Weak; How to Clean New and Old Glass Plates; Long's Bath Warmer; Albumen, its Preparation and Use in Photography; An Item of Real Value; The Negative Bath; How to Lubricate Prints for Burnishing; Then and Now; A Pair of Suggestions; How to Obtain Boiling Water in Winter; An Excellent Ware for Photographic Myrpose; Hints on Composition; The Causes and Cure for some of the Difficulties pertaining to Photography; At and Mechanism; Breakfast for Dinner; Field Work; Marble Negatives—Stains From the Hands, etc.; Pyroxylin—Gun-Cotton; The Old Bath; The Upper Floor; Dry-Plates; The Art Privileges of our Great Centennial; Curtains as a Meansof Adjusting Light; An Exposing Shutter; How to Touch out Finholes; Photography; The Toning Solution; A Chapter of Practical Matters; Climbing; Poor Negatives, their Cause and Cure; On Landscape Photography; A Cheap and Good Plateholder; The Way it is Done; To Correspondents; The Construction of Skylights; Blisters; At the Desk; On Photographic Lenses—How Voc Choose and Take Care of Th

Price, bound in Cloth, \$1. Paper Cover, 50 Cts. 144 pages.

hiladelphia Photographer.

THE BEST PHOTOGRAPHIC MAGAZINE IN THE WORLD.

EACH NUMBER EMBELLISHED BY PHOTOGRAPHY.

THE THIRTEENTH VOLUME of our Magazine promises to be the most popular and brilliant of any that has preceded it. We have many good things in store for it. It shall be our endeavor to make it all the richer and more interesting on account of the Centennial. We expect to embellish it with some of the choicest gens the Exhibition can produce and admirerest to its pages from month to month, by giving a sort of compendium of all that relates to Art or Photography. Among other attractions, we expect to have our old friend Dr. Voerlicher during six months of next year, at least, and our readers may expect some of the fruits of his genius and talents to add to its interest and usefulness.

But while we intend to provide all these home attractions, we do not propose to neglect whatever may transpire abroad, but shall present as usual correspondence from such well-known writers as Prof. Strebbing, Mr. W. J. Stillman, Mr. Chas. Waldack, and others. With all these good things in prospect for the year 1876, we hope to render our magazine more heartiful and more useful than ever before; and while we maintain that the beautiful example of photography, which accompanies each issue, is alone worth the subscription price, still more and more effort will be made to make the reading matter everything that it ought to be. Our correspondents from all the leading centres abroad will keep our renders posted on all matters or interest in their several sections, while our unrivalled staff at home will look diligently after your interests here. To make THE PHILLADELPHIA THO-TOGRAPHER the best PRACTICAL HELPER which can possibly be obtained, is the aim and earnest desire of its publishers, and offer to all present subscribers, who secure us new ones, the following

PREMIUMS.

For every new subscriber, for one year, \$1.00, payable in any of our publications, books, or, if preferred, one dollar's worth of any of our prize pictures, or any other article for which we are agents, advertised in this Magazine.

The subscription price of the Philadelphia Photographer is \$5 a year, \$2.50 for six months, 50 cents per month.

Each number, remember, contains a handsome photograph.

OUR BOOKS.

THE PRACTICAL PRINTER. By Chas. W. Hearn.

This very useful book is indispensable in the printing department. No one who wishes to be up with the times in printing, can afford to be without it. Its rapid sale and the favor with which it has been received, are the best recommendations we can give. Price, \$2.50.

BIGELOW'S ALBUM OF LIGHTING AND POSING.

This excellent work still maintains its popularity. It contains 24 beautiful photographs from life in different lights and positions, with an explanatory key, which makes it the most practical helper the Photographer can have. Price, \$6.60.

DR. VOGEL'S HANDBOOK OF PROTOGRAPHY. Second Edition.

This is a really standard work, and the most complete hand-book ever published. The new edition has been thoroughly revised, and much additional matter introduced, together with new illustrations, new photographs, and a new arrangement. all through. Now is the time to study up, and this book is ap-plicable to any department. Price, \$3.50.

DR. VOGEL'S PHOTOGRAPHERS' POCKET REFERENCE-BOOK.

This is in every sense a reference book. It is alphabetically arranged, and any process or formulæ in photography may be found at a moment's notice. All is arranged in a concise and practical form. It is particularly useful in the chemical department. Price, \$1.50.

THE FERROTYPERS' GUIDE.

This little work is by a practical ferrotyper, and gives just the instruction necessary to those who wish to do good work in this branch of our Art. Price, 75 cents.

LINN'S LANDSCAPE PHOTOGRAPHY

Is an excellent companion in the field, and may help you over many difficulties; can be carried in the pocket. Price, 75 cts.

GLIMPSES AT PHOTOGRAPHY. By Prof. Himes.

This work treats of some of the peculiar styles of printing, such as leaf-printing, etc., etc. Price, \$1.25.

WILSON'S LANTERN JOURNEYS.

To those who use the lantern this book is indispensable. It contains just the information required about six hundred different views, and enables any exhibitor to make his entertainments enjoyable and instructive. Price, \$200.

BURNET'S HINTS ON COMPOSITION.

We have reproduced this work by photo-lithography, and sell it at the low price named, while a copy of the original work could not be bought for five times that amount. It is fully illustrated, and supplies in a very attractive form, the art knowledge, in reference to composition, that so many pho-tographers are seeking after. Price, \$3.50.





Boston Public Library.

S R STONDARD

Philadelphia Photographer.

Vol. XIII.

MARCH, 1876.

No. 147.

Entered according to Act of Congress, in the year 1876,
BY BENERMAN & WILSON,
In the office of the Librarian of Congress, at Washington, D. C.

TALK AND TATTLE.

COME WITH YOUR EYES OPEN-to the Centennial Exhibition we mean. One of the best ideas we have yet heard comes from a photographer, who, strange to say, takes our magazine. He writes: "Send me such art works as you think I ought to read and study to enable me to enjoy the treasures which I shall see at the Centennial Exhibition." This man is more far-sighted than any one we have heard of. His head is in focus clean back to the ear, and his eyes are open tight. "To enjoy the Exhibition"that's the way to talk-and you all want to prepare yourselves to do that same. You will see wondrous works of art, such as you never before had the opportunity of studying, and they will be as a dead letter to you unless you open your eyes by studying art principles a little. You may enjoy beautiful colors, you may be sentimental enough to understand the subject of a picture, but the light and shade, the composition, the management of the lines, how about all that? There will be more to see than you ever dreamed of-296,000 feet of paintings and 20,000 feet of photographs, besides statuary! Come with your eyes open.

THE CARBON REVIVAL.—England has always stuck to carbon. France has practiced it more largely than elsewhere, and Belgium was among the first to apply it to

the every-day work of the gallery. Now, the carbon process is in use in all the important portrait galleries of Berlin, Brussels, Paris, and Vienna, for the production of portrait custom-work of all sizes, from the cabinet size up. And, as it has been seen, our foreign correspondents speak most enthusiastically of the success of the process in that direction. In our own country many tried it and found it a delusion, and one firm, Messrs. Allen & Rowell, Boston, are the only ones whom we know in America to have held on to carbon with success. Within a year or two, though, the process has been much simplified and made easy for any tasteful man to work. It is predicted that we have got to come to it. Let the enterprising post themselves and go at it.

The Tables Turned.—It is not so many years ago since we used to gather around the famous "Berlin cartes," and wonder over and admire them, and walk away half despairing to try to equal them. Many good lessons were learned from them, and they awakened a new feeling among American photographers, which developed talent which we were unconscious of. We owe much to our good friends in Berlin, and we shall have the pleasure of seeing several of them here during the Centennial Exhibition. But we speak wittingly when we say that they are "coming to learn." They are pre-

5

pared for it, for already at one of the late meetings of the Berlin Society nearly the whole session was occupied in examining some pictures by one of our talented American artists, which created a regular consternation among them, and not only were photographers there, but artists (painters) and art critics, and the unanimous verdict was that the American pictures, large and small, were "the most artistic productions they had ever seen executed in plain photography." And the photographer to whom Berlin has made this concession is none the less than our friend, Mr. Henry Rocher, of Chicago. Thus the tables are turned, and America is paying Berlin back the delight she once gave us. Now the croaker will say, with pointed finger, "Yes, but Mr. Rocher bought all his accessories in Berlin." Bah! so did the Berlin photographers.

WHY DON'T THEY-SURE ENOUGH ?-Speaking of Mr. Rocher reminds us of a complaint he made to us some time ago. While he is willing to stand by us, and aid us in presenting for the study of our readers some of the best examples of modern photography, he still thinks that "a lively spirit of rivalry should manifest itself among photographers to aid us in our work." He says: "There are hundreds of good ones who could do something; why don't they come forward? Are they afraid to divulge some of their ideas, or are they afraid of criticism?" We are unable to answer this We have always wondered that there should be any trouble to get negatives for our use, but there is-great trouble. We have only one or two more places for this year in our magazine. Who speaks?

WE WANT TO PLACE IT ON RECORD—Namely, that if the National Photographic Association falls, its blood cannot be upon us. We have done our whole duty in the matter. We have spent and been spent for it. We have brought to notice the fact that failure of the members to pay their dues makes it impossible for the Executive Committee to arrange for any convention or exhibition during this year, when the most golden opportunity ever offered is close at hand for reaping a rich reward. Heretofore the dealers have supplied a goodly share

of the means to "run" the National Photographic Association; and recently, in conversation with some of them on the subject, they aver their unwillingness to do any more unless the members themselves show some interest in the matter. Now we feel guilty in bringing up this subject so often, but our earnestness must be our excuse. We now say our last say until some one else says something, and that is, to suggest what you (fellow-member) can do, namely: Inquire of the Treasurer, Albert Moore, 828 Wood Street, Philadelphia, what your dues are; pay the same, and then suggest when you would like the next convention. We are quite sure that if you do this, the Executive Committee will carry out your wishes. This is our last call.

Signs of Life.—There are, after all, two or three evidences of interest in the above subject which came to hand lately. Messrs. H. F. Maneely, Muscatine, Iowa, and Edward H. Fox, Danville, Ky., have become members of the National Photographic Association recently. That is hopeful, to say the least. Mr. A. B. Stebbins, Tioga, Pa., says:

"DEAR SIR: In your article on the National Photographic Association, in the February number of the Philadelphia Photographer, you request an expression of all who have been members on the life and usefulness of the Association.

"Although I am a reader of your publications, and feel much inspired by your stirring editorials, I for one must decline to pay anything further to the National Photographic Association until I see if there will not be started this coming season a National Protective Association, or a change in the Constitution of the National Photographic Association. I think the National Photographic Association, as it is, does not benefit or protect the photographer, as it has no standard of excellence, and admits any one and everybody, so that the very poorest can become members and use its monogram. The ideas of Mr. E K. Hough suit my ideas, and I shall advocate them. Although if the photographers do not choose to form a Union as mentioned, I will do my best to help the National Photographic

Association, hoping that it may result in something better."

Well done. Let us come together once more. Ah! there goes another word—well, "don't count this one"—and talk all these things over.

MARLBORO', Feb. 14th, 1876.

DEAR SIR: The Photographer, for February, duly received and noted. It is brimful of good, but there is one thing that I feel sorry for, and that is that it looks as though the National Photographic Association was now going through the slough of despendency, and would either die or come out of it with newer life. The last I most heartily hope; and although I can do nothing for the Centennial, yet I will do and live for the National Photographic Association as long as I can. It has done much for me, as also your publications, and among them Burnet's Hints on Composition.

M. H. ALBEE.

A LITTLE BIT OF "HONORABLE" HISTORY.—The facts recorded below should be known to all of us. We know that photography—wondrous, blessed photography—has always been a great helper to the arts and industries, and although we have seen many a poetical couple come and sit "in a group," we believe this is the first, because undoubtedly the earliest, instance when photography was the "right hand man" of the poet. Oh, Mudgekeewis, and Wabun, and Hiawatha, go tell it in Gath! Here is the record:

EVANSTON, COOK Co., ILL., February 9th, 1876. FRIEND WILSON:

In looking over your Lantern Journeys, your description of Minnehaha Falls reminds me of a fact not generally known, viz., Longfellow never saw those falls until long after he had written "Hiawatha," if indeed he has ever seen them. The whole thing was suggested to him, and description made by him from seeing daguerreotypes I made of the falls and surrounding country, in the summer of 1851, in the month of August; the most fearfully hot days I ever experienced. On the same day, I made views of St. Anthony's Falls and country lying west of the river, where Minneapolis now stands, then a naked prairie.

This, I don't suppose will in the least interest you, but I thought it no harm to mention the fact.

A. HESLER.

DEAR SIR: I was surprised this month to see my little friendly letter displayed in the broad light of your columns; but I am not going to resent that "betrayal of confidence," for I am not the least ashamed to acknowledge publicly that I not only take your magazine, but what is more, actually read it; and, what is most of all, find it both instructive and entertaining. What I'm after now is a little "clearing up solution" on my "impression" of your "editorial foot" note affixed thereto.

I hardly know whether to thank you for it as a somewhat equivocal but well-meant compliment, or to resent it as a covert attack upon my New York brethren, using me as a masked battery. Did you really mean to whip them over my shoulders?

Do you always "wonder" to find a New York photographer a "live" man "interested in the craft?" And by "the above explains it" did you mean that my reference to Brazil, showing I had lived out of New York for some time, lessened the "wonder?"

Perhaps, knowing the enormous expense of running even a small gallery in New York, you "wonder" that in these tight times any of us "still live."

It is true that "our natural enemies" the landlords, literally "devour our substance" nowadays; but, nevertheless, we are "alive," and all of us ready to catch our share if it "rains larks," during the "Centennial," as we all expect; and we believe the shower will extend across the Hudson.

But if there is no doubt about New York photographers in general being "live," there may be some reason for thinking they are not much "interested in the craft," or in anything else outside their individual interests. It is pitifully true that New York portrait photographers have not enough community of interest in each other, as fellow-craftsmen, to maintain a photographic society, except one entirely German. The "Section" of the American

Institute can hardly be called a society, and none of the prominent photographers ever attend its meetings. And with the exception of Mr. Bogardus—whom we have all "delighted to honor" for his earnest and unselfish labors in founding and conducting through infancy our still unweaned and not-able-to-go-alone National Photographic Society—all our prominent photographers have resolutely kept aloof from all society communion; and some of them "make no bones" of saying they will not help to teach country photographers against their own interests.

Mr. Sarony, whom all admit to be our far-advanced leader, will hardly own he is a photographer. "He" is an "artist," and takes no stock with photographersunless he has something to sell them-also, Mr. Mora, his former pupil and present rival, who imitates him in everything, does likewise in this of having no society lot or interest with the craft. It is even rumored they, with Mr. Kurtz, and some others equally endowed with exalted consciousness of their own merit, are too proud to exhibit with "common" photographers in Photographic Hall, and have secured space among the "artists;" but that must be a mistake, as I see some of their names among the applicants in your list.

But in real or seeming selfishness, New York photographers are not alone, for it is also matter of comment through the craft, that all over the country those whose names were brought prominently forward by the first meetings of the National Society, and who financially "feathered their nests" through the magnified local reputations thereby obtained, have nearly all "gone back" on their "Artistic Mother," and left her to "go it alone," or die if she likes, without offering her even the cheap tribute of a mourning tear.

But my similitudes are getting a little mixed, making the N. P. A., like a Madonna of Raphael, both "mother and child"—besides, I had better stop before I talk" more than "tattle," veritable scandal, which Heaven forbid.

Yours in gossip, E. K. Hough.

New York, February 15th, 1876.

PHOTOGRAPHIC ACCIDENTS.

BY ROBERT J. CHUTE.

Last month I referred to some of the accidents which occur in the negative department of photography. I now propose to call attention to the printing, and other parts of the work which may be subject to similar misfortunes or accidents.

I do not expect these observations to be particularly instructive, or apply to those who are skilled in the work, except as they may be the victims of some of these freaks of ill luck. He that is without fault requires no advice or instruction, looking to self-improvement. "He that is whole needs not a physician"

While varnishing the negative, dust may accidentally be stirred up in the apartment, and settle upon the plate; the consequence of this will be seen in the minute white spots on the prints which come from it. In carrying negatives from the varnishing to the printing-room, a number are taken in a pile rubbing against each other, and accidentally some of them are badly scratched before they can get to the retoucher.

In floating the paper on the silver bath, the sheet may be lowered unsteadily, or accidentally stop, and cause a sharp line across the sheet, which will show in the print. This effect is the same as that produced in a negative when the plate has not been lowered steadily into the bath, any hesitation or stoppage causing a line which no after-manipulation can remove. Bubbles are accidentally formed under the paper by lowering the middle of the sheet upon the bath first. These bubbles, if not speedily removed, will each register a white spot on the print. To remedy this, let one corner come in contact with the bath first, and then lower the whole sheet gradually. A few light taps upon the back of the sheet will usually remove the larger bubbles, but it is well to make sure of a perfectly silvered sheet, by hastily raising the corner, by first lifting it from the solution with a glass rod, and then catching it with the thumb and finger; any bubbles are in this way quickly removed with the breath or the rod, and by raising successively either of the two opposite corners, the whole sheet may be examined in a few seconds.

Accidentally, the sheet on the bath is forgotten, by the attention being taken with something else, and instead of floating one minute or a minute and a half, it is floated five minutes, and bad prints are the result. They may be known by their heavy dull-black appearance in the shadows, sometimes bronzing and sometimes showing black spots all over the print. Oversilvered paper will also, especially in warm weather, turn yellow or brown, very soon after being dried.

By buying of irresponsible parties, a poor sample of ammonia may be used accidentally or unwittingly, and weak prints result from insufficient furning. The same may result from accidentally leaving the furning-box door open when it should be closed, or from the stopper being forced out of the ammonia bottle by its being kept in too warm a place. An evil in the other direction may arise by accidentally leaving the paper to furne too long, the result being blue, overdone prints.

Such accidents as cutting the paper unequally, giving some pieces too small to cut the print properly, and others so large as to cause considerable waste, placing the paper unevenly on the negative, failing to remove any dust or particles from the negative that may cause white spots on the prints, leaving the print exposed to the strong light so long that it is overprinted, dropping the printing-frame on its edge, causing the negative to move when partly printed, so that when done the print has a double impression, dropping the negative flat on the floor, and smashing it. It is always better to drop a negative or glass plate of any kind on its edge; this may be acquired by practice, and to those whose fingers are unfortunately slippery, this habit might save them a great deal in the course of a year; putting the negative in the frame wrong side out, and getting a mezzotint effect when it was not expected or desired; printing the weak negatives on the weakly silvered paper, and the strong negatives on the strongly silvered paper, thereby aggravating the evils it was intended to overcome. Keep the different qualities of negatives separated, and the paper for each in separate drawers or boxes, or have it so marked that mistakes of this kind cannot occur.

In toning, the gold is supplied by guess, or the bath is accidentally too hot, so that the toning is unmanageable and uneven, and overtoned prints are the result. Accidentally the toning bath becomes impregnated with hypo, and the prints refuse to tone at all. This may occur from having the hands in the hypo, and then putting them in the toning bath without washing. Any handling without carefully washing or changing of tanks or dishes from toning or washing to hypo or vice versa, will be fatal to pure, unblemished prints. In the hypo the prints are left without being moved; some are so covered by others that the fixing solution cannot act upon them; the consequence is unequal or imperfect fixation. The inexperienced photographer sees his prints looking yellow and mottled; some are clear in parts, while parts are muddy-looking, making him feel almost sick to contemplate it, and to believe that something in the process -he knows not what-has accidentally gone wrong. He is right about something having gone wrong, but it was from carelessness or ignorance rather than accident. Move the prints frequently in the hypo, and there will be no trouble with unequal fixing. It must be remembered, also, that a cold hypo bath works much slower than one of moderate temperature. An even or uniform temperature in all the solutions is one of the surest means of avoiding blisters and securing the maximum of good qualities in the print.

In the washing-tank the play of water is so arranged that the prints are forced into a bunch in one corner, and accidentally bruised and mangled so as to be unsalable. To remedy this, run the lead pipe around the top of the tank inside, and perforate it with holes pointing obliquely inward. This oblique direction of the streams has a tendency to keep the prints in motion, and insures a constant circulation of the water. If the tank can be arranged with a siphon, so much the better.

Most printers object to washing the prints all night, as the long soaking has a tendency to flatten or impair their brilliancy. This objection is valid, but the evil is not so great as the other extreme to which some printers have got to running, viz., that of washing the prints a half hour or an hour, and then hurrying them out, so that all may be done within the hours of the day's work. I have prints which I made twelve and thirteen years ago, which were washed all night in running water, and they are as bright and perfect now as the day they were mounted, while others made quite recently and hurriedly washed, have the jaundice badly, and will soon be too far gone to be tolerated even as the semblance of the dearest friend.

These sorry, faded specimens of our art are not looked upon by the public as the offspring of accidents, or even bad management, but their consumptive condition has come to be taken for granted as something inherent in and inseparable from the process. They have all come to understand that "photographs will fade," and so are charitable towards the careless or inexperienced.

But this is a poor shelter for a man who habitually and knowingly sends out work that has in it the elements of its own destruction. It is far more creditable to err, if we err at all, on the safe side, and by the strictest attention to every detail, a thorough study of cause and effect in every operation, and fidelity to truth and right with one's own conscience, reduce all accidents or the appearance of accidents, as far as possible, to that sphere which lies beyond the scope of human responsibility.

IS BURNET A HUMBUG?

As this work is on trial among photographers, and some of them may have entertained opinions in reference to it similar to those expressed in the following communication, we desire to call their attention to the conclusions one has arrived at who is seeking after light and truth to guide him in a better understanding of the principles of art.

By request, we omit names. Read what he says:

MESSRS. BENERMAN & WILSON.

GENTLEMEN: The copy of Burnet's Hints on Composition came duly to hand, and as I was busy at the time it was brought in, I merely glanced at the package, and concluded it was a small book for a big

price. When I had an opportunity to open and examine the work, I felt still more confirmed in the opinion that I had been considerably sold. But I concluded to smother my wrath and not write you at once, as the fault might be somewhat with myself. I laid the book aside till I had cooled off from my first impulse, and took occasion to go over it more carefully and dispassionately. I soon became convinced that I had expected too much; I had looked for something that should demonstrate to me, with but little effort on my part, just how a pieture should be arranged, i. e., any of my photographic sittings, according to the rules of composition. But when I came to the concluding paragraph of the book, I began to see the whole work in its true light.

Burnet says, "I must caution the young artist against supposing that these modes of arrangement are given for his imitation; I merely wish him to be acquainted with the advantages any particular composition possesses, that in adopting any invention of his own, he may engraft upon it those or similar advantages. A design that has nothing but novelty to recommend it, is a conceit, not a composition. The student in art can hope to derive advantage from theory only, when rendered obvious by ocular demonstration."

This satisfied me that there was something for me to do. I was not merely to glance over the work superficially and pass judgment upon its merits; I was convinced there was something in it that required effort on my part to get it out. No man would expect to find gold or precious stones lying upon the surface of the ground, however rich the field might be; he would expect to dig for them; and so I concluded to dig into this book. I have not explored far enough yet to get the real essence of what I am sure it contains; but sufficient has been revealed to lift me, as it were, into a new atmosphere. A closed door seems to have been opened, and I begin to see new beauties everywhere; pictures have a new meaning to me; some of the engravings of the pictures from which these little sketches were made, which I fortunately possess, have suddenly become endowed with new qualities, and possess to me a value that I never dreamed of before. This is how the work is affecting me, and I begin to see how its principles are to be applied to our art in every-day work.

If any have experienced at first a disappointment similar to mine, I would say to such, do justice to the book by giving it careful study, and my word for it, a new light will dawn upon you, you will see beauty where you never saw it before, and when once commenced it will grow upon you, and you will soon seem to be living in almost a new world.

As to the price of the book, its intrinsic value can searcely be estimated; it is not to be measured by most other books; it is not a mere statement of facts, or finely constructed theories, which are to be read and scarcely thought of afterwards, but as a stone falling in the middle of a quiet lake, which causes waves to radiate out and on till lost upon the shore, so the thoughts which will spring from this little work will spread out over all of one's future life, continuing to expand and grow broader as their waves flow on and on.

As a publication, its price is probably no more than sufficient to pay, when it is considered that the whole is a photo-lithographic reproduction, and the demand for it necessarily somewhat limited. After reading your preface, and considering the style in which the work is gotten up, I am perfectly satisfied that it could not have been published for less.

Excuse me for encroaching so much upon your time, but I have become enthusiastic on this art subject, and felt that I must tell you how I regard Burnet's Hints on Composition. You are at liberty to make such use of this as you may deem proper.

Truly yours,

This work has already reached its second edition. For sale by Benerman & Wilson.

OUR ADVANCE COLUMN.

In response to our invitation of last month the communications are beginning to come in; and we give the following, which carries out our idea precisely. We want to get the best formulæ, the best thought, and the best actual work photography is capable of producing, that this Centennial year may show just where we stand. How many will help us in this work, by giving their old methods of working and such improvements as they may have made and proved to be an advance?

MY OLD AND NEW. BY G. W. WALLACE.

I used to clean my glass by rubbing with rottenstone and alcohol; I now albumenize all my glass. My formula is about the same as that generally used, and published so many times; but I think that by Mr. Carbutt, in *Mosaics* for 1876, is an improvement on any yet published.

My bath I used to use 45 and 50 grains strong; I used to precipitate the iodide nearly every week, and was often troubled with the bath working badly, giving blue films and hard cold negatives. Now, I never precipitate the iodide any more than what little may occur when making up the bath to its proper strength; then any excess of iodide is precipitated and filtered out; when it does not filter clear, add a few crystals of silver, which will immediately clear it up. I use my bath from 30 to 35 grains strong, and boil when necessary to expel the ether and alcohol. When the bath appears to be foul I neutralize with ammonia, and the application of heat throws down the organic matter. After being made up again and filtered, I acidify slightly with nitric acid, C. P., when it always works well. My collodion I used to make complete at once; the consequence was that my favorite formula would deteriorate before I could use it up, and a lot of old collodion kept accumulating on my hands. Now I make my iodizing solution with ether, alcohol, and excitants, in proper proportions, which will keep indefinitely, and add the cotton to such quantity as I want to use from day to day. I always prefer to add the new to some that is several days old, and by this means keep a nearly equal degree of ripeness in working. New collodion may be used immediately by filtering carefully through cotton, and covering the funnel with a plate of glass to prevent evaporation.

The collodions I use mostly are made as follows:

Ether and Alcohol, Equal parts.

Iod. Ammonium, . . 5 grs. to oz.

Bro. Potassium, . . 2 " "

Cotton, . . . 6 " "

This collodion ripens quickly, and will seldom keep in good condition more than a week or ten days; it is therefore better to add the cotton to what is required for use within that time. If bromide of cadmium be used instead of potassium, the collodion will keep much better. I usually add the potassium by dissolving in a small quantity of water and add to the ether and alcohol solution. The resulting precipitate may be recovered by running the solution through one thickness of filter-paper.

A formula for collodion, with much better keeping qualities, is as follows:

Solution the same as before.

 Iod Ammonium,
 . . . 3 grs.

 Iod. Cadmium,
 . . . 2 "

 Bro. Cadmium,
 . . . 2 "

These collodions mixed usually produce an article superior to either alone. In warm weather I find that an excess of alcohol is beneficial; about 4 of ether to 6 of alcohol. An advance on my old methods, too, is to keep my bath warm in winter and my collodion cool in summer.

I used to develop all my plates alike, without noticing how the image was coming up until it was all out and washed; now I watch the development from the beginning to the end, using different strengths of developer, and holding the plate still or rocking it, as the case may require.

I used to make my sittings on light and flashy grounds, with but little attention to the position of the subject, arrangement of accessories, except to get in all I could, or to the disposition of the light. Now I use dark and subdued backgrounds, am very careful in the arrangement of the position, studying every line, use but few accessories, and those judiciously arranged to support or balance the subject; screen and control my light with great care, till I see on my sitter just the effect I desire in the picture. This last point is something that in my early photographic experience I could not

do; my eye was not trained to see light and shade. So if any young photographer is not able to see the picture, or the effect he wishes, with the sitter before him, let him not be discouraged, for by patient study and practice this will come to him.

I used to think it of little importance to endeavor to make myself agreeable to sitters, seldom made any attempts to draw one out or induce conversation. The consequence of this was all sorts of moods, over which I had no control. Now I study to make my gallery attractive. I meet every sitter as pleasantly as possible, and strive by being social to dispel any reserve they may feel, draw out their individualities, and secure, at the proper time, such an expression as shall be characteristic of them in their most familiar and unassuming moods.

I used to allow as many resittings as were demanded without prepayment, and was often wofully imposed upon as every photographer has been under similar conditions. Now I require a deposit on all sittings, have done so for more than ten years, and the payment of the full amount when the order is given. I have never found this rule to work to my disadvantage, while I have been sure of getting pay for all I did.

I have referred to the improvements in one department of my work. I had intended to cover the whole, but as my communication is already sufficiently long, I must leave the changes in the printing department till another time, or suggest that it be taken up by some printer who may be better qualified to treat of it than I am.

ALLEN & ROWELL'S METHOD OF CARBON PRINTING.

A few words for you on carbon printing. For the past year we have been in receipt of letters asking us many questions with regard to our manner of working, and if we were successful in printing our work in carbon. We have for the past three years made all our work, from $6\frac{1}{2} \times 8\frac{1}{2}$ inches to 30×45 inches, in carbon, and there is certainly a satisfaction in giving a customer a permanent picture, and knowing it will not be brought back to you with the question, What is the matter with our picture?

What causes these yellow spots? etc. We have thought best therefore to give our method of making transparencies and prints as follows:

 Cox's Gelatin,
 .
 \frac{1}{2} ounce.

 Water,
 .
 .
 10 ounces.

 Chrome Alum,
 .
 .
 10 grains.

 Water,
 .
 .
 .
 1 ounce.

Dissolve gelatin; add chrome alum gradually, stirring briskly; while doing so filter through muslin or Shaker flannel; coat clean glasses with the warm solution, place in rack to dry, taking care to keep free from dust. A quantity may be prepared, as they will keep any length of time. Negative must be masked with a half-inch margin, to keep that much tissue from being acted on by light, which forms what is known as a "safe edge;" place tissue on negative, and print in shade from one to two hours, according to density of negative; then take tissue out of frame, clip down to a glass, or pin down corners to a board, or turn up edges to form a dish, and coat with plain collodion, three grains cotton to onnce; let dry, then immerse tissue and glass in a dish of clean water till tissue begins to straighten cut; lift out glass with tissue on it on to a glass or board, and secure contact between the two surfaces by using a rubber scraper or squeegee, placing a piece of rubber cloth over the tissue to protect it from the scraper; leave to dry twenty or thirty minutes: beginners generally hurry this too much; then develop in clean water, 90 or 100 degrees, increasing in warmth if necessary, to make the paper peel readily off; wash off all soluble color, rinse with cold water, then in alum water, again in cold water, and put to dry in a cool place free from dust, as every speck of dirt will be enlarged in the negative; place transparency in enlarging camera, film side to lens, to make a reversed negative for carbon printing; the reverse way if for silver printing. Negatives for carbon printing should be vigorous and clear in shadows. To make a single transfer print, take your reversed negative, place tissue over it in frame, expose to light; no definite time can be given, as it is much more sensitive than printing in silver; immerse your print in water with a piece of single transfer paper, which is a paper coated with gelatin and chrome alum; get the two surfaces together under water, remove to a glass slab, use squeegee to secure perfect contact and remove air; do not be afraid of rubbing it too hard. Beginners usually fail in this also. Blisters will result from imperfect contact, whether caused by air or dirt between the two surfaces. Develop in the same manner as for transparencies.

For many new ideas in simplifying carbon printing we are indebted to Mr. E. Derham, our carbon printer and tissuemaker.

Yours respectfully,
ALLEN & ROWELL.
25 WINTER STREET, BOSTON.

PRODUCTION OF SPECTRA BY THE OXYHYDROGEN FLAME.

BY TASKER H. MARVIN, BROOKLYN, N. Y.

Some months since, in using the limelight for spectroscopic work, I had the good fortune to hit upon a method by which bright-line spectra, without an accompanying continuous spectrum, could be produced at will, by means of the oxyhydrogen flame.

I had been engaged in examining the spectrum of calcium, superimposed upon the continuous spectrum, which is easily seen by bringing the collimator of a compound spectroscope to bear laterally upon the incandescent point of the lime. I found that I could bring out all the bands of calcium, and the sodium line doubled sharply and brightly, notwithstanding the brightness of the continuous spectrum. When, however, the proportions of oxygen and hydrogen were so adjusted that there was no excess of the latter, the bright lines of calcium and sodium disappeared, and the continuous spectrum alone remained. The chemical reaction then seemed evident. The excess of hydrogen at the high temperature of the flame served to reduce the oxide of calcium, and an atmosphere of vapor of metallic calcium partially enveloped the cylinder. Hence the double spectrum.

Following the suggestion, I soon found a simple way to eliminate entirely the con-

tinuous spectrum, leaving the other remarkably bright, sharp, and persistent. I accomplished this by taking the light from a point above or quite outside of the incandescent point of the lime. After various experiments, the method adopted for producing these results most satisfactorily was, to prepare artificial cylinders, perforated centrally, the opening being one-fourth of an inch in diameter. These were slipped on the jet, which was a double one, the two jets of gas playing upon opposite sides of the inner surface of the hollow cylinder. This threw a flame directly upwards, from which the spectrum was obtained.

The incandescent points being within the cylinder, no continuous spectrum was possible, and the results produced by this device were in the highest degree satisfactory.

It was evident that if lime could thus be reduced, and the metal volatilized, other oxides could be similarly treated. I, therefore, had hollow cylinders of strontia prepared, from which I obtained the strontium spectrum with far greater brightness and persistency than is possible by ordinary means. Indeed, so far as my experiments have gone, I see no reason why this method is not applicable to most of the metallic oxides. In experimenting, however, with an easily fusible oxide like that of copper, I have found it necessary to combine it with some very refractory substance, like lime or alumina, in order to prevent fusion.

In applying this method to the projection of spectra, the results were very satisfactory, though conducted with the screen at moderate distances, and they warrant the expectation that the projection of most spectra may be effected in this way. My experiments in this direction have been limited for want of time. An attempt to photograph the lines projected to a distance of two or three feet, though only partially successful, was sufficiently so to satisfy me of the practicability of the operation.

I should say that, having called the attention of my friend, Prof. A. K. Eaton, to these facts, he has willingly lent his aid in the prosecution of these experiments, especially in the line of projection.—Amer. Chem.

HOW TO CONDUCT BUSINESS.

ORDER is said to be heaven's first law. We know the absence of it is chaos and confusion, usually resulting in failure or defeat.

In business of all kinds system is a prime necessity, and in none more so than in photography.

The recent discussion of "Photographic Rights," and the impositions which have been practiced upon photographers ever since the custom of showing proofs and making resittings became general, have suggested to us the propriety of giving some hints in reference to the best methods of conducting the business. We did this several years ago, but we outgrow theories so fast in these times, and there are so many coming into the business who are obliged to feel their way, and learn from experience what might be told them in a few words, that we propose to give the plans pursued by some of our foremost and best photographers of to-day, with the hope that it may help many others to adopt such methods as will insure the safe and easy conducting of their business, and protect them against imposition by unprincipled and pretending patrons.

Prepayment in part, or the whole, has come to be very generally enforced among our best photographers, as the only safe or satisfactory rule of dealing with the public. Many have hesitated long and suffered a great deal of persecution before adopting this; they feared to make a change, were fearful it would drive away their best customers, etc. But, as we have said, the old methods were outgrown, and an advance has been imperative. We have yet to hear of a photographer who ever regretted adopting a rule of prepayment, or found it to work disastrously. A man's best customers, those he fears the most to lose, are always the most ready to accept any such provision, while those who are never ready to pay, and will defraud, if an opportunity offers for them to do so, are always the ones to rebel against any restrictions which interfere with their free choice to take or leave a picture when finished according to order. These people will go away in a "huff," refusing

to "patronize anybody who imposes such unjust demands," and would seem to almost overwhelm the poor photographer with their indignation; but let him console himself: he is better off without their patronage. When his day's work is over, and he has the whole or part pay for all he has done, there is a satisfaction in it which those who run on the confidence plan know nothing of. A rising young photographer in one of our Eastern cities, who has been but about four years in business, has made the prepayment rule a success, and we will here give his method. He makes all his sittings by "appointment." For this purpose he has a card printed as follows:

Sittings for Small Photographs to be Prepaid; for other Sizes, a Deposit required

APPOINTMENT.

M		
On	Hour	
Style of Portrait,		

A. B. ADVANCE, Photo-Artist.

480 Progress Avenue.

The lines across the top, referring to prepayment, are made conspicuous by printing in red ink. This notification prepares every intending sitter, so that he or she goes fully understanding what is to be required of them, thus obviating any explanations or bantering when the sitting is applied for. At the time of sitting a check blank, on good, fine writing paper, about three by five inches in size, is filled out and handed to the sitter. This is arranged somewhat as follows:

NOTICE.

The charge for photographs is principally for making the sittings and plates, and under no circumstances will an order be cancelled after one sitting and one plate has been made.

No sittings made over after the expiration of one month.

No	Date,	
М		
Style,		

A. B. ADVANCE,
Artist-Photographer.

480 Progress Avenue.

Whatever money is paid is noted on this check, which answers as a receipt.

After the sitting the operator places the number of the negative on the check, and the sitter retains it. He probably uses also another blank, on which he writes the name, number, and amount paid, which he retains for the purpose of numbering the negatives, and having them properly registered in the negative-book. When proofs are sent or called for, they are placed in an envelope, on which is printed the following:

NOTICE.

The price charged for photographs being principally for the sittings and plates, no order will be cancelled, under any circumstances, after one sitting and one plate has been made. All proofs must be returned for reference, and no sittings made over after the expiration of one month.

A. B. Advance personally makes sittings by appointment only. All photographs to be prepaid.

No	Date,_		187		
м					
Style,			,		

A. B. Advance, 480 Progress Avenue.

It will thus be seen that the patron is fully instructed at every step as to what is to be required.

On the blank spaces, at the ends of his bill-heads, this artist has printed in red ink: "Terms: Cash in advance for photographs."

"Orders for crayons, paintings, etc., 50 per cent. in advance, balance C. O. D.," on one end; and on the other, the same "Notice" as given in the check above.

This gentleman commenced in an old community, where was the usual number of old established houses, who have been and are still being imposed upon in the manner so well known where prepayment is not required. He had seen so much of this in some of the leading galleries, where he had been as operator, that he determined at the outset to do business on a different prineiple, or do none at all. He commenced with the same distrust and misgivings which nearly all have experienced under similar circumstances, but he never for a moment went back, and now he has the satisfaction of seeing his policy and his business a confirmed success.

Where a person has been for some time located, and his patrons are familiar with his methods of conducting his business, it may not be policy to enforce a new rule of this kind against those whom he knows to be reliable. Let it grow gradually, and when it becomes known, and its purpose understood, the best and most reliable customers will be found the readiest to conform to it. Any principle based upon justice will always be approved by all honest, well-meaning persons.

It was our intention, when we commenced this article, to refer to the business methods of several of our leading photographers, but as it has already grown to a sufficient length, we will leave the matter with our readers, with the suggestion that they communicate to us any rules they may have adopted as an improvement on their former plan of working which may be of service to the fraternity. We started our Advance Column for the purpose of drawing out all such items of progress, and ascertaining this year just where we stand. Let us take an account of stock and see how much we have gained. How many will help us? See first page of February number.

HINTS TO BEGINNERS.

FIXING.

Water, 10 oz. Hypo soda, 1 "

The hypo should be dissolved some hours before the prints are introduced. After

having put the prints into the foregoing solutions, be careful and keep them from attaching to each other, and keep them in constant motion during the fixation, which should last from twelve to fifteen minutes. Some doetor the fixing to prevent blisters. The following will be found more useful. Blisters are most apt to occur with freshly albumenized papers, and should be worked with a very rapid process, of which we have none. The best method for albumen paper that blisters is to keep the washing waters, toning and fixing, the same temperature, hence the less chance for expansion and contraction, for instance, from a warm toning to a cold dish of water is sufficient to produce blisters on albumen paper. After the prints have been carefully fixed, remove them to a dish of water, which change frequently for several hours, then they can be hung up to dry or mounted wet.

Conclusions in next issue.

L. T. WILT.

FRANKLIN, Pa., February 9th, 1875.

GERMAN CORRESPONDENCE.

Preparations for Philadelphia—Negatives by the Carbon Process—M. Carey Lea's Objections.

BERLIN, January 28th, 1876.

THE end is approaching of the time fixed for the delivering of the goods for the Centennial Exhibition. Many of the packages have already been shipped; others, whose proprietors are waiting for better weather, are still kept back. The sky remains cloudy; for four weeks we have not seen any sunshine, and I fear, among the goods for the Exhibition, there will be found many underexposures. For this reason some of our most prominent expositors intended to withdraw, among them Albert, in Munich, the inventor of the Albertype, and Braun, in Dornach, but fortunately they changed their minds, and will send, although late.

Meanwhile we have made many experiments in pigment print. Unfortunately there is a deficiency in the number of good operators in this branch, and that is the only reason the greater part of the photo-

graphs sent from here consist of silver print. One of the most interesting applications of the new process is certainly the reproduction from negatives. Some time ago we became acquainted with an interesting process by Obernetter, namely, the dust process. A coating of gum and chromate is placed under the negative to be toned, and by dusting with graphite another negative is produced. As simple as this process appears, it has many difficulties. A greater or less degree of damp weather may change the adhesion of the coating considerably, and it requires a good deal of experience and skill to produce the right thing. Besides this the negatives must be taken on plate-glass, otherwise a sharp copy is not possible. These difficulties do not exist in the pigment process, though there are several operations necessary to make a negative. At first it is important to prepare a good positive. This we accomplish by copying the negative in the usual manner on the carbon tissue. For this purpose it is only necessary to expose briefly. I copy by my photometer twice 24°, that is, till two chrom-paper strips after another are toned to 24°; but the ordinary pigment paper is not fine enough for this purpose. The Autotype Company in London is preparing for it a special transparency tissue which answers every requirement. The copied tissue is to be transferred on a collodionized glass plate, and developed in perfectly clean water. In this manner we get a fine positive. Under this positive another piece of special tissue is now to be copied, but this time only to 22° of my photometer, and in this manner we receive, by transferring it again on glass and developing it, a very fine negative in half tones. But this is not intense enough, and would deliver a poor impression, but we can strengthen it in the usual manner, and make it as intense as we wish. I have produced negatives in indirect manner which delivered pictures just as well as original negatives. Generally two minutes are sufficient for strengthening. The negative shows a brownish color and seems to be very thin, so that we are inclined to doubt its copying ability. How sure this method is, is shown best by the fact that I succeeded completely by the second trial in reproducing a negative; and how valuable it is, I learned thereby too, for at the first trial I broke a very rare and irreplaceable negative of a forest scene, taken by myself at the Nicobars, but fortunately it was already reproduced.

On this occasion I also made some trials relative to the sensitiveness of carbon tissue, and noticed that it is three times more sensitive than silver paper.

In the August number of the Philadelphia Photographer I took occasion to repel Mr. Lea's objections to my theory of the action of light on colored bromide films, and in the November number I published the letter which I received from Mr. Waterhouse, which contains many facts in support of my view. Now Mr. Lea has given an answer in the British Journal of Photography of January 17th, in which he continues the dispute, and wherein he quotes Waterhouse's statements inaccurately. I have read repeatedly Lea's article, and feel sorry that this deserving searcher in photography does not hesitate to make false assertions in order to sustain obstinately his own theories. When, in scientific matters, the love of truth fails, then all honest argument becomes an impossibility. I refrain from a continuance of the discussion, and restrict myself to a simple statement of the inaccuracies of Mr. Lea.

Mr. Lea says: "In the British Journal of Photography, for September 12th last, there was printed a communication from Captain Waterhouse, referring to some experiments made by himself, and more especially to our showing that a plate colored red with roseine was thus rendered sensitive to red rays."

That is not true. Captain Waterhouse says literally, at the cited place, in relation to the plates colored with roseine:

"On applying the alkaline developer the green, yellow, and red gradually appeared, and obtained a spectrum showing a strong action extending beyond D to about halfway between it and C, and though the C line was not visible, there was faint action quite up to it."

Waterhouse says further: "The same plate with two minutes' exposure gave a similar result, and I obtained a spectrum showing strong action up to about half-way between C and D; there it suddenly fell off, but the C line was quite distinct, and visible action extended beyond C to B, and possibly to A."

Consequently there is nothing else existing but a faint action in red; the main action, as described by Waterhouse, stops "half-way between C and D," that is, in orange!

But with more certainty states Waterhouse in the letter directed to me, which I published in the December issue of the *Philadelphia Photographer*, p. 381: "Roseine markedly sensitive in yellow, insensitive in green, not sensitive in red" (much the same as naphthalin red). Waterhouse repeats the same in the *British Journal of Photography*, December 10th, p. 594.

Therefore Mr. Lea's assertion is not correct! Still further, Mr. Lea asserts, as taken from Mr. Waterhouse: "Corallin, he finds, increases the sensitiveness to the red."

That again is incorrect. Waterhouse wrote to me: "Corallin appears sensitive in the red, but I have more trials to make before I can be certain;" and in the British Journal, December 10th, he writes: "I have not quite determined the action of corallin, but it appears to increase the action in the GREEN more than the dyes already noticed!"

Mr. Lea then asserts: "I was the first to observe that colorless substances also affected the sensitiveness of silver bromide to various rays."

That, also, is a mistake. In 1873, I stated in the Berichte der Deutschen Chemischen Gesellschaft, p. 1303, that a colorless substance—namely, solution of silver—considerably increases the sensitiveness of bromo-silver for the blue rays of the spectrum.

In the August issue of this journal, p. 240, I was placed in the disagreeable situation of having to condemn some assertions made by Mr. Carey Lea.

In future I shall consider it beneath my dignity to controvert in scientific matters with men who falsify facts.

I hope soon to see you.

Truly yours,
DR. H. Vogel.

FRENCH CORRESPONDENCE.

New Year and Amateurs—Meeting of the Photographic Society of France—A Prize of 1000 francs offered by the Photographic Society of France for the best Dry Process— A Generous Photographer—Presentation of Silver Prints—Experiment with Willis's New Platinum Process, by Prof. Stebbing, before the Society.

THE beginning of the New Year is always for the Parisian a season of toil, trouble, vexation, and fatigue. Toil in the numerous visits which he is forced to make, trouble in the derangement which the purchase of New Year's gifts to his friends and acquaintances causes him, and vexation to find sometimes that his purse is emptied without a corresponding contentedness on the part of his friends, and fatigue caused by the numerous balls and receptions to which he cannot but be present. Philanthropical and scientific societies feel the "contre coup" of all this emotion; the members are everywhere but in their "fautcuils," the arms of which appear to be stretched out in vain to receive their owners. We had a specimen of this desertion: last Friday evening the monthly meeting of the Photographic Society of France took place, but was more than poorly attended. The absentees, who are generally, as we should suppose, admirers of the orb of day, instead of studying its chemical composition with their colleagues, were no doubt admiring artificial light in the shape of a magnificent chandelier throwing its light upon surrounding beauty. No doubt they thought that a photographic society could get on for once without their aid, and that there was no danger of the clock of time running down through their neglect. Although sorrow was rife to be so deserted, and business dull, a conversation took place upon the next photographic exhibition in Paris. This exhibition, although it cannot offer so much attraction as that of Philadelphia, still as a local one it will not be without interest. It will be opened in the month of May next in the "Palais de l'Industrie au Champs Elyseés," the admired promenade of this gay city.

Mons. Davanne, the chairman of the evening, informed the members that the Society

had received from "Le Ministre de l'Instruction Publique" the grant of 500 francs to be added to the prize of 500 francs already proposed by the Society for the best dry process. The prize is open to foreign competition; therefore I give the programme. A sum of 1000 francs will be awarded by the Photographic Society of France to the author or inventor of the best dry process. The desideratum is to obtain for the public weal the revelation of a preparation which can be preserved for an undetermined space of time, and which, when flowed over a glass or any other substance, would, by simply drying, give a sensitized surface equal to wet collodion. The prize will be given in part or wholly to the inventor whose process approaches the nearest to these requirements.

Another prize of 500 francs has been generously offered by Mr. Liebert, the well-known American photographer, residing in Paris; he has placed this sum in the hands of the Photographic Society of France to be given by them to any one who can discover and make known a more rapid process than that now in use for the production of portraits, etc., in the studio.

Some very fine silver prints were sent to the Society by Mons. Chauvigné, of Tours. They were remarkable for their artistic arrangement. Being reproductions of "bouquets," great latitude was left to the artist to exercise his skill, and he has done so in a very master-like manner.

I was then called upon to make a few experiments, in presence of the members, with the new platinum printing process of Mr. Willis, Jr.

That gentleman had sent his operator over to Paris, with the intention of having his process worked under my superintendence, in order to give publicity to his invention.

Everything had been prepared to develop, tone, and fix a few proofs in presence of the members. I will give the report I then made in full, hoping that it will interest the readers of the *Philadelphia Photographer*. The tenor was as follows:

Gentlemen: I intend this evening to fulfil the promise I made you at your last meeting, that is to say, make a report and experimental demonstration before you for the production of positives on paper by means of a platinum salt, an invention of W. Willis, Jr.

Yesterday I had the pleasure to call on your honorable Vice-President to borrow a negative; this negative was employed today to print a certain number of positives, which I shall have the honor in a few minutes to develop before you. The operator began to work this morning at 9 o'clock, and at 4 o'clock only eight proofs had been obtained. I desire now to draw your attention to the conditions under which the printing had been executed. The light was very bad, and the negative very dense. I beg Mons. Davanne to have the kindness to state approximately how many proofs he himself would have been able to obtain in silver salts with that negative, and with the feeble light of to-day.

Mons. Davanne replied, that as the negative was made by Taupenot's process at the same time it was yellow and dense, he should probably not have been able to print more than one and a half. (Laughter.)

I took the liberty of putting this question, said I, because I desired to show the rapidity of this process, for the great value in the present day of a new process consists in a great measure in the rapidity of its manipulations, for "time is money."

The first operation required in this process is the pasting of the surface of Saxe paper with a paste made of arrowroot or fine starch. This coating has for its object to prevent the solutions from penetrating too far into the pores of the paper. When the paste is thoroughly dry, the paper is floated upon a weak solution of nitrate of silver for two or three seconds, then dried. When dry, the sheet of paper is laid flat upon a glass or wooden table, the four corners being held down by means of pegs or pins, and a small volume of a mixture of ferric oxalate and chloroplatinite of potassium is poured upon it and spread in a uniform manner over its surface by means of a sponge or piece of flannel. The paper is now dried, cut up into a convenient size, and placed under negatives in the printingframes. A sheet of paper was sensitized this morning in the above-mentioned manner, and the eight prints now before you

were obtained under very unfavorable circumstances. As you can see, the image is barely visible. The platinum salt has not yet undergone any change whatever, but a chemical change has taken place in the ferric salt employed, the action of light has changed the ferric oxalate into ferrous oxalate, and in proportion to the quantity of light which passed through the whites and blacks of the negative, this last-mentioned salt alone having the property of reducing the platinum salts into a metallic state, when in presence of an oxalate of potash. In the enamelled tray now before you is a solution of potassic oxalate which must be slightly warmed. In contact with this solution the proof, now barely visible, will flash out instantaneously as the platinum salt has been reduced into a metallic form in proportion to the quantity of ferric oxalate which had been transformed into ferrous oxalate by the action of light. As you have seen, gentlemen, the eight proofs were developed in less than eight minutes before your eyes. The proofs are now left a short time in a weak solution of oxalic acid, which dissolves out all the untransformed ferric oxalate, leaving the whites of the proofs very pure. After having been rinsed, the proof is terminated so far as concerns its permanency, but the tone is not very agreeable to the eye; to give it the charm and brilliancy of a silver proof, it is necessary to tone it in a solution of sulphocyanide of gold. It is here that the small quantity of silver previously put upon the paper plays a great part; it facilitates the toning, and makes the image lay as it were firm hold of the fibres of the paper. After this operation the prints are plunged into a bath of hyposulphite of soda, in order to eliminate any soluble salt which might remain. The proofs are finally rinsed in plain water for about a quarter of an hour, and they are ready for mounting.

The members took a great interest in the manipulations, and admired the specimens very much.

J. Stebbing.

PARIS, 3 PLACE BREDA, January 9th, 1876.*

ELIMINATING HYPOSULPHITE FROM PRINTS.

BY W. H. SHERMAN.

In Mosaics for 1876, on pages 30 and 31, is published a process by Mr. Clemons designated by the above title. As the author alludes to a former article of mine on the same subject, applying to it a charge of "fallacy," and as silence on my part may be taken as acknowledgment of defeat, this reply may not be deemed improper or uncalled for.

He quotes from a paragraph in my artiele as follows: "If you immerse the prints in the solution of alum the liquid will assume a milky appearance, and the sense of smell will easily detect the odor of burning sulphur." This, he says, has never been his experience. He further says: "It is easy for those interested to give it a trial to see the fallacy of the statement." Take Mr. Clemons's process as given at Chicago (for that was what was under discussion), and "give it a fair trial" with a good batch of prints. He then said: "I first take the prints, dripping, right from the hypo, and immerse them in a saturated solution of alum, and leave them a few minutes." Let some one who takes stock in this process, physic a few hundred prints after this manner to the letter, and report to those interested where the "fallacy" is. I presume that a few prints may be manipulated with the alum solution, immersing them two or three minutes, throwing away the alum, rinsing the prints, immersing again in fresh alum, throwing away again, rinsing, and so on (thus managing by a sort of sleight of hand to keep out of sight the sulphur and sulphurous acid), and so brought through the fire apparently unscathed. The real fallacy lies in throwing away the alum solution after rinsing it two or three minutes. Why this amendment in the process since making it known at Chicago? Not that it is not a good thing to improve in everything; but what happens to the alum in two or three minutes that it should be thrown away? Why not immerse the prints in the same solution the second and third time, as directed at Chicago? Why, simply because, with a respectable batch of prints, the sulphur and sulphurous acid would make their

^{*} The above arrived too late for our last issue, so that we have this month two letters from Prof. Stebbing.—Ep. '

appearance, and the real nature of the process be revealed, whereas by the revised method the *outside* of the prints apparently escapes.

Mr. Clemons further says: "I am aware that by pouring hyposulphite into an alum solution a milky appearance takes place at once, and gives off sulphurous fumes." " But if the prints are once fixed in the hyposulphite no such action takes place." According to this account, the fixing of the prints so changes the hyposulphite as to prevent the alum from decomposing it. If this were true it would be most unfortunate for Mr. Clemons's process, for in that case the alum would no more "eliminate" the hypo than so much common salt. The two solutions, to wit, the alum and hyposulphite, would simply mix, and neither one nor the other be eliminated.

But let us see how the statement stands examination. Take a little saturated solution of alum in a test-tube, and add drop by drop a little of the *last used* hypo bath. A few drops will suffice to produce the "milky appearance," showing the utter absurdity of the above assertion. I have shown the experiment many times without ever a failure.

The author further says: "I have tried all the known tests for sulphur in the finished prints, such as soaking them in turpentine then flaming it to see if I could detect the smell of burning sulphur; also in a saturated solution of acetate of lead, etc.; but all have failed to show the least trace of sulphur."

This, I suppose, is not intended as a joke, or as a burlesque on the seience of chemical analysis, but as serious scientific matter, set forth to quiet any misgivings in the minds of photographers as to the propriety of immersing their prints in a solution having such a powerful acid reaction as to require their removal in "two or three minutes." Lest such an array of "known tests" should have the effect of lulling to rest the wellfounded apprehensions of mischief naturally excited by the very nature of the treatment and the known reaction of the substances thus brought together, let us examine the tests mentioned and see, if we can, how much they prove.

First let us take the turpentine test. Considering that the sulphur (supposing it to be present in the prints under examination) is partly in combination with the silver and gold of the prints, forming sulphides which the turpentine does not dissolve; considering that, of the free sulphur which is lodged in the pores of the paper, but little is removed by simply soaking in the turpentine; then, that the turpentine has a very pungent smell of its own, it will not be too much to say that the organ of smell, which at a safe distance from the flame can detect the presence of sulphur, must be in such a high state of training as to make it altogether superfluous to soak the prints in the turpentine at all. Smelling of the prints would answer quite as well.

Second, soaking the prints in a saturated solution of acetate of lead. This is just as much of a test for sulphur as soaking in a tub of rain-water, and no more. To prove this, we have only to take an ounce or two of the lead solution, and add half a teaspoonful of sulphur; mix well in a porcelain mortar; set aside until the water evaporates and the lead salt crystallizes; redissolve with boiling water. No apparent change will take place either in the lead solution or sulphur.

So much for the two "known tests" of sulphur in photographic prints, as published for the first time.

But it will not do to say that alum "eliminates" the hyposulphite from the prints and does not decompose it. It does both, or it does neither. If no hypo remains in the prints after the treatment in question, then it has been decomposed—all excepting what has been washed out. What is washed out is not helped out by the alum, for the capacity of the water to hold the two salts (the alum and hyposulphite) is not lessened by mixing the two solutions. All the hyposulphite that is decomposed deposits its sulphur-some in the pores of the paper, there to remain, and some on the surface of the prints, a part to sulphur-tone them and a part to be rinsed off and thrown away with the remainder which is liberated in the so-

In proof of the sulphur-toning I refer to Mr. Hesler's article in *Mosaics*, for 1875,

page 111, where he recommends a very weak solution of alum (less than 3 per cent. of a saturated solution). He says: "If you use alum, do not tone so much, and use less gold, as the alum makes the prints two or three shades darker than the gold and hypo leaves them." Others, who have tried the process, have told me that the alum toned their prints. If no hypo is present in the prints the alum does not tone them. This I have repeatedly proved by experiment.

Are photographers willing to go back to sulphur-toning under any guise? Twenty-one years ago Mr. Hardwich demonstrated it to be an efficient cause of fading, a deduction which the observation and experience of the intervening period has only confirmed. Can we afford to go over this old ground again? It may take ten years to settle the alum question, but nothing seems surer to me than that, being the same thing in another form, it will sooner or later share the same fate. In the meantime, having shown the matter up, as I believe, in its true light, I shall leave those who so prefer to see the folly of it by using it.

MILWAUKEE, February 8th, 1875.

PHOTOGRAPHIC HALL.

In our article on this subject last month, we forgot to mention the fact that Photographic Hall is to cost \$26,000. The Hall is rapidly approaching completion. The arrangements of the superintendent are not sufficiently completed to enable us to state definitely this month about how the space will be apportioned, although the spaces for Great Britain, Germany, Austria, France, and the United States are pretty well settled upon. Already several exhibits have arrived from Europe, and among them some exquisite things.

Now there are a great many of our readers who are preparing to exhibit in the only building ever devoted exclusively to photography, and what follows may be of service to them.

If you have applied for space you have received an acknowledgement of it with a number attached, which you are to use in future correspondence concerning it. Ap-

plications have been made for more space already than the Hall provides as now arranged. There will probably be more uprights erected. Applicants will shortly be communicated with on the subject of space. All that being arranged, and your pictures ready to leave you for the place of exhibition, you may send by what method you please, and the freight and all charges upon them must be paid. At this end of the route they will come to the hands of the Committee on Admissions, who will examine the work as to merit, and if up to the standard, turn it over to the Committee on Hanging. Of the Examining Committee, John C. Browne, Esq., President of the Philadelphia Photographic Society, will probably be the chairman-a gentleman well worthy, capable, and impartial. It is not settled who will be the superintendent. If it is desired to sell from samples sent, or to insure the goods (which should be done by all means) or to have them sold at the elose of the Exhibition, all such matters will come under the Superintendent's care. Any one can come and unpack and arrange his own exhibit, and care for it during the Exhibition, and reship it himself, or he can depute some other person on the spot to act for him.

After the Exhibition the goods must be repacked and reshipped (if not sold). For space there is no charge. What are called terminal charges are for care and storage of the packing-box, and for its removal from place to place. But it is very trifling.

We have taken it upon us to see that our readers are posted in this matter, and shortly all who have applied for space will receive a circular from the parties named, giving all necessary information in good season.

Meanwhile-get ready.

MAGIC LANTERN SLIDES.

We have made considerable reduction in the prices of these goods lately, and have many new and beautiful subjects. Subscribe for *The Magic Lantern*, \$1 a year, and keep posted. Send for special terms. See advertisement.

EMULSION PROCESS IMPROVED.

BY A. F. CHASE.

WHILE the emulsion process is in vogue permit me to give the result of my experience, although but an amateur. Since Mr. Newton's article on the subject appeared, in June of last year, I have been working and experimenting with the process during my leisure, and I am happy to say with success. I can frankly say that I think it the most perfect process for the following reasons: Every plate from the vial of emulsion is alike, which is not the case with a bath; there is no waste silver, every grain being used up clean, and all nitrate of silver stains are avoided, which is quite an object to all amateurs like myself. My method of making and using the emulsion is exactly according to Mr. Newton's formula, with the exception that lately I have been introducing the organifier (preservative) in the emulsion, thus doing entirely away with everything but the one vial of emulsion; no filtering or slopping of preservative mixtures, or drving of plates; merely flow them with the prepared emulsion, and all is complete; they can be used while moist or when dry. How long the emulsion will keep with the organifier in it I have not had time to test, but I now have some over two weeks old and showing no signs of deteriorating yet; in fact, I think it is more sensitive than when first made. My formula, in every other respect, is taken from Mr. Newton's, which has been published before, and is as follows:

Dissolve the bromide in the alcohol, add the cotton next, and lastly the ether; take from the above 3 ounces, and add 54 grains fused nitrate of silver finely pulverized, and dissolved in alcohol by boiling, and adding 12 grains chloride of cobalt dissolved in ½ ounce of alcohol about eight or ten hours after. The preservative mixture (organifier) I prefer is simply coffee and alcohol, made as follows:

Roasted and Pulverized Coffee, . $\frac{1}{2}$ ounce. Atwood's Alcohol, . . 1 ounce.

Digest for about a week, and filter. When the emulsion is in good working condition add from 15 to 20 drops to the emulsion, as works best. I have also tried tannin and pyrogallic acid with good results; also Mr. Newton's substances, laudanum and nux vomica; 20 drops to the ounce of a 4-grain solution of acetate of morphia works well. I prefer the coffee, as it is simple and seems to give me the best results. I develop according to Newton, with a 3-grain solution of pyrogallic acid and water until all details are visible, when a few drops from either of the following vials of ammonia solution completes the intensity:

In one vial put 5 grains bromide of ammonium, and in the other 15 grains. If the exposure has been too long, use from the 15-grain vial, or mix to suit the case. I fancy they are more sensitive with the organifier in the emulsion, as with a stereoscopic lens (imitation Dallmeyer), 4-inch focus, using a \(\frac{1}{4}\) inch stop, I have made full negatives, with an exposure of two seconds, at 3 o'clock in the afternoon, that is, landscapes; and using a \(\frac{3}{4}\) inch stop in the same lens, made the same subject almost instantaneously, merely uncapping and covering the lens as soon as possible.

To all who may try Newton's emulsion process I would say, give short exposures, as the plates are very sensitive; I think more so than the wet process. In regard to the keeping properties of his emulsion, I have some prepared last August, and it works well yet, only it is not quite so sensitive. The idea of introducing the organifier in this emulsion first occurred to me after reading Mr. Singer's article, where he used the substances in alcohol to flow over the plates when set.

In conclusion, I would say to all amateurs, try Newton's emulsion process, and if you are not pleased I will be greatly mistaken. I do not give the eoffee as the best organifier, only what seems to yield the best results in my hands.

Our Prize Offer for Retouching.

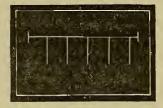
SINCE our last issue, containing an offer

of a gold medal for retouching, we have been reminded by one of our subscribers that many have no multiplying camera, and cannot, therefore, make double negatives. In view of this we will modify the terms of the offer as follows: We will give a gold medal for the best six negatives of cabinet size heads, the particular size not material, which show the most artistic retouching. Each negative must be accompanied by a mounted print, made before retouching, and one made after.

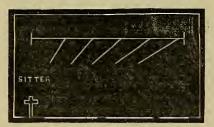
For the further provisions of the offer, see February number.

WRINKLES AND DODGES.

A word about the Vanderweyde studio. My light, when I was in business at St.



Paul, Minn., had a northwestern aspect, 15 feet long, 11 feet wide, being at an angle of about 45°. I had five curtain frames covered with blue paper hung on points, not hinges. When free they hung straight down; they were so calculated in regard to width that I could exclude the sun entirely, and yet have full use of the entire light;



this gave in my estimation precisely the same effect that the Vanderweyde light will give, without a royalty. I used it for four years, and several artists who saw the arrangement adopted it.

If E. K. Hough will drop the short end of his siphon into the bath, then lower the

long end until he can just hold it, he can then put his finger on the end of it with or without the glass tube, and stop it tight; then raise it high enough to grip it tight between the thumb and finger of his free hand below "water-mark;" his siphon is now full, and no need of sucking; turn down the end far enough to insure its running, remove the pressure, and it will start at once. I have used it for years without the glass, but consider that an improvement. Thanks to E. K. H.

Sphynx advises Texas to add 12% per cent. of water to his alcohol for heating his burnisher. Why not use methylated spirits? As I did not have to pay for what I used in the United States, I do not know how such alcohol is sold there. I fixed up a burnisher for an artist in Hamilton, who objected to the cost of alcohol. On inquiry I found methylated spirits of the same strength little more than half price. As methyl is added simply to prevent the internal use of the alcoho!, and so avoid the heavy duty on this side the Niagara River, I think perhaps methylated spirits, diluted with 121 per cent. water, will be even cheaper than Sphynx's plan. A. St. CLAIR.

Our old friend Mr. Hesler is never forgotten by "the boys," who "looked up to him" when a child, and still write to him for advice (the fact is, he is the life of the Chicago Photographic Society), and he sends us the following for "Wrinkles," trusting his answer may do others good. First the query, viz.:

HOUSTON, TEXAS, January 31st, 1876.
Mr. A. Hesler,

Evanston, Ill.

DEAR SIR: I have just been looking over Mosaics for 1875, and noticed the manner in which you use alum in washing prints. I would like to know if your experience so far has proven prints so treated to be durable, and are you still using it as there described? We have been troubled with prints turning yellow in a year or two, and I want to find a remedy if possible. Have no water-works, but plenty of good cistern water. Trusting to hear from you when you have leisure, I am,

D. P. BARR.

ANSWER.

D. P. BARR.

DEAR SIR: Yours of the 31st ult. at hand. Prints that I treated with alum three years ago are just as bright to-day as when made. I found that, like hypo, it should be used but once. Among the causes of prints turning yellow I have found the following: 1st. Clearing in old hypo; 2d. Using it too weak; 3d. Leaving prints in too long. Remedy .- Use hypo and alum but once; use the hypo clearing to nearly saturation; take out prints as soon as cleared; make the clearing just tepid, so it will feel just warm. The alum solution should be very little warmer than the hypo. Five minutes is long enough to keep prints in the alum. Keep them separate and in motion. Now wash prints in frequent changes of warm water, not quite blood warm, for fifteen to twenty minutes. Separate prints between each change of water; take out and at once mount on Slee's prepared eards. With this treatment I have found no fading. Clean rain-water is the best for all our uses. Soaking prints over night, and many of them matted together in the washing-tanks, is a sure way to get fading prints, do what else you will. Acid hypo will also surely give photographs the yellow fever in time.

A. HESLER.

I have received much from the Philadelphia Photographer, and, if I could, would like to give in my mite, if thereby I might help some struggling worker into daylight. But it seems to me the ordinary methods have been discussed in almost every possible way. Here are a few thoughts, though, if worth while, you can use. When I have a negative which prints too dark for a nice vignette, I treat it in the following manner: Varnish the glass side with Hance's groundglass substitute; then, with a dusting brush, dipped in plumbago, proceed to work on sufficient to get the required intensity, being careful not to get any upon the figure; then, with a soft pencil, work up to the figure, making an even coating. This might be taken advantage of to work in clouded grounds if the operator be skilful. I have often made clouds in stereo-negatives by use of the pencil on the ground-glass substitute; also use it much in copies to strengthen high lights. In fact I could not keep house without this valuable substitute.

In making enlargements from a negative by the wet process, a much better result can be obtained by making an enlarged transparency than by making a small one, to make the large negative from; at least my experience is according to the above.

I am in favor of using Mr. Hearn's toning bath—that is, the bicarbonate of soda—used over and over. I have never used any which suits me as well, and have tried many with good results.

One more hint about using Hance's ground-glass substitute: Should it, in flowing, have a tendency to flow over the edge and get upon the varnished side, go around the negative, before flowing, with a piece of beeswax. It will remedy the evil.

IRVING SAUNDERS.

VOICES FROM THE CRAFT.

St. Louis, Jan. 3d, 1876.

DEAR SIR: I wish to say a few words through your valuable journal. It is this: I think the ferrotype platemakers have put on the last straw to break the camel's back in their last rise of ferrotype plates. The idea of raising the price of plates these dull times I consider an outrage to photographers, when labor is cheaper than it has been for years, and material also, and business so very dull; I cannot see what they are thinking about. And for my part I will not stand it, and I find many others of the same mind. I take, on an average, as many ferrotypes and gems, I presume, as any four galleries in the city; and I am determined sooner than be imposed upon by such exorbitant prices I will quit taking them altogether (except for pins or lockets), and take in their place a cheap photograph. Nearly every photographer in the city has agreed to do the same thing. They all look at the thing in the same light as I do, that is this: That the platemakers have made independent fortunes off of us, and they have been able by combining to drive all opposition out of the market, which they have succeeded in doing. Now, the only

way to do, is for the photographers to combine all over the country, and say we will not use their plates unless they sell them at reasonable prices. I for one have determined to take such action in the matter; and most of the galleries in the city that take gens have pledged themselves to do the same thing. And I think it will become universal throughout the whole country. I earnestly urge it, and sincerely hope that it will be put into practice in every other place, as it most assuredly will be in this city.

GEM.

NEWRY, Jan. 17th, 1876.

BENERMAN & WILSON.

SIRS: Will you, or some of the numerous readers of the journal, instruct me through the columns of the *Photographer* how to make and use a cheap portable photographic tent, which will answer all the requirements of ferrotyping?

Yours, V. L. Wight, No Newry, Maine.

DISTORTION IN PHOTOGRAPHIC PRINTS.

VARIOUS writers at different times have called attention to distortion caused by the lenses used by photographers. Foremost among these was Dr. Vogel, of Berlin, who, at the very pleasant and profitable Convention at Cleveland, entertained the members with his able disquisition on the distortion caused by lenses, epecially in photographic groups. I had started for that Convention fully prepared by experience to speak upon that same subject, but Dr. Vogel's lecture so satisfied me with its sufficiency that I decided not to occupy time in running over the same ground, and so I contented myself by exhibiting among the members some distorted representations of groups of in-My model consisted of animate objects. five common spools lying in a row against a board background; below this row of spools was a row of common marbles, and below this row was a row of nickel cents, the diameter of each and all being equal one to another.

In my experiments I started to confirm a theory, which I had traced out in the same way that Dr. Vogel illustrated it on the black-board at the Convention. I found the theory confirmed, but of much less effect or consequence than I had theoretically conceived. With several long-focus lenses the distortion was unappreciable to the eye, and barely measurable by ordinary means. When the instrument was quite small, or of short focus, requiring it to be very close to the model for a large image, the distortion was quite conspicuous. One such proof now lies before me with marginal memoranda: "Distance from object to groundglass 13 inches; 21 inch Globe lens situated midway between." This was the worst distortion I was able to produce. The central figures are correct, but the marbles on the extreme sides have changed from spheres to oblate spheroids, the circular cents slightly approximating to ovals, while the spools have their outer and upper corners quite perceptibly askew and their breadth slightly increased, the objects being about the same size as the copy.

When the same relative diminution usually existing in photographic groups was produced—that is, reducing a space of ten feet or ten inches to one foot or one inch—the results indicated so little distortion as to be of very little importance, even with a short-focus lens. The matter of convex or concave marginal distortion of many long-focus lenses is so well known as to need no comment.

The result of my experiments then was not to confirm my previous estimate of the practical dangers of lens distortion in portraiture. I have, however, discovered a source of photographic distortion so dangerous as to satisfy all my predilections in that direction. It probably is not new in the experience of many photographers, but it has not yet had the attention it deserves through the medium of photographic literature. Its cause is probably irremediable; it lies in the base of all our present photographic prints, viz., the paper, and I have yet to try a sample that is entirely free from this cause of distortion.

If the printer will take a slip of sensitized paper cut from the long way of the sheet, and another cut from the short way or at right angles to the first, and print from each, using the same negative and an oval mask, then tone, fix, mount, and finish, he will be in a position to fully comprehend the really dangerous possibility of this source of distortion. The negative will not agree with either of the prints, while they will not agree with each other. One oval will perhaps be of the same height as the mask which formed it, but from 10d to 16th of an inch wider. The other print will perhaps be of the right width, but considerably longer or higher. The first print will exhibit a round, fat face, while the other will be longer or more "peaked," neither agreeing with the just proportions of the negative. In the inclosed samples, "Latitude" and "Longitude," the distortion is apparently increased by printing the broader portrait through a square or arch-top mask, while the other is printed oval; but the dividers, or measuring tools used to compare them, will detect decided distortion. In the long picture the eyes appear "rounder," the nose longer, and the mouth narrower, and fuller lipped. The broad picture is positively pugnacious, the phrenological organ of combativeness being apparently well developed, the nose being "puggy," and the mouth wide. In a profile portrait this distortion is somewhat less perceptible, still the addition, of say the hundredth part of an inch to a man's nose, is not to be sneezed at!

If an exact square is cut from a sheet of paper whose sides are diagonal to those of the square, this bit of paper will be found diamond-shaped when finished, and a print on it will be diagonally distorted.

While we contented ourselves with the carte de visite, or the small head vignette, these distortions were not conspicuous; but in these later days of "swellheads" it is so evident that I have yet to see the batch of prints made on paper more or less "crossgrained," among which I cannot detect this difference as rapidly as I can count the finished prints.

It is evident that the different prints cannot all be correct, while comparison

with the negative, by measuring tools, will prove that none are correct, and this source of error baving been admitted as more or less constant, it remains to be decided what shall be done with it. I have made considerable use of it in making fleshy people look thinner, and vice versa; and I am particular to print my pictures from certain negatives all the same way of the paper, so that the subject will have no means of comparison.

My experiments teach me that this distortion exists in greater degree among the later brands and the so-called double albumen papers, while among both these and the thinner papers I find various degrees of difference. The distortion is also much more apparent in prints that are trimmed before printing, and mounted soon after washing or before shrinking by drying thoroughly. It is also more apparent in front views of the face. Long silvering is also an exaggerating cause, for the then very wet paper shrinks considerable in drying and before printing, and expands in washing. I recommend this matter to the consideration of photographers as a more fruitful field for possible distortion than any other ever opened to the fraternity, and as possessing some compensating advantages if judiciously handled.

I suggest that other investigators who may be equally familiar with this subject, hand in their results for publication, and if any member of the fraternity finds upon experiment that his prints do not exhibit the results I have mentioned, I shall esteem it a favor if he will send me proofs, and inform me of the brand of paper he uses, and his method.

CARL MYERS.

Mohawk, N. Y.

A CHAPTER OR TWO FROM "SOMETHING NEW."

ASIDE from all profit which may accrue from the sale of our little leaflets, The Photographer to his Patrons, and Something New, we really feel that photographers who want business, do not take as large advantages as they might of a very useful means of "bringing trade." This is the year of

all years when you should "hang your banners on the outer walls." Permit the bringing of this matter to your mind and then a chapter or two from Something New. It is the photographer speaking to his patrons, thus:

I.

"That charming author and art critic, Mr. Philip Gilbert Hamerton, in his essay on The Practical Work of Painting, declares 'that without a thorough knowledge of technical processes, art criticism can never be reliable,' for this reason: 'Human effort in every direction has fair claims to what may be called an intelligent indulgence, just as it ought to come up to an intelligent demand upon it. We ought not to ask from the workman more than the nature of his tools and materials will enable him to perform for us. And, on the other hand, we ought not to accord an exaggerated approval to qualities which the nature of the materials or the instrument make almost matters of course to any skilful executant who chooses to employ them. To be truly just, a critic ought always to know, and never even temporarily to forget, the exact nature of the manual work that has been done, and the order of its processes. Armed with this knowledge, and kept by it continually on his guard against technical surprises, he will be always ready to acknowledge a serious accomplishment when he meets with it.'

"He also truly says: 'A thorough workman will always feel himself on the side of thoroughness in work, and opposed to unskilled performance of all kinds. But there is little fear of general criticism becoming so technical as the criticism of artists; and if it understood workmanship better it would still be likely to estimate the knowledge of nature, and the gift of imagination, quite at their full value, and even to forgive some faults in workmanship for the sake of them.'

"These things being so, in photography—which is an art and not a branch of mechanics or physics—as well as in painting, this little work has been prepared in order to better inform the patrons of photography concerning the 'technical process' of the art, and its requirements of them, in order

that they may be better able to understand what they can reasonably require of it, and to criticize justly and fairly the results produced by it for them.

"The photographer of to-day who has the right sort of feeling, is quite ready to place himself on the side of thoroughness,' and to submit to being measured by the 'thorough workman' standard. He is, therefore, very willing to inform you what you may expect of him. The evidence of this he places in your hands herewith, trusting you may find in it something entertaining and 'something new.'"

II.

PHOTOGRAPHIC TECHNICALITIES.

"Almost every one has seen examples of those transparencies in biscuit ware which produce the effect, when hung up at a window, of a drawing in light and shade. Such effect is caused entirely by the varying thicknesses of the plate, which is so moulded as to be exceedingly thin in the highest lights, and very thick in the extreme darks, i. e., the picture is made up of gradations of light and shade. Just the same is the case with the photographic negative. It is made up of varied thicknesses of a film which is the product of sundry chemical mixtures that have first been rendered sensitive to light, and then, after submission to the action of the light, exposed to the influence of other chemicals until the image is developed. Unlike the biscuit ware picture, however, which gives you the effects of black and white as they are in nature, our photographic negative is reversed; i. e., the dark parts are white, and vice versa. Therefore, in order to secure an approach to nature, we must place the negative on paper or other material sensitive to light, and expose them together to the sun, when we have a resulting image on the paper the reverse of the one on the negative. This is fugitive, however, and would soon be discolored and destroyed by exposure to the light, were it not submitted to the other chemical processes of 'toning' and 'fixing.' Before it is finished, the smallest photograph must pass through some thirtytwo operations!

"Now when we take into consideration how

varied are the conditions of light, and how changeable in their action are the chemicals used, it will be admitted that the photographer meets difficulty all along the way. His instruments, it is true, are always just the same; but, like himself, they are the slaves of their whimsical masters, the light and the chemicals. You may speculate on the changes of light yourself by looking at your face as reflected in a mirror, in different lights at different times of the day. You will observe that with the light from one direction, you are much handsomer than when it falls upon your face from another. That is why your picture taken at one time 'looks so much more like ' you than when taken at another. The difference is often attributed to the want of skill on the part of the photographer, but it is not always so. The light he cannot change, but he can often modify it. His chemicals are more under control, but they are also subject to changes of temperature, and sometimes seem totally depraved. It will be seen then that the photographer has not the advantages of those who produce the same results day after day, but he is actually a manufacturer of many kinds of goods, which each day differ.

"Happy would be his lot, however, if varying light and obstreperous chemicals were all he had to deal with. The patrons of his establishment, owing to their lack of knowledge concerning the 'workmen' whom they employ, and 'the nature of his tools and materials,' are often his most perplexing drawbacks.

"The public, however, are becoming better informed, and it is the purpose of this little leaflet to inform them concerning the capabilities and the requirements of photography, and to that, as much as to the skill of the photographer, is due the great improvements which have been made in photographic portraiture during the few years last past. The progressive photographer rejoices to see these changes, for it enables him not only to produce better results, but it encourages him to exercise his utmost skill for the reason that he is laboring for an appreciative public.

"What he desires to produce is not only likenesses, but also good pictures—such as

meet the requirements of the well-known rules of art as to light and shade and composition. When photography is too literal as to likeness he has a great helper in the new innovation of retouching the negative, by which the rugosities, and the frowns, and the ugly blemishes of nature may, by most careful management, be removed without any actual loss of likeness. Too much of this, however, should not be done.

"Having now let you into some of the difficulties in the way of the production of good photographs, permit us to touch a little upon the idiosynerasies of dress, and to show you how you may yourself assist the 'workman' in producing the best results. You and your photographer are alike interested in this matter, therefore you will take kindly the suggestions which follow."

Several chapters of a kindred nature follow this. They should be read by all who intend having pictures taken, and then loaned to everybody else With your card printed on the cover they make an advertising medium for you; sure to tell. Samples free.

SOCIETY GOSSIP.

PHOTOGRAPHIC SOCIETY OF PHILADEL-PHIA.—Stated meeting held February 3d, 1876, the President in the chair.

The minutes of the last stated meeting, and of a special meeting held Friday, January 28th, were read and approved.

The Committee on the Public Exhibition at the Franklin Institute reported that gas for the evening could be obtained at the Institute.

The committee also gave a list of evenings on which the hall was unoccupied, and after some discussion, the evening of Friday, February 18th, was fixed upon for the exhibition.

Mr. Clemons said that having made some remarks at the last meeting relative to the practicability of keeping albumen for a long time without decomposition, he had brought some samples for exhibition which had been kept since the latter part of November.

Mr. Clemons also laid upon the table some prints, made on paper prepared with this albumen, which were in all respects satisfactory; and some pieces of the same paper floated on a 52-grain ammonio-nitrate solution, on January 25th, showed little or no discoloration.

Mr. Young said that he had continued his experiments with caustic potash in collodion with excellent results. He had added the alkali even to salted collodion in the proportion of one-eighth of a grain per ounce.

Mr. Young also complained of having lost a number of negatives from cracks in the film after varnishing. Mr. Clemons suggested a varnish composed of sandarac, balsam of fir, and spirits of lavender.

Mr. Clemons said that in working over some silver residues a short time since he had extracted 2 ounces, 2 drachms, and 24 grains of metallic silver from 1000 old negatives, $8\frac{1}{2} \times 6\frac{1}{2}$. Plates that had been treated with sulphide of potassium did not yield as much silver as those simply finished without strengthening.

Mr. Young exhibited a very neat satchel camera with light tripod for dry plates.

On motion, adjourned

ELLERSLIE WALLACE, JR,
Recording Secretary.

A BEAUTIFUL LANTERN EXHIBITION. -On Friday evening, Feb. 18th, the Photographic Society of Philadelphia gave a complimentary exhibition of lantern slides for the entertainment of their friends, and upon this occasion, as upon others that have preceded it, the hall of the Franklin Institute was well filled by an interested audience. Through the kindness of Mr. Joseph W. Bates, who with great liberality offered the use of his entire collection of slides, the Society was enabled to exhibit many pictures not often to be met with in this country, comprising a selection of instantaneous street scenes in Paris, and a particularly fine assortment of views in Portugal. Mr. E. Wallace, Jr., added much to the pleasure of the evening by exhibiting a portion of his last summer's work in England and the Isle of Wight. It is seldom that we see photographs of English scenery made by an American amateur, and it was gratifying to notice the success of this enterprising gentleman. Messrs. Schreiber & Bro.'s reputation as

photographers of animals was fully sustained by a number of slides of animals taken in the Philadelphia Zoological Garden. The exhibition closed with a few instantaneous pictures of yachts at Nahant under full sail, made by Mr. Robert S. Sturgis.

The slides were well described by Dr. Alexander Wilcocks, and E. Wallace, Jr. Mr. Lewis F. Young kindly gave the use of his dissolving lanterns and managed the light in a most satisfactory manner.

B. C. J.

February 8th, 1876.

THE stated meeting of the Pennsylvania Photographic Association was held at the gallery of Messrs. Mahan & Keller. President F. S. Keller in the chair.

Minutes of last meeting read and approved. Owing to the indisposition of Mr. H. C. Gabriel, the reading of his paper was postponed until next meeting.

Mr. D. Marston, as promised at last meeting, exhibited a large number of prints made by his formulæ; they were critically examined, and pronounced fine specimens of printing. Mr. Marston refused accepting a vote of thanks. He did not think it necessary, and was opposed to giving thanks for everything the members brought before the Association. He was satisfied to know that his efforts would be of benefit to the members, and expected to be benefited by what the other members brought before the Association.

Several prints and a negative were exhibited by the Secretary.

An untoned print was shown that had a fuzzy and cracked surface of the albumen; several gave their opinions as to the cause, but no decided conclusion was arrived at as to the cause, the same paper in other hands working all right.

The subject for next meeting was taken up, and in conjunction with Mr. Gabriel's paper on retouching, the Secretary proposed giving his manner of making porcelain collodion, and made a quantity before the members present.

On motion, adjourned.

CHARLES EVANS, Secretary.

814 CHESTNUT ST.

The Chicago Photographic Association is fresher and greener than ever. It held its regular session February 2d, and we have to report, that last month our types made us say that Mr. C. W. Stone was elected chairman of the Financial Committee, while in reality it was our old friend C. W. Stevens, Esq. The Treasurer reported \$3.95 balance in the treasury.

BOSTON PHOTOGRAPHIC ASSOCIATION met at the studio of J. W. Black, Friday, Feb. 4th, 1876.

On motion of Mr. Holton, it was voted that a committee be appointed to collect, sort, and count votes for officers for the ensuing year.

The chair appointed as that committee, J. W. Black, T. R. Burnham, C. F. Richardson.

On motion of Mr. Hallenbeck, it was voted that a committee be appointed to nominate a list of officers.

The chair appointed the same committee, who made the following nominations: For President, Frank Rowell; for Vice-President, A. N. Hardy; for Secretary, J. H. Hallenbeck; for Treasurer, E. F. Smith.

On the first ballot for President Mr. Rowell had a majority, and was declared elected. He thanked the Society for the honor, but said he had not time to attend to the duties, and must decline the office.

A second ballot was then ordered, which resulted in a majority for Mr. Benj. French, who was declared elected. The vote was then made unanimous.

The balloting then proceeded, with the following result: Vice-President, Frank Rowell; Secretary, A. N. Hardy; Treasurer, E. F. Smith; Executive Committee, T. R. Burnham, D. K. Prescott, W. M. Wires

Mr. Southworth suggested that Mr. Black furnish a carsel burner and shade to use for lighting faces, and he would pay the bill.

Voted that the suggestions of Mr. Southworth be carried out, and the Society pay for it.

Mr. Southworth presented the following resolution, which was approved by the Society:

Resolved, That the thanks of the Associa-

tion be presented to the President, Vice-President, Secretary, Treasurer, and Executive Committee for their satisfactory and beneficial services for the past year.

Mr. Black spoke of the Society occupying his rooms, and said he was ready to help the Society in every way.

Mr. Hallenbeck suggested that the Society pay Mr. Black five dollars a night for the use of his rooms.

On motion of Mr. Smith, it was voted that the Society occupy the rooms for the coming year, the price to be left to the Executive Committee.

Mr. Burrell exhibited his chart, which is a very tasty affair to be hung in the studio, showing how the different colors photograph.

Mr. Black showed a print on plain paper made twenty years ago. There had been no pains taken to preserve it, and it was as bright as though made but a few months. Mr. Southworth and Mr. Burnham also exhibited pictures.

The Secretary showed the Society a German photographic year-book, which was sent to the Society by Dr. E. Horning.

Adjourned.

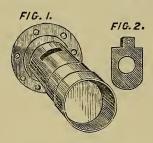
FRENCH CORRESPONDENCE.

Darlot's Instantaneous Slide—Vidal's Photometer—Prevul's Pellicle—Boivin's New Process—A Tiny and Cheap Fire-Alarm— Simple Method of Cleansing the Nitratebath

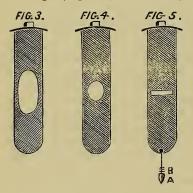
The Photographic Society of France held its February meeting on the 4th instant. Mons. Peligot acted as President. The room was well filled, and the business interesting. A new instantaneous slide was proposed by Mons. Darlot. As I think it will render service to some of the readers of the *Philadelphia Photographer*, I will endeavor to describe its construction.

Lenses, such as are used for instantaneous landscape work, are almost all fitted with diaphragms, which slide into the body of the tube between the two lenses. I believe this system is known as the Waterhouse diaphragm (see Figs. 1 and 2). A similar slit is made in the under portion of the tube, and a long, thin piece of steel, with a hole

in the centre, replaces the ordinary diaphragm (Fig. 3). After having focussed, the steel slide is placed into the slit and held in an upright manner by means of a catch or spring under the lens; when this is pressed



the steel slide slips rapidly down through the grooves, and the image is thrown but for an instant upon the sensitized surface in the camera. The length of exposure can be regulated by having two or three slides with different openings (Figs. 4 and 5). If more rapidity be required, a small weight can be attached to the slide by means of a strong silken thread (Fig. 5, A). If this is insufficient, a number of small metal disks or quoits can be made to lay on the top of the weight (Fig. 5, B). No shaking of the



whole apparatus, as with the old system, need be feared, for the steel slide slips through its brass guides in an easy and uniform manner, and, when the shock arrives, the impression has been already obtained. The shock itself can be softened by lining the flange at the top of the slide with indiarubber, or by some mechanical contrivance, such as a spring, etc.

Mons. Leon Vidal took up a great part

of the evening, first by the presentation of his photometer, and then by his presentation of a great number of phochromic proofs, which were very good indeed; the renown of his invention got to the cars of the Minister of Public Instruction, who thought himself in duty bound to inspect and judge of the value of such a process for the reproduction of works of art contained in museums. He left the establishment highly pleased with what he saw, and gave Mons. Vidal permission, and promised him at the same time every facility, for the reproduction of pictures in the Louvre. I will not dwell on the artistic value of this new process, as I have no doubt that Mons. Vidal will avail himself of the opportunity of exhibiting specimens of his process in the Philadelphia Exhibition, then my readers can see and judge for themselves. I will only speak of the new photometer that Mons. Vidal laid before the Society. This little aid to photographers and amateurs has the form of a small pocketbook, weighs nearly two ounces, and is a compact little thing. When opened it is nine inches long; it folds in three parts; on the top of the centre part is a drawing representing a frame of tints, from two to ten; below this frame of tints are ten tables, compiled corresponding to the different tints. On the two other leaves are printed instructions. A piece of albumenized paper, containing chloride of silver, is attached to a slide, which slips up and down under the frame of tints. The observation is made as follows: The operator turns his back to the sun, opens the book, and holds it a few inches from his body (in the shadow formed by his head, if possible), for the space of sixty seconds. The coloration of the chloride of silver is now compared with the tint, and, by looking at the table bearing the number of that tint, the time of exposure can be seen with any diaphragm, from the smallest to the largest aperture, and from a four-inch to a three-feet focus. A skilled person need make but two or three observations daily; but, if necessary, twenty-five or even more can be made with the same paper, it being only necessary to raise the slide upon which the paper is fixed about the eighth of an inch after each observation.

Mons. Preval, operator of Mons. Davanne, has discovered a means to give common glass the appearance of ground-glass, so that it can even with advantage replace the latter as a focussing-glass in the camera. Soak 10 parts of gelatin in 100 parts of water. Warm it slightly until it is dissolved, then add 4 parts of starch, and boil it for three or four minutes, or until the solution becomes clear. It is now poured upon a clean piece of glass, levelled, and, when dry, it presents the appearance of glass which had been finely ground. If the glass had been previously cleaned with tale, or French chalk, the pellicle can be taken off its support, and so several made in order to be carried about when travelling in foresight of an accident to the focussing-glass of the camera.

No one but the amateur and photographer who, being out for field-work, and who met with an accident by which the focussingglass was broken, can judge of the vexation, trouble, and difficulty to be contended with to replace it if even it was possible. Thanks to Monsieur Preval, that difficulty need no longer fall to the lot of a landscape photographer; for, even did he forget his pellicle, in the first village he could now obtain materials to make or replace the broken glass. The first "hedgerow carpenter" would give him a little glue out of his gluepot, and while this was soaking, he could run to the glazier's for a piece of glass; in almost every house he could find starch and a little saucepan. So what was formerly an irreparable accident, is now but a question of a little loss of time.

Mons. Rousselon, director of the well-known firm of Goupil & Co., made a present to the Society of a collection of photo-engravings, which were reproductions of all the most remarkable pictures in the late exhibition of paintings by modern artists. Mons. Rousselon has brought photo-engraving to a high standard; the proofs excited the admiration of the members, and were well worthy of it. This gentleman obtained the prize of excellence in the late exhibition at Brussels, and it is well known that the great reputation and success which have crowned his name is but a just reward due to his skill and perseverance.

Mons. Boivin has published what the journals call a new process, which consists in introducing the nitrate of silver into the collodion and sensitizing the plate in a bath of iodide of potassium.

A Brevet d'Invention has been taking out here for a very skilfully invented apparatus, which, I have no doubt, will render service to mankind. It is what I may call a firealarm. This little instrument is intended to be hung up in every room of a house or public establishment, and as soon as the heat of the apartment rises above a fixed standard, let us say 100° Fahrenheit, the instrument explodes, and sets all the electric bells ringing; this gives warning that a fire has commenced somewhere about the house, the room is sought for, and the fire extinguished. Thus the fortune, and perhaps the lives of hundreds, may be saved by a little foresight and at the low expense of about a dollar for each room. The apparatus is very simple. It consists of a piece of metal at the bottom of which is a hook; on the top is a cork covering to which the negative and positive poles are attached; on the brass plate a thermometer is hooked on. This last-named hook is brazed to a spring which forms the point of contact between the poles. As the thermometer is left purposely a little short, the spring must be pulled down a little in order that it may be hooked on. This separates the point of contact, and the electrical current cannot pass; but should the glass-thermometer be broken by hazard, the spring flies up, the current passes, and sets the alarm-bell ringing. Now this is the entire secret: the thermometer is made in such a manner that if the heat rises above 100° in the room, the dilatation of the mercury breaks the thin glass bulb, the spring is set at liberty, and warning is given, and the house saved. The instrument is placed in a thin brass tube perforated with many holes, and hung up in the corner of the room or behind a picture; but, being very small, it is not a very prominent object; but when our lives and property are in jeopardy this is a matter of very little importance.

Which is the best means of clarifying an old bath of nitrate of silver? is asked over and over again. If the readers of the

Philadelphia Photographer will try the following simple way, I think they will be contented. Put the solution to be clarified into a porcelain dish over a slow fire or a Bunsen burner, and, when boiling, drop by intervals into it pieces of eaustic potash, stirring all the time with a glass rod. Continue this operation until the solution ceases to precipitate in the form of a brown-black powder, which is an oxide of silver. In order to be certain that the reaction is terminated, take a few drops of the solution, and put it into a glass with a little distilled water; in adding a small quantity of hydrochloric acid, if the solution remains clear, the operation has been well conducted; if it turns of a milky appearance, more potash is required. The oxide of silver obtained must be well washed; it can then be dissolved in nitric acid, in order to form pure nitrate of silver.

E. STEBBING,

3 PLACE BREDA, March 7, 1876. Professor.

OUR PICTURE.

This month we present our readers with a change of scene. From some of the ever-charming phases of human nature in the boudoir, the parlor, and on the street, as illustrated by our recent promenades, we turn to where Nature in the more material order invites us to scenes which, though grandly wild, are not less enchantingly beautiful.

As the season draws near, and promises to be earlier this year than usual, when the knights of the camera, either for pleasure or profit, may go forth in search of the picturesque, we have chosen for this month's embellishment a view from nature which we believe will be interesting and instructive to all who have a love for landscape photography.

Our picture is the work of Mr S. R. Stoddard, of Glen's Falls, N. Y, a gentleman who has shown himself equally skilful with the camera and the pen. From his home, on the upper Hudson, Mr. Stoddard has courted Nature in all her moods; on Lakes George and Champlain, in the rugged and mysterious Ausable Chasm, and among the wilds of the celebrated Adirondacks, till he has furnished the finest photographic

views of those regions that have ever been published. But not content with telling the story in his pictures, he has sought to make that section better known and more accessible to the ever-swelling tide of pleasure-seekers, which every year sweeps in that direction, by publishing three different books, viz.: Ticonderoga, Lake George Illustrated, and The Adirondacks Illustrated. These works partake somewhat of the humorous, are written in a very rendable style, and have received many complimentary notices from the press.

In his description of the subject of our picture, Mr. Stoddard, in his latest work, The Adirondacks, says: "A little depression in the otherwise level country, a wooded valley with gently sloping sides, marks the site of this grand wonder-a Yosemite in miniature almost at the doors of the great city, and, curiously enough, comparatively unknown. The river, flowing quietly along the valley from the south and west, passes Keesville, plunges over Alice Falls square against a solid wall of rock, turns at right angles, and, wheeling around in confused whirls, now right, now left, falls in a mass of foam over the rocks of Birmingham; then hurrying downward, between towering cliffs and over rocks, where the sun never shines, emerges from the gloom out into the glorious sunlight, and onward to mingle with the muddy waters of Lake Champlain.

"This freak of nature is not alone of its kind, but one of a system of rents in the earth's surface that, probably, extend all over the northern portion of the State; the most noticeable of the others being at Chateaugay Falls, on the Opalescent, and higher up, on the east and west branches of the Ausable. Neither are we to say how or when they were formed; the walls, that are now from ten to fifty feet apart, were undoubtedly some time united and solid; projections, on the one hand, are often faced by corresponding depressions on the other; layers of rock on one side duplicated on the other. Prof. Emmons, State Geologist, found here petrified specimens of the lowest or first orders of animal life, and ripple-mark's made when the rock was in its plastic state; above these, in successive layers, towers seventy feet of solid rock."

This strange work of nature is on the Ausable River, between Keesville and Lake Champlain, 150 miles north from Albany and 15 miles south from Plattsburg. Our picture gives a very excellent view of one of the sections, the name of which will be found printed on the bottom. The excellence of Mr. Stoddard's work will be apparent upon a careful examination. The point he has chosen for giving the best view both of the rugged walls and the swiftly flowing river, the time of day when the sunlight illumines the narrow gorge, and brings every detail into view as far as the eye can reach, giving a beautiful play of light and shade throughout the whole, indicate a trained judgment and fidelity to conviction which are sure to command success. By fidelity to conviction we mean that love for truth and art which will not sanction the taking of a view under any but the most favorable conditions. The photographer, who is true to what he knows to be right, will refuse to expose a plate on a view unless it be from the best position and in the best light; he will wait several hours, will photograph some other spot, or come at the proper hour another day. The man who

would think all this a waste of time, and with little regard, either from lack of knowledge or principle, for the truth of the work, or the best conditions, would take a view at whatever time he chanced to come upon it, whether in sunshine or shadow, in a flat light or one in full relief. The good work produced by such a one are accidents, and are very likely to prove the exception; the other keeps all conditions in subjection as far as possible, and good work with him is a duty, from which no inducements can tempt him to swerve. This is a point which requires to be well considered by all landscape photographers as one of the most important lessons connected with this department of our art. The first is to learn what is right and proper to be done, and the next, from principle as well as policy, to do that right and proper thing.

We trust Mr. Stoddard's excellent work will stimulate many others to strive for a higher standard of landscape photography, and not much longer suffer America to be outdone by the artists of the Old World. There is an immense field open, and, to the lover of the beautiful in nature, a most fascinating and profitable one.

Editor's Table.

THE CENTENNIAL PHOTOGRAPHIC DIARY.—Our assistant, Mr. Robert J. Chute, is preparing, and we expect to publish in a few weeks, probably before our next issue, a little work under the above head. It will be of convenient size for the pocket, and is intended as a guide-book for photographers who visit the Centennial. It will contain a calendar giving the important events pertaining to the Centennial, and such photographic dates as show the progress of our art. A brief description of the Centennial buildings; all information which can be obtained in reference to the photographic exhibit; the places of interest in and about Philadelphia; postal regulations, etc.

A portion of the work will be devoted to photography, giving some of the most approved processes and formulæ, together with such hints and dodges as will be a help to every one engaged in

photographic practice. From Mr. Chute's well-known proficiency in the art, this department may be expected to be particularly rich and useful. A special feature of the book will be the interspersing of the printed pages with blank leaves; these will be found very convenient for those who wish to make memoranda, note incidents, or record a formula.

Dealers and others will please send their orders early.

A New Stock House in Indianapolis.— Messrs. Henderson George and James H. Latcamp, under the firm of George & Latcamp, have formed a copartnership for the manufacture and sale of photographic materials, and are located at 58 South Meridian Street. We wish them success.

PICTURES RECEIVED .- Promenades, from Mr. Crosby, of Lewiston, Me.; Promenades and Cards, from J. Pitcher Spooner, Stockton, Cal.; Cabinets and Cards, from Messrs. Roberts & Caskey, Springfield, Ohio; Cabinets, from E. E. Henry, Leavenworth, Kansas, and Ormsby, Chicago; Promenades, Cabinets, Cards, and Stereos, from Mr. Charles Knowlton, Kankakee, Ill.; Cards, from Mr. M. H. Albee, Marlboro, Mass.; Stereos, from Mr. H. L. Bingham, San Antonio, Texas. The latter are some charming bits of scenery, as well as excellent specimens of photography. They were made on dry plates, and might serve to encourage any landscape photographer to dispense with the wet process in the field.

IMPROVEMENT IN FERROTYPE MOUNTS.—
Messrs. A. M. Collins, Son & Co., Philadelphia, the enterprising caterers to good taste in the matter of card-board and mounts, mats, &c., &c., have just introduced some new designs of ferrotype mats. Those designed by Mr. Von Seutter are very neat, and must be attractive for those who do this class of work. We are glad to see that ferrotypers as well as photographers are compelled to get out their work in better shape than heretofore. See a variety of samples in advertisement department.

BURRELL'S CHART OF PHOTOGRAPHIC DRAPERY is the best thing ever gotten up, to show just how different goods and different colors will photograph in lights and shades. We furnish an 11 x 14 print of this chart for \$1.25. Every photographer can afford to have one, and they are certainly the most useful thing he can hang in his gallery. For sale by Benerman & Wilson. See advertisement.

THE PHOTOGRAPHIC YEAR-BOOK, for 1876, published by the editor of the *Photographic Correspondence*, Dr. E. Horning, is received. It contains a Lichtdruck portrait of Mr. Ludwig Angerer, by Mr. J. B. Obernetter.

MR. L. W. ROBERTS, formerly of Urbanna, Ohio, has located in Springfield, with Mr. Caskey, under the firm of Roberts & Caskey. Some samples of their work, noticed above, are very promising. We wish them success.

WE are glad to see that one of our local societies, instead of retrograding in its organization, has made an advance for the Centennial year. The Boston Association shows no signs of verd-

ancy when it elects our old friend Benjamin French as its president, but does itself an honor that will redound to its prosperity in the future. Mr. French is at the head of the well-known stock house of Benjamin French & Co., and is one of the best friends photography has in this country. May his term of office he marked by unusual prosperity to the Boston Photographic Association.

PHOTOGRAPHY IN NATURAL COLORS.—An Italian correspondent writes us as follows: "I am at present under the impression of an extraordinary phenomenon in photography, the real production of natural colors! The fact exists. I have it before me. I see it! It is life, real life!"

The phenomenon referred to appears to have made its appearance on a plate fifteen years old, which had undergone changes of locality, changes of temperature, etc., etc., and finally appears changed from a negative to a positive, in all the heauty of the original natural coloring. He promises us full particulars soon.

Unlimited Retouching a Necessity.—To the article under this head, in the February number, we omitted to affix the name of the author. It was written by Mr. E. K. Hough, whose articles on "Photographic Rights" have attracted so much attention. When Mr. Hough speaks he always has something to say.

MR. JAMES MULLEN, Lexington, Ky., has recently changed his location, and fitted up a new gallery. His operating-room is 28 x 40 feet, with a very fine light, and facilities in every way for doing first-class work, and plenty of it. We are glad to see these signs of prosperity, and hope there may be more of them in all parts of the country. Mr. Mullen has a good local reputation, and we have no doubt this move will bring him a largely increasing business.

THE ENGLISH ANNUALS FOR 1876.—The Year-Book of Photography, published in connection with the London Photographic News, and The British Journal Almanac, have both been received, and are well filled with the usual variety of original contributions from many of the most distinguished artists and photographers in Great Britain and on the Continent. A few copies of each are for sale by Benerman & Wilson; price 50 cents.

Specialties.

ADVERTISING RATES FOR SPECIALTIES.—It will be understood that matter under this head is not to be considered as always having editorial sanction, though we shall endeavor to clear it of anything tending to deceive or mislead. Stock-dealers will find this a beneficial mode of advertising, and sure to pay largely. Six lines, one insertion, \$2.00, and 25 cents for each additional line, seven words to a line—in advance. Operators desiring situations, no charge. Matter must be received by the 23d to secure insertion. Advertisers will please not ask us for recommendations. ** We cannot undertake to mail answers to parties who advertise. Please always add your address to the advertisement.

For Sale.—A good, light wagon, for out-door photographing; in best of order. Apply of Thos. H. McCollin,

Photographic Stock-house, 624 Arch St., Philadelphia, Pa.

For Sale.—A new and handsomely fitted gallery, in a new building erected especially for the purpose, with every facility for making first-class work; in a Southern city of 40,000 inhabitants. Doing a prosperous business of several years' standing; being the only first-class gallery in the place. Terms moderate. Address, for further information, A, care Philada. Photographer.

I want, also, a first-class dark-room man and operator, one who can pose and light a subject artistically. None other need apply.

WAYMOUTH'S VIGNETTE PAPERS.

OPEN for three chances, on the first of April. I have followed the business for eighteen years, and understand it thoroughly. Am 38 years old. Do not use tobacce or liquor in any form. Can speak English and German. Have lost most all I had by fire. Have wife and one child. Will accept a steady situation in any part of the Union, at from \$18 to \$30 per week, according to locality. Prefer operating, or dark-room; or will take entire charge of a good gallery, on salary or shares. Will buy a small gallery in a live town or city, where good work is appreciated, at fair prices. Best of reference given and required. Address

C. S. R., care of John Haworth, Photo. Stock-Dealer, Philadelphia.

A BARE opportunity for an enterprising man to purchase one-half interest, or the whole, if desired, in my photographic business, situated at Lincoln, the capitol of Nebraska. Splendid location, cheap rent, and long lease; rooms fitted for the business and complete in every arrangement. A splendid North light. Business rapidly increasing. Prices first-class, and work according. I have a large view and coloring trade. For terms and sample of work, address, immediately, V. H. Young, Photographer,

Box 757, Lincoln, Neb.

Wanted.—A good photographer, by the middle of March, or first of April. Must be well posted in all branches of the business, able to take good views and not afraid of work. Address, sending samples of work,

BEST, Photo., Oshawa, Ontario.



are the best the world produces. They are planted by a million people in America, and the result is beautiful Flowers and splendid Vegetables. A Priced Catalogue sent free to all who inclose the postage—a two-cent stamp.

VICK'S FLORAL GUIDE, quarterly, 25 cents a year.

Vick's Flower and Vegetable Garden, 35 cents; with cloth covers, 65 cents.

Address JAMES VICK, Rochester, N. Y.

A MAN who is fully competent to make carbon tissue and all requisites for carbon printing, and who is also a thorough carbon printer, desires to hear from any one who may require the services of such a person. Address, for particulars,

E. DERHAM, care of Allen & Rowell,

25 Winter Street, Boston.

Wanted immediately.—A second-hand portable gallery. Address, giving size, condition, terms, etc. J. N. Roof, Photographer,

Newton, Sussex Co., N. J.

FOR SALE.—A good photograph gallery can be bought at a bargain; is located in a town of 6000 inhabitants; is the county seat. Good surrounding country trade; established for seven years. 5000 paying negatives on hand; first-class light; in fact, everything for a first-class gallery. Will sell with or without the instruments. The owner wishes to sell on account of ill health. Address Photographer.

Care of Thos. H. McCollin, 624 Arch Street, Philadelphia.

USE WAYMOUTH'S VIGNETTE PAPERS.

WANTED TO SELL FOR CASH. -One of the best paying photograph galleries in the West, without any exception, and always has done first-class work at first-class prices, in every respect. Doing a frame trade business of over \$3000, at retail, a year. Situated in the very "elite" resident part of Chicago. The gallery is brick, three story front, two story back; building 25 x 50 feet, lot 25 x 120 feet to alley; with five years lease from May 1, 1876; on a rental of six per cent. interest and taxes upon the valuation of the lot. First floor I use for sales and receptionroom, and is adapted for any business in connection with photographing, and there are suitable rooms on the third floor for small family to live in. Would sell the whole without reserve, or would reserve the cameras, fixtures, and negatives. Must know if I sell within the next thirty days. Address C. D. MOSHER,

951 Wabash Avenue, Chicago

A SPLENDID BARGAIN! WHO WANTS IT?—
The gallery advertised by me in January and
February numbers of this magazine, will be sold
for two-thirds its actual cost, if disposed of by
April 1st. This is the best bargain in the market.

P. C. NASON,

No. 4 P.O. Arcade, Columbus, Ohio.

For SALE VERY CHEAP.—A first-class gallery that is doing first-class work in a first-class rail-road town. County seat; no competition in county. Large moulding and chromo trade, and complete view outfit. Reasons for selling, failing health. For particulars, address

H. L. EGGLESTON, Chardon, Grange Co., Ohio.

For Sale at a Sacrifice.—Photograph gallery in Harrisburg, Pa. Well fitted with good instruments, accessories, and nicely furnished. Water and gas; every convenience for making fine work. Best location; low rent; large skylight. Cash only will buy it. Proprietor wishes to devote whole time to outdoor branch. Address Mr. P., Artist, Box 208, Harrisburg, Pa.

THE GORHAM STOVE.—No photographer can get more for his dollar than by investing in a "Gorham Stove." It is tiny in size but a giant in usefulness. See advertisement.

Wilson, Hood & Co., 822 Arch Street, Philadelphia.

LUCKHARDT'S ELEGANT STUDIES.—We have just received an invoice of splendid studies of the female figure, by Fritz Luckhardt, Vienna. The size, 8 x 10; the price, \$3.50. Order quick!

Wilson, Hoon & Co., 822'Arch Street, Philadelphia.

, by Fritz Luckhardt, Vienna. The He has arranged with the editor of

--

S

ш

۲

4

ш

I

Pianos and Organs —Photographers wishing to buy a Beatty Piano or Organ, can get extra inducements through photographing. Address Daniel F. Beatty, Manufacturer,

Washington, N. J.

Wanted.—A fair operator, with small cash capital (\$300 to \$500), to take half interest and entire charge of my Hyde Park gallery. Population from 15,000 to 18,000, and no other gallery. Has been in operation less than a year and has averaged \$332.30 per mouth for past six months, which can easily be increased. Particulars given on application to

Frank Jewell, Hyde Park, Pa.

The Backgrounds used in making Rocher's beautiful "Prize" pictures, published in the October "Photograrapher," were from Seavey's Studio.

Popular Backgrounds and Accessories.

PROFILED COLUMN SLIPS
PROFILED REVERSIBLE SET
GROUND PIECE.

BUSEY CABINET, Background or Profiled Slip.

LANDY'S WAINSCOTING, Papier Mache, elaborate design.

Also, the KURTZ BALUS-TRADE, the most artistic and popular accessory yet produced.

N. B. — All Promenade Backgrounds & Accessories are equally suitable for other purposes.

CAÙTION.—My new designs are being copyrighted. Inclose stamp for samples. Address

LAFAYETTE W. SEAVEY, 8 Lafayette Place, New York.

Mr. John L. Gihon will return from South America, to the United States, about the first of March, 1876. He solicits an engagement in some leading gallery. His abilities as a colorist, poser, and operator have been acknowledged, and his experience in the business (embracing a period of twenty years) entitle him to claim a knowledge of all its branches. He will engage upon a stated salary, or upon shares in any paying concern, and is indifferent as to locality. He has arranged with the editor of this journal to retain correspondence until his arrival in the country. Address John L. Gihon, care of E. L. Wilson, Editor Philadelphia Photographer.

USE WAYMOUTH'S VIGNETTE PAPERS.



PHOTOGRAPHIC HALL.—Electrotypes of Photographic Hall, five sizes, from the above up to the size in February number of this magazine. For prices apply to CROSSCUP & WEST,

Seventh and Chestnut Sts.

Or, BENERMAN & WILSON, Philadelphia.

M. B. ATKINSON, Photographic Artist. Photographs on plain or albumen paper finished in India ink, water colors, or crayon; life size and copies; also, porcelain miniatures. Originals sent can be copied at a fair price and promptly attended to. 215 Spruce Street, Philadelphia.

THE ROBINSON TRIMMER.

RICHMOND, IND., August 11, 1875. Mr. Edw. L. Wilson.

DEAR SIR: I feel as though I should say a few words in praise of the Robinson Trimmer and Guides I received from you. The trimmer does its work admirably, do not know how I should do without it; and the round-cornered guides, for cards, is something new, and makes the picture look much neater when compared with the old square cut kind, from a glass pattern.

The guides, all sizes, are the nearest perfect of any I ever used. But what I wish to request of you in particular is, to publish in your Journal the right way for sharpening the trimmer, I am certain this will be looked for by a great many with interest. I have used mine now constantly for some time, and it does not need it yet; but, in case it does, would not like to spoil it with any experimenting. Yours respectfully,

M WOLFE

Mr. Charles Waldack, who is known to many of our readers, writes in the Photographic Times as follows: As Robinson's trimmer is getting to be used universally, I think I will do a good turn to photographers in telling them how to sharpen the little wheel when it gets dulled by use. I owe it to a photographic friend here, and although some may know it, I am sure many do not. Make a groove in a piece of lead by means of the trimmer, put in it a little fine emery and a drop of oil, and run the trimmer forward and back in the groove until it is sufficiently sharp. There is something else about the trimmer; ascertain by trial which side of the wheel should be on the inside of the zinc or iron matt to cut best, and mark it."

BUTTER AND EGGS.

MANSFIELD, PA., December 31, 1875.

MR. JNO. R. CLEMONS,

Manufacturer of Albumen and Plain Paper, 915 Sansom Street, Philadelphia.

I am delighted with your "new" albumen paper. I have printed and toned it after it had been silvered over two weeks repeatedly, and in damp weather, kept in a room without fire to keep the air dry, yet it printed quickly and toned easily, and I was unable to select the finished prints from those on fresh paper.

You can "sail in 'Centennially'" and diurnally on your new papers, both plain and egged, and win. If any of your customers find any fault with them, and you want to give them a "blessing" by proxy, refer them to me.

Very truly yours,

F. M. SPENCER.

A MAN with plenty of vim, shove, and energy, can find as splendid an opportunity for business, in one of our largest cities in the South-west, as was ever offered. A "new broom" can sweep in the best trade of the city, by making superior work. Will sell the whole or a part interest.

Address

W. B. I.,

Care "Philadelphia Photographer."

SITUATIONS WANTED.

No charge for advertisements under this head: limited to four lines. Inserted once only, unless by request.)

A situation as operator, am well up in photography. Salary, \$25 per week. References given. Address Operator, care Carrier No. 6, Detroit, Mich.

A first-class artist, finishing in crayon, pastel, water color, and India ink; on plain and on albumen paper; of long experience; wants a situation in a No. I gallery. Address B. Schlieser, care of R. Benecke, St. Louis, Mo.

By a fine and competent negative retoucher. Address Retoucher, 34 First Avenue, New York.

By a young lady, of two years' experience, as printer and toner, and will wait on receptionroom. Central part of New York state preferred. Address Miss Annie Hopkins, Utica, N. Y.

By a young man of steady habits, in some firstclass gallery in a large city, eastern preferred; having been in the business over a year. Wages not so much in view as a thorough knowledge of the business. Address Percy M. Craig, Xena, Ohio.

As a good negative retoucher, printer, and toner; will assist in operating. Salary to correspond with the duties. Can furnish good references. Address W. C. L., No. 2 Raynor's Block, N. Clinton Street, Syracuse, N. Y.

An experienced artist in oils, etc., desires to engage with a good, reliable photographer, upon accommodating terms. Address Portrait Painter, Post-office, Pittsburg, Pa. Pittsburg or Philadelphia preferred.

USE WAYMOUTH'S VIGNETTE PAPERS,

In a first-class gallery, a position as operator, have had long experience, and can give good references. A western city preferred. Address Box 793, post-office, Middletown, N. Y.

An operator and positionist, of experience and ability, with first-class references, is open for an engagement. Address Photo.. care of Walter Lawton. 111 Broadway, New York.

By a good artist, in Philadelphia, by 1st of May, 1876. Qualifications—ability, industry, and sobriety. Address Parton Miller, Waverly, Pike Co., Ohio. Double Lock Box 23.

As operator, retoucher, printer, and toner, in some first-class gallery. Texas preferred. Address A. W. McDonough, Anderson, Ind.

By a young lady of long experience in the business, a position in some Boston photograph gallery. Understands all branches of printing, including solar, porcelain, printing on watch dials, etc.; can operate, and has had a long experience in copying and retouching. Address Miss R. M. Kling, Rome, N. Y.

By a young lady, as general assistant, or printer and toner; can print well and only needs practice in other branches of the art. Address Miss C. E. Royce, Reading, Hillsdale Co., Mich.

By a young lady, in a photograph gallery. Understands negative retouching; willing to leave the city. Address, stating terms, M. A. M., 822 North Twentieth St, Philadelphia, Pa.

By a young lady of experience, as retoucher of negatives or prints; can also finish in ink. Address Louise A. Palmer, P.O. Box 227, Springfield, Mass.

A middle-aged, liberally educated chemist, with much theoretical and some practical knowledge of photography, desires a situation in Philadelphia. Small pay at first. Satisfactory references. Address James P. Emry, Philadelphia.

By the 1st of April, as printer, toner, and retoucher, or dark-room worker; or will take a gallery in a small town to work on shares, with the privilege of buying. Address B, care Horace Robinson, Stall 90, Central Market, Cleveland, Ohio.

By a young man, of good habits, a chance to travel with some view artist the coming season; or assistant operator in some first-class gallery. Is not afraid of work of any kind. Had three years' experience. References given. Address V. L. W., care of C. W. Curtis, Photographer, Lewiston, Maine.

As viewest, by a young man who has apparatus for 8x10 and stereo. views. Address Frank A. Nims, Landscape Photographer, Manlins, Onondaigua, Co., N. Y.

As assistant printer and operator; been under a good instructor six months and wish to finish my trade. Address A. S. Niles, Oneida, N. Y.

By a first-class operator, well versed in both portrait and landscape work. The use of a most complete portable landscape apparatus and instruments will be given, if required. Address R. W. Anderson, 45 Alexander Street, Toronto, Canada.

To take charge of printing or operating, but prefer the former. Address F. H. Lee, care of Wm. Duthie, Esq., Lexington, Mich.

D. J. RYAN'S



SOUTHERN

Photographic Ferrotype

STOCK DEPOT,

Savannah, Geo.

FIRST-CLASS STOCK
AT NORTHERN PRICES,

Saving Time, Freight, Insurance, Drayage, &c.

SEND FOR PRICE LIST.

OUR NOVEMBER, 1875

PRIZE 3

PICTURES

Our second PROMENADE PICTURE competition has just been closed, and we are in possession of some of the finest Photographic work ever done in the world?

We offer prints from the competing negatives, for sale at the prices below. They are most useful to every photographer as examples of good negative work, artistic composition and lighting, and superior printing and finishing. We have done our part to make them models in every respect.

THE



Was awarded for the best six negatives to

Mr. LYMAN G. BIGELOW, Detroit, Michigan,

Whose elegant work is familiar to many of our patrons.

THE SETS INCLUDE:

Nos. 1 to 8—Studies by L. G. Bigelow, Detroit, Michigan.
Nos. 9 to 20—Studies by F. B. Clench. Lockport, N. Y.
Nos. 21 to 28—Studies by G. M. Elton, Palmyra, N. Y.
Nos. 29 to 34—Studies by O. P. Scott, Abingdon, Ill.
Nos. 35 to 40—Studies by E. M. Collins, Oswego, N. Y.
Nos. 41 to 46—Studies by E. H. Alley, Toledo, Ohio.

See review in December number Philadelphia Photographer.

The whole set of 46, .														\$10	00
In two Photo. Covers,											į,			11	50
Selections, per dozen,														4	00
" per two doz	en,													7	00
The 28 of Messrs. Clen	ch,	В	ige	lov	٧,	and	E	ltoi	n,					6	00
Book Cover and Bindin	ıg,												٠.		75

Address all orders to

BENERMAN & WILSON, Publishers, SEVENTH & CHERRY STS., PHILAD'A, PA.









G. GENNERT,

53 Maiden Lane, New York,

IMPORTER OF THE CELEBRATED

S. & M. DRESDEN ALBUMEN PAPERS

Rives and Steinbach-White, Pink, and Blue.

Every one says it WORKS THE MOST UNIFORM, ECONOMICAL, and GIVES FINER RESULTS than any other. To satisfy yourself that it is the best, send to your stock-dealer for a sample dozen. Kept by all stock-dealers in the United States.

ALSO.

Hyposulphite of Soda, Sulphate of Iron,

Solid German Glass Baths,
Saxe Evaporating Dishes,

AND French Filter Paper.

SPECIAL ATTENTION IS CALLED TO THE

EXTRA BRILLIANT, OR DOUBLE GLOSSY PAPER,

Which is recognized by the best artists all over the world as the

FINEST ALBUMEN PAPER IN THIS COUNTRY OR EUROPE.

A. M. COLLINS, SON & CO.,

MANUFACTURERS OF

PHOTOGRAPHIC CARDS AND CARD BOARDS,

OF EVERY DESCRIPTION.

Warehouse:

18 S. Sixth St., and 9 Decatur St.,
PHILADELPHIA.

PROMENADE PHOTOGRAPH CARDS.

SIZE 41 x 71. SQUARE CORNERS.

White, Light Buff, Amber, Pink, and Black—Plain.

White, Light Buff, Amber, Pink, and Black, with Gilt Borders.

Light Buff and Amber, with Red Borders.

Thin White, Rose Tint, and Black, with Gilt Beveled Edges.

Light Buff and Amber, with Red Beveled Edges.

Thick Gilt, Beveled Edge Glacé, Black and Rose Tint "J."

Glacé Card Boxes, for the Thick Beveled Edge.

Cards 7 x 10, with Gilt Borders, opening 4½ x 7½.

Cards 7 x 10, with India Tint and Gilt Borders, opening 4½ x 7½.

See detailed advertisement in this number of the "Photographic Times."

PRICE LISTS FURNISHED ON APPLICATION,

Send me 12 Bigelow Albums at once.—P. E. LIESEGANG.

LONDON, ENG., November 1, 1875.

Add 12 Bigelow Albums to our order, and send soon, as we are out. PIPER & CARTER, Publishers Photo. News.

BIGELOW'S ALBUM OF LIGHTING AND POSING.

SELLS ALL OVER THE WORLD.

WITH AN ENLARGED KEY, AND NEARLY ALL NEW STUDIES.

If you would improve your Lighting and Posing, study Bigelow's Album.

Another Lot Sent to England, October, 1875.

PRICE, \$6.00. FOR SALE BY ALL STOCKDEALERS.

BENERMAN & WILSON, Publishers, Philadelphia, Pa.

PHOTOGRAPHER'S

POCKET

REFERENCE BOOK.

An Alphabetically arranged collection of practically important hints on the construction of the Gallery; selection and trial of lenses and chemicals; approved formulæ for the different photographic processes; tables of weights and measures; rules for avoiding failure, etc.

IT IS A BOOK EVERY PHOTOGRAPHER SHOULD HAVE,

Because it is a ready helper under all difficult circumstances.

For sale by all dealers. Price, \$1.50, post-paid.

BENERMAN & WILSON, Photo. Publishers,

PHILADELPHIA, PA.

Over 1000 Sold.

A COMPLETE MANUAL OF

PHOTOGRAPHIC PRINTING

ON PLAIN AND, ALBUMEN PAPER, AND ON PORCELAIN.

Too little attention has heretofore been given to Photographic Printing, which is indeed quite as important a branch of the art as negative making.

It is the hope of both author and publishers to create REFORM in this

matter, by the issue of this work, and as it is to put money in the pockets of all who read it, the hope is that it will be generally read.

CONTENTS.

INTRODUCTION.

The Printing Room, with a Plan. The Silvering and Toning Room, with a Plan. The Drying Room, with a Plan.

PART I .- ALBUMEN PAPER PRINTING.

PART I.—ALBUMEN PAPER PRINTING.

The Positive Bath for Albumen Paper. Silvering the Albumen Paper. Drying the Paper. Funning the Paper. Preservation of Sensitive Albumenized Paper.—Washed Sensitive Paper. Cutting the Paper. The Printing Boards. Keeping Tally. Vignette Printing Blocks. Treatment of the Negatives before Printing. Filling of the Boards. Fitting Vignette Boards to the Negatives for Printing. Medallion and Archtop Printing. Fancy Printing. Vignette Cameo and Medallion Vignette Cameo Printing. Printing the Bendann Backgrounds. Printing Intense Negatives. Printing Weak Negatives. A Few More Remarks about Printing—Treatment of Broken Negatives. Cutting the Prints. Washing the Prints. Acidifying the Prints. Toning Baths. Artistic Toning. Fixing Baths and Fixing Prints. Washing the Prints. Finishing the Prints. the Prints. Finishing the Prints.

PART II.-PLAIN PAPER PRINTING.

Salting the Paper. Positive Baths for Plain Salted Paper. Silvering Plain Salted Paper. Drying, Fuming, and Cutting the Paper. Treatment of the Negatives before Printing. Printing-in False Backgrounds. General Plain Paper Printing. Further Treatment of the Prints after Printing. Causes of Failures in Albumen and Plain Paper Printing.

PART III.-PORCELAIN PRINTING.

Selection of the Porcelain Plates. Cleaning of the Porcelain Plates. Albumenizing the Porcelain Plates. Making the Porcelain Collo-Porcelain Plates. Making the Porcelain Collo-dion. Coating, Fuming, and Drying the Plates. Porcelain Printing Boards. Placing the Sensi-tive Plate on the Board for Printing. Printing Vignette Porcelains. Printing Medallion Pcr-celains. Washing the Porcelains. Toning the Porcelain. Fixing the Porcelain. Final Wash-ing of the Porcelain. Drying and Tinting of the Porcelain. Varnishing the Porcelain. Causes of Failures in Porcelain Printing.

Together with over 50 Wood Cuts, and an elegant Cabinet Portrait, from negatives by Mr. F. Gutekunst, printed by the author, Mr. Chas. W. Hearn.

A THOUSAND COPIES ALREADY GONE.

Mailed Post-paid on Receipt of \$2.50, by any dealer, or

BENERMAN & WILSON, Photo. Publishers, Seventh and Cherry Streets, Philadelphia.

ROBINSON'S METALLIC Guides,

FOR USE WITH THE ROBINSON PRINT-TRIMMER.

(See advertisement of Trimmer opposite.)

These Guides are made of Stout Iron and are turned in a Lathe, so that they are Mathematically True.

OVAL, ROUND, ELLIPTIC, and SQUARE, of all sizes; various shapes for Stereoscopic work, Drug Labels, etc., etc.

We have the following regular sizes always on hand at 10 cents per inch the longest way of the aperture, the fractions counting as one inch.

Special sizes made to order at 15 cents per inch the longest way of the aperture.

REGULAR SIZES:

	OVALS.		SQUARE	OR ROUND-COI	RNERED.
$2 \times 2\frac{7}{8}$	$3\frac{1}{2} \times 4\frac{7}{8}$	$5\frac{3}{4} \times 7\frac{3}{4}$	$2\frac{1}{16} \times 3\frac{3}{4}$	$2\frac{5}{16} \times 3\frac{7}{8}$	$3\frac{7}{8} \times 5\frac{1}{4}$
$2\frac{1}{8} \times 3\frac{1}{8}$	$3\frac{5}{8} \times 5\frac{1}{8}$	6 x 8	$2\frac{1}{8} \times 3\frac{3}{4}$	$2\frac{3}{4} \times 4\frac{1}{4}$	$4 \times 5\frac{5}{8}$
2½ x 3½	4 x 5\frac{3}{8}	6¼ x 8¼	$2\frac{1}{8} \times 3\frac{1}{8}$	$2\frac{3}{4} \times 4\frac{1}{2}$	$4\frac{1}{8} \times 5\frac{7}{8}$
$2\frac{3}{8} \times 3\frac{3}{8}$	$4\frac{3}{8} \times 6\frac{3}{8}$	$6\frac{1}{2} \times 8\frac{1}{2}$	$\begin{array}{c c} 2\frac{5}{16} \times 3\frac{15}{16} \\ 2\frac{5}{16} \times 3\frac{3}{4} \end{array}$	$2\frac{7}{8} \times 4\frac{5}{8}$	$3\frac{7}{8} \times 6$ $4 \times 6\frac{1}{8}$
$2\frac{5}{8} \times 3\frac{5}{8}$	5 x 7	7 x 9	10 1		
$2\frac{7}{8} \times 4\frac{1}{4}$	$5\frac{1}{4} \times 7\frac{1}{4}$	7½ x 9½		STEREOGRA	PHS.
3 x 4 x 4 x	$5\frac{1}{2} \times 7\frac{1}{2}$	$7\frac{1}{2} \times 9\frac{1}{2}$	Arch Tops. $3\frac{1}{16} \times 3\frac{3}{4}$	Round Cornered. $3\frac{1}{16} \times 3\frac{3}{4}$	Round.
$3\frac{3}{8} \times 4\frac{5}{8}$	$5\frac{5}{8} \times 7\frac{5}{8}$	$7\frac{3}{4} \times 9\frac{3}{4}$	3 x 3	3 x 3	

The above sizes suit the Collins Card Mounts, and photographers knowing that they can be always had at the low price of ten cents per inch, would do well to make their sizes accord, as orders can also be filled more quickly. Ten days is required to make special sizes.

An allowance of ten inches (\$1 worth) of regular sizes of guides will be given with

every Trimmer purchased. (See opposite page).

FOR SALE BY ALL DEALERS.

BENERMAN & WILSON, Manufacturer's Agents,

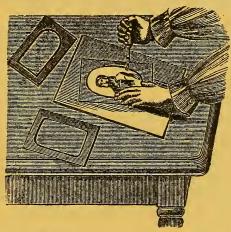
PHILADELPHIA, PA.

ROBINSON'S PHOTOGRAPH TRIMMER

IS A SUBSTITUTE FOR A KNIFE

FOR TRIMMING PHOTOGRAPHS, AND DOES THE WORK MUCH MORE EXPEDITIOUSLY AND ELEGANTLY THAN A KNIFE.

IT SAVES TIME, SAVES PRINTS, AND SAVES MONEY.



The accompanying cut represents the instrument in the act of trimming a photograph. It does not cut, but pinches off the waste paper, and leaves the print with a neatly beveled edge which facilitates the adherence of the print to the mount. Try one, and you will discard the knife and punch at once. For ovals and rounded corners it is worth its weight in gold.

A Trimmer and Ten Inches of Guides Mailed for \$3.50.

Oil the wheel bearings with Sewing Machine Oil.

Given Away!

WITH EACH ROBINSON PHOTOGRAPH TRIMMER

WILL HEREAFTER BE GIVEN Ten Inches of Metallic Guides, your choice from the regular sizes named on the opposite page. The manufacturers and agents finding that they can save money by manufacturing in large quantities, make this liberal offer to the trade, as they want everybody to have these capital inventions in use. They are no humbug and are not glass cutters or anything like them.

BENERMAN & WILSON, Manufacturer's Agents, FOR SALE BY ALL DEALERS. PHILADELPHIA, PA. Edition ready and already.

Practical Hints on Composition

ILLUSTRATED BY EXAMPLES FROM THE

GREAT MASTERS OF THE ITALIAN, DUTCH, AND FLEMISH SCHOOLS.

By JOHN BURNET, 1822.

THE ABOVE WORK IS THE VERY BEST AUTHORITY ON

POSITION AND OMPOSITION.

Owing to the fact that it has long been out of print, few are privileged to enjoy its advantages. We have reprinted and republished the original work by means of a photolithographic process, thus securing all the charms of the original drawings, and now offer the book to the art students of America for the first time.

It contains about 48 pages, and includes 38 illustrations—sketches of the best pictures by the masters of the schools named above, as follows:

Plate I-Angular Composition.

- Fig. 1: Shows rectangle, crossed by diagonal line. Used
- by Cuyp.

 2. Doubling of the lines on clouds. By Cuyp.

 3 & 4. Sky backgrounds, with cows in foreground.

 By Potter.
- Domestic group. By OSTADE.
 Country scene. By CLAUDE.

Plate II-Angular Composition.

- Angel in foreground, group of cattle beyond, with trees. By CLAUDE.
 River bank view. By REUBENS.
 Huntsman going out in the morning. By Delaer
 Embarkation of Prince of Orange. By CUYP.

Piate III—Angular Composition.

- Hate I—Aliganar Composition.

 1. Group of heads in form of diamond, By J. Burnet 2. Home comforts. By Ostade.

 3. English pastimes. By J. Burnet. 4. Gambler's quarrel. By Terburg. 5. Hunter's return. By DeLaer. 6. Lady writing. By MetzU. 7. The drunken father. By Rembrandt.

Plate IV-Angular Composition.

- 1. Awaiting orders. By Terburg.
 2. "School is out." By Ostade.
 3. Italian shepherdess. By DeLaer.
 4. Seducing the God Bacchus. By Reubens.
 5. The "Firstborn." By Corregio.

Plate V-Circular Composition.

- Fig.

 1. Death of Ananias. By RAPHAEL.

 2. Magdalen and St. Jerome, with child Jesus. By
- 3. Doctors consulting the law. By Guido.

Plate VI-Circular Composition.

- 1. A country dance. By REUBENS.
 2. Death of Gen. Wolfe. By B. WEST.
 3. Christ preaching. By REMBRANDT.
 4. Death of St. Jerome. By DOMENICHINO.
- 5. Transfiguration. By RAPHAEL.

Plate VII-Model Compositions.

- Christ and his disciples. By RAPHAEL.
 The sick bed. By REMBRANDT.

Plate VIII-Model Compositions.

- 1. "Landing of Charles II." By West.
 2. Cattle returning home in a shower. By Burnet.
 3. Cattle at rest. By Burnet.

Plate IX-Model Compositions.

- Blind fiddler, By WILKIE.
 Salutation of the virgin. By REMBRANDT.
 A dance. By OSTADE.

It is handsomely bound in cloth: \$20 cannot purchase a copy of the original work. As a help to photographers in making positions it cannot be overestimated. It teaches the practical elements of composition, and supplies the best examples.

PRICE, POST-PAID, \$3.50.

BENERMAN & WILSON, Photo, Publishers. Seventh and Cherry Streets, Philadelphia.

DR. VOGEL'S HANDBOOK.

SECOND EDITION.

THE HANDBOOK OF THE PRACTICE AND ART OF PHOTOGRAPHY,

By Prof. H. VOGEL, Ph.D., Berlin, Prussia.

IS NOW READY.

ALTHOUGH IT IS MUCH ENLARGED WE OFFER IT AT THE OLD PRICE, \$3.50.

It is Elegantly Illustrated, with Photographs and Engravings. Cloth Bound.

The reputation Dr. Vogel enjoys in this country as a practical photographic writer, is first-class, and insures a book of the best quality. That his *Hand*book is *eminently* so, we guarantee. It has been re-arranged and revised specially for the American photographer, giving the best German formulæ, &c., and is, in every sense of the word, a *Hand*book of the *practical* and *artistic* departments of Photography. Over fifteen hundred of the first edition were sold, and the demand continues.

IT ILLUSTRATES AND TELLS

How the Ateliers are built and used in Berlin and elsewhere;

How to make the best Photographs;

How to manage your Apparatus;

How to compose the Picture;

How to pose the Sitter:

How to choose Accessories;

How Berlin Cards are Made;

How to select and use your Lenses;

How to do everything in the Art.

TEACHES HOW TO BECOME A PERFECT PHOTOGRAPHER.

The whole includes, under one cover, everything needed for the practice of photography by the beginner, the amateur, and the professional—a complete Handbook. See contents of Book. The engravings are numerous, elaborate, and expensive. Four photographs, illustrating the lighting of the subject, accompany the work. Please read future advertisements

ASK YOUR DEALER FOR IT.

BENERMAN & WILSON, Photo. Publishers,

S. W. cor. Seventh and Cherry Sts., Philada.

WILSON'S BALTIMORE STOCK DEPOT

THE MOST POPULAR IN THE SOUTH.

QUICK TRANSIT. CHEAP FREIGHTS.

Best Coods! Best Prices!
Best Personal Attention!

Baltimore, the "City of Advantages" now, especially to the Photographer.

BEFORE PURCHASING, SEND FOR PRICE LIST AND CATALOGUE TO

CHARLES A. WILSON,

No. 7 N. Charles Street,

BALTIMORE, MD.

TRY BALTIMORE! IT WILL PAY!!

PLEASE READ OTHER ADVERTISEMENTS.

PROMENADE

PRIZE PICTURES.

JULY COMPETITION.

To enable all photographers to study these

GEMS OF ART,

We offer prints from the competing negatives, for sale at the prices below

They are the most exquisite things we ever offered, and will teach any one, be he a good or poor operator.

THE GOLD MEDAL

Was awarded for the best six negatives to Mr. Henry Rocher, Chicago, Ill., whose pictures are marvels of beautiful photography. The studies are all mounted in tasteful style, on Collins' Mounts, and printed at our own rooms by Mr. Chas. W. Hearn, and are fine studies in posing, lighting, printing, and toning.

THE SETS INCLUDE:

Nos.	1	to	7,						Studies	s by H. Rocher, Chicago.
**	8	to	16,						44	L. G. Bigelow, Detroit, Mich.
44	17	to	22,						64	I. W. Taber, San Francisco, Cal.
**	23	to	27,						**	C. M. French, Youngstown, O.
"	28	to	31,						44	Core & Frees, Tiffin, O.
**	32	to	37,						**	E. M. Collins, Oswego, N. Y.
44	38	to	42,						46	J. H. Folsom, Danbury, Conn.
**	43	to	48,						**	E. H. Alley, Toledo, O.
See	R	ev	iew	in	A	ugi	ust	n	umber 1	Philadelphia Photographer, page 242.

The whole set of 48,	12 00
In two Photo. Covers,	13 50
Selections, per dozen,	4 00
" per two dozen,	7 00
The 21 of Messrs. Rocher, Bigelow, and Taber,	6 00
Book Covers and Binding,	75

Address all orders to

BENERMAN & WILSON, Publishers,
Seventh and Cherry Sts., Philadelphia.



ROSS' PORTRAIT VIEW LENSES.

We have now successfully introduced to the American Photographers the Ross Lens, and by our increased sales we know they are appreciated. At the convention held at Buffalo, July 15, many fine photographs were exhibited by photographers, and ourselves, made with the Ross Lens, which attracted great attention.

While Ross & Co. are the oldest manufacturers of Photographic Lenses in existence, they also keep up with the requirements of the fraternity, by constantly manufacturing new combinations and improving on those already in existence. They have lately perfected, and will soon furnish us stock of, a new series of Card Lenses, extra rapid, peculiarly adapted for babies, and people who will not be quiet. We will give notice of their arrival.

WE HAVE NOW IN STOCK

Portrait Lenses, from 1-4 to 15 x 18. Instantaneous Doublets, all sizes.
Cabinet Lenses, Nos. 1, 2, and 3. Medium Angle Doublets, all sizes.
Card Lenses, Nos. 1, 2, and 3. Large Angle Doublets, all sizes.
Triplets, Nos. 1, 2, 3, 4, 5, 6, and 7. Stereographic Lenses, all sizes.
Symmetricals. Rapid Symmetricals. New Universal Lens.

Numerous testimonials pronounce them to be the best, as well as the *cheapest* Foreign Lens ever offered to the American Photographer. We will mail price-list on application, and promptly fill all orders.

STEINHEIL'S SONS' NEW APLANATIC LENSES.

We now have a full stock of these Celebrated Lenses, at the following prices:

No.	1, 1-4	size	34	inch	focus,		\$25	00	No.	5,10-12	size	, 13 ½	inch	focus	\$70	00
6.	2, 1-2		5 1	4.4	**		30	00		6,13-16		164	4.6	66	110	00
	3,4-4		7			·····	45	00		7, 18-22	4.6				200	00
6.6	4,8-1	0 "	104	66	4.6		60	00		8,20-24	"				350	00
			N	os. 1	& 2 ar	e in	mate	ched	l pair	s for Stereos	copi	e Work.				

We feel sure that at least one of these lenses is needful for the successful prosecution of your business, and so solicit your orders.

WILSON, HOOD & CO., THE UNITED STATES, 822 Arch St., Philadelphia, Pa.

The only genuine brand of DRESDEN ALBU-MEN PAPER is the CROSS-SWORD BRAND, all others are superannuated. We keep a full assortment of Single and Extra Brilliant always on hand.

CHAS. F. USENER'S Celebrated PORTRAIT LENSES are unexcelled. Before purchasing be sure and try a Usener.

CHARLES COOPER & CO., Wholesale Agents,

Manufacturing Chemists and Importers,

191 Worth Street, New York.

The Universal





Press

EMBOSSING PATENTED JANUARY 9th, 1872.

This Press will cameo all sizes, from cards to cabinets, and is sold lower than any other that will do the same work. It has been greatly improved and made very complete in all its parts.

We furnish a card, victoria, and cabinet size.

PRICE, \$20.00.

MANUFACTURED AND SOLD WHOLESALE AND RETAIL BY

WILSON, HOOD & CO., 822 Arch St., Philadelphia,

CAUTION.—Photographers are cautioned against buying other presses that may use an elastic embossing substance, as they are an infringement on the above.

R. J. Сните, Patentee.

JOHN DEAN & CO. Worcester, Mass.,

Manufacturers of the .

Nonpareil Plate,

A substitute for Porcelain. The new NONPAREIL PICTURES have elicited the most general expressions of approval and admiration. The latest improvement simplifies the formula and insures success. Our Plates are stamped. Patented July 29, 1873, and June 16, 1874. All others are spurious.

ALSO, THE CELEBRATED

FERROTYP **ADAMANTEAN**

BLACK, AND PATENT CHOCOLATE-TINTED. EGG-SHELL, AND GLOSSY.

The experience and extensive facilities of JOHN DEAN & CO. enable them to produce the most desirable FERROTYPE PLATES in the market.

> E. & H. T. ANTHONY & CO., Trade Agents, 591 Broadway, New York.

IMPROVED

PHOTOGRAPH COVERS.



The Outside Appearance.

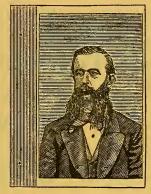


Fig. 2.

A Leaf Showing the Guard.

Frequent inquiries for something at a much lower price than an album, for the holding together and preservation of photographs, has induced us to manufacture an article which we think will meet the want.

IT SERVES ALL THE PURPOSES OF AN ALBUM, FOR

A Series or a Set of Portraits,

A Series or a Set of Landscapes,

A Series or a Set of Photographs of any kind,

MAY BE NEATLY AND CHEAPLY BOUND IN THESE COVERS.

They are made with expanding backs, so that from six to twenty-four pictures may be They are made with expanding backs, so that from six to twenty-tour pictures may be inserted in one cover. The pictures are mounted in the usual way, and then strips of linen, or strong paper, of the proper width, are pasted on one edge, by which the picture is inserted and held in place in the cover by a paper fastener. Fig. 1 represents the cover, with the perforations in the back, through which the spreading clasps of the paper fastener bind the whole together. These are so easily inserted or removed, that pictures are readily put in or taken out at any time. Fig. 2 represents the picture, with the guard pasted on ready for insertion. The arrangement is simple, and we are sure will be readily comprehended. For binding together views of your town or city, or portraits of celebrities, they are very neat

The following is a list of sizes and prices, without cards:

Card Si	ze,						\$1.50							
Cabinet	DUA	e,	•	•	•	•	A. A.O	•	•	•	•	•	•	10.00
EXTRA HEAVY	COV	ER	s.											
5-8 Size	3, .						4.50				,			33.00
4-4 66	٠.						6.00							40.00
8-10 "														
11-14 "							9.00							65.00

Larger or special sizes made to order. Furnished with card board at best rates. Samples mailed at dozen price. Send for some.

BENERMAN & WILSON, Photo. Publishers,

Seventh and Cherry Streets, Philadelphia.

JAMES F. MAGEE & CO.

MANUFACTURERS OF

PURE

PHOTOGRAPHIC CHEMICALS.

No. 108 North Fifth Street,

PHILADELPHIA.

Stock Dealers only Supplied.

THE ZENTMAYER LENS.

FOR VIEWS AND COPYING.

These Lenses possess pre-eminently, the following qualities:

Width of visual angle, ranging from 80° to 90°; depth of focus; extreme sharpness over the whole field; true perspective; freedom from all distortion in copying; portability and cheapness.

Each mounting is provided with a revolving Diaphragm, containing the stops of the different combinations for which they are designed. The larger ones are provided with an internal shutter for making and closing the exposure.

No.	1,	2 }	inch	focus,	3	x	3	plate,			\$20	00	No.	1	and	l No.	. 2	combined,						\$33	00
"	2,	31	**	**	4	x	5	• • •			25	00	66	2	"	, 66	3	ee ee	•	٠	•	•		40	00
"	3,	5 }	"	66	$6\frac{1}{2}$	x	8	1 "			30	00	ii.	4	66	"	5	44						55 75	
6.6	4,	8	6.6	"	10	x	12	2 "		٠	42	00	66	5	66	66	6	4.4						110	00
**	5,	12	**	"	14	x	17		٠	٠	60	00	66	1,	2,	and	3,	()						48	
66	6,	18	"	6.6	20	X	24	<u> </u>			90	00		3,	4,	and	5,	**		•		•	•	88	UU

No. 3, with large mounting to combine with No. 4 and No. 5, \$35.

No. 1 and No. 2, specially adapted for Stereoscopic Views, are furnished in matched pairs. No. 1 and No. 2, single, not to combine with other sizes, \$36 a pair.

Lenses and mountings to form all six combinations, from 2½ to 18 inches, \$173.

Zentmayer's Stereoscopic outfits, including a pair of No. 2 Lenses 4 x 7 box, 7 x 10 India Rubber Bath and Dipper, Tripod, Printing Frames, and outside box, \$60.

JOSEPH ZENTMAYER, Manufacturer,

147 South Fourth Street, Philadelphia.

BENJ. FRENCH & CO.,

319 Washington St., Boston,

IMPORTERS AND SOLE AGENTS FOR THE CELEBRATED

Voigtlander & Sonmon Parlot LEWSES,

NEW STEREOSCOPIC LENSES.

New Stereoscopic Tube and Lens, made expressly for us, marked with our name (imitation Dallmeyer), with rack and pinion, central stops, for portraits or views. Will work in or out of doors. Also, for instantaneous pictures. Four inch focus, **price per pair**, **\$21.00.** By taking ont back lens, and using only front lens in place of back, you get six inch focus. The great and increasing demand for all these lenses, is sure guarantee that they are the best. Read the following

Testimonials.

"I have tried the Mammoth Voigtlander you sent me, and I consider it the best large instrument I have ever seen, and I have tried those made by other makers, Dallmeyer's included, and they do not compare with the Voigtlander. All my baby pictures were made with half-size Voigtlander lenses."—J. LANDY, 208 W. Fourth St., Cincinnati, Feb. 25, 1874.

"The Voigtlander lenses have always been favorites with me. My first experience, in the days of daguerrectype, was with one, since which I have owned and tried many of the different sizes and never saw one but was an excellent instrument. Lately again trying some for my own use and for a friend, I found them to be superior to other eminent makers, particularly in the large sizes."—W. J. Baker, Buffalo, N. Y.

"Twenty-four years ago I bought and commenced using my first Voigtlander lens. It was a good one. Since then I have owned and used a good many of the same brand, of various sizes. They were all and always good. Some of the larger sizes that I have recently bought seem to me better than any I have ever had or seen before."—J. F. RYDER, Cleveland, Ohio, Dec. 18, 1872.

"About a year ago I bought a Voigtlander & Son No. 3 4-4 size lens. Said instrument gives me great satisfaction, being very quick, at the same time has great depth of focus."—E. G. Maine, Columbus, Miss.

"Have never seen anything equal to the Voigtlander & Son Lens. The No. 5, Ex. 4-4 is the best instrument I ever used. I cannot keep house without it."—D. B. VICKERY, Haverhill, Mass.

"The pair of imitation Dallmeyer Stereoscopic Lenses you sent we are very much pleased with; they work finely."—GOODRIDGE BROS., East Saginaw, Mich.

"After a trial of your imitation Dallmeyer in the field with those of the Dallmeyer Rapid Rectilinear, side by side, I can say that for general views I like yours as well, for some objects far better, on account of their short focal length."—D. H. Cross, Mosher's Gal., *Chicago*.

New Catalogue of Prices Just Issued, to be had on Application.

WILSON'S

Lantern Journeys

By EDWARD L. WILSON,

Editor of the "Philadelphia Photographer."

This work will be found entertaining by all who like to read about the beautiful places and things of this world.

The contents are divided into six "Journeys," each one including a visit to 100 places, making 600 in all, as follows:

- JOURNEY A-Havre, Paris, Versailles, Rouen, Fontainebleau, and Switzerland.
- JOURNEY B-Compiegne, Brussels, Aix la Chapelle, Cologne, Up and Down the Rhine, Potsdam, Berlin, Dresden, Vienna, the Vienna Exposition, the Semmering Pass, Saxony, Munich, and Southwest Germany.
- JOURNEY C—Italy—Lake Maggiore and Como, Milan, Verona, Venice, Florence, Pisa, Rome, Naples, Pompeii, the Ascent of Vesuvius, Puteoli, and the Italian Art Galleries.
- JOURNEY D-Holland, Denmark, Norway, Sweden, Russia, and Spain.
- JOURNEY E-Egypt, Palestine, Syria, Turkey, Greece, and India.
- JOURNEY F-England, Scotland, and the United States of America.

It has been carefully prepared, and will be found amusing, very entertaining and instructive.

It contains 218 pages, Cloth bound, Gilt. Price, \$2.

BENERMAN & WILSON,

Photo. Publishers, Philadelphia, Penna.

PHILADELPHIA

PHOTOGRAPHER

THE LIVEST and BEST

Photographic Magazine Published.

ANNOUNCEMENT FOR 1876!

The publishers have a great many good things in anticipation for the year 1876, which they think will render their magazine more beautiful and more useful than ever before; and while they maintain that the beautiful example of photography, which accompanies each issue, is alone worth the subscription price, still more and more effort will be made to make the reading matter everything that it ought to be. Our correspondents from all the leading centres abroad will keep our readers posted on all matters of interest in their several sections, while our unrivalled staff at home will look diligently after your interests here. To make the Philadelphia Photographer the best practical helper which can possibly be obtained, is the aim and earnest desire of its publishers.

We ask your co-operation in extending its usefulness, and offer to all present subscribers, who secure us new ones, the following

For every new subscriber, for one year, \$1, payable in any of our publications, books, or, if preferred, \$1

PREMIUMS

worth of any of our prize pictures, or any other article for which we are agents, advertised in this magazine.

Operators, printers, etc., can secure all their necessary photographic literature in this way, by a little earnest effort.

EACH MONTHLY ISSUE IS A PHOTOGRAPHIC WORK IN ITSELF. NOTICE TO SUBSCRIBERS.

Subscription price, \$5 a year, \$2.50 for six months, 50 cents per copy, postpaid. positively in advance.

In remitting by mail a post-office order, or draft payable to the order of Benerman & Wilson, is preferable to bank-notes. Clearly give your Post-Office, County, and State.

Canada subscribers must remit 24 cents extra, to prepay postage.

Foreign subscriptions must be accompanied by the postage in addition.

ADVERTISING sheets are bound with each number of the Magazine. Advertisements are inserted at the following

1 Month. 6 Months. 1 Year.
One Page,\$20 00 \$110 00 \$200 00
Half " 12 00 66 00 120 00
Quarter Page, ... 7 00 38 50 70 00
Eighth " ... 4 00 22 00 40 00
Cards, 6 lines, or less, 2 00 11 00 20 00

The attention of advertisers, and those having galleries, &c., for sale, is called to our Specialties pages. Terms, §2 for six lines, and 25 cents for each additional line, seven words to a line, always in advance. Duplicate insertions, 50 cents less, each.

SURE TO PAY!

Operators desiring situations, no charge.

BENERMAN & WILSON, Publishers,

OFFICE, S. W. COR. OF SEVENTH AND CHERRY STS., PHILADELPHIA.



ENTREKIN BURNISHER OF PLANISHER

MANUFACTURED UNDER AN

Exclusive License

GRANTED BY

W. E. LOCKWOOD,

ASSIGNEE OF

J. F. SCHUYLER.

WHOSE PATENT BEARS
DATE

February 24, 1863.

RE-ISSUED

June 1, 1875.

WITH THE FOLLOWING CLAIMS!

1.—As an improvement in the art of Planishing paper, submitting the paper to friction under pressure between a roughened feed roller and a Planisher, substantially as described.

2.—The combination in a Paper Planishing Machine, of a Planisher with a draw-filed roller, for controlling the paper while it is under pressure between the said roller and planisher, all substantially as set forth.

DECISION OF THE U. S. COURT,

SUSTAINING THE LOCKWOOD PATENT.

In the United States Circuit Court, held at Portland, Me., October 8, 1875, in the case of J. P. Bass vs. John M. Peck, the jury, on questions submitted by the Court, rendered a verdict, that Emile R. Weston was not the first and original inventor of the invention claimed by the said J. P. Bass, his assignor; John F. Schuyler had anticipated him by substantially the same invention, patented and assigned to W. E. Lockwood in 1863, reissued June 1, 1875.

CAUTION!

TO PHOTOGRAPHERS AND DEALERS IN PHOTOGRAPHIC GOODS.

Whatever doubts may have existed in the minds of photographers as to the merits of the controversy between the undersigned, W. G. Entrekin, and the owners of the Weston Patents for Burnishers, will be set at rest by the perusal of the above claims and decision.

While the undersigned feels disposed to treat with liberality, photographers who have been induced by threatening circulars to purchase the Weston and other machines that infringe the above claims, he will hold them responsible as infringers of the above-mentioned re-issued patent of Wm. E. Lockwood in the use of said machines without first paying the small license fee which is now demanded.

On the other hand, the most prompt and determined legal measures will be taken against those infringers who deliberately, and after being thus duly cautioned, make, use, or sell burnishing machines in which is embodied the invention claimed in the said re-issued patent.

W. G. ENTREKIN, Sole Licensee,

Under grant by WM. E. LOCKWOOD, Patentee.

Manayunk, Philada., February 23, 1876.

TRY HERMACIS' "PROMENADE" LENSES.

Number 148.

50 Cents.

THE + 7972.1

PHILADELPHIA

Photographer.

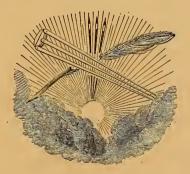
AN ILLUSTRATED MONTHLY JOURNAL,

DEVOTED TO PHOTOGRAPHY.

THE OFFICIAL ORGAN OF THE NATIONAL PHOTOGRAPHIO ASSOCIATION OF THE UNITED STATES.

EDITED BY EDWARD L. WILSON.

April, 1876.



PHILADELPHIA:

BENERMAN & WILSON,

PUBLISHERS,

S. W. COR. SEVENTH AND CHERRY STS.

Subscriptions received by all News and Stock-Dealers.

FIVE DOLLARS PER ANNUM, IN ADVANCE.

Sherman & Co., Printers, Philadelphia.

SUMMARY OF CONTENTS.

PAGE	PAG
The Gold Medal for Retouching 97	Society Gossip
Who Will Teach us Art? 97	German Correspondence. By Prof. H. Vogel 11:
Silver, Carbon, or-What? 99	French Correspondence. By E. Stebbing 11:
Dead Letter Photographs 99	Correspondence
Hints to Beginners. By L. T. WILT 99	Landscape Photography and its Trials 11
Skylight Construction 101	The Centennial Photographic Diary 11
The Printer's Corner. By CHARLES W. HEARN 103	The Robinson Trimmer 11
California Correspondence 105	Interesting American Scenery 12
Canada Correspondence 106	Talk and Tattle 12
Wrinkles and Dodges 107	Matters of the N. P. A 12
Weymouth's Vignette Papers 108	Photographic Hall 12
Our Picture 109	EDITOR'S TABLE 12
Our Advance Column 109	

EMBELLISHMENT.-Promenade Competition Picture. Negatives by G. M. ELTON, Palmyra, N. Y.

ADVERTISEMENTS.

ANTHONY & Co., E. & H. T. Adamantean Plates. BENERMAN & WILSON. Magic Lanterns and Slides. BULLOCK & CRENSHAW. Photographic Chemicals. BURRELL, D. T. Photo. Chart, etc. CAMEO PRESS, THE UNIVERSAL. CENTENNIAL EXHIBITION VIEWS. CENTENNIAL PHOTOGRAPHIC CO. COLLINS, SON & Co., A. M. Photograph Cards. COOPER, CHAS. & Co. Dresden Albumen Papers, etc. DEBANES, J., Glace Work. ENTREKIN, W. G. Burnisher or Planisher. FAIRBANK, MURPHY & Co. Passepartouts, Matts, etc. FRENCH, B. & Co. Voigtlander Lenses, &c. GEORGE & SATCAMP. Photographic Materials. GENNERT, G. Albumen Papers. GIHON, JOHN L. Opaque and Cut-Outs. HANCE'S PHOTO. SPECIALTIES. HEARN'S PRACTICAL PRINTER. HEARN'S PHOTOGRAPHIC PRINTING INSTITUTE. HERMAGIS' PORTRAIT LENSES. HINTS ON COMPOSITION, BURNET'S. HOWSONS' PATENT OFFICES. IMPROVED PHOTOGRAPH COVERS.

LEWIS, R. A. Collodlon. MAGEE, JAMES F. & Co. Photographic Chemicals. Mosaics, 1876. PATTBERG, LEWIS & BRO. Passepartouts, &c. PHOTOGRAPHIC INSTALLATION Co. PHOTOGRAPHER'S POCKET REFERENCE-BOOK. PHOTOGRAPHIC PUBLICATIONS. PHOTOGRAPHER TO HIS PATRONS. PROMENADE PRIZE PICTURES. ROBINSON'S PHOTO. TRIMMER AND METALLIC GUIDES. Ross' Portrait and View Lenses. RYAN, D. J. Southern Stock Depot. SAUTER, G. Passepartouts. SOMERVILLE, J. C. New Stock-House. VOGEL'S HAND-BOOK OF PHOTOGRAPHY. WALLACH, WILLY. Trapp & Munch's Albumen Paper WAYMOUTH'S VIGNETTING PAPERS. WILSON, CHAS. A. Baltimore Stock Depot. WILSON, HOOD & Co. Announcement for 1876.

WILSON'S LANTERN JOURNEYS.

ZENTMAYER, JOSEPH. Lenses.

WOODWARD, D. A. Solar Cameras.

119 South Fourth St.

PHILADELPHIA.

Branch Office, 605 Seventh Street, WASHINGTON. D. C.



H. HOWSON,

Engineer and Solicitor of Patents.

C. HOWSON,

Attorney at Law, and Counsel in Patent Cases.

CENTENNIAL



By arrrangement with the CENTENNIAL PHOTOGRAPHIC CO., who have the exclusive right to photograph within the INTERNATIONAL EXHIBITION OF 1876, we are enabled to offer to our patrons a splendid line of

INTERIOR AND EXTERIOR VIEWS

OF THE

Memorial or Art Hall, Main Building, Machinery Hall, Horticultural Hall,
Agricultural Hall, The Women's Pavilion, The Government
Building, The Jurors' Pavilion,

The Japanese Building, The English Government Buildings, and the various other buildings, Bird's-eye Views of the Whole, and many other "bits" here and there, so far made,

ONE HUNDRED AND FORTY SUBJECTS.

Of stereographic size, at \$3 per dozen; 5×8 at 50 cents each; 8×10 , \$1; 13×16 , \$2.50; and 17×21 , \$5. These views are all gotten up in the highest style of the art, can be sold by any photographer, and will bring a crowd to any gallery to see them.

CATALOGUES FREE. SAMPLE DOZEN STEREOS BY MAIL, \$3.
LIBERAL DISCOUNT BY THE GROSS.

Also the **CENTENNIAL SOUVENIR**—16 Views of the Centennial Buildings and Philadelphia. Cloth bound, 50 cents, post-free. Trade supplied. Money in it!

BENERMAN & WILSON, Photo. Pub's, SEVENTH AND CHERRY STS., PHILADELPHIA.

CENTENNIAL PHOTOGRAPHIC COMPANY.

By exclusive concession of the Centennial Board of Finance, having the exclusive right to make and sell Views of the International Exhibition of 1876 within the Exhibition limits. desire to give all publishers of good views of the country, celebrities, etc., etc., an opportunity to sell their goods also at the Exhibition, and therefore invite correspondence on the subject from all such publishers. Arrangements should not be delayed.

Address or call at the

STUDIO:—{ Belmont Avenue, opposite the Lake, International Exhibition, Philad'a.

Our Studio, 65 x 126 feet, being located between the Main Building and Machinery Hall, near all the other great structures, and on the BEST BUSINESS SITE within the grounds, gives us splendid facilities. Besides we shall have booths in all the principal buildings.

Centennial Photographic Co.,

BELMONT AVENUE, INTERNATIONAL EXHIBITION.

TRANSPORTATION STATION, No. 9.

PHILADELPHIA, PA.

CENTENNIAL

PHOTOGRAPHIC INSTALLATION CO.,

CENTENNIAL EXPOSITION.

Having received special permission from the Bureau of Art Administration, to instal the exhibit of those who may not find it convenient to attend to the same in person, we hereby offer our services to those about to exhibit in PHOTOGRAPHIC HALL, to act for them in attending to the unpacking and installing in position their exhibit (under the direct supervision of the proper officer appointed by the Centennial Commission), to take charge of the same during the Exhibition, and at its close to repack for return to the exhibitor, unless otherwise disposed of. Our charge for these services we have carefully considered, and it will be at the rate of twenty cents per square foot of surface space allotted the exhibitor, the amount to accompany the order authorizing us to act for you.

In addition to the above capacity, we shall make a special feature of the following:—To furnish to order special decorations to exhibits, subject to the rule of the Commission; to frame and otherwise prepare such exhibits as may be sent unfinished; to furnish to order the necessary painting of signs; to effect special fire insurance on exhibits; to attend to the sale of such articles as the exhibitor may desire to dispose of; to use those on exhibition as samples to sell by, and deliver duplicates outside the Centennial grounds.

The PHOTOGRAPHIC INSTALLATION CO. will have their office in Photographic Hall after the opening and during the Exhibition, and at least one of the Company will be in attendance all the time the Exhibition is open to attend to commissions intrusted to them.

THIS CERTIFIES, That the Photographic Installation Co. is reliable, and has the confidence of John Sartain, Chief of Art Bureau.

MANAGERS.



DOUBLE IODIZED PORTRAIT COLLODION.

ANDERSON'S PORTRAIT COLLODION.

WHITE MOUNTAIN LANDSCAPE COLLODION.

NIAGARA FALLS LANDSCAPE COLLODION.

TRASK'S FERROTYPE COLLODION.

HANCE'S BATH PRESERVATIVE.

HANCE'S GROUND GLASS SUBSTITUTE.

HANCE'S DELICATE CREAM GUN COTTON.

HANCE'S SILVER SPRAY GUN COTTON.

HEARN'S COLLODIO-CHLORIDE.

GILL'S CHROMO INTENSIFIER.

CUMMINGS' GRIT VARNISH.

Manufactured from the best chemicals that can be procured in the market, manipulated with the greatest care.

Each article warranted to do the work claimed for it, if used according to the directions plainly printed on the label accompanying each bottle or package. These preparations are noted for their purity and uniformity, and have for years been used in the most celebrated galleries in the United States and Canada.

FULL MEASURE CUARANTEED.

For Sale by all Stock-dealers in the United States and Canada.

A. L. HANCE, Manufacturer, 126 NORTH SEVENTH STREET, PHILADELPHIA.

Read detailed advertisments on succeeding pages.

HANCE'S PHOTOGRAPHIC SPECIALTIES

WARRANTED FULL MEASURE, AND CHEMICALLY PURE.

ARE SOLD BY ALL DEALERS, AS FOLLOWS:

HANCE'S BATH PRESERVA-TIVE. A sure preventive of pinholes, stains, &c. It preserves the bath in good working condition, and will be found worth its weight in gold. See special advertisement. \$1.00 per bottle.

HANCE'S DOUBLE IODIZED COLLODION. This is made by compounding the different iodides according to their equivalents, and producing a new salt. It is being used by some of the best photographers, but its general use is retarded, no doubt, by the extra trouble in making it. The peculiarities of this Collodion are good keeping qualities, its improvement by age, and the richness of effect produced in the negative, the film being perfectly structureless. As it requires time to ripen, I have the advantage of making a quantity and keeping it always ready to supply any demand. \$1.50 per lb.; 80 cts. per ½ lb.

ELBERT ANDERSON'S PORTRAIT COLLODION is made according to the formula used by Mr. Anderson in Mr. Kurtz's gallery in New York. It is especially adapted to portrait work. \$1.75 per ib.; 90 cts. per ½ ib.

HANCE'S WHITE MOUNTAIN COLLODION is adapted more especially to outdoor work, and for quick working, delineating foliage, frost-work, or sky, it stands unrivalled. It is made after the formula used by that celebrated mountain artist, B. W. Kilburn, of Littleton, N. H., whose work is too well known to need any comments. \$1.50 per fb.; 80 cts. per ½ fb.

CURTIS' NIAGARA FALLS COLLODION is another used for land-scapes. The wonderfully beautiful views made by Mr. Curtis, of the great cataract, with this collodion, have a world-wide reputation, and are an indisputable evidence that he could have nothing better to produce such magnificent work. \$1.50 per lb; 80 cts. per ½ lb.

TRASK'S FERROTYPE COL-LODION is made especially for positive pictures. Mr. Trask has no superior in this class of work, and this collodion is the result of his practice and experience for years in proving what was BEST. It is made after his formula and ferrotypers will find it all that can be desired. \$1.50 per lb.; 80 cts. per $\frac{1}{2}$ lb. HANCE'S PECULIAR PORTRAIT COLLODION is peculiar in that it is prepared without bromides, and is adapted for use with Black's acid bath. To those using the acid bath this collodion is indispensable. Formula on the bottle. \$1.50 per lb.; 80 cts. per ½ lb.

cummings' grit varnish gives a very fine surface for retouching. Those that use a varnish of this kind will find that this has no superior. By it the retouching is greatly facilitated and the same amount of work on a negative may be done with it in half the time that would be required without it. 40 cts. per 6 oz. bot.

HANCE'S SILVER SPRAY GUN COTTON is now being used by many of the best photographers, and the testimonials I am receiving are sufficient evidence of its excellence. I prepare it with great care, and warrant it free from acid, very soluble, gives good intensity so that no redevelopment is necessary, gives perfect detail, and a film pure and structureless. 50 cts. per oz.

HANCE'S DELICATE CREAM GUN COTTON is adapted to those who like a very delicate, soft-working collodion, giving all the modelling especially in the Rembrandt style, and with light drapery. Its sensitiveness renders it particularly adapted for children, or any work that requires short exposure. 80 cts. per oz.

CHROMO INTENSIFIER is intended to strengthen the negative. It imparts a beautiful tone and gives excellent printing qualities. 50 cts. per bottle.

HANCE'S GROUND-GLASS SUBSTITUTE is simply what its name implies, a substitute for ground-glass for any purpose that it is used for in the gallery. To the landscape photographer a bottle of it is indispensable. If he breaks his ground-glass, he has only to coat a plate, such as he is sure to have with him for negatives, with the substitute, and in a few moments his ground-glass is replaced and his work goes on. It is equally useful in the printing room, and any photographer who has once used it will never again be without it. 50 cts. per bottle.

HEARN'S COLLODIO-CHLO-RIDE.—The best for Porcelain pictures. \$2.25 per \(\frac{1}{2} \) lb. bottle, and \$4.00 per lb. bottle. Try it, and get good porcelains.

HANCE'S GROUND GLASS SUBSTITUTE

Is an indispensable article in the photographic gallery. There are so many uses to which it can be applied that a photographer having once given it a trial, will never be without it, as there is nothing known that will take its place. There are a few base imitations in the market, but they are not used a second time, and will soon die a natural death.

The Substitute is in the form of a varnish, is flowed and dried the same as varnish, but dries with a granulated or ground-glass surface. Wherever ground glass is required, Hance's Substitute answers every purpose.

FOR VIGNETTE GLASSES.

- " A RETOUCHING VARNISH.
- " SOFTENING STRONG NEGATIVES.
- " THE CELEBRATED BERLIN PROCESS.
- " GROUND GLASS FOR CAMERAS.
- " GLAZING SKY AND SIDE LIGHTS.
- " OBSCURING STUDIO & OFFICE DOORS.
- " PRINTING WEAK NEGATIVES.

For skylights it must be flowed before glazing. The Substitute being very thin it will cover a large space. It is economical, and makes a surface equal to the finest ground glass. It can be easily removed by rubbing it with cotton wet with alcohol. GIVE IT A TRIAL.

PRICE, 50 CENTS PER BOTTLE,

Large quantities, for Studio Lights, etc., supplied low.

HANCE'S DELICATE CREAM GUN COTTON

IS THE KING COTTON, AND HAS NO PEER.

Prepared with particular care, warranted free from acid, and very soluble. I take particular pride in this cotton. It has made its way steadily and surely into most of the principal galleries in the country, where parties prefer to make their own collodion, and its superior qualities are shown in the medals awarded at the Vienna Exhibition, for photographs made with collodion in which it was used.

It is especially adapted to the Rembrandt style, and light drapery. Its sensitiveness renders it particularly adapted for children or any work that requires short exposure.

PRICE, 80 CENTS PER OUNCE.

Read next page.

COMMENDATORY LETTERS

Testifying to the superior qualities of

HANCE'S SPECIALTIES

WE HAVE ROOM ONLY FOR THE FOLLOWING:

"I consider the Cotton the best we have ever used as yet."-R. POOLE, Nashville, Tenn.

"The film of the Cotton you sent me was unusually smooth and firm, being entirely free from glutinosity, and setting like India-rubber. It was quite powdery and crumbled to pieces in my fingers, 'as if rotten.' It dissolved almost instantaneously, and it was 'by far' the very best material I have ever used. I sincerely trust that you will send me the same kind again."—Elbert Anderson, Kurtz Gallery, New York.

"I received your Double-Iodized Collodion all right, and in good shape. Have tried it pretty well. It gives very fine negatives and good detail."—W. E. HART, Watertown, N. Y.

"We take pleasure in recommending Hance's Double-Iodized Collodion as a first-class article, in fact it is the best manufactured Collodion we have tried."—SCHREIBER & SONS, No. 818 Arch Street, Philadelphia.

"The goods by Express came safe to hand. I have tried a part of them and am greatly pleased. Will likely want more goods in your line."—R. POOLE, Nashville, Tenn.

"Your Ground Glass Substitute is the best I have ever tried, and I have tried nearly every kind advertised, as the long row of nearly full bottles will testify. It works like a charm."—J. N. WEBSTER, Barton, Vt.

"I take pleasure in recommending your Cottons and Collodions, before all others I have used. It is a blessing to know where you can get good Cotton."—B. W. KILBURN, Littleton, N. H.

"The last lot of Cotton you sent is the very best I have ever used. Please send me another pound at once."—ELBERT ANDERSON, Kurtz Gallery, New York.

"Have used some twenty-five pounds of your Collodion the past year with unvarying success."—G. W. HOPE, Middletown, New York.

"Your Double-Iodized Collodion is the most perfect working Collodion I have used in fifteen years. Every picture I make with it is a success."—R. L. Dale, Boston, Mass.



Has now become the standard Collodion in all first-class galleries. Although but a short time in the market it is rapidly superseding all other makes, and the quantity that has been sold is simply astonishing.

Give it but a single trial and you will be convinced. Can be used as soon as made, but improves with age, and will keep indefinitely.

Price, \$1.50 per pound.

A liberal discount to parties ordering by the gallon. READ ADVERTISEMENTS ON PRECEDING PAGES.

1776. PREPARE FOR THE CENTENNIAL. 1876.



Announcement for 1876!

WILSON, HOOD & CO.,

No. 822 ARCH STREET, PHILADELPHIA.

We having completed our annual account of stock, have replenished all departments needing it, and are now ready to fill promptly all orders intrusted to our care.

your attention to a few of our specialties.

Innumerable experiments have been made to produce a Photographic Negative Glass, that should combine the two qualities of excellence and cheapness, but until now without success. We can now offer you a glass that excels the French for polish, freeness from bubbles, straightness, and uniformity, at a less price than French glass has ever been sold. It is not susceptible to atmospheric action, and never rusts or stains. It will be known and sold as the

ARTISTS' BRAND OF SULPHATED GLASS.

AT FOLLOWING PRICES:

$6\frac{1}{2} \times 8\frac{1}{2}$, and 7×9 , per box of 50 ft.,	\$4	25	11 x 14, pe	er box	of 50 ft.,		\$5	50
8 x 10, and 9 x 11, " "					66			75
10 x 12, per box of 50 feet,	5	00	14 x 17,	"	"		6	00
Larger sizes furnish	ed.	Sa	mple Order	s solic	ited.			

We are agents for the sale of

THE MULTISCOPE.

It is a combination of a slide-which will hold four dozen views-with a stand which will fit any Holmes' Hand Stereoscope. They supply a long felt want, are strongly made, and can be purchased at \$12.00 per dozen. Descriptive Circulars furnished when desired.

> We have been appointed by the manufacturers, Agents for the sale of

THE GORHAM HEATING STOVE.

REVERSIBLE SUPPORT.

Patented July 13, 1875, August 17, 1875, and Patent pending.

Always ready and perfectly safe. Just the thing for drying plates, boiling baths, or any purpose for which you require an instantaneous heat. It burns non-explosive fluid. Alcohol, two tablespoonsful, will burn one-half hour; will boil a pint of water in five minutes. The stove is made of spun brass, and support of Russia sheet-iron, with wire gauze covering a packing of Asbestos, which serve as a permanent vaporizer, causing the alcohol to light instantly. The flame is easily extinguished with the brass cap, which accompanies the stove. Will send to any address, post-paid, on receipt of \$1.

We take pleasure in notifying you that we have reduced the prices of

BLACK WALNUT OVAL, METAL RIM FRAMES

TO FOLLOWING PRICES, PER DOZEN:

No. 1—4 x 5, \$3.85; $5\frac{1}{2}$ x $6\frac{1}{2}$,\$4.75; $6\frac{1}{2}$ x $8\frac{1}{2}$,\$5.75; 8 x 10,\$7.25. No. 2—8 x 10,\$8.00; 10 x 12,\$9.50. No. 3—8 x 10,\$8.75; 10 x 12,\$10.75; 11 x 14,\$12.25. No. 4—8 x 10,\$9.50; 10 x 12,\$11.50; 11 x 14,\$14.00. No. 5—8 x 10,\$12.00; 10 x 12,\$13.75; 11 x 14,\$15.50.

Above are the only sizes and styles we shall in future keep in stock.

We also continue the manufacture of Monogram Chemicals, Wilson's Head-Rests, Bergner's Print-Cutters, Tables, Chairs, etc. Soliciting your continued favors, we are

Yours, very truly,

ILSON, HOOD & CO.

JANUARY 1, 1876.

GIHON'S

Are the very best that are made, and are now without a rival in the market. They are clean cut, most desirable shapes and sizes, and made of non-actinic paper, manufactured specially for the purpose. Each package contains 30 Cut-Outs, or Masks, with corresponding Insides assorted for five differently sized ovals and one arch-top.

PRICE, \$1.00 PER PACKAGE. Sent by mail on receipt of price.

Parties wishing special sizes, or large lots of a few sizes, may have them cut to order promptly, by addressing the manufacturer. No lot costing less than \$1.00 made at a time.

No printer should attempt to make medallion pictures without them.

THEY HAVE NO EQUAL FOR QUALITY.

Beware of spurious imitations made of common paper, full of holes, badly cut, and odd shapes and sizes. Ask your stockdealer for GIHON'S CUT-OUTS, and see that they are in his envelopes with instruction circular included.

PROMENADE SIZE NOW READY! SOLD SEPARATELY AT 50 cts. per dozen.

SOLD SEPARATELY AT

GIHON'S

IS DESIGNED FOR

COMPLETELY OBSCURING THE IMPERFECT BACKGROUNDS OF COPIES.

RETOUCHING NEGATIVES,
FAULTY SKIES IN LANDSCAPES,
COATING THE INSIDE OF LENSES OR CAMERA BOXES,
BACKING SOLAR NEGATIVES,

COVERING VIGNETTING BOARDS.

AND FOR ANSWERING

ALL THE REQUIREMENTS OF THE INTELLIGENT PHOTOGRAPHER IN THE PRODUCTION OF ARTISTIC RESULTS IN PRINTING.

WHEREVER YOU WANT TO KEEP OUT LIGHT, USE OPAQUE.

It is applied with a brush, dries quickly and sticks.

CUT-OUTS (thirty), \$1.00.

OPAQUE, 50 CENTS.

FOR SALE BY ALL DEALERS.

Address all orders to

JOHN L. CIHON, Inventor,

128 N. Seventh St., Philadelphia, Pa.

1876! TOGRAPHIC 1876! SOUTH OF THE STATE OF

Edited by EDWARD L. WILSON, Editor Philadelphia Photographer,

ETC., ETC.

This favorite and only American annual is fairly crammed with articles prepared expressly for it by the eminent photographers of Europe and America, who are seldom induced to write for anything else.

Price, in Cloth, \$1.00; in Paper Cover, 50 cents.

"The Best Little Handbook of Photography in the World." For Sale by all Dealers.

No Photographer should be without Mosaics for 1876.

BENERMAN & WILSON, PHOTOGRAPHIC PUBLISHERS, PHILADELPHIA.

BURRELL'S PHOTOGRAPHIC DRAPERY CHART.

I have long felt the need of something to show my customers, before sitting, that would give them a clear idea how the various shades of drapery would appear when photographed. After considerable study and expense I have devised a chart comprising thirty-five pieces of silk, woollen, cotton, and lace goods, etc., with the name of each color distinctly printed. Each piece is made into a bow, so as to give the very best effect of light and shade (see cut). The print is $10\frac{1}{2} \times 12\frac{1}{2}$, mounted on 13×15 extra thick tinted card board.



COPYRIGHTED.

I have placed them within the reach of ALL, at the very lowest price of \$1.25, by express, or sent by mail, unmounted, post-paid, as you wish, thus saving an express bill. All orders addressed to me will receive prompt attention. Also, For SALE BY THE PRINCIPAL STOCK-DEALERS.

"HINTS TO MY PATRONS."

The above is the title of a selection of Rules and Hints for the benefit of our sitters and customers, saving a great many questions being asked, and showing them what they are responsible for. I have found these so useful in my own gallery, and wishing that you may all be benefited, I send them free with chart, on application, or without chart on receipt of ten cents, post-paid. The above I have printed on 8 x 10 tinted card board, in plain type. They should hang in every studio. All orders to be addressed to

D. T. BURRELL, Brockton, Mass.

Or, BENERMAN & WILSON, Photo. Publishers, Trade Agents,
SEVENTH & CHERRY STREETS, Philadelphia, Pa.

GEORGE & SATCAMP,

58 South Meridian Street, Indianapolis, Ind.,

HAVE JUST OPENED UP A FRESH AND COMPLETE STOCK OF

PHOTOGRAPHIC MATERIALS.

CONSISTING OF

Pure Photographic Chemicals, Card Stock, Ferrotype Stock, Camera Boxes, of every Style and Manufacture,

Darlot Lenses, Voigtlander & Son Lenses, Ross Lenses, Steinheil Lenses,
Dallmeyer Lenses, Hermagis Lenses, Morrison View Lenses,
Camera Stands, Head Rests, Posing Chairs,

Backgrounds, Samuel Peck & Co.'s Printing Frames, Judkin's Photo. Printing and Tinting Frames,

Porcelain Trays, Glass Baths, Oval and Square Picture Frames, Mouldings, Picture Cord, Screw Eyes, Entrekin Burnishing Machines, etc., etc.

Everything called for by the photographer, for gallery work or viewing, can be furnished promptly and shipped without an hour's delay to any part of the country.

WE ARE THE SOLE MANUFACTURERS AND TRADE AGENTS FOR

JUDKIN'S PHOTO, PRINTING & TINTING FRAMES,

To WHICH WE SPECIALLY INVITE THE ATTENTION OF PHOTOGRAPHERS.

This improvement is admirably adapted for Graying and Tinting Vignette Pictures, Printing from Weak Negatives, etc., saving time and money, and producing beautiful and real artistic effects.

TWO SIZES NOW READY!

The $6\frac{1}{2}$ x $8\frac{1}{2}$ size can be used for card work. Liberal discount to the trade. Samples of work and circular, setting forth more fully its merits and advantages, sent on application.

SEND FOR PRICE LIST OF PHOTOGRAPHIC MATERIALS.

GEORGE & SATCAMP,

58 South Meridian Street, Indianapolis, Indiana.

THE PHOTOGRAPHER TO HIS PATRONS.

WHAT IS IT?

HE PHOTOGRAPHER TO HIS PATRONS is a little book or pamphlet of twelve pages, the HE PHOTOGRAPHER TO HIS PATRONS is a little book or pamphlet of twelve pages, the intention of which is: 1st. To enable the photographer to say a few words in a kindly way to those who have photographs taken, in order that the intercourse between them and their photographer may be pleasant and result in the most successful pictures. Every photographer knows that he is constantly beset with a lot of questions, as to the proper way to dress, the best time to come, and so on, which take a great deal of his time to answer. This little book answers them all, and the mere handing of a copy to the questioner, which he or she can carry away and study at leisure, serves as admirably as a half-hour's conversation.

2d. It is a cheap mode of advertising. What could you want better than to have your business card so attractive that people will come and ask for it, hand it around from one to another, discuss it, and then keep it for reference? This is what they do with this little "tract." Witness what those who have tried it say below.

have tried it say below.

3d. It is also intended to convey to the public at large the fact that photography is not a branch of mechanics, nor photographers a sort of mechanic themselves, but that both are entitled to respect, the same as the family physician or the minister; that the photographer has rights as well as the public; that he must be trusted, and that he alone is responsible for his results. Moreover, that he must make the picture and not they.

the picture and not they.

How far the work serves these three ends the reader must judge from the testimonials below, of a few of those who have been using our little publication in their business.

We believe it will pay you to use it, and that you will assist just that much in elevating your art and your craft, an object which we are all working for.

We get "The Photographer to his Patrons" up in neat style, on the best letter cap paper, assorted tints, green, pink, and buff. Eight pages are devoted to the body of the work, which contains paragraphs or chapters—1, on the object of the work; 2, on photography; 3, when to come; 4, how to come; 5, how to dress; 6, how to "behave; 7, the children; 8, general remarks on coloring, copying frames prices he."

ing, frames, prices, &c.

All this is inclosed in a cover of the same kind of paper, the pages of which are at the service of the photographer who orders them to have printed thereon anything he may please, which printing we do without extra charge. We publish this leaflet in English, German, and Spanish.

Cuts for the covers we supply free.

. . \$20 00 3000 copies, cover included, . 1000 copies, cover included, . 35 00 5000 Over 500,000 have been sold.

TESTIMONIALS.

"I sent one out West to a friend, and she wrote that she was now posted, and when she came here to have a picture rade, she would come 'according to directions.' "—A. BOGARDUS, New York.

"It assists me greatly."-JAMES MULLEN, Lexington, Ky.

"A grand idea."-ELBERT ANDERSON.

"You have conferred a great favor on the fraternity in supplying it."—A. C. McInter & Co., Ogdensburg.

"It is the best advertising medium I have ever found."-H. M. SEDGEWICK, Granville, O.

We send samples to any who may desire.

BENERMAN & WILSON, Photo. Publishers, Seventh and Cherry Sts., Philadelphia.

PROMENADE ALL! HERMAGIS'

Celebrated French

LENSES. PORTRAIT

CABINET SIZE, ARE JUST THE LENS FOR THE NEW

PROMENADE PICTURE.

Mr. Henry Rocher, the renowned Chicago photographer, says of them: "In my opinion they are truly lenses of great capacity, and must surely satisfy every purchaser." Mr. Rocher has purchased two Hermagis lenses of card size and one Salomon style. See further splendid testimonial from Mr. Rocher in Specialties.

MR. F. GUTEKUNST, the celebrated Philadelphia photographer, was sent a Salomon Lens to try for us, and wont part with it. It cuts sharp a 9 inch standing figure, and beats a lens that has been his favorite many years, and where many makes of lenses have failed, on trial, to equal it.

The HERMACIS IS THEREFORE AHEAD

TRY THEM!

These celebrated lenses, are used by MONS. ADAM SALOMON, of Paris, exclusively for making his WORLD-RENOWNED PORTRAITS, and by the most famed photographers of Europe, from whom Mons. Hermagis has the Highest Testimonials.

We now have a FULL STOCK on hand.

The Salomon Style, 8 x 10 size, \$160. For Cabinet Size, extra quick, \$100. For Cabinet Size, quick, \$90. For Carte Size, extra quick, \$50.

For Carte Size, quick, \$40.

They are being introduced in America steadily, and are liked wherever they go.

They will be sent on trial to responsible parties C. O. D., and instructions to Express Company to hold money one week for trial. If parties prefer to see the work of a lens before purchasing, we will make a negative and send with details of exposure, etc., and reserve the lens until answer is received (if the time is reasonable), on receipt of \$1 to pay cost. Having a skylight of our own we are enabled to do this.

Not a single person to whom we have sent these Lenses on trial, as above, has returned them.

BENERMAN & WILSON,

Seventh and Cherry Sts., Philadelphia, Pa.





M. ELTON. PRODUCTION DALMYRA, N. V.

Philadelphia Photographer.

Vol. XIII.

APRIL, 1876.

No. 148.

Entered according to Act of Congress, in the year 1876, By BENERMAN & WILSON, In the office of the Librarian of Congress, at Washington, D. C.

The Gold Medal for Retouching.

REMEMBER the competition for this prize closes the 15th of this month, and all who desire to compete should get their negatives ready, and send them along at once.

The terms are: a gold medal for the best six negatives of cabinet-size heads which show the most artistic retouching.

We will allow each artist to be his own judge of what constitutes artistic retouching. The retouching must be well supported by artistic posing, lighting, and other qualities which constitute a first-class negative.

We shall reserve the right for the judges to exclude any work which may appear to have been used simply as a retouching basis, without regard to its merits as enumerated above.

All negatives entered for competition must be carefully packed, with two mounted prints from each negative, one made before, and the other after retouching; and sent us, express paid, before the 15th of April.

Each accepted competitor will receive one picture from each of the others admitted to competition.

We would like to see a real wide-awake interest in this matter; it calls for the exercise of a different talent from any for which we have ever offered a prize before, and as in many cases a special artist is employed for retouching, we would suggest that the

name of such artist be sent with that of the photographer, that we may award honor to whom honor is due. As the competition closing on the 15th will give a short time to any who might be encouraged by this notice to make an effort, we hereby offer three days' grace, so that all negatives received before the 18th will be admitted. Now go to work and see how well you can do.

WHO WILL TEACH US ART?

THE above question has revolved itself in my mind, as I have chafed for some days under what has seemed to me a severe rap on us Americans from one whose opinion I value very highly, and to whom I would look for counsel or advice on questions photographic, as if he were really my professor and I his student.

In a recent number of the Photographic News is an extract from the Photographische Mittheilungen, in which our good friend Prof. Vogel laments the dearth in "Photographic Art Literature," and, after alluding to the silent pens of those who have either died or are too much engaged otherwise to devote any time to literary work, says: "In America, it is true, one still encounters papers upon art-photography which contain both what is good and what is new; unfortunately, the old saying here applies, that what is good in these writings

7*** 13 13

is not new, and what is new is not good." How chagrined we Americans feel to be spoken of thus. We had hoped that some of our writers on art subjects had been able to say some things that were good, and which had been useful in helping others; but, alas! what has been said that was good was not new, and what was new was not good, and our condition is an unfortunate one.

As long ago as the days of Solomon, that wise king said: "There is no new thing under the sun."

How unfortunate for us Americans that Pythagoras solved the forty-seventh problem of Euclid; that Galileo discovered the arrangement of the solar system; that the Athenian sculptors executed the most perfect models of the human form; that such masters as Michael Angelo, Raphael, Murillo, and others, should have painted in such high art that their works have been studied, and looked upon as examples embodying such lofty sentiments, and constituting in themselves such perfect æsthetic examples, as to be taken as the highest authorities in art by all the generations that have followed.

All this being true and well known, it seems useless for us to rehearse any of these good things, because they are not new, or exercise any of our American genius in this direction to produce anything new, because we cannot hope to evolve anything good. The only alternative left us is to deplore the fate that, at this late day, fixed our lot on the western shores of the broad Atlantic.

There is, however, one other possible resort for us who love our art, and are filled with a desire to do all in our power to promote its interests and diffuse its principles, and that is, to quit the land we love, and take up our abode within the *classic* limits and breathe the charmed atmosphere of the Old World, as Mr. Heighway has done.

Now Mr. Heighway's articles, well written and useful as they are, are doubtless the result of his study and experience in this country, and in substance contain nothing that has not been published in our American journals over and over again.

When a star falls in a man's own doorway, he is apt to think the showers, that others far away have, are as nothing compared with it. I cannot think, however, that our friends on the other side of the water look at so patent a question as the study of art with any such abbreviated vision.

I have not taken up this matter with any intention of charging our learned professor with any unfairness, or to defend our unpretending authors on this, the republican side, but rather to show that the position assumed was slightly inconsistent. In the article in the Photographic News, to which I have referred, the editor calls attention to two articles in his Year-Book, relating to art culture. That by Mr. H. P. Robinson, entitled "Light and Shade and Shape in Landscape," is most excellent, illustrated as it is by the simple diagrams, which convey the lessons in the clearest and most comprehensive manner. But ("unfortunately") it is not new. The same in substance, and partly in the letter, was published by him several years ago in his admirable work, Pictorial Effect in Photography, which, as he says, is now out of print. But he recognizes the fact "that a new generation must be growing up to whom such information would be useful." This is the point precisely; these old truths must be rehearsed over and over from time to time as new actors come upon the stage, and every time they are rehearsed they must be new to many, and are as good as new to those who have heard them before.

The other, by Mr. Robert Faulkner, on "Good Taste in Photography," is in a different vein; it presents many old truths in new and attractive dress, which makes the whole very fresh and readable.

In conclusion, I would say that any innovations on the rules of art, as generally understood, may justly be regarded with suspicion, from whatever quarter they may come. Let us first gain the height which is still above us, and then we may be justified in reaching for something new and still beyond.

GUIDO.

PHOTOGRAPHY and truth can only be made to harmonize by the introduction of a third element, viz., Art.

SILVER, CARBON, OR-WHAT?

THERE has hardly been a period in the history of photography when the subject of printing received so much attention as is being devoted to it at the present time. The interest in the carbon process has had a great revival, and it promises to adapt itself to all classes of work, both plain and colored; the latter as in the wonderful productions of Mr. Leon Vidal, of Paris; while the beautiful silver prints maintain their popularity, and this process is used almost universally for gallery work. But the sad experience, that silver prints will fade, is confirmed by our observations almost every day, and this is the main cause of the revival of carbon work. But here we are met again with the startling announcement that carbon prints will fade !

In this dilemma we are met with a new process, giving both silver and carbon the go-by. It is a method of printing with the salts of platinum, invented by Mr. William Willis, Jr., of Birmingham, England, and several times referred to in our French correspondence by Prof. Stebbing. The advantages of this process are said to be permanency, rapidity of execution, it being as five to one more rapid than chloride of silver, and easy manipulation, it being very similar in this last respect to the silver process, so that it may be the more readily adopted by those who are accustomed to the popular method. Its cost is estimated to be about the same as that of silver printing.

Here, then, may be the process that is to solve the problem of permanency in photographic prints; but this point is, of course, yet to be determined by the test of time. Mr. Willis, the inventor, seems to have sufficient confidence in the process to make it worth securing by patents in the principal countries of Europe, and America.

With the testimony in its favor of one so eminently qualified to judge of its merits as Prof. Stebbing, who has formed his opinions from practical experiments, having demonstrated its working before the Photographic Society of France, we are disposed to regard the new process with favor and Mr. Willis in the light of a benefactor, not only for extending the capacity of photography, but in contributing to the advancement of

science by achieving another triumph of mind over matter.

DEAD LETTER PHOTOGRAPHS.

WE were quite interested recently in examining a list of articles advertised for sale at the dead letter office in Washington, and particularly the packages of photographs which have miscarried from a want of proper address, no address at all, or from non-payment of postage. We send a great many photographs by mail, but we did not recognize any as having come from the office of the *Philadelphia Photographer*.

Among the photographic items were a number of boxes of ferrotype plates. The following is a list of the photographs of various kinds, among which may be those which some of our readers will recognize as having been lost:

38 views of Washington, 31 Colorado, 7 Indians, 8 Utah, 60 California, 150 Niagara, 77 Chicago, 414 Miscellaneous, 5 Detroit, 6 New York, 8 Canada, 6 Rocky Mountains, 14 Oakland, Mich., 8 Indianapolis, 28 Minnesota, 6 Dakota, 12 Wilmington, N C., 9 Philadelphia, 12 Mount Washington, 8 San Francisco, 11 Connecticut, 14 Alleghany City, 10 Yosemite, 12 Watkins Glen, 4 Wisconsin, 8 Brooklyn, 1 Athens, 64 historical, 39 noted men, 25 Edward Stokes, 25 Jim Fisk, 25 Josie Mansfield, 25 Mrs. Scott-Siddons, lot of children, and 5 large photographs, besides several miscellaneous lots—counting, in all, over 1700 pictures.

HINTS TO BEGINNERS.

BY L. T. WILT.

(Concluded.)

ANY one, with the intention of making photographing a livelihood, must first take into consideration that cleanliness and care are the great highways to success. After having procured the best of chemicals and apparatus from any well-known photographic stockdealer, proceed to arrange everything in a suitable place; always maintaining this order of keeping everything in its particular place when not in use. Some photographers must have several assistants to hunt articles that are needed, simply for the want of

better discipline; others, again, are so selfconceited that they know it all, and what they do not know is not worth knowing. To such I would say that I have learned a great deal from going into a very small and rather poorly arranged establishment, there seeing some little thing that was of benefit to me. I remember a time when, in a gallery that had a very small light, the proprietor remarked that if he had a larger light that he could do better work. I simply inquired of him if he thought that would make his chemicals work any better (at the time fitting him with a 4-4 lens, and showing him how to work Sarony's toning). At this present writing a student of ours occupies that gallery without any change as regards the light, and makes the finest work in this part of the country, and has some excellent 4-4's, made with that same 4-4 lens before referred to, central stops, cost \$45.

This puts me in mind of the old adage, "Not how much, but how well." This small light answers a very good purpose for heads, but not for full-lengths, as it is very low. Our light here is just the reverse, very high, 18 feet at lowest point, 23 at highest; top light 10 x 14 feet; side, an ordinary window 4 feet 6 inches x 9 feet.

This is, however, digressing from what we intended this article should be. We will now proceed to the *modus operandi* of the working of the formulæ as prescribed in the several chapters to beginners. The first thing to procure, a good negative, with any well-known brand of collodion, is to have it ripe—that is, not too fresh nor too old—by using B. P. C. glass. A few trials will enable the operator to ascertain the working condition of the collodion.

The next that comes into consideration is the condition of the silver bath, which, by some, is claimed to produce the best results when kept in a neutral state. A neutral bath will produce good negatives if the collodion is well ripened or rather old; but in case the ripe collodion should be all used, and the operator obliged to resort to the new collodion, then, to get good results, he must add to his fresh collodion tincture of iodine, with an acid bath. The collodion may be hurried to a better working condi-

tion by adding tincture of iodine, especially when the collodion is fresh. If the collodion is in good working condition, and the negative appears solarized or flat, the bath having been made of C. P. nitrate of silver, by the addition of acid to the bath the negative will be bolder, and the prints produced therefrom will be more pleasing.

In regard to developing, it will be found, by adding sufficient acid to retard the iron from producing dense lines over the negative, the best way to proceed to develop is to flow the negative with quantum sufficit to nicely cover the negative. should be done quickly and evenly, without spilling a drop if possible. This should be kept up until the negative is full and vigorous, when it must suddenly be arrested by introducing the negative under a tap of running water. After it has been carefully washed it is introduced into the fixing bath, to remove the superfluous chemical that has not been exposed or decomposed. When clean, wash thoroughly; when dry, varnish; and, when the varnish is well set, proceed to retouch judiciously. Negatives from some subjects require but little retouching, while others require a great deal of work; for instance, a subject badly freckled, all the transparent spots in the negative are made as dense as the more intense part of the negative with the pencil; and, from a subject that has deep crevices at different places in the face, these are touched out even.

Now, does a print from such a negative retouched produce a likeness? No; but it produces a picture that will please; hence the artist must humbug.

After we have a good negative, we proceed to the printing, after having obtained the best brand of albumen paper, sensitized carefully. As told you before, printing is a branch that requires very close attention. Some printers, when they get a print too dark, say that will tone out all right. The better process for a print too dark is to put it with the waste, and save time, labor, toning, etc. After a lot of prints are made and trimmed, wash carefully, preparatory to toning, and have the prints a shade warm and strong. While toning they should be kept in motion, and removed before they

are the tone required, as they generally get a shade colder. If prints will not admit of the requisite amount of toning, there is something wrong with the sensitizing. After the prints are toned they should be submitted to a careful washing; they then can be fixed; after which they should be thoroughly washed, then taken from the water and placed on glass larger than the largest print, faces down, when they can be mounted, wet with ordinary starch paste. After the prints are all mounted it is a very good time to begin to touch out the spots, if any, as the prints are in a good, moist condition. After they are completely dry, they are ready for the press or burnisher, numbering, delivering, etc.

FRANKLIN, PA., March 13th, 1876.

SKYLIGHT CONSTRUCTION.

As the season is approaching when many contemplate building, rebuilding, or making alterations, we have thought a chapter on dent for some advice in the following let-

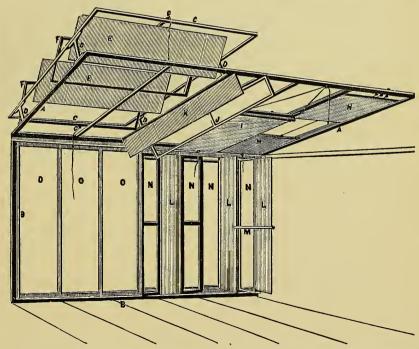
SUFFOLK, VA., March 14th, 1876.

MESSRS. BENERMAN & WILSON:

If it will not be troubling you too much, you will confer a favor to a subscriber to your valuable journal by giving him the information wanted through your columns. I am about to erect a new gallery; my operating-room will be 35 x 12 feet, running north and south. How would you arrange your light, and how large would you have the top and side-lights? I have no other way but western for a side-light. What is the best material to use for making a sink to carry off the waste developing solution? And what would be suitable for making a tank out of to give prints the final washing in? You will oblige me very much by letting me hear from you in the April Photographer.

> Yours respectfully, JAS. PARKER.

This question of the construction of sky-



this subject might be acceptable, especially | lights is one which has been discussed and as we have been called upon by a correspon- thoroughly canvassed over and over again, so that we do not propose to present anything new, but will go back and look over what has been said on the subject, and make such selections as may seem to be most useful.

At the convention of the National Photographic Association, held in Philadelphia in 1871, a model for a skylight was exhibited, of which the largest accompanying cut is a representation.

DESCRIPTION.

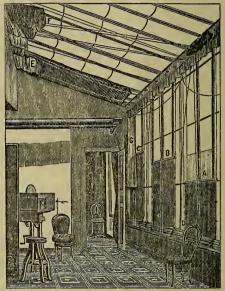
A, A, the framework of the top-light, all glazed, which is made so that it can be used as shown in the cut (top inclination and sidelight to the north). B, B, the frame of the side light, all glazed; C, C, the frame of the top blinds; D, D, D, D, the upright supporting the frame C, C; E, E, top blind frames, covered with canvas; F, F, ditto, uncovered; G, a glazed top sash, without inside curtain or blind; H, H, wood sliding frames, covered with tissue-paper; I, a spring roller curtain; J, movable top blind frame, uncovered; K, ditto, covered; L, L, ditto, for side-light; M, same as L, uncovered; N, N, N, N, side frames, uncovered, and outside sash showing through; O, O, O, side sash glazed and exposed inside, and may be covered by either of the arrangements, H, I, or J.

These arrangements for shades and blinds are not all for use on the same light, but are given here that parties may choose whichever is best adapted to their individual requirements.

This style of skylight is probably more generally used, in modified forms, than any other, and, in about the proportions here represented, has been worked with uniform success. The size of the light must be governed by the size of the room it is expected to illuminate. In such a room as Mr. Parker proposes above the same style of light may be used, but not in the same proportions. A room 12 feet wide will not require the top-light more than 8 or 9 feet up the roof; while along the room it should be not less than 10 feet, nor more than 15 feet, and placed in the centre. The side-light should be not over 10 feet from the floor, where it intersects the top-light, and, for a small light, 8 feet would be better. The bottom of the side-light should be about 2 feet from the floor.

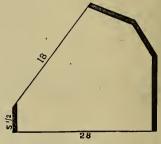
With the above style of light, with a western exposure, sittings might be made either way in the morning; but in the afternoon, on sunny days, it would be necessary to work with the sitter in the south end.

The accompanying cut gives the interior view of such a studio, and is a representation of one of those in Paris or Berlin, from which we have seen so many beautiful pictures. This style of light is used by the leading



artists in this country, such as Mr. Bogardus, of New York, and Mr. Rulofson, of San Francisco, and is the style that we feel can be recommended without risk, even to those who have a very limited knowledge of photography.

At the Buffalo Convention, Mr. L. G.

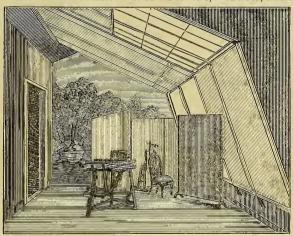


Bigelow, now of Detroit, advocated a light after the accompanying diagram. It rep-

resents a light about 18 feet square for a room 28 x 40. He then said: "It is the best light I ever worked under, and I have worked under over thirty for different parties, for from two to three weeks to six months, lately."

This light has many advantages; not the least of which is that, with a northern exposure, it would secure almost entire exemption from direct sunlight even in the longest days; its inclination would keep it quite free from snow in winter, and lessen in a great degree the probability of its leaking at any time. The main body of light, too, enters about at an angle of 45°, which is the proper direction for giving a good light on the sitter.

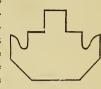
With a room as narrow as Mr. Parker's,



however, this style would hardly be admissible, as the top of the light would fall in so far as to leave hardly room for a proper size background for full length or standing figures. But a modification of both of these plans may be used by letting the side-light incline inward, as shown in the accompanying illustration, which represents the studio of Mr. J. Landy, of Cincinnati. This form of light is highly recommended by those who use them. The dimensions of this studio and light are as follows: Length, 40 feet; width, 25 feet; top and side-light, each 12 feet wide. The side-light reaches to within 2 feet 6 inches of the floor, and stands at an angle of about 25°, and is 10 feet high. The top-light is 20 feet long, and inclined at an angle of 40°, as shown in the cut.

The sash-bar we would recommend is that which has been so often published, but for all that it may yet be new to some.

The cut given here merely shows the manner of grooving to insure the light against leaking. In any case the bar should be much deeper than this represents, and espe-



cially for large lights, where they are required to be from 12 to 20 feet, the bars should be at least 3 inches in depth by 1½ in thickness, of straight-grained, sound lumber, and supported across the centre by

a bar of iron $\frac{5}{8}$ inch thick by 3 inches deep, securely fastened at the sides of the light.

To Mr. Parker's inquiry about tanks, we would say that good, sound, pine lumber, put together with white lead, has been found as durable as anything. They can be made by any good carpenter. For developing, an extra tank or dish should be used to catch the developer with its waste silver during the day, and a spigot so arranged as to draw off

the clear water every morning.

THE PRINTER'S CORNER.

BY CHARLES W. HEARN.*

As the letters have rushed in so fast since the last issue of the "Printer's Corner," we will again devote our space this month to the answering of them. The first one on the list is from a party who was in trouble with teardrops and a mottled appearance on the paper after silvering. He got out of his difficulty as described below in his own words:

I am out of my difficulty with albumen

* Conductor of Hearn's Photographic Printing Institute; author of The Practical Printer.

paper. By simply brushing the paper briskly with a flat badger brush before silvering all the difficulty was removed. I repeated the operation several times, brushing only half of the sheet, when the portion brushed was perfect, and that part not brushed was mottled so as to be useless.

I find relief entirely from the difficulty also by blotting the paper after silvering.

Yours truly,

What is the cause of prints getting soft in cold weather? When the water is cold I am troubled with soft surface albumen coming off, but the way I stop it is to use warm water in first washing, and also the same after fixing; but without warm water all the albumen comes off, when it is cold weather.

Never troubled with anything of the kind in summer weather. I am an old printer; used to print for McClecs some years ago; have been troubled with soft prints in winter for the last five years, since I have been in business out here. Never had any trouble when I worked in Philadelphia, no matter how cold the weather or water was.

We think your trouble is nothing else but too alkaline a silver or toning bath.

DEAR SIR: Would you be kind enough to give the formula (silvering and toning) of promenade print in February number of *Photographer*, also the paper used. The color, clearness, and depth of tone I do not think can be surpassed.

By so doing you will greatly oblige

Yours truly, J. G.

The paper used was Morgan's Extra Brilliant, and also "Clemons's New." The silver bath was as follows:

Nitrate of Silver, . . . 52 grains. Nitrate of Ammonium, . . 30 "
Distilled Water, . . . 1 ounce.

Silvered forty-five minutes; fumed fifteen minutes; toned in a plain bicarbonate of soda bath with a little salt in it. See *Mosaics* for 1876.

FERNANDINA, FLORIDA, Jan. 31st.

DEAR SIR: I have a copy of your valuable work (The Practical Printer), which is of great service to me. I am young in the

art, and therefore far from perfection, and very liable to make failures in printing. Thinking you could probably inform me the cause of the mottled appearance of the inclosed print, I write you.

I use "Berlin" albumen paper; silver solution, forty grains strong.

Silver the paper one minute; dry in a heated box, and when dry fume about fifteen minutes.

My toning bath is the acetate of soda bath given in your book.

My fixing solution is one part hypo to five or six of water by measure. I fix about fifteen minutes. As I haven't a good water supply, I wash the prints in a tank, changing the water two or three times in the course of the evening, stirring them frequently; leave them in the tank over night, put through two or three changes of water in the morning, and hang them up to dry. This is my process. But I have been troubled frequently with my prints mottling like the inclosed. First I laid it to the hypo, but have changed my mind after experimenting, and thought it might be some salt in the water; I wash them in sulphur, perhaps.

Most of my prints come out *first-rate*. The last batch I had *four* injured prints out of about four dozen.

If you would be so kind as to inform me the cause you will incur my lasting gratitude.

Yours respectfully,

CHARLES K. O.

Your trouble is simply imperfect washing after fixing. The prints have stuck together, and have been imperfectly washed.

SAN FRANCISCO.

DEAR SIR: My troubles are quite numerous, as you will perceive by an examination of the inclosed prints. Use the usual nitrate ammonia bath, and fume 12 minutes; print in sun under ground-glass; wash in three waters, then acidify with acetic acid; nearly neutral toning bath; strong hypo fixing bath, and wash in salt water to prevent blisters. These spots (except metallic) do not appear until after the salt washing.

Can you tell me in April Photographer what is the probable cause; also the cure.

Very truly yours,

J. B. McQ.

Your trouble is a very unusual one. There are three suppositions which you will have to investigate yourself, and see which it is.

1st. It looks as though ammonia had got on your paper in very small spots, and had made the white spots.

2d. Either eyanide of potassium or strong hypo has got on it, and allowed to eat away before it was washed off.

3d. The paper itself was badly albumenized, and contained matter that dissolved away in small particles. The latter I do not think is the eause, but the former ones are very likely to be the cause.

MANCHESTER, OHIO, Jan. 24th, 1876.

Would you send me your toning process on albumen paper. I have been seeking for some time for the latest and best formula for toning albumen paper, and have been referred to you by Benerman & Wilson. If you will send me your formula, let me know the price, and I will send for it.

Truly yours,

J. W. B.

See last page in Mosaics for 1876.

The following letter I must ask the pardon of the writer for not answering sooner, the reason being that it has been overlooked:

If it is not too much trouble, would you be so kind and give me in plainer proportions how to make iodide of starch than it is expressed in Vogel's *Handbook*, and in your *Practical Printer* (page 124). It says there:

1 grain Arrowroot. 100 parts Water. 20 parts Saltpetre, etc., etc.

To the solution of starch 20 grains of a wine-yellow solution of iodine is added, etc.

I never knew that liquids were measured by grains, and am, therefore, troubled to find the meaning of the receipt.

Truly yours,

T. L.

Substitute equally grains for minims (i. e., drops), and go ahead. 4 grains = 4 minims = 4 drops, etc.

The correspondence that was left over last month to be answered in this issue will

still have to be left over. The same party sends us another "dodge" for the "Printer's Corner." He sends us two prints of a lady printed in vignette.

The paper was cut *two* different ways, and the results are very instructive, and will be a great assistance to those printers who may not be familiar with the idea.

If a face is broad and you desire to make it thinner (as in the case of very full-face persons) let the grain of the paper run lengthwise with the face. If it is very thin, cut the paper so that the grain will run across the face, for the paper will stretch in both cases as you desire. In the samples sent us one face is fully one-sixteenth of an inch wider.

DEAR SIR: Will you please give me a formula, with nitrate of ammonia, for silvering the "Extra Brilliant" paper; also the toning bath, and you will oblige,

J. K.

There is a bath given above; also one in *Mosaics* for 1876.

GREENCASTLE, INDIANA.

DEAR SIR: I want to obtain all the information I possibly can in the printing department, and submit the following question for the "Printer's Corner:"

What is the best formula for silvering and toning the Brilliant Dresden paper?

I am using plain silver, 40 grains, with the bicarbonate toning bath. I get very good results, but want better.

J. W. H.

See the above.

CALIFORNIA CORRESPONDENCE.

Your Mosaics—with name as ordered—at hand O K, and were its contents to be appreciatively digested by the craft, I would no longer need to ask, "What will we do with the National Photographic Association?"

Let us either continue our National Photographic Association, let us make of it a model photographic institution, or toll a requiem dirge! One or the other. But let us have no "on the fence" sort of National Photographic Association. Indeed, it is the candid opinion of your humble corre-

spondent, that there are good and true photographers quantum suff, to carry on the work so well and nobly begun, and that when the unprecedented dull times shall have given way to the busy spring, up from a "Rip Van Winkle sleep" will start those who will not see the "one solid fact" moulder away, and join the ashes of dozens of less deserving societies. In the February number just at hand you call on the members to come to its (National Photographic Association's) assistance; I am sure you will not call in vain. Our California winter has been gloomy, wet, foggy, roads almost impassable, money very scarce, and mostly silver at that, from three to five per cent. discount then; and in spite of all this, there is much to be thankful for. And as the coming year bids fair to be one of photographic promise, it is almost certain beyond a doubt, that we will be able as a craft to outdo ourselves, if we half try. In reply to one or two who speak through your journal of having "raised their prices," let us say here's an humble paw from the Golden State to shake on "that same." And whenever the press tells the public of a reduction in prices by "Jones and Smith," yours truly just rubs his eyes, gets on his thinking-cap, and has something new immediately, and, in consequence of unparalleled expense, and etc., ad infinitum, collects accordingly. Just now we are favored with a T. T. institute-fifty for as many cents. Herewith please find our attempt at a novelty, being a full-fledged "bay window" on castors, usable reversible. If any member of the fraternity (National Photographic Association) sees fit to make themselves one, they have only to do so, and no questions asked. One thing certain, as an advertisement it surpasses all our previous efforts most successfully. 'Everybody delighted!" is true of it. Nothing less than \$12 per dozen, taken for services with same. And there are many positions that can be beautifully taken with it, which no other accessory I have ever used will admit of. The delicate statuettes, the ornamental tapestry, and crystal or metal services, are very appropriately usable; and, indeed, it places in a new light every form of feature, and line, and outline. Having thus

been guilty of an act of may-be unpardonable supererogation in thus intruding on the photographic usages, backgroundly speaking, we are ready to receive censure and ridicule, and shall doubtless proceed to still further innovations.

REPLACING A BROKEN NEGATIVE.—A copy from an old card, raised to 4th size, suddenly broke in the printing-frame, leaving a print three-quarters finished. This being a third order, the original card was long since returned; time was short, and "What shall we do?" was the word. Immediately preparing a plate, the unfinished print was placed under a clean glass just as it came from the frame, a careful focus and exposure in soft light gave a valuable negative, and "bridged the chasm." Truly, "necessity maternizes invention."

Pardon extreme length.

Yours truly, photographically,

J. P. SPOONER.

STOCKTON, CAL., February 11th, 1876.

CANADA CORRESPONDENCE.

KINGSTON, ONTARIO, March 15th, 1876.

DEAR SIR: Since I wrote last I have had "a hard road to travel," to get my views of this city and its principal buildings taken for your Centennial Exhibition. Permit me to express my sincere wish that it may be a grand success in every way, as, from all I can learn, your countrymen intend your Exhibition to be as far ahead of any bygone exhibitions as their experience of them and your natural go-a-headedness can make it. I sincerely trust, also, that we on this side the line, as well as you yourselves, may learn many things from the works of other countries, and that Photographic Hall may be the means, through the works there exhibited, of raising our art (for art, and high art, too, it is) in the estimation not only of the general public, but also of those who have sometimes been inclined to treat photography as a mere mechanical science-I mean, of course, our brethren of the brush and palette.

My short experience in the art of photography has convinced me that it is an art requiring the perfection of mechanism, the study of light and shade, a certain

amount of knowledge of chemistry, and an amount of study of the adaptability of the knowledge attained to each separate case (be it portraiture, landscape, or architecture), which no one but a true artist can estimate or decide on; and therefore I say it is not a mere mechanical science. In proof of my assertion, let me tell you of one instance alone which was proof enough to me that no mechanical science is photography. The other day I started off early, in my dark-room shanty (a wooden shanty eight feet long by six feet wide and high, with a stove in it to keep us warm), when the snow was on the ground, to take a view of this city; the light was very brilliant and very quick, but there was so much reflection from the snow that no dodge I could try would overcome it; the negative was good in the near foreground, but beyond that overexposed and fogged in the distance; the plate also was very thin, and in that state when intensification won't do. Now, sir, I contend that no mechanical science could overcome such a light; and yet for architectural objects, at a respectably close distance, the light was all that could be desired, and I made some of my finest negatives by it.

Well, Mr. Editor, I am about sending off, this week or next, my quota of photographs to (I wont say grace your walls in Photographic Hall) the Centennial, and so you will be able to judge of what winter photographing is like. I am not ashamed of my work either, but I think I could now improve on some of them. You see I have a reputation among my friends here of never being satisfied with my work, and I begin to believe "that's so," for I almost always think I could improve on my last attempt.

I have heard it stated, that it is almost impossible to get rectangular views of architectural subjects with Ross's new symmetrical lenses; now permit me to state that that is not so if you handle them rightly, as I have proved by actual measurement that you can get just as straight lines with that lens as with Dallmeyer's rectilinear lenses; and some of my views of buildings of this city are taken with No. 9 Ross's symmetrical on 11 x 14 plates; so measure away, if any one doubts my statements. Nevertheless, for architecture give me Dallmeyer's rapid

rectilinear; it works faster than any lens I have yet tried; gives a more brilliant finish, working with the very same chemicals and light, as far as I could judge, and altogether for that work is, as the ladies say, "a duck."

But I must close this tirade. I hope to see you, before "many days," in propria persona. Can any of your readers give me a route down the Lackswanna Valley, with the names of hotels, if possible? as that is my intended way to Philadelphia, carrying my camera, etc., with me.

Yours, as ever, RICHARD W. BARROW.

[If any of our readers can answer Mr. Barrow's question in reference to the Lackawanna Valley, they will confer a favor by communicating with him.—Ed.]

WRINKLES AND DODGES.

CURE FOR BLISTERS.

THERE have been so many different explanations of the cause of blistering of albumen paper that I hesitate to add another, especially as it is not easy to prove any of them right. But considering the facts that ten or fifteen years ago blistering was comparatively unknown, that during that time albumen paper has been greatly improved in quality in many respects, such as brilliancy and uniformity of surface, while most kinds have come to have a peculiar smell, suspiciously like acetic acid, I am led to think that the blistering may be caused by some peculiar treatment of the albumen; perhaps like that recommended by Mr. Carbutt, which, while improving its general properties and ease of application, changes its properties in relation to hypo, for nothing else seems to blister it. If this is the ease we ought not to blame the albumenizers, who have been trying to balance evils, and have succeeded so well in the main, but seek a remedy for the blisters; and I wish to recommend one which has proved very successful in my hands. Add to each quart of the hypo solution, which should not be too strong, half an ounce of sal soda crystals. This has prevented a particle of blistering on any single albumenized paper, even when washed immediately afterwards in very cold water, and without the use of salt. With double albumen paper small blisters may appear if the prints are put at once into very cold water; but if put in strong salt solution for five minutes, after leaving the hypo, they are entirely free from them.

CAPTAIN KNIGHT having given in Mosaics his method of mounting with Slee's mounts, I venture to give mine. Place the prints right side up in a basin of water at your left; cut several sheets of ordinary white blotting-paper into halves; lay one of these pieces on the bench, length from right to left, and spread ten cards in two rows on the paper; lay the prints in place on each of these, place another piece of the blottingpaper over them, and roll the whole with a common kitchen rolling-pin, letting the first pressure be light (so as not to slip the pictures), and afterwards heavier. The blotters serve again after drying, till soiled. I agree with Captain Knight that these mounts are great labor savers, when properly made, but the manufacturers ought to be more careful in sizing them, as I have had several lots in which many failed to stick at all, or, what was still worse, partially stuck.

A SIMPLE application of Mr. Newton's method of climinating hypo from prints is very useful in strengthening negatives after fixing in hypo. Flow the negative with a solution of acetate of lead after washing off the hypo, and it will prevent any danger of the brown stains which are always produced when pyro acid and silver are applied to a plate on which there is the slightest trace of hypo.

Insoluble cement for glass is obtained, according to Prof. H. Schwarz, by dissolving one part of bichromate of potassium for every five parts of gelatin, or glue, in a solution containing from 5 to 10 per cent. of the latter.

After having been applied to the glass, the cement, on exposure to the sunlight, loses its property of swelling and dissolving in water, in consequence of partial reduction of chromic acid.—Selected.

TO REMOVE VARNISH FROM NEGATIVES OR FERROTYPES.

Use saturated solution of eyanide of potassium, one part; alcohol, 95°, two parts; flow on and off as in redeveloping; will clear of varnish very rapidly, so the negative or positive can be washed under the faucet, dried, and revarnished, bright and fresh as new.

I discovered this method—partly by accident—some months ago, and have used it many times since, always successfully; and having never heard of any other method as good I send it for others to try.

I have at various times tried most of the published methods for removing varnish from collodion films; instance, pure alcohol bath, ammonia and alcohol, common crude potash and alcohol, vapors of hot alcohol, etc., all more or less available; but in my experience all more tedious, more expensive, or more dangerous to such films than this method.

Whether the cyanogen aids the solvent action of the potash or not, the materials for this combination are ready in almost every gallery, and seem perfectly reliable in action.

Of course it must not be used on negatives strengthened with bichloride, or similar chemicals, especially soluble in cyanide.

E. K. Hough.

NEW YORK, March 8th.

WEYMOUTH'S IMPROVED VIGN-ETTE PAPERS.

THESE papers have recently been very much improved by the manufacturer, and are now so much superior to what they were formerly, a superior quality of paper having been used in them, that we have condemned all the old stock we had on hand, and are now selling only the improved quality.

In this number of our magazine we insert a sample of the old papers, that all may have an opportunity of comparing the old with the new, and see where the difference really is. The best evidence we can have that these papers are now serving their purpose better than ever before, is the increasing demand for them. Our sales

recently have been larger than ever before, and we are satisfied that no method of vignetting can be so simple and yet so effective.

For sale by Benerman & Wilson.

OUR PICTURE.

AGAIN we treat our readers to an example of the promenade style, which seems to have established itself in popular favor, wherever photographers have been sufficiently enterprising to introduce it.

Our picture this month is from the studio of Mr. G. M. Elton, Palmyra, N. Y., and is one of our last prize series. Mr. Elton is one of our most intelligent and painstaking artists, who has shown himself always ready to help himself by helping others, in contributing specimens of his own work for our prize competitions. We had the pleasure of giving an example of his work last year, as many of our readers will doubtless remember, and we have been pleased to notice from time to time the improvement he has made

We commend this disposition to make an effort whenever an opportunity offers, to photographers everywhere. It always helps; and even if the prize is not won, the exercise will benefit all who go to work with a will and do the best they can.

In our picture Mr. Elton has exercised a degree of taste and skill that is highly commendable, and from which others may draw many good lessons. He has carried out the idea of the promenade picture in a very happy manner, and made all his appointments consistent and harmonious.

Harmony is one of the essential elements, either in composition or in light and shade. When we see a photograph with a land-scape background, and the subject posed with parlor furniture and a Brussels carpet, it strikes us as being so incongruous that every other point of excellence is neutralized, and the whole work is pronounced a failure. There is a want of harmony, both in the conception and execution of the work. So in the light and shade; the extremes of dark and light may be so placed as to produce harshness and an unnatural and disagreeable effect; harmony in lighting con-

sists in a blending or linking together of the extreme parts by intermediate tints, which, in portraiture particularly, gives that beautiful gradation and softness which constitute the life and charm of all good photographs.

Mr. Elton has preserved this element in our picture, both in the composition, and in the arrangement of the light, giving us a work that is at once pleasing, natural, and, if viewed rightly, instructive.

To the fair subject who has done her part so well, much is due. She suggests the thought of a morning walk, plucking a flower here and there as she goes, and breathing the fresh, fragrant atmosphere that is considered so conducive to health and beauty. The first stanza of Jean Ingelow's poem, "Light and Shade," seems applicable to her.

"She stepped upon Sicilian grass,
Demeter's daughter fresh and fair,
A child of light, a radiant lass,
And blithesome as the morning air.
The daffodils were fair to see,
They nodded lightly on the lea,
Persephone—Persephone!"

The prints were made by Mr. Hearn at his Printing Institute, and are well executed.

OUR ADVANCE COLUMN.

"BLISTERS,"

How they may be Produced, and how they can be Avoided.

I HAVE read innumerable speculations upon the subject of "blisters" on albumen prints, wherein various causes have been suggested, and many antidotes offered for their cure. Experience has taught me one certain cause, and also a sure remedy for the disease.

More than a year ago, I allowed my silver solution to become acid, and, beside other difficulties, blisters appeared. Then, as now, I fumed the silvered paper.

About that time I noticed a communication in one of the British photographic almanacs, written by Mr. Stuart, of Glasgow, in which he recommended sal soda in the sensitizing bath, and subsequent toning with borax and gold. With some modifications I adopted his suggestions, and blisters disappeared.

In this process every step is taken on alkaline ground.

Lately, my silver solution getting out of order, I added some nitric acid, intending to neutralize it, but failed to do so, and again the blisters became a fact. An addition of sal soda relieved me of the evil.

Feeling assured that acidity before fuming had in my case produced blisters, I determined to make a severe test in this direction; and a bottle of citric acid in solution being at hand, I added an excessive quantity to my bath, making it intensely acid. The paper used in this instance was the "extra brilliant double albumenized," which was fumed as usual. To my surprise the proofs printed with great brilliancy, and toned quickly and finely; but, immediately on immersion in the hypo bath, they were covered with blisters. Another sheet of the same kind of paper was silvered on the acid bath, and proofs printed without fuming. These prints were quite as brilliant as those made on the fumed paper, but they toned badly. When placed in the fixing bath not a blister appeared.

From previous experience and this test, I am satisfied that ammonia vapor, in the presence of an acid, originates the disease which the action of the hypo bath develops.

I will add that the water used for the toning and fixing baths above alluded to was taken from an outside cistern, and was but a few degrees above the freezing-point.

I leave theorists to speculate over this matter, but to practical people I say, keep your printing solutions alkaline or neutral, and you will not be annoyed with "blisters."

T. H. LANE.

SOMERS CENTRE, N. Y., March 15th, 1876.

P. S.—Perhaps I should add that I do not confine myself to the borax bath, but use as often phosphate of soda, acetate of soda, and acetate of baryta, when making up toning solutions.

THERE is no surer way to advance, or improve, than to acquire a habit of thinking deeply about what you read. Try it.

SOCIETY GOSSIP.

PHOTOGRAPHIC SOCIETY OF PHILADEL-PHIA. — Stated meeting held Thursday, March 2d, 1876, the President in the chair.

The minutes of the last meeting were read and approved.

On behalf of the Committee on the Public Exhibition, Dr. Wilcocks reported that an exhibition had been given at the Franklin Institute on the evening of Friday, February 18th, to the satisfaction of every one present. One hundred and thirty slides had been exhibited, and three hundred and fifty tickets issued. A vote of thanks was tendered to Mr. Young, who had both furnished the lanterns and given the exhibition, to Mr. Bates, who had loaned a large number of fine slides for the occasion, and to the committee.

Mr. Henry C. Gibson was elected to membership.

Mr. Young exhibited a novel form of lock for plate boxes. It was flat, and provided with a catch independent of the key. It had been originally intended for show-cases, but could be used as a valise lock, or for the purpose named, its only objection being its large size and weight.

Conversation ensued upon the causes of fading in positive prints. Mr. Clemons was decidedly of the opinion that a thorough washing before toning was necessary; even more so than after fixing. Mr. Clemons mentioned cases in which prints had been merely rinsed off after removal from the hypo, and shown no change for a long time, while others which had been well washed after fixing, but not before toning, had soon begun to fade. Mr. Clemons said that he believed that a print should be washed for half an hour in running water, or if this was not practicable at least in sixteen changes of ordinary water before toning.

Several members called the attention of the Society to specimen prints on the walls and in bound volumes of the illustrated journals, many of which were twelve years old, and all were pronounced to be quite fresh and free from yellow discoloration.

Mr. Clemons spoke of the advisability of dipping finished prints in a mixture of one part of glycerin to four of water before mounting.

This was said to prevent the cracking of the albumenized surface after drying, so often seen in papers having a high gloss.

On motion, adjourned.

ELLERSLIE WALLACE, JR., Recording Secretary.

March 14th, 1876.

THE stated meeting of the Pennsylvania Photographic Association was held at the gallery of Messrs. Mahan & Keller.

President H. S. Keller in the chair.

Minutes of last meeting read and approved.

A paper was read from Mr. H. C. Gabriel on retouching. He said, the main point is a good negative. Where the face shows good transparency, the retoucher can procure better effects than if the negative were too intense. The operator must not rely on the retoucher, but furnish a good negative, that will require very little labor to get the proper effect. Mr. Gabriel stated that, not being well acquainted with the English language, if the members would ask him questions, he would answer better than by writing.

Questions were then put in regard to the surface for retouching, and the various varnishes used, as to which was the best?

The varnish generally used was sandarac; and an application of a solution of rosin and turpentine applied to the parts to be retouched. This gave a fine surface for the pencils. He uses several grades, from hard to soft, to suit; does very little stippling or hatching, but works with a circular motion of the pencil.

An interesting interchange of opinions amongst the members as to the various modes of retouching, made the subject very interesting.

The Secretary, as promised at the last meeting, exhibited a 4-4 porcelain print of the Treasurer. After being examined and its merits pronounced he gave his formula for making porcelain collodion, and proceeded to make a quantity, and show the members his mode of forming chloride of silver without precipitation; 12 ounces were made with success.

The members approved of his mode of making collodio-chloride, the demonstra-

tion of which proved of great interest and benefit to those present.

On motion, adjourned.

CHARLES EVANS,

Secretary, 814 Chestnut Street.

BOSTON PHOTOGRAPHIC SOCIETY.

STUDIO OF J. W. BLACK, BOSTON, March 3d, 1876.

The meeting was called to order by ex-President W. T. Bowers, who, in a few appropriate remarks, introduced his successor, Mr. Benjamin French, the Presidentelect for the ensuing year.

The President addressed the meeting, and said he was greatly surprised at hearing the news of his election to the position of President of the Boston Photographic Society. He appreciated the compliment the members had paid him, and would work in the future, as he had in the past, for the advancement of the art and those engaged in it. He had been connected with the business for over thirty years, having learned the old daguerreotype process in the first years of its discovery, but afterwards became engaged in the stock trade. He could see but one member present whose service in the art dated further back than his. He referred to Mr. Southworth, a gentleman who had done a great amount of good for his fellow-artists.

The President stated that he had watched with great interest the progress of the artists, and had found the societies had done much to induce photographers to compare their ideas, and in this way aid each other. The members of the Society had done considerable toward the progress of photography, and, if he could serve as well as some others, he would be most happy to do so; for, although he had not attended the meetings as much as he could have wished, in consequence of his deafness, his best wishes had been with them, and he would serve them to the best of his hearing, and should consider it the same compliment if the members should confer the office on another. That matter he should leave open to the Society, for he knew there were many members who could fill the position with credit to themselves and honor to the SoThe minutes of the last meeting were read and adopted.

Reports were received from the usual officers, which were accepted.

A very full report was read by ex-President Bowers, reviewing the work of the Society the past year, and abounding in pertinent suggestions for the good of the Society for the year to come.

He would, once in awhile, have a particular question for discussion, and have members appointed to speak on each side, and have it announced on the notices in this manner:

"QUESTION FOR DISCUSSION.

"Resolved, That the practice of retouching negatives is pernicious, and ought to be abolished.

"Mr. Black will speak in the affirmative, and Mr. Prescott in the negative; after which the question will be open."

If some such announcement as that failed to fill the room with photographers, he would be surprised.

Mr. Southworth gave many very valuable suggestions in relation to lighting the subject; he was followed by Messrs. Prescott, Black, and Rowell, in a general discussion, which proved entertaining and instructive; after which the meeting adjourned.

A. N. HARDY,

Secretary.

PHOTOGRAPHIC ART SOCIETY OF THE PACIFIC.

ANNUAL REPORT OF THE PRESIDENT.

To the Officers and Members of the Photographic Art Society of the Pacific.

Fellow-Members: Although I have been President of this Society only a portion of the time, the duty devolves on me of preparing a report of its proceedings for the term constituting the entire period of its existence.

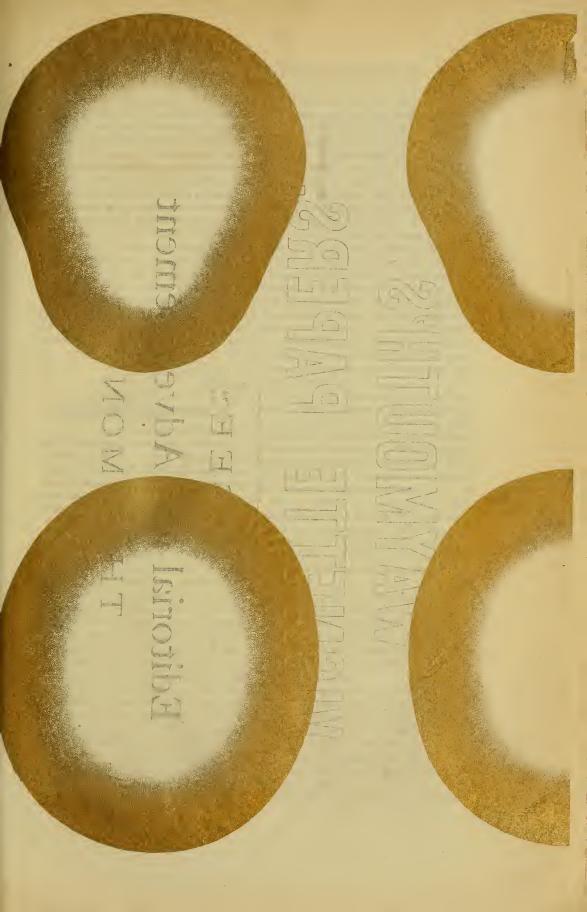
During the latter part of the year 1874, the attempt of the license collector of the city to collect a manufacturer's license from the photographers was the cause of bringing a considerable number of them together to consult in reference to that matter, and to devise measures' to protect themselves against the enforcement of what they

deemed to be an unjust demand. Succeeding in their object, the advantage of associated efforts became so palpable in that connection that it was deemed advisable by those interested to extend the organization, and create a permanent society in the interest of the photographic fraternity of this coast. An additional motive was also found in the purpose expressed by resolution of the National Photographic Association to hold its annual meeting for 1875 in San Francisco, and the desire felt by the photographers here that a creditable and fitting reception should be extended them on that occasion, a desire which was shared by the citizens of San Francisco, and which, it was believed, could better be accomplished by a thorough organization of those immediately interested.

[The President then reviewed the history of the Society, together with the personal relations to it of some of the members, and, after drawing from it some valuable lessons for future guidance, concluded as follows:]

With the limited number practicing our art, or directly interested in it, on the Pacific Coast, from whom to draw upon for membership, it becomes an important question for consideration with us, whether we have placed our dues high enough to raise funds sufficient for the purpose of the Society, even if economically administered. While I would not advise taxing our members to a greater extent than is necessary, especially such as are employés, the advantages directly and indirectly derived from our organization as a society are so evident to all, that I would suggest and recommend that those members who are also proprietors of galleries should subscribe as voluntary contributions according to their business and means enough to about double the present limited income of the Society. Should this fail to meet the views of proprietors of galleries, it will be indispensable to in some way reduce expense, an alternative which I trust their liberality will render it unnecessary for us to consider.

In conclusion, hoping that my efforts to serve you in the honored capacity of your presiding officer have met your approval, permit me to extend mutual congratulations at our success in establishing a photo-



MIGNETTE PAPERS.

S 可 可 可 可 Editorial and Advertisement THIS MONTH.

graphic society on these golden shores. To those of us who have observed the weaker efforts of the past, the present is full of promise. It would be strange, indeed, with the marked prosperity surrounding us, if sufficient intelligence and enterprise cannot be found in our profession to organize and sustain a society for our mutual advantage, and one that will command the respect of the community in which we live. After hearing reports of the Executive Committee and other officers, the annual election will take place, and I trust that the officers and members one and all will enter upon the labors of the coming year with the kindly and fraternal spirit of forbearance, and with a firm determination to achieve the far greater degree of success than any yet attained which is now within our reach.

Respectfully submitted,

JACOB SHEW, President.

GERMAN CORRESPONDENCE.

BERLIN, February 28th, 1876.

Carbon Printing versus Silver Printing—
Making Reversed Carbon Negatives and
Pigment Cameo Pictures—The new Process in Dry-plate Photography—Action of
Sensitizers on Bromide of Silver—Alkaline
Developer with Iron—Reinforcing with
Nitrate of Lead—List of German Exhibitors.

In photography there are certain recurring periods in which seemingly a transformation takes place. In 1867 we had such a period in carbon printing. This subject, carbon printing versus silver printing, was discussed with energy. The excelleneies of the new and the old methods had been the points of dispute in all jour-In England and America were issued hand-books of the carbon printing process. Every photographer at that time had tried at least the process, but only a few with success; it was the same in the old and in the new world. At last the combat waned, and the old silver printing process remained master of the field-carbon printing had apparently had its day. At present, after nine years, the same crisis appears again; but meanwhile the carbon printing process has obtained very important simplifications, and, indeed, is easier to be practiced than before, and again is carbon printing versus silver printing the topic of discussion in professional journals. many, it seems, the question is decided already, but for others the issue is still doubtful. One party says: Carbon printing has a future for large pictures from 7 by 9 inches up to full size. In this matter, on account of the high prices, the durability is an important question; the same seems to be less important with carte de visite and cabinet pictures. Other photographers have decided this question practically already, for they make all sizes down to carte de visite after the new method-in Brussels, for example. These are claimed as merits of pigment prints by its advocates: 1, for preparing of transparent positives; 2, for reproduction of negatives; and 3, for enlargements.

No. 1 is really inestimable for the preparation of magic lantern pictures and stereos on glass; No. 2 is for all, even for those photographers who do not intend to introduce positively the carbon printing process, of importance, for there is no one possessing a valuable negative which he would not like to have in duplicate at least.

The production of enlargements is certainly not so easily done as direct enlargements on paper, and many prefer the latter on account of their greater deepness in shades; but in considering durability the opinion is doubtless in favor of pigment prints.

The reproduction of negatives will simplify considerably the whole process. Till now the double transfer was the most troublesome; but this double transfer we can easily dispense with by making a converted negative, which is done without difficulty by the new process.

We develop a positive pigment picture on collodionized glass, and pour over it in horizontal position a gelatin solution, 1:8. After twenty-four to thirty-six hours the gelatin is dry, and then we can take an impression of the transparent positive, and copy, from the front as well as from the back, on pigment.

In the latter case we receive a reversed

negative, which by the common transfer process delivers immediately pictures in right position.

The pictures with gray margin, especially favored in America, can also very easily be made by the pigment printing process. We have to select very homogeneous, white, fine paper, lay several sheets one over another, and cut out an oval with a sharp knife. The mask with an oval hole thus obtained is to be laid between the negative and the pigment paper. Then the light will pierce through the transparent mask, and color the margin. If we have no paper of complete evenness we had better lay the same on the glass side of the negative, for the uneven places will in this manner appear less distinctly.

With toned pictures we succeed the best by transferring on collodionized glass, but only with entirely fresh and quickly dried paper.

The new results of dry-plate photography form another subject of interest for photographers, but not in such a degree as the carbon-printing question, though also important.

For many years the preparation of a usable cotton for emulsion work has been a secret. A cotton prepared in a high temperature was recommended for emulsions; but the results of such cotton had not always been perfect, and on the other side American observers, as Lea, Newton, etc., showed that with papyroxyl, set through, under general circumstances, excellent emulsions can be produced. Now at last the veil of mystery has been removed; the new publications of Mr. Stuart Wortley and the profound investigations of Warnerke show plainly and without doubt that not cotton, but gelatinized cotton is the foundation for preparing a good dry-plate pyroxylin. Now it explains itself why papyroxyl had better results for emulsions than cotton. The papyroxyl (paper pyroxylin) is prepared of silk-paper, which in its slight glutinous condition contains gela-

Warnerke's excellent article contains also many other things of interest in regard to the action of the different bromide salts in emulsions, and explains several points of which we had so far only some indistinct ideas.

In the February number I reported about the results of some investigations in regard to the action of sensitizers on bromide of silver, which showed the same of nitrate of silver, except that the sensitiveness of bromide of silver is not essentially increased. Similar results were observed lately by Stuart Wortley. I remark, however, that these observations are only regarding bromide of silver, which is prepared with the surplus of nitrate of silver. But different is the action with bromide of silver saturated with surplus of bromide and chloride, as in the drying processes of Newton and Singer. In this case the increase of the sensitiveness by sensitizers, as tannin, etc., is a considerable one. Lately I have tried Singer's process with very good success, and, indeed, the same is, for my trials with colored collodion, most invaluable. Without preservative I find, however, the plates but little sensitive.

On this occasion I will remark that Eder and Poth, in Vienna, lately directed attention to an alkaline iron developer, which has been tried only a little. Sugar, vinous acid, citric acid, mixed with vitriol of iron, prevent its filling with ammoniac; hereby some clear solutions of iron oxide arise. which are reducing in an extraordinary manner. Vinous acid is the best for this purpose. It is to be dissolved in surplus ammoniac, and then pour so much to a solution of vitriol of iron till the precipitate dissolved again. The at first nearly colorless fluid is by exposure to the air turned quickly into dark-green, and must, therefore, be used immediately. Chloride of silver and bromide of silver are most quickly and entirely reduced by this solution of iron to metallic silver, and for this reason the solution would act stronger on emulsions than the alkaline acid. Anyhow the same ought to be given a more special trial by all dry-plate men.

The same authors recommended lately for such negatives which require a thick cover a strengthening with nitrate of lead and red ferro-prussiate of potassium. The developed plate is to be fixed, at least to be

washed with distilled water, and dipped in the following bath:

Nitrate of Lead. 4 parts.

Red Ferro-prussiate of Potassium, 6 "

Water, 100 "

till the dark places have become opaque. Then the plate is to be washed with distilled water, and afterward sulphuric ammonium to be poured on, at last to be rinsed with water.

I am now able to give you a list of those members of our Society who will exhibit in Philadelphia:

- Portraits.—Loescher & Petsch, Berlin; Schaarwächter, Berlin; Reichardt & Lindner, Berlin; Schulz & Suck, Carlsruhe; Mischewsky, Danzic; Kiewning, Stettin; Von Delden, Breslau; Kösler, Landeck; Kremer, Gladbach; Dauthendey, Würzburg; Wolf, Hamburg; Ritschel, Hirschberg; Geldmacher, Frankfort-on-the-Main.
- Landscapes and Architecture. Rückwardt, Berlin; Scholz, Görlitz; Remele, Geldern; Heiler, Mosbach; Vogel, Berlin.
- Reproductions, Carbon Printing, Light Printing, Heliographic. — Albert, Munich; Braun, Dornach; Obernetter, Munich; Jacobi, Neuendorf; Folk, Berlin; Schwier, Weimar.
- 4. Lenses and Goods.—Busch, Rathenow; Hennig, Berlin; Schering, Berlin.

Besides the above, six other firms are reported who do not belong to the Society; and therefore a representation from Germany is to be expected just as large as at the International Exhibition at Paris, in 1867.

Yours truly, PROF. H. VOGEL.

FRENCH CORRESPONDENCE.

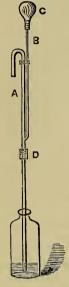
March Meeting of the Photographic Society of France—Carbon and Collotype Printing—A New Swinging Back for Field Camera—A Simple Siphon—A Good Receipt to Clean off Gum Lac—Photochromy, etc.

THE Photographic Society of France held its monthly meeting on the 3d of March last. A great discussion commenced upon the future exhibition, which will take place next May, in the Palais de l'Industrie. Naturally I cannot ask any of my American readers to take part in that international struggle for the progress of art and science, because they will have sufficient to do to prepare for the celebrated Exhibition of Philadelphia.

Silver printing is getting out of fashion in France, and carbon and colletype processes are going ahead rapidly; in fact, the whole evening was absorbed in the inspection of proofs made by these two processes. Mons. Geymet presented the Society with a large collection of fatty ink proofs, which were much admired. Mr. George Fortier, another champion of fatty ink printing, gave a demonstration before the Society as to the means he employed in order to obtain a transfer upon stone or zinc, and from thence he printed off a great number of indelible proofs upon paper. Mons. Brown made a present of a very fine collection of carbon proofs to the Society. They were the reproduction of the most celebrated pictures in the well-known Museum of the Hague. Mons. Roger made a presentation to the Society of a novel means to obtain the parallelism of the image on the focussingglass in travelling cameras. Every one knows that when the camera is pointed in an upward or downward direction, it is found necessary to bring the back into a perfectly vertical position, or the lines of a building will be distorted; this is generally done by a double frame, to which is attached the frame of the dark slide by means of pivots. This arrangement is very cumbersome when travelling. Mons. Roger has replaced it in a very ingenious manner. The frame which carries the dark slide is simply mounted by means of pivots upon two thin brass pillars, not unlike in form to those which support the ordinary swinging bedroom looking-glass. These two pillars are themselves imbedded in a flat piece of wood attached to the base-board by means of a screw in the centre. Thus, the dark slide has two tilting motions, one a perpendicular and the other in a horizontal position. The frame is fixed in any position by means of fastening screws, the nuts of which are easily loosened or fastened with

the hand. The whole apparatus has the advantage of being very light.

The accompanying drawing represents a siphon as made by me and used for many



years in my laboratory with perfect success for removing silver solutions from trays, bottles, etc., without staining the fingers, spoiling, or causing loss of solution.

In order to make the above siphon, procure glass tubing of a 7-16 bore, bend the end to a curve by means of a flame; at the lower part of the tube solder a 3-16 tube, and curve it upwards as in diagram. It is only now necessary to join to the top of B an indiarubber bottle. Another tube is joined to siphon A of sufficient length to permit it to touch the floor of the laboratory. A joint

is made at D with gutta-percha, not india-rubber. To work the siphon, plunge the long end into stock-bottle, which is placed on the ground, in which there has been purposely left a small quantity of the solution, put the short end of the siphon into the tray; it suffices simply to squeeze the bottle in order to expel the air. Open the hand, and immediately the siphon is at work. The small quantity of liquid left in the bottle performs the same office as if the end of the tube had been stopped with the finger. Should it be necessary to decant the solution from a deep bottle, join a piece of glass tubing upon the short stem by means of gutta-percha tubing.

It sometimes occurs that an operator has not sufficiently intensified a very valuable negative, the which having been gummed or varnished, it would be very dangerous to work upon. The printer, in this case, has recourse to many subterfuges, in order that the face of the person may not have the appearance of that of a red Indian, one of which is: A solution of gum lac in alcohol is poured on the back of the negative, upon those parts requiring intensification; the

reddish color of the gum lac contributes to soften the ardor of the light and procure the desired effect. Photographers in general have a great repugnance to employ this method, although very good, because it takes a very long time to scratch off the varnish from those parts where it is not required. Our esteemed friend Mons. Davanne gave a simple receipt to make this operation a very simple one. Having experimented with it myself, and found it very good, I hasten to impart it to the readers of the Philadelphia Photographer. If peradventure it may prove of service to some and be a saving of time to many, I am certain that Mons. Davanne will be but too happy. In order to take off excess of varnish it suffices to dip the wood of a match into a little liquid ammonia and draw it over the surface of the varnish; wherever the ammonia has touched the varnish the latter has become soluble, and the least damp will take it off with ease; in fact, all the borders of a design or portrait can be followed with truthfulness and facility.

Photographic news is rather dull at this moment. Photographers and amateurs are on the qui vive, concentrating their energies and skill, preparing to enter the public lists for fame, determined to fight bravely in a friendly struggle for popularity either in the large and magnificent Exhibition at Philadelphia, or in the more modest and homely one of Paris. Mons. Leon Vidal, among the rest, is preparing his collection of photochromy for Philadelphia, and I have no doubt it will be one of the great attractions. A very long time the cry has been heard in the journals: "But we cannot see any of Mons. Vidal's photochromic proofs." This is not surprising when we take into consideration the difficulties he had to contend with in the organization of the immense establishment under his management. Photochromic proofs are now becoming visible on the boulevards of Paris. Mr. Liebert, the celebrated American photographer, was the first to put some in his private exhibition or show on the Boulevard des Italiens. These proofs attract crowds, and it is indeed amusing to hear the discussion which they, as well as the title, "Photochromic proofs," elicit. Some are

of opinion that the natural colors seen in the camera could now be fixed; others of a contrary opinion. This created such a war of words the other day, that in many other countries it would have degenerated into blows. In whatever way Mons. Vidal operates, whether by the superposition of gelatin films each bearing a different color, and by their marriage creating harmonious and pleasing tones, or by the colors being placed by a mechanical means under a transparent film, all this appears unimportant to me; all I observe is the beauties of the results obtained and their commercial as well as artistic interest. Great honor is due to Monsieur Vidal for creating a new branch of industry in his native country, giving thus wealth to a few, ease and comfort to many, and pleasure to

PROF. E. STEBBING.

Paris, March 6th, 1876. 3 Place Bréda.

CORRESPONDENCE.

AN INSULT.

THE following, printed on postal cards was received by several in our town:

"CARD .- The prices charged in New York for the prevailing styles of first-class portrait photographs, known as Imperial cards and cartes de visite, although established by me years ago, do now, in my opinion, unnecessarily restrict the business. While the highest artistic standard will continue to be maintained at this establishment, common sense business principles need not be ignored. I propose to lead in placing the high art of photography on a square business basis of reasonable prices and profits, and, therefore, offer to the public a quality of pictures such as shall not be surpassed in this country, at the following rates:

Imperial cards, \$6 per doz., 2 doz. for \$10 Cartes de visites, \$3 per doz., 2 doz. for \$5

PHOTOGRAPHER,
Broadway, N. Y."

(Established 1859.)

Now, fellow-photographers, what do you think? Had we not all, "better step down and out?"

"The highest artistic standard," "I propose to lead in placing the high art of photography on a square business basis," pictures such as shall not be surpassed in this country," etc., etc.

And all of the above for "three dollars per dozen." Is the man mad? or does he think the people fools? The postal card with the above on was handed to me by a professional man, a lover of art other than the art photographic, and right heartily did he laugh. I had finished making a sitting of him for an Imperial photograph. He is one of those hard cases that we meet with so often in photography, very angular features, etc. I was fully an hour holding him in conversation, with no other object than to study his face, and how I could best make his position. The upshot was a good negative the first time, with as much art composition in it as I was capable of. Now. will Mr. R. or somebody else tell me how much "high art of photography" can be executed for "three dollars per dozen?"

Mind you that this is from Broadway, New York City, and from an establishment of no small pretensions, under heavy expenses, etc.

I am almost ashamed of some of our brethren. I have seen specimens of this particular photographer's "high art," and those I have seen would readily call forth the ejaculation, "How is that for high?" leaving off the art as having nothing whatever to do with it. I trust and hope for his patrons' sake, they were only the very poorest.

At any rate I think the issuing of the above card is simply an insult to all true photographic artists who are using up their life energies to elevate the art, and not degrade it. Yours very respectfully,

FERRIS C. LOCKWOOD.

FREEHOLD, N. J., March 18th, 1876.

It may be said that every man has the right to manage his business in his own way, but it pains us to see one who has held a good position in the fraternity for nearly twenty years giving way to the baser claims of his calling, and professing to produce work of the highest artistic standard at prices which every one connected with the business knows to be ruinous. The

principal regret we feel is, that such a move as the above always indicates the early collapsing of the establishment that introduces it, and sets a bad example to others who may be feeling the press of dull times.

We would advise all to hold on, however, keep up good courage; if business does not come to you, move around and try to look up some, but do not sacrifice your standing as an artist by advertising to do cheap work.—ED.

LANDSCAPE PHOTOGRAPHY AND ITS TRIALS.*

BY FRANCIS BEDFORD.

THE life of the landscape photographer is assuredly an enviable one. The pursuit of his favorite art leads him to pleasant places, and brings him face to face with whatever is most lovely and enjoyable in Nature's fair domain; but it is not a life of unmixed content. How often it happens that the buoyant hopes with which he has looked forward to the coming trip are disappointed, and the harvest on which he has too confidently reckoned is never reaped! I do verily believe that no member of the community is so sorely tried as he is. He may be a master of his art, and yet his most carefully laid plans, and all his efforts, may be frustrated by a spell of bad weather. Causes entirely beyond his control often reduce him to inaction, and unless he be blessed with wonderful patience and determined devotion to his art, he soon becomes dejected and hopeless. So many are the conditions of success, that it is scarcely to be expected that all will go well with him. A light sunshiny day, and perfect stillness, are indispensable for some particular view on which he has set his heart. He has carefully studied it beforehand, and he comes to it full of spirits. hoping to secure at the right moment the bright picture he has painted in his mind's eye. The camera is adjusted, and the plate is ready, when, to his infinite chagrin, the sun goes behind a cloud from which it is not likely to emerge again; or the wind rises, and sets in motion the trees or foreground foliage, on which all the beauty of the picture depends. Or, greater trial still, successive days of rain or wind or leaden dulness bring matters to a standstill altogether, unless he be sufficiently hopeful and patient to take advantage of such casual gleams of sunshine as may come even on the most unpromising days; and that is just what he must make up his mind to do, for it is often on these very days, when it appears to be of little use venturing out at all, that a break will come in the clouds, and the sun shine out white and bright, and the most charming effects are seen. Such chances should never be neglected, for they may prove to be the sole opportunity.

But it is quite possible on the roughest days to get good results with the exercise of a little patience. Of course, if wind blows continuously, as it does sometimes without cessation, landscape photography is simply impossible; but when it comes in sudden gusts, violent enough, perhaps, to dash the camera to the ground, there are intervals of perfect stillness, during which foliage may be rendered perfectly by uncapping and capping the lens at the right time. A plate carefully prepared, with a bath in good order, and then closely drained, will keep longer than is generally supposed, and it will be hard if one cannot, during half or three-quarters of an hour, get the requisite two or three minutes' exposure. But I would suggest here that he should, first of all, fix his camera-stand firmly in the ground, and then, with a stout string, suspend from the screw-head a big stone or other heavy weight. He will then be free from any solicitude for the safety of his camera, and can give all his thoughts to his work. Sometimes small shrubs or weeds in the foreground cause much annoyance by their motion when all else is still; these may be judiciously pruned without injury to property. If a bough of a tree obtrudes, or is otherwise troublesome, it is better to tie it back out of the way, and release it as soon as your view is taken. I have succeeded in obtaining, in a very high wind, subjects consisting almost wholly of foliage, which had all the appearance of being done on a perfectly still day.

^{*} The Year-book of Photography.

If, however, the wind, our greatest foe, proves too much for us, even then there is good work to be done. There are often magnificent cloud effects at such times, and if the photographer will set to work upon them, he may obtain a stock of such cloud negatives as will serve to convert comparatively uninteresting views into perfect pictures.

And then, again, while waiting for this or that view, which can only be done on a very perfect day, the true worker need never be at a loss for subjects for the camera; there is a wide field open, and he will find occupation of an improving and delightful kind in taking, as occasion offers, studies of many a picturesque object full of interesting details. An old barn or shed, for instance, with a cart or implements of farm industry; or a pretty cottage mantled with ivy or clematis, with, perhaps, its aged and simple inmate or a little child at its rustic porch; boats and other craft on the seabeach, or a group of brambles and ferns by the roadside, or a gate at the entrance to a wood,-such subjects as these, and many others of a like nature, are often met with in sheltered spots, and can be photographed successfully even on a dull and windy day; and they form such choice "bits" as his artist friends, when they turn over his folio, will stop at, and find true delight in.

The Centennial Photographic Diary.

It is expected this work will be ready by the time this reaches our readers. In its preparation, the author, Mr. Robert J. Chute, has had in view the purpose to supply photographers with a neat Diary and Guide Book.

It contains just the information necessary for Centennial visitors, interspersed with blank memorandum pages.

It will be embellished with a fine engraving of Photographic Hall, and a beautifully colored map of Philadelphia, 20 x 22 inches, showing the location of the Centennial grounds, and the positions of the principal exhibition buildings. On the margins are finely executed lithographs of the Main Building, Memorial Hall, Machinery Hall, Horticultural Hall, Agri-

cultural Hall, United States Government Building, Women's Pavilion, and Judge's Hall; the whole forming a complete guide to those intending to visit the Centennial exhibition. The information photographers may gain from this work before coming is almost indispensable, and may save them many times its cost. It will be beautifully bound in muslin, and sold at the low price of 75 cents. Send orders to Benerman & Wilson.

THE ROBINSON TRIMMER.

THE following, from the British Journal of Photography, will show how this little machine is regarded abroad. The plan for cutting with a square guide was long since adopted by the manufacturers, and guides made in the manner described may be had of us or of any dealer.—Ed. P. P.

PRINT TRIMMERS.

We have no means of ascertaining to what extent the ingenious American invention known as a "print trimmer" is used in this country; that it is in use by many we are, however, well aware. The trimmer in question consists of a small steel wheel with an obtuse knife, or rather wedgeshaped edge, which is fixed between shears so as to revolve on a pin which passes through the axis. The piece of metal in which the wheel is fixed is set in a handle, in which it is capable of turning round easily in the same way, although not to the same circumscribed extent, as a glazier's diamond is set in its handle. In recommending photographers to take advantage of this little instrument we have no trade interests whatever in view, for indeed we are in ignorance to a large extent as to the channels through which they are usually supplied; but we have found the "trimmer" so handy for many purposes that we must be held excused for having thus given it a passing word of recommendation.

We now come to speak of the method of using the instrument, and of the means by which it is best kept in good working condition.

As regards its application to the cutting out of such mats as those for lantern slides, we need say but little by way of recom-

mendation, inasmuch as no other mode has been devised, short of stamping, by which an aperture in a sheet of paper can be cleanly and expeditiously cut. In effecting this operation it is only necessary that a thin brass or steel plate, having in it an aperture of the desired size and form, be placed upon the paper (which is laid upon a table or plate of glass) and the cutter made to run rapidly round the margin of the aperture of the guide-plate, against which it must be slightly pressed, so that the paper is cut in a far more complete manner than when the severation is effected by a sharp knife. But it is alleged-and here arises one of the points of our remarks at present-that while the trimmer is perfect when applied to curves, such as circles, ovals, or cushion-shapes, it fails when applied to a sharp corner. This is quite true in one sense—that is, when it is required to cut exactly to the configuration of a square-cornered aperture in a guideplate such as we have described. But this objection does not apply to the opposite kind of trimming-that is, the cutting round the outside of the "shape," which in this case must consist of glass in order that the picture be plainly seen; for what applies to the formation of clean-edged apertures in paper mats or masks, applies with equal force to carte, cabinet, or indeed to any other description of photograph.

We have recently devised a means by which pictures may be trimmed with perfectly sharp and square corners by means of the brass guide with an internal aperture, and we can strongly recommend it as fulfilling every requirement in connection with the rapid trimming of pictures. It is this: Having obtained the brass guide-plate with its aperture of the exact dimensions to which it is desired that the print should be trimmed, apply a sharp, thin file to each corner in such a way and with such a result that each of the straight lines which meet to form the corner shall be carried a little waysay the eighth of an inch-into the solid metal. Each corner will thus present the appearance which characterizes those of the well-known "Oxford frames." The use of these corner slits will be apparent. They allow the small circular cutter of the trimmer to pass on to such a distance as to bring

its centre opposite to the straight line of the guide, which is at a right angle to the path it has just traversed—a cut along the other path, or straight edge, effecting the same thing—the result being that an exceedingly sharply trimmed corner is produced. The cutting of a picture to a dome shape by means of a guide-piece prepared in the manner here described is thus rapidly accomplished without lifting up the cutter more than once during its circuit.

The rapidity with which prints can be trimmed by means of the little piece of apparatus here referred to is so much greater, and the results so much superior, to those secured by the old system that we feel justified in urging the matter on the attention of photographers.

We find that few, if any, seem to be aware of the best method of keeping the trimmer in proper cutting order. The grain of the cutting edge should not be concentric with the centre of the cutter, which would undoubtedly be the case if it were sharpened in a turning lathe, as is the practice of some; but it should be at nearly right angles to the periphery, or radiating outwards from the centre. To secure this, all that is necessary is that the cutting wheel, without being dismounted from its setting, be dragged in an oblique manner over a rather coarse and flat oilstone, such as that employed for sharpening carpenters' tools, the wheel being first of all'applied to the stone so as to suit the bevel of the cutting edge, and then made to run along or over the face of the stone at an angle of about forty-five degrees to the line over which the wheel would naturally be made to run, and which should be at a right angle to the sheers or holder in which it revolves. This is the whole secret in the sharpening of cutters of this kind when intended to be used either for paper or glass.

INTERESTING AMERICAN SCENERY.

WE have received from Mr. William H. Jackson, Washington, D. C., a number of views illustrating the sections of country explored by the United States Geological Survey of the Territories, under Prof. F.

V. Havden, of which Mr. Jackson is photographer-in-chief. The sizes are 5 x 8, 8 x 10, and 20 x 24. The last belong to the series of 1875, and illustrate the "prominent points in the San Juan, Uncompagee, and Rocky Mountains, and are the first of this size ever made of that region." An examination of these pictures fills us with admiration and amazement. Admiration for this magnificent scenery of our own country, which is scarcely excelled by that of any other, and for the wonderfully successful work of this mammoth size, each picture of which is a study in its composition, its lighting, and general grandeur of effect produced by its breadth and perspective. Amazement that such work could be executed in the wild regions of the Rocky Mountains, from almost inaccessible positions, whence everything had to be carried on pack-mules, and much of the work done under circumstances of the greatest disadvantage. Most photographers consider the manipulation of 20 x 24 plates formidable enough under the most favorable conditions, as the chances of failure and all the difficulties attendant upon the negative process are greatly increased, when the plates used can be measured by feet instead of inches; but Mr. Jackson has proved himself a master, not only of the principles of art which govern such work, but of every circumstance or condition which may in any way affect his success in producing the grandest results photography is capable of. These beautiful pictures are from negatives apparently as clear and perfect as the carefully made card or cabinet plate in any of the galleries of our best photographers. In perfection of detail, in fine gradation of light and shade, and successful chemical effects, we think they stand unrivalled by any work of this size it has ever been our good fortune to inspect.

There are two or three that we must notice especially.

San Miguel Falls, with its surroundings, presents a charming bit of scenery. The fall is about sixty feet in height, and touches just enough of the jagged rock in its descent to form the whole into a sheet of foam as it pours into the little basin beneath. It appears to be surrounded by a thick forest, and the trunks of dead trees which have tumbled

into the chasm add much to the picturesqueness of the scene, and show that the wild charm of this spot owes nothing to the orderly arrangement, or the pruning hand of man.

The Upper Twin Lake .- This view presents lake and mountain in a most effective manner, the latter being mirrored in the former so perfectly that were it not for the well-chosen foreground the picture might be framed either side up. Baker's Park and Sultan Mountain presents a broad valley in the foreground, through which the River Animas winds its way, reminding one of the Chamouni Valley in Switzerland, where the muddy Arve drains the great glaciers of the Alps. But as the eye follows the valley along into the distance the similarity ceases as it seems to come to an abrupt termination against the great Sultan Mountain, which raises its peaks 13,366 feet towards the clouds which float along its top. At the foot of the mountain in the distance lies the little town of Silverton, scarcely two years old, but growing rapidly.

The Uncompagee Mountains, at the head of the Lake Fork of the Gunnison River, is the gem of the collection, "a glimpse of really Alpine grandeur. The crest of the range in the distance is nearly 14,000 feet high, and covered with deep snow for 2000 feet below." This picture is certainly a magnificent production, and answers in itself the question whether we have any scenery in America that equals the Alps. The dark trees and landscape of the foreground contrast most effectively with the snow-clad mountain in the distance, making a picture worthy of the highest skill of the painter.

One peculiar feature of this view is the lighting; it being what photographers term a Rembrandt light, i. e, the shadows all fall towards the spectator. The rugged crest being thus in shadow is sharply defined against the white sky, while its outline is marked on the snowy surface far down the mountain side. In the foreground is a "babbling brook," which drains the melting snows above, and goes dancing over its rocky bed, forming numerous pools and miniature waterfalls, and flowing on, swells into the Gunnison River.

The smaller sizes comprise the Yel-

lowstone Falls, the geysers, prehistoric ruins, Indian camps, and mountain, lake, and river scenery in great variety, all executed in the same excellent manner, and testifying unmistakably to Mr. Jackson's skill and perseverance.

We consider the government very fortunate in securing the services of one who has proved himself so well qualified for such a work, and ourself happy in being the recipient of landscape photographs of our own country, executed by an American artist, and possessing so high an order of merit.

Accompanying the views is a complete catalogue of the work done on the several expeditions each year from 1869 to 1875, inclusive, which we would advise lovers of the beautiful to consult and select from. We shall add of the views, as far as we have room, to our office collection, and shall prize them as among the choicest of our heliographic productions.

TALK AND TATTLE.

WE frequently have occasion to notice how widespread and deep is the interest in photography, and the growing disposition among all classes to acknowledge its proper position among the arts. We well remember when it was seldom alluded to by the daily press except as a subject for butt or ridicule by some joker; but the past few years of the diffusion of photographic literature, of the formation of societies and holding conventions, and the earnest study of the principles of art by our professional photographers, have produced such wonderful advances that photography is being assigned its true place, and everything connected with it, even to methods and manipulatory details, are deemed of public interest.

The following extract from the Paris correspondence of the Philadelphia Evening Bulletin is an indication of the truth of what we have said. It will be found fresh and interesting, and has the appearance of having come from one not wholly unacquainted with the art. The method of lighting here spoken of, or something similar, has been practiced to some extent in this country, but, we believe, not with any marked improvement on the ordinary method. Our

readers may be able to gather some thoughts from the suggestions here given that will help them to put the principle in practice and judge for themselves of its merits or utility.

A COLORED SCREEN FOR LIGHTING.

"The photographic art is now of such universal interest and practice that some of your readers, amateur or professional, may not be sorry to have anything which is apparently new, or an improvement, in the process, brought to their notice. And such appears to be, in some degree at least, the case in the system of an application of light, as practiced by M. E. Klary, a French photographer at Algiers, and of which he has just published a very lucid explanation.

" Photographs, as is well known, are never absolutely correct in all the parts, as regards either the drawing or the distribution of light and shade. The outline will be incorrect in part, and the shadows too deep, and lights too vivid. Photography left entirely to itself is ruthless and rugged, and reproduces everything with a hard and harsh fidelity; making no choice or selection, as an artist would, in seizing essential traits and toning down what is only accessory. Sir Joshua Reynolds once said of the painting of a 'Lady and an Apple Tree,' that it was an admirable representation of the latter, but in no sense a portrait of the former. Were two such objects presented to photography, it would take just as much pains with the one as with the other. And so an ordinary photographer treats his subjects, whether animate or inanimate, on a footing of equality. The artist-photographer, on the contrary, uses, or endeavors to use, light just as he would paint on his brush. Light is his pallet; and in the proper distribution of it over his subject consists the true art of the photograph. But the acquirement of this art, like everything else, demands both much study and long experience and dexterity, as well as adaptation to times, seasons, colors, complexions, etc.

"M. Klary professes, by the aid of a 'screen (écran) with a movable colored head to it,' to have put into the hands of photographers just the 'brush' which they required wherewith to 'paint with light.' I shall not attempt any minute description

of the apparatus, which is, however, extremely simple, consisting of a screen of white, blue, pale-red, or pale-orange calico, according to circumstances, fixed on a stand with an ingeniously contrived power, and which, placed behind the subject, enables the operator to regulate and distribute the lights absolutely at will, until all is brought into due harmony and good keeping in the 'picture' which he is about to reproduce. The above instrument, combined with the use of a concave reflector of a pale-rose or yellow tint, enables the operator to bring out, in relief, all the features of a portrait which require to have more light thrown upon them. The productions of M. Klary, obtained by the above process, are very pleasing, and have been much admired in Paris. Another part of his system also is that the whole face, in a photographic portrait, should be all more or less shaded, none of it left absolutely crude or white; just as in playing the violin, to borrow an illustration from the sister art, no string is ever left entirely 'open,' nor any true note produced without the feeling and action of the finger of the musician. In a word, the system of M. Klary is intended to replace advantageously the whole clumsy apparatus of curtains, blinds, shutters, reflectors, and counter-reflectors, headscreens, etc., which one sees generally employed, and which often serve only to humiliate both the operator and the subject, and produce confusion, instead of artistic adjustment and distribution of light and shade."

MATTERS OF THE



As it may assist some to get at the amount of their dues to the Association, we will say that those who attended at Chicago and paid up there, and have not paid since, are now owing two years' dues. The dues are \$4 for employers and \$2 for employés. Entrance fee for new members, \$5. Life membership, \$25, with no dues to pay. Remit

dues to the Treasurer, Albert Moore, 828 Wood Street, Philadelphia; and admission fees to the Permanent Secretary, Edward L. Wilson, 124 N. 7th Street, Philadelphia.

As we announced last month we have had our last say. We have now only to call attention to the following communications, and trust they may be the means of suggesting some solution of the National Photographic Association problem.

Medina, Ohio, March 10th, 1876. Mr. Wilson:

I read with deep regret the desponding view you take of the condition of the National Photographic Association, and it does seem to me as if photographers were dead to their own interests to let it die such a disgraceful death. Changing locality and building up a new trade has compelled me until now to neglect the payment of my dues, but have written Mr. Moore for my account and it shall be paid, if I sell my new overcoat to do it. Allow me to suggest a word. I have talked with several photographers upon the subject lately, and they all agree in saying that if they could be assured that their money would count for something, they would pay up. No doubt if all or a large majority of members would do so, the Association could be sustained. But for a few, a hundred or less to pay up, and then not have any Association, they seem to think (and no doubt rightly) they are out just so much.

The majority of photographers look upon the Association as already dead, and none want to pay even their back dues under such circumstances. Now if some plan could be hit upon so as to continue the existence of the Society for the benefit of those who do pay, or assure the return of the money, in case the Association is given up, there is little doubt but that very many more would pay up yet. I think no sane man can for a moment question the good influence the Association has exerted upon the fraternity, or upon the public generally, and I think the general opinion is that we cannot afford to do without it, and if security can be given to those who do pay, a healthy reaction must take place.

Yours hopefully, J. S. Mason. ANOTHER.

I am sorry to hear of such little interest being taken in the National Photographic Association convention this year. It seems to me that the expenses would be very small comparatively to what it has always been.

I say for one, let us have a convention this year, about the middle of June or middle of July. That will avoid the great rush about the Fourth of July.

> Yours truly, J. A. W. PITTMAN.

A WORD FROM THE PRESIDENT OF THE NATIONAL PHOTOGRAPHIC ASSOCIATION.

SAN FRANCISCO, March 1st, 1876.

FRIEND WILSON: I read with profound sorrow what you say by letter, and in the Philadelphia Photographer, touching the disinclination of the members of the National Photographic Association to come forward with their dues, and thus enable the Executive Committee to arrange for a grand gathering this year. I ask myself the question: What can I do to remedy the difficulty? Certain it is that I can feel but little interest in travelling from California to preside over a body which seems not to value its existence even. So I have delayed writing till I could arrive at some conclusion as to what was my duty in the premises. Modesty forbids that I should indulge the hope that my presence at Philadelphia would produce any marked influence in arousing their slumbering interest; but still hoping and believing that a good meeting is possible if the proper steps are taken at an early day, I have concluded to render my absence more valuable than my presence can be, and to this end I would ask you to request the Executive Committee to arrange for one of the vice-presidents to preside, and to please accept from me the sum of one hundred dollars towards meeting the expense of the meeting, and to have it further understood, that in the event of their being successful in holding a Convention, and require the money for this purpose, they are authorized to draw on me for an additional fifty dollars. I would not have them think that I believe this insignificant amount will be sufficient for the purposes of the Convention; but I indulge the hope

that, as a commencement, it will lead to such other contributions and the payment of dues as will in the aggregate secure all the funds required to relieve the Convention from the embarrassments of a financial discussion, leaving them free to work out such substantial results as will be an enduring monument to the progress made by photography in the past. The culture of our race to-day is not simply the product of the thought of to-day. We enjoy the long results of centuries. Let us then, as we enter upon a new century of our national existence as heirs-at-law of the labors of past ages, secure to posterity, as an inheritance, title-deeds to efforts not unworthy of the age in which we live.

I remain yours truly,

WILLIAM H. RULOFSON.

PHOTOGRAPHIC HALL.

WE have had the thrilling pleasure of standing "within the shades" of Photographic Hall! Nay, not that either, for at this writing only the framework has been erected, including the rafters. But it will be all completed soon after many of our readers receive this; and it will be handsome and just the thing, only it is too small. This latter thought was convincing when we stood within the building; and, although we are overjoyed with the thought that there is to be a Photographic Hall, we are still chagrined that photographers took so little interest in the matter that the Centennial authorities could not feel warranted in crecting a larger building.

As it is, we are informed by Mr. Sartain that he fears the building will be too small, as there are already more applications for space than the hall will hold. Still, the Examining Committee may have to reduce these some; there will be some withdrawals, and again an annex may be erected.

That the exhibition will be grand there is no shadow of a doubt. Already we have seen some glorious things from Japan, California, England, Palestine, Italy, Greece, Germany, and France, and each day they are arriving. Oh, what an opportunity, ye photographers who are anxious to improve!

Now, without further remark, let us pro-

ceed to give further details concerning the business department of the hall. We are happy to know that the Director-General has appointed Mr. John Carbutt, of this city, as superintendent of the hall. A more excellent and acceptable appointment could not be made, for Mr. Carbutt is a thoroughly practical man, in sympathy and in love with our art, and he will doubtless give general satisfaction. Below we give a copy of his official appointment, and some suggestions from him concerning the preparation and shipment of exhibits:

INTERNATIONAL EXHIBITION, 1876.

United States Centennial Commission, Philadelphia, March 16th, 1876. (Bureau of Administration—Art.)

JOHN CARBUTT, Esq.

DEAR SIR: Your acceptance of the position of Superintendent of Photographic Hall was approved by Gen. A. T. Goshorn, Director-General, some few days since, and yesterday the appointment was definitely confirmed by the making out of the formal paper usual in the practice of the Centennial organization.

If it suits your convenience for you to assume the duties of your position immediately that the builders have made the hall ready for the reception of goods we should like it. This will probably be some time between the 1st and 17th of April.

Yours respectfully,
(Signed), John Sartain,
Chief of Art Bureau.

EDWARD L. WILSON, ESQ,

Editor Philadelphia Photographer.

DEAR SIR: Inclosed I hand you a copy of my appointment as Superintendent of l'hotographic Hall, Centennial Exposition. The hall is expected to be ready for reception of goods some time from the 1st to 15th of April, and in all probability the time actually available for arranging the pictures will be not more than fifteen or twenty days before the day of opening, and, in order to facilitate the work of those engaged in the placing of exhibits, offer the following suggestions: To use stout screweyes and wire picture cord on the frames;

the cord not to reach above the frame; to insert the screw-eye at such a point as will give to the frame the necessary forward tilt. The lower edge of all frames will be thirty inches from the floor, with ten feet of space above, so that the first row should have little or no tilt. The light will be uniform. being mostly from the top and diffused. Those desiring their exhibit arranged in any special order, we suggest they inclose in their case, or forward to us a diagram, and we will endeavor to carry out their wishes. Use screws only, in packing your pictures and in lids of cases. Mark your name and address on under side of lid, and prepay all freight or express charges to Philadelphia, being particular to address it to Photographic Hall, Centennial Exposition, and, in case you do not attend in person to arrange your exhibit, responsible parties, having permission of the Bureau of Art Administration to act as agents for exhibitors in Photographic Hall, will attend to it for you. Finally, have your exhibits ready for shipment, and you will be notified by mail when the hall is ready to receive them. Yours respectfully,

JOHN CARBUTT,
Superintendent Photographic Hall,
Centennial Exposition.

As some of our readers will want to know more definitely when their exhibits will probably be wanted, we would say that, in an interview with Mr. Sartain, we were informed that the time would be extended to April 19th at least. A definite time will be fixed just as soon as it is certainly known when the hall will be ready. Our advice is to have everything ready to ship by the 15th instant and await orders. You will receive notice just as soon as it can be known exactly what to tell you. Don't worry. You can rely on this. Of course this is only to those who have applied for space.

Now there is another department in which you are interested, namely, in the reception, care, and protection of your goods while they are here, and their return or sale after the Exhibition. Such commissions should be intrusted to the "Photographic Installation Company," whose card is, viz.:

"1876.

THE PHOTOGRAPHIC INSTALLATION COMPANY, CHAS. A. WILSON, Manager, Office, 624 North Twenty-fourth Street, Philadelphia.

"Acting by permission of the Bureau of Art Administration of the Centennial Exposition.

- "While the space allotted to an exhibitor is free of charge, each exhibitor is expected to arrange his own exhibit or provide for its being done.
- "C. A. Wilson & Co., having obtained special permission to act as agents for exhibitors in Photographic Hall, hereby offer their services to intending exhibitors in the following manner:
- "1st. To unpack the pictures, arrange them in the allotted space, see to them during the Exhibition, and repack at the close of the Exhibition.
- "2d. To get special fire insurance placed on exhibits. This each exhibitor should by all means have done.
- "3d. To attend to the sale of such pictures as the exhibitor may desire to have sold, and other business that may be required.
- "For circular of terms, etc., address the Photographic Installation Company, 624 North Twenty-fourth Street, Philadelphia."

The charges of this company cannot be exacting. It would not be allowed. And in preference to intrusting the work to parties unknown, we would recommend that it be given to those who are directly connected with Photographic Hall and who are themselves photographers.

Mr. Charles A. Wilson, the manager, has long been known to the fraternity as a stockdealer in Baltimore, Md., and comes here to devote his entire time to the matter with his co-workers. This is another capital arrangement, and will protect photographic exhibitors from the exacting charges which we understand some have already arranged to pay. Every one can see that it is wisest to employ the Photographic Installation Company.

Space is free absolutely; but in all the departments, as well as in Photographic Hall, it is necessary to pay for placing and caring for exhibits and returning them, or

do it yourself. For further information we refer to the advertisement, or send to the Photographic Installation Company. All this arranged, begin to get ready to come and be astonished.

Additional American Applicants for Space in Photographic Hall.

C. S. Warner, C. J. Wills, S. W. M. Winslow, Waller & Schrader, D. N. Carvalho, D. H. Anderson, N. S. Busey, S. G. Borhek, E. Bierstadt, Baron P. Des Granges, W. G. Entrekin, J. C. Herring, W. Harris, J. H. Lamson, O. G. Mason, T. H. McCollin, McIntyre & Co., Portland Co., C. Randall, F. H. Smith, Stattburg Bros., M. P. Simon.

Additional Subscriptions to Photographic

	Hat	ι.				
					Sha	res.
Fairman Rogers,	Newpor	t, R.	I.,			2
W. Curtis Taylor,	Philad	elphia	١, .			15
C. D. Mosher, Ch.	icago, I	11.,				5
J. Sinclair, Stillw	ater, M	inn.,				1
J. G Smith, Vall	ejo, Cal	., .				1
R. Benecke, St. I	ouis. M	0.,				1
O. C. Bundy, Virginia City, Montana,						1
George Rau, Phil	adelphia	ı, .				5
H. M. Clifford,						1
F. T. Fassitt,	"					1
J. M Bates,	+ 6					1
J. W. Bates, Jr.,	4.6					ι
R. H. Vance, Nev	v York,					1
John Haworth, P	hiladelp	hia,				5
C. Gentile, Chica	go, .	•				I
C. A. Zimmerman, St. Paul, Minn., .						1
Theod. Gubelman						1.
A. Hassock, San l		_		΄.		- 1
R. Winter,						1
G. D. Morse,	•6					4
J. H. Peters,	4					2
R. G. Allen,	64					1
John D. Godens.	"					2
W. Shew,	**					1
Hartwick Bornem	an, San	Fran	eisec			2
J Rock,	,	6.				2
A. Nahl,		66				1
N. Weston,		66				1
2 52.56.,					·	_
						63

O. C. Bundy, Virginia City. Mon., \$3 for medal.

We have received one of Rev. W. H. Mendenhall's Light Protectors, for retouching negatives at night, and hope to take an early opportunity to examine its merits. Mr. Mendenhall furnishes some excellent testimonials.

Editor's Inble.

PICTURES RECEIVED .- A finely executed collection of portraits in a new style called the "Spherical," from Mr. I. W. Taber, San Francisco; Cabinets, from Messrs. Hildreth, Young & Co., Union City, Pa., and Gentile, of Chicago; Cabinet and Cards, from Messrs. V. H. Young, Lincoln, Neb, and George N. Cobb, Binghamton, N. Y.; Cards, from Messrs. J. H. Morrow, Jacksonville, Fla.; A. W. Kimball, Augusta, Me.; H B. Hillyer, Austin, Texas; Louis de Planque, Corpus Christi, Texas; E. L. Willis, Milford, Mass.; besides a number of cards and stereos without name. A number of fine stereos from Mr. B Bradley, Bar Harbor, Me., being a series of views of Mount Desert scenery. From Mr. B W. Kilburn, Littleton, N. H., several 5 x 8 views of White Mountain scenery, which are real gems of photography. One general view of the mountains is the best distant view we have ever seen. It reminds us of the Alps in its clearness of atmosphere and the definition of its snow clad summit against the wintry sky. A number of stereos, also from Mr. Kilburn, give some wonderful frost, snow, and cloud effects, as they can only be seen in winter in that frigid region. Stereos of his gallery, exterior and interior, from Mr. V. H. Young, Lincoln, Neb.

WILLARD'S MONTHLY for March is well filled with matter interesting to all who desire to keep posted on the prices of materials they are using. We appreciate the following kind words in it in reference to our magazine, and call attention to the offer made therein;

"In answer to several questions on the subject, we will make an item of it. We do receive subscriptions for the Philadelphia Photographer, and as to our opinion of it, we consider it the leading photographic magazine published. That is rather unlimited, but not a bit stretched. Now, it is one thing to offer excellent literary effusions on practical matters for the edification and benefit of the fraternity; but when a photographic publication exhibits profound interest in the welfare of its readers, and its editor and publisher concern themselves with philanthropic zeal about the business of the craft and the condition of the art in the country they represent, striving by personal labor and even sacrifice as well as business enterprise, to almost voluntarily administrate for the prosperous growth of eachwe say, when this kind of thing is added to the usual standard excellencies of a photographic journal, let no competitor come alongside expecting equality in comparison.

"This is Centennial year, and the current volume of the Philadelphia Photographer will be an artistic and literary achievement worthy the important period. Any member of the 'stained finger frateenity' sending \$5, will receive the Photographer and the Monthly for one year, or for six months on receipt of \$2.50."

THE following kind words are so honest, and apparently truthful, and yet were accompanied by such really fine examples of portrait photography, that we feel they deserve a place here:

"DEAR SIR: Inclosed in a separate envelope you will find four cabinet photographs. I do not expect they will compare with the fine work you get from large places, but I just wish you to see what we are doing up here among the Granger. I have been a reader of your journal for eight years, and if there is any good in the pictures, I have got the knowledge from the works you publish. Yours truly.

"II. MCMICHAEL."

THE new stock house of Messrs. George & Satcamp, at 58 South Meridian Street, Indianapolis, is well worthy the attention of Western photographers, and we commend the above firm as gentlemen in every way reliable, and well worthy of a liberal patronage. Please read their advertisement.

Some of the finest life-size crayon heads it has recently been our good fortune to see have just been executed by Mr. Giovanni Bréssan, artist, 815 Arch Street, Philadelphia, where his beautiful work is on exhibition.

From Mr. I. W. Taber, San Francisco, we have received a new style of pictures, which he dubs the "Spherical." The size is the same in width as the cabinet, $4\frac{1}{4}$ inches, and the length, $4\frac{3}{4}$ inches; this is the size of the mount. The print is $3\frac{7}{4} \times 4\frac{4}{4}$. The portrait, which is usually a bust, is printed in a circular medallion, with plain or ornamental border. The print is enamelled, and raised in cameo. They are finely executed, as is all of Mr. Taber's work, and he says the new size with him "is a complete success." It is a novelty, and as such may have a run, but we cannot predict for it any such popu-

larity as has been gained by the Promenade. Mr. Taber has applied for a patent.

The Bonanza Plateholder is another invention by Mr. Taber and his partner, Mr. Boyd. This is said to be a very successful piece of apparatus, and is highly spoken of by those who have used it. We expect to be able to speak more definitely about this soon, as Mr. Taber has one on the way for our inspection.

Messrs. Taber & Boyd bave formed a partnership, and taken the Yosemite Art Gallery, where they will, no doubt, continue to produce the same excellent work that has given them so high a reputation. We wish them success.

We had a pleasant call, a few days ago, from Mr. Wm. H. Jackson, of Washington, photographer of the Geological Survey of the Territories, whose splendid work we have noticed on another page. Mr. Jackson is a gentleman of culture and refinement, and just such a one as we love to see devoting his talents to the advancement of photography. It is in the hands of such modest, unassuming men as he that our art makes its rapid strides, and we hear no noise about it.

ERRATA.—Mr. J. A. W. Pittman desires us to correct an error in his *Mosaics* article, which was published in the *Philadelphia Photographer* for January, page 6, line sixteen; instead of reading "I never sun," read "I never filter my bath, except just after boiling."

HINTS TO BEGINNERS .- Under this head a very interesting and useful series of articles, written by Mr. H. T. Wilt, of Franklin, Pa., has been published in this journal, the conclusion being in this issue, to which we call the attention of those who are learning, if they have not followed them from month to month, as well worth their reading. There are but few practical men, who are full of daily business, that will give their time to writing for the instruction of others; and we feel that we are all, both readers and publishers, under obligation to Mr. Wilt for this very acceptable service. He has our sincere thanks for his efforts to promote the interests of those who are taking their first steps in the art, and we trust he will not be silent long, but will give us another series on some other department of the work.

DEAR SIR: I had a providential escape from death last week, by poisoning with cyanide; it was by the most prompt and decided action that

I was saved. Cause of the accident: cleaning hands with cyanide; wound under finger-nail. I write this as a warning to others, who are in the habit of using the deadly poison.

J. G. BARROWS.

WABASH, IND.

A CAUTION which all will do well to heed.

New Stock House in St. Louis.—We are glad to hear that Mr. J. C. Somerville, formerly with W. H. Tilford, and Gatchell & Hyatt, has opened a new stock house at No. 8 South Fifth Street, St. Louis. Mr. Somerville's long experience in selecting and dealing in photographic goods enables him to keep only the best stock, and photographers may have every confidence in him as a worthy and reliable gentleman. His goods are fresh, and all who give him their orders may rest assured of their being filled with promptness and fidelity.

CENTENNIAL VIEWS .- By arrangement with the Centennial Photographic Company, we are enabled to supply, in any quantity, views of the splendid Exhibition Buildings of all sizes, from stereographs to 24 x 20. The buildings being now nearly completed, the pictures made are very interesting and pretty. The size of the stereos is "artistic." They are mounted more handsomely than any goods we ever saw, and are in every way first class. They are sold at \$3 per dozen They will be found to sell in every gallery in America, and you should begin to push them now. Each week, nay, each day, the variety increases, and soon pictures of the gems on exhibition will be ready. We will mail a selected dozen to any address on receipt of \$3. Dealers supplied on good terms by the gross. If you want to make money, go into it. Catalogues free.

A GOOD CHANCE FOR PHOTOGRAPHIC PUBLISHERS.—The Centennial Photographic Company desire us to say that they want every photographer, who wishes it, afforded a chance to sell his best goods within the Exhibition grounds. They therefore solicit consignments of such goods. Those desiring to arrange for such a capital chance, should address the Centennial Photographic Company at their studio, Belmont Avenue, International Exhibition, Philadelphia.

DURING the coming month some of our friends will be waited upon by Mr. Theo. N. Gates, who is our only authorized travelling agent. We bespeak kindly treatment for him, and hope he may be useful to many.

Specialties.

ADVERTISING RATES FOR SPECIALTIES.—It will be understood that matter under this head is not to be considered as always having editorial sanction, though we shall endeavor to clear it of anything tending to deceive or mislead. Stock-dealers will find this a beneficial mode of advertising, and sure to pay largely. Six lines, one insertion, \$2.00, and 25 cents for each additional line, seven words to a line—in advance. Operators desiring situations, no charge. Matter must be received by the 23d to secure insertion. Advertisers will please not ask us for recommendations. The We cannot undertake to mail answers to parties who advertise. Please always add your address to the advertisement.

J. C. BOOREAM & Co., Solar and Contact Printers for the Trade, 747 Broadway, New York. Send for price list. W. Terry, Solar Printer. Promptness a specialty.

FOR SALE, CHEAP. — Photographic goods, frames, etc., of every description. Prompt shipments. Best goods. Lowest prices.

LONG & SMITH, Quincy, Ills.

WAYMOUTH'S VICNETTE PAPERS.

PHOTOGRAPHERS that are not satisfied with the quality of their work, can now secure an operator of many years' practical experience in lighting, posing, and chemical work, to instruct them in the same at their own galleries, on very reasonable terms, by addressing the undersigned in care of Mr. Ryder; in whose gallery I have been operating for the past two years.

O. W. Hodges, 239 Superior St., Cleveland, Ohio.

Mr. O. W. Hodges has been operator in my establishment for the past two years. To anybody desiring him as a teacher, I can say he is well skilled in lighting, posing, and management of chemicals, and I believe him competent to teach many who call and consider themselves first-class operators. Respectfully,

J. F. RYDER.

S

Ш

-

4

ш

I

HERMACIS LENS TESTIMONIAL.

Philadelphia, March 21, 1876.

Messrs. BENERMAN & WILSON.

I take pleasure in testifying to the perfect working of the "Hermagis" just purchased from you. We have tested it particularly as to its depth of focus, and find it to combine with this a rapidity of working which makes it doubly esteemed. Very respectfully,

WM. CURTIS TAYLOR, 914 Chestnut Street.

For Sale.—A room in Boston, Mass. Good situation for business; long lease; is well stocked; reasonable rent. Has been established five years. Will sell cheap.

J. L. McCormick, 23-Temple Place.

For Sale.—A patent-right of Conant's patent oil photo. of Boone Co., Iowa, on long time for twenty-five cents. Address

J. PAUL MARTIN, Boone, Boone Co., Iowa.

Wanted.—A first-class operator, one that can retouch, also. Will pay good wages to the right man. Address, with samples of work, to

JOHN F. PETERSON, Des Moines, Iowa.

SEAVEY'S LATEST ACCESSORY

ANTIQUE FIRE-PLACE and CHIMNEY FRONT.

Very Elaborate.

New designs in Backgrounds and Accessories will appear at the Centennial.

Popular Backgrounds and Accessories.

PROFILED COLUMN SLIPS
PROFILED REVERSIBLE SET
GROUND PIECE.

BUSEY CABINET, Background or Profiled Slip.

LANDY'S WAINSCOTING,
Papier Mache, elaborate design.

Also, the KURTZ BALUS-TRADE, the most artistic and popular accessory yet produced.

N.B.—All Promenade Backgrounds & Accessories are equally suitable for other purposes.

CAUTION.—My new designs are being copyrighted. Inclose stamp for samples. Address

LAFAYETTE W. SEAVEY, 8 Lafayette Place, New York.

FIRST-CLASS PHOTOGRAPHER'S TENTS.—Very important reduction in the prices. On account of the large demand for tents during this year of Centennial celebrations, we have made special arrangements to furnish them at prices to suit the times and still maintain their national reputation for superiority. Send for supplement list to RICHARD WALZL, Baltimore, Md.,

Importer, Manufacturer and Headquarters for the Photographic Trade of the U.S.

USE WAYMOUTH'S VIGNETTE PAPERS.



FOR SALE .- \$2500 cash will buy one of the finest and best galleries in the city of Chicago. Everything is in first-class style and in A No. 1 order. All the lens are first-class (Dallmeyer, three A and two B patent; Voigtlander, Steinheil, etc.); the camera boxes are American Optical Co.'s, and other first-class makes, from card size to mammoth; plate glass baths; fine furniture and carpets; fine walnut counter and frame show case; silver-mounted show cases on counter; in fact a strictly first-class gallery. Location, one block south of Palmer House, and the nearest gallery to the Matteson House, Gardner House, Grand Pacific Hotel, Palmer House, and the new Post-office. The building is a fine one (see cut); long lease, low rent. Must be sold soon. Will give time on one-third the amount, if needed: or will sell one-half interest to a party competent to take charge of and manage it.

Address Mrs. J. H. Nason, 224 & 226 State Street, Chicago.

Wanted.—A first-class solar printer, one who thoroughly understands the business.

Apply to J. C. BOOREAM & Co., 747 Broadway, New York City.

For Sale—Or trade for an extra 4-4 tube, one 4-4 Darlot, quick worker; four 1-4 gem Darlot's; nine 1-9 gem Darlot's, all in first-class order, and only sold for want of use. Address

E. B. CORE, Lincoln, Ills.

Photographic Hall.—The four sizes of electrotypes of Photographic Hall, advertised last month, are as follows: $1\frac{1}{4} \times 2$ in., $2 \times 3\frac{1}{4}$ in., 4×6 in., $4\frac{1}{2} \times 7\frac{1}{4}$ iu. For sale by

CROSSCUP & WEST, 702 Chestnut Street, Philadelphia.

PIANOS AND ORGANS.—Photographers wishing to buy a Beatty Piano or Organ, can get extra inducements through photographing. Address DANIEL F. BEATTY, Manufacturer,

Washington, N. J.

THE GORHAM STOVE.—No photographer can get more for his dollar than by investing in a "Gorham Stove." It is tiny in size but a giant in usefulness. See advertisement.

Wilson, Hood & Co., 822 Arch Street, Philadelphia.

LUCKHARDT'S ELEGANT STUDIES.—We have just received an invoice of splendid studies of the female figure, by Fritz Luckhardt, Vienna. The size, 8 x 10; the price, \$3.50. Order quick!

Wilson, Hoop & Co., 822 Arch Street, Philadelphia.

THE ROBINSON TRIMMER.

RICHMOND, IND., August 11, 1875. Mr. Edw. L. Wilson.

DEAR SIR: I feel as though I should say a few words in praise of the Robinson Trimmer and Guides I received from you. The trimmer does its work admirably, do not know how I should do without it; and the round-cornered guides, for cards, is something new, and makes the picture look much neater when compared with the old square cut kind, from a glass pattern.

The guides, all sizes, are the nearest perfect of any I ever used. But what I wish to request of you in particular is, to publish in your Journal the right way for sharpening the trimmer, I am certain this will be looked for by a great many with interest. I have used mine now constantly for some time, and it does not need it yet; but, in case it does, would not like to spoil it with any experimenting. Yours respectfully,

M. WOLFE.

Mr. Charles Waldack, who is known to many of our readers, writes in the Photographic Times as follows: As Robinson's trimmer is getting to be used universally, I think I will do a good turn to photographers in telling them how to sharpen the little wheel when it gets dulled by use. I owe it to a photographic friend here, and although some may know it, I am sure many do not. Make a groove in a piece of lead by means of the trimmer, put in it a little fine emery and a drop of oil, and run the trimmer forward and back in the groove until it is sufficiently sharp. There is something else about the trimmer; ascertain by trial which side of the wheel should be on the inside of the zinc or iron matt to cut hest, and mark it."

A MAN with plenty of vim, shove, and energy, can find as splendid an opportunity for business, in one of our largest cities in the South-west, as was ever offered. A "new broom" can sweep in the best trade of the city, by making superior work. Will sell the whole or a part interest.

Address W. B. I.,

Care "Philadelphia Photographer."

USE WAYMOUTH'S VIGNETTE PAPERS.



PHOTOGRAPHIC HALL .- Electrotypes of Photographic Hall, four sizes, from the above up to the size in February number of this magazine. For prices apply to CROSSCUP & WEST.

Seventh and Chestnut Sts. Or, BENERMAN & WILSON, Philadelphia.

WANTED IMMEDIATELY .- A second-hand portable gallery. Address, giving size, condition, J. N. Roof, Photographer, terms, etc.

Newton, Sussex Co., N. J.

M. B. ATKINSON, Photographic Artist. Photographs on plain or albumen paper finished in India ink, water colors, or crayon; life size and copies; also, porcelain miniatures. Originals sent can be copied at a fair price and promptly attended to. 215 Spruce Street, Philadelphia.

BUTTER AND EGGS.

Mansfield, Pa., December 31, 1875.

MR. JNO. R. CLEMONS,

Manufacturer of Albumen and Plain Paper, 915 Sansom Street, Philadelphia.

I am delighted with your "new" albumen paper. I have printed and toned it after it had been silvered over two weeks repeatedly, and in damp weather, kept in a room without fire to keep the air dry, yet it printed quickly and toned easily, and I was unable to select the finished prints from those on fresh paper.

You can "sail in 'Centennially'" and diurnally on your new papers, both plain and egged, and win. If any of your customers find any fault with them, and you want to give them a "blessing" by proxy, refer them to me.

Very truly yours,

F. M. SPENCER.

SITUATIONS WANTED.

No charge for advertisements under this head: limited to four lines. Inserted once only, unless by request.)

In some first-class gallery, as retoucher, by a young lady. Baltimore preferred. Address Lock Box 187, Urbana, Ohio.

By a fine retoucher and crayon artist, is also a careful printer and toner. Moderate wages in a good gallery. Refer to present employer. Address Y. E. Nordstrom, Artist, Folsom's Gallery, Danbury, Conn.

By a young lady, as printer and toner. crims, references, etc., address Miss Kitty Mc-Carthy, care L. C. Mundy, No. 11 Broad Street, Utica, N. Y.

In first-class gallery, as crayon worker, printer, or retoucher of negatives. Salary, \$20 per week. Address A. Lorenzo W., care P. Smith & Co., 121 West Fifth Street, Cincinnati, Ohio.

By a photographer of twenty years' experience, in some good gallery. Permanent situation more than salary. Address W. W. H., 354 West 46th Street, N. Y., care Mrs. A. G. Robinson.

By a first-class operator and retoucher; have by a first-class operator and retoucher; have had five years' experience. Would take entire charge of a gallery, or purchase a small gallery in some live town, where they would appreciate good work. Can give good reference. J. C. Hunter, Baltimore, Md.

As operator (will retouch some if necessary). from May 1st. Good work guaranteed. Posi-tion desired in none but a first-class gallery. Address Kendall, 217 Clinton St., Buffalo, N.Y.

By a youth, a short time at the business, a situation in some first-class gallery where he can improve. Address Photo., Drawer 36, Hamilton,

By a lady, in a first-class gallery, to work in crayon and pastel; is proficient in oil and albu-men coloring, India ink passably, plain coloring a little. Understands retouching well. Address Artist, Box 254, Meadville, Penna.

In an established gallery, in a city of not over 15,000 inhabitants, by a first-class (single) skylight and dark-room operator, retoucher, printer, and toner. A permanent situation with a gentleman (even at a moderate salary) preferred. Address, with photo. of self, for terms, etc., R. Morgeneier, Sheboygan, Wis.

One of the oldest, practical photographers in the United States would like to make arrangements with some good house for a permanent situation. The best of references given. Address S. P. Van Loan, Bogardus' Gallery, 363 Broadway, New York.

As retoucher and assistant operator, or printer. Address A. C. Gicker, 1658 Vienna St., Philadelphia, Pa.

By a young lady of experience, as retoucher of negatives or prints; can also finish in ink. Address Louise A. Palmer, P.O. Box 227, Springfield, Mass.

By a first-class crayon and negative artist: will do crayon work at half the usual pay to keep in practice. Address Artist, 240 North Eighth Street, Philadelphia.

As printer or operator, have had eight years' experience. Can furnish references from several leading galleries. Address J. A. H., 47 Summit St., care W. E. McKecknic, Toledo, Ohio.

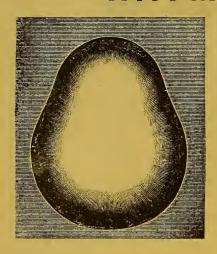
By a young man of good habits, as assistant printer, or general assistant in a first-class gallery. Address A. F. H., Box 242, Skaneateles, Onondagua Co., N. Y.

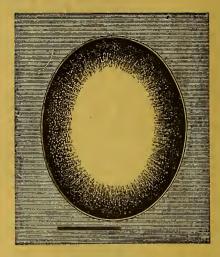
By a young man, as printer, toner, and land-scape photographer. Will work in a gallery or with traveling photographer. Object, to learn.
Address Ernest I. Little, Oskaloosa, Iowa.

By a young man in a gallery as general assistant. Can make a sharp, clean negative, print, tone and do out-door viewing. Address O. G. Forrer, Metamora, Ind.

USE WAYMOUTH'S VIGNETTE PAPERS.

WAYMOUTH'S





VIGNETTING PAPERS

ARE NOW MADE OF TWO SHAPES, as shown in the drawings above. They consist of finely gradated, lithographed designs, mounted on protecting sheets of non-actinic paper, and are the lightest, neatest, and best means of producing vignette pictures ever offered.

RECENTLY IMPROVED.

The quality of the "papers" has just been much improved by the substitution of a peculiar French, fibrous, hard calendered paper, which is not only less opaque but has other qualities which produce quickly the most lovely and soft vignettes possible. We consider this a great improvement, as do others to whom we have sent samples. Below we give a letter from one of them, Mr. Ormsby, who has sent us also some exquisite vignettes:

The package of Vignette Papers has been received and tried; they are just the thing. They are a great improvement over the others; they will print in a little more than half the time required for the others, and the results are everything that can be desired, as you can see by samples inclosed. Please fill my order and send bill. I like the pear-shape best. Send them all that shape.

E. D. ORMSBY. Chicago.

FROM PROFESSIONAL AND AMATEUR PHOTOGRAPHERS.

"First-class."—"The sample sent answers perfectly."—"I consider them first-rate articles."—
"They answer the purpose admirably."—"They are the best vignettes I have ever had, and as you can print in full sunlight, they are a great saving of time."—"They could not be better, oblige me with another packet."—"I find them excellent, giving much softer pictures than the old way."—"I have tried one of the Vignette Papers, and like it much; send me packets two and three."—"I am much pleased with them, and shall thank you to send me another packet."—"I did not need any copies of testimonials, having well-known by experience that your Vignette Papers were superior to anything I have ever used."—"I found those you sent before excellent."—"Vignetting Papers received and tested; can't be beat. I use by cutting an opening in a piece of cardboard and tacking to the printing-frame, when I am ready for printing vignettes in the very best manner."—"Waymouth's Vignette Papers I have tried, and they are just what I have been wanting for years."

Any number sent on receipt of price, by any stockdealer, or by

BENERMAN & WILSON, Manufacturers,

(See opposite pagé.)

PHILADELPHIA.

DO YOU USE

WAYMOUTH'S VIGNETTE PAPERS.

(DESIGNS COPYRIGHTED.)

of all pictures, the **Dinnette** is the most artistic.

When properly printed. But the clumsy devices generally in use for printing them, or rather for blending the shading about the figure, produce but very few really artistic vignette pictures. Either the shading is too intensely dark, not gradated in tint at all, or it shows an ugly direct, decided line, which is very repulsive. The shading should blend gradually from the dark tint nearest to the figure, off into the white background. The results are then soft, artistic, and beautiful. The easiest and best way to secure them is by the use of

WAYMOUTH'S VICNETTE PAPERS.

THEY ARE NOT CLUMSY; DO NOT BREAK; ARE ALWAYS READY; COST BUT LITTLE, AND ARE EASY OF APPLICATION TO ANY NEGATIVE.

THEY NEED BUT ONE ADJUSTMENT TO PRINT ANY QUANTITY.

They entirely do away with all the old and troublesome methods, either wood, metal, or cotton.

Eighteen sizes are now made, suiting all dimensions of pictures from a small carte figure to Whole-size, Victorias, Cabinets, &c. They are printed in black for ordinary negatives, yellow bronze for thin negatives, and red bronze for still weaker ones. Directions for use accompany each parcel.

PRICES:

In parc	els containing o	ne of	each size.	Nos. 1	1 to 15, assorted colors	\$1 00
Assorte	ed sizes and color	s. by	number, r	er pa	ackage of fifteen	1 00
Nos. 1,	2, 3, 4, and 5, ass	orted	sizes and	colors	rs, for Cartes, by number, per dozen	50
" 6,	7, 11, 12, and 13	**	46	44	Large Cartes and Victorias, by number, per doz	75
" 8,	9, 10, 14, and 15	"	44	66	Cabinets and Whole-size, " "	1 00
66 10	17 000 10	66	44	64	Hale " " " "	1.05

(SEE OPPOSITE PAGE.)

When ordering, state the number and color you want.

BENERMAN & WILSON, Manufacturers, 7th and Cherry, Philada.

FOR SALE BY ALL DEALERS.

G. GENNERT,

53 Maiden Lane, New York,

IMPORTER OF THE CELEBRATED

S. & M. DRESDEN ALBUMEN PAPERS

Rives and Steinbach-White, Pink, and Blue.

Every one says it WORKS THE MOST UNIFORM, ECONOMICAL, and GIVES FINER RESULTS than any other. To satisfy yourself that it is the best, send to your stock-dealer for a sample dozen. Kept by all stock-dealers in the United States.

ALSO,

Hyposulphite of Soda, Sulphate of Iron,

Solid German Class Baths,
Saxe Evaporating Dishes,

AND French Filter Paper.

SPECIAL ATTENTION IS CALLED TO THE

EXTRA BRILLIANT, OR DOUBLE GLOSSY PAPER,

Which is recognized by the best artists all over the world as the

FINEST ALBUMEN PAPER IN THIS COUNTRY OR EUROPE.

HEARN'S PHOTOGRAPHIC PRINTING INSTITUTE,

FOR PRINTING FOR THE TRADE, AND FOR INSTRUCTION IN THE ART OF PHOTOGRAPHIC PRINTING.

The undersigned, author of the "Practical Printer," and for the past year printer for the Philadelphia Photographer, desires to say that he has leased the spacious and well-arranged printing-rooms of Messrs. Benerman & Wilson, for the purpose of giving photographers an opportunity of obtaining

INSTRUCTIONS IN ALL THE DETAILS OF PERFECT PRINTING, AND FOR PRINTING FOR THE TRADE.

He respectfully refers to his work, many thousand examples of which are before the readers of the above-mentioned magazine, as a guarantee of his entire ability to attend to both branches well.

Having had the opportunity, during the past year, to see the many pictures from all parts which came to the office of the editor of the *Philadelphia Photographer*, he is surprised to see how many photographers there are, who make perfect negatives, and seem totally ignorant of what good work can be obtained from them, judging from their own prints.

IF YOU WOULD INCREASE YOUR TRADE, SEND YOUR NEGATIVES TO THE INSTITUTE TO BE PRINTED.

IF YOU WISH TO PERFECT YOURSELF IN PHOTOGRAPHIC PRINTING, COME TO THE INSTITUTE AND BE INSTRUCTED.

ALL STYLES AND CLASSES OF PRINTING DONE, BOTH IN PORTRAITURE AND VIEWS.

The Plain, Vignette, Medallion, Plate, or Gray Printing, etc., will meet with careful and prompt attention.

Plain Paper Printing and printing of all kinds on Porcelain, a specialty.

Retouching Negatives will be a department of itself, and none but first-class artists will be engaged upon this very artistic branch of photography.

Glace work, of all sizes and styles, done expeditiously and in a superior manner.

The attention of Landscape Photographers is especially called to the many advantages derived from sending their negatives to the Institute to be printed. To those who make a specialty of this class of work, it has often become a source of worriment that the negatives which are taken with so much care and trouble yield such miserable results in the printing, owing to the lack of feeling on the part of their assistants. So often has such been the case that they have been obliged to attend to the printing of their own negatives, and lose beautiful viewing days, so as to produce finished work, which will readily find its way to the critical taste of an appreciative public. To all such we especially invite your attention to our work, for such persons can send their negatives here to be printed, and have it done in a superior manner. Please give us a trial order, and we have no fear but that in the future you will find it to your advantage to have all of your printing done at the Institute.

Instruction will be given in all styles of Printing, Toning, etc., at reasonable rates, with the understanding that the parties must furnish all their own chemicals, dishes, frames, etc., used in their experiments, and we will accommodate them with excellent printing, washing, toning, and other space. Send for Circulars.

Having a skylight of our own we shall also do copying for the trade, so send your copy originals to the Institute and have both negatives and prints made.

Special terms upon application.

Prepare for the "Centennial" by having your arrangements perfected for having firstclass prints produced from your negatives, at reasonable prices.

Hearn's Photographic Printing Institute,

A NEW ENTERPRISE IN PHOTOGRAPHIC PRINTING.

Below we insert a few letters, out of many that we have received since the first opening of the Institute, of which your perusal is respectfully solicited.

"I have received to-day the two cabinet pictures you sent me for inspection, and I can fairly say that I fully approve of your style of printing and toning—both are excellent in the extreme. I may just as well say that if I had not my own printing establishment where my exhibition pictures have been printed some time ago, I would have availed myself of your offer gladly. I wish you best success in your enterprise."—H. ROCHER, Chicago, Ill.

"Your communication of February 24th is at hand, and the samples therein inclosed are very fine. I commend the enterprise, and highly recommend such an institute as you represent. A place for instruction is an absolute necessity, and I have no doubt that it will be a blessing to the fraternity. I wish for you abundant success."—G. Frank E. Pearsall, Brooklyn, N. Y.

"The samples of printing you have forwarded me could not be excelled, and are hard to equal. They are very beautiful."—W. J. BAKER, Buffalo, N. Y.

"Your letter was received yesterday, and samples to-day. The prints you send are exquisite. They are clean and brilliant, yet very soft and velvety, notwithstanding the negatives are only ordinarily good. I cannot produce such prints, and I doubt if there is a gallery in America that does. I wish you success in your new enterprise."—Frank Jewell, Scranton, Pa.

"Your idea of giving practical instructions in printing is an excellent one, and should be encouraged. I know of no one better fitted for the position than yourself, as evidenced by your own work and *The Practical Printer*. You have my hearty wishes for the success of your undertaking."—Alva Pearsall, Brooklyn, N. Y.

"The three specimens on my desk now, from you, received this a.M. Truly, they are as fine samples of printing as I ever saw. The chemical harmony of the printing bath, with that of the gold, is apparent. You have got at the bottom of the 'secret.' Success to your new enterprise. I hope you will be gratified with your labors by seeing the much-neglected part of our profession (photo. printing) elevated from its too common degredation to that of, at least, a very great improvement in many of us."—FERRIS C. LOCKWOOD, Freehold, New Jorsey New Jersey.

TO WHOM IT MAY CONCERN.

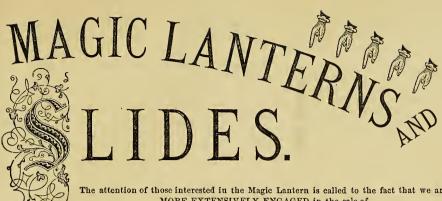
I most cheerfully give my unqualified commendation, both as to personal character and first-class professional abilities, of my former printer and toner, Mr. Charles W. Hearn, who was in my employ for about three years in that capacity. He is one of the very few who seemed really to love and enthusiastically devote his entire time to that interesting but somewhat neglected branch of our art. He often declared to me that he thought printing and toning the most interesting department of photography, and expressed his determination to make a specialty of it, which he has done with an energy and heartiness in his work and study that has won for him most deserved success, so that he is, though still quite a young man, one of the very first photographic printers of this or any other country. That the most abundant means may attend him in his new enterprise, is the earnest wish of his old employer,

J. H. Lamson, Portland, Me.

A trial order is respectfully solicited. Address

HEARN'S PHOTOGRAPHIC PRINTING INSTITUTE.

124 North Seventh St., Philadelphia.



The attention of those interested in the Magic Lantern is called to the fact that we are MORE EXTENSIVELY ENGAGED in the sale of

LANTERN SLIDES AS A SPECIALTY,

Than any other house in America. Our continuous contact with photographic men gives us special advantages in this line, and as MANUFACTURERS AND DEALERS we offer the very best opportunities to secure

MUCH FOR YOUR MONEY,

AS WELL AS SUCH GOODS AS WILL PUT MONEY IN YOUR PURSE, NAMELY:

A GOOD LANTERN. THE BEST of SLIDES.

FOUR CATALOGUES MAILED ON RECEIPT OF 25 CTS.

DO NOT BUY UNTIL YOU HAVE CONSULTED HEAD-QUARTERS! SUPPLEMENTARY CATALOGUE (March 1) READY!

USE WILSON'S

cture Book describing graphically, as an eyewitness, 600 beautiful places and things in all parts of the world.

SUBSCRIBE FOR THE



Monthly Journal, devoted to the interests of lantern lovers.

\$1 per year, post-paid.

Special estimates and other information given gladly. No substituting of Slides. Prices very low. PROMPTNESS OUR RULE.

> BENERMAN & WILSON, Photo. Publishers, SEVENTH & CHERRY STS., PHILADELPHIA.

WHAT follows is a Catalogue of the best Photographic Publications, sent to remind all live photographers of the fact that good practical information is as essential to them as good lenses and pure chemicals. There are some "artists" who "get along" without any of these, but they do not progress, neither do they succeed. Do not be of their number. There is too much going on in photography in these "quick acting" times to enable any photographer to afford to do without reading and being posted. In anything you undertake you should take every precaution to be as bright as your neighbor, or he will get ahead. Keep alongside, any way. We will mall you any of the works named below, post-paid, on receipt of price. Order now.

1876

WILL BE A YEAR OF JUBILEE FOR PHOTOGRAPHERS THAT SHOULD NOT BE NEGLECTED.

THE CENTENNIAL EXHIBITION

Will present opportunities for study and improvement which should not be overlooked, and the study of the best books will not only do you good before, but after the inspection of Photographic Hall. READ! READ!! READ!!!

BENERMAN & WILSON.

Photographic Publishers.

Philadelphia, Pa

hiladelphia Photographer.

THE BEST PHOTOGRAPHIC MAGAZINE IN THE WORLD

EACH NUMBER EMBELLISHED BY PHOTOGRAPHY.

THE

THE THIRTEENTH YOLUME of our Magazine promises to be the most popular and brilliant of any that has preceded it. We have many good things in store for it. It shall be our endeavor to make it all the richer and more interesting on account of the Centennial. We expect to embellish it with some of the choicest gems the Exhibition can produce and add interest to its pages from month to month, by giving a sort of compendium of all that relates to Art or Photography. Among other attractions, we expect to have our old friend Dr. Yoselhere during six months of next year, at least, and our readers may expect some of the fruits of his genius and talents to add to its interest and usefulness.

But while we intend to provide all these home attractions, we do not propose to neglect whatever may transpire abroad, but shall present as usual correspondence from such well-known writers as Prof. Strebnic, Mr. W. J. Stillman, Mr. Chas. Waldack, and others. With all these good things in prospect for the year 1876, we hope to render our magazine more beautiful and more useful than ever before; and while we maintain that the beautiful example of photography, which accompanies each issue, is alone worth the subscription price, still more and more effort will be made to make the reading matter everything that it ought to be. Our correspondents from all the leading centres abroad will keep our readers posted on all matters of interest in their several sections, while our unrivalled staff at home will look diligently after your interests here. To make THE PHILADELPHIA PHOTOGRAPHER the best PRACTICAL HELEPR which can possibly be obtained, is the aim and earnest desire of its publishers.

We ask your co-operation in extending its usefulness, and offer to all present subscribers, who secure us new ones, the following

PREMIUMS.

For every new subscriber, for one year, \$1.00, payable in any of our publications, books, or, if preferred, one dollar's worth of any of our prize pictures, or any other article for which we are agents, advertised in this Magazine.

The subscription price of the Philadelphia Photographer is \$5 a year, \$2.50 for six months, 50 cents per month.

Each number, remember, contains a handsome photograph.

Photographic Mosaics.

THE Centennial anniversary year of American Independ-ence finds our little Annual in its eleventh year. It is developing rapidly for its age and size, and this year takes quite an interest in the Centennial. It is full and running over with fresh contributions from the most wide-awake members of the fraternity in all parts of the country. We here give a list of the

bers of the fraternity in all parts of the country. We bere give a list of the CONTENTS.—Review; Eighteen Hundred and Seventy-six; Discoveries, Inventions, and Improvements; Work in the Studio; The Dark Room; The Printing Department; Landscape Photography; Dry-plate Work; Apparatus; Art Advances; The National Photographic Association; Our Publications; Our Prize Offer; Items of Interest; Obituary; The Art Progress; Fog; Conne, Let us Reason Together; Experience; Provoking; A Suggestion Anent the Great Exhibition; Centennial Album of Photographic Studies; The Eliminating of Hyposulphite from Prints; A Treatise on Photography; Why not make Solars instead of Conlact, etc.; Systematic Preservation of Regatives, Want of Enterprise; Lighting the Sitter; Theory and Practice; Be Functual; Formulæ for Photographs and Prerrotypes, which give Lights and Half-tones not surpassed; Exposure and Development of a Negative; A Cause for Faded Prints; How I Sunned a Bath under Difficulties; A Good Collodion; A Word to the Weak; How to Clean New and Old Glass Plates; Long's Bath Warmer; Albumen, its Preparation and Use in Photography; An Item of Real Value; The Negative Bath; How to Lubricate Prints for Burnishing; Then and Now; A Pair of Suggestions; How to Obtain Boiling Water in Winter; An Excellent Ware for Photographic Purposes; Hints on Composition; The Causes and Cure for some of the Difficulties pertaining to Photography; At and Mechanism; Breakfast for Dinner; Field Work; Marble Negatives—Stalns from the Hands, etc.; Pyroxylim—Gun-Cottor; The Old Bath; The Upper Floor; Dry-Plates; The Art Privileges of our Great Centennial; Curtains as a Meanos of Adjusting Light; An Exposing Shutter; How to Touch out Pinboles; Photography; At Cheap and Good Plateholder; The Way it is Done; To Correspondents; The Construction of Skylights; Blisters; At the Desk; Ou Photographic Lenses—How Way it is Done; To Correspondents; The Construction of Skylights; Blisters; At the Desk; Ou Photographic Lenses—How to Choose and Take Care of Them; The

Price, bound in Cloth, \$1. Paper Cover, 50 Cts. 144 pages.

OUR BOOKS.

THE PRACTICAL PRINTER. By Chas. W. Hearn.

This very useful book is indispensable in the printing department. No one who wishes to be up with the times in printing, can afford to be without it. Its rapid sale and the favor with which it has been received, are the best recommendations we can give. Price, \$2.50.

BIGELOW'S ALBUM OF LIGHTING AND POSING.

This excellent work still maintains its popularity. It contains 24 beautiful photographs from life in different lights and positions, with an explanatory key, which makes it the most practical helper the Photographer can have. Price, \$6.00.

DR. VOGEL'S HANDBOOK OF PHOTOGRAPHY. Second Edition.

This is a really standard work, and the most complete hand-book ever published. The new edition has been thoroughly revised, and much additional matter introduced, together with new illustrations, new photographs, and a new arrangement all through. Now is the time to study up, and this book is ap-plicable to any department. Price, \$3.50.

DR. VOGEL'S PHOTOGRAPHERS' POCKET REFERENCE-BOOK.

This is in every sense a reference book. It is alphabetically arranged, and any process or formulæ in photography may be found at a moment's notice. All is arranged in a concise and practical form. It is particularly useful in the chemical department. Price, \$1.50.

. THE FERROTYPERS' GUIDE.

This little work is by a practical ferrotyper, and gives just the instruction necessary to those who wish to do good work in this branch of our Art. Price, 75 cents.

LINN'S LANDSCAPE PHOTOGRAPHY

Is an excellent companion in the field, and may help you over many difficulties; can be carried in the pocket. Price, 75 cts.

GLIMPSES AT PHOTOGRAPHY. By Prof. Himes.

This work treats of some of the peculiar styles of printing, such as leaf-printing, etc., etc. Price, \$1.23.

WILSON'S LANTERN JOURNEYS.

To those who use the lantern this book is indispensable. It contains just the information required about six hundred different views, and enables any exhibitor to make his entertainments enjoyable and instructive. Price, \$2.00.

BURNET'S HINTS ON COMPOSITION.

We have reproduced this work by photo-lithography, and sell it at the low price named, white a copy of the original work could not be bought for five times that amount. It is fully illustrated, and supplies in a very attractive form, the art knowledge, in reference to composition, that so many photographers are seeking after. Price, \$3.50.

A. M. COLLINS, SON & CO.,

MANUFACTURERS OF

PHOTOGRAPHIC

CARDS AND CARD BOARDS,

OF EVERY DESCRIPTION.

Warehouse:

18 S. Sixth St., and 9 Decatur St.,

PROMENADE PHOTOGRAPH CARDS.

SIZE 4½ x 7½. SQUARE CORNERS.

White, Light Buff, Amber, Pink, and Black—Plain.

White, Light Buff, Amber, Pink, and Black, with Gilt Borders.

Light Buff and Amber, with Red Borders.

Thin White, Rose Tint, and Black, with Gilt Beveled Edges.

Light Buff and Amber, with Red Beveled Edges.

Thick Gilt, Beveled Edge Glacé, Black and Rose Tint "J."

Glacé Card Boxes, for the Thick Beveled Edge.

Cards 7 x 10, with Gilt Borders, opening 4½ x 7½.

Cards 7 x 10, with India Tint and Gilt Borders, opening 4½ x 7½.

See detailed advertisement in this number of the "Photographic Times."

PRICE LISTS FURNISHED ON APPLICATION.

TRAPP & MUNCH'S

Ibumen

Introduced into this country since 1868 has become the leading paper, and is now better known and more appreciated than any other brand.

That this great success is well deserved and due to its excellent qualities

may be judged from the fact, that of all the competitors of the Vienna Exhibition, Messrs. Trapp & Munch alone received the

MEDAL OF MERIT

for Albumenized Paper. For Sale at all the Stockhouses.

WILLY WALLACH.

GENERAL AGENT FOR THE UNITED STATES.

No. 4 Beekman St., and 36 Park Row, New York SPECIAL ACENTS:

Scovill Manufg. Co., New York. E. & H. T. Anthony, """ G. GENNERT, New York.

WILSON, HOOD & Co., Philadelphia. H. W. BRADLEY, San Francisco. G. S. BRYANT & Co., Boston.

DR. VOGEL'S PHOTOCRAPHER'S

POCKET

REFERENCE BOOK.

An Alphabetically arranged collection of practically important hints on the construction of the Gallery; selection and trial of lenses and chemicals; approved formulæ for the different photographic processes; tables of weights and measures; rules for avoiding failure, etc.

IT IS A BOOK EVERY PHOTOGRAPHER SHOULD HAVE.

Because it is a ready helper under all difficult circumstances.

For sale by all dealers. Price, \$1.50, post-paid.

BENERMAN & WILSON, Photo. Publishers, PHPLADELPHIA, PA.

Over 1000 Sold.

A COMPLETE MANUAL OF

PHOTOGRAPHIC PRINTING

ON PLAIN AND ALBUMEN PAPER, AND ON PORCELAIN.

Too little attention has heretofore been given to Photo-

graphic Printing, which is indeed quite as important a branch of the art as negative making.

It is the hope of both author and publishers to create REFORM in this matter, by the issue of this work, and as it is to put money in the pockets of all who read it, the hope is that it will be generally read.

CONTENTS.

INTRODUCTION.

The Printing Room, with a Plan. The Silvering and Toning Room, with a Plan. The Drying Room, with a Plan.

PART I .-- ALBUMEN PAPER PRINTING.

The Positive Bath for Albumen Paper. Silvering the Albumen Paper. Drying the Paper. Fuming the Paper. Preservation of Sensitive Albumenized Paper—Washed Sensitive Paper. Cutting the Paper. The Printing Boards. Keeping Tally. Vignette Printing Blocks. Treatment of the Negatives before Printing. Filling of the Boards. Fitting Vignette Boards to the Negatives for Printing. Medallion and Archtop Printing. Fancy Printing. Vignette Cameo and Medallion Vignette Cameo Printing. Printing the Bendann Backgrounds. Printing Intense Negatives. Printing Weak Negatives. A Few More Remarks about Printing—Treatment of Broken Negatives. Cutting the Prints. Washing the Prints. Acidifying the Prints. Toning Baths. Artistic Toning. Fixing Baths and Fixing Prints. Washing the Prints. Mounting the Prints. Finishing the Prints. The Positive Bath for Albumen Paper. the Prints. Finishing the Prints.

PART II .- PLAIN PAPER PRINTING.

Salting the Paper. Positive Baths for Plain Salted Paper. Silvering Plain Salted Paper. Drying, Fuming, and Cutting the Paper. Treat-ment of the Negatives before Printing. Printment of the Negatives before Printing. ing-in False Backgrounds. General Plain Paper Printing. Further Treatment of the Prints after Printing. Causes of Failures in Albumen and Plain Paper Printing.

PART III. - PORCELAIN PRINTING.

Selection of the Porcelain Plates. Cleaning of the Porcelain Plates. Albumenizing the Porcelain Plates. Making the Porcelain Collo-Porcelain Plates. Making the Porcelain Collo-dion. Coating, Fuming, and Drying the Plates. Porcelain Printing Boards. Placing the Sensi-tive Plate on the Board for Printing. Printing Vignette Porcelains. Printing Medallion Per-celains. Washing the Porcelains. Toning the Porcelain. Fixing the Porcelain. Final Wash-ing of the Porcelain. Drying and Tinting of the Porcelain. Varnishing the Porcelain. Causes of Failures in Porcelain Printing.

Together with over 50 Wood Cuts, and an elegant Cabinet Portrait, from negatives by Mr. F. Gutekunst, printed by the author, Mr. Chas. W. Hearn.

A THOUSAND COPIES ALREADY GONE.

Mailed Post-paid on Receipt of \$2.50, by any dealer, or

BENERMAN & WILSON, Photo. Publishers, Seventh and Cherry Streets, Philadelphia.

ROBINSON'S METALLIC Guides,

FOR USE WITH THE ROBINSON PRINT-TRIMMER.

· (See advertisement of Trimmer opposite.)

These Guides are made of Stout Iron and are turned in a Lathe, so that they are Mathematically True.

OVAL, ROUND, ELLIPTIC, and SQUARE, of all sizes; various shapes for Stereoscopic work, Drug Labels, etc., etc.

We have the following regular sizes always on hand at 10 cents per inch the longest way of the aperture, the fractions counting as one inch.

Special sizes made to order at 15 cents per inch the longest way of the aperture.

REGULAR SIZES:

	OVALS.		SQUARE	OR ROUND-CO	RNERED.
$2 \times 2\frac{7}{8}$	$3\frac{1}{2} \times 4\frac{7}{8}$	$5\frac{3}{4} \times 7\frac{3}{4}$	$2\frac{1}{16} \times 3\frac{3}{4}$	$2\frac{5}{16} \times 3\frac{7}{8}$	$3\frac{7}{8} \times 5\frac{1}{4}$
$2\frac{1}{8} \times 3\frac{1}{8}$	$3\frac{5}{8} \times 5\frac{1}{8}$	6 x 8	$2\frac{1}{8} \times 3\frac{3}{4}$	$2\frac{3}{4} \times 4\frac{1}{4}$	4 x 5\frac{5}{8}
2½ x 3½	$4 \times 5\frac{3}{8}$	$6\frac{1}{4} \times 8\frac{1}{4}$	$2\frac{1}{8} \times 3\frac{1}{8}$	$2\frac{3}{4} \times 4\frac{1}{2}$	$4\frac{1}{8} \times 5\frac{7}{8}$
23 x 33	$4\frac{3}{8} \times 6\frac{3}{8}$	6½ x 8½	$2\frac{5}{16} \times 3\frac{15}{16}$	$2\frac{7}{8} \times 4\frac{5}{8}$	$3\frac{7}{8} \times 6$
$2\frac{5}{8} \times 3\frac{5}{8}$	5 x 7	7×9	$2\frac{5}{16} \times 3\frac{3}{4}$		$4 \times 6\frac{1}{8}$
2½ x 4½	5½ x 7½	7½ x 9½	FOR	STEREOGRA	PHS.
			Arch Tops.	Round Cornered.	Round.
$3\frac{3}{8} \times 4\frac{3}{8}$	$5\frac{1}{2} \times 7\frac{1}{2}$	$7\frac{1}{2} \times 9\frac{1}{2}$	$3\frac{1}{16} \times 3\frac{3}{4}$	$3\frac{1}{16} \times 3\frac{3}{4}$	3×3
$3\frac{3}{8} \times 4\frac{5}{8}$	$5\frac{5}{8} \times 7\frac{5}{8}$	$7\frac{3}{4} \times 9\frac{3}{4}$	3 x 3	3 x 3	

The above sizes suit the Collins Card Mounts, and photographers knowing that they can be always had at the low price of ten cents per inch, would do well to make their sizes accord, as orders can also be filled more quickly. Ten days is required to make special sizes.

An allowance of ten inches (\$1 worth) of regular sizes of guides will be given with every Trimmer purchased. (See opposite page).

FOR SALE BY ALL DEALERS.

BENERMAN & WILSON, Manufacturer's Agents,

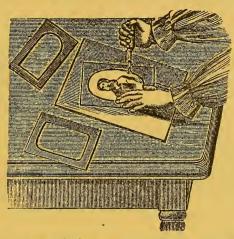
PHILADELPHIA, PA.

ROBINSON'S PHOTOGRAPH TRIMMER

IS A SUBSTITUTE FOR A KNIFE

FOR TRIMMING PHOTOGRAPHS, AND DOES THE WORK MUCH MORE EXPEDITIOUSLY AND ELEGANTLY THAN A KNIFE.

IT SAVES TIME, SAVES PRINTS, AND SAVES MONEY.



The accompanying cut represents the instrument in the act of trimming a photograph. It does not cut, but pinches off the waste paper, and leaves the print with a neatly beveled edge which facilitates the adherence of the print to the mount. Try one, and you will discard the knife and punch at once. For ovals and rounded corners it is worth its weight in gold.

A Trimmer and Ten Inches of Guides Mailed for \$3.50.

Oil the wheel bearings with Sewing Machine Oil.

Given Away!

WITH EACH ROBINSON PHOTOGRAPH TRIMMER

WILL HEREAFTER BE GIVEN Ten Inches of Metallic Guides, your choice from the regular sizes named on the opposite page. The manufacturers and agents finding that they can save money by manufacturing in large quantities, make this liberal offer to the trade, as they want everybody to have these capital inventions in use. They are no humbug and are not glass cutters or anything like them.

BENERMAN & WILSON, Manufacturer's Agents,

FOR SALE BY ALL DEALERS.

PHILADELPHIA, PA.

Edition ready and already.

BITENIE Practical Hints on Composition

ILLUSTRATED BY EXAMPLES FROM THE

GREAT MASTERS OF THE ITALIAN, DUTCH, AND FLEMISH SCHOOLS.

By JOHN BURNET, 1822.

THE ABOVE WORK IS THE VERY BEST AUTHORITY ON

POSITION AND

Owing to the fact that it has long been out of print, few are privileged to enjoy its advantages. We have reprinted and republished the original work by means of a photolithographic process, thus securing all the charms of the original drawings, and now offer the book to the art students of America for the first time.

It contains about 48 pages, and includes 38 illustrations-sketches of the best pictures by the masters of the schools named above, as follows:

Plate I-Angular Composition.

- Fig. 1. Shows rectangle, crossed by diagonal line. Used
- 1. Shows rectangle, crossed by diagrams by Cuyp.
 2. Doubling of the lines on clouds. By Cuyp.
 3 & 4. Sky backgrounds, with cows in foreground.
 By POTTER.

 By OSTADE.
- Domestic group. By OSTADE.
 Country scene. By CLAUDE.

Plate II-Augular Composition.

- 1. Angel in foreground, group of cattle beyond, with trees. By CLAUDE.
 2. River bank view. By REUBENS.
 3. Huntsman going out in the morning. By DELAER
 4. Embarkation of Prince of Orange. By CUYP.

Plate III-Augular Composition.

- Plate II—Alightar Composition.

 1. Group of heads in form of diamond. By J. Burnet

 2. Home comforts. By Ostade.

 3. English pastimes. By J. Burnet.

 4. Gambler's quarrel. By Terrburg.

 5. Hunter's return. By DeLaer.

 6. Lady writing. By MetzU.

 7. The drunken father. By Rembrandt.

Plate IV-Angular Composition.

- Awaiting orders. By Terburg.
 "School is out." By Ostade.
 Italian shepherdess. By Dellaer.
 Seducing the God Bacchus. By Reubens.
 The "Firstborn." By Corregio.

Plate V-Circular Composition.

- Fig.

 1. Death of Ananias. By RAPHAEL.

 2. Magdalen and St. Jerome, with child Jesus. By CORREGIO.
- 3. Doctors consulting the law. By GUIDO.

Plate VI-Circular Composition.

- 1. A country dance. By REUBENS.
 2. Death of Gen. Wolfe. By B. West.
 3. Christ preaching. By REMBRANDT.
 4. Death of St. Jerome. By DOMENICHINO.
 5. Transfiguration. By RAPHAEL.

Plate VII-Model Compositions.

- Christ and his disciples. By RAPHAEL.
 The sick bed. By REMBRANDT.

Plate VIII-Model Compositions.

- "Landing of Charles II." By West.
 Cattle returning home in a shower. By Burnet.
 Cattle at rest. By Burnet.

Plate IX-Model Compositions.

- Blind fiddler. By WILKIE.
 Salutation of the virgin. By REMBRANDT.
 A dance. By OSTADE.

It is handsomely bound in cloth. \$20 cannot purchase a copy of the original work. As a help to photographers in making positions it cannot be overestimated. It teaches the practical elements of composition, and supplies the best examples.

PRICE, POST-PAID, \$3.50.

BENERMAN & WILSON, Photo. Publishers, Seventh and Cherry Streets, Philadelphia.

DR. VOGEL'S HANDBOOK.

SECOND EDITION.

THE HANDBOOK OF THE PRACTICE AND ART OF PHOTOGRAPHY,

By Prof. H. VOGEL, Ph.D., Berlin, Prussia.

IS NOW READY.

ALTHOUGH IT IS MUCH ENLARGED WE OFFER IT AT THE OLD PRICE. \$3.50.

It is Elegantly Illustrated, with Photographs and Engravings. Cloth Bound.

The reputation Dr. Vogel enjoys in this country as a practical photographic writer, is first-class, and insures a book of the best quality. That his Handbook is eminently so, we guarantee. It has been re-arranged and revised specially for the American photographer, giving the best German formulæ, &c., and is, in every sense of the word, a Handbook of the practical and artistic departments of Photography. Over fifteen hundred of the first edition were sold, and the demand continues.

IT ILLUSTRATES AND TELLS

How the Ateliers are built and used in Berlin and elsewhere;

How to make the best Photographs;

How to select and use your Lenses;

How to compose the Picture;

How to pose the Sitter;

How to choose Accessories:

How Berlin Cards are Made;

How to do everything in the Art.

How to manage your Apparatus;

TEACHES HOW TO BECOME A PERFECT PHOTOGRAPHER.

The whole includes, under one cover, everything needed for the practice of photography by the beginner, the amateur, and the professional—a complete Handbook. See contents of Book. The engravings are numerous, elaborate, and expensive. Four photographs, illustrating the lighting of the subject, accompany the work. Please read future advertisements

ASK YOUR DEALER FOR IT.

BENERMAN & WILSON, Photo. Publishers,

S. W. cor. Seventh and Cherry Sts., Philada.

WILSON'S BALTIMORE STOCK DEPOT

THE MOST POPULAR IN THE SOUTH.

QUICK TRANSIT. CHEAP FREIGHTS.

Best Coods! Best Prices!
Best Personal Attention!

Baltimore, the "City of Advantages" now, especially to the Photographer.

BEFORE PURCHASING, SEND FOR PRICE LIST AND CATALOGUE TO

CHARLES A. WILSON,

No. 7 N. Charles Street,

BALTIMORE, MD.

TRY BALTIMORE! IT WILL PAY!!

PLEASE READ OTHER ADVERTISEMENTS.

PROMENADE PRIZE PICTURES.

JULY COMPETITION.

To enable all photographers to study these

GEMS OF ART,

We offer prints from the competing negatives, for sale at the prices below

They are the most exquisite things we ever offered, and will teach any one, be he a good or poor operator.

THE GOLD MEDAL

Was awarded for the best six negatives to Mr. Henry Rocher, Chicago, Ill., whose pictures are marvels of beautiful photography. The studies are all mounted in tasteful style, on Collins' Mounts, and printed at our own rooms by Mr. Chas. W. Hearn, and are fine studies in posing, lighting, printing, and toning.

THE SETS INCLUDE:

N	os.	1.	to	7,		÷				Studies	by H. Rocher, Chicago.
-		8	to	16,	٠.					44	L. G. Bigelow, Detroit, Mich.
- 60		17	to	22,						"	I. W. Taber, San Francisco, Cal.
61		23	to	27,						"	C. M. French, Youngstown, O.
61		28	to	31,						44	Core & Frees, Tiffin, O.
	:	32	to	37,					÷	**	E. M. Collins, Oswego, N. Y.
- 60		38	to	42,						**	J. H. Folsom, Danbury, Conn.
44	4	43	to	48,						"	E. H. Alley, Toledo, O.
	See	F	lev	iew	in	A	ugi	ust	n	umber P	hiladelphia Photographer, page 242.

The whole set of	of 48	, .											. \$	12	00
In two Photo. C	Cove	rs,												13	50
Selections, per d	lozei	n,.							,					4	00
" per t	wo	doz	en	١,										7	00
The 21 of Messrs	s. Ro	che	r,	Bi	ge	10	w	, a	n	l E	Гa	be	r,	6	00
Book Covers an	d Bi	ndi	ng	,								•			75

Address all orders to

BENERMAN & WILSON, Publishers, Seventh and Cherry Sts., Philadelphia.



ROSS' PORTRAIT VIEW LENSES

We have now successfully introduced to the American Photographers the Ross Lens, and by our increased sales we know they are appreciated. At the convention held at Buffalo, July 15, many fine photographs were exhibited by photographers, and ourselves, made with the Ross Lens, which attracted great attention.

While Ross & Co. are the oldest manufacturers of Photographic Lenses in existence, they also keep up with the requirements of the fraternity, by constantly manufacturing new combinations and improving on those already in existence. They have lately perfected, and will soon furnish us stock of, a new series of Card Lenses, extra rapid, peculiarly adapted for babies, and people who will not be quiet. We will give notice of their arrival.

WE HAVE NOW IN STOCK

Portrait Leuses, from 1-4 to 15 x 18. Instantaneous Doublets, all sizes.
Cabinet Lenses, Nos. 1, 2, and 3. Medium Angle Doublets, all sizes.
Card Lenses, Nos. 1, 2, and 3. Large Angle Doublets, all sizes.
Triplets, Nos. 1, 2, 3, 4, 5, 6, and 7. Stereographic Lenses, all sizes.
Symmetricals. Rapid Symmetricals. New Universal Lens.

Numerous testimonials pronounce them to be the best, as well as the cheapest Foreign Lens ever offered to the American Photographer. We will mail price-list on application, and promptly fill all orders.

STEINHEIL'S SONS' NEW APLANATIC LENSES.

We now have a full stock of these Celebrated Lenses, at the following prices:

No.	1, 1-4	size,	$3\frac{1}{2}$	inch	focus,	 \$25	00	No.	5,	10-12	size	, 13 չ	inch	focus,	\$70	00
6.	2, 1-2	6.6	51	6.6	64	 30	00	6.6	6,	13-16	"	16	. 44	66	110	00
6.6	3,4-4		7	6.6	**	 45	00	66	7,	18-22	- 44				200	00
"	4, 8-1	0 ''	104		6.6	 60	00	6.6	8,	20-24	٠٠.				350	00

Nos. 1 & 2 are in matched pairs for Stereoscopic Work.

We feel sure that at least one of these lenses is needful for the successful prosecution of your business, and so solicit your orders.

WILSON, HOOD & CO., THE UNITED STATES, 822 Arch St., Philadelphia, Pa.

The only genuine brand of DRESDEN ALBU-MEN PAPER is the CROSS-SWORD BRAND, all others are superannuated. We keep a full assortment of Single and Extra Brilliant always on hand.

CHAS. F. USENER'S Celebrated PORTRAIT LENSES are unexcelled. Before purchasing be sure and try a Usener.

CHARLES COOPER & CO., Wholesale Agents,

Manufacturing Chemists and Importers,

191 Worth Street, New York.

The Universal



EMBOSSING PATENTED JANUARY 9th, 1872.

This Press will cameo all sizes, from cards to cabinets, and is sold lower than any other that will do the same work. It has been greatly improved and made very complete in all its parts.

We furnish a card, victoria, and cabinet size.

PRICE, \$20.00.

MANUFACTURED AND SOLD WHOLESALE AND RETAIL BY

WILSON, HOOD & CO., 822 Arch St., Philadelphia.

CAUTION.—Photographers are cautioned against buying other presses that may use an *elastic* embossing substance, as they are an infringement on the above.

R. J. Chute, Patentee.

JOHN DEAN & CO.

Worcester, Mass.,

Manufacturers of the

Nonpareil Plate,

A substitute for Porcelain. The new NONPAREIL PICTURES have elicited the most general expressions of approval and admiration. The latest improvement simplifies the formula and insures success. Our Plates are stamped. Patented July 29, 1873, and June 16, 1874. All others are spurious.

ALSO, THE CELEBRATED

FERROTYP **ADAMANTEAN**

BLACK, AND PATENT CHOCOLATE-TINTED. EGG-SHELL, AND GLOSSY.

The experience and extensive facilities of JOHN DEAN & CO. enable them to produce the most desirable FERROTYPE PLATES in the market.

> E. & H. T. ANTHONY & CO., Trade Agents. 591 Broadway, New York.

IMPROVED

PHOTOGRAPH COVERS.



Fig. 1.

The Outside Appearance.

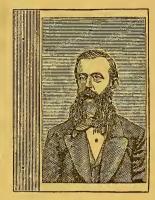


Fig. 2.

A Leaf Showing the Guard.

Frequent inquiries for something at a much lower price than an album, for the holding together and preservation of photographs, has induced us to manufacture an article which we think will meet the want.

IT SERVES ALL THE PURPOSES OF AN ALBUM, FOR

A Series or a Set of Portraits,

A Series or a Set of Landscapes,

A Series or a Set of Photographs of any kind.

MAY BE NEATLY AND CHEAPLY BOUND IN THESE COVERS.

They are made with expanding backs, so that from six to twenty-four pictures may be They are made with expanding backs, so that from six to twenty-four pictures may be inserted in one cover. The pictures are mounted in the usual way, and then strips of linen, or strong paper, of the proper width, are pasted on one edge, by which the picture is inserted and held in place in the cover by a paper fastener. Fig. 1 represents the cover, with the perforations in the back, through which the spreading clasps of the paper fastener bind the whole together. These are so easily inserted or removed, that pictures are readily put in or taken out at any time. Fig. 2 represents the picture, with the guard pasted on ready for insertion. The arrangement is simple, and we are sure will be readily comprehended. For binding together views of your town or city, or portraits of celebrities, they are very neat

The following is a list of sizes and prices, without cards:

For Photograp	h.					Per dozen.				Per hundred.
Card Siz	e.					\$1.50				\$10.00
Cabinet										
EXTRA HEAVY	cov	ER	s.							
5-8 Size						4.50		,		33.00
4-4 66										
8-10 "										
11-14 "										

Larger or special sizes made to order. Furnished with card board at best rates. Samples mailed at dozen price. Send for some.

BENERMAN & WILSON, Photo. Publishers,

Seventh and Cherry Streets, Philadelphia.

JAMES F. MAGEE & CO.

MANUFACTURERS OF

PURE

PHOTOGRAPHIC CHEMICALS,

No. 108 North Fifth Street,

PHILADELPHIA

Stock Dealers only Supplied.

THE ZENTMAYER LENS.

FOR VIEWS AND COPYING.

These Lenses possess pre-eminently, the following qualities:

Width of visual angle, ranging from 80° to 90°; depth of focus; extreme sharpness over the whole field; true perspective; freedom from all distortion in copying; portability and cheapness.

Each mounting is provided with a revolving Diaphragm, containing the stops of the different combinations for which they are designed. The larger ones are provided with an internal shutter for making and closing the exposure.

No.	1.	21	inch	focus,	3	x	3	plate.		\$20	00	No.	1	and	l No	. 2	combined,						\$33	00
"	2,	31/2		"	4	x	5	""		25	00	66	2	66	"	3	**	•	•	•	•	٠	40	00
"	3,	5 1		"	$6\frac{1}{2}$	x	84	"		30	00		3	66	"	4 5	"						55 75	
"	4,	8	"	"	10	X	12	"		42	00	66	5	66	- 66	6							110	
				**																			48	
66	6.	18	"	6.6	20	x	24	66		90	00	66	3,	4,	and	5,	(,						88	00

No. 3, with large mounting to combine with No. 4 and No. 5, \$35.

No. 1 and No. 2, specially adapted for Stereoscopic Views, are furnished in matched pairs. No. 1 and No. 2, single, not to combine with other sizes, \$36 a pair.

Lenses and mountings to form all six combinations, from 2½ to 18 inches, \$173.

Zentmayer's Stereoscopic outfits, including a pair of No. 2 Lenses 4 x 7 box, 7 x 10 India Rubber Bath and Dipper, Tripod, Printing Frames, and outside box, \$60.

JOSEPH ZENTMAYER, Manufacturer,

147 South Fourth Street, Philadelphia.

BENJ. FRENCH & CO.,

319 Washington St., Boston,

IMPORTERS AND SOLE AGENTS FOR THE CELEBRATED

Voigtlander & Son Darlot LENSES,

NEW STEREOSCOPIC LENSES.

New Stereoscopic Tube and Lens, made expressly for us, marked with our name (imitation Dallmeyer), with rack and pinion, central stops, for portraits or views. Will work in or out of doors. Also, for instantaneous pictures. Four inch focus, **price per pair**, **\$21.00.** By taking out back lens, and using only front lens in place of back, you get six inch focus. The great and increasing demand for all these lenses, is sure guarantee that they are the best. Read the following

Testimonials.

"I have tried the Mammoth Voigtlander you sent me, and I consider it the best large instrument I have ever seen, and I have tried those made by other makers, Dallmeyer's included, and they do not compare with the Voigtlander. All my baby pictures were made with half-size Voigtlander lenses."—J. LANDY, 208 W. Fourli St., Cincinnati, Feb. 25, 1874.

"The Voigtlander lenses have always been favorites with me. My first experience, in the days of daguerrectype, was with one, since which I have owned and tried many of the different sizes and never saw one but was an excellent instrument. Lately again trying some for my own use and for a friend, I found them to be superior to other eminent makers, particularly in the large sizes."—W. J. Baker, Buffalo, N. Y.

"Twenty-four years ago I bought and commenced using my first Voigtlander lens. It was a good one. Since then I have owned and used a good many of the same brand, of various sizes. They were all and always good. Some of the larger sizes that I have recently bought seem to me better than any I have ever had or seen before."—J. F. RYDER, Cleveland, Ohio, Dec. 18, 1872.

"About a year ago I bought a Voigtlander & Son No. 34-4 size lens. Said instrument gives me great satisfaction, being very quick, at the same time has great depth of focus."—E. G. MAINE, Columbus, Miss.

"Have never seen anything equal to the Voigtlander & Son Lens. The No. 5, Ex. 4-4 is the best instrument I ever used. I cannot keep house without it."—D. B. VICKERY, Haver-hill, Mass.

"The pair of imitation Dallmeyer Stereoscopic Lenses you sent we are very much pleased with; they work finely."—GOODRIDGE BROS., East Saginaw, Mich.

"After a trial of your imitation Dallmeyer in the field with those of the Dallmeyer Rapid Rectilinear, slide by side, I can say that for general views I like yours as well, for some objects far better, on account of their short focal length."—D. H. Cross, Mosher's Gal., Chicago.

New Catalogue of Prices Just Issued, to be had on Application.

WILSON'S

Lantern Journeys

By EDWARD L. WILSON,

Editor of the "Philadelphia Photographer."

This work will be found entertaining by all who like to read about the beautiful places and things of this world.

The contents are divided into six "Journeys," each one including a visit to 100 places, making 600 in all, as follows:

- JOURNEY A-Havre, Paris, Versailles, Rouen, Fontainebleau, and Switzerland.
- JOURNEY B-Compiegne, Brussels, Aix la Chapelle, Cologne, Up and Down the Rhine, Potsdam, Berlin, Dresden, Vienna, the Vienna Exposition, the Semmering Pass, Saxony, Munich, and Southwest Germany.
- JOURNEY C—Italy—Lake Maggiore and Como, Milan, Verona, Venice, Florence, Pisa, Rome, Naples, Pompeii, the Ascent of Vesuvius, Puteoli, and the Italian Art Galleries.
- JOURNEY D-Holland, Denmark, Norway, Sweden, Russia, and Spain.
- JOURNEY E-Egypt, Palestine, Syria, Turkey, Greece, and India.
- JOURNEY F-England, Scotland, and the United States of America.

It has been carefully prepared, and will be found amusing, very entertaining and instructive.

It contains 218 pages, Cloth bound, Gilt. Price, \$2.

BENERMAN & WILSON,

Photo. Publishers, Philadelphia, Penna.

THE PHILADELPHIA

PHOTOGRAI

THE LIVEST and BEST

Photographic Magazine Published.

ANNOUNCEMENT FOR 1876!

The publishers have a great many good things in anticipation for the year 1876, which they think will render their magazine more beautiful and more useful than ever before; and while they maintain that the beautiful example of photography, which accompanies each issue, is alone worth the subscription price, still more and more effort will be made to make the reading matter everything that it ought to be. Our correspondents from all the leading centres abroad will keep our readers posted on all matters of interest in their several sections, while our unrivalled staff at home will look diligently after your interests here. To make the PHILADELPHIA PHOTOGRAPHER the best PRACTICAL HELPER which can possibly be obtained, is the aim and earnest desire of its publishers.

We ask your co-operation in extending its usefulness, and offer to all present subscribers, who secure us new ones, the following

For every new subscriber, for one year, \$1, payable in any of our publications, books, or, if preferred, \$1

worth of any of our prize pictures, or any other article for which we are agents, advertised in this magazine.

Operators, printers, etc., can secure all their necessary photographic literature in this way, by a little earnest effort.

EACH MONTHLY ISSUE IS A PHOTOGRAPHIC WORK IN ITSELF. NOTICE TO SUBSCRIBERS.

Subscription price, \$5 a year, \$2.50 for six months, 50 cents per copy, postpaid. positively in advance.

In remitting by mail a post-office order, or draft payable to the order of Benerman & Wilson, is preferable to bank-notes. Clearly give your Post-Office, County, and State.

Canada subscribers must remit 24 cents extra, to prepay postage.

Foreign subscriptions must be accompanied by the postage in addition.

ADVERTISING sheets are bound with each number of the Magazine. Advertisements are inserted at the following

1 Month, 6 Months, 1 Year, One Page, \$20 00 \$110 00 \$200 00 12 00 Half " 66 00 120 00 Quarter Page,.. 700 38 50 70 00

Eighth " .. 400 40 00 Cards, 6 lines, or less, 2 00 11 00 20 00

The attention of advertisers, and those having galleries, &c., for sale, is called to our Specialties pages. Terms, \$2 for six lines, and 25 cents for each additional line, seven words to a line, always in advance. Duplicate insertions, 50 cents less, each.

SURE TO PAY!

Operators desiring situations, no charge.

BENERMAN & WILSON, Publishers,

OFFICE, S. W. COR. OF SEVENTH AND CHERRY STS., PHILADELPHIA.



ENTREKIN BURNISHER OF PLANISHER

MANUFACTURED UNDER

Exclusive License

GRANTED BY

W. E. LOCKWOOD,

ASSIGNEE OF

J. F. SCHUYLER.

WHOSE PATENT BEARS
DATE

February 24, 1863.

RE-ISSUED

June 1, 1875.

WITH THE FOLLOWING CLAIMS!

1.—As an improvement in the art of Planishing paper, submitting the paper to friction under pressure between a roughened feed roller and a Planisher, substantially as described.

2.—The combination in a Paper Planishing Machine, of a Planisher with a draw-filed roller, for controlling the paper while it is under pressure between the said roller and planisher, all substantially as set forth.

DECISION OF THE U. S. COURT,

SUSTAINING THE LOCKWOOD PATENT.

In the United States Circuit Court, held at Portland, Me., October 8, 1875, in the case of J. P. Bass vs. John M. Peck, the jury, on questions submitted by the Court, rendered a verdict, that Emile R. Weston was not the first and original inventor of the invention claimed by the said J. P. Bass, his assignor; John F. Schuyler had anticipated him by substantially the same invention, patented and assigned to W. E. Lockwood in 1863, reissued June 1, 1875.

CAUTION!

TO PHOTOGRAPHERS AND DEALERS IN PHOTOGRAPHIC GOODS.

Whatever doubts may have existed in the minds of photographers as to the merits of the controversy between the undersigned, W. G. Entrekin, and the owners of the Weston. Patents for Burnishers, will be set at rest by the perusal of the above claims and decision.

While the undersigned feels disposed to treat with liberality, photographers who have been induced by threatening circulars to purchase the Weston and other machines that infringe the above claims, he will hold them responsible as infringers of the above-mentioned re-issued patent of Wm. E. Lockwood in the use of said machines without first paying the small license fee which is now demanded.

On the other hand, the most prompt and determined legal measures will be taken against those infringers who deliberately, and after being thus duly cautioned, make, use, or sell burnishing machines in which is embodied the invention claimed in the said re-issued patent.

W. G. ENTREKIN, Sole Licensee,

Under grant by WM. E. LOCKWOOD, Patentee.

Manayunk, Philada., February 23, 1876.

TRY HERMAGIS' "PROMENADE" LENSES.

Number 149.

50 Cents.

THE

PHILADELPHIA

Photographer.

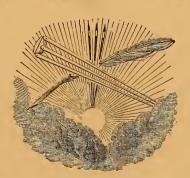
AN ILLUSTRATED MONTHLY JOURNAL,

DEVOTED TO PHOTOGRAPHY.

THE OFFICIAL ORGAN OF THE NATIONAL PHOTOGRAPHIO ASSOCIATION OF THE UNITED STATES.

EDITED BY EDWARD L. WILSON.

May, 1876.



PHILADELPHIA:

BENERMAN & WILSON,

PUBLISHERS,

S. W. COR. SEVENTH AND CHERRY STS.

Subscriptions received by all News and Stock-Dealers.

FIVE DOLLARS PER ANNUM, IN ADVANCE.

Sherman & Co., Printers, Philadelphia.

SUMMARY OF CONTENTS.

· F	PAGE		PAGI
Attention	129	Society Gossip	142
National Photographic Association. By J. H. FITZ-		Practice. H. C. W.,	145
GIBBON	129	Proceedings of Executive Committee of the N. P. A.,	145
How to Come, and How to See It	130	The National Photographic Association	146
Solar Printing. By VERITAS	131	Photographic Rights. By E. K. Hough	147
A Rising Artist	132	The Sphynx	148
Prices for Photographs	133	Eyelashes for Cameras	148
What Shall a Photographic Journal Contain?	134	An Important Patent Decision	- 149
Correspondence. By O. N. W. BALDWIN	135	German Correspondence. By Prof. H. Vogel	. 152
Photographing on Wood	136	French Correspondence. By E. Stebbing	. 154
Translations	137	Our Picture.	. 156
A Few Words About Lighting	138	Photographie Hall	. 157
A Multiplying Camera Attachment. By Jones &		Wrinkles and Dodges	. 158
Moffitt	140	EDITOR'S TABLE	. 159

EMBELLISHMENT.—The Prize Promenade Picture. Negatives by L. G. BIGELOW, Detroit, Mich.

ADVERTISEMENTS.

BULLOCK & CRENSHAW. Photographic Chemicals. CAMEO PRESS, THE UNIVERSAL. CENTENNIAL EXHIBITION VIEWS. CENTENNIAL PHOTOGRAPHIC CO. CENTENNIAL PHOTOGRAPHIC INSTALLATION CO. COLLINS, SON & Co., A. M. Photograph Cards. COOPER, CHAS. & Co. Dresden Albumen Papers, etc. DEBANES, J., Glace Work. ENTREKIN, W. G. Burnisher or Planisher. FAIRBANK, MURPHY & Co. Passepartouts, Mats, etc. FRENCH, B. & Co. Voigtlander Lenses, &c. GEORGE & SATCAMP. Photographic Materials. GENNERT, G. Albumen Papers. GIHON, JOHN L. Opaque and Cut-Outs. HANCE'S PHOTO, SPECIALTIES. HANCE'S GROUND GLASS SUBSTITUTE. HANCE'S DELICATE CREAM GUN COTTON. HEARN'S PRACTICAL PRINTER. HEARN'S PHOTOGRAPHIC PRINTING INSTITUTE. HERMAGIS' PORTRAIT LENSES. HOWSONS' PATENT OFFICES.

BENERMAN & WILSON. Magic Lanterns and Slides.

IMPROVED PHOTOGRAPH COVERS. LEWIS, R. A. Collodion. MAGEE, JAMES F. & Co. Photographic Chemicals. Mosaics, 1876. PATTBERG, LEWIS & BRO. Passepartouts, &c. PHOTOGRAPHER'S POCKET REFERENCE-BOOK. PHOTOGRAPHIC PUBLICATIONS. PHOTOGRAPHER TO HIS PATRONS. PROMENADE PRIZE PICTURES. ROBINSON'S PHOTO. TRIMMER AND METALLIC GUIDES. ROSS' PORTRAIT AND VIEW LENSES. RYAN, D. J. Southern Stock Depot. SAUTER, G. Passepartouts. TABOR, J. W. & Co. Background and Plate Holder. VOGEL'S HAND-BOOK OF PHOTOGRAPHY. WALLACH, WILLY. Trapp & Munch's Albumen Paper WAYMOUTH'S VIGNETTING PAPERS. WILSON, CHAS. A. Baltimore Stock Depot. WILSON'S LANTERN JOURNEYS. WOODWARD, D. A. Solar Cameras.

ZENTMAYER, JOSEPH. Lenses.

119 South Fourth St. PHILADELPHIA.

. Branch Office, 605 Seventh Street, WASHINGTON, D. C.



H. HOWSON,

Engineer and Solicitor of Patents.

c. Howson,

Attorney at Law, and Counsel in Patent Cases.

CENTENNIAL EXHIBITION



By arrrangement with the CENTENNIAL PHOTOGRAPHIC CO., who have the exclusive right to photograph within the INTERNATIONAL EXHIBITION OF 1876, we are enabled to offer to our patrons a splendid line of

INTERIOR AND EXTERIOR VIEWS

OF THE

Memorial or Art Hall, Main Building, Machinery Hall, Horticultural Hall,
Agricultural Hall, The Women's Pavilion, The Government
Building, The Jurors' Pavilion,

The Japanese Building, The English Government Buildings, and the various other buildings, Bird's-eye Views of the Whole, and many other "bits" here and there, so far made,

ONE HUNDRED AND FORTY SUBJECTS.

Of stereographic size, at \$3 per dozen; 5×8 at 50 cents each; 8×10 , \$1; 13×16 , \$2.50; and 17×21 , \$5. These views are all gotten up in the highest style of the art, can be sold by any photographer, and will bring a crowd to any gallery to see them.

CATALOGUES FREE. SAMPLE DOZEN STEREOS BY MAIL, \$3.
LIBERAL DISCOUNT BY THE GROSS.

Also the CENTENNIAL SOUVENIR—16 Views of the Centennial Buildings and Philadelphia. Cloth bound, 50 cents, post-free. Trade supplied. Money in it!

BENERMAN & WILSON, Photo. Pub's, SEVENTH AND CHERRY STS., PHILADELPHIA.

CENTENNIAL PHOTOGRAPHIC COMPANY,

By exclusive concession of the Centennial Board of Finance, having the exclusive right to make and sell Views of the International Exhibition of 1876 within the Exhibition limits, desire to give all publishers of good views of the country, celebrities, etc., etc., an opportunity to sell their goods also at the Exhibition, and therefore invite correspondence on the subject from all such publishers. Arrangements should not be delayed.

Address or call at the

 $\textbf{STUDIO} := \left\{ \begin{array}{l} \textbf{Belmont Avenue, opposite the Lake,} \\ \textbf{International Exhibition, Philad'a.} \end{array} \right.$

Our Studio, 65 x 126 feet, being located between the Main Building and Machinery Hall, near all the other great structures, and on the BEST BUSINESS SITE within the grounds, gives us splendid facilities. Besides we shall have booths in all the principal buildings.

Centennial Photographic Co.,

BELMONT AVENUE, INTERNATIONAL EXHIBITION.

Operators, Printers, and Mounters wanted.

PHILADELPHIA, PA.

CENTENNIAL

PHOTOGRAPHIC INSTALLATION CO.,

CENTENNIAL EXPOSITION.

PHILADELPHIA, April 1, 1876.

Having received special permission from the Bureau of Art Administration, to instal Having received special permission from the Bureau of Art Administration, to instal the exhibit of those who may not find it convenient to attend to the same in person, we hereby offer our services to those about to exhibit in PHOTOGRAPHIC HALL, to act for them in attending to the unpacking and installing in position their exhibit (under the direct supervision of the proper officer appointed by the Centennial Commission), to take charge of the same during the Exhibition, and at its close to repack for return to the exhibitor, unless otherwise disposed of. Our charge for these services we have carefully considered, and it will be at the rate of twenty cents per square foot of surface space allotted the exhibitor, the amount to accompany the order authorizing us to act for you.

In addition to the above capacity, we shall make a special feature of the following:—To furnish to order special decorations to exhibits, subject to the rule of the Commission; to frame and otherwise prepare such exhibits as may be sent unfinished; to furnish to order the necessary painting of signs; to effect special fire insurance on exhibits; to attend to the sale of such articles as the exhibitor may desire to dispose of; to use those on exhibition as samples to sell by, and deliver duplicates outside the Centennial grounds.

The PHOTOGRAPHIC INSTALLATION CO. will have their office in Photographic Hall after the opening and during the Exhibition, and at least one of the Company will be in attendance all the time the Exhibition is open to attend to commissions intrusted to them.

THIS CERTIFIES, That the Photographic Installation Co. is reliable, and has the confidence of John Sartain, Chief of Art Bureau.

MANAGERS.



DOUBLE IODIZED PORTRAIT COLLODION.

ANDERSON'S PORTRAIT COLLODION.

WHITE MOUNTAIN LANDSCAPE COLLODION.

NIAGARA FALLS LANDSCAPE COLLODION.

TRASK'S FERROTYPE COLLODION.

HANCE'S BATH PRESERVATIVE.

HANCE'S GROUND GLASS SUBSTITUTE.

HANCE'S DELICATE CREAM GUN COTTON.

HANCE'S SILVER SPRAY GUN COTTON.

HEARN'S COLLODIO-CHLORIDE.

GILL'S CHROMO INTENSIFIER.

CUMMINGS' GRIT VARNISH.

Manufactured from the best chemicals that can be procured in the market, manipulated with the greatest care.

Each article warranted to do the work claimed for it, if used according to the directions plainly printed on the label accompanying each bottle or package. These preparations are noted for their purity and uniformity, and have for years been used in the most celebrated galleries in the United States and Canada.

FULL MEASURE CUARANTEED.

For Sale by all Stock-dealers in the United States and Canada.

A. L. HANCE, Manufacturer, 126 NORTH SEVENTH STREET, PHILADELPHIA.

Read detailed advertisments on succeeding pages.

HANCE'S PHOTOGRAPHIC SPECIALTIES

WARRANTED FULL MEASURE, AND CHEMICALLY PURE,

ARE SOLD BY ALL DEALERS, AS FOLLOWS:

TIVE. A sure preventive of pinholes, stains, &c. It preserves the bath in good working condition, and will be found worth its weight in gold. See special advertisement. \$1.00 per bottle.

COLLODION. This is made by compounding the different iodides according to their equivalents, and producing a new salt. It is being used by some of the best photographers, but its general use is retarded, no doubt, by the extra trouble in making it. The peculiarities of this Collodion are good keeping qualities, its improvement by age, and the richness of effect produced in the negative, the film being perfectly structureless. As it requires time to ripen, I have the advantage of making a quantity and keeping it always ready to supply any demand. \$1.50 per lb.; 80 cts. per ½ lb.

ELBERT ANDERSON'S PORTRAIT COLLODION is made according to the formula used by Mr. Anderson in Mr. Kurtz's gallery in New York. It is especially adapted to portrait work. \$1.75 per ib.; 90 cts. per ½ ib.

HANCE'S WHITE MOUNTAIN COLLODION is adapted more especially to outdoor work, and for quick working, delineating foliage, frost-work, or sky, it stands unrivalled. It is made after the formula used by that celebrated mountain artist, B. W. Kilburn, of Littleton, N. H., whose work is too well known to need any comments. \$1.50 per fb.; 80 cts. per ½ fb.

CURTIS' NIAGARA FALLS COLLODION is another used for landscapes. The wonderfully beautiful views made by Mr. Curtis, of the great cataract, with this collodion, have a world-wide reputation, and are an indisputable evidence that he could have nothing better to produce such magnificent work. \$1.50 per 10; 80 cts. per ½ 1b.

TRASK'S FERROTYPE COL-LODION is made especially for positive pictures. Mr. Trask has no superior in this class of work, and this collodion is the result of his practice and experience for years in proving what was BEST. It is made after his formula and ferrotypers will find it all that can be desired. \$1.50 per lb.; 80 cts. per ½ lb. HANCE'S PECULIAR PORTRAIT COLLODION is peculiar in that it is prepared without bromides, and is adapted for use with Black's acid bath. To those using the acid bath this collodion is indispensable. Formula on the bottle. \$1.50 per ib.; 80 cts. per ½ ib.

cummings' grit varnish gives a very fine surface for retouching. Those that use a varnish of this kind will find that this has no superior. By it the retouching is greatly facilitated and the same amount of work on a negative may be done with it in half the time that would be required without it. 40 cts. per 6 oz. bot.

HANCE'S SILVER SPRAY
GUN COTTON is now being used by
many of the best photographers, and the
testimonials I am receiving are sufficient
evidence of its excellence. I prepare it with
great care, and warrant it free from acid,
very soluble, gives good intensity so that
no redevelopment is necessary, gives perfect
detail, and a film pure and structureless.
50 cts. per oz.

HANCE'S DELICATE CREAM GUN COTTON is adapted to those who like a very delicate, soft-working collodion, giving all the modelling especially in the Rembrandt style, and with light drapery. Its sensitiveness renders it particularly adapted for children, or any work that requires short exposure. 80 cts. per oz.

CHROMO INTENSIFIER is intended to strengthen the negative. It imparts a beautiful tone and gives excellent printing qualities. 50 cts. per bottle.

HANCE'S GROUND-GLASS SUBSTITUTE is simply what its name implies, a substitute for ground-glass for any purpose that it is used for in the gallery. To the landscape photographer a bottle of it is indispensable. If he breaks his ground-glass, he has only to coat a plate, such as he is sure to have with him for negatives, with the substitute, and in a few moments his ground-glass is replaced and his work goes on. It is equally useful in the printing room, and any photographer who has once used it will never again be without it. 50 cts. per bottle.

HEARN'S COLLODIO-CHLO-RIDE.—The best for Porcelain pictures. \$2.25 per ½ lb. bottle, and \$4.00 per lb. bottle. Try it, and get good porcelains.

HANCE'S GROUND GLASS SUBSTITUTE

Is an indispensable article in the photographic gallery. There are so many uses to which it can be applied that a photographer having once given it a trial, will never be without it, as there is nothing known that will take its place. There are a few base imitations in the market, but they are not used a second time, and will soon die a natural death.

The Substitute is in the form of a varnish, is flowed and dried the same as varnish, but dries with a granulated or ground-glass surface. Wherever ground glass is required, Hance's Substitute answers every purpose.

FOR VIGNETTE GLASSES.

- " A RETOUCHING VARNISH.
 - " SOFTENING STRONG NEGATIVES.
- " THE CELEBRATED BERLIN PROCESS.
- " GROUND GLASS FOR CAMERAS.
- " GLAZING SKY AND SIDE LIGHTS.
- " OBSCURING STUDIO & OFFICE DOORS.
- " PRINTING WEAK NEGATIVES.

For skylights it must be flowed before glazing. The Substitute being very thin it will cover a large space. It is economical, and makes a surface equal to the finest ground glass. It can be easily removed by rubbing it with cotton wet with alcohol. GIVE IT A TRIAL.

PRICE, 50 CENTS PER BOTTLE,

Large quantities, for Studio Lights, etc., supplied low.

HANCE'S DELICATE CREAM GUN COTTON

IS THE KING COTTON, AND HAS NO PEER.

Prepared with particular care, warranted free from acid, and very soluble. I take particular pride in this cotton. It has made its way steadily and surely into most of the principal galleries in the country, where parties prefer to make their own collodion, and its superior qualities are shown in the medals awarded at the Vienna Exhibition, for photographs made with collodion in which it was used.

It is especially adapted to the Rembrandt style, and light drapery. Its sensitiveness renders it particularly adapted for children or any work that requires short exposure.

PRICE, 80 CENTS PER OUNCE.

Read next page.

ance

FROM THE MANY

COMMENDATORY LETTERS

Testifying to the superior qualities of

HANCE'S SPECIALTIES

WE HAVE ROOM ONLY FOR THE FOLLOWING:

"I consider the Cotton the best we have ever used as yet."-R. POOLE, Nashville, Tenn.

"The film of the Cotton you sent me was unusually smooth and firm, being entirely free from glutinosity, and setting like India-rubber. It was quite powdery and crumbled to pieces in my fingers, 'as if rotten.' It dissolved almost instantaneously, and it was 'by far' the very best material I have ever used. I sincerely trust that you will send me the same kind again."—Elbert Anderson, Kurtz Gallery, New York.

"I received your Double-Iodized Collodion all right, and in good shape. Have tried it pretty well. It gives very fine negatives and good detail."—W. E. HART, Watertown, N. Y.

"We take pleasure in recommending Hance's Double-Iodized Collodion as a first-class article, in fact it is the best manufactured Collodion we have tried."—SCHREIBER & SONS, No. 818 Arch Street, Philadelphia.

"The goods by Express came safe to hand. I have tried a part of them and am greatly pleased. Will likely want more goods in your line."—R. POOLE, Nashville, Tenn.

"Your Ground Glass Substitute is the best I have ever tried, and I have tried nearly every kind advertised, as the long row of nearly full bottles will testify. It works like a charm."—J. N. Webster, Barton, Vt.

"I take pleasure in recommending your Cottons and Collodions, before all others I have used. It is a blessing to know where you can get good Cotton."—B. W. KILBURN, Littleton, N. H.

"The last lot of Cotton you sent is the very best I have ever used. Please send me another pound at once."— ELBERT ANDERSON, Kurtz Gallery, New York.

"Have used some twenty-five pounds of your Collodion the past year with unvarying success."—G. W. HOPE, Middletown, New York.

"Your Double-Iodized Collodion is the most perfect working Collodion I have used in fifteen years. Every picture I make with it is a success."—R. L. Dale, Boston, Mass.



Has now become the standard Collodion in all first-class galleries. Although but a short time in the market it is rapidly superseding all other makes, and the quantity that has been sold is simply astonishing.

Give it but a single trial and you will be convinced. Can be used as soon as made, but improves with age, and will keep indefinitely.

Price, \$1.50 per pound.

A liberal discount to parties ordering by the gallon. READ ADVERTISEMENTS ON PRECEDING PAGES.

1776. PREPARE FOR THE CENTENNIAL. --- 1876.



Announcement for 1876!

WILSON, HOOD & CO.,

No. 822 ARCH STREET, PHILADELPHIA.

We having completed our annual account of stock, have replenished all departments needing it, and are now ready to fill promptly all orders intrusted to our care. We call

your attention to a few of our specialties.

Innumerable experiments have been made to produce a Photographic Negative Glass, that should combine the two qualities of excellence and cheapness, but until now without success. We can now offer you a glass that excels the French for polish, freeness from bubbles, straightness, and uniformity, at a less price than French glass has ever been sold. It is not susceptible to atmospheric action, and never rusts or stains. It will be known and sold

ARTISTS' BRAND OF SULPHATED GLASS,

AT FOLLOWING PRICES:

$6\frac{1}{2} \times 8\frac{1}{2}$, and 7×9 , per box of 50 f	t., \$4	25	11 x 14, per	box of	50 ft.,		\$5	50
8 x 10, and 9 x 11, " "	4	75	13 x 16,	"	"		5	75
10 x 12, per box of 50 feet,	. 5	00	14×17 ,	"	"		6	00
Larger sizes furn	ished.	Sa	mple Orders	solicited				

We are agents for the sale of

THE MULTISCOPE.

It is a combination of a slide—which will hold four dozen views—with a stand which will fit any Holmes' Hand Stereoscope. They supply a long felt want, are strongly made, and can be purchased at \$12.00 per dozen. Descriptive Circulars furnished when desired.

> We have been appointed by the manufacturers, Agents for the sale of

THE GORHAM HEATING STOVE.

REVERSIBLE SUPPORT.

Patented July 13, 1875, August 17, 1875, and Patent pending.

Always ready and perfectly safe. Just the thing for drying plates, boiling baths, or any purpose for

which you require an instantaneous heat. It burns non-explosive fluid. Alcohol, two tablespoonsful, will burn one-half hour; will boil a pint of water in *five minutes*. The stove is made of spun brass, and support of Russia sheet-iron, with wire gauze covering a packing of Asbestos, which serve as a permanent vaporizer, causing the alcohol to light instantly. The flame is easily extinguished with the brass cap, which accompanies the stove. Will send to any address, post-paid, on receipt of \$1.

We take pleasure in notifying you that we have reduced the prices of

BLACK WALNUT OVAL, METAL RIM FRAMES

TO FOLLOWING PRICES, PER DOZEN:

No. 1—4 x 5, \$3.85; $5\frac{1}{2}$ x $6\frac{1}{2}$,\$4.75; $6\frac{1}{2}$ x $8\frac{1}{2}$,\$5.75; 8 x 10, \$7.25. No. 2—8 x 10, \$8.00; 10 x 12, \$9.50.

No. 3—8 x 10, \$8.75; 10 x 12, \$10.75; 11 x 14, \$12.25. No. 4—8 x 10, \$9.50; 10 x 12, \$11.50; 11 x 14, \$14.00. No. 5—8 x 10, \$12.00; 10 x 12, \$13.75; 11 x 14, \$15.50.

Above are the only sizes and styles we shall in future keep in stock.

We also continue the manufacture of Monogram Chemicals, Wilson's Head-Rests, Bergner's Print-Cutters, Tables, Chairs, etc.
Soliciting your continued favors, we are
Yours, very truly,

ILSON, HOOD & CO.

JANUARY 1, 1876.

GIHON'S

Are the very best that are made, and are now without a rival in the market. They are clean cut, most desirable shapes and sizes, and made of non-actinic paper, manufactured specially for the purpose. Each package contains 30 Cut-Outs, or Masks, with corresponding Insides assorted for five differently sized ovals and one arch-top.

PRICE. \$1.00 PER PACKAGE. Sent by mail on receipt of price.

Parties wishing special sizes, or large lots of a few sizes, may have them cut to order promptly, by addressing the manufacturer. No lot costing less than \$1.00 made at a time.

No printer should attempt to make medallion pictures without them.

THEY HAVE NO EQUAL FOR QUALITY.

Beware of spurious imitations made of common paper, full of holes, badly cut, and odd shapes and sizes. Ask your stockdealer for GIHON'S CUT-OUTS, and see that they are in his envelopes with instruction circular included.

PROMENADE SIZE NOW READY! SOLD SEPARATELY AT 50 cts. per dozen.

SOLD SEPARATELY AT

GIHON'S

IS DESIGNED FOR

COMPLETELY OBSCURING THE IMPERFECT BACKGROUNDS OF COPIES. RETOUCHING NEGATIVES,
FAULTY SKIES IN LANDSCAPES,
COATING THE INSIDE OF LENSES OR CAMERA BOXES,
BACKING SOLAR NEGATIVES,

COVERING VIGNETTING BOARDS,

AND FOR ANSWERING

ALL THE REQUIREMENTS OF THE INTELLIGENT PHOTOGRAPHER IN THE PRODUCTION OF ARTISTIC RESULTS IN PRINTING.

WHEREVER YOU WANT TO KEEP OUT LIGHT, USE OPAQUE.

It is applied with a brush, dries quickly and sticks.

CUT-OUTS (thirty), \$1.00.

OPAQUE, 50 CENTS.

FOR SALE BY ALL DEALERS.

Address all orders to

JOHN L. CIHON, Inventor,

128 N. Seventh St., Philadelphia, Pa.

OUR NOVEMBER, 1875

E PRIZE

RICTURES

Our second PROMENADE PICTURE competition has just been closed, and we are in possession of some of the finest Photographic work ever done in the world!

We offer prints from the competing negatives, for sale at the prices below. They are most useful to every photographer as examples of good negative work, artistic composition and lighting, and superior printing and finishing. We have done our part to make them models in every respect.

THE



Was awarded for the best six negatives to

Mr. LYMAN G. BIGELOW, Detroit, Michigan,

Whose elegant work is familiar to many of our patrons.

THE SETS INCLUDE:

Nos. 1 to 8—Studies by L. G. Bigelow, Detroit, Michigan.

Nos. 9 to 20—Studies by F. B. Clench. Lockport, N. Y.

Nos. 21 to 28—Studies by G. M. Elton, Palmyra, N. Y.

Nos. 29 to 34—Studies by O. P. Scott, Abingdon, Ill.

Nos. 35 to 40—Studies by E. M. Collins, Oswego, N. Y.

Nos. 41 to 46—Studies by E. H. Alley, Toledo, Ohio.

See review in December number Philadelphia Photographer.

The whole act of 10														
The whole set of 46, .	•	•	•		٠	•		•		•			\$10	00
In two Photo. Covers,													11	50
Selections, per dozen,													4	00
" per two doz	æn,												7	00
The 28 of Messrs. Cler	ìch	, В	ige	lov	v,	and	E	ltoi	n,				6	00
Book Cover and Bindir	ıg,		,											75

Address all orders to

BENERMAN & WILSON, Publishers, SEVENTH & CHERRY STS., PHILAD'A, PA





PROMENADE ALL! HERMAGIS'

Celebrated French

PORTRAIT LENSES.

CABINET SIZE, ARE JUST THE LENS FOR THE NEW

PROMENADE PICTURE.

MR. HENRY ROCHER, the renowned Chicago photographer, says of them: "In my opinion they are truly lenses of great capacity, and must surely satisfy every purchaser." Mr. Rocher has purchased two Hermagis lenses of card size and one Salomon style. See further splendid testimonial from Mr. Rocher in Specialties.

MR. F. GUTEKUNST, the celebrated Philadelphia photographer, was sent a Salomon Lens to try for us, and wont part with it. It cuts sharp a 9 inch standing figure, and beats a lens that has been his favorite many years, and where many makes of lenses have failed, on trial, to equal it.

The HERMACIS IS THEREFORE AHEAD

TRY THEM!

These celebrated lenses, are used by MONS. ADAM SALOMON, of Paris, exclusively for making his **WORLD-RENOWNED PORTRAITS**, and by the most famed photographers of Europe, from whom Mons. Hermagis has the Highest Testimonials.

We now have a FULL STOCK on hand.

The Salomon Style, 8 x 10 size, \$160.
For Cabinet Size, extra quick, \$100.
For Cabinet Size, quick, \$90.

For Carte Size, extra quick, \$50. For Carte Size, quick, \$40.

They are being introduced in America steadily, and are liked wherever they go.

They will be sent on trial to responsible parties C. O. D., and instructions to Express Company to hold money one week for trial. If parties prefer to see the work of a lens before purchasing, we will make a negative and send with details of exposure, etc., and reserve the lens until answer is received (if the time is reasonable), on receipt of \$1 to pay cost. Having a skylight of our own we are enabled to do this.

Provided the second to the second three seconds of the second three seconds above, has returned them.

BENERMAN & WILSON.

Seventh and Cherry Sts., Philadelphia, Pa.





PROMENADE PRIZE PHOTOGRAPH



Philadelphia Photographer.

Vol. XIII.

MAY. 1876.

No. 149.

Entered according to Act of Congress, in the year 1876,
BY BENERMAN & WILSON,
In the office of the Librarian of Congress, at Washington, D. C.

ATTENTION!

N. P. A. TO THE FRONT.

THERE is to be a Convention! Fellow-members, awake! Let all croakers be still! Let us all be loyal, patriotic, enthusiastic, and demonstrate to the world the fact that the National Photographic Association of the United States of America still lives, and is a power in the land for promoting the interests of the art of Photography.

See the more detailed announcements further on.

National Photographic Association.

OLD GUARD TO THE FRONT.

WHY is it thus, that you stand by and see the National Society go by default? Shame on you, the younger members, for this great neglect; the paltry sum of \$4 a year is the excuse, and hard times; be above it; think of the many dollars some of you have spent foolishly and wastefully during the year, and still you cannot afford to contribute \$4 to help sustain a society that in a measure helps you to get your living by its existence, and gives your business tone in and out of society. For my part I do not understand it. Why this talk of disbanding and dissolution? There are now many true and valuable members, old and young, that I know are willing to keep it up and not to exhibit oftener than once in three

sustain it; let them keep together and carry it on and see that the strict letter of the Constitution (Section 4) be put in full force, where a member forfeits his right to membership after being two years in arrears. It will weed a good many out that ought to be out, and then you will find you have still a good-sized society for all practical purposes, of true useful photographers and good paying members in the long run. The enormous expenses that have been incurred heretofore to keep up this society (and many of them have been needless), I will admit, have been very discouraging, for it was all the time putting your hand in your pockets to keep it up (and many thanks to the much-abused stockdealers for a large portion of that), when others never gave a cent; and where has all this money gone to? Echo answers, where? who got it, and was benefited by it? I would like to see published the figures in full; it would astonish some members, especially those that have been in the habit of voting for the spending of it without a thought if it was right or just for the general welfare. Then when the National Photographic Association is culled of its useless branches let it be reorganized, if you will, on a practical substantial basis, and do away with expensive yearly exhibitions. And let us resolve

years, and you will find out the longer they are put off the more attractive they will be, and in the meantime something new and novel may be brought out to make a grand display.

Another feature I would recommend to our society; a board of five managers (different from the Executive Committee), to inform the Association at large of any important matters that may be new or transpire during the three years. Previous to the meeting of the society such matter could be published in any of the journals devoted to our art free of all charge, as such news would be anxiously looked for by the journals to make them interesting to their subscribers.

There is another feasible plan, and one that has many advocates, and that is the establishment of a permanent photographic fine art gallery. Such a plan was submitted to the National Photographic Association at its convention in St Louis, in May, 1872, and published in the Philadelphia Photographer, in its official report of the proceedings, in the June number, page 223.

But, brother photographers, old or young, this is the age of progression, not of retrogression; so, onward, let us rise to greater aims, be men of mind, do away with petty jealousies, soar above discordant bickerings, make our whole-souled treasurer happy by remitting to him the paltry sum of \$4, and I will guarantee you will get no more postal card duns from him. Whatever you do do not think of disbanding. I for one move (who will second the motion) that the President or Executive Committee call a special meeting of the National Photographic Association some time in July or August, in Philadelphia, when, no doubt, hundreds of members will be brought together to the Centennial Exposition, and they could make their time to suit the meeting of the Association, and then and there determine what is the best method to uphold and sustain the National Photographic Association of America.

J. H. FITZGIBBON.

THERE is to be a Convention, and the greatest exhibition of photography the world ever saw.

How to Come, and How to See It.

WE mean the Centennial Exhibition; but we do not mean which route you shall take, how much baggage you shall carry, or where you shall put up at when you get here; neither do we propose to advise you as to which entrance you shall select on visiting the grounds, or which department you shall visit first; these are all immaterial to our purpose, but the lesson we want to convey here is in reference to the state of mind in which you come, the object for which you come, and the kind of eyes you see through when you get here.

The man who comes with prejudice in his heart, with a feeling of jealousy against some neighbor, who may be an exhibitor as well as himself; who sees everything through green eyes, and concludes, after a thorough inspection, that his work is just as good as anything there, and far superior to that of his neighbor, will go home no better off than when he came.

He who comes for the sole purpose of having a grand holiday excursion, to see all the sights of the great exhibition, and while he gratifies the sense of sight by seeing only for that purpose, gives free license to every other sense and passion of his nature, becoming thereby a mere sensualist, will in the end have gained nothing tangible, and will return to his home worse off than when he came.

But the man who is to be benefited by a visit here is he who sees in it the means of educating himself, who divests himself of all local, personal, or other feeling which might tend to warp his judgment or cloud his vision, and with his mind prepared to receive and his eyes to see all that is good or instructive, comes, not so much to see a great show, as to endeavor to find great truths, and learn some grand lessons. This man, while he enjoys the great spectacle, views with amazement and admiration the paintings and sculpture in the Art Gallery, and the unparalleled display in Photographic Hall, will at the same time see all with an inquiring mind; every new thought expressed, every new method suggested, every new style, every improvement, will be carefully studied and appropriated by him; it will make no difference whether the suggestion comes from the Feejee Islands, or the most cultivated art centre of the Old World, if it be good he profits by it and adds it to his stock of knowledge. Thus he enjoys and stores his mind with all that is useful, so that when he returns to his home he has new thoughts about life, new thoughts about his business, new impulses, new aspirations, and he not only finds himself a wiser and better man, but the whole community in which he lives is benefited by what he has gained.

From an editorial in the Philadelphia Public Ledger, of a recent date, bearing upon this same subject, we make the following extract, which, though intended for visitors of all classes, is particularly applicable to photographers:

"The exhibition regarded as an educator of the active minds and hands of this generation of Americans, and of the generation which is following close upon the present, is the view of the exhibition which should attract the strongest attention and be kept uppermost all the time. Glory, patriotism, and enthusiasm, grand spectacular effects, and impressive ceremonial are bound to have their way and to occupy a large space in the public eye in this year 1876. They are very pleasant matters and need no stimulus. But there may be some chance that in the dazzling splendor and attractiveness of these surroundings, the unparalleled utilities of the exhibition to this country may be, if not obscured, at least relegated to a secondary position. Great things have most assuredly been done in this country. Beginning with agriculture and the products of the forest and of the fisheries less than a hundred years agowith no handicrafts except those of the most primitive description, making nothing but coarse and rude articles and fabrics, it is true that some of our manufactured productions, particularly those of the most useful kinds, now lead those of the world, and displace the rival products of the older countries in competing markets. But he is a blind patriot who does not see that these superior manufactured articles of ours are comprised within a limited class, are produced in but comparatively few localities, and that in respect of a vast array of other articles, other methods, manipulations, and processes, we have much to learn. And here, in the International Exhibition of 1876, the great field for observation, examination, and study is to be presented. Our mechanics, artisans, manufacturers, inventors, professional men, teachers, operatives of all kinds, women and men, designers, artists, people of talent and genius, have much to learn from each other as well as from the rest of the world."

SOLAR PRINTING.

In an article on Enlarging Processes, by Charles Waldack, in the Year-book of Photography, and published in the March number of Anthony's Bulletin, the writer says: "Direct printing in the solar camera is out of the question." "It can only be done about six months in the year." It is difficult to understand how one of so much experience in the art of photography, and one who has stood so prominent as Mr. Waldack has, should make this assertion, in view of the fact that there is an immense amount of what is known as "solar printing" continually being done. There is not a city, and scarcely a town in the country, that is not favored with its "solar printer." In fact, it may be safely said, that there is not a gallery to be found, where enlargements by the solar camera are not used, one way or another, to meet the demands of its customers.

And yet we are told in the article referred to, that "a small print cannot be made to submit for approval."

Certainly Mr. Waldack could never have had the opportunity of examining such enlargements as are made at the present time with the solar camera. He would doubtless be well repaid by a short visit to one of our large solar camera printing establishments, that for instance of the well-known solar printer, Albert Moore, of Philadelphia, which would convince him beyond all doubt, that "direct printing in the solar camera is not out of the question."

It must be remembered that the solar camera of to-day is a far different apparatus in effectiveness from what it was years ago, in the hands of the writers of the article referred to.

Great improvements have been made in the construction of solar cameras, as in everything else pertaining to the art, which have made them indispensable to the successful prosecution of it in a business way.

A well-known photographer wrote in the early part of February last, which month may reasonably be supposed, could not be included in the six months of the year mentioned by Mr. Waldack, as follows:

"Our solar camera is grand; with what little sunlight we have been able to catch this winter, it has done wonders. I really believe we can print, using the old ammonio-nitrate process, twelve or more daily, with a clear day and early start, and might on long days squeeze out fifteen."

It is of the greatest importance to the advancement of photography, that photographers should be correctly informed on a question so much affecting the successful pursuit of the art, and not be induced to ignore one of their most reliable aids, by any new theories or assertions, no matter by whom made.

VERITAS.

A RISING ARTIST.

THE following communication sent us by a correspondent, to whom it was addressed, will give us all reason for "great expectations." We shall doubtless soon see the artistic horizon illuminated by this rising light, which promises to fill the world with its splendor. Read the thrilling announcement.

DEAR SIR: I have a friend in my county, is by trade a natural macanic and also a natural bornd artist, he wishes to no if you think he can learn to do oil paintings, and, also, he sends you some speciamens of his work just marked off by a pencil just to let you no or see a little of his work, and you can draw anidie of what he can do; he can take a pencil and make a picture just like yeu, and give it the propper expression or any other person. It would surprise yeu to see what he can do with a pencil; it is perfectly natural with him, and, I am confident, that he will make one of the

finest painters in the world this thing is natural with him he has not got hit to learn he only needs to practice under a good oil painter. he wants you to write and tell him what you think of this from what you can see of those pictures he sends you write soon and let him no what he mite do he wants to no write at once.

Write soon and direct to ----

What a prodigy! A natural-born mechanic, and a full fledged artist who has nothing to learn.

Cannot this genius be induced to turn his attention to photography? We fear not. His powers are too large to be compassed by any such narrow limits. Our correspondent has advised him to go to "Paris or London," but we are sure he will find nothing worthy to compete with his masterly proficiency short of the great art centre of the world, Rome itself. Even here, probably the works of Raphael, Titian, and Correggio would soon sink into insignificance before the wonderful productions of this scion of the western world.

The accompanying cut is a fac-simile of one of the drawings from the hand of this

genius. There was also a group of heads which was too elaborate to reproduce, but when one is seen we see the whole; mannerisms predominate; their hair was all arranged by the same barber, each mouth looks like the same piece of putty, the eyes all



have the same expression of simplicity, while the ears looks as if their prime object was not to hear, but like those of a stubborn donkey, simply to hold back. The faces, like the one given here, are all in profile, the style which so forcibly illustrates perspective and consummate skill in drawing, reminding us of the primitive silhouette portraits we used to see years ago.

We well remember how, in our youthful days, we used to fill the margins of our old

copy or writing books with profiles, many of them we presume being nearly as meritorious as these, and most of them bearing, by chance, the likeness of somebody we knew, but we have not yet reached the grand goal of a great painter.

Now, we have not referred to the efforts of this young man for the purpose of ridiculing or discouraging him, for he is unknown to us, as well as to our readers, and he may yet develop a talent which will place him in the front rank of the artists of his time, but rather to draw a lesson for the benefit of those who may start out young in the art photographic. The time was when a young man could take a camera and chemicals, and by going through the merely mechanical motions of the process, make pictures which people were satisfied to buy, and after from three to six weeks' practice he was dubbed an artist, and, in his own estimation, knew about all there was worth knowing. This is an unfortunate position to arrive at. It is only the man who believes, not that he only requires practice, though that may be in a degree educational, but that there is ever beyond and above him a great storehouse of knowledge which will tax all his efforts and energies to explore or acquire; it is only such a man, we say, who, in any profession or calling, and more particularly in art, reaches those high attainments in which the world accords him the honors of success, and in which more is awarded him than he claims for himself.

But he who thinks he has nothing more to learn, may be flattered by a few, and under the influence of this fatal praise strives for nothing higher, but lives and dies within the little circle of his own egotism, while the great world outside is totally unaware of his existence.

Let no young student of photography fall into this fatal error, or arrest the development of any powers he may have, by concluding that there is nothing more for him to learn; but rather remember that the highest attainments are but progressive, and each achievement will but reveal the fact that far above him, and beyond his present reach, are brighter laurels than any he has yet won.

PRICES FOR PHOTOGRAPHS.

As considerable interest has been manifested in the methods of doing business, and the prices for work, to which we have referred in recent numbers of this journal, we believe there are many who are yet a good deal at sea on these questions.

As an offset to the price-list of a "Broadway Photographer," published last month, we have received the following as an example of how they do it away down in Texas. We notice a different order here from any we have ever before seen, in reference to "First Print," and the plan impresses us favorably. Messrs. Blessing & Bros. send us also some very pretty specimens of their work; just such as pleases the people, and will command good prices anywhere.

We copy one page of their circular entire, as follows:

BLESSING & BRO.'S PRICE-LIST

OF STYLES AND SIZES OF

PHOTOGRAPHS AND ART PRODUCTIONS.

Gallery, 174 Tremont Street, Galveston.

OUR negatives are all artistically retouched and alphabetically registered, so that duplicate prints can be had at any time. We have on hand over fourteen thousand negatives made within the past five years. Any one having been photographed by us can have duplicate prints from the original negatives, at the price of re-orders. (See Price-List)

PLAIN PHOTOGRAPHS.

Size.		st Hal Doz		Duplicates or Re-orders.		
Carte de Visite	\$2 2					per doz.
Victoria Imperials or Cabinet	$\begin{vmatrix} 2 & 7 \\ 3 & 5 \end{vmatrix}$	$\begin{bmatrix} 5 & & 4 & 5 \\ 0 & & 6 & 0 \end{bmatrix}$			00	"
Whole size, 6½×8½ in. 8×10 inches	5 0		0 14		00 50	each.
" 10×12 "	7 0	0 15 0	0 25	2	00	"
" 11×14 " " 14×17 "	8 0	$\begin{array}{c c} 0 & 18 & 0 \\ 0 & 24 & 0 \end{array}$			50 50	"
" 18×22 "	10 0	0		.5	00	"
" 22×27 " " 25×30 "	12 0 15 0		: :::	6	00 50	"

N.B.—We will give a discount of five per cent. on all bills of ten dollars, and ten per cent. on all bills of twenty dollars and upwards, except where a single quoted price amounts to the sums named.

For groups, one dollar additional will be charged for each person composing the group, except for large groups of families, schools, classes, etc., when a liberal reduction will be made Duplicate prints of groups made at the same price as single figures.

We are prepared to do all styles of copying and enlarging, at the prices quoted above. Enlarging from negatives on hand will be done at one-half the rates quoted for first prints.

Any amount of tinting and coloring done on above sizes, from 25 cents each, to a finely finished water-colored miniature.

The following list embraces our prices for portraits finished by our artists, with pencil or brush, in the several styles named. These prices include appropriate frames for each portrait.

Size.	India- Ink.	Crayon.	Water Color.	Pastelle.	Oil.	
8×10 in. 10×12 " 11×14 " 14×17 " 18×22 " 22×27 " 25×30 "	\$15 00 18 00 25 00 30 00 35 00 40 00 50 00	\$27 50 32 50 37 00 45 00	\$15 00 18 00 25 00 30 00 35 00 40 00 50 00	\$60 00 75 00	\$25 00 30 00 40 00 50 00 75 00 100 00	

These prices are for bust portraits. When hands are included, or groups painted, an additional charge will be made.

WHAT SHALL A PHOTOGRAPHIC JOURNAL CONTAIN?

In answering the above question, we must first consider, or ask another, viz., Who takes and reads a photographic journal for the purpose of being benefited by it? Of course, there can be but one answer. The practical photographer who desires to be well read in all that pertains to his profession, or is striving for improvement, is the man to whom a periodical photographic publication comes as a light to guide him on his way. But of what should its contents consist in order to serve as a guide to such a man? Would learned disquisitions on chemical science, or abstract theories on the composition and action of light, be of much use to him? It would be about as dry and useless, as far as his business was concerned, as the statistics of the population

of China. But give him art instruction, processes, formulæ, with all approved methods of working in his every-day practice, and he will look for it as eagerly as for the coming It is living substance of an old friend. for him; it gives him life, energy, new thoughts, new impulses, and he is involuntarily lifted up till he attains the highest position in the art. A little of theory on abstract questions may do very well-a man requires something a little higher than he is to reach after, then he is led upward: but when everything is placed beyond his reach, he is more likely to give it up at once, and remains,-like a hungry man in a desert place, where flocks of delicious birds are flying over his head, but all beyond his reach,-untutored, unfed.

We have been led to the foregoing remarks by a paragraph in the British Journal of Photography, by a Peripatetic Photographer, to which we can say Amen! It is as follows: "If I were the editor of the British Journal Photographic Almanac I would accept, as a compliment, a bit of criticism on that annual work which was probably intended by Nature as anything but a compliment. He is evidently of opinion that it should consist of a dry disquisition on the scientific aspect of the art, instead of being so much devoted to the details of every-day, living, practical photography. When it speaks of photographic annuals failing in recording progress, the old proverb, ne sutor ultra crepidam, is irresistibly forced upon one's attention. A pretty, precious, and well-appreciated Almanac it would be were its contents limited to luminous vibrations and spectroscopic examinations of colored films! From such an Almanac, Phæbus protect us! By the way, What is 'science?' I used to think that the term was employed to signify systematized knowledge; but as the critic of Nature evidently pooh-poohs such commonplace subjects as baths, lighting, and printing, as something quite antithetical to science, I imagine the word may be undergoing some change in its signification."

THE Philadelphia Photographer is the model Photographic Journal, they say.

CORRESPONDENCE.

CLEANLINESS IN PHOTOGRAPHY.

KNOXVILLE, IOWA, April 12th, 1876.

I have long been a reader of your valuable monthly, and derived a great deal of benefit from it in the last few years. Although there has been considerable said on the subject of cleanliness, I beg leave to argue that it cannot be too fully dwelt upon.

We may take either branch of the photographic profession, and if there has not been strict observance of cleanliness, the (un-) finished picture will disclose the slothful neglect of the executor.

I have visited several galleries, and dirt and negligence seem to be the prevailing cause of so many failures; some claim the bath is out of order, some the collodion, and others similar complaints, but none have even hinted that dirt and carelessness were the least bit dangerous. Some galleries that I visited seemed to be more like a workshop than a photographic gallery where they expected lady customers daily.

Can any one build up a good trade or reputation as long as his rooms are filthy; his clothes shabby and glazed from head to foot with chemicals; his hands black as though he worked in a wagon-shop; his work streaked, spotted, and stained, and, worst of all, filthy finger-marks upon it? I am sure, and I think you will bear me out in the assertion, that carelessness and uncleanliness are the only true sources of streaky chemicals and dirty pictures.

There cannot certainly be any one that has worked at the business any length of time but what has a good set of formulæ, and if he is careful in preparing his chemicals and diligent in cleanliness, he will have but little trouble. In the first place there is too little attention paid in keeping the person neat and clean. Then the rooms are dusty, and everything in confusion. Brother shadow-catchers, let us have a place for everything, and when once through using it you have more time then to put it where it belongs than to wait till things get promiscuously mixed. Always before mixing any chemical, preparing plates, or making sittings, wash your hands and wipe them dry on a clean towel. In preparing and albumenizing glass, the greatest care should be used, and all glass should be rinsed under a tap of running filtered water. Do not let the albumen run over on the back of the plate; if you do, your bath will soon get out of order, and you will not know how to remedy it. Do not leave your bath open while the plate is coating, and wonder why your chemicals fog. Do not flow on the plate enough developer to wash off all the silver, then be puzzled to know why the image is flat and inexpressive. Do not fix your negatives in cyanide strong enough to take out all the fine detail, then intensify with chloride of gold to bring back intensity and no detail, Do not slop your hypo around on the floor so that when it dries it will rise and settle in your chemicals, and you will be at your wit's ends to know what is the trouble.

Hypo is one of the most dangerous as well as the most useful things in photography. If you want to try an experiment, tone your prints in an old fixing dish, but I would advise you to vaccinate your prints first. Clean your negatives on both sides thoroughly before printing.

It would be well to look to your cameratubes, and see that the lens is covered when not in use.

Avoid raising dust in sweeping by sprinkling salt upon the carpet.

In conclusion, I will mention there is nothing so disgusting to the observing public as negligence and filthiness in photography.

Observation and experience have induced me to write as I have upon the subject, being convinced that we cannot be too careful.

Yours respectfully,
O. N. W. Baldwin.

PELLA, Iowa, April 12th, 1876.

MESSRS. BENERMAN & WILSON.

DEAR SIRS: As we have been greatly benefited by reading communications in the *Photographer* addressed to beginners, perhaps it might not be amiss to send you something from beginners, if you see fit to publish. Inclosed please find two card photographs, not that they possess any de-

gree of merit, but simply to show you what we boys who have been but a few months in the business are doing. We started in a small town of about 2500 inhabitants with one gallery already in operation. But we got hold of good books, such as Dr. Vogel's Handbook, and, above all, the Photographer, by which means, more than any other, we have succeeded in getting good results.

In the first place get the best chemicals (which cannot always be got in small towns); be clean in preparing them; try experiments that are written in the journal; and let us have more in the journal from beginners.

We found that a negative bath 40 grains strong, with plenty of iodide of silver, gives better results than one stronger, and our positive bath, 50 grains alkaline, with an ounce of alcohol to 12 ounces of solution works better than any we have tried. We silver paper three minutes; fume fifteen (Trapp & Munch paper). We eliminate hypo from prints with alum, according to directions in *Mosaics* for 1876, and find it to be far preferable to the common way of washing.

In conclusion, let us say, "Never give up the ship;" never let a picture leave the gallery that does not suit yourself, and by so doing you will succeed, in spite of competition and hard times.

> Yours in unison, REUVERS & SCARFF.

PHOTOGRAPHING ON WOOD.

WE have recently been asked to give a process for photographing on wood for engraving purposes. We have never seen anything more simple and reliable than a process we published several years ago. It is used by some of the leading publishers of illustrated papers in this country, and greatly improves the quality, reduces the cost, and facilitates the work of wood engraving. We quote from the *Philadelphia Photographer* for July, 1866, as follows:

"Those who desire to try to photograph on wood, will, in the beginning, recollect that more depends upon care and cleanliness than upon the details of the process. They are very easy to make, if this fact be borne in mind, and carefully practiced. The negative is made in the usual way, except that it must be reversed; this is best done by reversing the sensitive plate in the holder. To do this the spring must be removed from the shutter, and the plate kept in place by using a little wedge of clean wood on each side, or it will remain in place of itself, if the holder be kept in an inclined position. Allowance must also be made for the thickness of the plate in focussing. When a negative is to be reproduced, the transposition is made with the original plate. This reversing is done in order to make the impression from the wood-cut appear properly.

"To prepare the blocks, which are, of course, box-wood, such as is commonly used by engravers, saturate them in melted white wax, permitting them to remain in it a few seconds only. Scrape the wax off the block with a scraper, clean the surface with turpentine, and coat it with flake white in the way practiced by engravers. This is done merely to give the block a white surface, and to make it more easy to watch the printing as it progresses. The block is then flowed with a solution of water 3 parts, albumen 3 parts, and salt 3 grains to the ounce of water and albumen. It is then dried, and with a piece of paper a second solution is spread over the surface of the block, of silver, 15 grains to the ounce of water, glacial acetic acid, 2 drops to the ounce, and just enough gelatin to give the solution the consistency of oil. After again drying the block thoroughly, fume it about fifteen minutes, and print in the usual way. After printing, the blocks are treated almost exactly as paper prints. They are toned, as follows: Dissolve 45 grains of hyposulphite of soda in 32 oz. water, then dissolve 15 grains chloride of gold in 16 oz. water, and add it, little by little, to the hypo solution. Shake well, and when the mixture becomes clear as water, it is ready for use. Fix with hypo soda. By this simple and easy process, quite a revulsion is being made in woodcutting, much to the improvement of the pictures."

TRANSLATIONS.

THE following are from the Bulletin Belge de la Photographie.

On Removing the Clichés on Gelatin Pellicles.

BY M. JEANRENAUD.

Having experimented for some months with collodions of different makers, I found some that offered so great a resistance, when they had to be removed from the plate, that they split; half of the thickness of the collodion came with the gelatin, whilst the other half remained on the plate. Many unsuccessful attempts have deprived me of clichés which promised good results; but I have succeeded in mastering this difficulty by a process which I advised my colleagues to use when they meet it.

After having passed the cliché which has been finished, fixed, washed in acidulated water containing 7 cubic centimetres (2 fl. drachms) of ordinary muriatic acid for 100 cubic centimetres of water (3½ fl. oz.), as I advised in 1868, it is allowed to dry, and the plate is then covered with the following solution, which is flowed from each of the angles towards the opposite one:

It is then dried without washing.

The cliché is now ready to receive the coating of gelatin. The above solution can be used indefinitely, especially if care has been taken to pass the plate in acidulated water, as mentioned above, an operation which will afterwards prevent the alcoholic liquid taking a brown color.

In the preparation of the gelatin which is destined to remove the cliché from the plate, I have made a slight change, which appears to give preferable results.

For a plate 11 x 13 inches I advised in 1868,

Gelatin, . . 20 gram., . 308 gr. Water, . . 100 c.c., . 3½ fl. oz.

After solution, glycerin, 4 cubic centimetres, 1 fl. drachm.

I find it useful to add to this preparation 40 cubic centimetres (11 fl. drachms) of a

solution of alum at 2 per cent. of water. This solution should be at the exact degree, as a few cubic centimetres more would render the solution of gelatin insoluble, and transform it into a paste.

The gelatin solution should be poured very hot upon the plate, which has been previously heated. This addition of alum renders the gelatin insoluble and imputrescible after desiccation, and is not liable to mould-spots, as sometimes happens when kept in a damp place; besides, the cliché, when dry, has the appearance of a very fine ground-glass, which gives greater harmony to the print.

CLARIFICATION OF SOLUTIONS OF GUM LAC.

Add to the solution as much pulverized chalk as it contains of gum lae; mix and heat to 150° Fahr. Three-quarters of the mixture clear themselves rapidly, and the remainder can be easily filtered.

NORDEN'S GOLD BATH.

The gold is dissolved in aqua regia, the acid solution evaporated, and the dry residuum is heated until partially decomposed. When cold, it is dissolved in muriatic acid, filtered to separate the metallic gold which has not been redissolved, and is then carefully evaporated. The gold salt obtained is dissolved in water, and a little lime-water is added. This bath can tone three times more prints than any other, with the same quantity of gold.

THE ORNAMENTATION OF GLASS BY HYDROFLUORIC ACID.

The best glass to engrave upon is that which contains the most lead (10 of acid for 100 of lead). Fix on the glass a picture or photograph, of which everything may be removed, except the image which remains attached to the surface; then plunge the glass in rather weak hydrofluoric acid, as strong acid does not act as well. In the case of drawings and lithographs, make use of a solution of asphaltum in turpentine, thickened with beeswax and rosin.

The hydrofluoric acid is contained in an oblong wooden tank lined with lead. The object to be engraved, lamp-globes, for ex-

ample, are made to rotate slowly in the liquid by means of a wooden axis which passes through their centre. The time of immersion depends upon the quality of the glass.

From Photographisches Archiv.

Cameo Pictures with Dim Margin .- Ed Dunmore gives in the British Journal the following directions to produce a beautiful effect in cameo or medallion pictures. The picture is to be printed in oval or obtuseangular shape, with toned margin, and then to be gelatinized. After that we paste sandpaper on a piece of thick cardboard, a little larger than the picture to be operated upon, rough side out, and cut the oval or obtuse angle exactly by the copying mask out of the centre, place its sandpaper side on the victure, and run through a roller-press. The sandpaper will give the toned margin a dim appearance, whilst the surface of the picture will remain shining. If we wish to get a finer dim margin, we have only to put on the sandpaper a second time in another position, and press again. Instead of sandpaper, paper-lace or woven stuffs may also be used, but the former, in most cases, produces the best effect.

The transfer of an oily picture on stone will be quickly and reliably performed in the following manner: We develop a carbon picture on paper coated uniformly with lithographic varnish or fatty paint, and press this picture on the stone; then we put on the paper a coat of turpentine, and remove it from the stone; the carbon picture we rub away with water. The negative must be sensitized, developed, and strengthened in such manner that the lines are very distinct.

R. SCHLEGEL.

The enlargement of carbon diapositives will be most successful by applying gaslight in a lantern, with a condenser six inches in diameter. By using a very brilliant light (magnesium), the unevenness of the gelatin coat will often effect some disturbance. The strengthening of carbon positives on clear glass I attain with blood-alkali and nitric uran-oxide, or with blood-alkali and pyrogallic acid.

R. Schlegel.

To prevent the moving and loosening of the collodion film, it is only necessary to rub and grease the edges of the glass-plate with a tallow-candle.

FRANCK DE VILLECHOLLE.

ON THE USE OF GLYCERIN.

(From Dr. Phipson's English correspondence, in the Paris Moniteur de la Photographie of March 1st, 1876.)

As glycerin is used more and more in photography, I think it useful to reproduce here a table of the solubility of divers photographic agents in this fluid. One hundred and twenty cubic centimetres (four fluid ounces) of ordinary glycerin will dissolve:

Al	um,					40 gr	ams.	(61	7	grains	.)
Ca	rbonate	of A	mmo	niur	n,	20	**	(30)8	τι)
Ch	loride o	f Am	mon	ium,	, -	20	"	(30	8	**)
Su	lphate o	f Cop	per,			30	"	(46	3	")
Su	lphate o	of Iro	n,			25	"	(38	6	**)
Bio	chloride	of M	1ercu	ıry,		7.50	"	(12	25	")
Iod	line,					1.90	"	(3	0	")
Сy	anide o	f Pot	assiu	m,		32	"	(49	4	44)
\mathbf{Br}	omide o	f Pot	assiu	m,		25	"	(38	6	**)
Iod	lide of	Potas	sium	١,		40	"	(61	7	**)
Mo	orphia,					0.45	"	(7	")
Ac	etate of	Mor	phia	,		20	"	(30)8	**)
Ac	etate of	Lead	i,		٠.	20	"	(30	8	")
Ch	loride o	f Zin	ic,			50	"	(77	1	")
Ioc	lide of	Zine,				40	**	(61	7	")

These figures are approximations, but will suffice as a guide in the use of glycerin in place of water for dissolving the above substances.

A FEW WORDS ABOUT LIGHTING.

A COMMUNICATION under this head, by Mr. George Croughton, to the Glasgow Photographic Association, contains some excellent suggestions, which have been verified by our own experience, and heretofore recommended, in substance, by some of the best photographic artists in our own country. But as these good things can hardly be too often repeated, we ask our readers to carefully peruse the following extract:

"The time has long passed when the sole idea of the photographer was to get as much light as possible from any direction. I can remember a circumstance which happened to a friend some fifteen years ago which has occurred to more than one. This artist had a long, low skylight in his studio—the only

light he could get, as there were chimneypots all round. He made very good pictures
in this studio, and succeeded so well that he
was enabled to buy the house and make a
grand place. He pulled down his old place
and built a new one a story higher, clear of
the chimneys, and put glass almost all
round. You may guess his surprise and
dismay when he found he could not get
such good pictures in his grand new place
as he could under the old skylight. He was
taught a practical lesson which many photographers have yet to learn, namely, that
it is the quality, not the quantity, of light
which is required.

"My experience is that diffused light of any kind is to be avoided, and if I had to build a new studio to-morrow under the most favorable conditions I would have no light on the south side. A long, steep ridge, which is both top and side light in one, is the one I should choose. But the form of light is not so important as the knowledge of what is wanted in a picture; that knowledge enables the photographer to get the effects desired in almost any kind of studio. My journey into Scotland proved this to me practically, for I saw well-lighted pictures, full of modelling, turned out in studios such as I had never seen in England. In Largs Mr. Fergus had just erected a studio which was all top-lighted. If I remember rightly there was no glass at the sides at all, and the sides were, at least, seven or eight feet high. Mr. Fergus, of Greenock, and Mr. McKenzie, of Paisley, both worked in the same manner, with a high top-light without side-light. This is only an illustration of the fact that knowing what to do and how to do it brings success, not the tools we work with; for the light is the photographer's tool, to be used with judgment and discretion.

"Now I will try if we can arrive at a knowledge of what to do, and how to do it will follow. We have as photographers to make a portrait, and as artists to make a picture if possible. To begin at the beginning: you must place your sitter in front of your background; if you place him (or her) in the open air, the shadows are all thrown downward from the predominance of top-light, the face is flat because the light

is from both sides, and if a photograph were taken in such a light the result would be weak, flat, and poor, with black shadows under the eyebrows, nose, and chin. Now screen off the direct top-light. The face is still flat, but the many downward shadows have disappeared. Now screen off one side as well as the top-light, and the face is not like the same. With the light all round the face it would appear broad, flat, and altogether deficient in character. Now it is just the reverse; there is too much light on one side and too much shadow on the other: every prominence upon the face is exaggerated, and the texture of the skin shows with a coarseness which is far from natural. As Artemus Ward says, 'Why is this thus?' Because there is too much direct side-light. Screen off the side-light until you get a delicate shadow upon the edge of the lighted side of the face. This will send the ear and the retiring edge of the cheek into their proper places, and concentrate the highest lights where they should be-upon the forehead, over the eye, upon the nose and chin; but still the shaded side of the face is too dark for photographing. And here comes the difference in practice. Some would use a screen to soften the shadow and give reflected lights. This is right enough if you use large screens and keep them far enough away from the sitter to give the reflected lights as they would be if reflected from the side of a room. In my own practice I prefer to use a little of my far-off top-light to soften the shaded side, but then my studio is very small, and I get my reflections from the wall of the studio; in a wider place reflecting screens would be necessary.

"There is nothing, I think, so useful as a three-leaved screen hinged and upon castors, white on one side and gray upon the other, and so hinged that one leaf of each color can be brought into the other if wanted. The facility with which the leaves can be placed at any angle for reflection is of great value. Small hand-screens are, in my opinion, a mistake. They concentrate reflected lights upon the face only, and sometimes only on parts of the face. The screen should be large enough to give the same reflected lights upon both face and drapery.

"So far, then, in making a portrait.

What comes next to make it a picture? A photograph may be a likeness, and yet not be either a picture or a faithful portrait. To make a picture it should have expression, repose, concentration, and keeping.

"The expression, to a great extent, depends upon the sitter; but the artist can put that sitter at his ease by his manner and conversation, and so get him at his best. Another thing tending to destroy an easy and natural expression is too great an amount of light. With some persons even an ordinary light will cause a frowning contraction of the brow, which gives to the best tempered face an ugly scowl. Temper the light to your sitter until he can open his eyes naturally, and he will not only feel easier but will look so, and pleasing conversation and easy manners will do the rest.

"Concentration, keeping, and breadth are the three essential qualities which will make a portrait a picture. The centre of interest is, of course, the head, and upon that the attention should be concentrated. This must be done by keeping all other parts of the picture in subjection to it. This is easiest done upon head and shoulder pietures, for there is nothing to sacrifice to the Sir Joshua Reynolds said, 'The more you put in a picture the more the sacrifice.' Wherever a light cuts against a shadow there will be concentration; therefore do not let your coat cut against a light background. I like a dark background, but not a flat one. By the use of curtains and a three-leafed screen I shut off the light from the top and side of my background nearest the light. By these means I get a gradation of shadow upon the lightest side of the sitter, so that the lighted side of the head is relieved against the shadow side of the background. I get balance upon the other side by the use of a dark curtain or piece of furniture. It could be obtained by graduating the color of the background upon A low side-light will destroy that side. keeping by lighting up the lower part of the figure to the same extent as the head, and so bringing into equal prominence the head, hands, and feet. My studio is so situated that a garden wall cuts off all light five feet from the ground, and I am all the better for it; for if I build another place I should not have glass lower than five feet from the floor. This keeps the lower parts in subjection. Be careful in placing accessories that you put nothing which will either by its color or reflected lights cut up the picture. Concentration is obtained by keeping all your lights together.

"Breadth is obtained by secondary lights lower in tone than the principal light being earried into the shadow. These lights should get lower in tone the farther they are removed from the principal light. There is concentration in a white spot upon a blackboard, but no breadth. A judicious gradation of lights into shadows and shadows into lights will give breadth to a picture."

A Multiplying Camera Attachment.

PILOT POINT, DENTON COUNTY, TEXAS, March 9th, 1876.

DEAR EDITOR: We have been constant readers and advocates of your most exeellent journal, the Philadelphia Photographer, for the last two years, and have received valuable information therefrom, which has paid many times over the subscription. The Photographer has been a resort for relief in times of trouble, and seldom fails to give good advice on almost any subject pertaining to photography. Now, having been benefited so much by the contributions of our fellow-craft published in the Photographer, we deem it no more than right to reciprocate in some way to your readers, and also to let the fraternity know that some, at least, of the Texas photographers are alive to the importance of reading and studying works on their calling, and in endeavoring to catch up and keep pace with the rapid advance of the art, whether they realize their aim or not, and, furthermore, to show that some more good may come out of Texas.

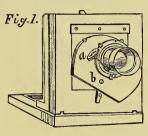
We in Texas are, as a fraternity, poor, and some of us young in the business; hence economy is a very important element to success. Therefore, with the hope of benefiting some of your readers who are in moderate circumstances like ourselves, we send you for publication a description and diagrams of a little invention made by ourselves, and which has been the outgrowth of necessity, the common parent of all improvements.

This invention might be called a rotary lens, or rather a rotary flange-head. The contrivance is original with us, but may have been brought out by some one else and patented, for all we know. If it has, we have not seen or heard of it. Still the thing is good, and has been the means of saving money for us, and we hope it may do the same for others.

Heretofore, nearly all contrivances for increasing the number of pictures on one plate with one lens have been applied to the back end of the camera-box, the sliding-tablet, for instance, which, until lately, has not been free to all, and which requires considerable ingenuity to construct. Now our flange-head is simple, and can be made by any one who has the least degree of ingenuity, and, besides, has some advantages over the sliding-tablet, which we will not enumerate at present.

We will now describe how to make and operate the apparatus for making two pictures on one plate, it being, in our opinion, the most practicable.

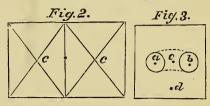
Fig. 1 shows the front view of the box, with the lens placed in position for making



an image on one end of the plate, the plate being placed horizontally. The lens is brought into position for the other end of the plate by moving it to that side, the piece to which the lens is fastened (a, Fig. 1) rotating on the screw b (Fig. 1), thus describing an arc of a circle around the point b.

Now, how to make one. First, make a flange-head to fit the box you wish to use; then take a plate the size you wish to work, a one-fourth size, for instance, and draw lines, as in Fig 2, thus finding the centres, c, c, of the two halves. Now measure the distance from c to c. Find the centre of the flange-head c, Fig. 3. Then mark a point at the right and one at the left of this

centre, both the same distance from it, and from each other the same distance that the points c and c (Fig. 2) are apart. Around



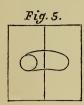
each of these points, a and b, Fig. 3, describe circles the size of the back end of the lens, or a little larger, to permit of the lens working freely. Mark a point d, Fig. 3, exactly under the centre of the flange-head. This is where the screw is placed on which the piece to which the lens is fastened moves. Next, cut out the small circles, and that part between them and the dotted lines (Fig. 3), and you have the flange-head proper made. Now take a piece of pine or other wood, one-fourth or three-eighths of an inch thick, wide enough to extend a little below d and a little above the opening (Fig. 3), and about twice as long as the opening, something like Fig. 4. Mark a point equidistant from the ends and near the bottom, a, Fig. 4; also another, b, Fig. 4, exactly above it, the same dis-

tance from it that d is from a or b, Fig. 3. Around this last point b, Fig. 4, describe a circle the size to admit the free working of the back end of the lens,



and cut it out. Around a, Fig. 4, describe the part of a circle at the top, as shown by the dotted lines, and trim off the outer part to the circle, also the lower corners, if desired. Make a hole at a, Fig. 4, for the screw to pass through, and fasten the screw to the flange-head at d, Fig. 3, and the apparatus is ready for the lens, which can be very conveniently fastened on by three or four small screw-eyes, by which arrangement it can be removed in less than half a minute and fastened in the same way to any other flange-head you may wish to use. Put into the flange-head two screws close to the top edge of the piece to which the lens is fastened, which will prevent the weight of the lens from pulling it forward

and letting in the light. Some other device may answer in the place of the screws.



Now make and place the cut-off, which is a partition in the camera (Fig. 5), to keep the two images from blending, and you have your apparatus ready for business.

We have described the one we are now

using and the first one we made. It is rudely constructed, but works satisfactorily, and has for six months. We use a one-half camera and a one-fourth lens. There are many little improvements that might be made to add to convenience and looks. Ours is made of pine. They can be made of some metal, and perhaps would work better. Be particular that the lens is the same distance from the ground-glass in both positions. If you find you are out of focus on one side, take the lens off, and make a careful measurement from the ground-glass to the outside edge of the piece to which the lens is fastened, and if there is any difference, make the correction. If you are still out of focus, it may be that the sensitive surface of the plate in the plateholder, when the tablet is in position, does not come in the same plane with the inside surface of the ground-glass. The remedy for this is simple.

We also have one constructed by which we can take four pictures on a one-half size plate, using a 4-4 camera-box and a one-fourth size lens. But, as we have already occupied so much of your valuable space, we will not describe it. However, if any of your readers desire a description of it, we will give it to you for publication.

The advantages of this contrivance are many. Nearly every photographer has a one-fourth size lens. With this size he can construct the apparatus himself, which will do all the work of a double or four-tube lens of one-fourth size, and thus save an outlay of money for such lenses, which is quite an item with the poor man. It can supplant the little ninth size gem tubes now used by so many, and which all-will admit are generally inferior instruments, thus making a gain of quality of work done without pur-

chasing new instruments. Furthermore, it gives the advantage of a change of position or subject at each exposure.

It can also be used as a stereoscopic lens with success in all cases where there are no moving objects, by simply making the two points of exposure to suit the size of the plate. In order to use it as such, it will be necessary to make a separate one for the purpose.

Now, finally, if this proves an advantage to only a few of your readers, we will feel greatly rewarded for the little trouble to which we have been in writing this article.

Let others who have anything which they think is good, and which will be a saving of time and money, come out with it, and let all be the partakers of the benefits.

Yours respectfully,

JONES & MOFFITT.

SOCIETY GOSSIP.

PHOTOGRAPHIC SOCIETY OF PHILADEL-PHIA. — Stated meeting held Thursday, April 6th, 1876, the President in the chair.

The President announced the death of Robert Shaw Sturgis, Esq., and gave a short account of the services which this gentleman had rendered to the art of photography.

The Corresponding Secretary presented a copy of the "Agenda Photographique," by Mr. Leon Vidal, of Paris, France. On motion, a vote of thanks was tendered to Mr. Vidal.

Dr. Wilcox offered the following resolution:

Resolved, That the death of Robert Shaw Sturgis, Esq., has caused a widely-extending circle of sorrow, for he was generally known and greatly esteemed. To this Society, of which he was an active member for many years, his decease is especially painful. His love for the art was warm, and his taste in appreciating and his skill in producing the higher class of pictures, was known to all familiar with this science and favored with his acquaintance. The Photographic Society desire to express in these few lines their respect for his character, and profound regret at his unexpected death.

Accepted.

On motion of Mr. Hewitt the above resolution was ordered to be entered on the minutes of the Society and published in the daily papers.

Dr. Seiler said that, having been present at an outdoor meeting of the Society held in June last, he was so impressed with the usefulness of such meetings, in respect to the opportunities they afforded for comparison of results obtained by different operators on the same views, besides the pleasure of such personal reunions, that he was desirous of having the plan continued. He therefore moved that a committee be appointed, to report at the next meeting of the Society, such information as they could obtain in respect to suitable localities for such meetings, means of access, transportation, etc., etc.

The chair appointed Messrs. Seiler, Dixon, Wallace, and Young to serve as committee.

The President gave an account of some experiments which he had recently made in regard to the keeping qualities of dry plates. Having on hand a batch of "Liverpool" plates, not less than four years old, he had exposed one with a 11-inch rapid rectilinear lens, second smallest stop seven minutes in diffused light. An excellent negative resulted, though the plate required much forcing. He had also exposed a plate prepared by Mr. Carbutt some ten months since, which gave a very good negative, more like a wet plate in quality than the Liverpool plate. The President also spoke of a very similar result obtained by the Secretary with some Liverpool plates purchased by him in 1872; in short, in these plates the keeping qualities were all that could be desired.

Mr. Carbutt spoke of the injurious effects of gas from coal-burning furnaces upon dry plates in general, and upon bichromatized gelatin. He also spoke of the use of alcohol for a final wash to dry plates as materially assisting the drying. He recommended beer as a preservative.

Mr. Hewitt spoke in favorable terms of the gelatino-bromide process.

Dr. Seiler made some remarks in relation to removing negative films. He also exhibited some Rockwood permanent prints from microscopic enlargements of his own, which were very successful.

On motion, adjourned.

ELLERSLIE WALLACE, JR.,
Recording Secretary.

PENNSYLVANIA ASSOCIATION, PHILA-DELPHIA.—April 11th, 1876. The stated meeting was held at the gallery of Messrs. Mahan & Keller. President H. S. Keller in the chair.

Minutes of last meeting read and approved.

Several of the members who had received portions of the porcelain collodion made at the last meeting reported. Mr. Marston had made several prints with it successfully, and stated they were the best he ever made on porcelain.

The remainder of the evening was taken up by the members giving their views on posing and lighting. Several prints were shown, and positions made by the members, and explanations given in regard to lighting them.

Mr. B. F. Spencer was present and exhibited his head-rest, making several positions, and showing the various ways it can be used at several angles and at any position of the body, with perfect ease and securing steadiness.

On motion, adjourned.

CHARLES EVANS,
Secretary,
814 Chestnut Street.

BOSTON PHOTOGRAPHIC ASSOCIATION met at the Studio of J. W. Black, Friday, April 7th, 1876.

The President having sent word that it would not be convenient for him to be present, Mr. Frank Rowell, the Vice-President, presided.

The records of the last meeting were read and approved.

A telegraph dispatch was received from Mr. John Carbutt, Superintendent of Photographic Hall, Philadelphia, stating that it had been rumored that Boston would not send any photographs to the exhibition, and said that it would be a poor show without them.

Mr. E. H. Lincoln, who was announced

to deliver a lecture for the evening, was then introduced, and proceeded to give a very interesting and instructive lecture on the Origin and Early History of Photography.

He said that the year 1876 is with the nation a year of retrospection, and he would ask photographers to look back awhile with him and trace the progress of our art.

The alchemists of the middle ages had in their laboratories a substance which from its appearance they called horn silver. They saw that this substance, which is the muriate or cloride of silver, darkens very rapidly on exposure to the light. What was the cause of this change was to them a mystery.

Perhaps the first germ of photography as an art is presented in an experiment of Priestley's, who caused some chloride of silver to be deposited on the side of a glass bottle, and then putting around the bottle a piece of dark paper, out of which letters had been cut, the arrangement was exposed to the sun. All those portions upon which light had fallen through the openings turned black, while the protected portions remained white. Nothing further seems to have been done in relation to this discovery until 1802, when Wedgewood, son of Wedgewood, of porcelain-ware fame, and Sir Humphry Davy, made their first attempts at photography.

The camera obscura is a curious optical instrument, invented by Porta, an Italian philosopher, of the sixteenth century. Whether owing to the tax on window glass or not is not known, but he had a room to which light was admitted only through a small hole. On entering the room pictures were seen on the opposite wall of all that was taking place outdoors. A small box was soon substituted in place of the room, and a movable polished slide inserted. The suggestion of using a focal lens or glass in place of the hole was soon adopted in this form; the instrument was used by Davy and Wedgewood.

The first recorded observations in reference to change in the color of the salts of silver were made by Scheele, the distinguished Swedish philosopher, in 1777. Wedgewood, the son of Wedgewood, of porcelain-ware

fame, made the first really practical experiments.

Mr. Niepce is the first one who has the honor of producing permanent sun pictures. His experiments were made with asphaltum or bitumen of Judea, and the peculiar property this substance possesses had been hitherto unknown.

Niepce gave the name of heliographs to his prints, and he seems to have made them before 1826.

Such work as he succeeded in doing, however, was only line work, and in 1829 he associated with Daguerre, and together they tried to fix the image of the camera obscura. In 1833 Niepce died without reaching the object of his hopes, and Daguerre continued his experiments alone, using silver plates which had been exposed to the vapor of iodine.

Those iodide of silver plates were sensitive to light, and an image was produced upon them when exposed in the camera, but a very long exposure was needed.

Accident brought finally to Daguerre the long-looked-for object of his hopes.

The French Chamber of Deputies voted Daguerre a pension of 6000 francs, provided he made public his discovery.

It was at a memorable public meeting of the French Academy of Sciences, in the Palais Mazarin, on the 19th of August, 1839, that Daguerre illustrated his processes by experiments.

From France the daguerreotype rapidly spread over Europe and America.

In this country Dr. J. W. Draper, of New York, was the first to practice, and in his laboratory, Prof. S. B. Morse, the inventor of the electric telegraph, learned the art.

Niepce de St. Victor, the nephew of Niepce, the friend of Daguerre, first made glass negatives, yery different from the present way, which were free from the blemishes of paper negatives, and from which any number of copies could be made.

This method was invented in 1847, and was practiced very extensively until 1858, when Archer published, in England, the details of the collodion process, which was substantially the art as practiced to-day.

In 1845, Fox Talbot issued The Pencil

of Nature, the first book published illustrated by photographs. In 1844, Mr. R. Hunt first used the sulphate of iron.

A very fine stereopticon exhibition was given by Messrs. Black and Lincoln, illustrating the lecture from pictures made in the early stages of the art, with which all seemed much pleased.

Some good large pictures, 16 x 20, were exhibited by Mr. E. A. Holten, which attracted much notice and attention from the artists present.

Mr. M. L. Wright, a visitor from Providence, showed some very pleasing photographs made in the Promenade style.

There being no further business the meeting adjourned.

A. N. HARDY, Secretary.

PRACTICE.

PRACTICE No. 1.

WHILE the rest were out on a duck hunt, I tried a plate, which was a failure, being all full of dark spots. Supposing it to be an old bath, and as the customer was in haste, I did not have time to filter, I at once poured into it glacial acetic acid, stirred and left stand a few minutes, tried another plate; the result I will report as Practice No. 2.

H. C. W.

PRACTICE No. 2.

Report of the acid-charged old bath.

To my surprise, I succeeded in getting a soft, mellow, and satisfactory picture, almost entirely free from spots. H. C. W.

PROCEEDINGS

OF THE

Executive Committee of the N. P. A.

A SPECIAL MEETING of the Executive Committee was held in Philadelphia on Wednesday, 19th instant, to consider the feasibility of holding a convention this year. The Secretary made the statement that two great expenses usually attendant upon holding the conventions, could this year be avoided, namely: 1. The necessary expenses of an exhibition, such as the rent

of a hall, preparation, hanging, etc.; and 2. The cost of a hall for holding the meetings of the convention, since the Centennial Exhibition at Photographic Hall would supply the first, and for the second the Secretary had obtained from Director-General Goshorn the use of the "Hall of the Jurors" within the Exhibition limits, for the purposes of the convention, free of charge.

The other expenses could be somewhat curtailed by making the convention of shorter duration than usual. Moreover, the holding of a convention was urged by many members.

A free discussion followed. The unanimous feeling was that what with the great lessons to be learned at the Centennial Exhibition in the art and other departments, especially in the fine array of photography in the only Photographic Hall ever known, and that it would be the only way to maintain the life of our Association, therefore it would be criminal not to hold a convention. Thereupon Mr. Moore moved that a convention be held, and upon the second of Mr. Wilcox, the motion was carried.

The following resolutions were then adopted, viz.:

"WHEREAS, Leading photographers have written the Secretary urging the holding of a convention,

"Therefore, Resolved, That this Executive Committee invite and urge the members of the National Photographic Association to meet in convention at the Jurors' Pavilion, International Exposition, Philadelphia, on Tuesday, Wednesday, and Thursday, August 15th, 16th, and 17th, 1876.

"Resolved, That the Treasurer and Secretary urge the members to pay their dues, to enable this committee to arrange for the necessary expenses of the convention, and for publishing the report free.

"Resolved, That the Secretary invite Dr. Vogel, Dr. Jacobsen, and other foreign photographers who are coming to America this year, to be present at our convention.

"Resolved, That the Secretary be and he is hereby instructed to get the refusal of the aforesaid hall at the time mentioned.

"Resolved, That short, practical papers be and are hereby invited for reading at the convention, and that every one be invited to come and help lift up our Association from laxity to life.

"Resolved, that the photographic magazines at home and abroad are hereby requested to publish these resolutions."

Mr. Robert J. Chute was elected Local Secretary, with power to make the necessary arrangements in conjunction with the Permanent Secretary, and publish the same. The Treasurer, Mr. Moore, stated that a portion of the dues had been paid, and that some new members had been recently admitted.

On motion adjourned.

EDWARD L. WILSON,
Secretary.

THE NATIONAL PHOTOGRAPHIC ASSOCIATION.

A GRAND CENTENNIAL CONVENTION.

WE have relented. We said we had had our say, and should say no more; but we found this an uncomfortable conclusion to come to. Might it not be that the members only needed to be informed that a convention would be held to have them rally with their accustomed promptness, and make the National Photographic Association as living an institution as it ever was? It seemed too good an opportunity to be lost; the grand privileges of this Centennial Exhibition will never occur to any of us again, and not to attempt to make it beneficial to the fraternity in its highest sense was a sacrifice we could not become reconciled to, notwithstanding our efforts during the past few months have availed so little in awakening an interest, or calling forth any substantial evidences of a disposition on the part of the members to give the Association further support. With this feeling prompting us we determined to use our influence with the Executive Committee in favor of calling a convention; and at a meeting held in this city on the evening of the 19th of April, as will be seen by the report in another column, it was voted to hold a convention of the National Photographic Association on the 15th, 16th, and 17th of August. So, brother photographers, we are to have a

convention, and now we feel easier; a great responsibility seems to have been taken from us; the skies look brighter; and as every day reveals more and more of the great and good things which are in store for us as photographers, as citizens, and as appreciative, intelligent beings, we rejoice that the National Photographic Association has an existence, and that it may be the medium this year of accomplishing great good to the fraternity.

It only remains now with the members to respond to this call, to determine to what extent the convention shall be a success, for our enthusiasm is now all aglow; and we are hoping that, on the 15th of August next, a meeting shall be held if there is nobody to attend it but the Executive Committee!

But we have little to fear on this score; we know the attractions will be too great to be resisted, so we will here say to one and all, make up your minds at once to come, and begin to arrange your plans to favor the middle of August as your time to visit the Centennial Exhibition.

We have secured the use of a very beautiful hall in the Judges' Pavilion, within the Exhibition grounds, free of charge. President Rulofson telegraphs that he will be here to preside; Prof. Vogel will be here from Berlin, and we must all give him a true American greeting. It is expected that the number of foreign photographic visitors will be large, including English, French, German, Italian; indeed, nearly every nation under the sun will be represented, and these, we are sure, will add immensely to the interest of our convention. Then there is the photographic exhibit in Photographic Hall, a splendid building, erected by the Centennial Board of Finance and American photographers, exclusively for photography-an honor and recognition our art has never had accorded it before in any country. Here, under the most favorable conditions of light and arrangement, will be gathered the best works our art at this time is capable of producing; here they can be studied free from any extraneous influences which might tend to distract the mind or disturb the inspiring emotions which we are sure must be felt by

every lover of photography who visits Photographic Hall; and he who fails to be moved, to be lifted up, to be filled with high aspirations and noble resolves for future efforts, who experiences no responsive thrill in his own being to the elevating influences of this charming place, must be like the man of whom Shakspeare wrote, who had no music in his soul:

"Fit only for treasons, stratagems and spoils."

With all these good things in store, let us hear no more bickerings, but pay up our dues, and prepare to come together in August, to have the grandest photographic jubilee the world has ever seen.

PHOTOGRAPHIC RIGHTS.

Résumé.

ABOUT one year ago I was writing the first words in my series of papers on this subject. That photographers have all the rights I claim is generally admitted in the abstract, but regarding the best means of asserting and maintaining these rights there is naturally much difference of opinion. As a sort of basis for argument, I submitted in rough outline a plan of organization that I believe would lead to great improvement in our business relations with the public, if once effectively adopted This plan, although not recommended to the craft by a famous name, such as might justly command attention, but simply depending on its own inherent reasonableness for recognition, by appealing to the conscious experience of all photographers, has yet received approval that may truly be called encouraging. To be sure, it has been treated with comparative indifference by the majority, as all social reforms are by the majority of the public, who always "prefer to bear the ills they have, rather than fly to those they know not of," and always wait to be convinced by the experience of others before taking decisive steps in any new direction; they wait for the experience of those more daring leaders who first plunge in and ford all the unknown streams arrived at in the march of enterprise, to show more timid souls the path of safety toward success.

In this sense the warm approval of Mr.

Alva Pearsall, backed by your graphic history of his courageous self-assertion and assured success on a similar basis, is of far more value in convincing the fraternity than all I have written. I only congratulate myself in being partially the cause of drawing out such valuable testimony. Thus we have the Messrs. Pearsall arrayed on opposite sides of the question with their artistic influence, and as time goes on the craft will be able to judge between them by the results achieved. And, although I believe Mr. G. F. Pearsall is as fatally mistaken, in opposing organization for maintainance of photographic rights and interests, as men would be who opposed any form of military organization in defence of their rights and liberties in their common country, I shall always maintain that he has done valuable service in obtaining legal recognition of the photographer's right to pay for his services in trying to please, even when he fails to please. How most excellent work, many times repeated, may utterly fail to please and even be contemptuously rejected, Mr. Pearsall has conclusively shown by the experience leading to his celebrated suit.

This is a point which many photographers fail to fully comprehend or maintain. For instance, on page 24 of Mosaics for 1876, Mr. E. T. Whitney says: "The problem of the day to solve is, why are photographers as a class so universally poor? My theory is that, owing to there being so many in the business, together with high rents, expensive help, and resittings without cash in advance, are among the principal reasons why so few are making money in the photographic business. Prices are too low, operators too generous, eustomers too exacting; there is a want, a great want, of independence born of conscious power that you are master of the situation."

Now those last are brave words, well calculated to brace up the weak nerves and faint hearts of poor photographers, as a brisk north wind might brace up the fainting spirits of tired travellers under oppressive summer skies. They are the voice of a courageous soul that cannot tamely submit to injustice without protest and resistance, that feels proudly conscious he is, or

ought to be, "master of the situation." Yet, with all due respect, I must say that on the next page there is a recommendation that seems to weaken the effect by failure to truly comprehend "the situation."

He says: "Make proofs immediately, and be sure and get your pay then and there, if proof is satisfactory."

How one who can feel so ardently and speak so powerfully for the right can be led by habit and custom to make such a fatal admission as is contained in that clause, "if proof is satisfactory," I can scarcely conceive. To be sure it would be utterly absurd to expect your pay, "then and there," if the proof is not "satisfactory;" but if it is, why ask for pay; the danger is then over, the battle is won. But if it is not satisfactory, what then? Decidedly it is the customer, not "you," who is "master of the situation." He has got you with a ring in your nose, and can make you dance as he likes. He can lead you "whither he will" through a wilderness of whimsical fancies. You are at his mercy, and if he is tyrannical he can oppress you, or if generous may let you off more easily; or he may walk out and leave you to whistle for what you have done, for you have admitted that he owes nothing if not pleased. And each and all these phases occur almost daily in every gallery acting on that principle, and ever will so long as that principle is admitted.

A correspondent of your Chicago contemporary states the difficulties of the "situation" in similar terms, and the remedy in a very easy manner, "by each photographer for himself commencing at once to require payment in advance, without waiting for any organization or agreement."

How easy by recommends on that basis we could remedy at once every evil and abuse under heaven. The same writer also recommends to tear down our signs, such as "we study to please," and all of similar import. That also betrays failure to comprehend the situation.

The assuming of such higher plane in our art, instead of relaxing our endeavors to please, should pledge us to redoubled efforts, not with base servility, but from nobler motives, striving to prove worthy of honorable confidence. Where payment is required, and made in advance, the artist and the customer bear to each other relations of mutual respect; their interests are equalized, neither being in the other's power, and by mutual deference and conciliation a far more satisfactory result will be attained than if either one is sole dictator.

But I am running on too fast and far for one article; yet if not wearying I will continue this time-worn subject into all its phases.

E. K. Hough.

NEW YORK, April 22d, 1876.



DEAR SIR: Can you inform me how I can make very sensitive paper, which light will affect instantaneously? Such paper is used in the observatories in England, to record variations of the barometers.

DANIEL F. LEAHY.

Can you give in your next a receipt for varnish that is perfectly transparent? I mean a varnish that is colorless, and will dry with a brilliant or glossy surface; by so doing, you will greatly oblige

AN AMATEUR.

EYELASHES FOR CAMERAS.

OUR old friend Mr. J. F. Ryder has recently patented a most useful invention, which we think it our duty to bring to the minds of our readers. We cannot do it better than by using his own language, which we quote from his circular, viz.:

"All photographers know that the camera is like the human eye in seeing things photograpically. All know the eye sees better when protected from strong light. Many know that too much light enters the eye of the camera, and prevents its seeing and impressing the image clearly;

particularly is this the case in making shadow effects, where the camera is more or less pointed toward the light. Again, when the sunlight enters the operating-room and falls directly upon the camera, even through a curtain, and again in outdoor viewing, all have experienced the bother of the sun in the lens.

"This newfangled notion meets the trouble and effects a cure.

"Its next value is the easy and effective means of opening and closing the cameratube. It is attached to the upper front end of the tube, and when open, forms a canopy or awning, projecting sufficiently to cover the mouth of the tube when closed. The framework is of metal, and it is opened or closed by means of a spring hinge. It is covered with black velvet, which is extended beyond the frame and forms side curtains to more effectually screen the lens. A touch of the hand immediately opens or closes the camera. It is always in its place and always ready.

"The operator who spleens against running across the room, chasing the cap as it falls from the camera, or who finds the cloth on the floor instead of covering the lens, will take kindly to this sensible improvement.

"The proprietor who likes to keep his lens clean from dust and dirt and the strong light shut out, to prevent the gradual yellow tint that strong light surely brings, and makes the lens work slower and more slow, year by year, will welcome it.

"Directions for adjusting accompany the lashes."

Five dollars will bring one of these useful articles post-paid to your camera front. Get it there, and then never allow it to flop away from you. The Centennial Photographic Company are using them on all their cameras.

The prize offered by us for the best retouched negatives brought forth only two responses, and the parties are welcome to have the negatives back, as the jury selected do not deem either worthy of a prize, the work being only medium. We regret such lack of enterprise on the part of the photographers of America.

An Important Patent Decision.

THE CIRCUIT COURT OF THE UNITED STATES.

Western District of Michigan-In Equity.

SIMON WING,
ALBERT S. SOUTHWORTH, and
MARCUS ORMSBEE,
vs.

JOSEPH H. TOMPKINS.

Heard January 25th, 1876. Decision April 5th, 1876.
WITHEY, JUDGE.

LETTERS-PATENT were issued to Albert S. Southworth, April 10th, 1855, which were surrendered and cancelled, and September 25th, 1860, upon amended specifications, reissued letters were granted for a new and useful plateholder for cameras. The claim is "bringing the different portions of a single plate, or several smaller plates, successively into the field of the lens of the camera, substantially in the manner and for the purpose specified." In describing his invention the patentee, in his specification, states that it had "been customary to use a separate plate for each impression, the plate being removed from the camera and replaced by another; where several impressions of the same object were to be taken, as in multiplying copies, or for the purpose of selecting the best-timed pictures, this caused considerable delay and trouble, to obviate which is the object of my present invention."

Complainants are assignees of the patentee, and it is admitted, if the patent is valid, that defendant has infringed. The only question I have occasion to examine and decide is, whether the patentee was the first and original inventor. Incidentally the question is raised of abandonment.

It is insisted that the evidence shows Southworth to have conceived and perfected his invention as early as the winter of 1847-8, if not earlier. And it is shown that in 1851 the validity of the patent was declared—Wing vs. Richardson, 2d Fisher's Patent Cases, 535; also that there have been sixteen other decrees upholding the letterspatent—not all contested cases, however.

On the other hand it is claimed that the proofs show the patented improvement of a sliding plateholder for cameras, was known and practiced by photographers as early as 1847 or 1848, and that the patentee did not perfect his invention until the fall of 1854, long after the machine was in use by others; that in 1869 Mr. Justice Nelson, in Wing rs. Schoonmaker, 3d Fisher's Patent Cases, 607, held the patent invalid. The last case was appealed to the Supreme Court of the United States, which court was equally divided, four of the judges for and four against the patent.

But one case, it is said, has since been decided, Wing vs. Dunshee in the U. S. Circuit Court for the District of Massachusetts, not reported, in which the previous ruling in that circuit by Mr. Justice Clifford in the Richardson case was followed. The last reported case is that against Schoonmaker, holding the patent for a sliding plateholder invalid, and in which there was apparently important and material testimony not put into the case against Richardson, decided eight years earlier. Presumptively, this would account for the different judgments of the two eminent judges.

In considering the additional testimony in this case, I have necessarily been led to examine the evidence in previous cases, stipulated into this. Briefly, Southworth's patent, owned by complainants, rests upon the fact that one Coburn, in 1846, made for the patentee a camera box having wings on its side in which a sliding platcholder could be placed, but no platcholder was made or used in connection with it, or otherwise. The camera was found to be too expensive, and was discarded. Then Southworth had one Stewart make a sliding front to a camera, by which he moved the lens over the plate, on which impressions were taken at any desired point; but this process in multiplying pictures on one or more plates required either the camera or the sitter to be moved at each separate impression taken, and was in my judgment far from being identical in principle with the sliding plateholder, by which pictures may be multiplied on one or several plates without moving the camera, the sitter, or object.

Nothing further was accomplished by

Southworth in perfecting the idea which he evidently had, of multiplying pictures by some sort of an adjustable plateholder, and which he seems to have abandoned when he discarded the Coburn camera, until 1854, some time after his return from California. In 1849 he went to California and remained nearly two years, till January, 1851, during which time he worked in the mines and gave no attention to the art of photography. When he returned to Boston he experimented for a time in reference to the stereoscope, and was in poor health, altogether occupying him till the fall of 1854. In this time he perfected and took out one or more patents for the stereoscope. In the fall of 1854 he had the varioloid, confining him to his room for more than two weeks, and then again he turned his attention to the adjustable platcholder. During that fall he perfected his invention and applied, in December, for and obtained a patent April, 1855. Southworth states, as a reason why he did not earlier make application for the patent, that he had not perfected the mechanical parts to his satisfaction, so as to carry out his idea readily. Then the California excitement came on, and he followed others to the land of gold.

After he was taken with the varioloid, in the fall of 1854, he says he shut himself up in his room, and "I applied myself to finish this idea of taking pictures rapidly in the centre of the lens, by adapting the movement in a frame which would fit any ordinary camera." This view of the progress of his invention is not substantially changed by any subsequent testimony, and in my opinion dates his invention of a movable plateholder in the fall of 1854.

This was the judgment of Mr. Justice Nelson in the case against Schoonmaker, in 1869, and with which I fully coincide.

Southworth testifies again in Wing vs. Anthony, in 1874, stipulated into this case. On his cross-examination he says: "I think I used the sliding plateholder in a camera as early as 1852." For him to swear to what he "thinks" he did in 1852 does not establish any fact. It is too late to change ground as to the time of his invention, unless the proofs are stronger than anything before me.

It may be worthy of notice, in this connection, that if Southworth perfected his invention in 1846-7, or '48, and did not apply for a patent until the spring of 1855, there would seem to be a grave question whether he had not by laches abandoned to the public what he had invented. He makes a faint showing of ill health and want of pecuniary means during some part of the interval, but he had health to visit California, and there engage in digging for gold for about two years. After his return he had health enough and money enough to engage "in considering new ideas, new plans, and new inventions relating to the stereoscope and other things connected with our (his) business, studying upon and taking out patents," before he turned his attention to applying for this patent.

If it had not been said in Wing vs. Richardson that there was no abandonment, because the reasons assigned, poor health and want of pecuniary means, excused want of diligence, I should be disposed to say that the six or seven years' delay was fatal to the validity of this patent. The point is raised in this case, but I need not rest my judgment upon it.

The next consideration is whether the sliding plateholder for multiplying pictures on one or several plates, had been known and used in cameras prior to 1854, and if so, when? I make but brief reference to testimony.

The testimony of W. A. Pratt, taken December, 1873, in the case of Wing et al. vs. Tompkins, is quite satisfactory on the point, corroborated as he is in material portions of his statements.

He says he invented the sliding plate-holder at Alexandria, Va., in 1845—presents a model of it and pictures taken by that method, four on one plate, of his son, on his birthday, with the date of taking, at Richmond, Va., indorsed on the back of the plate at the time, "March 6th, 1847."

He opened a gallery at Richmond in 1846 On his sign were the words: "Virginia Daguerrean Gallery, established 1846;" here he made many thousand pictures for sale by this method of the sliding plateholder. He thus made pictures of the members of the Constitutional Convention of Virginia in 1850-51—named several members whose pictures were taken,—also members of the legislature of that State in session in 1850-51. He explained his method of multiplying pictures to others. Among them one M. P. Simons, who testifies to the same facts, and that he used the method in taking impressions. The camera and plateholder used by Pratt were burned at Richmond in the great fire of 1865, hence they are not produced.

William Stroud learned of the movable plateholder and process for multiplying pictures on one plate at Philadelphia in 1852, and in that year used a camera and adjustable plateholder in multiplying pictures.

He fixes the time by a bill rendered for poplar boards used in his gallery in making a revolving platform for taking stereoscopic pictures by this method, bearing date December, 1852—made an exhibit in this case. He also produces a leaf from his daguerrean register, in which, under date of August 11th, 1852, is an entry of pictures which were taken by this method. One of the pictures is made an exhibit. He also produces the camera and sliding plateholder used by him in taking and multiplying these, and many other pictures.

I pass over other testimony of prior use of complainant's patented invention, remarking, however, that the evidence to discredit the testimony of Pratt, and to show that certain exhibited pictures could not have been taken in the centre of the focus of the lens, nor by the patentee's process and plateholder, is fully met by the testimony on behalf of defendant on the same subject.

Satisfied, as I am, upon both of the topics discussed that the patent is invalid, I have no hesitation in so ruling. My judgment is supported by that of Mr. Justice Nelson, in Wing vs. Schoonmaker, in which that learned judge said: "The proofs are full that this idea of making the same impression on different parts of the same plate by the use of a sliding platcholder existed and was carried into practical operation by working machines as early as 1847–48, and was in use by several practical photographers some seven or eight years before the date of the patent of Southworth, and before he had perfected his machine."

There has been no ruling in this circuit upon this patent, so far as I know. This fact taken in connection with the different judgments in Wing vs. Richardson and Wing vs. Schoonmaker, eight years apart, and upon somewhat different facts, leaves me at liberty to follow my own judgment, and especially so in view of the additional testimony put into this case.

A decree will be entered for defendant.

The above is sent to us by the defendant in this case, who has been most persistent in bringing it to an issue. He accompanies it by the following letter, which should be hint enough to all the honest interested parties.

GRAND RAPIDS, MICH., April 21st, 1876.

Mr. Wilson.

DEAR SIR: For your own information, and to illustrate the correctness of your prophecy, I only have to say that, in my late suit, my cash expenses have been nearly \$1200, besides my own time given in doing the hard work. Less than half of this has been paid me as yet. Next month I will send you a list of contributors if you would care for it. Many subscribers fail to pay, but I do not complain. I have benefited myself as well as many others by doing what might have been done years ago, but the world is some better for my efforts even at this late day.

Very respectfully yours, J. H. Tompkins.

GERMAN CORRESPONDENCE.

BERLIN, March 31st, 1876.

New Progress in Phototype Processes— Reproduction of Reversed Negatives by the Carbon Process—Enlargements in Carbon — Photographing the Less Refrangible Rays of the Solar Spectrum.

THERE are still many photographic processes to accomplish which numerous searchers are working, and which promise great profits to those who are successful; but, notwithstanding every possible endeavor, they have not yet been completed. Among these is the making of printing-blocks by aid of photography. He who is able to solve this problem can gain hundreds of thousands by

it; perhaps many have found it, but of course they keep secret the treasure, while others try in vain. Artists, full of despair, on account of the spoiling of their most beautiful drawings by bad workmanship of the cutters in wood, call on me every year. They all say: Furnish us a process by which you are enabled to reproduce on wood any drawing as a printing-block. Photoblock prints were lately shown by Gillot in Paris which were exceedingly well made; at all events they are the best I have seen. The process has become known in parts, and Herr Franz at Vienna made reproductions with success. But one cannot assert that the process is simple; it does not only require photographic but also lithographical ability, and at the same time knowledge in etching the plates of metal.

At first a negative is made from the drawing, which has to be strengthened with sulphuric ammonia to make it as intense as possible. The negative is copied upon paper which is covered by a coating of gelatin of the following composition:

Let the paper float one to two minutes on the warm solution; dry it twenty minutes in a warm current of air; put it once more on the solution of gelatin, and let the same run off on the opposite side from the first drawing. The paper is lighted under the negative one minute by bright, and ten to fifteen minutes by subdued light; then the copy is blackened. The ink used for this purpose is after Waterhouse, of the following preparation:

Mix the ink with oil of turpentine till of the consistence of honey; roll it out on a stone and lay the copy thereon; let the whole pass through the press, and put it afterwards into water of 90° F. until the lines come out; wash after with warm water, then with a sponge, and subsequently dry it. The print thus obtained is carried over on a plate of zinc by a lithographic process, and is etched with gum-water and After having washed gallnut decoction. away this etching it is rolled with a greasy ink, which consists of lithographic ink, white wax, colophony, and varnish. Dry this plate and distribute on the surface pulverized colophony by dusting. This colophony adheres to the blackened places. The plate is cleaned by dusting, and the back and rim besmeared with shellac. By this time the plate is deeply etched, for which purpose one makes use of a rocking-trough, which must be kept in motion during the whole operation, in order to keep the fluid of equal strength. The first etching must be very slight, and only be extended to the white spots which are found within the deepest blackness. When the residue in this blackness has come out wash the plate, dry and warm it uniformly over a stove. The colophony then melts and runs down to the lines which have formed an elevation by etching.

It depends not upon obtaining immediately the sufficient relief for the print in the printing press, but every single etching must rather be limited to the different gradations which are given by the hatching of the drawings, so that the part having been sufficiently etched by the acid is protected against its further effects.

From these result a succession of operations which can only be properly executed upon a basis of adequate experience.

Let the plate grow cold and roll it anew with lithographic ink; dust again with pulverized resin, and put the plate again into the etching-trough, in order to etch it now somewhat stronger. Afterwards it is again washed, dried, and warmed, so that the resin comes to the place which shall protect it from further etching. In the same manner it is done six to nine times. The half-shades then form a perfect covered black substance; whereupon the plates are put into strong etching-water, in order to excavate deeply the white places. Large white places must be covered with shellac before the etching, in order not to weaken too much the etching-water.

After finishing the etching the plate is

carefully washed with kali-lye and benzine respectively, and, when dried, it is ready for printing.

It is a matter of course that the asphalt process can also be used for this process. The plate of zinc is covered with the solution of asphalt and exposed under a negative.

Rodriguez, the director of the Geographical Institute of Portugal, was even successful in obtaining plates of semitones. He rubs sugar of milk together with asphalt and lavender-oil; adds a mixture of asphalt and benzine to it, and places the whole on zinc, dries, exposes, and develops in connection with turpentine-oil, and puts them into the etching-trough. Here the acid loosens the sugar, and thus perforates the protected asphalt layer. The result is a tone which almost refracts the semitones of the original, and by this it is possible to obtain the restitution of the same by print.

With my last communication I gave you information about a simple process to make a reversed negative for the carbon printing process, furnishing first of all a transparent positive upon glass, which is taken off and turned by means of leather-collodion. There it has become apparent, that the colander placed upon glass does not cleave very close, so that flat blisters easily arise, which interfere in copying. They can only be avoided in the following manner: Cover a plate of glass with collodion, with 1 per cent. of cotton dip into water, and leave it in there until the greasy lines have disappeared, then put it into the bowl containing the drawn off print under water. Lay the colunder carefully upon the collodionized side of the plate; take the whole out of the water; apply a piece of smooth paper, and press the whole down with the squeegee. The layer dries hard in a short time and cleaves closely to the glass.

Since the carbon printing process has become better known, the taste of the public for lifesize pictures has also increased. In former times we had almost nobody in Berlin who made lifesize pictures; now a large establishment will be shortly erected for that purpose, and at the same time the inquiry for transparent positives is daily increasing. Thus we are indebted to the carbon printing process, which is daily be-

coming more popular on account of the excellent results it is capable of producing. I am convinced that the carbon printing process will also soon be exclusively employed in America.

As I perceive from English newspapers, my invention of making bromo-silver sensitive to the weak refrangible rays of the spectrum, is still the object of discussion.

Captain Abney has lately made experiments with resin, and found that the same makes bromo-collodion sensitive for the less refrangible rays of the spectrum. With an exposure lasting ten to twelve and a half times as long as for blue, he has obtained by means of his resin-collodion a light impression in the red of the spectrum, and he now believes he will be able to thus explain my results and Waterhouse's which we obtained from colors. The same form combinations of resinous nature with bromosilver.

Here I remark that I have photographed in the time of exposure heretofore given the yellow and red of the spectrum with pure bromo-silver without resin, and that Eosin has found that the sensitiveness of bromo-silver and Magdala red, raises the sensitiveness of chloro-silver for yellowgreen and yellow in such a degree that the plates for this weak refrangible part of the spectrum are considerably more sensitive than for blue. This enormous gradation of the sensitiveness cannot therefore be explained from the very little gradation of the sensitiveness which, after Abney, the resin effects.

Captain Abney is mistaken if he believes that it requires a long time of exposure for the reception of the less refrangible part of the spectrum by means of my colored collodion. I have made an impression of yellow and orange, without condenser, within ten seconds. But when the favorable effect of the color just appears on the place of the spectrum, which absorbs the loosening of the same color by the rays of light, then the combination between absorption and photographic effect is produced by itself. Has Becquerel even found that chlorophyll, which shows several absorption stripes lightened on bromo-silver in the spectrum, appear several places of photographic effect which correspond with the absorption stripes. The combination between chemical effect and absorption was not discovered by me, but has been already explained by Herschel, Draper, and Shultz-Sellack.

All German physicists have already accepted it as a well-founded principle, which has received a new confirmation through my experiments. When Abney asserts, "To me it seems natural that they (the compounds of resinous nature) should be most sensitive to those rays which they can transmit," then he did perhaps anticipate that he is just opposite with his opinion to the mentioned principle.

It is deployable that

It is deplorable that almost all who repeat my experiment, the proportions of absorption of the bodies with which they experiment are entirely passed over, and only pay attention to the photographic part of my observations. Under such a state the combination between absorption and chemical effect remains perfectly unknown to them, and then opinions are expressed which are totally incompatible with the facts. It is true the study of the appearances of absorption are not easy; it requires just as much time, patience, and labor as photographic experiments with the spectrum.

PROF. H. VOGEL.

FRENCH CORRESPONDENCE.

April Meeting of the Photographic Society of France—Death of the President—Mons. Geymet's Fatty Ink Proofs—Painted Photographs—Enamels—Photomicrographic Proofs—A Substitute for Carbonate of Ammonia—Alkaline Development—On Substratums—Mons. Janssen on his Voyage to Japan.

THE Photographic Society of France held its monthly meeting on the 7th of April last, Mons. Peligot in the chair.

The meeting was saddened by the announcement of the death of Mons. Balard, their honored President. Mons. Balard is well known to the scientific world by his numerous discoveries, among which can be cited that of bromine.

Mons. Geymet presented a new collection

of fatty ink proofs, which were admirably finished. He told the Society that they were obtained by Poitevin's process, and that he had invented nothing, but that all the honor was due to the latter gentlemen. He, Mons. Geymet, had no difficulty to obtain four hundred proofs per diem from a single pellicle; this is astonishing, considering that the proofs measured 22 x 14 inches.

Mons. Cheri Rousseau presented two photographic paintings which were said to have been colored by his new process. No taste was displayed, and the coloring was bad. Something better must be produced in order to excite public opinion. If the inventor does not do so another process "will go to the wall." Really it is astonishing the quantity of rubbish brought before experts by inventors, a chaos of ideas, which by a little reasonable advice from some critic, would take as it were life and form, and become of use to mankind.

MM. Gougenheim and Forest presented some very finely finished enamels. This branch of the photographic art is making great progress in France; the public takes to it, and appreciates its value. Mons. Lafon de Camarsac was, a short time ago, almost the only one who made it a regular business, but now many really very clever artists have taken to it and made a profitable speculation.

Mons. Alfred Chardon presented some photomicrographical proofs taken by Mons Moitessier. It is indeed to be regretted that this branch of the photographic art is not followed up as it should be, for the field of discovery is without bounds, and would sooner or later repay a thousandfold all time spent upon its study. Alas! the beginning is tedious and unproductive; a man must have a great love for discovery, and, above all, private means at his disposal, to enable him to choose that branch. It is not astonishing that we find so few amateurs if we consider the difficulties to be encountered, the application required, and the energy and firm will to advance, however distant the prospect of success may be.

Mons. Davanne informed the members that he had found a composition which would replace with advantage the carbonate of ammonia for the alkaline development. It has been said over and over again that two samples giving the same results cannot be obtained; the same can also be said of the liquid ammonia, as its strength can only be properly estimated by ascertaining how much acid of a definite strength it will neutralize; for it is almost impossible to rely upon the specific gravity test. We have therefore a great acknowledgment to Mons. Davanne for initiating us into a compound which he employs with success, and from which not only are those inconveniences eliminated, but permits the time of exposure to be shortened.

FORMULA.

Saturated Lime Water, . . 10 ounces. Sugar, 1

Replace the given quantity of the carbonate of ammonia by the same quantity of the above formula; the bromide and the pyrogallic acid need not be changed.

One great advantage of this sugar of lime compound is, that it can be made everywhere; for it may be said, I think, without fear of contradiction, that a little sugar and a little lime can be obtained in almost every town or village in the civilized world.

Much has been said on the best edging solutions, in order to prevent the film from slipping off or rising up during the washing and other subsequent manipulations to which dry plates are subjected; also on the best substratum which can be employed for that purpose. Gelatin, india-rubber, albumen, and many others, have been proposed, but, in my humble opinion, none can surpass the albumen when worked as it ought to be. Some propose to use a camel'shair brush, in order to paint as it were the surface to be covered; others a felt roller or a glass rod, in order to obtain the same result. I shall now endeavor to give the readers of the Philadelphia Photographer the fruits of ten years' experience in dryplate work. The substratum is thought to be of very little consequence; this is a great error; it is a very serious manipulation. If the albumen be too thick, it will not prevent blisters, and having a strong affinity for nitrate of silver, the sensitizing bath will be permanently injured by containing

an excess of organic matter. If too thin, it will collapse in drying, and the plate will be found full of spots after development.

FORMULA.

Take the whites of three eggs, beat them to a froth in a large basin, then add a pint of water, little by little, beating all the time. Procure a tubular bottle (of which I gave a description in the January number of 1876, page 20) holding about two quarts. Into this bottle pour the egg solution, then add three pints of water, shaking all the time. Allow it to remain all night; then decant the next morning, which can easily be done by turning down the tube, as in Fig. 3. The sediment must be well rinsed out of the bottle; the solution can then be returned to its place; thirty or forty drops of liquid ammonia is added, the solution well shaken, and, after having remained in repose one night, it is fit for use the following morning.

Before I begin to coat my plates, I take a large bottle, in the neck of which I introduce a glass funnel having a piece of filtering cotton. I take also three pouringbottles, which I fill by lowering the glasstube of the stock-bottle in such a manner as to receive the liquid upon the side, in order to prevent air-bubbles, which, if formed, will rise to the surface, together with any dust or dirt which may have made its way into the solution; the finger is now drawn across the neck of the pouring-out bottle, and all these bubbles, together with the dirt, are got rid of. The solution is now poured upon the previously cleaned plate in the same manner as collodion; the excess is caught in the funnel, filtered through the cotton, and is ready to be added to the stockbottle as soon as the whole operation has been finished. The plates are set up on one of their edges on a piece of white blottingpaper to dry. By this system I can albumenize forty-eight plates 12 by 18 inches in less than an hour, and never fear any slipping of the film.

Monsieur Janssen, the celebrated astronomer, gave a verbal description of his late voyage to Japan for the observation of the transit of Venus, and presented the Society with his photographic revolver, which,

although not an implement of war, has made no little noise in the world.

E. STEBBING, Professor.

3 PLACE BREDA, PARIS, April 4, 1876.

OUR PICTURE.

THE second Promenade prize offered by us was awarded to Mr. Lyman G. Bigelow, of Detroit, Mich., and we have the pleasure this month of presenting the successful picture.

Mr. Bigelow has become well known to photographers by the numerous examples of his work which we have published from time to time, and in which there has been a continual improvement, each presentation showing him to be in advance of his previous effort; by his Album of Lighting and Posing, which has had a large circulation both in Europe and in this country, and by his revolving backgrounds and other accessories, which have become so generally used. He is an artist whose success is due exclusively to his own genius, and whatever there may be of merit in his work, whether in lighting, posing, backgrounds, or accessories, is the result of his own personal skill, and attest the remarkable versatility of his talents. Thus our picture is the reflex of a single mind, and the student of photographic art who may seek instruction from its many excellent qualities may, on this account, all the more readily grasp the thought or sentiment expressed, as well as the reasons for the arrangement of the picture in all its details of background and accessories.

Mr. Bigelow possesses the faculty of the true artist in giving expression to his work; in the several negatives which he sent us he tells several different stories. In "The Walk in the Park" the subject seems almost to have motion, and so faithful is it to the idea of the Promenade style, that we are ready involuntarily to exclaim, "There she goes!" The parlor and opera scenes are equally expressive and true to life; while that group which tells the "old, old story," where with maidenly blushes and downcast eyes the tenderest words are spoken, and which leads to that other scene

where, in bridal costume and with fluttering anticipations, she basks for a few moments in the pale moonlight, at the open window, while that fascinating hour approaches which is to determine the lights and shadows for all her future life.

A critical examination of our picture will show how well Mr. Bigelow has conformed to the rules of art in all the details of his work. This is particularly noticeable in the lighting, in which it will be seen that the face or some portion of the upper part of the figure receives the strongest light, while from that there is a beautiful blending away into middle tints and shadow. This effect is very finely illustrated in the pictures with white drapery, which are remarkable for their delineation and delicacy.

There has been considerable interest manifested lately in the question of skylight construction, and since the issue of our April number we have had several inquiries as to the best form of light for the photographic studio. It will be seen by Mr. Bigelow's letter which follows, that he has adopted and is using the style of light given as Mr. Landy's, with a modification which we believe to be an improvement. This form is simple, easily constructed, easily worked, and we have no hesitation in recommending it to any one about to build.

The following communication from Mr. Bigelow gives briefly his formulæ, which we have no doubt will prove reliable in the hands of any who may wish to try them.

E. L. WILSON.

DEAR SIR: In regard to the methods used in making the photographs to which your committee have awarded the prize, I have only to say that the formulæ are the same I have before given you for publication, and the same as published in my "Posing Album." In my new book, soon to be issued, I have made some additions, giving more range for choice, but known to be equally reliable.

Negative bath, 40 grains, thoroughly iodized.

COLLODION.

Iodide of Ammonium, . 5 grains. Bromide of Cadmium, . 2½ " Anthony's Cotton, . . 5 "

to ounce of Alcohol and Ether.

DEVELOPER.

Plain Iron, 15 grains strong. To 8 ounces solution add 1 ounce of Acetic Acid.

PAPER BATH.

The ordinary Ammonio-nitrate solution, 60 grains to 1 ounce. Toned in Acetate of Soda bath.

My present light is of northeast exposure, and exactly like the one published in the April number of the *Philadelphia Photographer* as Mr. Landy's, except that the side-light is three feet from the floor.

The exposure on the negative was about twenty seconds; the light good. The backgrounds are my own designs and manufacture.

Any further information cheerfully furnished.

Yours fraternally,

L. G. BIGELOW.

The prints were made at Hearn's Printing Institute, and, considering the delicacy of the negatives, and the large number printed, are exceedingly well executed.

Thus we send out our picture for the opening month of the great Centennial Exhibition, trusting that it may be studied in such a way, that the lessons it may contain shall be clearly comprehended, and all who are aiming for improvement be benefited thereby.

PHOTOGRAPHIC HALL.

WE shall not be able to give as full an account of it in our present issue as we had hoped, though we delayed for it. The contractor has not completed the building as agreed, but it will be done, and the major portion of the pictures hung before you see this.

The lighting and arrangement are splendid, and Photographic Hall alone will be worth a long pilgrimage to Philadelphia to see. Be sure to see it.

While we write Superintendent Carbutt is busy enough with his duties, and the majority are finding out that it is much cheaper and easier to employ the Installation Company to hang and care for their goods than do otherwise.

The walls and the uprights are all painted dark maroon, and the effect is quiet and

fine. The centre is devoted to the display of materials and apparatus, the very centre of all being adorned by a beautiful arrangement for transparencies. Scovill Manufacturing Company have chosen the northeast corner of the hall for their exhibit, where a splendid case, twenty-nine feet long, contains the finest show of goods ever exhibited. Our book exhibit is the only one there, of course, for no one else could make one of any size. Lantern transparencies from England, Scotland, France, and America are shown in beautiful and unexcelled variety.

'Mid the slammings and the bangings,
'Mid the pictures and the hangings,
We stole a peep.

And cannot do less (or more) than give our readers an idea of what we saw. It is only a taste. We mean to describe fully everything in it, and supply a sort of catalogue, so as to give you as good a picture of it as possible to do by words. Its lessons can only be learned in person. What follows is by no means a list of the pictures there, but only a record of a few glimpses at pictures, some of which stood back to wall when we saw them. May 10th will show the world the greatest exhibit photography ever made.

Bradley & Rulofson's San Francisco exhibit consists of five life-size portraits finished in crayon and pastile, and a large contribution of portraits and views.

J. F. Ryder, Cleveland, O., a large and varied collection.

Aug. Marshall, Boston, frame of enamels.
Allen & Rowell, Boston, life-size enlargements and smaller prints in carbon.

L. Allman & Co., N. Y., a fine collection, chiefly enlargements, highly finished in crayon and pastile.

Sarony, Howell, Mora, Kurtz, contribute largely.

Rocher, Chicago, groups and genré.

Mosher, Chicago, a fine collection and patent album, containing Chicago celebrities.

- N. H. Busey, Baltimore, a small but fine collection.
- J. Holyland, Baltimore, a small but fine collection.

- J. W. Black & Co., Boston, a fine show.
- A. N. Hardy, Boston, a fine show.
- J. Gaffield, Boston, self-prints from nature.
- J. Landy, Cincinnati, something worth coming to see.
 - L. Van Loo, Cincinnati, the same.
- J. H. Kent, Rochester, a splendid show. Charles A. Zimmerman, St. Paul, portraits and landscapes.
 - F. Gutekunst, Phila., a splendid lot.
- W. Curtis Taylor, Phila., a splendid lot. Frank M. Good, London, views of Palestine and Egypt.

Baron Stillfried, portraits, etc., of Japan. H. R. Robinson, England, genré and sea views.

Trapp & Munch, Friedberg, Germany, a magnificent collection of portraits and views on their albumen paper.

WRINKLES AND DODGES.

AMHERST, MASS., April 3d, 1876.

The following, which, if not one of the "wrinkles," is one way to avoid them, may possibly assist some of your readers.

In making prints from large plates the printer is often troubled by wrinkles or cockles in the middle of the sheet, which no amount of padding or pressure in the frame will bring in contact with the negative. To remedy this, after silvering, and before the paper is thoroughly dry, fasten the sheet by the corners to the fuming-frames, or locking these to a large board or anything that will keep it out straight; and allow it to get as dry as usual. Then give the middle of the sheet an extra dry over a lamp or gas-stove, and the paper instead of bagging in the centre will have all its wrinkles near the outside, and, when printing, will be found to lie against the negative "as close as a cat to a hot brick."

H. M. JUDD.

The following method may be used to inscribe words on a negative. The collodion is cut at the place where the inscription is to be placed, and a piece of paper of about the same tint as the surrounding portions of the negative is pasted thereon; the inscription is written on this paper and shows white on the print.—Selected.

Editor's Table.

SITUATIONS PROVIDED.—There are, as any one can see by referring to our advertising columns, a great many photographers wanting situations. We would suggest to such parties that they communicate with the Centennial Photographic Company, studio Belmont Avenue, Philadelphia (within the Exhibition grounds), for we understand that there will be a great demand for help there of all kinds—mounters, retouchers, portrait and view negative makers, and printers. Look into the matter. It would be a valuable experience to any one, and a great aid hereafter, to be employed on the Centennial work.

MESSES. EWING & Co., Toronto, Canada, have sent us two handsomely printed catalogues—one of their mouldings, and the other of lenses, apparatus, chemicals, and materials.

FINE CRAYON WORK. - In our last number we called attention to the exquisite crayon work of Mr. Giovanni Bressan, artist, No. 815 Arch Street, Philadelphia. Since then we have watched his progress upon a life-sized portrait of a lady, whose picture appeared in our magazine last year from a negative by Mr. C D. Mosher, Chicago, Ill. From the rough enlargement Mr. Bressan has created one of the most exquisite things we have ever seen. The workmanship is soft and beautiful, and quite as effective near by as at a distance. Mr. Bressan's touch is soft and full of feeling, and his effects are magical. We understand that he will exhibit this picture at the Centennial with others, and photographers should take pains to see it. Mr. Bressan does work for the trade.

PICTURES RECEIVED.—We have received examples of portraiture from the following photographers: Messrs. Singhi, Rockland, Maine; Renvers & Scarff; Millman & Co.; A. H. Hall, Folsom (Katonah, N. Y.); Cook, Portsmouth, N. H.; Lloyd, Minneapolis, Minn.; W. A. Hutchinson, Grand Rapids, Mich.; Blessing & Bro., Galveston, Texas, and James, Iowa City, Iowa. The last three parties show unusually good taste in their lighting, posing, and photography, and it is interesting and cheering to see such good work from places so widely apart. Our magazine goes to all, and we trust it helps.

MESSRS. I. W. TABER & T. H. BOYD ad-

vertise their plateholder and wire background in our present number. You have all seen an example of the effects of the last in Mr. Taber's pictures in this magazine, and we have one of the plateholders which seems to *insure* the saving of every drop of silver. We shall have more to say presently about both.

THE LEHIGH UNIVERSITY. South Bethlehem, Pa., has admirable facilities for giving a thorough education in civil, mechanical, and mining engineering, and chemistry and metallurgy; also a classical course, and excellent instruction in French and German. The location in the midst of the great coal, iron, and zinc mines of this country, and in a place famous for its manufacturing and railway interests, and the access to the vast workshops of New York and Philadel phia, give this institution unusual and unsurpassed facilities. By the liberality of the founder, the Hon. Asa Packer, tuition is free. For catalogues apply to the President, Prof. John M. Levitt.

LECTURE ON LENSES.—We have a portion of Mr.Zentmayer's excellent lecture on lenses before the Franklin Institute in type, but are compelled to lay it over because of the press of National Photographic Association matter at so late a day.

CHUTE'S DIARY FOR PHOTOGRAPHERS .-- Do not fail to secure a copy.

THERE will be a Photographic Convention in August.

MICRO-PHOTOGRAPHS IN HISTOLOGY, Normal and Pathological, by Carl Seiler, M.D., in conjunction with J. Gibbons Hunt, M.D., and Joseph G. Richardson, M.D. This publication is intended to replace the microscope, as far as is possible, for those physicians who have neither opportunity nor leisure to make observations with the instrument for themselves; and also to furnish microscopists, for comparison, correct representations of typical specimens in the domain of normal and pathological histology. The pictures are obtained directly from the microscopic objects by means of photography, and printed from the negative by a reliable mechanical process, and will be accompanied by a few pages of text fully describing each plate indicating the particular points of interest, and showing the connection and analogy of the different specimens. The work will be issued in monthly numbers, twelve numbers to form a volume. The high scientific standing of the medical gentlemen connected with the publication is sufficient guarantee of its value to the profession at large. It is the only publication of its kind. The plates and letter-press are printed on fine, toned paper. Size of the page, 9 by 11 inches. Each number in a neat cover. Price of separate numbers, sixty cents each. Sent post paid by the publishers at \$6.00 per annum. Messrs. J. H. Coates & Co., publishers, \$22 Chestnut Street, Philadelphia, Pa.

THE gallery and building at Fort Dodge, Iowa, owned by Mrs. Barrett, was recently destroyed by fire, and Mrs. Barrett and her daughter, who resided in the building, had barely time to escape. She was well insured.

THE copartnership of Messrs. Wager & Churchill, Erie, Pa., has been dissolved, and a new firm formed, under the name of Wager & Crowell, photographers, dealers in pictures, frames, stereoscopes, etc.

MR. JAMES MULLEN, Lexington, Ky., whose new gallery we noticed last month, has had a visitation of fire, and sustained some damage. We are glad to learn, however, that his loss was covered by insurance, and his business suffers but a brief interruption.

CENTENNIAL PHOTOGRAPHY. — Mr. William Curtis Taylor, so long and so well known as one of the leading photographic artists of the country, is engaged in the preparation of a Centennial memento of Philadelphia, which will form a very interesting feature in the photographic department of the Exposition. Mr. Taylor is executing portraits of one hundred citizens of Philadelphia, from life, in the finest style of his art, on a uniform scale, the whole to be mounted and bound in a handsome volume for exhibition.

Mr. Taylor's design is to present a collection of accurate portraits of men more or less representative of their several professions or occupations, and who are still actively identified with Philadelphia affairs. Men like Henry C. Carey, William D. Lewis, Joseph R. Chandler, Dr. Stillé, J. B. Lippincott, Dr. Henry H. Smith, Rev. Dr. Goodwin, President Allen, Fairman Rogers, Morton McMichael, and others whose names we do not now recall, will be included in this handsome volume, which will illustrate both the present state of Philadelphia photography and present

artistic and accurate recent portraits of many of our most prominent citizens of the Centennial year.

THE lantern exhibition business is looking up wonderfully. Once it was down and degraded so that few decent people patronized it. Now, however, men of culture and enterprise are pushing it, and a wondrous "elevation" is the result. The time is coming when every lecturer must use lantern illustrations. The public will demand it. Already this is largely the case. The Centennial is going to offer a fine chance to men of pluck to make money in this direction. Thousands of splendid subjects will be obtainable; it is the best advertised affair ever known in America, and there is success for any one who undertakes it right. We know of only one man who is doing this, in a New York city. He has arranged for a special photographer on the opening day, May 10th, to make him views of the opening ceremonies to make slides therefrom at once, and a messenger waiting will carry the slides to New York in the 3 P.M. train, and they will be exhibited to a large audience that evening! Beat that if you can. It is shead of the illustrated newspapers by hours! We now have near seventy-five Centennial subjects, including the buildings and splendid exhibits. them. A fine lot, English and French slides. also just in. The Migic Lantern monthly to any address, \$1 a year.

Just as we go to press we receive a letter from our esteemed old friend Dr. Vogel, in which he says: "It is now sure that I shall go as juror to Philadelphia; I shall leave Berlin about June 1st." This announcement gives us a great deal of pleasure, and will, no doubt, do the same to many of our readers.

MR. J. C. BROWNE, of this city, desires us to say that he is not on the Committee for examining photographs to be admitted to Photographic Hall. We therefore correct the statement we made to that effect.

A HISTORY AND HANDBOOK OF PHOTOGRAPHY. Translated from the French of Gaston Tissandier, by S. Thomas, F.R.G.S., and published by Sampson, Low, Marston, Searle & Rivington, London.—This is a work possessing a high order of merit, and is the most valuable contribution to photographic literature that has appeared for a long time. It contains the most complete and detailed history of photography, including the earliest discoveries that have any reference to it, that has ever been published.

Specialties.

ADVERTISING RATES FOR SPECIALTIES.—It will be understood that matter under this head is not to be considered as always having editorial sanction, though we shall endeavor to clear it of anything tending to deceive or mislead. Stock-dealers will find this a beneficial mode of advertising, and sure to pay largely. Six lines, one insertion, \$2.00, and 25 cents for each additional line, seven words to a line—in advance. Operators desiring situations, no charge. Matter must be received by the 23d to secure insertion. Advertisers will please not ask us for recommendations. Decrease who advertise. Please always add your address to the advertisement.

A SPLENDID BARGAIN.—Desiring to make some change in my business, I offer for sale my gallery, the best and most conveniently arranged of any in this section. Work and prices are strictly first-class. Will be sold very low if disposed of by June 1st. For a good workman this is an opportunity seldom met with.

Address, J. H. Oakley, Ravenna, Portage Co., O.

FOR SALE.—The instruments of a photograph gallery, all in good order, among which are one direct print solar camera, one 4-4 Harrison tube, one ½ Jamin tube, one ½ Voigtlander tube, Gem box with four 1-9 tubes, pair stereo tubes and box, camera boxes, stand, head rests, bath holders, back-grounds, funnels, dishes, etc., all of which willbe sold very low. J. E. TORBET,

Del. Ave., Wilmington, Del.

WAYMOUTH'S VICNETTE PAPERS.

Wanted.—Information of J. Divez, a Frenchman, speaks English with an accent, is a stere-opticon and lime light operator. Information as to where he is will be suitably rewarded.

Address.

J. W. BLACK,

333 Washington St., Boston.

For Sale.—A Ross portrait lens, to cover 20 x 24, together with Roberts' box, holders, etc., 25 x 30; the whole will be sold at almost any price offered, to close out the effects of a deceased artist.

Apply to J. W. Black,

333 Washington St., Boston.

HERMAGIS LENS TESTIMONIAL.

Philudelphia, March 21, 1876. Messrs. WILSON, HOOD & CO.

I take pleasure in testifying to the perfect working of the "Hermagis" just purchased from you. We have tested it particularly as to its depth of focus, and find it to combine with this a rapidity of working which makes it doubly esteemed. Very respectfully.

WM. CURTIS TAYLOR, 914 Chestnut Street. For Sale.—To close a copartnership we offer our gallery for sale. The operating room is 30 x 40 feet, due north, sky and side light 15 x 18 feet. 20,000 negatives on hand. All necessary apparatus, from the smallest to mammoth size cameras. The gallery is worth about \$6000; will sell for less than half that sum. Now doing a good business. Satisfactory reasons for selling.

C. R. Rees & Co.,

821 & 823 Main St., Richmond, Va.

WAYMOUTH'S VIGNETTE PAPERS.

Burrel's Chart and Hints to Patrons.—Your gallery is not complete without them. For particulars, see advertisement in January, February, and March issues of this Journal. Price, \$1.25, unmounted, by mail, or by express mounted.

SEAVEY'S LATEST ACCESSORY

ANTIQUE FIRE-PLACE and
CHIMNEY FRONT.

Very Elaborate.

New designs in Backgrounds and Accessories will appear at the Centennial.

Popular Backgrounds and Accessories.

PROFILED COLUMN SLIPS.
PROFILED REVERSIBLE SET
GROUND PIECE.

BUSEY CABINET, Background or Profiled Slip.

LANDY'S WAINSCOTING,
Papier Mache, elaborate design.

Also, the KURTZ BALUS-TRADE, the most artistic and popular accessory yet produced.

N. B. — All Promenade Backgrounds & Accessories are equally suitable for other purposes.

CAUTION.—My new designs are being copyrighted. Inclose stamp for samples. Address

LAFAYETTE W. SEAVEY, 8 Lafayette Place, New York

USE WAYMOUTH'S VIGNETTE PAPERS.

S

ш

-

4

_

ш

I

By an artist, to do general crayon work in a first class gallery. Good reference given. Address Chas. E. Albright, Toledo, O., care Toledo Mutual Life Insurance Co., Hall Block.

By a man of twelve years' experience, as photographer and portrait painter; also understands retouching. Address D. Devitt Duncan, Lock Box 863, Jacksonville, Fla.

By a young man, a position as negative retoucher. Has had two years and a half experience in a city gallery. Salary moderate. Address Edward Vanderwalker, Rome, N. Y.

By a good operator. Is thoroughly acquainted with all branches of the business; has had three years' experience. Single, temperate, good references; will work very chap. Address Photographer, Box 363, Butler Co., Pa.

By a young lady of experience, as retoucher and finisher in inks and colors. Best of reference given. Address G. W. F., 122 Hanover St., Boston, Mass. As operator and retoucher. The best reference wilbe a fairtrial. Can give others. Salary \$20 per week. Work first-class. The South or West preferred. Address C. E. E, 43 Main St., Elmira, N. Y.

By a photographer who understands the business; 15 years' experience. Address D. P. Shalten, West Liberty, Ohio.

By a young lady, in a first-class gallery, as retoucher, printer, and toner. Wishes a permanent situation. The best of references given. Salary from eight to ten dollars per week. Address Box 211, Geneva, N. Y., care Mrs. H. J. Jackson.

A situation, by a young man of steady habits, of four months' experience, in all its branches, to finish the trade. Not afraid to work. Address Chas. W. Howard, Box 163 Malden, Mass.

By a young man in a gallery as general assistant. Can make a sharp, clean negative, print, tone and do out-door viewing. Address O. G. Forrer, Metamora, Ind.

BULLOCK & CRENSHAW,

No. 528 Arch Street, Philadelphia,

MANUFACTURERS AND IMPORTERS OF PURE CHEMICALS FOR PHOTOGRAPHY.

IMPORTERS OF GLASS AND PORCELAIN, APPARATUS, ETC.

1876! PROTOGRAPATO 1876! SHOTOGRAPATO STOCK MOSAICS

Edited by EDWARD L. WILSON, Editor Philadelphia Photographer,

ETC., ETC.

This favorite and only American annual is fairly crammed with articles prepared expressly for it by the eminent photographers of Europe and America, who are seldom induced to write for anything else.

Price, in Cloth, \$1.00; in Paper Cover, 50 cents.

"The Best Little Handbook of Photography in the World." For Sale by all Dealers.

No Photographer should be without Mosaics for 1876.

BENERMAN & WILSON, PHOTOGRAPHIC PUBLISHERS, PHILADELPHIA.

HEARN'S PHOTOGRAPHIC RINTING NSTITUTE,

FOR PRINTING FOR THE TRADE, AND FOR INSTRUCTION IN THE ART OF PHOTOGRAPHIC PRINTING.

Below we insert a few letters, out of many that we have received since the first opening of the Institute, of which your perusal is respectfully solicited.

"I have received to-day the two cabinet pictures you sent me for inspection, and I can fairly say that I fully approve of your style of printing and toning—both are excellent in the extreme. I may just as well say that if I had not my own printing establishment where my exhibition pictures have been printed some time ago, I would have availed myself of your offer gladly. I wish you hest success in your enterprise."—H. ROCHER, Chicago, Ill.

"Your communication of February 24th is at hand, and the samples therein inclosed are very fine. I commend the enterprise, and highly recommend such an institute as you represent. A place for instruction is an absolute necessity, and I have no doubt that it will be a blessing to the fraternity. I wish for you abundant success."—G. FRANK E. PEARSALL, Brooklyn, N. Y.

"The samples of printing you have forwarded me could not be excelled, and are hard to equal. They are very beautiful."—W. J. Baker, Buffalo, N. Y.

"Your letter was received yesterday, and samples to-day. The prints you send are exquisite. They are clean and brilliant, yet very soft and velvety, notwithstanding the negatives are only ordinarily good. I cannot produce such prints, and I doubt if there is a gallery in America that does. I wish you success in your new enterprise."—Frank Jewell, Scranton, Pa.

"Your idea of giving practical instructions in printing is an excellent one, and should be encouraged. I know of no one better fitted for the position than yourself, as evidenced by your own work and The Practical Printer. You have my hearty wishes for the success of your undertaking."—ALVA PEARSALL, Brooklyn, N. Y.

"The three specimens on my desk now, from you, received this A.M. Truly, they are as fine samples of printing as I ever saw. The chemical harmony of the printing bath, with that of the gold, is apparent. You have got at the bottom of the 'secret.' Success to your new enterprise. I hope you will be gratified with your labors by seeing the much-neglected part of our profession (photo. printing) elevated from its too common degredation to that of, at least, a very great improvement in many of us."—Ferris C. Lockwood, Freehold, New Jorsey

TO WHOM IT MAY CONCERN.

I most cheerfully give my unqualified commendation, both as to personal character and first-class professional abilities, of my former printer and toner, Mr. Charles W. Hearn, who was in my employ for about three years in that capacity. He is one of the very few who seemed really to love and enthusiastically devote his entire time to that interesting but somewhat neglected branch of our art. He often declared to me that he thought printing and toung the most interesting department of photography, and expressed his determination to make a specialty of it, which he has done with an energy and heartiness in his work and study that has won for him most deserved success, so that he is, though still quite a young man, one of the very first photographic printers of this or any other country. That the most abundant means may attend him in his new enterprise, is the earnest wish of his old employer,

J. H. Lamson, Portland, Me.

"Since having my views printed at the Institute nearly all my patrons are duplicating their orders, which speaks decidedly in favor of your careful and artistic printing."—Frank Robbins, Oil City, Pa.

"The examples of Printing are received, and are simply PERFECT. I congratulate you upon having inaugurated a means of securing to the art and 'the trade' a certainty of obtaining the best print a negative will yield, and that you offer this great advantage to both proprietor and pupil. Success to your enterprise."—J. F. RYDER, Cleveland, Ohio.

A trial order is respectfully solicited. Address

HEARN'S PHOTOGRAPHIC PRINTING INSTITUTE.

124 North Seventh St., Philadelphia.

THE BONANZA PLATE HOLDER.

Patented January 19, 1875.

This is one of the most useful appliances yet introduced in the Photographic business, and

one much needed for economy and neatness in every gallery.

The "Bonanza" Plate Holder has been in constant use in G. D. Morse's Gallery, in San Francisco, for over one year, and a test made from month to month of the savings. In the busy season it reached over \$12 per month in pure silver solution. The drippings from the plates do not come in contact with the wood frame, slide or door of the Holder, thereby saving it from destruction. Besides, it protects the camera-box, clothing of the operator, carpets, etc., from silver stains. Another great advantage of this Holder: The inside kit of frames which are in general use for accommodating the different size plates are dispensed with. The fittings are so adjusted that they take every size plate from a card to 8 x 10 size, uprights or crosswise, as may be desired, by simply moving the receptacle that holds the plate to the position required for any particular size. Every photographer will see at a glance the value of this invention.

"We have had your "Bonanza" Plate Holder in use in our establishment for about eight months. We take we have inal your "honaiza" race roller in use in our establishment for about eight montals. We take pleasure in testifying to their great superiority over all others we have employed or seen, not only as a silversaving appliance, but also in promoting cleanliness in work and protection of carpets and drapery from silver contamination. The very moderate price charged for these Holders will be returned to the purchaser, in the saving made, in a very short time."—W. H. Rulofson, San Francisco, February 10, 1876.

"The constant use of a couple of your 'Bonanza' Plate Holders during the past year warrants me in saying they are unexcelled. The silver all being saved in a liquid state can be used again, and there is no soiling of clothes, carpets, or the floor of the studio. The silver not coming in contact with the camera, the focus is not disturbed by the eating away of the wood work. The saving in silver, clothing, and carpets, is astonishing, and I would not be without them on any consideration. I cordially recommend them to the craft."—G. D. MORSE, San Francisco, February 20, 1876.

"The past eight months I have used the "Bonanza" Plate Holder at Bradley & Rulofson's. It has been a great source of pleasure to work with a Holder free from drippings of silver solution. Every photographer will appreciate the cleanliness of this invention, as well as the dollars he will save by its use. I am starting in business at 415 Montgomery Street, and wish you to send me two "Bonanza" Plate Holders."—D. B. TAYLOR, February 13, 1876.

"I believe it to be the best Photographic Plate Holder ever used in the art."—SILAS SELLECK, San Francisco, March 4, 1876.

The "BONANZA" PLATE HOLDER is manufactured of the very best material, and is now ready for the market. The retail price is \$20. They are made to fit and are in focus with the American Optical Co.'s 8 x 10 boxes. Will forward a holder by mail to any address on the receipt of \$20 currency, or will send by express, C. O. D. It is much cheaper to send by mail, as we can forward them to any part of the United States for fifty cents. All orders should be addressed to

I. W. TABER

YOSEMITE ART GALLERY,

26 Montgomery St., San Francisco, Cal.

THE "ATMOSPHERIC" BACKGROUND.

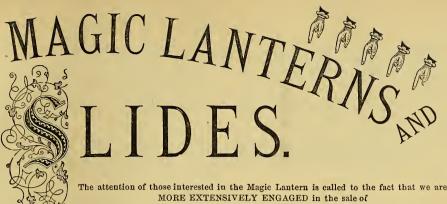
Patented November 23, 1875.

This Background which is made of wire cloth, is remarkable for its atmospheric effect. The wire cloth is of such a texture that the eye or lens cannot focus upon it, which has the effect of producing a sharper outline to the figure. This result makes it valuable for plain Backgrounds, as it produces negatives free from any blemish, as a dent or scratch on the

Backgrounds, as it produces negatives free from any blemish, as a dent or scratch on the wire cannot be photographed, owing to the open meshes of the cloth.

The durability of the Wire-Cloth Background cannot be questioned. One of them will last a lifetime. We have had them in constant use for over two years. They have been hit by head-rests, and every accessory used in a gallery have have had their accidental contact, but they are as perfect to-day as when new. They are used in all the first-class galleries in San Francisco. We have manufactured them for this market, but as freights are high to ship them East, we have determined to offer gallery rights for sale at \$25 currency, with full instructions for making them. It is economy for photographers to purchase the right, for they can be made at a small expense.

I. W. TABER & CO.



LANTERN SLIDES AS A SPECIALTY,

Than any other house in America. Our continuous contact with photographic men gives us special advantages in this line, and as MANUFACTURERS AND DEALERS we offer the very best opportunities to secure

MUCH FOR YOUR MONEY.

AS WELL AS SUCH GOODS AS WILL PUT MONEY IN YOUR PURSE, NAMELY:

A GOOD LANTERN. THE BEST of SLIDES.

FOUR CATALOGUES MAILED ON RECEIPT OF 25 CTS.

DO NOT BUY UNTIL YOU HAVE CONSULTED HEAD-QUARTERS! SUPPLEMENTARY CATALOGUE (March 1) READY!

USE WILSON'S

Lecture Book describing graphically, as an eyewitness, 600 beautiful places and things in all parts of the world.

SUBSCRIBE FOR THE

Monthly Journal, devoted to the interests of lantern lovers. \$1 per year, post-paid.

Special estimates and other information given gladly. No substituting of Slides. Prices very low. PROMPTNESS OUR RULE.

BENERMAN & WILSON, Photo. Publishers, SEVENTH & CHERRY STS., PHILADELPHIA.

WHAT follows is a Catalogue of the best Photographic Publications, sent to remind all live photographers of the fact that good practical information is as essential to them as good lenses and pure chemicals. There are some "artists" who "get along" without any of these, but they do not progress, neither do they succeed. Do not be of their number. There is too much going on in photography in these "quick acting" times to enable any photographer to afford to do without reading and being posted. In anything you undertake you should take every precaution to be as bright as your neighbor, or he will get ahead. Keep alongside, any way. We will mail you any of the works named below, post-paid, on receipt of price. Order now.

1876

WILL BE A YEAR OF JUBILEE FOR PHOTOGRAPHERS THAT SHOULD NOT BE NEGLECTED.

THE CENTENNIAL EXHIBITION

Will present opportunities for study and improvement which should not be overlooked, and the study of the best books will not only do you good before, but after the inspection of Photographic Hall. READ! READ!!! READ!!!

BENERMAN & WILSON.

Photographic Publishers,

Philadelphia, Pa.

hiladelphía Photographer.

THE BEST PHOTOGRAPHIC MAGAZINE IN THE WORLD.

EACH NUMBER EMBELLISHED BY PHOTOGRAPHY.

THE THIRTEENTH VOLUME of our Magazine promises to be the most popular and brilliant of any that has preceded it. We have many good things in store for it. It shall be our endeavor to make it all the richer and more interesting on account of the Centennial. We expect to embellish it with some of the choicest gems the Exhibition can produce and add interest to its pages from month to month, by giving a sort of compendium of all that relates to Art or Photography. Among other attractions, we expect to have our old friend Dr. Yooga here during six months of next year, at least, and our readers may expect some of the fruits of his genius and talents to add to its interest and usefulness.

But while we intend to provide all these home attractions, we do not propose to neglect whatever may transpire abroad, but shall present as usual correspondence from such well-known writers as Prof. Strebbing, Mr. W. J. STILLMAR, Mr. CHAS. WALDACK, and others. With all these good things in prospect for the year 1876, we hope to render our magazine more beautiful and more useful han ever before; and while we maintain that the beautiful example of photography, which accompanies each issue, is alone worth the subscription price, still more and more effort will be made to make the reading matter everything that it ought to be. Our correspondents from all the leading centres abroad will keep our readers posted on all matters of interest in their several sections, while our unrivalled staff at home will look dillgently after your interests here. To make THE PHILADELFHIA PHOTOGRAPHER the best PRACTICAL HELEER which can possibly be obtained, la the aim and earnest desire of its publishers. We ask your co-operation in extending its usefulness, and offer to all present aubscribers, who secure us new ones, the following

PREMIUMS.

For every new subscriber, for one year, \$1.00, payable in any of our publications, books, or, if preferred, one dollar's worth of any of our prize pictures, or any other article for which we are agents, advertised in this Magazine.

The subscription price of the Philadelphia Photographer is \$5 a year, \$2.50 for six months, 50 cents per month.

Each number, remember, contains a handsome photograph.

Photographic Mosaics.

THE Centennial anniversary year of American Independence finds our little Annual in its eleventh year. It is developing rapidly for its age and size, and this year takes quite an interest in the Centennial. It is full and running over with fresh contributions from the most wide-awake members of the fraternity in all parts of the country. We here give a list of the

bers of the fraternity in all parts of the country. We here give a list of the

CONTENTS.—Review; Eighteen Hundred and Seventy-six; Discoveries, Inventions, and Improvements; Work in the Studio; The Dark Room; The Printing Department; Landscape Photography; Dry-plate Work; Apparatus; Art Advances; The National Photographic Association; Our Publications; Our Prize Offer; Items of Interest; Obituary; The Art Progress; Fog; Come, Let us Reason Together; Experience; Provoking; A Singgestion Anent the Great Exhibition; Gentennial Album of Photographic Studies; The Eliminating of Hyposulphite from Prints; A Treatise on Photography; Why not make Solars instead of Contact, etc.; Systematic Preservation of Negatives; Want of Enterprise; Lighting the Sitter; Theory and Practice; Be Punctual; Formulæ for Photographs and Ferrotypes, which give Lights and Half-tones not surpassed; Exposure and Development of a Negative; A Cause for Faded Prints; How I Sunned a Bath under Difficulties; A Good Collodion; A Word to the Weak; How to Ciean New and Old Glass Plates; Long's Bath Warmer; Albumen, its Preparation and Use in Photography; An Item of Real Value; The Negative Bath; How to Lubricate Prints for Burnishing; Then and Now; A Pair of Suggestions; How to Obtain Bolling Water in Winter; An Excellent Ware for Photographic Purposes; Hints on Composition; The Causes and Cure for some of the Difficulties pertaining to Photography; At and Mechanlsm; Breakfast for Dinner; Field Work; Marble Negatives—Stalns Browth Hands, etc.; Pyroxylin—Gun-Cotton; The Old Bath; The Upper Floor; Dry-Plates; The Art Privileges of our Great Centennial; Curtains as a Meansof Adjusting Light; An Exposing Shutter; How to Touch out Finholes; Photography; The Toning Solution; A Chapter of Practical Matters; Climbing; Poor Negatives, their Cause and Cure; On Landscape Photography; A Chepp and Good Plateholder; The Way it is Done; To Correspondents; The Construction of Skylights; Blisters; At the Desk; On Photographic Lenses—How to Choose and Take Care of The

Price, bound in Cloth, \$1. Paper Cover, 50 Cts. 144 pages.

OUR BOOKS.

THE PRACTICAL PRINTER. By Chas. W. Hearn.

This very useful book is indispensable in the printing department. No one who wishes to be up with the times in printing, can afford to be without it. Its rapid sale and the favor with which it has been received, are the best recommendations we can give. Price, \$2.50.

BIGELOW'S ALBUM OF LIGHTING AND POSING.

This excellent work still maintains its popularity. It contains 24 beautiful photographs from life in different lights and positions, with an explanatory key, which makes it the most practical helper the Photographer can have. Price, \$6.00.

DR. VOGEL'S HANDBOOK OF PHOTOGRAPHY. Second Edition.

This is a really standard work, and the most complete hand-book ever published. The new edition has been thoroughly revised, and much additional matter introduced, together with new illustrations, new photographs, and a new arrangement all through. Now is the time to study up, and this book is ap-plicable to any department. Price, \$3.50.

DR. VOGEL'S PHOTOGRAPHERS' POCKET REFERENCE-BOOK.

This is in every sense a reference book. It is alphabetically arranged, and any process or formulæ in photography may be found at a moment's notice. All is arranged in a concise and practical form. It is particularly useful in the chemical department. Price, \$1.50.

THE FERROTYPERS' GUIDE.

This little work is by a practical ferrotyper, and gives just the instruction necessary to those who wish to do good work in this branch of our Art. Price, 75 cents.

LINN'S LANDSCAPE PHOTOGRAPHY

Is an excellent companion in the field, and may help you over many difficulties; can be carried in the pocket. Price, 75 cts.

GLIMPSES AT PHOTOGRAPHY. By Prof. Himes.

This work treats of some of the peculiar styles of printing, such as leaf-printing, etc., etc. Price, \$1.25.

WILSON'S LANTERN JOURNEYS.

To those who use the lantern this book is indispensable. It contains just the information required about six hundred different views, and enables any exhibitor to make his entertainments enjoyable and instructive. Price, \$2.00.

BURNET'S HINTS ON COMPOSITION.

We have reproduced this work by photo-lithography, and sell it at the low price named, while a copy of the original work could not be bought for five times that amount. It is fully illustrated, and supplies in a very attractive form, the art knowledge, in reference to composition, that so many photographers are seeking after. Price, \$3.50.

A. M. COLLINS, SON & CO.,

MANUFACTURERS OF

PHOTOGRAPHIC

CARDS AND CARD BOARDS,

OF EVERY DESCRIPTION.

Warehouse:

18 S. Sixth St., and 9 Decatur St.,
PHILADELPHIA.

PROMENADE PHOTOGRAPH CARDS.

SIZE 4½ x 7½. SQUARE CORNERS.

White, Light Buff, Amber, Pink, and Black—Plain.

White, Light Buff, Amber, Pink, and Black, with Gilt Borders.

Light Buff and Amber, with Red Borders.

Thin White, Rose Tint, and Black, with Gilt Beveled Edges.

Light Buff and Amber, with Red Beveled Edges.

Thick Gilt, Beveled Edge Glacé, Black and Rose Tint "J."

Glacé Card Boxes, for the Thick Beveled Edge.

Cards 7 x 10, with Gilt Borders, opening 4½ x 7½.

Cards 7 x 10, with India Tint and Gilt Borders, opening 4½ x 7½.

See detailed advertisement in this number of the "Photographic Times."

PRICE LISTS FURNISHED ON APPLICATION.

TRAPP & MUNCH'S

Albumen Paper

Introduced into this country since 1868 has become the leading paper, and is now better known and more appreciated than any other brand.

That this great success is well deserved and due to its excellent qualities may be judged from the fact, that of all the competitors of the Vienna Exhibition, Messrs. Trapp & Munch alone received the

MEDAL OF MERIT

for Albumenized Paper. For Sale at all the Stockhouses.

WILLY WALLACH,

GENERAL AGENT FOR THE UNITED STATES,

No. 4 Beekman St., and 36 Park Row, New York SPECIAL ACENTS:

SCOVILL MANUFG. Co., New York. E. & H. T. ANTHONY, "G. GENNERT, New York."

WILSON, HOOD & Co., Philadelphia. H. W. BRADLEY, San Francisco. G. S. BRYANT & Co., Boston.

DR. VOGEL'S PHOTOGRAPHER'S

POCKET

REFERENCE BOOK.

An Alphabetically arranged collection of practically important hints on the construction of the Gallery; selection and trial of lenses and chemicals; approved formulæ for the different photographic processes; tables of weights and measures; rules for avoiding failure, etc.

IT IS A BOOK EVERY PHOTOGRAPHER SHOULD HAVE,

Because it is a ready helper under all difficult circumstances.

For sale by all dealers. Price, \$1.50, post-paid.

BENERMAN & WILSON, Photo. Publishers,

PHILADELPHIA, PA.

Over 1000 Sold.

HEARN'S

PRACTICAL PRINTER

PHOTOGRAPHIC PRINTING

ON PLAIN AND ALBUMEN PAPER, AND ON PORCELAIN.

Too little attention has heretofore been given to Photographic Printing, which is indeed quite as important a branch of the art as negative making.

It is the hope of both atthough and publishers to create REFORM in this

It is the hope of both author and publishers to create **REFORM** in this matter, by the issue of this work, and as it is to put money in the pockets of all who read it, the hope is that it will be generally read.

CONTENTS.

· INTRODUCTION.

The Printing Room, with a Plan. The Silvering and Toning Room, with a Plan. The Drying Room, with a Plan.

PART I .-- ALBUMEN PAPER PRINTING.

The Positive Bath for Albumen Paper Silvering the Albumen Paper. Drying the Paper. Fuming the Paper. Preservation of Sensitive Albumenized Paper—Washed Sensitive Paper. Cutting the Paper. The Printing Boards. Keeping Tally. Vignette Printing Blocks. Treatment of the Negatives before Printing. Filling of the Boards. Fitting Vignette Boards to the Negatives for Printing. Medallion and Archtop Printing. Fancy Printing. Vignette Cameo and Medallion Vignette Cameo Printing. Printing the Bendann Backgrounds. Printing Intense Negatives. Printing Weak Negatives. A Few More Remarks about Printing—Treatment of Broken Negatives. Cutting the Prints. Washing the Prints. Acidifying the Prints. Toning Baths. Artistic Toning. Fixing Baths and Fixing Prints. Washing the Prints. Mounting the Prints. Finishing the Prints.

PART II.-PLAIN PAPER PRINTING.

Salting the Paper. Positive Baths for Plain Salted Paper. Silvering Plain Salted Paper. Drying, Fuming, and Cutting the Paper. Treatment of the Negatives before Printing. Printing-in False Backgrounds. General Plain Paper Printing. Further Treatment of the Prints after Printing. Causes of Failures in Albumen and Plain Paper Printing.

PART III.-PORCELAIN PRINTING.

Selection of the Porcelain Plates. Cleaning of the Porcelain Plates. Albumenizing the Porcelain Plates. Making the Porcelain Collodion. Coating, Fuming, and Drying the Plates. Porcelain Printing Boards. Placing the Sensitive Plate on the Board for Printing. Printing Vignette Porcelains. Printing Medallion Percelains. Washing the Porcelains. Toning the Porcelain. Fixing the Porcelain. Final Washing of the Porcelain. Drying and Tinting of the Porcelain. Varnishing the Porcelain. Causes of Failures in Porcelain Printing.

Together with over 50 Wood Cuts, and an elegant Cabinet Portrait, from negatives by Mr. F. Gutekunst, printed by the author, Mr. Chas. W. Hearn.

A THOUSAND COPIES ALREADY GONE.

Mailed Post-paid on Receipt of \$2.50, by any dealer, or

BENERMAN & WILSON, Photo. Publishers, Seventh and Cherry Streets, Philadelphia.

ROBINSON'S METALLIC Guides,

FOR USE WITH THE ROBINSON PRINT-TRIMMER.

(See advertisement of Trimmer opposite.)

These Guides are made of Stout Iron and are turned in a Lathe, so that they are Mathematically True.

OVAL, ROUND, ELLIPTIC, and SQUARE, of all sizes; various shapes for Stereoscopic work, Drug Labels, etc., etc.

We have the following regular sizes always on hand at 10 cents per inch the longest way of the aperture, the fractions counting as one inch.

Special sizes made to order at 15 cents per inch the longest way of the aperture.

REGULAR SIZES:

	OVALS.		SQUARE	OR ROUND-COI	RNERED.
$2 \times 2\frac{7}{8}$	$3\frac{1}{2} \times 4\frac{7}{8}$	$5\frac{3}{4} \times 7\frac{3}{4}$	$2\frac{1}{16} \times 3\frac{3}{4}$	$2\frac{5}{16} \times 3\frac{7}{8}$	$3\frac{7}{8} \times 5\frac{1}{4}$
$2\frac{1}{8} \times 3\frac{1}{8}$	$3\frac{5}{8} \times 5\frac{1}{8}$	6 x 8.	$2_8^1 \times 3_{\frac{3}{4}}^3$	$2\frac{3}{4} \times 4\frac{1}{4}$	$4 \times 5\frac{5}{8}$
$2\frac{1}{8} \times 3\frac{1}{4}$	$4 \times 5\frac{3}{8}$	$6\frac{1}{4} \times 8\frac{1}{4}$	$2\frac{1}{8} \times 3\frac{1}{8}$	$2\frac{3}{4} \times 4\frac{1}{2}$	$4\frac{1}{8} \times 5\frac{7}{8}$
$2\frac{3}{8} \times 3\frac{3}{8}$	$4\frac{3}{8} \times 6\frac{3}{8}$	$6\frac{1}{2} \times 8\frac{1}{2}$	$2\frac{5}{16} \times 3\frac{15}{16}$	$2\frac{7}{8} \times 4\frac{5}{8}$	$3\frac{7}{8} \times 6$
25 x 35	5 x 7	7 x 9	$2\frac{5}{16} \times 3\frac{3}{4}$		$4 \times 6\frac{1}{8}$
$2\frac{7}{8} \times 4\frac{1}{4}$	5½ x 7½	7½ x 9½	FOR	STEREOGRA	PHS.
3\frac{3}{8} \times 4\frac{3}{8}	$5\frac{1}{2} \times 7\frac{1}{2}$	$7\frac{1}{2} \times 9\frac{1}{2}$	Arch Tops.	Round Cornered.	Round.
3 ² / ₈ x 4 ⁵ / ₈	55 x 75	73 x 93	$3\frac{1}{16} \times 3\frac{3}{4}$ 3 x 3	$3\frac{1}{16} \times 3\frac{3}{4}$ 3 x 3	3 x 3
08 V 18	08 Y 18	14 A 94	2 X 2	0 7 0	

The above sizes suit the Collins Card Mounts, and photographers knowing that they can be always had at the low price of ten cents per inch, would do well to make their sizes accord, as orders can also be filled more quickly. Ten days is required to make special sizes.

An allowance of ten inches (\$1 worth) of regular sizes of guides will be given with every Trimmer purchased. (See opposite page).

FOR SALE BY ALL DEALERS.

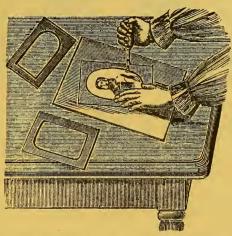
BENERMAN & WILSON, Manufacturer's Agents, PHILADELPHIA, PA.

ROBINSON'S PHOTOGRAPH TRIMMER

IS A SUBSTITUTE FOR A KNIFE

FOR TRIMMING PHOTOGRAPHS, AND DOES THE WORK MUCH MORE EXPEDITIOUSLY AND ELEGANTLY THAN A KNIFE.

IT SAVES TIME, SAVES PRINTS, AND SAVES MONEY.



The accompanying cut represents the instrument in the act of trimming a photograph. It does not cut, but pinches off the waste paper, and leaves the print with a neatly beveled edge which facilitates the adherence of the print to the mount. Try one, and you will discard the knife and punch at once. For ovals and rounded corners it is worth its weight in gold.

A Trimmer and Ten Inches of Guides Mailed for \$3.50.

Oil the wheel bearings with Sewing Machine Oil.

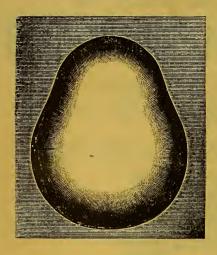
Given Away!

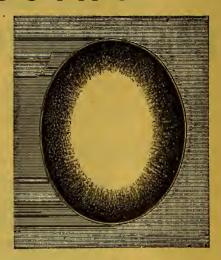
WITH EACH ROBINSON PHOTOGRAPH TRIMMER

WILL HEREAFTER BE GIVEN Ten Inches of Metallic Guides, your choice from the regular sizes named on the opposite page. The manufacturers and agents finding that they can save money by manufacturing in large quantities, make this liberal offer to the trade, as they want everybody to have these capital inventions in use. They are no humbug and are not glass cutters or anything like them.

BENERMAN & WILSON, Manufacturer's Agents,
FOR SALE BY ALL DEALERS. PHILADELPHIA, PA.

WAYMOUTH'S





VIGNETTING PAPERS

ARE NOW MADE OF TWO SHAPES, as shown in the drawings above. They consist of finely gradated, lithographed designs, mounted on protecting sheets of non-actinic paper, and are the lightest, neatest, and best means of producing vignette pictures ever offered.

RECENTLY IMPROVED.

The quality of the "papers" has just been much improved by the substitution of a peculiar French, fibrous, hard calendered paper, which is not only less opaque but has other qualities which produce quickly the most lovely and soft vignettes possible. We consider this a great improvement, as do others to whom we have sent samples. Below we give a letter from one of them, Mr. Ormsby, who has sent us also some exquisite vignettes:

The package of Vignette Papers has been received and tried; they are just the thing. They are a great improvement over the others; they will print in a little more than half the time required for the others, and the results are everything that can be desired, as you can see by samples inclosed. Please fill my order and send bill. I like the pear-shape best. Send them all that shape.

E. D. ORMSBY, Chicago.

FROM PROFESSIONAL AND AMATEUR PHOTOGRAPHERS.

"First-class."—"The sample sent answers perfectly."—"I consider them first-rate articles."—
"They answer the purpose admirably."—"They are the best vignettes I have ever had, and as you can print in full sunlight, they are a great saving of time."—"They could not be better, oblige me with another packet."—"I find them excellent, giving much softer pictures than the old way."—"I have tried one of the Vignette Papers, and like it much; send me packets two and three."—"I am much pleased with them, and shall thank you to send me another packet."—"I did not need any copies of testimonials, having well-known by experience that your Vignette Papers were superior to anything I have ever used."—"I found those you sent before excellent."—"Vignetting Papers received and tested; can't be beat. I use by cutting an opening in a piece of cardboard and tacking to the printing-frame, when I am ready for printing vignettes in the very best manner."—"Waymouth's Vignette Papers I have tried, and they are just what I have been wanting for years."

Any number sent on receipt of price, by any stockdealer, or by

BENERMAN & WILSON, Manufacturers,

(See opposite page.)

PHILADELPHIA.

DO YOU USE

WAYMOUTH'S VIGNETTE PAPERS.

(DESIGNS COPYRIGHTED.)

of all pictures, the **Higherty** is the most artistic

When properly printed. But the clumsy devices generally in use for printing them, or rather for blending the shading about the figure, produce but very few really artistic vignette pictures. Either the shading is too intensely dark, not gradated in tint at all, or it shows an ugly direct, decided line, which is very repulsive. The shading should blend gradually from the dark tint nearest to the figure, off into the white background. The results are then soft, artistic, and beautiful. The easiest and best way to secure them is by the use of

WAYMOUTH'S VICNETTE PAPERS.

THEY ARE NOT CLUMSY; DO NOT BREAK; ARE ALWAYS READY; COST BUT LITTLE, AND ARE EASY OF APPLICATION TO ANY NEGATIVE.

THEY NEED BUT ONE ADJUSTMENT TO PRINT ANY QUANTITY.

They entirely do away with all the old and troublesome methods, either wood, metal, or cotton.

Eighteen sizes are now made, suiting all dimensions of pictures from a small carte figure to Whole-size, Victorias, Cabinets, &c. They are printed in black for ordinary negatives, yellow bronze for thin negatives, and red bronze for still weaker ones. Directions for use accompany each parcel.

PRICES:

In parcels containing one of	each size. N	Vos. 1	to 15, assorted colors	\$1 00
Assorted sizes and colors, by	number, ne	r pac	kage of fifteen	1 00
Nos. 1, 2, 3, 4, and 5, assorted	sizes and c	olôrs,	for Cartes, by number, per d	lozen 50
" 6, 7, 11, 12, and 13 "	**	"	Large Cartes and Victorias.	by number, per doz 75
" 8, 9, 10, 14, and 15 "	"	66	Cabinets and Whole-size,	" " , 1 00
" 16, 17, and 18, "	**	"	Half " "	" " 1 25

(SEE OPPOSITE PAGE.)

When ordering, state the number and color you want.

BENERMAN & WILSON, Manufacturers, 7th and Cherry, Philada. For sale by all dealers.

DR. VOGEL'S HANDBOOK.

SECOND EDITION.

THE HANDBOOK OF THE PRACTICE AND ART OF PHOTOGRAPHY,

By Prof. H. VOGEL, Ph.D., Berlin, Prussia.

IS NOW READY.

ALTHOUGH IT IS MUCH ENLARGED WE OFFER IT AT THE OLD PRICE, \$3.50.

It is Elegantly Illustrated, with Photographs and Engravings. Cloth Bound.

The reputation Dr. Vogel enjoys in this country as a practical photographic writer, is first-class, and insures a book of the best quality. That his Handbook is eminently so, we guarantee. It has been re-arranged and revised specially for the American photographer, giving the best German formulæ, &c., and is, in every sense of the word, a Handbook of the practical and artistic departments of Photography. Over fifteen hundred of the first edition were sold, and the demand continues.

IT ILLUSTRATES AND TELLS

How the Ateliers are built and used in Berlin and elsewhere;

How to make the best Photographs;

How to select and use your Lenses;

How to manage your Apparatus;

How to compose the Picture;

How to pose the Sitter:

How to choose Accessories;

How Berlin Cards are Made;

How to do everything in the Art.

TEACHES HOW TO BECOME A PERFECT PHOTOGRAPHER.

The whole includes, under one cover, everything needed for the practice of photography by the beginner, the amateur, and the professional—a complete Handbook. See contents of Book. The engravings are numerous, elaborate, and expensive. Four photographs, illustrating the lighting of the subject, accompany the work. Please read future advertisements

ASK YOUR DEALER FOR IT.

BENERMAN & WILSON, Photo. Publishers,

S. W. cor. Seventh and Cherry Sts., Philada.

PROMENADE PRIZE PICTURES.

JULY COMPETITION.

To enable all photographers to study these

GEMS OF ART,

We offer prints from the competing negatives, for sale at the prices below

They are the most exquisite things we ever offered, and will teach any one, be he a good or poor operator.

THE GOLD MEDAL

Was awarded for the best six negatives to Mr. Henry Rocher, Chicago, Ill., whose pictures are marvels of beautiful photography. The studies are all mounted in tasteful style, on Collins' Mounts, and printed at our own rooms by Mr. Chas. W. Hearn, and are fine studies in posing, lighting, printing, and toning.

THE SETS INCLUDE:

Nos.	1	to	7,						Studies	by H. Rocher, Chicago.
66	8	to	16,						66	L. G. Bigelow, Detroit, Mich.
"	17	to	22,						"	I. W. Taber, San Francisco, Cal.
66	23	to	27,						44	C. M. French, Youngstown, O.
44	28	to	31,						44	Core & Frees, Tiffin, O.
"	32	to	37,		ı.				"	E. M. Collins, Oswego, N. Y.
"	38	to	42,						44	J. H. Folsom, Danbury, Conn.
**	43	to	48,						44	E. H. Alley, Toledo, O.
See	e R	lev	iew	in	A	ug	ust	n	umber I	hiladelphia Photographer, page 242.

The whole set	of 48	3, .						•						\$12	00
In two Photo.	Cove	rs,												13	50
Selections, per	doze	n,.							1					4	00
" per	two	doz	er	1,										7	00
The 21 of Mess	rs. Ro	che	r,	Bi	ge	lo	W	, ε	n	d T	Га	be	r,	6	00
Book Covers a	nd B	indi	nç	J,											75

Address all orders to

BENERMAN & WILSON, Publishers, Seventh and Cherry Sts., Philadelphia.

* *



ROSS' PORTRAIT VIEW LENSES

We have now successfully introduced to the American Photographers the Ross Lens, and by our increased sales we know they are appreciated. At the convention held at Buffalo, July 15, many fine photographs were exhibited by photographers, and ourselves, made with the Ross Lens, which attracted great attention.

While Ross & Co. are the oldest manufacturers of Photographic Lenses in existence, they also keep up with the requirements of the fraternity, by constantly manufacturing new combinations and improving on those already in existence. They have lately perfected, and will soon furnish us stock of, a new series of Card Lenses, extra rapid, peculiarly adapted for babies, and people who will not be quiet. We will give notice of their arrival.

WE HAVE NOW IN STOCK

Portrait Leuses, from 1-4 to 15 x 18.
Cabinet Leuses, Nos. 1, 2, and 3.
Card Leuses, Nos. 1, 2, and 3.
Triplets, Nos. 1, 2, 3, 4, 5, 6, and 7.
Symmetricals.

Instantaneous Doublets, all sizes.
Medium Angle Doublets, all sizes.
Large Angle Doublets, all sizes.
Streographic Leuses. all sizes.
New Universal Leus.

Numerous testimonials pronounce them to be the best, as well as the cheopest Foreign Lens ever offered to the American Photographer. We will mail price-list on application, and promptly fill all orders.

STEINHEIL'S SONS' NEW APLANATIC LENSES.

We now have a full stock of these Celebrated Lenses, at the following prices:

No.	1,1-4	size	31	inch	focus	,	\$25	00	No.	5,	10-12	size	, 13 }	inch	focus,	\$70	00
6.	2, 1-2	"	51	"	46		30	00	46	6,	13-16	66	164		4.6	110	0.0
"	3,4-4		7	"	"		45	00	16	7,	18-22	4.6				200	00
"	4,8-10	"	101	64	6.6		60	00	1 56	8,	20-24	6.6				350	00
			NT.			:		ah ad			on Ctonoon	a a mi	0 W 0 mlm				

We feel sure that at least one of these lenses is needful for the successful prosecution of your business, and so solicit your orders.

WILSON, HOOD & CO., THE UNITED STATES, 822 Arch St., Philadelphia, Pa.

The only genuine brand of DRESDEN ALBU-MEN PAPER is the CROSS-SWORD BRAND, all others are superannuated. We keep a full assortment of Single and Extra Brilliant always on hand.

CHAS. F. USENER'S Celebrated PORTRAIT LENSES are unexcelled. Before purchasing be sure and try a Usener.

CHARLES COOPER & CO., Wholesale Agents,

Manufacturing Chemists and Importers,

191 Worth Street, New York.

The Universal



EMBOSSING PATENTED JANUARY 9th, 1872.

This Press will cameo all sizes, from cards to cabinets, and is sold lower than any other that will do the same work. It has been greatly improved and made very complete in all its parts.

We furnish a card, victoria, and cabinet size.

PRICE, \$20.00.

MANUFACTURED AND SOLD WHOLESALE AND RETAIL BY

WILSON, HOOD & CO., 822 Arch St., Philadelphia.

CF CAUTION.—Photographers are cautioned against buying other presses that may use an elastic embossing substance, as they are an infringement on the above.

R. J. Chute, Patentee.

G. GENNERT,

53 Maiden Lane, New York,

IMPORTER OF THE CELEBRATED

S. & M. DRESDEN I DITAINI DADIDO

ALBUMEN PAPERS

Rives and Steinbach-White, Pink, and Blue.

Every one says it WORKS THE MOST UNIFORM, ECONOMICAL, and GIVES FINER RESULTS than any other. To satisfy yourself that it is the best, send to your stock-dealer for a sample dozen. Kept by all stock-dealers in the United States.

ALSO.

Hyposulphite of Soda, Sulphate of Iron,

Solid German Glass Baths,
Saxe Evaporating Dishes,
AND French Filter Paper.

SPECIAL ATTENTION IS CALLED TO THE

EXTRA BRILLIANT, OR DOUBLE GLOSSY PAPER,

Which is recognized by the best artists all over the world as the

FINEST ALBUMEN PAPER IN THIS COUNTRY OR EUROPE.

IMPROVED

PHOTOGRAPH COVERS.



Fig. 1.

The Outside Appearance.

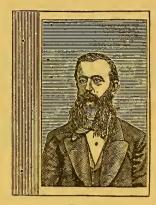


Fig. 2.

A Leaf Showing the Guard.

Frequent inquiries for something at a much lower price than an album, for the holding together and preservation of photographs, has induced us to manufacture an article which we think will meet the want.

IT SERVES ALL THE PURPOSES OF AN ALBUM, FOR

A Series or a Set of Portraits,
A Series or a Set of Landscapes,
A Series or a Set of Photographs of any kind,

MAY BE NEATLY AND CHEAPLY BOUND IN THESE COVERS.

They are made with expanding backs, so that from six to twenty-four pictures may be inserted in one cover. The pictures are mounted in the usual way, and then strips of linen, or strong paper, of the proper width, are pasted on one edge, by which the picture is inserted and held in place in the cover by a paper fastener. Fig. 1 represents the cover, with the perforations in the back, through which the spreading clasps of the paper fastener bind the whole together. These are so easily inserted or removed, that pictures are readily put in or taken out at any time. Fig. 2 represents the picture, with the guard pasted on ready for insertion. The arrangement is simple, and we are sure will be readily comprehended. For binding together views of your town or city, or portraits of celebrities, they are very neat

The following is a list of sizes and prices, without cards:

For Photograph. Card Size, Cabinet Size,			\$1.50				\$10.00
EXTRA HEAVY COVERS							
5-8 Size,			4.50				33.00
							40.00
8-10 "			8.00				56.50
							65.00

Larger or special sizes made to order. Furnished with card board at best rates. Samples mailed at dozen price. Send for some.

BENERMAN & WILSON, Photo. Publishers, Seventh and Cherry Streets, Philadelphia.

JAMES F. MAGEE & CO.

MANUFACTURERS OF

PURE

PHOTOGRAPHIC CHEMICALS,

No. 108 North Fifth Street,

PHILADELPHIA

Stock Dealers only Supplied.

THE ZENTMAYER LENS.

FOR VIEWS AND COPYING.

These Lenses possess pre-eminently, the following qualities:

Width of visual angle, ranging from 80° to 90°; depth of focus; extreme sharpness over the whole field; true perspective; freedom from all distortion in copying; portability and cheapness.

Each mounting is provided with a revolving Diaphragm, containing the stops of the different combinations for which they are designed. The larger ones are provided with an internal shutter for making and closing the exposure.

No.	1,	21/2	inch	focus,	3	x	3	plate,			\$20	00	No.	1	an	d No	. 2	combined,						\$33	00
66	2.	34	6.6	+6	4	x	5	44			25	00	"	2		46	3	""	•	•	•	•	•	40	00
66	2	51	66	44	61		81	66			30	0.0	66	3	"	"	4	"						55	
	4,	0.3			102		10		•	•	40	0.0	6.6	4	"	"	5	" .						75	00
																								110	00
	5,	12	"	"	14	X	17				60	00	66	1,	2,	and	3,	e r						48	00
6.6	6,	18	"	4.6	20	x	24	"			90	00		3,	4,	and	5,	**		١.				88	00

No. 3, with large mounting to combine with No. 4 and No. 5, \$35.

No. 1 and No. 2, specially adapted for Stereoscopic Views, are furnished in matched pairs. No. 1 and No. 2, single, not to combine with other sizes, \$36 a pair.

Lenses and mountings to form all six combinations, from 2½ to 18 inches, \$173.

Zentmayer's Stereoscopic outfits, including a pair of No. 2 Lenses 4 x 7 box, 7 x 10 India Rubber Bath and Dipper, Tripod, Printing Frames, and outside box, \$60.

JOSEPH ZENTMAYER, Manufacturer,

147 South Fourth Street, Philadelphia.

BENJ. FRENCH & CO.,

319 WASHINGTON ST., BOSTON,

IMPORTERS AND SOLE AGENTS FOR THE CELEBRATED

Voigtlander & Soums Parlot LENSES,

NEW STEREOSCOPIC LENSES.

New Stereoscopic Tube and Lens, made expressly for us, marked with our name (imitation Dallmeyer), with rack and pinion, central stops, for portraits or views. Will work in or out of doors. Also, for instantaneous pictures. Four inch focus, **price per pair**, \$21.00. By taking out back lens, and using only front lens in place of back, you get six inch focus. The great and increasing demand for all these lenses, is sure guarantee that they are the best. Read the following

Testimonials.

"I have tried the Mammoth Voigtlander you sent me, and I consider it the best large instrument I have ever seen, and I have tried those made by other makers, Dallmeyer's included, and they do not compare with the Voigtlander. All my baby pictures were made with half-size Voigtlander lenses."—J. LANDY, 208 W. Fourth St., Cincinnati, Feb. 25, 1874.

"The Voigtlander lenses have always been favorites with me. My first experience, in the days of daguerrectype, was with one, since which I have owned and tried many of the different sizes and never saw one but was an excellent instrument. Lately again trying some for my own use and for a friend, I found them to be superior to other eminent makers, particularly in the large sizes."—W. J. Baker, Buffalo, N. Y.

"Twenty-four years ago I bought and commenced using my first Voigtlander lens. It was a good one. Since then I have owned and used a good many of the same brand, of various sizes. They were all and always good. Some of the larger sizes that I have recently bought seem to me better than any I have ever had or seen before."—J. F. RYDER, Cleveland, Ohio, Dec. 18, 1872.

"About a year ago I bought a Voigtlander & Son No. 34-4 size lens. Said instrument gives me great satisfaction, being very quick, at the same time has great depth of focus."—E. G. MAINE, Columbus, Miss.

"Have never seen anything equal to the Voigtlander & Son Lens. The No. 5, Ex. 4-4 is the best instrument I ever used. I cannot keep house without it."—D. B. VICKERY, Haverhill, Mass.

"The pair of imitation Dallmeyer Stereoscopic Lenses you sent we are very much pleased with; they work finely."—Goodridge Bros., East Saginaw, Mich.

"After a trial of your imitation Dallmeyer in the field with those of the Dallmeyer Rapid Rectilinear, side by side, I can say that for general views I like yours as well, for some objects far better, on account of their short focal length."—D. H. Cross, Mosher's Gal., *Chicago*.

New Catalogue of Prices Just Issued, to be had on Application.

WILSON'S

Lantern Journeys

By EDWARD L. WILSON,

Editor of the "Philadelphia Photographer."

This work will be found entertaining by all who like to read about the beautiful places and things of this world.

The contents are divided into six "Journeys," each one including a visit to 100 places, making 600 in all, as follows:

- JOURNEY A-Havre, Paris, Versailles, Rouen, Fontainebleau, and Switzerland.
- JOURNEY B-Compiegne, Brussels, Aix la Chapelle, Cologne, Up and Down the Rhine, Potsdam, Berlin, Dresden, Vienna, the Vienna Exposition, the Semmering Pass, Saxony, Munich, and Southwest Germany.
- JOURNEY C—Italy—Lake Maggiore and Como, Milan, Verona, Venice, Florence, Pisa, Rome, Naples, Pompeii, the Ascent of Vesuvius, Puteoli, and the Italian Art Galleries.
- JOURNEY D-Holland, Denmark, Norway, Sweden, Russia, and Spain.
- JOURNEY E-Egypt, Palestine, Syria, Turkey, Greece, and India.
- JOURNEY F-England, Scotland, and the United States of America.

It has been carefully prepared, and will be found amusing, very entertaining and instructive.

It contains 218 pages, Cloth bound, Gilt. Price, \$2.

BENERMAN & WILSON,

Photo. Publishers, Philadelphia, Penna.

PHILADELPHIA

PHOTOGRAPHER

THE LIVEST and BEST

Photographic Magazine Published.

ANNOUNCEMENT FOR 1876!

The publishers have a great many good things in anticipation for the year 1876, which they think will render their magazine more beautiful and more useful than ever before; and while they maintain that the beautiful example of photography, which accompanies each issue, is alone worth the subscription price, still more and more effort will be made to make the reading matter everything that it ought to be. Our correspondents from all the leading centres abroad will keep our readers posted on all matters of interest in their several sections, while our unrivalled staff at home will look diligently after your interests here. To make the Philadelphia Photographer the best practical helper which can possibly be obtained, is the aim and earnest desire of its publishers.

We ask your co-operation in extending its usefulness, and offer to all present subscribers, who secure us new ones, the following

For every new subscriber, for one year, \$1, payable in any of our publications, books, or, if preferred, \$1

PREMIUMS

worth of any of our prize pictures, or any other article for which we are agents, advertised in this magazine.

Operators, printers, etc., can secure all their necessary photographic literature in this way, by a little earnest effort.

EACH MONTHLY ISSUE IS A PHOTOGRAPHIC WORK IN ITSELF. NOTICE TO SUBSCRIBERS.

Subscription price, \$5 a year, \$2.50 for six months, 50 cents per copy, postpaid. positively in advance.

In remitting by mail a post-office order, or draft payable to the order of Benerman & Wilson, is preferable to bank-notes. Clearly give your Post-Office, County, and State.

Canada subscribers must remit 24 cents extra, to prepay postage.

Foreign subscriptions must be accompanied by the postage in addition.

ADVERTISING sheets are bound with each number of the Magazine. Advertisements are inserted at the following

 1 Month. 6 Months. 1 Year.

 One Page, ... \$20 00
 \$110 00
 \$200 00

 Half " ... 12 00
 66 00
 120 00

 Quarter Page, ... 7 00
 38 50
 70 00

 Eighth " ... 4 00
 22 00
 40 00

 Cards, 6 lines, or less, 2 00
 11 00
 20 00

The attention of advertisers, and those having galleries, &c., for sale, is called to our Specialties pages. Terms, \$2 for six lines, and 25 cents for each additional line, seven words to a line, always in advance. Duplicate insertions, 50 cents less, each.

SURE TO PAY!

Operators desiring situations, no charge.

BENERMAN & WILSON, Publishers,

- OFFICE, S. W. COR. OF SEVENTH AND CHERRY STS., PHILADELPHIA.

ENTREKIN BURNISHER OF PLANISHER

MANUFACTURED UNDER

Exclusive License

GRANTED BY

W. F. LOCKWOOD.

ASSIGNEE OF

J. F. SCHUYLER.



WHOSE PATENT BEARS DATE

February 24, 1863.

RE-ISSUED

June 1, 1875.

PRICE LIST.

6-inch Roll, \$20; 10-inch Roll, \$30; 14-inch Roll, \$40; 18-inch Roll, \$50. Also, 30-inch Roll, for hand or steam-power (this machine is especially adapted for large work). Price, \$300.

CAUTION. The suit of J. P. BASS, assignee of E. R. Weston vs. Peck, tried in the United States Circuit Court, at Portland, Maine, October 8, 1875, the JURY in rendering a verdict for the defendant found:

First.—That Weston, assignor to Bass, was not the original and first inventor of a burnishing machine by which a surface is given to the article to be burnished, by feeding it under pressure over the surface of a burnishing tool.

Second.—That he was not the original and first inventor of the combination of a bur-

nishing tool and a friction feed-roll.

Third .- That he was not the original and first inventor of the combination of the feed-roll and adjustable burnishing tool.

The evidence on which the jury based this finding was that relating to the invention and use by the late J. F. Schuyler of a machine by which a surface was given to the article to be burnished by feeding it under pressure over the surface of a burnisher, rendered stationary, the paper being fed over said burnisher by means of a friction feed-roll.

The patent of W. E. Lockwood, assignee of John F. Schuyler, dated February 24, 1863, was reissued June 1, 1875,

WITH THE FOLLOWING CLAIMS!

1.—As an improvement in the art of Planishing paper, submitting the paper to friction under pressure between a roughened feed roller and a Planisher, substantially as described.

2.-The combination in a Paper Planishing Machine, of a Planisher with a draw-filed roller, for cantrolling the paper while it is under pressure between the said roller and planisher, all substantially as set forth.

To Photographers and Dealers in Photographic Goods:

Whatever doubts may have existed in the minds of photographers as to the merits of the controversy between the undersigned, W. G. Entrekin, and the owners of the Weston Patents for Burnishers, will be set at rest by the perusal of the above claims, by the verdict of the jury declaring the patent of Weston to be invalid.

While the undersigned feels disposed to treat with liberality, photographers who have

been induced by threatening circulars to purchase the Weston and other machines that infringe the above claims, he will hold them responsible as infringers of the above-mentioned re-issued patent of Wm. E. Lockwood in the use of said machines without first paying the small license fee which is now demanded.

On the other hand, the most prompt and determined legal measures will be taken against those infringers who deliberately, and after being thus duly cautioned, make, use, or sell burnishing machines in which is embodied the invention claimed in the said re-issued patent.

W. G. ENTREKIN, Sole Licensee,

Under grant by WM. E. LOCKWOOD, Patentee.

Manayunk, Philada., April 25, 1876.

TRY HERMAGIS' "PROMENADE" LENSES.

Number 150.

THE

50 Cents.

PHILADELPHIA

Photographer.

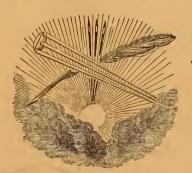
AN ILLUSTRATED MONTHLY JOURNAL,

DEVOTED TO PHOTOGRAPHY.

THE OFFICIAL ORGAN OF THE NATIONAL PHOTOGRAPHIO ASSOCIATION OF THE UNITED STATES.

EDITED BY EDWARD L. WILSON.

June, 1876.



PHILADELPHIA:
BENERMAN & WILSON,

PUBLISHERS,

116 NORTH SEVENTH STREET.

Subscriptions received by all News and Stock-Dealers.

FIVE DOLLARS PER ANNUM, IN ADVANCE.

Sherman & Co., Printers, Philadelphia.

SUMMARY OF CONTENTS.

Pa	AGE		PAGE
The National Photographic Association Convention,	161	Photographic Rights. By J. CADWALLADER	170
N. P. A.—Local Secretary's Call	162	Talk and Tattle	172
The Star-Spangled Banner at the Convention	163	A Lecture on Lenses. By JOSEPH ZENTMAYER	173
Deferred and New Business of the National Photo-		German Correspondence. By Prof. H. Vogel	177
graphic Association. By J. H. FITZGIBBON	163	French Correspondence. By E. Stebbing	179
The Centennial Photographic Diary	164	Matters of the N. P. A	181
The Printer's Corner. By Chas. W. Hearn	164	Photography in the Great Exhibition	182
More About Alum Elimination. F. M. S	166	Gelatino-Bromide Process. By G. W. HEWITT	186
A Rare Specimen	167	Society Gossip	187
An Improved Dipper	168	Landy's Seven Ages of Man	188
Our World's Fair	168	Our Picture.	190
Texas Correspondence	169	EDITOR'S TABLE	191

EMBELLISHMENT.-Promenade Picture. Negatives by J. H. Kent, Rochester, N. Y.

ADVERTISEMENTS.

BULLOCK & CRENSHAW. Photographic Chemicals. CAMEO PRESS, THE UNIVERSAL. CENTENNIAL EXHIBITION VIEWS. COLLINS, SON & Co., A. M. Photograph Cards. DEAN, JOHN & Co. Ferrotype Plates. COOPER, CHAS. & Co. Dresden Albumen Papers, etc. DEBANES, J., Glace Work. ENTREKIN, W. G. Burnisher or Planisher. FAIRBANK, MURPHY & Co. Passepartouts, Mats, etc. FRENCH, B. & Co. Voigtlander Lenses, &c. GEORGE & SATCAMP. Photographic Materials. GENNERT, G. Albumen Papers. GIHON, JOHN L. Opaque and Cut-Outs. HANCE'S PHOTO. SPECIALTIES. HANCE'S GROUND GLASS SUBSTITUTE. HANCE'S DELICATE CREAM GUN COTTON. HEARN'S PRACTICAL PRINTER. HEARN'S PHOTOGRAPHIC PRINTING INSTITUTE. HERMAGIS' PORTRAIT LENSES. HOWSONS' PATENT OFFICES.

BENERMAN & WILSON. Magic Lanterns and Slides.

AND THE DISCUST

Magee, James F. & Co. Photographic Chemicals.
Mosaics, 1876.

Patthere, Lewis & Bro. Passepartouts, &c.
Photographer's Pocket Reference-Book.

Photographic Publications.

PHOTOGRAPHER TO HIS PATRONS.
PROMENADE PRIZE PICTURES.

ROBINSON'S PHOTO. TRIMMER AND METALLIC GUIDES.

ROSS' PORTRAIT AND VIEW LENSES.

RYAN, D. J. Southern Stock Depot.

SAUTER, G. Passepartouts.

Somerville, J. C. Photographic Stock Depot.

TABER, I. W. & Co. Background and Plate Holder.

THE CENTENNIAL PHOTOGRAPHIC DIARY.

U. S. NATIONAL MONUMENT TO ABRAHAM LINCOLN.

VOGEL'S HAND-BOOK OF PHOTOGRAPHY.

WALLACH, WILLY. Trapp & Munch's Albumen Paper

WAYMOUTH'S VIGNETTING PAPERS.

WILSON'S LANTERN JOURNEYS.

WILSON, HOOD & Co. Catalogue of Photo. Requisites, & c

WOODWARD, D. A. Solar Cameras.

ZENTMAYER, JOSEPH. Lenses.

119 South Fourth St. PHILADELPHIA.

IMPROVED PHOTOGRAPH COVERS.

Branch Office, 605 Seventh Street, WASHINGTON, D. C.



H. HOWSON,

Engineer and Solicitor of Patents.

C. HOWSON.

Attorney at Law, and Counsel in Patent Cases.

CENTENNIAL PHOTOGRAPHIC



A Guide to Photography, a Guide to the Centennial, and a Memorandum Book.

BY ROBERT J. CHUTE.

This book should be in the hands of every photographer who intends visiting Philadelphia before he comes, and in his pocket when he comes. The information it contains is indispensable to visitors and may save them many times its cost; while the blank leaves with which the printed pages are interspersed, make it a confidential companion to whom you can communicate your choicest thoughts.

The following is a list of its

CONTENTS.

Rates of Postage, Places of Interest in Philadelphia, Railroad Depots and Ticket Offices, Calendar, Local Photographic Societies, Items of Photographic History, Photographic Processes, The Negative Bath, The Developer, Collodion, Varnishes, Retouching Varnish, Printing and Toning, Mr. Marston's Process, Mr. Hearn's Process, Collodio-Chloride for Porcelain Printing, Emulsion Process, Photographic Hints, Executive Officers of the United States Centennial Commission, The Centennial Buildings, Photographic Hall, Directions for Exhibitors, Important to Visitors, Regulations for Admissions to the Centennial Grounds, Admission Tickets for Exhibitors and Employees, Admission Tickets for the Public, Hotel Charges, N. P. A. Convention, Map of Philadelphia.

It contains a fine frontispiece engraving of Photographic Hall, and the beautifully colorea Map of Philadelphia is a really valuable feature of the work. Visitors will be required to pay from 25 to 50 cents for this map alone.

For the photographer there is no other Guide-Book that will do him so much service. It will be useful in the gallery, useful on the journey, and most useful during the sojourn in the City of Brotherly Love.

PRICE, 75 CENTS.

For sale by

BENERMAN & WILSON,

116 North Seventh Street, Philadelphia.

OHN DEAN & CO.

Worcester, Mass.,

Manufacturers of the

Nonpareil Plate,

A substitute for porcelain. The new NONPAREIL PICTURES have elicited the most general expressions of approval and admiration. The latest improvement simplifies the formula and insures success. Our plates are stamped. Patented July 29, 1873, and June 16, 1874. All others are spurious.

ALSO, THE CELEBRATED

FERROTYP **ADAMANTEAN**

BLACK, AND PATENT CHOCOLATE-TINTED, EGG-SHELL, AND GLOSSY.

The experience and extensive facilities of JOHN DEAN & CO., enable them to produce the most desirable FERROTYPE PLATES in the market.

> E. & H. T. ANTHONY & CO., Trade Agents, 591 Broadway, New York.

U.S.

NATIONAL MONUMENT

то

Abraham Lincoln,

OAK RIDGE CEMETERY, SPRINGFIELD, ILL.

We have just issued a most charming picture of this monument, including some of the surrounding scenery. The monument is situated on the bank of a beautiful little stream, which winds along in the foreground, reflecting the trees and foliage in its mirror-like surface; the whole forming a beautiful souvenir of our martyred President, who

"WITH MALICE TOWARD NONE, CHARITY TO ALL,"

won the affections of so many of his countrymen.

The print is 9×12 , mounted on a fine, tinted, lithographic mount, 18×22 inches. The picture is copyrighted, and can be had only of us.

PRICE, \$3.00.

Liberal discount to the trade.

BENERMAN & WILSON, Photo. Publishers,

116 North Seventh Street, Philadelphia, Pa.

CENTENNIAL



By arrrangement with the CENTENNIAL PHOTOGRAPHIC CO., who have the exclusive right to photograph within the INTERNATIONAL EXHIBITION OF 1876, we are enabled to offer to our patrons a splendid line of

INTERIOR AND EXTERIOR VIEWS OF THE BUILDINGS AND GROUNDS.

Including charming interiors, rich exhibits, wonderful flora, beautiful panoramas, and lovely scenes, which meet the eye in all directions, comprising now some

FIVE HUNDRED SUBJECTS.

Stereos, \$3 per dozen; 5×8 at 50 cents each; 8×10 , \$1; 13×16 , \$2.50; and 17×21 , \$5. These views are all gotten up in the highest style of the art, can be sold by any photographer, and will bring a crowd to any gallery to see them.

CATALOGUES FREE. SAMPLE DOZEN STEREOS BY MAIL, \$3.
LIBERAL DISCOUNT BY THE GROSS.

Also the CENTENNIAL SOUVENIR—16 Views of the Centennial Buildings and Philadelphia. Cloth bound, 50 cents, post-free. Trade supplied. Money in it!

BENERMAN & WILSON, Photo. Publishers, 116 NORTH SEVENTH ST., PHILADELPHIA.



DOUBLE IODIZED PORTRAIT COLLODION.

ANDERSON'S PORTRAIT COLLODION.

WHITE MOUNTAIN LANDSCAPE COLLODION.

NIAGARA FALLS LANDSCAPE COLLODION.

TRASK'S FERROTYPE COLLODION.

HANCE'S BATH PRESERVATIVE.

HANCE'S GROUND GLASS SUBSTITUTE.

HANCE'S DELICATE CREAM GUN COTTON.

HANCE'S SILVER SPRAY GUN COTTON.

HEARN'S COLLODIO-CHLORIDE.

GILL'S CHROMO INTENSIFIER.

CUMMINGS' GRIT VARNISH.

Manufactured from the best chemicals that can be procured in the market, manipulated with the greatest care.

Each article warranted to do the work claimed for it, if used according to the directions plainly printed on the label accompanying each bottle or package. These preparations are noted for their purity and uniformity, and have for years been used in the most celebrated galleries in the United States and Canada.

FULL MEASURE GUARANTEED.

For Sale by all Stock-dealers in the United States and Canada.

A. L. HANCE, Manufacturer, 116 NORTH SEVENTH STREET, PHILADELPHIA.

Read detailed advertisments on succeeding pages.

FROM THE MANY

COMMENDATORY LETTERS

Testifying to the superior qualities of

HANCE'S SPECIALTIES

WE HAVE ROOM ONLY FOR THE FOLLOWING:

"I consider the Cotton the best we have ever used as yet."-R. Poole, Nashville, Tenn.

"The film of the Cotton you sent me was unusually smooth and firm, being entirely free from glutinosity, and setting like India-rubber. It was quite powdery and crumbled to pieces in my fingers, 'as if rotten.' It dissolved almost instantaneously, and it was 'by far' the very best material I have ever used. I sincerely trust that you will send me the same kind again."—ELBERT ANDERSON, Kurtz Gallery, New York.

"I received your Double-Iodized Collodion all right, and in good shape. Have tried it pretty well. It gives very fine negatives and good detail."—W. E. HART, Watertown, N. Y.

"We take pleasure in recommending Hance's Double-Iodized Collodion as a first-class article, in fact it is the best manufactured Collodion we have tried."—SCHREIBER & SONS, No. 818 Arch Street, Philadelphia.

"The goods by Express came safe to hand. I have tried a part of them and am greatly pleased. Will likely want more goods in your line."—R. POOLE, Nashville, Tenn.

"Your Ground Glass Substitute is the best I have ever tried, and I have tried nearly every kind advertised, as the long row of nearly full bottles will testify. It works like a charm."—J. N. Webster, Barton, Vt.

"I take pleasure in recommending your Cottons and Collodions, before all others I have used. It is a blessing to know where you can get good Cotton."—B. W. Kilburn, Littleton, N. H.

"The last lot of Cotton you sent is the very best I have ever used. Please send me another pound at once."—ELBERT ANDERSON, Kurtz Gallery, New York.

"Have used some twenty-five pounds of your Collodion the past year with unvarying success."—G. W. Hope, Middletown, New York.

"Your Double-Iodized Collodion is the most perfect working Collodion I have used in fifteen years. Every picture I make with it is a success."—R. L. Dale, Boston, Mass.



Has now become the standard Collodion in all first-class galleries. Although but a short time in the market it is rapidly superseding all other makes, and the quantity that has been sold is simply astonishing.

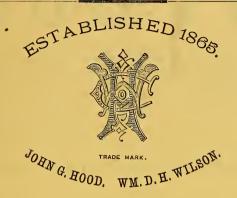
Give it but a single trial and you will be convinced. Can be used as soon as made, but improves with age, and will keep indefinitely.

Price, \$1.50 per pound.

A liberal discount to parties ordering by the gallon. READ ADVERTISEMENTS ON PRE-

1776. PREPARE FOR THE CENTENNIAL. 1876.

NOW READY!



WILSON, HOOD & CO.'S

Photographic Requisites,

Frames,

Stereoscopes and Views.

SALESROOMS:

822 Arch Street, Philadelphia, Pa.

MAY, 1876.

FURNISHED GRATUITOUSLY TO ALL APPLICANTS.

CIHON'S

Are the very best that are made, and are now without a rival in the market. They are clean cut, most desirable shapes and sizes, and made of non-actinic paper, manufactured specially for the purpose. Each package contains 30 Cut-Outs, or Masks, with corresponding Insides, assorted for five differently sized ovals and one arch-top.

PRICE. \$1.00 PER PACKAGE. Sent by mail on receipt of price.

Parties wishing special sizes, or large lots of a few sizes, may have them cut to order promptly, by addressing the manufacturer. No lot costing less than \$1.00 made at a time.

No printer should attempt to make medallion pictures without them.

THEY HAVE NO EQUAL FOR QUALITY.

Beware of spurious imitations made of common paper, full of holes, badly cut, and odd shapes and sizes. Ask your stockdealer for GIHON'S CUT-OUTS, and see that they are in his envelopes with instruction circular included.

PROMENADE SIZE NOW READY!

SOLD SEPARATELY AT 50 cts. per dozen.

IS DESIGNED FOR

COMPLETELY OBSCURING THE IMPERFECT BACKGROUNDS OF COPIES, RETOUCHING NEGATIVES,
FAULTY SKIES IN LANDSCAPES,
COATING THE INSIDE OF LENSES OR CAMERA BOXES,

BACKING SOLAR NEGATIVES,

COVERING VIGNETTING BOARDS,

AND FOR ANSWERING

ALL THE REQUIREMENTS OF THE INTELLIGENT PHOTOGRAPHER IN THE PRODUCTION OF ARTISTIC RESULTS IN PRINTING.

WHEREVER YOU WANT TO KEEP OUT LIGHT, USE OPAQUE.

It is applied with a brush, dries quickly and sticks.

CUT-OUTS (thirty), \$1.00.

OPAQUE, 50 CENTS.

FOR SALE BY ALL DEALERS.

Address all orders to

JOHN L. CIHON, Inventor,

128 N. Seventh St., Philadelphia, Pa.

OUR NOVEMBER, 1875

PRIZE

RICTURES

Our second PROMENADE PICTURE competition has just been closed, and we are in possession of some of the *finest Photographic work ever* done in the world!

We offer prints from the competing negatives, for sale at the prices below. They are most useful to every photographer as examples of good negative work, artistic composition and lighting, and superior printing and finishing. We have done *our* part to make them *models* in every respect.





Was awarded for the best six negatives to

Mr. LYMAN G. BIGELOW, Detroit, Michigan,

Whose elegant work is familiar to many of our patrons.

THE SETS INCLUDE:

Nos. 1 to 8—Studies by L. G. Bigelow, Detroit, Michigan.
Nos. 9 to 20—Studies by F. B. Clench. Lockport, N. Y.
Nos. 21 to 28—Studies by G. M. Elton, Palmyra, N. Y.
Nos. 29 to 34—Studies by O. P. Scott, Abingdon, Ill.
Nos. 35 to 40—Studies by E. M. Collins, Oswego, N. Y.
Nos. 41 to 46—Studies by E. H. Alley, Toledo, Ohio.

See review in December number Philadelphia Photographer.

The whole	eseto	of 46, .									\$10	00
In two Pl												
Selections												
		two doz										
The 28 of												
Book Cov												

Address all orders to

BENERMAN & WILSON, Publishers, 116 NORTH SEVENTH ST., PHILAD'A, PA.





GEORGE & SATCAMP,

58 South Meridian Street, Indianapolis, Ind.,

HAVE JUST OPENED UP A FRESH AND COMPLETE STOCK OF

PHOTOGRAPHIC MATERIALS.

CONSISTING OF

Pure Photographic Chemicals, Card Stock, Ferrotype Stock, Camera Boxes, of every Style and Manufacture,

Darlot Lenses, Voigtlander & Son Lenses, Ross Lenses, Steinheil Lenses,
Dallmeyer Lenses, Hermagis Lenses, Morrison View Lenses,
Camera Stands, Head Rests, Posing Chairs,

Backgrounds, Samuel Peck & Co.'s Printing Frames,
Judkin's Photo. Printing and Tinting Frames,

Porcelain Trays, Glass Baths, Oval and Square Picture Frames, Mouldings, Picture Cord, Screw Eyes, Entrekin Burnishing Machines, etc., etc.

Everything called for by the photographer, for gallery work or viewing, can be furnished promptly and shipped without an hour's delay to any part of the country.

WE ARE THE SOLE MANUFACTURERS AND TRADE AGENTS FOR

JUDKIN'S PHOTO, PRINTING & TINTING FRAMES,

TO WHICH WE SPECIALLY INVITE THE ATTENTION OF PHOTOGRAPHERS.

This improvement is admirably adapted for Graying and Tinting Vignette Pictures, Printing from Weak Negatives, etc., saving time and money, and producing beautiful and real artistic effects.

TWO SIZES NOW READY!

The $6\frac{1}{2}$ x $8\frac{1}{2}$ size can be used for card work. Liberal discount to the trade. Samples of work and circular, setting forth more fully its merits and advantages, sent on application.

SEND FOR PRICE LIST OF PHOTOGRAPHIC MATERIALS.

GEORGE & SATCAMP,

58 South Meridian Street, Indianapolis, Indiana.

THE PHOTOGRAPHER TO HIS PATRONS.

WHAT IS IT?

HE PHOTOGRAPHER TO HIS PATRONS is a little book or pamphlet of twelve pages, the intention of which is: 1st. To enable the photographer to say a few words in a kindly way to those who have photographs taken, in order that the intercourse between them and their photographer may be pleasant and result in the most successful pictures. Every photographer knows that he is constantly beset with a lot of questions, as to the proper way to dress, the best time to come, and so on, which take a great deal of his time to answer. This little book answers them all, and the mere handing of a copy to the questioner, which he or she can carry away and study at leisure, serves as admirably as a half-hour's conversation.

2d. It is a cheap mode of advertising What could you want better than to have your business card so attractive that people will come and ask for it, hand it around from one to another, discuss it, and then keep it for reference? This is what they do with this little "tract." Witness what those who

3d. It is also intended to convey to the public at large the fact that photography is not a branch of mechanics, nor photographers a sort of mechanic themselves, but that both are entitled to respect, the same as the family physician or the minister; that the photographer has rights as well as the public; that he must be trusted, and that he alone is responsible for his results. Moreover, that he must make

that he must be trusted, and that he alone is responsible for his results. Moreover, that he must make the picture and not they.

How far the work serves these three ends the reader must judge from the testimonials below, of a few of those who have been using our little publication in their business.

We believe it will pay you to use it, and that you will assist just that much in elevating your art and your craft, an object which we are all working for.

We get "The Photographer to his Patrons" up in neat style, on the best letter cap paper, assorted tints, green, pink, and buff. Eight pages are devoted to the body of the work, which contains paragraphs or chapters—I, on the object of the work; 2, on photography; 3, when to come; 4, how to come; 5, how to dress; 6, how to "behave; 7, the children; 8, general remarks on coloring, copying frames prices. Ac.

ing, frames, prices, &c.

All this is inclosed in a cover of the same kind of paper, the pages of which are at the service of the photographer who orders them to have printed thereon anything he may please, which printing we do without extra charge. We publish this leaflet in English, German, and Spanish.

Cuts for the covers we supply free.

1000 copies, cover included, . . \$20 00 2000 " " " . . . 35 00 Over 500,000 have been sold.

TESTIMONIALS.

- "I sent one out West to a friend, and she wrote that she was now posted, and when she came here to have a picture made, she would come 'according to directions.' "-A. Bogarbus, New York.
- "It assists me greatly."-JAMES MULLEN, Lexington, Ky.
- "A grand idea."-ELBERT ANDERSON.
- "You have conferred a great favor on the fraternity in supplying it."—A. C. McIntyre Co., Ogdensburg.
- "It is the best advertising medium I have ever found."-H. M. SEDGEWICK, Granville, O.

We send samples to any who may desire.

BENERMAN & WILSON, Photo. Publishers, 116 North Seventh Street, Philadelphia.

NEW STOCK HOUSE,

Somerville's St. Louis Photographic Stock Depot,

No. 8 South Fifth Street.

AMERICAN OPTICAL CO.'S CELEBRATED APPARATUS,
POWERS & WEIGHTMAN'S SILVER, GOLD, IODIDES AND BROMIDES,
VOIGTLANDER & SON AND DARLOT LENSES,
TILFORD'S CELEBRATED IODIZED AND NEGATIVE COLLODION,
AND EVERY WANT FOR THE TRADE.

FRAMES IN EVERY VARIETY.

J. C. SOMERVILLE, No. 8 S. Fifth St., Saint Louis, Mo.

FAIRBANK, MURPHY & CO.,

38 North Howard St., Baltimore, Md.,



MANUFACTURERS OF

PASSEPARTOUTS,

DOUBLE EMBOSSED,

DEEP GOLD,

AND BEVEL

MATTS,

SHOW MATTS.

FINEST GOODS. BEST STYLES. BOTTOM PRICES.

HEADQUARTERS FOR THE TRADE.

Show Displayers, Velvet Passepartouts, Velvet Passepartouts, Beveled Matts, Fancy Metal Frames,

Velvet Stands,
Velvet Cases,
Double Matts,
nes,
Standard Matts,

Fancy Paper Passepartouts.

These goods are entirely of our own manufacturing. A large assortment constantly on hand; odd sizes and styles made to order.

LEWIS PATTBERG & BRO., 709 (Formerly) Broadway, New York.



GLACÉ! GLACÉ!

J. DE BANES, 872 Broadway, N. Y., finishes Photographs of all sizes, for the trade, in the newest styles. Send in your orders early.

G. SAUTER.

No. 138 South Eighth Street, Philadelphia,
MANUFACTURER AND WHOLESALE DEALER IN

PASSEPARTOUTS.

The attention of the trade is particularly called to the superior quality of our Glass and materials and neatness of finish. A large assortment constantly on hand.

D. J. RYAN'S



SOUTHERN

Photographic Ferrotype

STOCK DEPOT,

Savannah, Geo.

FIRST-CLASS STOCK
AT NORTHERN PRICES,

Saving Time, Freight, Insurance, Drayage, &c.

SEND FOR PRICE LIST.

PROMENADE

ALL!

HERMAGIS'

Celebrated French

PORTRAIT LENSES.

CABINET SIZE, ARE JUST THE LENS FOR THE NEW

PROMENADE PICTURE.

MR. HENRY ROCHER, the renowned Chicago photographer, says of them: "In my opinion they are truly lenses of great capacity, and must surely satisfy every purchaser." Mr. Rocher has purchased two Hermagis lenses of card size and one Salomon style. See further splendid testimonial from Mr. Rocher in Specialtics.

MR. F. GUTEKUNST, the celebrated Philadelphia photographer, was sent a Salomon Lens to try for us, and wont part with it. It cuts sharp a 9 inch standing figure, and beats a lens that has been his favorite many years, and where many makes of lenses have failed, on trial, to equal it.

The HERMACIS IS THEREFORE AHEAD

TRY THEM!

These celebrated lenses, are used by MONS. ADAM SALOMON, of Paris, exclusively for making his **WORLD-RENOWNED PORTRAITS**, and by the most famed photographers of Europe, from whom Mons. Hermagis has the Highest Testimonials.

We now have a FULL STOCK on hand.

The Salomon Style, 8 x 10 size, \$160.

For Cabinet Size, extra quick, \$100.

For Cabinet Size, quick, \$90.

For Carte Size, extra quick, \$50.

For Carte Size, quick, \$40.

They are being introduced in America steadily, and are liked wherever they go.

They will be sent on trial to responsible parties C. O. D., and instructions to Express Company to hold money one week for trial. If parties prefer to see the work of a lens before purchasing, we will make a negative and send with details of exposure, etc., and reserve the lens until answer is received (if the time is reasonable), on receipt of \$1 to pay cost. Having a skylight of our own we are enabled to do this.

Not a single person to whom we have sent these Lenses on trial, as above, has returned them.

BENERMAN & WILSON,

116 North Seventh Street, Philadelphia, Pa.





Philadelphia Photographer.

Vol. XIII.

JUNE, 1876.

No. 150.

Entered according to Act of Congress, in the year 1876,

BY BENERMAN & WILSON,

In the office of the Librarian of Congress, at Washington, D. C.

THE NATIONAL PHOTOGRAPHIC ASSOCIATION CONVENTION.

It gives us pleasure to receive from all quarters expressions of satisfaction with the action of the Executive Committee in calling a convention of the National Photographic Association. It shows that there is a living interest still maintained among a large number of members, and we trust this may be the leaven that will work through the whole photographic fraternity, both among those who are members and those who are not, so that by the middle of August there will be an outpouring to attend the convention, that will only be equalled by the expressions of patriotism and loyalty to our country, and the enthusiasm in sustaining the National Photographic Association.

We want to impress upon all, whether members or not, the thought that this is the opportunity of a lifetime! None of us will ever see such another. We may travel our country over in years to come; we may visit exhibitions, fairs, and shows indefinitely; but none of us of this generation will ever see another Centennial Exhibition such as is now open to the public in Fairmount Park, and which, in its magnificent buildings, its delightful situation and beauty of grounds, and the extent, variety, and quality of exhibits, has never been

equalled by anything the world has ever seen. To meet in convention within the precincts of this wonderful international city, this community of the nations, is a privilege which we photographers will never have accorded us again; and he of the camera who fails to participate in our National Convention for 1876, will miss an opportunity for which there can be no compensation, and the regret for which will recur as often as memory recalls the great event.

This convention promises to be one of great interest to photographers all over our country, aside from the general attractions of the immense exhibition. It will probably determine what shall be our plan of organization for the future; taking the past, with its ups and downs, we may draw from it the lessons which experience only can teach, and be enabled to revise, or reorganize on a basis which will be more beneficial and satisfactory to all connected with the Association, and give us a more definite and responsible membership. As will be seen elsewhere some of our correspondents are agitating questions of reform, and we trust all will think the matter over, and come prepared to act for the best interests of the Association.

In the meantime we would advise all members to pay their dues promptly now,

that among the items of expense when they come to the convention. Also begin now to arrange business, and count the cash that will be necessary to pay for the trip. Make up your mind that you will come, and then make everything bend to that resolution. All obstacles will usually give way before well-directed efforts, and he who now sees any barrier to his having a part in this great event of a lifetime should at once set his engineering skill at work to remove it, if such be possible, so that he may be in Philadelphia on the morning of the 15th of August, with eyes open, ears unstopped, and mind prepared to receive all that is good and instructive, whether in exhibition or convention.

As an item of news in which many photographers will be interested, we will here say that our friend, Dr. Vogel, has been appointed a juror from Germany, and by the time this reaches our readers will be on his way to this country. Let us show him, and all our visitors from abroad, that we mean to support our National Association, and make it in the future, as it has been in the past, the means of bringing us all nearer together, and helping us to rise to higher attainments in the art we all love so well.

N. P. A.

LOCAL SECRETARY'S CALL.

Fellow-members of the National Photographic Association: I believe you will all rejoice with me, and with all who wish well to the N. P. A., that the suspense and doubt which for a time hung like a heavy cloud over our Association have been dispelled. The call of the Executive Committee has seemed to clear the atmosphere, and now the prospects for one of the best conventions we have ever had seem bright and promising.

You have all, doubtless, read the proceedings of the Executive Committee—the appeals of President Rulofson, Permanent Secretary Wilson, and some individual members of the Executive Committee—in behalf of a convention and the importance of sustaining the Association. I will, therefore, not attempt to add anything in this

direction, but in my capacity as Local Secretary I hereby extend to all a cordial invitation to meet with us on the 15th of August, in the Judges' Pavilion, within the Centennial grounds.

Aside from the interest which attaches to the Association, which we all wish to see promoted, and which hung so long as it were in the balance, but which promises now to be revived with renewed life and energy-aside from this, I say, there is an incentive for us all to attend this convention which has never been associated with any other nor will ever be again to any of us; I mean the great Centennial Exhibition, which is the grandest opportunity we Americans have ever had, and which excels in magnitude and excellence, in many respects, anything ever produced in any country. This you will all want to visit. You would want to visit it if there were to be no National Convention; but how delightful are the associations when for this double purpose we can come together, at this focus of the world's concentrated interest, and feel that while we are enjoying the grandest privilege of our time we may be cementing the ties of brotherhood, strengthening the common bonds of fraternity which have induced us to organize as an Association, and gather new courage, new impulses, for effort and improvement in the future which shall far excel that which has given us so much encouragement in the past.

With so much to interest you all, and make a visit to Philadelphia one of the happiest and most important events of your lives, I feel that I ought not only to invite you to come, but to urge you with all the persuasion I can command; but I know enough has been said. The attractions of Photographic Hall alone ought to be sufficient to bring you all here, and I feel confident that all who possibly can will come. There will, of course, be no preparations to make for the photographic exhibition, as that will be all complete before this reaches you, and I think I can safely say it will be the grandest display of photography that has ever been seen. So that all there will be for you to do at the time of the convention will be to come and enjoy.

Every arrangement for the comfort and accommodation of members that can be made will be attended to, the details of which will be announced hereafter, together with the order and exercises of the convention. In the meantime all prepare to come.

ROBERT J. CHUTE, Local Secretary.

The Star-Spangled Banner at the Convention.

THE Local Secretary hereby proposes that as a part of the opening exercises, on the extraordinary occasion of our Centennial Convention, that we sing that glorious, soul-stirring national song, The Star-spangled Banner. The time and place demand something from us—something that will be in keeping with and expressive of the spirit that will animate us all—the spirit of '761 And in what way can we better express our Centennial exuberance of loyalty and patriotism than by uniting in pouring it out in the inspiring notes of The Star-spangled Banner?

I have no doubt there are a goodly number of singers among our members; we have several fine sopranos in Philadelphia that we can probably command, and I propose that all the members who can, bring their ladies, especially if they sing, and at the opening meeting that all be admitted. We shall probably have a goodly number of photographers from abroad present on that occasion, and if we bring out our talent we can give them a specimen of American patriotic song that will make it worth their coming to America to hear; while the Judges' Pavilion will resound with such a flood of melody as will not have been heard within the grounds since the opening day.

Now, there will be ample time for all to rehearse this song, so as to become thoroughly familiar with it, and in order to place the music within the reach of all, I have made arrangements with a music-publishing house in this city whereby we can furnish the words and music complete for ten cents per copy, post-paid. I have made this arrangement because there may be many who cannot get copies conveniently, and where they are to be had they would

be required to pay from twenty-five to forty cents per copy. Send your orders early, to Benerman & Wilson, 116 North Seventh Street, Philadelphia.

> ROBERT J. CHUTE, Local Secretary.

Deferred and New Business of the National Photographic Association.

THE photographic fraternity owe to Mr. E. L. Wilson, of the Philadelphia Photographer, thanks for his untiring energy in trying, with the aid of a few others, to uphold the National Photographic Association, and infusing new life into it. gives me pleasure, in behalf of many Western and Southern photographers, to return our sincere thanks to him for the same. I am glad to see that the officers of the National Photographic Association have woke up, and determined to give us a Convention in August, at Philadelphia, when, no doubt, hundreds will make it their time to visit the Centennial (I shall be there), and see its sights, especially the grand display of pictures in the art of photography, and the accessories, that the occasion will bring forth, saying nothing of the pleasure of the shake by the hand of our worthy Professor Vogel (whom we hope to enjoy a Western spring chicken with, in Philadelphia, in the middle of midsummer). No doubt there will be a splendid display of materials appertaining to photography, especially by the great rival houses of the Scovill Manufacturing Company and Anthony & Co., who will try each to surpass the other in their grand exhibition of photographic materials, which will doubtless excel any that was ever brought together. May they both win the prize!

The deferred business of the last meeting of the Convention should be deferred no longer, especially the revisal of the Constitution, and it is hoped the chairman, Mr. Hall, will be on hand with that important document in a good shape, that will be acceptable to the majority of the Convention. Also the deferred business on the Mutual Benefit Life Association for Photographers. I understand the committee have it now in hand, revising and altering the articles

of the same, so as to make it acceptable to all photographers, inside and out of the National Photographic Association, that wish to become members and receive the benefits of the same. The articles of the Association of the Fire Insurance Company no doubt will be reported adversely; for that does not come within our sphere to go into the complicated business of a Fire Insurance Company. Now, among other new business, we want it definitely settled whether it is advantageous or policy to have a vearly exhibition, or once in every three years; and also a permanent committee or managers, of one or three, with power under the Executive Committee to arrange for an exhibition, at the time agreed upon, at any point most suitable and desirous to have the exhibition, and the said committee or managers be paid for their services whatever sum the Executive Committee may agree upon.

We also want some work and business defined for the Vice-Presidents, or abolish them altogether. We, finally, want the National Photographic Association kept together, even if we have no exhibition, for much good will be derived from the same, It is hoped that, at the meeting of the coming Convention, short speeches will be the order of the day, and to some practical effect, that we may learn wisdom from the past and gain knowledge for the future, that the grand display in the Photographic Hall, in the Centennial grounds, may teach us, one and all, something new, and convince us that the money spent in visiting the same is money gained, for knowledge is power, and from it we all can coin money that will pass as current as that which comes from the Mint, for it will be stamped from the labor of our genius in the Art of Photography.

J. H. FITZGIBBON.

The Centennial Photographic Diary.

This work is now ready, and is one of the neatest little books we have ever published. It should be in the hands of every photographer who intends visiting the Centennial Exhibition, as it contains just the information he wants, and may save him many times its cost. It is just the size to fit the

pocket. It contains a fine frontispiece engraving of Photographie Hall; has blank leaves for memoranda interspersed alternately with the printed pages; photographic formulæ covering the whole process, and embracing only that which is known to be reliable; information relating to the Centennial Exhibition, very useful to strangers; and a beautiful colored map of the City of Philadelphia, including the Centennial grounds, around the margin of which are fine engravings of eight of the principal buildings. This map is a most valuable feature of the work, and is such as visitors will be required to pay from twenty-five to fifty cents for when they get here.

Every member of the National Photographic Association should provide himself with a copy of this work, and bring it with him when he comes to the Convention. If he makes good use of it, it will be the most valuable item he can earry home with him, filled as it should be with notes, memoranda, formulæ, incidents, etc., etc.

For fuller details of contents see advertisement.

Mailed promptly on receipt of seventy-five cents to Benerman & Wilson.

THE PRINTERS' CORNER,

BY CHARLES W. HEARN. *

ALBUMEN PAPER.

It is often here, in the very selection of the albumen paper, where the cause of so many failures in photographic printing originate, and, coming as it does in the commencement of this branch of photography, it seems too bad that there is not more sound attention paid to it, rather than to have so much complaint about bad silver and toning baths. If all printers were to be certain in the first place that the paper they have selected is good, they would not be so constantly in trouble in their printing and toning operations, and would feel more in love with this beautiful class of work, and thus would produce better work. I need not hesitate in saying that I have often seen just the greatest possible bene-

^{*} Conductor of Hearn's Photographic Printing Institute 7 Author of the Practical Printer.

fits result with parties in a change of their paper. A may have worked the paper B very well, but found a change to C much better, while D found that C did not work well with him, and hence changed perhaps to B with decided improvement.

Such contradictory statements about paper bothers the bewildered tyro, and if he were to select paper by what others may say, he would probably be at fault, for there may be quite contrary opinions given, by equally reliable parties, about the same brand of paper, some preferring the paper K to O, while others prefer O to K.

Experience has taught us all, in such cases as this, to "work out our own" formulæ with the paper, for there is no use denying that certain kinds of albumen paper require certain baths, both in the silvering and toning of it, for, if Mr. Hoffman were to use and highly recommend the National Photographic Association Extra-Brilliant paper, Mr. Howe, "the Cross-sword German Brand," Mr. Bridle, Morgan's H Extra, and some one else, Clemons, where would the confused beginner look for his paper? He might use one or the other of the above brands of paper, because this or that one of the above-named gentlemen advised its use, but suppose experience had taught them all that none of the papers but their favorite were best, and they were very bitter against all others but that one, what is to be done? We can't say that they can't work it, because their large and extensive experience opposes such an absurd statement, but what then? for there is just this thing staring them in the face: one paper works very nicely with one party, and the same paper is voted bad or average good with another party.

The reason of this is on account of the albumenizers themselves, and not with the printers. There are often as many as three or four qualities of one albumenizer's paper in the market, and one party obtains good paper and praises it up; another party gets bad paper and runs it down. The albumenizers go too much into economizing with their albumen, putting all sorts of substances into it with a view of obtaining a good surface, when perhaps these very things they add become dissolved in the

various solutions through which they pass, and afterwards leave a rough surface, which does not come up to time in the finishing of the prints, besides contaminating the silver and toning baths with substances which are foreign to their composition, and thus a bad paper will ruin everything.

Other albumenizers, again, use for a coloring matter a color which is not permanent, and fades away in a short time, a good part disappearing through the operations necessary for the production of our prints. and in a few weeks or months the color has all disappeared, leaving a paler picture, and one which people give photographers the blame of making, terming it as faded, when it is the albumenizer's fault, and not the photographer's. Who has not seen prints made upon pink paper, which, at the time we made them, we were certain were properly treated, and yet in a few weeks or months were faded a little, and then remained in that state for years without fading any more? What is the cause? The paper itself!

An albumenizer once said to me that the pink color is very transient and will not remain, but will disappear in a few weeks and leave the paper white, and hence he is continually pushing his pearl paper. That may have been the case with his paper, but as to that I will not say, but I have prints fully two years old, made upon other brands of pink paper, and the whites are just as pure and pink as they were the day they were mounted.

Let those albumenizers who are troubled in making pink paper with the difficulties mentioned above use cochineal in their albumen, and they will have permanent pink paper, if the photographers will on their part use a slightly alkaline bath for the sensitizing solution, for an alkaline solution develops the color, making it stronger and more permanent.

There is a paper in the market which deserves the highest encomium in its favor, standing as it does at the very pinnacle of fame, with but few equals, and that is the Morgan's H Extra or Extra-brilliant paper, of which Mr. Thomas H. McCollin, of this city, is the agent. I have used this paper for many months, and find it worthy of all

praise; sometimes varying, but generally of the highest quality. The complaints general with albumen paper are seen less in this brand than in most others, such as streaks, albumen spots, and poor surface. The color is fixed, and not volatile, and on the whole is very fine. It has been given the preference by a great majority of our Philadelphia photographers, as well as others west of our city.

Let photographers insist upon having a good paper, and return all paper which is not up to a high standard of excellence, and a great step will be taken towards improvement of photographic printing.

PRESERVATION OF SENSITIZED ALBUMEN PAPER.

Richardson's Sensitized Albumen Paper.

It is our intention, whenever a new thing is introduced into the market, that is in any way connected with that branch of photography of which this Corner treats, to give it a good, thorough test, and, if it is a good thing, to publish it as such; if not, then to expose it.

A few weeks ago Mr. Richardson mailed us a few sheets of his prepared paper for our opinion, and, after fuming it as he desired, if we had not had a cross on the back of the pieces, it would perhaps have been difficult to tell it from the rest of the paper.

We hear that photographers generally will take hold of it, and then many of the complaints that the writer of this article receives from parties in trouble will not be heard, as there is no silver bath to bother with. We intend, in a few months, to show the readers of this journal a print printed upon this kind of paper, which will then corroborate the above statement. We hope that Mr. Richardson will not put the price up so high on his paper that it will kill the sale of it.

As everything is so crowded this month in the journal, the letters that have been received will be left over until next month to answer.

CENTENNIAL LANTERN SLIDES.—We are in daily receipt of new subjects, and most charming things are being produced. No exhibitor should be without them. See advertisement.

MORE ABOUT ALUM ELIMINATION.

DEAR SIR: In the March number of the Philadelphia Photographer, page 80, Mr. W. H. Sherman takes occasion to come to the rescue of a former attack upon Mr. Clemons's eliminating process, pleading that "silence" might "be taken as an acknowledgment of defeat" as a fitting excuse. No doubt that Mr. Sherman had an abundance of time between the receipt of Mosaics for 1876 in January and the 8th of February, to make experiments and analysis to demonstrate that alum-eliminated prints contained either a sulphide, or sulphite, or hyposulphite of some kind, after treatment in accordance with Mr. Clemons's method, and also plenty of time to demonstrate that such prints would fade,-nlenty of time!

I think Mr. Clemons rested over two years without breaking silence, nor feared the havoc silence might play upon his reputation, in order to continue his experiments, and note the effect of TIME upon the prints subjected to his treatment. He has in his possession alum-eliminated prints kept for four years, and subjected to severe tests of light, temperature, and atmospheric changes, and to this day retain their original purity in every instance, while prints out of the same batch that were treated together until they came from the hypo, but were washed thoroughly twelve hours, in many instances show the "yellow fever." Now, here is demonstration against theory, and what will Mr. Sherman be doing if his "theory" should be just a little immature?

I have tried the experiment of alum treatment myself, and used but one bath of saturated alum solution with soft water, treating the prints ten minutes or more in the bath, without any visible change in the appearance of the alum solution, have allowed the alum bath to stand over night in the dish, the solution remaining clear; but upon examination I discovered a crystalline deposit in the dish too great to account for upon the theory of change of temperature, or evaporation, or both combined. Will Mr. Sherman theorize that out? Does Mr. Sherman feel that he is sufficiently master of the chemistry and physical characteristics of aluminum and its complex com-

pounds, that he can theorize the inevitable result of the introduction of a new element into the problem? Does he know that if he takes prints from an alum bath, and immerses them in hard water, that the water will turn milky by the precipitation of alumina, and if placed in a bath of soft water, no decomposition of the alum takes place? Soft water should always be used for the alum bath, and first rinse water. Let Mr. Sherman demonstrate that alumeliminated prints Do contain any sulphur in any combination, and that such prints WILL fade; let him pursue his investigation as patiently as Mr. Clemons has his, and if his "silence" be somewhat protracted, I trust it will not be misconstrued; there is no need for hurry, science will go right along just the same, and take Mr. Sherman's report as well at any future time. It is a little singular that Vogel, Lea, Newton, and a score of watch-guards upon the walls of chemical science as applied to photography, should resign to Mr. Sherman all the laurels of exposing Mr. Clemons's process to defeat and ridicule. As to the question of "tests" for sulphur, apply to any acknowledged authority. Let us have the theories supported by positive demonstrations, gentlemen. Meanwhile, if any are disposed to try Mr. Clemons's process for themselves, who have not done so, let them get a copy of Mosaics for 1876; they will find it there. F. M. S.

PHILADELPHIA, April 18th, 1876.

A RARE SPECIMEN.

It has been expected on all sides that this Centennial year would bring to the surface many novel and curious things. We have looked forward with some degree of interest for the new things which it is expected photography will produce; but we had not expected anything of a literary nature. We were prepared to plod along with such dry material as we could collect, firing up occasionally perhaps on the great Exhibition question, and introducing a little spice here and there; but the same correspondent who sent us the communication which we printed and commented on last month under the head of "A Rising Artist," has

sent another, which we give below verbatim et literatim. Breadth in art is a pleasing and essential feature, and we are sure that breadth will be conspicuous on the faces of all our readers who peruse this wonderful production.

Coating the plate with "collodion rite from the bottle," and letting it "dry as hard as a peace of wood." is an entirely new dry process, and one which we question has ever been thought of by any of our readers; but the account of it will not be found dry by any means. If you have any weak point, we caution you about reading it, for it will develop achers (acres) of explosive surface in your ribs, and may reduce you to a mere "shadder," and fixing will be the only thing to be done for you. But, if you choose to take the responsibility, we will not longer keep you from this excruciating epistle.

Der Sir I Received my goods. And allso Received yours of the Sam date and contents Notied.

I wars varey sarrow that you cud not furnish me with as much collodion as I wounted. and I Dont think I order the kind I Received I think I order Positive and you sent me Negitive collodion So I am having Sum Trubble with my chinikle and I think it is on the account of the Collodion. I Never have binn so botherd before in all my life nuffin will Doe any good at all that I Can Do Now please Instruct me by letter as soon as possible.

First Just take the collodion Rite from the bottle and flow the plate with it as thin as paper and as Dry and as hard as A peace of wood and cant be scrach off hardley, this is before it Ever gose to the Nitrate Silver Bath at all, and after it cums out of it is dark and after it is Expose on the setter and the Developer is pord on all the Silver Will Burn off before the picture can be Discovered and it dark and flat and the Clothing is alltogether out of site and never Dose get in site.

Second. To add alcohal onley it makes White Speekle and makes No other Chang onley soffen the flem. I have aded differnt Amounts of alcohal and tryd it and Received no benifit at all. (See the other sid).

Third to add Ether & alcohal in Ecle parts makes no chang onley makes Black and white specks and the flem is so thin untell you can see the Naced plate and what Shadder thay is of the picture is varey dark and dim and has no Roundiens at all and look ded.

forth to add Eather A lone it is so varey dark untell it look lik A negro I have trid all I no, to Do my bath and Developer is all Right.

The Strenk of my Silver Bath is, 52 gr, to the oz. And my Developer is 2 oz of Iron & 2 of acid & 2 of alcohal, to quart of Water.

And I have let the Collodion Evaporate and it Dos No good at all.

Now please Instruck me What to Do by male assoon as you Can and address me

Varey Respectfully,

Moses - Arties.

February 14th, 1876.

AN IMPROVED DIPPER.

ALL photographers are familiar with the annovances incident to the use of the ordinary form of dipper, upon which the plate rests by its own weight, with the collodionized side uppermost. They have all suffered from the plate slipping from the dipper when moved about to assist the coating or prevent pinholes from floating particles in the bath settling upon it. Nearly all are familiar with the split stick, kept ready at hand for the purpose of fishing out the said plates, together with the time lost to photographer and sitter by the plate being spoiled, as in most cases it was sure to be, by the aforesaid fishing operation, and being obliged to prepare another. Again, the plates were always collodion side up, and pinholes and markings of various kinds were caused by the newly forming iodide of silver being exposed to the particles of matter which collect in the bath, and which being stirred up by the dipping, settle upon the plate and imbed themselves in the film, or obstruct the light during exposure, thereby causing spots and imperfections.

But all these perplexities are disposed of

effectually when the new dipper, invented

by Mr. S. Root, of Dubuque, Iowa, is used. The accompanying cut will show the design. only wonder that something so simple has not been introduced long ago, when we consider how important an office it fills. The dipper is made of hard wood, and fitted with a spring, as will be seen, which is tightened in place with a nut and screw, all of silver. The plate being placed upon the dipper and secured, is lowered into the bath



collodion side down, and being held securely is sure to come out safely, with a clean unblemished coating, even in the dirtiest bath. Mr. Root gives this improvement to the fraternity free, for which he deserves the thanks of us all. We believe all who try it will be pleased.

OUR WORLD'S FAIR.

THE great Centennial Exhibition was opened, according to previous announcements, on the 10th of May, with grand and impressive ceremonies, which were attended by over two hundred thousand people, including the highest officials and dignitaries of our own country, the Emperor of Brazil, and the representatives of nearly every nation under the sun. Amid the thunderings of artillery, the chiming of bells, and the shouts of the vast multitude, the doors were thrown open, and the greatest World's Fair that has ever been seen was inaugurated. The opening was a grand success, and promises well for the six months that the world will be privileged to visit this great Exhibition.

Most of the departments were in quite a forward state of preparation, but some of them were sadly deficient. This was the case in the art department more than almost any other. In the art halls many pictures were hung, and some statuary was in posi-

tion, but boxes in profusion still covered the floor, leaving barely room for visitors to pass, some of which having been partly opened revealed a hand or a face which indicated the beautiful form within. Photographic Hall seemed in a more unfinished condition than any of its neighbors. Boxes of pictures in great numbers occupied the alcoves, but only a few home exhibits were in any degree complete; so that the photographic exhibit offered but few attractions and received but comparatively few visitors on the opening day. But before this reaches our readers, all will be well in order, and of the photographic department we shall say a word elsewhere.

Of the Exhibition in general we have seen nothing more to the point than the following, which we clip from the Boston Transcript:

"It begins to be better understood that our World's Fair is in several important respects the most imposing and the most interesting the world has yet seen. It is grander in its outward aspect than was either of the preceding English or French Exhibitions, or the latest exhibition at Vienna. Only the Paris Exhibition in 1867 and the recent Vienna Exhibition furnish any comparison at all in point of beauty and grandeur of grounds and architecture. But the transplanted trees in the gravelly Champs de Mars always looked sickly, and the Prater at Vienna was flat and wet. The grounds at Philadelphia are a series of long, breezy plateaus, with gently sloping lawns and valleys between, dowered by nature with grand old trees and mellow turf, and laid out in drives and walks, with lakes and flowers and fountains like the palace parks of the Old World. The genial season is fast bringing forward the foliage and flowers, and soon the Exhibition will be a scene of unequalled beauty; for the principal buildings surpass in architectural effect those of all previous exhibitions. The spires and towers of those noble halls, which are grander even than their pictures, to the actual sight, our correspondents tell us, are but an honest and more than fulfilled promise of the glorious coups d'æil of their interior, which again surpass in extent and impressiveness the interior of either the

Champs de Mars labyrinth or the Prater rotunda.

"But the real value of the things exhibited is not less pre-eminent than the superior beauty of the surroundings. Competent authorities declare that man never saw such a collection of machinery as is displayed in Machinery Hall around the great central engine with its score of boilers, that is to turn eight miles of shafting for the machinery of the world. The art display, too, will be magnificent; a million dollars' worth of paintings came in a single collection recently. Between these two extremes the full list of man's industries and interests will be equally well represented, in contributions coming from all peoples from Japan to Peru. The effects upon our arts, industry, and general progress will be untold. But the pleasure and profit for this privileged generation living at the Centennial period are at our very doors-a World's Fair in many things the greatest the world has ever seen."

TEXAS CORRESPONDENCE.

ALVARADO, JOHNSON Co., TEXAS, April 10th, 1876.

FRIEND WILSON:

The Centennial is approaching. I wonder if anybody will be left at home. I hope to press the hand of many of my photographic friends on that occasion.

For the benefit of any concerned I will simply state that I will be found at your office on the 3d, 4th, and 5th of July next.

Any one wishing information relative to our art in this far-off State, or who may wish to emigrate hither, I will be at their service to give them such information as I may be able.

On my return I will take into my gallery a well-recommended partner, or will sell my entire outfit, as my failing eyesight will not permit me to follow my favorite occupation much longer.

All persons are doubtless aware that last year's crops in this State were unusually good, which has rendered money a little more free than for two or three years preceding. The present wheat crop is also promising. Corn and cotton we cannot yet say.

The past winter was unusually mild. My baths did not freeze solid in the dark-room all the winter through.

Photographs with me are \$5 per dozen, ½ dozen \$3, one gem 50 cents, though some are still itinerating in tents at any kind of price you may name. But this class of "artists" are fast growing "beautifully less."

For the present "wenno status," as the Mexicans would say for good-by.

E. FINCH.

PHOTOGRAPHIC RIGHTS.

THE NATIONAL PHOTOGRAPHIC ASSOCIA-TION CONVENTION, AND WHAT IT SHOULD DO.

Indianapolis, Ind., May 14th, 1876.
To the Editor of the Philadelphia
Photographer.

DEAR SIR: It is a matter of astonishment that photographers are so shortsighted in the direction of their own interest in the matter of "photographic rights." No one will dispute his right for every proprietor to demand prepayment.

The question of right to control and to dictate the management of his business, is the undisputed province of every business man. The question then, which is vital and pertinent in this discussion, is, how shall this right be exercised?

It is, therefore, conceded that I have the right to require prepayment; but if in the exercise of that right, which upon general business principles is odious to the public. I get a diminished number of orders, then the real question in the case comes-which is the question of interest-of profit and loss? Photographers, in justification, say to their patrons, prepayment is required for concerts, operas, etc.; for subscriptions to periodicals; for railroad fares, and that the same rule should apply to payment for photographs. The patron may submit, but he is not convinced that such terms are necessary; he pays, feeling that it is an imposition. In many instances the feeling is so strong with the patron that such demand is an imposition, that he stubbornly refuses to give an order unless the terms allow him to pay on delivery. Such men are usually good pay, and the artist who refuses to fill an order under such circumstances is himself a loser. And the same feeling, which is often expressed by what might be termed stubborn people, is pretty generally participated in by a very large portion of our patrons. The reasons why it is necessary to require prepayment in the enterprises above named, do not exist only to a small extent in conducting the business of photography. This the public know and feel, and the attempt to impose prepayment as the rule, in photography, I am convinced is a great mistake. More than this, I am convinced that it is a calamity which falls heavily upon the profession. It is a clog, lessening the cash receipts, for it is a stumbling-block over which many a careful, wellintending person will not attempt to cross.

It is a burden which attaches to photography as a business enterprise. The worthy advanced photographer has, in addition to the burden which he himself imposes, to bear in large degree the burdens which the fourth or fifth rate operator—the Tinkering Jim class—bring upon it. Advance pay system brings the whole fraternity upon the same level.

Put the question to-day to an intelligent artist, "What is the chief obstacle in the way of photographic prosperity?" His answer would be, the "grand army of Tinkering Jims." Their wretched productions tend to lessen the demand, as they certainly lower the tone of public estimation of our art.

To remove this class, then, out of the way of doing harm, is the thing devoutly to be wished. The laws forbid that we should shoot them. They are too numerous to burn, and there is not enough water to drown them. Starvation is the only alternative left. His bread and butter depend upon prepayment. If the worthy artist demand it, Tinkering Jim can do the same. When respectable photography proclaims to the public, "Payment required only on delivery," then all must do the same. The unskilful photographer must make his work worthy of acceptance, or his pictures will remain on his hands. Finding his business not paying he would "sell out," and seek a position which nature and habit had qualified him to fill. A large portion of the public are only occasional picture-buyers. They buy experience by paying in advance, which if it had not been paid in advance, would never be paid at all, and the artist unable to furnish good work to his patrons would be forced to surrender, while the skilful artist would gain, not only what the other lost, but the increase which good pictures bring.

In a future number of this magazine, I will undertake, by the application of common sense and the rules and customs governing business generally, to show that the necessity for advance payment for photographs does not exist as a rule. In support of the pay on delivery system, I now have had more than two years' experience. I propose to state in detail how the system works, how few losses, comparatively, follow, and that a better state of feeling exists between artist and patron, that larger orders are given, etc.

The convention of the National Photographic Association is near at hand. I am looking forward to it with interest, and hopeful for the good it may do. I trust it may take such action as will unite its membership firmly for the good of the fraternity.

One of the chief advantages of the coming convention of the National Photographic Association, is the opportunity to demonstrate before the world that we have a great national association of live resolute men and women, united and determined to make a position in the world of art and business, worthy of the high consideration of all men. I trust the work of the convention will embrace something of more value than the rehearsal of the formula of cleaning plates and chemical manipulations.

The text-books, the periodicals devoted to photography and apprenticeship in the gallery, is the fitting place where these should be taught and learned.

The time of the convention ought not to be occupied by harangues upon theory and practice by self-appointed speakers. Annual conventions of a national association are not the place to teach or learn the details of formulæ or gallery work. The work of the convention should embrace the

discussion of questions touching the general management of photography, of prices, of memberships, and of the qualifications for memberships. It would be a good place to discuss "photographic rights," and to devise some plan of action for local societies. Every town and city ought to have its local society, which should be auxiliary, and report to the National Photographic Association, and be subject to the rules which the National Photographic Association would make and provide for local societies. Memberships of the National Photographic Association should be obtained or held in check through the local societies. would make a membership in the National Photographic Association stand for something; as it now is I cannot see that it stands for anything.

I believe that the National Photographic Association might arrange a general plan for the organization of local societies, whereby memberships in the local would be a passport to the National Photographic Association, and that the collection of dues could all be made by the locals.

Surely there exists great need of some system whereby memberships of the National Photographic Association shall be obtained only upon qualification. Medical associations only admit members who are qualified and present their sheepskin. Can we afford a National Association free to every noodle who makes pictures?

I do not mean to say that the National Photographic Association should not discuss in its meetings the theory and practice of photography, but I do say that addresses or papers should come through an appointment by a committee, and that the convention shall not be afflicted by self-appointed brainless fellows who imagine they know it all.

I do not mean either that the suggestions of this letter cover the great work which the convention should do. They simply cover salient points, in my judgment of the matter. I firmly believe that great good could be accomplished by local societies, provided they would unite on a plan of organization based upon some restrictive mode of managing business, including prices, as well as discussing theory and practice.

JOHN CADWALLADER.

TALK AND TATTLE.

THERE is probably no subject that will more interest some of our readers at this time, and about which we may have a little profitable chat, than that of landscape photography. Soon we will all shake hands across our differences of opinion, and take to the fields to do the best we can. One takes the whole paraphernalia of his dark-room at home for working the wet process, and argues that his extra luggage is compensated for over any dry process by the greater rapidity with which he can work. He is enabled to secure foliage, instantaneous views on lake or river, beautiful cloud effects, and fine views in glens and caverns, where but little light penetrates.

Another uses an emulsion, or dry process, and has only what he can comfortably carry in his hand; he is scarcely limited by distance or locality; the most rugged country, or almost impassable height, present—not difficulties—but fascinations for him to explore every attractive feature, and secure an impression of every beautiful scene.

It is best then, perhaps, that each one should adopt whatever process may be most readily adapted to the conditions and the style of work to be done. Many landscape photographers are enlarging their capacities by making themselves familiar with all the processes, so as to be able to use one or the other, as circumstances may require.

The direction, however, in which there is the greatest need for study and improvement, is that which is above processes or formulæ, and constitutes, in all its summing up, that which is expressed in the word ART.

We would gladly do more than we have yet been able to do to promote the advancement of this department of photography. The field is broad; the storehouse of nature is inexhaustible, it only requires that those who are willing should go out and partake of the beauties that lie scattered all around us. We have long wished that a greater interest could be awakened in outdoor work, and more study be given to make, not mere maps, accidental situations, but pictures full of beauty, and conforming to the most approved rules of art.

A correspondent in California, who seems to be imbued with something of the true spirit, gives below some thoughts which may be useful or encouraging to others:

SANTA CRUZ, CAL., Feb. 24th, 1876. EDITOR PHILADELPHIA PHOTOGRAPHER.

DEAR SIR: I am afraid we landscapers do not get our share of attention. one, I would like very much to see specimens of outdoor work in every number, and would be willing to contribute to a fund to pay you for making this addition. It is probable there are too few specimens of portraiture also, instead of too many, and I would be in favor of inserting two of each in each number, even if it increased the price to \$10 a year. There must be careful, systematic studying done, if we would improve. I would also suggest to live photographers that it would be agreeable to me to exchange landscape views with them, so that I can have the benefit of studying theirs, and also the possession of a great variety of interesting views. In my imperfections they might perhaps find something of benefit. Our different ideas of conducting business also should be well ventilated.

I inclose my price list and terms, and would say I have travelled considerably, been among all sorts of artists, many of whom have had their prices less than half of mine, and I cannot see that it makes any difference in what I do. We may just as well have a fair price for our work as to ask so little that it is not profitable to retake a negative or reprint a picture if not up to our wish. More anon.

R. E. Wood.

Annexed is Mr. Wood's price list:

PRICE LIST.

	Stereos, large size and extra quality; negative		
	and first dozen,	\$8	00
l	Duplicates, first dozen,	4	00
ĺ	" each,		50
I	5 x 8 single view, same as stereos.		
l	7 x 9 " negative and one-half dozen,	10	00
	Duplicates, each,		75
	8 x 10 single view; negative and one-fourth		
۱	dozen,	12	00
	Duplicates, each,	1	25
	11 x 14, single view; negative and one view, .	15	00
	Duplicates, each,	2	00
	Money due when the negative is completed.		

In reply to Mr. Wood's suggestion about seeing more specimens of outdoor work in the journal, we would say, as before, that it has long been our desire to give more attention to this department, but the difficulty has been to get work possessing sufficient merit to serve as fit examples for study. We have written on the subject, we have offered prizes, but the work has failed to come. If such men as Mr. Wood, and others interested in landscape work, would make a little effort to secure us some good negatives, we might oftener publish specimens of outdoor photography, and do more towards educating all in this department. Mr. Stoddard set a good example in our March number, and we hope others will not be backward.

Some very excellent suggestions on the subject of landscape photography may be found in an article published in the April number, page 118, from the Year-Book of Photography, by Mr. Francis Bedford. We would ask all who are interested in this department to read it carefully.

A LECTURE ON LENSES.*

BY JOSEPH ZENTMAYER.

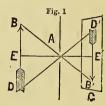
LADIES AND GENTLEMEN: Some months ago, being annoyed by a severe toothache, I went to a respected friend, a dentist. He examined my teeth, and said: "We will have to extract some of them." Seeing my nervousness, the doctor said: "It wont hurt you much; I will give you no more pain than necessary; I will treat you gently. If you please, sit still." He pulled out three teeth very gently. I will not say that to hear a lecture on lenses is as bad as getting a tooth pulled, but I will say what the doctor said: "It wont hurt you much; I will not give you any more pain than necessary. I will treat you gently; and please sit still as long as you can bear it."

A lecture on lenses is a difficult one to make entertaining. It is especially so to me, as I am laboring under two disadvantages; the first of which, as you may have already noticed, is that I am not speaking in my mother tongue; and the second is, that I have never spoken before so large an audience. For over thirty years the shop has been my domain; I hope you will make allowance for it.

Most of us recollect the splendidly illustrated lectures on light, by Professor Henry Morton, and the well-digested lectures on light and photography, by Mr. Coleman Sellers, before the Franklin Institute; and it remains for me only to recall to your mind some simple properties of light relating to our subject, with which you are already familiar.

Light is propagated in a straight line. We cannot see around a corner. If a ray of direct sunlight passes through a small hole of any given shape into a darkened chamber, and we hold a screen near behind the aperture, we observe a bright image of the shape of the hole. If we increase the distance of the screen and the aperture, the image of the hole disappears in the penumbra, and the round image of the sun takes its place; and, if the hole is small enough, you will see not only the image of the sun, but the image of all the external objects will appear likewise. This is one of the most interesting experiments, and its explanation is easy. Each point of the object B D (Fig. 1) radiates light in every direction, light of the

same color as it appears to our eye. From the point B, no light can reach the screen C, except through the small aperture A at B'; but if the aperture is infin-

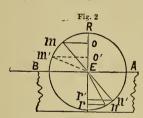


itely small, no other point of the object can send its rays to B'. The same is true for every other point, for E or D, for instance; these can only send rays to their respective points D' and E', and so on with the rest, and an inverted image, with all the natural colors of the object, is produced on the screen. If we now enlarge the hole, different points of the object would reach the same place upon the screen; the images of these points would overlap each other, and the image of the object would be indistinct. If the aperture is sufficiently enlarged, the image disappears, and the screen is illuminated homogeneously, taking only a tint of the most prominent colors of the objects. Therefore, the smaller the hole is, the sharper but fainter is the image. The size

^{*} Delivered before the Franklin Institute of Pa.

of the image depends upon the distance of the object from the hole, and also upon the distance of the screen from the hole. This primitive camera obscura is known by the name of pinhole camera.

Light, we said, is propagated in a straight line; but this is only true, when it continues in a medium of the same density, or if it enters a medium perpendicular or normal. But if a ray passes from one medium into another of different density obliquely, its direction is changed; it is refracted. This property of light was known to the ancients about eighteen hundred years ago, but the discovery of the law of refraction was left to Willebrod Snell, professor of the University of Leyden, 1621. I will briefly state this very important discovery, which elevated optics to a positive science. If a ray of light, R (Fig. 2), falls perpendicular upon a plane surface of a



piece of glass, A B, it enters the glass without changing its course, in a straight line, R D, it only changes its velocity. But if

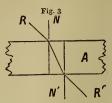
a ray, m, strikes the surface at E, obliquely, it is refracted to n. A ray, m', is refracted to n'. Now if we erect perpendiculars from the points m and n, and also from the points m' and n', to the normal R D, and divide the length om by np and also divide o'm'by n'p', we will have in both cases the same quotient, or, as it is generally expressed: the sine of the angle of incidence divided by the sine of the angle of refraction is a constant, whatever the angle of incidence may be. This constant quotient is called the index of refraction. Different media have different indices of refraction; thus a diamond has a higher index of refraction than flint glass, and flint glass a higher one than crown glass.

Another important law of refraction may be mentioned, it is this: The incident and refracted ray and the normal are situated in the same plane.

If a ray of light falls on a parallel piece of glass, A (Fig. 3), perpendicularly, it will

pass through it in a right line, because it is

coincident with the normal. But if a ray, R, strikes the glass obliquely, it will be refracted toward the normal, N, and away from it when leaving it. As

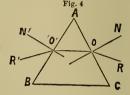


the normals n and n' are parallel, so must the incident and refracted ray be after leaving the glass.

Now let us see another case, where the two surfaces are not parallel, but form an angle with each other. Such a medium is called a prism.

Ro (Fig. 4) is an incident ray; the ray is refracted towards the normal N, along oo',

and by leaving the prism it is again refracted, but this time from its normal N, as it passes from a denser to a rarer medium. There-



fore, incident rays on a face of a prism are always refracted towards the base. We are now tolerably well prepared to see what a lens is.

A lens is a transparent medium, of which the two surfaces are either both curved, or the one is plane and the other curved. If the curves are spherical, the lens is called a spherical lens, if the curve is parabolic it is a parabolic lens, etc. Lenses are divided into two classes, converging and diverging lenses. The converging lenses, which are thicker in the centre than at the margin, are, the double convex with both surfaces convex; the plano-convex with one surface plane and the other convex; and the convex-concave (Meniscus), with one convex and one concave surface, but the convex of the shortest radius. This class of lenses, which may all be used as magnifying or burning glasses, are called convex or positive glasses, and these only are, strictly speaking, lenses. The diverging lenses, which are thinner in the centre than at their margin, are: The double concave, with both surfaces concave; the plano-concave, with one surface plane the other concave; and the concavo-convex, with a concave and a convex surface, the concave having the shorter radius. These diverging lenses are called negative glasses.

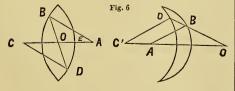
The general properties of lenses which are of importance, are: 1. The principal



2. The optical axis. centre. 3. The principal and conjugated foci, and, 4. The nodal points or conjugated centres. A straight line, drawn through the centres of curvature of the spherical surfaces of a lens, is the principal axis of the lens; if the one surface is plane, the axis passes through the centre of curvature of the spherical side, and is perpendicular to the plane surface. In all lenses the principal axis must go through the middle of the lens, that is, in the concave through the thinnest, and in the

convex through the thickest part; otherwise, we have a prism with spherical surfaces, and not a lens.

Every lens possesses a point, situated in its principal axis, which is of great importance. Rays of light, passing through that point, will undergo equal opposite refraction, so that it will leave the lens parallel with the direction in which it entered. If we consider the lens without thickness, we simply say, rays passing through the optical centre of a lens undergo no refraction. The optical centre can readily be found by drawing two radii, A B and C D (Fig. 6), from the centres of curvature A



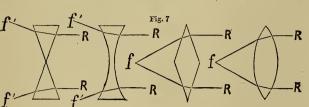
and C' of its surface, parallel to each other, but oblique to the axis A C, then connect

the two extremes B and D, and the line BD or its prolongation will cut the principal axis in O, the optical centre. If the lens is a double convex one of equal radii, the optical centre is the centre of the lens, or its centre of gravity. Fig. 6 is such a lens. Now suppose we change one curve into a shallower one, of longer radius, it is evident that the optical centre is shifted towards the predominant, more curved side, and if we continue to make that side shallower, it will gradually move towards E, until the surface is converted into a plane, in which case the optical centre is coincident with the point where the axis cuts the curved surface E. This, we will see afterwards, is an important point. But let us go on in the same way, still reducing that surface by making it a concave or negative one; it is clear that the optical centre still marches on, moving out of the lens, and if we go on so far as to make the negative curve equal to the positive one, then the optical centre would be in infinity, and if we disregard the thickness, we have no lens, but a non-optical glass like a watch-glass. All straight lines passing through the optical centre of a lens are called secondary axes. The next and most important of the general properties of a lens is their principal focus and the conjugated foci. If we hold a convex lens towards the sun, and a sheet of paper at a certain distance behind it, we observe a bright little circle, in which the sunlight, falling upon the lens, is collected; the point where the circle is smallest, and, therefore, most intensely illuminated, is called the principal focus; that is, the focus for parallel rays.

If we have to calculate the area of a circle, we are bound to look at the circle as a polygon of an infinite number of sides, and we will do well to take the lens as an infinite number of prisms, more so, as the infinitely small portion of the lens, struck by the ray, may be taken for a tangent plane. Thus a converging lens may be considered as prisms united at their bases, and a diverging lens of prisms united at their apices. As we already know that prisms refract parallel rays towards the the base, it is easily seen why converging lenses refract the rays R R (Fig. 7) to f,

R R to f'.

The distance of the focus from the lens | cross the axis on the opposite side, are



depends, 1st, upon the curvature; 2d, upon the refracting power of the material; and 3d, upon the thickness of the lens.

Not to make the matter unnecessarily complicated, we will take the supposition that our lenses have an extremely small, or no thickness at all. For common glass of an index of refraction of 1.5, calculation shows that a plano-convex lens has a focal length of the diameter of the sphere of which the lens is a part. A double convex lens of equal radii has its focus half that distance, or equal to the radius of the surfaces. If the double convex lens of equal radii, say of 10 inches, is made of the following substances, the thickness neglected, the foei would be:

For common glass, index of ref. 1.5 = focus 10 inches.

For flint glass, index of ref. 1.6 = focus 8.33 inches.

For diamond, index of ref. 2.439 = focus 3.48 inches.

We see that the diamond lens of the same radius has a focal length of little over onethird of the crown-glass lens.

We have now seen that luminous rays from a point infinitely distant are eollected to a single point in the axis, the principal focus. But let us suppose we move the luminous point towards the lens, to make the rays perceptibly converging; then the lens, which was strong enough to bring parallel rays to the point where the principal focus is situated, is not strong enough to bring these diverging rays to the same point, but they will cross the axis at a point further removed from the lens; and as the radiating luminous point is moved nearer to the lens, the farther off from the lens they will cross the axis; by moving

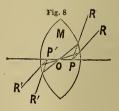
and that diverging lenses diverge the rays | still on, we come to a point where the radiating point and the point where the rays

> equally distant from the lens. In this case the radiating point and the rays where they cross the axis are nearly four times the distance of the principal focus apart. For ordinary purposes, this affords a ready

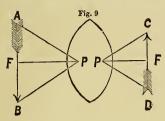
means to determine the principal focus of a lens. But let us move on still nearer to the lens, and the focus on the other side will continue to move farther away until we reach the principal focus this side; then the rays will emerge parallel on the other side. By overstepping that point, the rays will emerge diverging. These variable distances of the luminous point and the focus on the other side, are called the conjugated foci. There remains to be mentioned another important general property of lenses, the nodal points, or, as they are sometimes called, the centres of admission and emission.

M is a double convex lens of equal radii, o is its optical centre. Any ray passing through the optical centre, as R R, emerges on the other side parallel to its first direc-

tion, R'R', as explained before. If we now prolong R and R in their first direction, they will meet at a point P, the one nodal point, or the centre of admission, and if the



emerging rays are also prolonged, they will converge to a point P', the other nodal point, or the centre of emission. We recollect that in the pinhole camera the size of the image compared with that of the object is exactly in the same proportion as the distance of the screen to the hole is to the distance of the object from the hole. These distances represent the two conjugated foci, as there is no deviation of the rays from a straight line, and the two triangles, which are to be compared, meet with their apices. But if we have a biconvex lens (Fig. 9) and A B an object, C D its image, it is clear that the conjugated foci are to be measured from the nodal points P and P, and the two conjugated foci are F P and F P, showing how erroneous it is to measure the foci either from the



surface of the lens, or from the optical centre. In a Meniscus, the one nodal point is situated outside of the lens, and the other one inside of the lens. But in a planoconvex lens the optical centre as well as the nodal point are situated where the principal axis crosses the curved side. The planoconvex lens is therefore the only lens of which the focal length can be measured directly. If the plane side is placed towards a very distant object, the distance of the curved side to the image is the principal focus.

It is often necessary to know the focal length of a lens or a combination of lenses, especially in photography; but if no planoconvex lens of known focal length is at hand, for the purpose of comparing the size of the image, the following way may be adopted: first, focus the lens for a very distant object, on a screen, and mark the position of the screen. Do not move the lens, but place a bright object, about twice the focus of the lens, in front of it, as near as you can suppose; now move the screen about the same distance from the lens as the object was placed, and focus thereupon. If you find the object and image not of exactly the same size, move object and screen accordingly, and focus sharp, until the object and image are precisely of the same size; mark the position of the screen again. and the distance of the first and second mark is the focal length of the lens, or the equivalent lens of a combination of lenses.

We are now acquainted with the most important properties of a lens, and it remains only to be said, that all combinations of lenses have precisely the same general properties as single lenses.

(To be continued.)

GERMAN CORRESPONDENCE.

New Researches as to the Action of Sensitizers on Bromide of Silver.

BERLIN, May 1st, 1876.

In one of my last letters I communicated a few observations relating to the action of sensitizers on bromo-silver plates, and stated that substances like tannin, morphine, gallic acid, and pyrogallic acid, whose action on iodide-silver is excellently sensitizing, show no essentially favorable action on bromo-silver, and in most cases even reduce their sensibility.

According to this, bromo-silver is different in its relation from iodine silver, and this circumstance ought to be well observed in preparing bromo-silver dry plates. But this different action is in a high degree a mysterious one, for according to theory every bromo-binding substance, as pyro-gallic acid, gallic acid, etc., should promote the light-sensibility of bromo-silver. Recently, I have continued these experiments, and have. as I believe, solved the mystery. The effect of the sensitizers is entirely different according to the manner of preparing the bromo-silver. In my previous trials I had used only bromo-silver plates which were prepared in the bath and washed; these contained a surplus of nitrate of silver, of which, notwithstanding washing, there remained a perceptible quantity. But en tirely different is the action of plates prepared with a surplus of bromo-calium or chloro-calcium, viz., Cooper's and Singer's emulsion plates (which I can recommend as very excellent). I made trials to see how the above-named sensitizers would act on them, and the result was that all, without exception, increased in a high degree the light-sensibility of bromo-silver filled with a surplus of bromo-calium. If, therefore, the so-called preservatives on emulsions prepared with a surplus of lapis infernalis are useless, we have, on the contrary, the advantage of emulsions with a surplus of bromo-calium or chlor-calcium-like Cooper's and Singer's-a very remarkable one.

If we compare the effect of the different sensitizers on such bromo-silver, then the action of nitrate of silver is the most sensitizing; after it follows morphine, pyrogallic acid, gallic acid, and tannin; salicin has the least effect. Nitrate of silver surpasses in its effect all the other sensitizers considerably, even when it exists only in small quantity, as in washed plates.

The relation of iodide-silver is entirely different. Its sensibility is an enormous one when much nitrate of silver is present: but with washed plates, where only a small quantity of nitrate of silver remains, it is less than in presence of tannin, morphine, etc. It is now easily explained why the above-named sensitizers act not so favorably on bromo-silver filled with nitrate of silver and washed. When we bring one of the named substances on such bromo-silver, then the same decomposing acts on the existing slight excess of nitrate of silver; it thus destroys the substance which is the most sensitizing, and there remains only the surplus organic sensitizer, the favorable effect of which is less than the effect of nitrate of silver. Therefore, the result must be a reduction of sensibility. But, at the same time, it is very likely that the decomposing products between nitrate of silver and organic sensitizers act unfavorably on the sensibility. We know, by photographic practice, that the presence of the least quantity of organic substance will throw the silver bath entirely in disorder; the plates prepared in such bath are extremely unsensitive, and we ought not to be surprised when, by the effect of organic preservatives on bromo-silver filled with a surplus of nitrate of silver, similar results follow. But bromo-silver is more easily affected than iodide-silver, because more easily reduced.

After these experiments, it was of interest to try also the effect of dyes on bromosilver filled with a surplus of bromo-calium. In all my previous experiments I had used only bromo-silver plates which were prepared in the bath, i. e., with a slight excess of nitrate, and thereby I had noticed that dyes, like rosein, naphthalin-red, cyanin, corallin, aldehyd-green, picrate-green, methyl-violet, and others, increase the sensibility for those beams of the spectrum

which are absorbed by the dyes. Rosein and naphthalin red, for instance, absorb the green-yellow beams, and consequently make the bromo-silver sensible for green-yellow; the green dyes absorb the red beams between the Fraunhofer lines CC and B, and make the bromo-silver sensible for exactly the same place in the spectrum; rosein absorbs the green beams, and makes the bromo-silver correspondingly sensible for green. When other dyes do not show a similar effect, it results from causes not discovered so far, and which the abovementioned facts do not in the least contradict. It is probable that the dye itself in a certain degree must be sensible in order to produce the mentioned effect. When I tried the same dyes on bromo-silver with a slight excess of bromide, I was greatly surprised to find that the same did not show the abovedescribed interesting effect, namely, they did not impart to the plates the slightest mark of sensibility for green, yellow, or red. The plates appeared only sensible for blue and violet. Consequently the presumption is forced on us, that the dyes show only their effect when nitrate of silver or other sensitizers are present. This was corroborated by experiment. On an emulsion plate was poured nitrate of silver, then washed and dried; after which the same was colored with naphthalin red, and, behold, the sensibility for yellow in an intensive degree commenced setting in!

The experiment was repeated with cyanin, and instantly an excellent sensibility for orange rays appeared, which exceeded even the sensibility for blue rays.

Then I tried also other sensitizers in connection with dyes, as tannin and morphine, on plates prepared with a slight excess of bromide, and in presence of tannin and morphine the sensibility (which is not existing without the same) for yellow by naphthalin-red exhibited itself.

We notice by this that the dyes act differently from common sensitizers; the latter increase the sensibility of bromo-silver for blue and violet rays without further difficulties; whereas the dye acts not alone for itself, but only in presence of a sensitizer. I call, therefore, the latter actinizers, or optical sensitizers, in contrast to the chem-

ical sensitizers, as tannin, morphine, pyrogallic acid, nitrate of silver, etc. It is thought that by further experiment there will be discovered substances which are chemical and optical sensitizers at the same time, namely, a colored light-absorbing substance, which without difficulty at the same time chemically combines iodide and bromo. Amongst the great number of organic substances, of which so far only few have been tried, there may be several discovered which answer both demands. I have a tannin combination for aldehyd-green, which most likely will show this qualification, and which I intend to try as soon as the present unpropitious weather will change into sunny days. On the other side, there is the probability that under certain circumstances the colors may not show their qualification as optical sensitizers. Above, I have shown that the well-known sensitizers, as tannin, morphine, and pyrogallic acid, are not acting sensitizing on bromo-silver filled with surplus of lapis infernalis (lunar caustic), probably because the same decompose the existing nitric silver. Just as well, there may exist some dyes which act analogically, i. e., which do not show their actinizing action for nonactinic rays in consequence of their decomposing influence on the existing nitrate of silver, and for this reason many failures may be explained, which several investigators in their trials with dyes have met with.

But now the time is coming in which I will be compelled to give up for awhile my experiments. I have received a call, as member of the International Jury of Awards in Philadelphia, and when this correspondence will be in the hands of the worthy readers of the Philadelphia Photographer, I will probably have arrived on the American shore, wishing to see my many old friends in the new world in good health, and hoping that the same-notwithstanding the difficulties by which my office of juror will be accompanied (for it will be impossible to please everybody)-will retain for me unchangingly their indulgent and sympathizing feelings.

I remain yours truly,

H. VOGEL.

FRENCH CORRESPONDENCE.

May Meeting of the Photographic Society of France—On the Addition of Tartaric Acid to the Iron Solution—Heliochromy—A New Instrument for Viewing Cartes de Visite—The New Alkaline Development—The Photographic Exhibition of Paris—An Economy to be Made—Hardened Glass—Crystals of Nitrite of Silver in Negative Bath.

THE May meeting of the Photographic Society of France took place last Friday evening, the 5th inst, Mons. Davanue in the chair. Mons. Peligot was proposed and unanimously elected as President of the Society, in the place of the late Mons. Balard.

One of the members made a report to the Society on the addition of tartaric acid to the iron solution; this addition, said he, gives very dense blacks and pure whites.

Now this idea is by no means new; to the contrary, but in my opinion, it is well to bring to mind now and then some of the old formulæ employed by the pioneers of photography. If any of the readers of the *Philadelphia Photographer* make reproductions of engravings, let him employ tartaric acid, and he will succeed in obtaining dense blacks. I myself employed it some ten years since with success to intensify over-exposed negatives.

Mons. Ducos du Hauron presented a few proofs obtained by his heliochromic process; with the exception of one, the view of a secluded glade, the coloration was very poor, and it was necessary to take into consideration the difficulties of their production not to find them bad. Mons. Ducos du Hauron has a hobby, which is to produce natural colors in the camera, and this in truth he does, but one after the other. In order to produce a picture, he reasons as follows: The picture is composed of three fundamental colors, red, blue, and yellow, with their different shades. In order to make a red monochrome pellicle, he introduces a green glass between the object to be reproduced and the camera. To produce the blue of the picture, he places an orange-colored glass, and to obtain the yellow, a violet-tinted glass is made use of. When the three monochromes are produced upon pellicles, they

are superposed one above the other, and thus a polychrome is produced which theoretically speaking ought to be the exact reproduction of the original, but although Mons. Ducos de Hauron has spent much time and made great progress in his process, still it will be long before it can be anything else than a scientific experiment. As for the reproduction of natural colors, it is quite out of the question, when we think that in order to produce the red color through a green glass, hours are required.

MM. Baudin and Bouché presented a very pretty little instrument to the Society which they call the "automatic album;" in fact it is to replace the photographic album upon our parlor table. The apparatus consists of a small box, about 7 in. high and 5 in. square. When the lid is opened, a magnifying glass is visible; this is placed perpendicular. On the side of the box is a knob which, being turned round, a portrait rises out of the box behind, and at a certain distance from the monocle employed to magnify it. The knob is now turned again, the card falls down into the box, and another takes its place, and so on until the whole of the collection passes before the eye of the visitor. The very ingenious manner in which the proofs are made to appear and disappear, gives considerable attraction, and adds to the charm of the photographic portraits.

The chairman then gave a demonstrative lecture upon the employment of the sugar of lime solution, which replaces advantageously the carbonate and also the liquid ammonia in alkaline development. plates had been exposed, one of which had been previously developed, and was passed round to the members. Mons. Davanne then began to develop the two remaining negatives. The first was washed in a tray, and then a feeble solution of pyrogallic acid was poured over it. Carbonate of ammonia was then added, and the proof began to make its appearance; a dozen drops of the sugar of lime solution was now added, and the proof flashed out immediately. This experiment was to show that the sugar of lime is an excellent accelerator.

The second plate was then developed. Equal quantities of the pyro and sugar of

lime solutions were taken and spread over the plate in a uniform manner, the image developed rapidly, and although the solution became highly colored, still the whites of the negative remained very pure.

The sngar of lime solution is very easy to prepare, and I can recommend a trial. Take a piece of quicklime, about three ounces; put it upon a plate, and pour over it sufficient water to slacken it, then put it into a bottle, and pour upon it ten ounces of water, and add one ounce of loaf sugar. Shake well for a short time, and then allow it to settle; if sufficient lime has been employed, there will be a deposit. This solution will remain good for any length of time.

The photographic exhibition is now open in Paris, and although it cannot vie with that of the new world, still it has a marked superiority over all its predecessors. Not only are the photographic prints admirable in tone, artistic taste, and finish, but another great attraction is the exhibition of scientific instruments employed in our government establishments, as well as the telescopes and other machines which had photographed the late transit of Venus. In fact the eleventh exhibition of the Photographic Society of France will be and is a great success

The old saying that time is money, may be replaced in a photograph studio by, economy of chemicals leads to fortune. have been into many dark-rooms in my time, and never without a painful feeling when I saw the floor covered with thick crusts of dried collodion. Now a saving of the drops falling from a plate would be a great gain in the end of a year, and I can recommend the readers of the Philadelphia Photographer never to lose the droppings. I economize at least five dollars per month in this manner. I place a tray containing a little water on the ground under the place I sit or stand to collodionize; if any collodion escape, it falls into the water. The ether and alcohol are absorbed, and the cotton can be gathered up and put into a bottle containing water, and when a certain quantity is obtained, it can be well washed, dried, and redissolved to make collodion. The water which has absorbed the ether, etc., can be distilled; in this manner nothing is

lost, and I have found my laboratory gains by it, for I have not the inebriating smell of the other, etc.

Much has been said upon the value of hardened glass for photographic and chemical purposes, but I advise my readers to be very careful in its employ, for it appears that no guarantee can be given that evaporatingdishes, etc., can always resist heat. I desired to experiment the other day upon the value of this invention, and purchased an evaporating-dish, filled it with a concentrated solution of nitrate of silver, in order to procure crystals of that salt. I put it over a Bunsen burner, but took the precaution to put the whole into a large dish. Happily that I did so, for in a few minutes the bottom of the evaporating-dish flew into a thousand pieces, and the liquid was projected out in a second of time. A thousand pieces is a true expression, for the bottom was honeycombed in every direction. Now had I taken an ordinary glass dish, and it had cracked, ten to one I should not have had a loss, for the liquid would have only filtered through the crack, and given warning, whereas hardened glass does not crack, but flies into small pieces without giving any previous notice.

Nitrite of silver is generally formed in the nitrate bath by the solution having been kept too long in a state of fusion. As this salt is soluble in an excess of nitrate, it is very difficult to judge of its presence. When a great number of plates have been prepared, and the solution is a little weakened in silver, the crystals of nitrite attach themselves to the surface of the collodion, and cause pinholes, etc., and sometimes give the prepared plate the appearance of having the small-pox.

I have been very often troubled with these crystals in the bath, and have found no difficulty to clarify it from this impurity. I act as follows: Immediately after having employed the solution, I add a few ounces of distilled water; this precipitates the excess of iodide as well as a certain quantity of nitrite in crystals. If in winter, I place the bath out in the open air; if in summer, I put it in a pail of ice; in a few hours a microscope haystack of nitrite crystals, if I may be permitted that expression, is found

at the bottom of the liquid. A filter clarifies the solution, and it is ready for work as soon as the specific gravity is brought to the desired point by the addition of fresh nitrate.

I draw the attention of the readers of the Philadelphia Photographer to this salt, because Mr. Warnerke, in one of the French journals, states these crystals to be a fulminate of silver. Now, as many photographers have the custom to evaporate their old baths, in order to purify them from organic matter, etc., it would be prudent to get rid of those crystals before doing so, as an explosion might occur: la prudence est la mère de la sureté.

E. Stebbing, Professor.

Paris, May 8th, 1876.

MATTERS OF THE



As we are to have a Convention in August, we feel the necessity of keeping the matter constantly before our readers, and give them all the information possible. The dues to the Association are \$4.00 per year for employers and \$2.00 for employes. All members should look to their account, by conferring with Albert Moore, Treasurer, 828 Wood Street, Philadelphia, and try to pay up at once, so that funds may be in hand to defray the Convention expenses.

Now is the time for those who wish to become members, and have a part in this grand Centennial gathering, to send their names, with the entrance fee of \$5.00, to Edward L. Wilson, Permanent Secretary, 116 North Seventh Street, Philadelphia. Life membership, with no dues to pay, \$25.00. Let us have an advance all along the line, and a grand gathering in the Centennial grounds on the 15th of August.

THE CENTENNIAL PHOTOGRAPHIC DIARY.—No photographer should be without this little book, whether he visits the Centennial Exhibition or not. See notice on another page, and first page of advertisements, for details of the work.

PHOTOGRAPHY IN THE GREAT EXHIBITION.

Ι.

THE visitor who may have taken a glance at some of the larger exhibits, and now seeks for further light as to the contents of some of the less imposing structures, strolls eastward along Avenue of the Republic past the beautiful Art Gallery, with its great winged horses guarding the way to its entrance, till he comes to a long, rather squatty building, showing a roof liberally supplied with glass, but bearing no other indication of its use or contents. We enter, and, behold, it is devoted to photography. We pass from end to end; photographs, only photographs and their appliances meet our eyes. This is wonderful; such an exhibition as was never seen before. A great hall, a beautifully arranged and lighted gallery devoted exclusively to photography. What a compliment to this youngest of the arts, and how grandly it has responded to the provisions and space devoted to it. No other world's fair has ever honored photography thus; it has been left for America to recognize the importance of this art, and to accord to it a position which will enable it to command the admiration of the world. We have before had fine exhibits in connection with our National Conventions; they were national exhibits, but here we have an international exhibition of photography, in a hall built expressly for the purpose. Here are the products of nearly all countries on the globe, and the study and comparison during the coming six months by all who love our art will be a privilege which all should avail themselves of, as such another will probably not be offered to the present generation. Having thus taken a general survey, and noted such thoughts as naturally present themselves to the mind, as we find ourselves under such unprecedented circumstances within the fascinating influences of this unprecedented exhibition, we will now begin and note in detail the exhibits that are already the most complete. This brings us to the north side, which is devoted exclusively to America, and which has been sooner put in order than the foreign exhibits which occupy the south of the hall.

It is said that the proper place to commence building is in the northeast corner; that the corner-stone is usually laid there, etc.; so we will commence in the northeast corner of Photographic Hall to notice the details of the magnificent and unparalleled display.

First, we find here a large case filling the corner from the wall to within a few feet of the door, with a sign on the ornamental centre:

SCOVILL MANUFACTURING COMPANY, 419-421 Broome Street, New York.

Whether Scovill Manufacturing Company shall be considered the corner-stone of photography we will not pretend to argue; but as the corner-stone of a building is important to the stability of the structure, so in an equal degree is good apparatus important to success in photography. An inspection of their elegant assortment of the American Optical Company's boxes will readily satisfy the most critical that their exhibit leaves but little to be desired in the important item of cameras.

Here are mammoth and pocket cameras, with all the intervening sizes, some of them magnificently finished in French walnut, trimmed with ebony-the most beautiful work in photographic apparatus it has ever been our pleasure to see. The cone-bellows cameras for viewing are light, graceful, and compact, and will be appreciated by all who practice field work. The Centennial camera stand is another triumph of mechanical skill and workmanship. The endless screw attachments to these stands are also the most complete and reliable methods of raising and lowering the camera that has ever been devised. The Perfect camera stand is also a fine stand, but not so beautiful in design and finish as the Centennial. In addition to the elaborate finish of woodwork in these cameras and stands, they are all highly ornamented with nickel-plating, which gives them a very rich and elegant appearance.

Scovill Manufacturing Company also make a fine display of the various styles and sizes of Peerless and Morrison lenses. Also the American Optical Company's clocks for timing sittings. In addition to the case referred to, Scovill's have two long tables

in the central avenue, on which are displayed head-rests, printing frames, retouching frames, graphoscopes, parlor paste, etc., etc. Photographers who love good appliances for their work will find Scovill's corner a most interesting part of Photographic Hall.

Filling the corner on the side and above Scovill's case is the exhibit of Messrs. Charles Paxon Bros., solar printers, 612 Broadway, New York. This comprises some twenty prints in various sizes of enlargement. These are well executed for this class of work, but have the defects common to nearly all plain solar work of loss of middle tints, rendering most of the lights more or less flat. The best in the collection is a life-size, full length portrait of Joe Jefferson in his character of Rip Van Winkle.

In the space between Scovill's case and the door is the exhibit of J. C. Haring, Massillon, Ohio, consisting of cards, cabinets, and 16 x 20's. Mr. Haring is evidently a pain'staking artist.

Turning to the first screen we find it a blank, it being the Centennial Photographic Company's space, who being the nearest as to location, promise to be the last to place their exhibit. For this there is good reason in the heretofore unfinished conditions of the buildings and grounds, which are their particular subjects.

Passing around the end of the first screen we find facing the central avenue the exhibit of Messrs. Benerman & Wilson, photographic publishers, 116 North Seventh Street, Philadelphia. Their case contains all the bound volumes of the Philadelphia Photographer, samples of the various books published by them, cut-outs, vignette papers, Robinson trimmers and guides, photocovers, and opaque. This little case cannot but command attention by its neat arrangement, and more particularly that it represents the only publishing house in the world devoted exclusively to works on photography and its appurtenances.

As we turn screen No. 1 we find a large and beautiful frame containing stereos and 10 x 12 views on the Rome, Watertown & Ogdensburg Railroad, the great Thousand Island route, photographed by McIntyre

& Co., Alexandria Bay, N. Y. These views are well executed, and worthy the study of those interested in view photography. Next in order on the same screen is the exhibit of Mr. N. H. Busey, Baltimore. These are all plain photographs, consisting of cards, cabinets, and larger sizes, among which may be found some good effects, but none upon which we can dwell for especial merits.

On the wall opposite this alcove are the exhibits of Messrs. Gurlach & Fromhagen, No. 1200 Chestnut Street, Philadelphia, and Mr. Holler's, No. 132 Broadway, Brooklyn, N. Y. The former has several large crayons that are quite effective, and the latter some large size plain photographs of children, which, though not possessing any great degree of photographic merit, yet show a degree of success with a difficult class of work that is worthy of notice. A few cards display some neat work and pretty faces. East side of second screen blank.

West side of No. 2, Messrs. Schwind & Krucger, New York, some 4-4 and 8 x 10 Genrépictures of children are very successful and expressive. Several large imperials give some fine effects, but the extreme contrasts in light and dark impair the beauty of a few. Also on west side of No. 2, Mr. B. F. Reimer's exhibit, No. 613 North Second Street, Philadelphia, consisting of life-size solars, with a very cheap and badly executed tinting for a finish. We would not advise any one to imitate it.

East side, No. 3, frame containing portrait groups by Mr. J. Holyland, Baltimore. Two of these, 16 x 20 each, containing eight figures in Continental costume—real Centennial pictures—are very successful and well worthy of notice. Light draperies and black velvet are here side by side most faithfully rendered. Mr. Theo. Gubelman also occupies a portion of this screen with some beautiful plain work. His cabinets of little folks in old folks costumes are real little gems. Several large plain photographs are also equally successful.

As we turn Screen No. 3 we find on the inner end a frame of well-executed microphotographs, the tongue of a fly being enlarged to one hundred and eighty diameters. On the west of No. 3 is one of the rarest and most valuable collections in the hall.

It is no less than a magnificent display of carbon pictures, genuine carbon, by Messrs. Allen & Rowell, of Boston. There are seventeen beautiful prints, which, for purity of lights, depth of tone, and perfect gradation of light and shade cannot be excelled by any process. They are all of large size, either direct or enlargements, and show a little surface retouching. Among the life sizes are wonderfully lifelike portraits of Governor Rice of Massachusetts, Henry W. Longfellow, the late Hon. Charles Sumner, Wendell Phillips, and William Lloyd Garrison.

This work should stir every American phtographer who sees it, as it demonstrates that carbon photography can be executed in America as well as in Europe; and we all have reason to rejoice that we can claim so much in this long-neglected but important branch of our art. We hope other American photographers will take courage, and not be longer deterred from the advantages of this beautiful, non-fading process.

East side of No. 4 is occupied by Mr. C. D. Mosher, of Chicago. Mr. Mosher's reputation is well known, and visitors will find that the collection here fully sustains the high position he has long held as a first-class photographic artist. With the exception of a few beautiful cabinets, his pictures are all large. His exhibit is made up mainly of representative men and woman, clergymen, judges, representatives, generals, etc., etc. The photography is exceedingly rich, and well worth the study of those who are striving to produce first-class work.

'In this alcove we find exhibits of posing chairs by Messrs. G. & W. P. Evans, Malden, Mass.; stereoscopic boxes by Mr. Alexander Beckers, 210 Thompson Street, New York; and Mr. A. L. Hance's photographic specialties. These last consist of gun-cotton, ground-glass substitute, double iodized and other collodions, chromo intensifier, grit varnish, bath preservative, etc.

Turning No. 4 we find on the west of this screen the exhibit of Messrs. Broadbent & Phillips, 1206 Chestnut Street, Philadelphia. They show a good variety of carefully prepared work, the few plain photographs being very fine, and excelling in merit the larger crayons. While some of

these last are excellent, others are wanting in softness of lines and shading which is so essential in work of this class. We are much pleased with the exhibit of our fellow-townsmen, however, and congratulate them on so full a display and the taste with which they have arranged it.

East side of No. 5 is occupied by Mr. Henry Rocher, of Chicago. Here the visitor is impressed with the feeling that there is something more in this work than the mere mechanism of photography. Each picture expresses something, tells a story, whether it be a group or single figure. We know they are all from living subjects, and yet there is so much of natural ease and grace, that those who are familiar with the difficulties in securing these qualities cannot but admire the skill that has thus been able to control the nerves and give such active expression to real, living, breathing humanity. Mr. Rocher's exhibit can be dwelt upon with profit, and revisited again and again. We shall do so, and notice further at another time.

On the wall opposite this alcove, between Nos. 4 and 5, is the fine display of Mr. Sarony, of New York. His work, like that of Mr. Rocher, is all life and expression, only with far more abandon and intensity of action. His collection of the smaller sizes of Cabinets and Promenades are wonderful illustrations of the capabilities of photography, though we may not always admire the style in which they are presented. A series of fine cabinets representing a gunner on board a man-of-war, are most admirably executed, and require no explanation to make clear their meaning.

Mr. Sarony exhibits three "charcoal drawings," which doubtless illustrate his skill as an artist, rather than the capabilities of photography. The large life-size group is a fine production and an admirable study. The student will find much in this collection to profit by.

Turning the outer end of No. 5, we find three frames of cards, cabinets, and Promenades, by E. D. Evans, Corning, N. Y. Mr. Evans excels in his card and cabinet heads, which are very creditable.

On the west of No. 5 are two rows of handsomely framed and well-arranged pic-

tures which at once strike us as of no ordinary character. We glance over the exhibit and discover underneath the words, "Landy, Cincinnati." The upper row consists of large heads, with the exception of two or three, and are remarkable for their lighting, transparency of shadows, and perfect rendering in every detail. One picture on this line will attract the beholder especially; it is in the centre and represents a piece of statuary, and yet it was taken from a living person. But the main attraction is in the lower row of these pictures, over which is a sign, which reads: "The Seven Ages of Man." These pictures cannot well be described; they must be seen to get their full meaning and value. There is nothing in the hall so grand in conception and execution as these seven pictures. They are a contribution to the art of photography which will place Mr. Landy's name high on the roll of fame as one of the foremost artists of his time in his particular line.

The first picture represents the babe, a helpless thing, and we quote:

"At first the infant, Mewling and puking in the nurse's arms."

Then we pass to the next, which represents a youth, with knit brows and halting step, apparently bent on some disagreeable mission; underneath we read:

"The whining school-boy, with his satchel And shining morning face, creeping like snail Unwillingly to school."

The third represents the lover, kneeling imploringly to his love, and of him the poet says:

"The lover, Sighing like furnace, with a woful ballad Made to his mistress' eyebrow."

In the fourth we have illustrated that representation of all that is noble and manly, as has been considered, not by the highest type of civilization,—the soldier in armor clad, and ready to battle for his country and for glory. Of him we quote:

"A soldier,
Full of strange oaths and bearded like the pard,
Jealous in honor, sudden and quick in quarrel,
Seeking the bubble reputation
Even in the cannon's mouth."

The fifth is of more civil bearing:

"The justice,
In fair round belly with good capon lined,
With eyes severe and beard of formal cut,
Full of wise saws and modern instances."

The sixth shows the declining years in the stooping form and supporting cane:

"The lean and slippered pantaloon,
With spectacles on nose and pouch on side,
His youthful hose, well saved, a world too wide
For his shrunk shank; and his big manly voice,
Turning again towards childish treble, pipes
And whistles in his sound."

Then comes the

"Last scene of all,
That ends this strange eventful history,
Is second childishness and mere oblivion,
Sans teeth, sans eyes, sans taste, sans everything.".

And the story is told, the glass has run out. The series is a great success, though it is not without its faults. The most important of these is in the last picture. The one before the last represents the old man tottering on his cane, with wrinkled face and "shrunk shank," but in the last his calves are plump, and his face bears not the marks of age of the other. There is an inconsistency here that we think Mr. Laudy, in justice to himself and to the series, ought to remedy, by making another picture that shall be in keeping with those which precede it.

A picture of a little miss in long trail and leaning against a pedestal is one of the most charming photographs we have ever seen. Mr. Landy's exhibit is admired, and will be remembered by everybody.

On the end of screen No. 5 are Mr. Landy's inimitable crying babies, "Expressive Pets," thirty-two in number, which compel a laugh from the most sedate, and attract the attention of all visitors.

In the central avenue, opposite the exhibits last noticed, and following Scovill's tables, is the exhibit of Messrs. Wilson Hood & Co., No. 822 Arch Street, Philadelphia. A beautiful pyramidal case contains their small wares, such as photographic chemicals, gun-cotton, passepartouts, stereoscopes, Steinheil lenses, stereoscopic views, etc. A little further along is a Wilson head-rest, finely finished, and an ornamental

column. On a table adjoining is a Universal cameo press, Entrekin enameller, Bergner print-cutter in three sizes, and an ornamental vasc. Further on is another posing column, and an ornamental table.

Following these is a table and show case containing Mr. W. G. Entrekin's oscillating enameller. He exhibits four sizes, from six to twenty inches. They are highly finished, and present a very attractive appearance.

We had expected to have taken in the whole of the north side of the hall in the report for this number, but we find that to give any kind of a liberal notice, such as the good things there deserve, it will far overrun our space, so we are reluctantly compelled to defer the consideration of the many other beautiful things to future issues. In the meantime we can assure our readers that Photographic Hall is a tangible, glorious reality, and every photographer who visits the Centennial should give it a thorough inspection and careful study.

GELATINO-BROMIDE PROCESS.*

BY G. W. HEWITT.

HAVING recently made a somewhat extended series of experiments as to the capabilities of the gelatino-bromide process, and having found it a really valuable one, I desire to call the attention of the members present to a few negatives for critical examination, and also to lay before them the method of working I have found to be most certain, and which gave the best results in my hands. I cannot say that I have thoroughly tested this process, as I have yet to try it in the heat of the summer months, which trial I think will be the most severe, but up to the present time my experience has been most satisfactory.

In order to insure the successful working, I have found the following most important, and the neglect of which will, I think, invariably result in failure: A chemically clean plate, rapid drying, and proper thickness of film. As to the material, I find Nelson's ordinary gelatin, that used for jellies, etc., answers all purposes, and my ex-

My method of preparing the plate is as follows: Clean first with acid, then with tripoli and water, with a little alcohol; this seems to give a fine grain to the glass surface, which I think assists the adherence of gelatin. After rubbing off the tripoli, dry, polish with a few drops of alcohol and ammonia (equal parts), applied with a piece of clean flannel. I will describe the making of two ounces of finished emulsion:

Place in a four-ounce bottle 36 grains of gelatin, and add about 2 ounces of water; after two or three hours pour off the water as closely as possible; place the bottle in a dish of warm water, and add half an ounce of distilled water, and 36 grains of bromide of potassium. While the gelatin and bromide salts are coming in solution, dissolve 50 grains nitrate of silver in 6 drachms of water (distilled), and place it in the dish to become slightly heated; then, in nonactinic light, add the silver in four portions to the bromized gelatin, shaking well after each addition. I then place the bottle in a small pasteboard box, light tight, near a flue or in a warm place, and leave it for eight or ten hours, or over night. Add to it then sufficient distilled water to make up two ounces; heat it, if necessary, in a hot water bath, to render it perfectly fluid, and dialyze it for four or five hours; the dialyzer is, as you see, simply a tumbler with the bottom cut off. The parchment paper is first wet, and then stretched over and secured by a gum-band; the three supports are attached by another band; this is placed in a shallow dish, and warm water poured in until it touches the whole surface of the parchment floor, the dish being supported over a Bunsen burner, turned down quite low, as it is only necessary to keep the water just tepid; the gelatin is then poured in, and left to dialyze. At the expiration of the time above mentioned it is filtered through four thicknesses of papier-Joseph, and is then in condition to coat the plates, or may be set aside in a cool place, to be used within a few days.

To coat the plate requires a little dexterity. I have succeeded best in the follow-

perience has been, that should failure occur, the cause need not be looked for in that direction.

^{*} Read at the Photo. Soc. of Philadelphia.

ing way: Warm the plate over an Argand burner (a non-actinic one); take it with your pneumatic-holder, and pour on a pool of gelatin as you would collodion; bring it down (after covering the off corners of plate), slowly, guiding the edge with the lip of the beaker from which the gelatin is poured, by humoring it a little, and you may take your time; the plate will be easily covered; drain it as you would a collodion plate, but not so closely, and place it on a perfectly horizontal shelf to set, which it will do in about ten minutes. The quantity above taken will coat from eight to ten 4-4 plates.

To dry the plates I use a cupboard, under the bottom of which is a sheet-iron drum, with opening for the supply of fresh air; this is heated by a Bunsen burner, and keeps up a constant supply of warm air to the cupboard above, in which there are two shelves of plate-glass, accurately levelled, with openings at ends to allow the circulation of hot air, which, after passing over the plates, is taken off at top. The plates become thoroughly dry in from three to four hours. I have here a coated plate, which will serve as a guide for thickness of film, etc. I prefer dialyzing to washing out the free salts; it is less troublesome.

As to the rapidity of these plates, they are not the most sensitive, but are fairly so. An exposure of one minute, with an F 25 stop, will be found sufficient. By increasing the proportion of silver in the emulsion, they can be made as rapid as wet plates, but I prefer the formula as given. These plates will "blur," and require backing. I have reduced this defect very much by staining the film with rose-aniline, without detriment to the result.

Development.

Allow the plate to soak for at least three minutes in water; then use the alkaline developer, but flowing the plate first with the pyro and bromide, and adding the ammonia afterwards. I use the pyro dry, and not in alcoholic solution, which latter I think is apt to cause wrinkling of the film. The image should come up slowly; a rapid development, or forced one, is apt to produce a foggy result.

The developer I use is,

Pyro, 3 grains.

Water, 1 ounce.

120-grain Solution of Bromide
of Potassium, 1 drop.

Saturated Solution Carbonate of
Ammonia, 1 or 2 drops.

This will bring up the image to sufficient density in most cases; but when the image is flat and thin, I prefer to intensify with chloride of copper and alkaline pyro. The negatives, with two exceptions, were intensified in this manner. The negatives, when fixed in hypo and well washed, are allowed to dry spontaneously, and with careful handling can be used for printing without being varnished.

SOCIETY GOSSIP.

PHOTOGRAPHIC SOCIETY OF PHILADEL-PHIA.—Stated meeting held Thursday, May 4th, 1876, the President in the chair.

A correction in the minutes of the last meeting was made by Mr. Carbutt, who said that he had not advised the final wash of alcohol to dry plates as there stated, but that he had availed himself of the heat from an alcohol lamp for drying the finished plates.

Minutes approved.

The report of the committee on subscriptions for Photographic Hall was read and accepted. On motion, the committee was discharged.

On behalf of the committee on the outdoor meeting of the Society, Dr. Seiler reported that, after considerable labor and search on the part of the committee, they had not been able to fix upon any suitable locality within easy reach of the city. He said, however, that it had been proposed that the Society charter a tug-boat on the Delaware, and make a day's excursion on the water, stopping at such points as offered subjects for the camera.

After some discussion, it was resolved, on motion of Mr. Hacker, that the Society obtain a boat as proposed, and that the start be made from No. 420 South Delaware Avenue, at 9 A.M., Wednesday, May 24th.

On motion, Mr. Hacker's name was added to the committee.

Mr. Hewitt read an interesting paper* on the gelatino-bromide process, and exhibited some very successful negatives from oil paintings made on gelatin films with long exposures in the weak light of a gallery.

A vote of thanks was tendered to Mr. Hewitt for his communication.

On motion, adjourned.

ELLERSLIE WALLACE, JR.,
Recording Secretary.

BOSTON PHOTOGRAPHIC ASSOCIATION.— The regular meeting of the Boston Photographic Association was held at the studio of J. W. Black.

Mr. T. R. Burnham, chairman of the Executive Committee, presided.

The minutes of the last meeting were read and approved.

Mr. J. W. Black reported that he had recently had a conversation with Mr. French, the President of the Society, in which he expressed much interest in its welfare, and said if anything special could be devised to keep up and increase the interest of the meetings it would receive his cordial cooperation and support.

A very convenient and attractive notion, in place of a cap over the camera tube, was received from Mr. J. F. Ryder, of Cleveland, which was indorsed by the Society, and a vote of thanks returned.

It was voted that the camera donated some time ago, by the American Optical Company, and tubes by Benjamin French & Co., for the best invention or improvement in photographic manipulation, by any member of the Society, be brought up for disposal at the next meeting.

Mr. E. A. Ritze thought there should be some expression from the members of the Society relative to the so-called new style of pictures, of which there are considerable numbers made in Boston, and by persons outside of the photographic business. This is essentially the old Hollotype process, which exploded many years ago. The pictures are made by mounting photographs on the inner side of a convex glass and making it transparent by means of castor oil, and coloring it on the back, or by placing a duplicate one at the back of the first,

the coloring being usually done in a very crude way. The transparent effect of these pictures is quite pleasing when a good photograph is obtained to work on, and the coloring is not so much touched as to spoil it. But from the testimony given by many of the photographists present, they had made these pictures one or two years ago, but it was found they were not long in cleaving from the glass on which they were mounted (after the oil had dried), showing spots which rendered them worthless, and had abandoned making or recommending them.

Mr. Black gave a very interesting entertainment, by exhibiting views with the stereopticon, from slides furnished by Messrs. Benjamin French, F. C. Lowe, A. N. Hardy, and others. It was voted Mr. Black be invited to repeat the exhibition, and that he be paid the expenses incident.

It was voted that those having 17 x 21 instruments should bring in a picture of that size for criticism at the next meeting.

A. N. HARDY, Secretary.

LANDY'S SEVEN AGES OF MAN.

BOSTON, May 5th, 1876.

WE have briefly noticed elsewhere the wonderful series of pictures, with the above title, which are now on exhibition in Photographic Hall. Since writing the notice referred to, we have received from Mr. Landy a Cincinnati paper, in which we find a better description of the pictures than we have yet had time to prepare, and as it contains information in reference to the parties representing the several characters, which we could not have readily obtained, we quote it here in full.

In the first place, however, we will say for the information of those who may not be sufficiently acquainted with Shakspeare's works to turn to this passage, that it may be found in "As You Like It," act 2, scene 7. Duke Senior says:

"Thou seest we are not all alone unhappy: This wide and universal theatre Presents more woful pageants than the scene Wherein we play in.

Jacques.— All the world's a stage, And all the men and women merely players: They have their exits and their entrances; And one man in his time plays many parts,

^{*} See page 186.

His acts being seven ages. At first the infant, Mewling and puking in the nurse's arms. And then the whining school-boy, with his satchel

And shining morning face, creeping like snail Unwillingly to school. And then the lover, Sighing like furnace, with a woful ballad Made to his mistress' eyebrow. Then a soldier, Full of strange oaths and bearded like the pard, Jealous in honor, sudden and quick in quarrel, Seeking the bubble reputation Even in the cannon's mouth. And then the justice, In fair round belly with good capon lined, With eyes severe and beard of formal cut, Full of wise saws and modern instances; And so he plays his part. The sixth age shifts Into the lean and slippered pantaloon, With spectacles on nose and pouch on side, His youthful hose, well saved, a world too wide For his shrunk shank; and his big manly voice, Turning again toward childish treble, pipes And whistles in his sound. Last scene of all, That ends this strange eventful history, Is second childishness and mere oblivion, Sans teeth, sans eyes, sans taste, sans everything."

"THE SEVEN AGES.

"Those who have doubted that it is within the possibilities for photography to ever reach the realms of high art bave been pretty emphatically answered in the affirmative by Landy, of Cincinnati, in his contribution to the Centennial at Philadelphia. He has prepared a series of pictures, 20 by 24 inches, that will command the admiration of the critical world. The theme is Shakspeare's 'Seven Ages.' The backgrounds and interiors have all been painted or prepared expressly for the series, and are all in date mediæval. The subjects, too, have been chosen with great care. In No. 1, a wonderful light is thrown through a heavy arched window upon the 'infant, mewling and puking in the nurse's arms.' The nurse is costumed like the traditional nurse in Romeo and Juliet, and sits in the fine old interior, with her staff lying idle beside her, while she devotes her entire attention to the 'difficult subject,' which the artist has 'caught' to perfection, in her arms. 'The whining schoolboy' with his 'shining morning face' is represented happily by Master Freddy Hall, of Wood's Theatre, with an effective landscape back-'The lover, sighing like furground.

nace,' etc., is kneeling at the feet of his 'mistress,' to whose eyebrow he has indited his 'woful ballad;' and in the grand old castle behind there glimmers only one light, 'the light in the window,' for the lover to whom a reluctant interview has been granted. Only intimate acquaintances of Meade and Miss De Forest of the Grand Opera House would recognize them in this picture, so perfectly has individuality been sunk in the unity of the artist's general design. The soldier, 'bearded like the pard,' is in the full armor of the period, and seems to be leading the charge upon the quaint old battery and fort behind. The action and treatment are superb. We had to promise the modest lady that we would not tell who stood for that picture. 'The justice, in fair round belly with good capon lined,' sitting in his heavy-carved oak chair, is personated by Russell Soggs, late of Wood's Theatre, and his 'make-up' for the sitting must have been as admirable as were the scenic surroundings.

"In 'the lean and slippered pantaloon,' however, Mr. Landy has his most complete triumph. The 'subject' was Mr. Ezekiel Walker, of this city. The background is a dim, religious cathedral interior, with the crucifix in the distance, suggestive of what the old man's thoughts are upon, as, with 'his youthful hose, well saved, a world too wide for his shrunk shank,' he totters slowly on. This picture could successfully compete, we doubt not, with any at Philadelphia. 'The last scene of all' is also represented by a well-known citizen, of advanced years. The 'interior' is Elizabethan, and superb in its treatment. The artist has, with great good judgment, introduced as a contrast his own son, a handsome lad, who seems to stand in anxious and affectionate wonderment, at the condition of one who seems his grandparent.

"There are no duplications of background in the series. Light and shade have been treated with wonderful skill. A long-thought-of ideal has been well wrought out, and we can confidently predict Mr. Landy's victory over all of his profession seeking Centennial honors. A duplicate set, we understand, will shortly be placed on public exhibition in this city."

OUR PICTURE.

Mr. J. H. Kent, of Rochester, N. Y, is too well known to our readers to require any introduction from us. It is sufficient to say that he is one of the few progressive men who, several years ago, took a foremost position as a photographic artist, and has maintained it. In all the various styles of work produced, that from the hands of Mr. Kent has always shown careful and artistic treatment, and maintained for him the high reputation he has so long enjoyed.

In "Our Picture" Mr. Kent demonstrates his ability to treat the Promenade style equally with any other, and to convey some good lessons in composition, lighting, perspective, etc. As we have said of Mr. Kent before, he is an artist who has the ability to treat his subjects in a manner that would not be safe always for less experienced men to attempt.

It will be noticed that "Our Picture" is well filled with accessories; but they are judiciously chosen and arranged. The light top of the ornamental fence on the left, and the white leaves of the plant in the corner on the right, repeat, in a lower tone, the face and tie of the fair subject, and give breadth and balance to the picture. The place of deepest shadow, which gives value to the whole, will be found under the cluster of foliage in front of the subject; while the three trees assist the perspective, and give the proper retiring effect to the distant landscape.

All these give character to the picture and support to the subject. The latter appears to be moving gracefully along in the most approved style and decorum, and to her as well as to the artist we are indebted for this fine example of the Promenade picture.

In the hands of a less experienced artist, as we have observed, the very features which go to make up the excellent qualities of this picture might be the stumbling-block over which he would blunder into utter failure. We would therefore caution the young artist against introducing too much into his pictures. A simple background, with few accessories, will be found the best to begin with, carefully noting the bearing, or relation, that each may have to the subject, and always keeping them in a subordinate po-

sition. When the simple rules to which these may apply are comprehended, then something more elaborate may be attempted. In this way the taste is cultivated, the rules of art come to be understood, and almost imperceptibly a knowledge, or sense of the fitness of things, is gained; and in composing a picture with a profusion of accessories everything is made to take its place with apparently but little effort, and a successful work of art is the result. But this takes time, and requires study; no one must expect to attain to this proficiency in a week, a month, or a year. "Well," one may say, "how am I to know when I have acquired this knowledge, this ability?" There is no better evidence than to be able to give a reason for everything that is placed in a picture.

The experienced artist will proceed to pose his subject in a certain position, arrange the draperies, dispose a line here and another there. He places an accessory in a certain position and light, knowing the effect it will produce, and so he goes on till the whole is completed, and the result is an artistic photograph. Now, how was he enabled to do this? Why was he not obliged to experiment, and make a number of trials before he produced the effect he desired? Simply because his days of experimenting were past. He comprehended his subject and saw the picture in his own mind before he commenced to make the sitting. For every line, every accessory, every dark, or light, or middle tint, he had a purpose as he saw the end from the beginning.

Now, if the student will take "Our Picture" and try to discover Mr. Kent's meaning—his reasons for this, that, or the other—he may learn a great deal that will help him in his practice, much more than a mere attempt to imitate, without knowing the why or wherefore of what he does.

All pictures may be studied in this way, and under the influence of such exercise the mind will expand; it will soon see beauty where it saw nothing before; all nature will have a different meaning, new beauties will spring up everywhere, new powers will be developed, and the individual will soon seem to live as it were in a new world. All may not be able to experience this, but

we commend this method of study to all who love nature, who love art, and desire to cultivate a taste for the beautiful wherever it may be found. The prints were made by Mr. Hearn, at his Printing Institute, and will be found executed in his usual excellent manner.

Editor's Table.

WILLARD'S YANKEE DOODLE.—This is truly a Centennial picture, and was painted by a man who had carried a musket to the tune in his country's service. His soul as well as his hand is in it.

The painting is a wonder of art. It tells the story of the grand old man who, when their leader fell, and disaster threatened, himself took command; and, with drum instead of sword, led their broken forces on to victory.

The picture represents a "full orchestra," grand-ire, sire, and son The old man, with his white locks streaming in the wind, and in shirtsleeves, has seen the crisis, and rushing into the breach seizes a drum instead of a sword, and with compressed lips and hands clenched upon his drum-sticks, evinces a determination to do or die. The son, upon one side, makes the air resound with the shrill and soul-stirring notes of the fife, while the boy-drummer on the other catches the stroke and spirit of his grandsire, and thus they lead the lately discouraged army on to victory. It is a stirring picture and exceedingly appropriate to the Centennial year. As it has been reproduced in chromo by Mr. J. F. Ryder, of Cleveland, it is placed within the reach of all, and doubtless many of the patriotic will avail themselves of the privilege to secure a copy. We also have a fine lantern slide of this which is sure to take.

A BEAUTIFULLY gotten up catalogue and price list, printed on tinted paper and profusely illustrated, has just been issued by Messrs. Wilson, Hood & Co., 822 Arch Street, Philadelphia. Everything pertaining to photography, in the way of apparatus, chemicals, frames, graphoscopes, multiscopes, stereoscopes, etc., etc. are pictured, catalogued, and priced in a manner highly creditable to them, and very convenient to their patrons. The book is beautifully bound in cloth, and conveys at once the impression that it must have been issued by an enterprising and prosperous house.

Removal. -Our magazine this month goes out from our new office, 116 North Seventh Street.

Here we have a whole building devoted to our business: editorial, book, and lantern-slide departments. This has been rendered necessary by the rapidly-increasing demands in all of these, but more particularly in that of lantern-slides. We have now well-arranged and convenient offices, which will enable us to serve our customers more satisfactorily and promptly, if possible, than ever before.

CENTENNIAL STEREOS.—The Centennial Photographic Company are now producing some of the most beautiful things for the stereoscope we have ever seen. We keep a full supply, and photographers everywhere can draw trade and make business by exhibiting them to their customers. New subjects are being received every day. Send for catalogue.

THE STAR-SPANGLED BANNER.—The suggestion of our Local Secretary that we sing this national song at the opening of our Convention in August is, we think, a happy one, and we hope all will enter into the spirit of it. See his announcement on another page.

MR. J. A. FRENCH, Keene, N. H., sends us some stereos in genié composition, of children, which, for conception and execution, and having the merit of originality, come the nearest to the Gems of German Life—published by Loescher & Petsch, of Berlin, several years ago—of any we have ever seen. He sends us also his business card, which is quite unique, and an entirely original design, representing a large letter B, in the two ovals of which are pictures of a little girl named Bessie, the large letter forming her initial.

MR. JOHN CADWALLADER, of Indianapolis, Ind., is a man of ideas, and believes in printers' ink. In a recent number of a local paper he advertises with no less than twenty-two "personals," each reciting something that did or did not transpire "one hundred years ago," and closing with an allusion to Cadwallader's gallery as the place to get photographs.

SWASEY'S SCENIC BACKGROUNDS.—We have before us a pamphlet containing between its leaves a number of films, each of which bears a background impression of a different pattern. There are also a number of cabinet photographs which have been printed with the tissue background. The latter is placed between the negative and the paper in proper position and the whole prints together. The negative is made on a rather light neutral ground, and may then be printed with any scenic or landscape ground desired. There is no double printing, all is completed in one operation.

The film backgrounds are the invention of Mr. Benjamin Swasey, of San Francisco, who has protected it by patent. The films are exceedingly flexible, and may be rolled up and carried in the pocket without injury. Further than what we have seen, as stated, we have had no means of knowing the merits of the invention, or how far it is practicable, but it has the appearance of being very convenient and useful, doing away, as it does, with heavy backgrounds and accessories.

The catalogue season appears to have set in. We have received an illustrated and descriptive catalogue of photographic stationery, materials, and accessories, manufactured and imported by Edwin Osborne, Red Lion Square, London. Their stock appears to embrace quite a wide variety and must accommodate a large class of customers.

Also an illustrated catalogue from Herr K. Krziwanek, of Vienna. The usual photographic materials are enumerated and priced, besides which are samples of background materials, pink albumen paper, card mounts, and a great variety of designs for printing the backs of card mounts with the photographer's name. We are glad to see this evidence of business and enterprise among our friends in Vienna.

PHOTOGRAPHS OF THE EMPEROR DOM PEDRO.—We have received from Messrs. Bradley & Rulofson, San Francisco, several fine portraits, in cabinet and 17 x 20, of the Emperor of Brazil, which were executed under high pressure, as the following letter from Mr. Rulofson will show. Others may learn something from his methods of dispatching husiness:

"I intend sending a line of goods to the Centennial in a few days. I mail this day some full-sheet prints, to show that you are not forgotten amidst the many cares which press upon me. There are two of Doin Pedro, for whom we performed what we think was quite a feat. His

Majesty entered our establishment at twenty minutes of nine o'clock, on Thursday morning last, remaining seventeen minutes; during which time seven cabinet, one solar, and one 17 x 20 negative was taken. They were all retouched, and in the hands of our printer at twelve; and at four o'clock, same day, over two hundred cabinets were sent to the Emperor and mailed to all parts of the world; six 17 x 20 framed, sent to his Imperial Majesty and distributed throughout the city; and at two o'clock the solar print was in the hands of Mr. Schultz. At half-past four next day we delivered a life-size crayon, which 'His Imperial Majesty' was pleased to pronounce the finest portrait he ever sat for. Everything is now laid aside to fill the order with which he kindly honored us. Will do my best to 'enthuse' the National Photographic Association.

"Yours always,
"William H. Rulofson."

BEAUTIFUL LANDSCAPES .- There is scarcely anything in the way of pictures that gives us more pleasure than real artistic photographic views. We were surprised and delighted a few days ago at receiving a collection from Mr. S. R. Stoddard, of Glens Falls, N. Y. They consist of stereos, and larger views of 6 x 10 and 10 x 14 inches in size. In looking over some of the beautiful views of European scenery, by some of their best artists, we have often sighed for such work by American artists, and now we have it from Mr. Stoddard. The stereos are perfect gems of photography, including Ausable Chasm, Lake George, instantaneous and general landscape scenes. But the larger views captivate us most. They seem to be filled with the feeling and expression of the true artist. For choice of subjects, arrangement, and balance of lines, depth and beauty of perspective, well-chosen and effective foregrounds, and clearly defined yet subdued distance, which with dainty skies give a charming sense of a real atmosphere, we have rarely seen these views excelled. They comprise scenery about Lake George and vicinity, and demonstrate that the true artist can woo nature into beauty everywhere.

We thank Mr. Stoddard for his very acceptable donation, and congratulate him on his excellent work.

Business Change.—Mr. George Moore, of Seattle, Washington Ter., has sold out his gallery to Mr. R. H. Cardwell, late of Portland, Oregon. Mr. Cardwell is said to be an artist of much merit, and a worthy successor to Mr. Moore.

Specialties.

ADVERTISING RATES FOR SPECIALTIES.—It will be understood that matter under this head is not to be considered as always having editorial sanction, though we shall endeavor to clear it of anything tending to deceive or mislead. Stock-dealers will find this a beneficial mode of advertising, and sure to pay largely. Six lines, one insertion, \$2.00, and 25 cents for each additional line, seven words to a line—in advance. Operators desiring situations, no charge. Matter must be received by the 23d to secure insertion. Advertisers will please not ask us for recommendations. The We cannot undertake to mail answers to parties who advertise. Please always add your address to the advertisement.

Wanted.—Situation by a competent photographer, understands all branches of the business thoroughly. Wages only \$8 per week. If you mean business, address First-class,

Box 158, Harrisburg, Pa.

Рнотоскарну. — A photographer, at present established in one of the leading cities of Germany, first-rate operator and chemist, wishes either to obtain a situation as operator or, being a man of means, to enter as a partner in a firstclass business in New York, Philadelphia, or some other large city in America, or to establish himself there. Prizes awarded him at the Vienna International Exhibition for his photographic productions. Some specimens of his work will also be on exhibition at Philadelphia, others will be sent to any address upon application. Would be at liberty to commence an engagement at any time, if a favorable chance offers. Address letters to S. V., 789, care of Messrs. Haasenstein & Vogler, Berlin, S. W. (Germany). Name of advertiser may also be ascertained of Mr. Edward L. Wilson, 116 N. 7th St., Philadelphia, Pa.

WAYMOUTH'S VICNETTE PAPERS.

For Sale at Half its Value.—The best located gallery in the thriving city of Syracuse. Population, 70,000. Has always done the leading business, and being lately remodeled is now complete in all its appointments; rent but \$500 a year. This is a rare chance, and none but those who mean business need apply. The death of my husband, the late proprietor, is my reason for selling. The store under the gallery now rents for \$3,600; one may judge from this the value of the location and the business enterprise of our city. Address Mrs. John Austin,

58 S. Salina St., Syracuse, N. Y.

A SPLENDID BARGAIN.—Desiring to make some change in my business, I offer for sale my gallery, the best and most conveniently arranged of any in this section. Work and prices are strictly first-class. Will be sold very low if disposed of by July 1st. For a good workman this is an opportunity seldom met with.

Address J. H. OAKLEY,

Ravenna, Portage Co., O.

Quite a commotion has occurred among cameras. The new head-gear, introduced by J. F. Ryder, of Cleveland, has improved the vision of many, and excited the sober consideration of others. Valuable improvements will be adopted. The farmer manures the soil for better crops. The photographer must put fine bonnets, or eye lashes, upon his camera for better results.



"YANKEE DOODLE"

Is the name of the picture, and there is very much Yankee Doodle in it. The painting is by A. M. Willard, a man who has carried a musket to the tune in the service of his country; a man whose brush tells a story with more point and power than any artist in America. This great picture hangs with the best in Memorial Hall, at the Centennial Exhibition, and excites both admiration and patriotic fire in the breasts of thousands. That all may possess a copy, a fine chromo reproduction has been made, in size 18 x 24 inches, printed in seventeen colors, and the work first-class. Every photograph gallery should have a copy. It will be the best advertisement for the price that could be used. Every photographer can turn a few honest dollars in selling them to their customers. The coming anniversary will be the hottest in patriotic fire ever known, and Yankee Doodle will be in great demand about that time. On receipt of \$2, I will mail a copy to photographers so ordering. The price of the picture mounted, ready for framing, is \$3.50. Send in your orders. Give vent to your patriotism, and make a little money withal J. F. RYDER. Address the publisher,

Cleveland, Ohio.

For Sale.—A first-class gallery in a city of 25,000 inhabitants, and rich farming country neighborhood, in central Illinois, will be sold at half its value. Best north, top, and side light in town. Must sell under any circumstances. For further particulars, address

WM. RICHTER, care of G. Schmidt. 198 West Randolph St., Chicago, Ill

USE WAYMOUTH'S VIGNETTE PAPERS.

By a young lady of several years' experience as retoucher and water colorist, in a first-class gallery; porcelain finished in water colors a specialty. References exchanged. Address L. Austin, 58 S. Salina St., Syracuse, N. Y.

By an experienced photographer, a situation as printer, operator, retoucher, or general worker, in a good gallery; have been in the business twelve years. Address A. C. Hopkins, Palmyra, N. Y.

A sober, steady, first-class chemical operator, who understands artistic lighting and posing, will be open for engagement within a month or two. Has had twelve years' experience in first-class establishments in Europe and America; speaks English, French, and German; can furnish first-class references. Does not use any tobacco. Wages \$25 per week. Address Y. Fröhlich, 1019 N. Sixth Street, St. Louis, Mo.

By a fine negative retoucher, can do good work, would prefer a position where he can assist in other branches. Address F. Osterhedt, 218 Christie St., New York City.

A position in New York City as operator or retoucher, or both. Can be seen personally by request. Address Lock Box 38, Dover, N. J.

By a good photographer (any branch), a situation in a first-class gallery in Philadelphia, during the months of July and August; will work for board. Object, to post up in photography. Am proprietor of a gallery, have been for ten years. Address for samples of work, Isa F. Collins, Huntsville, Alabama.

Mr. John L. Gihon has just returned from South America, and is now ready to engage with any leading photographic establishment. He has over twenty years' experience, is thoroughly acquainted with every branch of the business, and is an accomplished colorist as well as photographer. Artistic posing and lighting a specialty. He has also devoted much attention to viewing, with introduction of cloud effects. Address John L. Gihon, Office of Philadelphia Photographer, 116 North Seventh St., Philadelphia.

By a young man in a first-class gallery, as printer, toner, and general assistant; is not afraid to work. Address W. L. V., care of A. B. Porter, Wyalusing, Pa.

Permanent situation by a man of twelve years' experience; operating preferred, or would take entire charge of a first-class gallery or copying house; three years' experience in a copying house. Address Photo., 28 Hart St., Utica, N. Y.

BULLOCK & CRENSHAW,

No. 528 Arch Street, Philadelphia,

MANUFACTURERS AND IMPORTERS OF PURE CHEMICALS FOR PHOTOGRAPHY.

IMPORTERS OF GLASS AND PORCELAIN, APPARATUS, ETC.

1876! STORAPHIC 1876! SHOTOGRAPHIC MOSAICS

Edited by EDWARD L. WILSON, Editor Philadelphia Photographer,

ETC., ETC.

This favorite and only American annual is fairly crammed with articles prepared expressly for it by the eminent photographers of Europe and America, who are seldom induced to write for anything else.

Price, in Cloth, \$1.00; in Paper Cover, 50 cents.

"The Best Little Handbook of Photography in the World." For Sale by all Dealers.

No Photographer should be without Mosaics for 1876.

BENERMAN & WILSON, PHOTOGRAPHIC PUBLISHERS, PHILADELPHIA.

HEARN'S PROTOGRAPHIC PRINTING INSTITUTE,

FOR PRINTING FOR THE TRADE, AND FOR INSTRUCTION IN THE ART OF PHOTOGRAPHIC PRINTING.

Below we insert a few letters, out of many that we have received since the first opening of the Institute, of which your perusal is respectfully solicited.

"I have received to-day the two cabinet pictures you sent me for inspection, and I can fairly say that I fully approve of your style of printing and toning—both are excellent in the extreme. I may just as well say that if I had not my own printing establishment where my exhibition pictures have been printed some time ago, I would have availed myself of your offer gladly. I wish you best success in your enterprise."—H. ROCHER, Chicago, Ill.

"Your communication of February 24th is at hand, and the samples therein inclosed are very fine. I commend the enterprise, and highly recommend such an institute as you represent. A place for instruction is an absolute necessity, and I have no doubt that it will be a blessing to the fraternity. I wish for you abundant success."—G. Frank E. Pearsall, Brooklyn, N. Y.

"The samples of printing you have forwarded me could not be excelled, and are hard to equal. They are very beautiful."—W. J. Baker, Buffalo, N. Y.

"Your letter was received yesterday, and samples to-day. The prints you send are exquisite. They are clean and brilliant, yet very soft and velvety, notwithstanding the negatives are only ordinarily good. I cannot produce such prints, and I doubt if there is a gallery in America that does. I wish you success in your new enterprise."—Frank Jewell, Scranton, Pa.

"Your idea of giving practical instructions in printing is an excellent one, and should be encouraged. I know of no one better fitted for the position than yourself, as evidenced by your own work and *The Practical Printer*. You have my hearty wishes for the success of your undertaking."—ALVA PEARSALL, Brooklyn, N. Y.

"The three specimens on my desk now, from you, received this A.M. Truly, they are as fine samples of printing as I ever saw. The chemical harmony of the printing bath, with that of the gold, is apparent. You have got at the bottom of the 'secret' Success to your new enterprise. I hope you will be gratified with your labors by seeing the much-neglected part of our profession (photo. printing) elevated from its too common degredation to that of, at least, a very great improvement in many of us."—Ferris C. Lockwood, Freehold, New Jersey.

TO WHOM IT MAY CONCERN.

I most cheerfully give my unqualified commendation, both as to personal character and first-class professional abilities, of my former printer and toner, Mr. Charles W. Hearn, who was in my employ for about three years in that capacity. He is one of the very few who seemed really to love and enthusiastically devote his entire time to that interesting but somewhat neglected branch of our art. He often declared to me that he thought printing and toning the most interesting department of photography, and expressed his determination to make a specialty of it, which he has done with an energy and heartiness in his work and study that has won for him most deserved success, so that he is, though still quite a young man, one of the very first photographic printers of this or any other country. That the most abundant means may attend him in his new enterprise, is the earnest wish of his old employer,

J. H. Lamson, Portland, Me.

"Since having my views printed at the Institute nearly all my patrons are duplicating their orders, which speaks decidedly in favor of your careful and artistic printing."—FRANK ROBBINS, Oil City, Pa.

"The examples of Printing are received, and are simply PERFECT. I congratulate you upon having inaugurated a means of securing to the art and 'the trade' a certainty of obtaining the best print a negative will yield, and that you offer this great advantage to both proprietor and pupil. Success to your enterprise."—J. F. RYDER, Cleveland, Ohio.

A trial order is respectfully solicited. Address

HEARN'S PHOTOGRAPHIC PRINTING INSTITUTE.

116 North Seventh St., Philadelphia.

* *

THE BONANZA PLATE HOLDER.

Patented January 19, 1875.

This is one of the most useful appliances yet introduced in the Photographic business, and

This is one of the most useful applications of the most useful applications one much needed for economy and neatness in every gallery.

The "Bonanza" Plate Holder has been in constant use in G. D. Morse's Gallery, in San Francisco, for over one year, and a test made from month to month of the savings. In the busy season it reached over \$12 per month in pure silver solution. The drippings from the plates do not come in contact with the wood frame, slide or door of the Holder, thereby saving it from destruction. Besides, it protects the camera-box, clothing of the operator, carpets, etc., from silver stains. Another great advantage of this Holder: The inside kit of frames which are in general use for accommodating the different size plates are dispensed with. The fittings are so adjusted that they take every size plate from a card to 8 x 10 size, uprights or crosswise, as may be desired, by simply moving the receptacle that holds the plate to the position required for any particular size. Every photographer will see at a glance the value of this invention.

"We have had your "Bonanza" Plate Holder in use in our establishment for about eight months. We take pleasure in testifying to their great superiority over all others we bave employed or seen, not only as a silversaving appliance, but also in promoting cleanliness in work and protection of carpets and drapery from silver contamination. The very moderate price charged for these Holders will be returned to the purchaser, in the saving made, in a very short time."—W. H. RULOFSON, San Francisco, February 10, 1876.

"The constant use of a couple of your 'Bonanza' Plate Holders during the past year warrants me in saying they are unexcelled. The silver all being saved in a liquid state can be used again, and there is no soiling of clothes. carpets, or the floor of the studio. The silver not coming in contact with the camera, the focus is not disturbed by the eating away of the wood work. The saving in silver, clothing, and carpets, is astonishing, and I would not be without them on any consideration. I cordially recommend them to the craft."—G. D. MORSE, San Francisco, February 20, 1876.

"The past eight months I have used the "Bonanza" Plate Holder at Bradley & Rulofson's. It has been a great source of pleasure to work with a Holder free from drippings of silver solution. Every photographer will appreciate the cleanliness of this invention, as well as the dollars he will save by its use. I am starting in business at 415 Montgomery Street, and wish you to send me two "Bonanza" Plate Holders."—D. B. TAYLOR, February 13, 1876.

"I believe it to be the best Photographic Plate Holder ever used in the art."-SILAS SELLECK, San Francisco,

The "BONANZA" PLATE HOLDER is manufactured of the very best material, and is now ready for the market. The retail price is \$20. They are made to fit and are in focus with the American Optical Co.'s 8 x 10 boxes. Will forward a holder by mail to any address on the receipt of \$20 currency, or will send by express, C. O. D. It is much cheaper to send by mail, as we can forward them to any part of the United States for fifty cents. All orders should be addressed to

W. TABER &

YOSEMITE ART GALLERY,

26 Montgomery St., San Francisco, Cal.

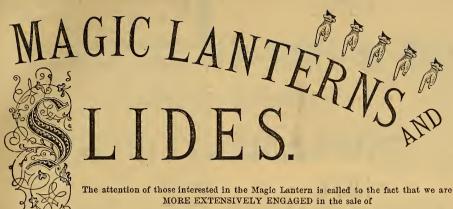
THE "ATMOSPHERIC" BACKGROUND.

Patented November 23, 1875.

This Background which is made of wire cloth, is remarkable for its atmospheric effect. The wire cloth is of such a texture that the eye or lens cannot focus upon it, which has the effect of producing a sharper outline to the figure. This result makes it valuable for plain Backgrounds, as it produces negatives free from any blemish, as a dent or scratch on the

The durability of the Wire-Cloth Background cannot be questioned. One of them will last a lifetime. We have had them in constant use for over two years. They have been hit by head-rests, and every accessory used in a gallery have had their accidental contact, but they are as perfect to-day as when new. They are used in all the first-class galleries in San Francisco. We have manufactured them for this market, but as freights are high to ship them East, we have determined to offer gallery rights for sale at \$25 currency, with full instructions for making them. It is economy for photographers to purchase the with full instructions for making them. It is economy for photographers to purchase the right, for they can be made at a small expense.

W. TABER &



LANTERN SLIDES AS A SPECIALTY.

Than any other house in America. Our continuous contact with photographic men gives us special advantages in this line, and as MANUFACTURERS AND DEALERS we offer the very best opportunities to secure

MUCH FOR YOUR MONEY,

AS WELL AS SUCH GOODS AS WILL PUT MONEY IN YOUR PURSE, NAMELY:

A GOOD LANTERN. THE BEST of SLIDES.

FOUR CATALOGUES MAILED ON RECEIPT OF 25 CTS.

DO NOT BUY UNTIL YOU HAVE CONSULTED HEAD-QUARTERS! SUPPLEMENTARY CATALOGUE (March 1) READY!

USE WILSON'S

A Lecture Book describing graphically, as an eyewitness, 600 beautiful places and things in all parts of the world.

SUBSCRIBE FOR THE

A Monthly Journal, devoted to the interests of lantern lovers. \$1 per year, post-paid.

Special estimates and other information given gladly. No substituting of Slides. Prices very low. PROMPTNESS OUR RULE.

BENERMAN & WILSON, Photo. Publishers, 116 NORTH SEVENTH ST., PHILADELPHIA.

1876.

WHAT follows is a Catalogue of the best Photographic Publications, sent to remind all live photographers of the fact that good practical information is as essential to them as good lenses and pure chemicals. There are some "artists" who "get along" without any of these, but they do not progress, neither do they succeed. Do not be of their number. There is too much going on in photography in these "quick acting" times to enable any photographer to afford to do without reading and being posted. In anything you undertake you should take every precaution to be as bright as your neighbor, or he will get ahead. Keep alongside, any way. We will mail you any of the works named below, post-paid, on receipt of price. Order now.

1876

WILL BE A YEAR OF JUBILEE FOR PHOTOGRAPHERS THAT SHOULD NOT BE NEGLECTED.

THE CENTENNIAL EXHIBITION

Will present opportunitles for study and improvement which should not be overlooked, and the study of the best books will not only do you good before, but after the inspection of Photographic Hall, READ! READ!! READ!!!

BENERMAN & WILSON,

Photographic Publishers,

Philadelphia, Pa.

hiladelphia Photographer. THE BEST PHOTOGRAPHIC MAGAZINE IN THE WORLD.

EACH NUMBER EMBELLISHED BY PHOTOGRAPHY.

THE THIRTEENTH VOLUME of our Magazine promises to be the most popular and brilliant of any that has preceded it. We have many good things in store for it. It shall be our endeavor to make it all the richer and more interesting on account of the Centennial. We expect to embellish it with some of the choicest gems the Exhibition can produce and add interest to its pages from month to month, by giving a sort of compendium of all that relates to Art or Photography. Among other attractions, we expect to have our old friend Dr. Yoozh, here during six months of next year, at least, and our readers may expect some of the fruits of his genius and talents to add to its interest and usefulness.

But while we intend to provide all these home attractions, we do not propose to neglect whatever may transpire abroad, but shall present, as usual correspondence from such well-known writers as Prof. Streams, Mr. W. J. Stillman, Mr. Chas. Waldack, and others. With all these good things in more beautiful and more useful than ever before; and while we maintain that the beautiful example of photography, which accompanies each issue, is slone worth the subscription price, still more and more effort will be made to make the reading matter everything that it ought to be. Our correspondents from all the leading centres abroad will keep our readers posted on all matters of interest in their several sections, while our unrivalled staff at home will look diligently after your interests here. To make THE PHILADELPHIA PHOTOGRAPHER the best PRACTICAL HELEER which can possibly be obtained, is the aim and earnest desire of its publishers. We ask your co-operation in extending its usefulness, and offer to all present subscribers, who secure us new ones, the following

PREMIUMS.

For every new subscriber, for one year, \$1.00, payable in any of our publications, books, or, if preferred, one dollar's worth of any of our prize pictures, or any other article for which we are agents, advertised in this Magazine,

The subscription price of the Philadelphia Photographer is \$5 a year, \$2.50 for six months, 50 cents per month.

Each number, remember, contains a handsome photograph.

Photographic Mosaics.

THE Centennial anniversary year of American Independence finds our little Annual in its eleventh year. It is developing rapidly for its age and size, and this year takes quite an interest in the Centennial. It is full and running over with fresh contributions from the most wide-awake members of the fraternity in all parts of the country. We here give a list of the

bers of the fraternity in all parts of the country. We here give a list of the CONTENTS.—Review; Eighteen Hundred and Seventy-six; Discoveries, Inventions, and Improvements; Work in the Studio; The Dark Room; The Printing Department; Landscape Photography; Dry-plate Work; Apparatus; Art Advances; The National Photographic Association; Our Publications; Our Prize Offer; Items of Interest; Obituary; The Art Progress; Fog; Come, Letus Reason Together; Experience; Provoking; A Suggestion Anent the Great Exhibition; Centennial Album of Photographic Studies; The Eliminating of Hyposulphite from Prints; A Treatise on Photography; Why not make Solars instead of Contact, etc.; Systematic Preservation of Regatives; Want of Enterprise; Lighting the Sitter; Theory and Practice; Be Punctual; Formulæ for Photographs and Perrotypes, which give Lights and Half-tones not surpassed; Exposure and Development of a Negative; A Cause for Faded Prints; How I Sunned a Bath under Difficulties; A Good Collodion; A Word to the Weak; How to Clean New and Old Glass Plates; Long's Bath Warmer; Albumen, its Preparation and Use in Photography; An Item of Real Value; The Negative Bath; How to Lubricate Prints for Burnishing; Then and Now; A Pair of Suggestions; How to Obtain Boiling Water in Winter; An Excellent Wate for Photographic Auriposes; Hints on Composition; The Causes and Cure for some of the Difficulties pertaining to Photography; At and Mechanism; Breakfast for Dinner; Field Work; Marble Negatives—Stains From the Hands, etc.; Pyroxylim—Gun-Cotton; The Old Bath; The Upper Floor; Dry-Plates; The Art Privileges of our Great Centennial; Curtains as a Meansof Adjusting Light; An Exposing Shutter; How to Touch out Finholes; Photography; A Cheap and Good Plateholder; The Way it is Done; To Correspondents; The Construction of Skylighta; Blisters; At the Desk; On Photographic Lenses—How Way it is Done; To Correspondents; The Construction of Skylighta; Blisters; At the Desk; On Photographic Lenses—How to Choose and Take Care of Them; The Gene

Price, bound in Cloth, \$1. Paper Cover, 50 Cts. 144 pages.

OUR BOOKS.

THE PRACTICAL PRINTER. By Chas. W. Hearn.

This very useful book is indispensable in the printing department. No one who wishes to be up with the times in printing, can afford to be without it. Its rapid sale and the favor with which it has been received, are the best recommendations we can give. Price, \$2.50.

BIGELOW'S ALBUM OF LIGHTING AND POSING.

This excellent work still maintains its popularity. It contains 24 beautiful photographs from life in different lights and positions, with an explanatory key, which makes it the most practical helper the Photographer can have. Price, \$6.00.

DR. VOGEL'S HANDBOOK OF PHOTOGRAPHY. Second Edition.

This is a really standard work, and the most complete hand-book ever published. The new edition has been thoroughly revised, and much additional matter introduced, together with new illustrations, new photographs, and a new arrangement all through. Now is the time to study up, and this book is ap-plicable to any department. Price, \$3.50.

DR. VOGEL'S PHOTOGRAPHERS' POCKET REFERENCE-BOOK.

This is in every sense a reference book. It is alphabetically arranged, and any process or formulæ in photography may be found at a moment's notice. All is arranged in a concise and practical form. It is particularly useful in the chemical department. Price, \$1.50.

THE FERROTYPERS' GUIDE.

This little work is by a practical ferrotyper, and gives just the instruction necessary to those who wish to do good work in this branch of our Art. Price, 75 cents.

LINN'S LANDSCAPE PHOTOGRAPHY

Is an excellent companion in the field, and may help you over many difficulties; can be carried in the pocket. Price, 75 cts.

GLIMPSES AT PHOTOGRAPHY. By Prof. Himes.

This work treats of some of the peculiar styles of printing, such as leaf-printing, etc., etc. Price, \$1.25.

WILSON'S LANTERN JOURNEYS.

To those who use the lantern this book is indispensable. It contains just the information required about six hundred different views, and enables any exhibitor to make his entertainments enjoyable and instructive. Price, \$2.00.

BURNET'S HINTS ON COMPOSITION.

We have reproduced this work by photo-lithography, and sell it at the low price named, while a copy of the original work could not be hought for five times that amount. It is fully illustrated, and supplies in a very attractive form, the art knowledge, in reference to composition, that so many pho-tographers are seeking after. Price, \$3.50.

A. M. COLLINS, SON & CO.,

MANUFACTURERS OF

PHOTOGRAPHIC CARDS AND CARD BOARDS,

OF EVERY DESCRIPTION.

Warehouse:

18 S. Sixth St., and 9 Decatur St.,

PROMENADE PHOTOGRAPH CARDS.

SIZE 41 x 71. SQUARE CORNERS.

White, Light Buff, Amber, Pink, and Black—Plain.

White, Light Buff, Amber, Pink, and Black, with Gilt Borders.

Light Buff and Amber, with Red Borders.

Thin White, Rose Tint, and Black, with Gilt Beveled Edges.

Light Buff and Amber, with Red Beveled Edges.

Thick Gilt, Beveled Edge Glacé, Black and Rose Tint "J."

Glacé Card Boxes, for the Thick Beveled Edge.

Cards 7 x 10, with Gilt Borders, opening 4½ x 7½.

Cards 7 x 10, with India Tint and Gilt Borders, opening 4½ x 7½.

See detailed advertisement in this number of the "Photographic Times."

PRICE LISTS FURNISHED ON APPLICATION.

TRAPP & MUNCH'S

Ibumen

Introduced into this country since 1868 has become the leading paper, and is

now better known and more appreciated than any other brand.

That this great success is well deserved and due to its excellent qualities may be judged from the fact, that of all the competitors of the Vienna Exhibition, Messrs. Trapp & Munch alone received the

MEDAL OF MERIT

for Albumenized Paper. For SALE AT ALL THE STOCKHOUSES.

WILLY WALLACH,

GENERAL AGENT FOR THE UNITED STATES.

No. 4 Beekman St., and 36 Park Row, New York SPECIAL ACENTS:

Scovill Manufg. Co., New York. E. & H. T. Anthony, "". G. GENNERT, New York.

WILSON, HOOD & Co., Philadelphia. H. W. BRADLEY, San Francisco. G. S. BRYANT & Co., Boston.

DR. VOGEL'S PHOTOGRAPHER'S

POCKET

REFERENCE BOOK.

An Alphabetically arranged collection of practically important hints on the construction of the Gallery; selection and trial of lenses and chemicals; approved formulæ for the different photographic processes; tables of weights and measures; rules for avoiding failure, etc.

IT IS A BOOK EVERY PHOTOGRAPHER SHOULD HAVE.

Because it is a ready helper under all difficult circumstances.

For sale by all dealers. Price, \$1.50, post-paid.

BENERMAN & WILSON, Photo. Publishers,

PHILADELPHIA, PA.

Over 1000 Sold.

HEARN'S

PRACTICAL PRINTER

PHOTOGRAPHIC PRINTING

ON PLAIN AND ALBUMEN PAPER, AND ON PORCELAIN.

Too little attention has heretofore been given to Photographic Printing, which is indeed quite as important a branch of the art as negative making.

It is the hope of both author and publishers to create REFORM in this

It is the hope of both author and publishers to create **REFORM** in this matter, by the issue of this work, and as it is to put money in the pockets of all who read it, the hope is that it will be generally read.

CONTENTS.

INTRODUCTION.

The Printing Room, with a Plan. The Silvering and Toning Room, with a Plan. The Drying Room, with a Plan.

PART I .-- ALBUMEN PAPER PRINTING.

The Positive Bath for Albumen Paper. Silvering the Albumen Paper. Drying the Paper. Fuming the Paper. Preservation of Sensitive Albumenized Paper—Washed Sensitive Paper. Cutting the Paper. The Printing Boards. Keeping Tally. Vignette Printing Blocks. Treatment of the Negatives before Printing. Filling of the Boards. Fitting Vignette Boards to the Negatives for Printing. Medallion and Archtop Printing. Fancy Printing. Vignette Cameo and Medallion Vignette Cameo Printing. Printing the Bendann Backgrounds. Printing Intense Negatives. Printing Weak Negatives. A Few More Remarks about Printing—Treatment of Broken Negatives. Cutting the Prints. Washing the Prints. Acidifying the Prints. Toning Baths. Artistic Toning. Fixing Baths and Fixing Prints. Washing the Prints. Mounting the Prints. Finishing the Prints.

PART II.-PLAIN PAPER PRINTING.

Salting the Paper. Positive Baths for Plain Salted Paper. Silvering Plain Salted Paper. Drying, Fuming, and Cutting the Paper. Treatment of the Negatives before Printing. Printing-in False Backgrounds. General Plain Paper Printing. Further Treatment of the Prints after Printing. Causes of Failures in Albumen and Plain Paper Printing.

PART III.-PORCELAIN PRINTING.

Selection of the Porcelain Plates. Cleaning of the Porcelain Plates. Albumenizing the Porcelain Plates. Making the Porcelain Collodion. Coating, Fuming, and Drying the Plates. Porcelain Printing Boards. Placing the Sensitive Plate on the Board for Printing. Printing Vignette Porcelains. Printing Medallion Percelains. Washing the Porcelain. Toning the Porcelain. Fixing the Porcelain. Final Washing of the Porcelain. Drying and Tinting of the Porcelain. Varnishing the Porcelain. Causes of Failures in Porcelain Printing.

Together with over 50 Wood Cuts, and an elegant Cabinet Portrait, from negatives by Mr. F. Gutekunst, printed by the author, Mr. Chas. W. Hearn.

A THOUSAND COPIES ALREADY GONE.

Mailed Post-paid on Receipt of \$2.50, by any dealer, or

BENERMAN & WILSON, Photo. Publishers,

116 North Seventh Street, Philadelphia.

ROBINSON'S METALLIC Guides,

FOR USE WITH THE ROBINSON PRINT-TRIMMER.

(See advertisement of Trimmer opposite.)

These Guides are made of Stout Iron and are turned in a Lathe, so that they are Mathematically True.

OVAL, ROUND, ELLIPTIC, and SQUARE, of all sizes; various shapes for Stereoscopic work, Drug Labels, etc., etc.

We have the following regular sizes always on hand at 10 cents per inch the longest way of the aperture, the fractions counting as one inch.

Special sizes made to order at 15 cents per inch the longest way of the aperture.

REGULAR SIZES:

	OVALS.		SQUARE	OR ROUND-COI	RNERED.
$2 \times 2\frac{7}{8}$	$3\frac{1}{2} \times 4\frac{7}{8}$	$5\frac{3}{4} \times 7\frac{3}{4}$	$2\frac{1}{16} \times 3\frac{3}{4}$	$2\frac{5}{16} \times 3\frac{7}{8}$	$3\frac{7}{8} \times 5\frac{1}{4}$
$2\frac{1}{8} \times 3\frac{1}{8}$	$3\frac{5}{8} \times 5\frac{1}{8}$	6 x 8	$2\frac{1}{8} \times 3\frac{3}{4}$	$2\frac{3}{4} \times 4\frac{1}{4}$	$4 \times 5\frac{5}{8}$
$2\frac{1}{8} \times 3\frac{1}{4}$	$4 \times 5\frac{3}{8}$	$6\frac{1}{4} \times 8\frac{1}{4}$	$2\frac{1}{8} \times 3\frac{1}{8}$	$2\frac{3}{4} \times 4\frac{1}{2}$	$4\frac{1}{8} \times 5\frac{7}{8}$
$2\frac{3}{8} \times 3\frac{3}{8}$	$4\frac{3}{8} \times 6\frac{3}{8}$	$6\frac{1}{2} \times 8\frac{1}{2}$	$2\frac{5}{16} \times 3\frac{15}{16}$	$2\frac{7}{8} \times 4\frac{5}{8}$	$3\frac{7}{8} \times 6$
25 x 35	5 x 7	7 x 9	$2\frac{5}{16} \times 3\frac{3}{4}$		4 x 6\frac{1}{8}
$2\frac{7}{8} \times 4\frac{1}{4}$	5½ x 7½	$7\frac{1}{4} \times 9\frac{1}{4}$		STEREOGRA	
33 x 43	$5\frac{1}{2} \times 7\frac{1}{2}$	7½ x 9½	Arch Tops. $3\frac{1}{16} \times 3\frac{3}{4}$	Round Cornered. $3\frac{1}{16} \times 3\frac{3}{4}$	Round. 3 x 3
$3\frac{3}{8} \times 4\frac{5}{8}$	$5\frac{5}{8} \times 7\frac{5}{8}$	$7\frac{3}{4} \times 9\frac{3}{4}$	$\begin{array}{c} 3 \times 3 \\ 3 \times 3 \end{array}$	3×3	0 7 9

The above sizes suit the Collins Card Mounts, and photographers knowing that they can be always had at the low price of ten cents per inch, would do well to make their sizes accord, as orders can also be filled more quickly. Ten days is required to make special sizes.

An allowance of ten inches (\$1 worth) of regular sizes of guides will be given with

every Trimmer purchased. (See opposite page).

FOR SALE BY ALL DEALERS.

BENERMAN & WILSON, Manufacturer's Agents,

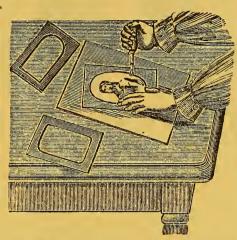
PHILADELPHIA, PA.

ROBINSON'S PHOTOGRAPH TRIMMER

IS A SUBSTITUTE FOR A KNIFE

FOR TRIMMING PHOTOGRAPHS, AND DOES THE WORK MUCH MORE EXPEDITIOUSLY AND ELEGANTLY THAN A KNIFE.

IT SAVES TIME, SAVES PRINTS, AND SAVES MONEY.



The accompanying cut represents the instrument in the act of trimming a photograph. It does not cut, but pinches off the waste paper, and leaves the print with a neatly beveled edge which facilitates the adherence of the print to the mount. Try one, and you will discard the knife and punch at once. For ovals and rounded corners it is worth its weight in gold.

A Trimmer and Ten Inches of Guides Mailed for \$3.50.

Oil the wheel bearings with Sewing Machine Oil.

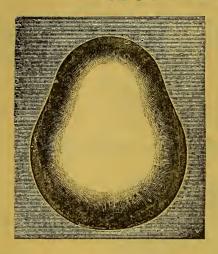
Given Away!

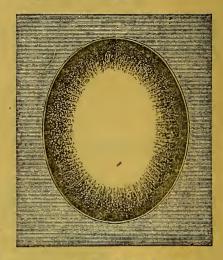
WITH EACH ROBINSON PHOTOGRAPH TRIMMER

WILL HEREAFTER BE GIVEN Ten Inches of Metallic Guides, your choice from the regular sizes named on the opposite page. The manufacturers and agents finding that they can save money by manufacturing in large quantities, make this liberal offer to the trade, as they want everybody to have these capital inventions in use. They are no humbug and are not glass cutters or anything like them.

BENERMAN & WILSON, Manufacturer's Agents,
FOR SALE BY ALL DEALERS. PHILADELPHIA, PA.

WAYMOUTH'S





VIGNETTING PAPERS

ARE NOW MADE OF TWO SHAPES, as shown in the drawings above. They consist of finely gradated, lithographed designs, mounted on protecting sheets of non-actinic paper, and are the lightest, neatest, and best means of producing vignette pictures ever offered.

RECENTLY IMPROVED.

The quality of the "papers" has just been much improved by the substitution of a peculiar French, fibrous, hard calendered paper, which is not only less opaque but has other qualities which produce quickly the most lovely and soft vignettes possible. We consider this a great improvement, as do others to whom we have sent samples. Below we give a letter from one of them, Mr. Ormsby, who has sent us also some exquisite vignettes:

The package of Vignette Papers has been received and tried; they are just the thing. They are a great improvement over the others; they will print in a little more than half the time required for the others, and the results are everything that can be desired, as you can see by samples inclosed. Please fill my order and send bill. I like the pear-shape best. Send them all that shape.

E. D. ORMSBY, Chicago.

FROM PROFESSIONAL AND AMATEUR PHOTOGRAPHERS.

"First-class."—"The sample sent answers perfectly."—"I consider them first-rate articles."—
"They answer the purpose admirably."—"They are the best vignettes I have ever had, and as you
can print in full sunlight, they are a great saving of time."—"They could not be better, oblige me
with another packet."—"I find them excellent, giving much softer pictures than the old way."—"I
have tried one of the Vignette Papers, and like it much; send me packets two and three."—"I am
much pleased with them, and shall thank you to send me another packet."—"I did not need any
copies of testimonials, having well-known by experience that your Vignette Papers were superior to
anything I have ever used."—"I found those you sent before excellent:"—"Vignetting Papers received
and tested; can't be beat. I use by cutting an opening in a piece of cardboard and tacking to the
printing-frame, when I am ready for printing vignettes in the very best manner."—"Waymouth's
Vignette Papers I have tried, and they are just what I have been wanting for years."

Any number sent on receipt of price, by any stockdealer, or by

BENERMAN & WILSON, Manufacturers,

(See opposite page.)

PHILADELPHIA.

DO YOU USE

WAYMOUTH'S VIGNETTE PAPERS.

(DESIGNS COPYRIGHTED.)

of all pictures, the **Higherty** is the most artistic.

When properly printed. But the clumsy devices generally in use for printing them, or rather for blending the shading about the figure, produce but very few really artistic vignette pictures. Either the shading is too intensely dark, not gradated in tint at all, or it shows an ugly direct, decided line, which is very repulsive. The shading should blend gradually from the dark tint nearest to the figure, off into the white background. The results are then soft, artistic, and beautiful. The easiest and best way to secure them is by the use of

WAYMOUTH'S VICNETTE PAPERS.

THEY ARE NOT CLUMSY; DO NOT BREAK; ARE ALWAYS READY; COST BUT LITTLE, AND ARE EASY OF APPLICATION TO ANY NEGATIVE.

THEY NEED BUT ONE ADJUSTMENT TO PRINT ANY QUANTITY.

They entirely do away with all the old and troublesome methods, either wood, metal, or cotton.

- Eighteen sizes are now made, suiting all dimensions of pictures from a small carte figure to Whole-size, Victorias, Cabinets, &c. They are printed in black for ordinary negatives, yellow bronze for thin negatives, and red bronze for still weaker ones. Directions for use accompany each parcel.

PRICES:

In parcels containing of	ne of	each size,	Nos. 1	1 to 15, assorted colors	\$1 00
Assorted sizes and color	s, by	number, p	er pa	ckage of fifteen	1 00
Nos. 1, 2, 3, 4, and 5, ass	orted	sizes and	colors	s, for Cartes, by number, per dozen	50
" 6, 7, 11, 12, and 13	**	**	**	Large Cartes and Victorias, by number, per doz	75
" 8, 9, 10, 14, and 15	"	"	"	Cabinets and Whole-size, " "	1 00
" 16, 17, and 18,	"	"	"	Half " " " "	1 25

(SEE OPPOSITE PAGE.)

When ordering, state the number and color you want.

BENERMAN & WILSON, Manufacturers, 116 N. 7th Street, Philada.

FOR SALE BY ALL DEALERS.



ROSS' PORTRAIT VIEW LENSES.

We have now successfully introduced to the American Photographers the Ross Lens, and by our increased sales we know they are appreciated. At the convention held at Buffalo, July 15, many fine photographs were exhibited by photographers, and ourselves, made with the Ross Lens, which attracted great attention.

while Ross & Co. are the oldest manufacturers of Photographic Lenses in existence, they also keep up with the requirements of the fraternity, by constantly manufacturing new combinations and improving on those already in existence. They have lately perfected, and will soon furnish as stock of, a new series of Card Lenses, extra rapid, peculiarly adapted for babies, and people who will not be quiet. We will give notice of their arrival.

WE HAVE NOW IN STOCK

Portrait Lenses, from 1-4 to 15 x 18. Instantaneous Doublets, all sizes.
Cabinet Lenses, Nos. 1, 2, and 3. Medium Angle Doublets, all sizes.
Card Lenses, Nos. 1, 2, and 3. Large Angle Doublets, all sizes.
Triplets, Nos. 1, 2, 3, 4, 5, 6, and 7. Stereographic Lenses. all sizes.
Symmetricals. Rapid Symmetricals. New Universal Lens.

Numerous testimonials pronounce them to be the best, as well as the cheopest Foreign Lens ever offered to the American Photographer. We will mail price-list on application, and promptly fill all orders.

STEINHEIL'S SONS' NEW APLANATIC LENSES.

We now have a full stock of these Celebrated Lenses, at the following prices:

No.	1, 1-4	size	34	inch	focus,	\$25	00	No.	5,10	0-12	size,	131	inch	focus,	\$70	00
6.	2, 1-2	66	5 1	6.6	**	30	00	66	6,1	3-16	66	164		**	110	00
+6	3,4-4	6.6	7	66	"	45	00	66.	7,1	8-22	- "				200	00
4.6	4,8-1	0 ''	101			60	00	1 **	8,2	0-24	"	•••••			350	00

Nos. 1 & 2 are in matched pairs for Stereoscopic Work.

We feel sure that at least one of these lenses is needful for the successful prosecution of your business, and so solicit your orders.

WILSON, HOOD & CO., THE UNITED STATES, 822 Arch St., Philadelphia, Pa.

The only genuine brand of DRESDEN ALBU-MEN PAPER is the CROSS-SWORD BRAND, all others are superannuated. We keep a full assortment of Single and Extra Brilliant always on hand.

CHAS. F. USENER'S Celebrated PORTRAIT LENSES are unexcelled. Before purchasing be sure and try a Usener.

CHARLES COOPER & CO., Wholesale Agents,

Manufacturing Chemists and Importers,

191 Worth Street, New York.

The Universal





Press

EMBOSSING PATENTED JANUARY 9th, 1872.

This Press will camee all sizes, from cards to cabinets, and is sold lower than any other that will do the same work. It has been greatly improved and made very complete in all its parts.

We furnish a card, victoria, and cabinet size.

PRICE, \$20.00.

MANUFACTURED AND SOLD WHOLESALE AND RETAIL BY

WILSON, HOOD & CO., 822 Arch St., Philadelphia.

CAUTION.—Photographers are cautioned against buying other presses that may use an *elastic* embossing substance, as they are an infringement on the above.

R. J. Chute, Patentee.

G. GENNERT,

53 Maiden Lane, New York,

IMPORTER OF THE CELEBRATED

S. & M. DRESDEN ALBUMEN PAPERS

Rives and Steinbach-White, Pink, and Blue.

Every one says it WORKS THE MOST UNIFORM, ECONOMICAL, and GIVES FINER RESULTS than any other. To satisfy yourself that it is the best, send to your stock-dealer for a sample dozen. Kept by all stock-dealers in the United States.

ALSO.

Hyposulphite of Soda,
Sulphate of Iron,
Solid German Glass Baths,
Saxe Evaporating Dishes,
AND French Filter Paper.

SPECIAL ATTENTION IS CALLED TO THE

EXTRA BRILLIANT, OR DOUBLE GLOSSY PAPER,

Which is recognized by the best artists all over the world as the

FINEST ALBUMEN PAPER IN THIS COUNTRY OR EUROPE.

IMPROVED

PHOTOGRAPH COVERS.

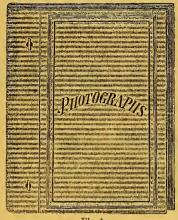


Fig. 1.

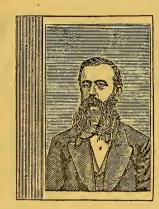


Fig. 2.

The Outside Appearance.

A Leaf Showing the Guard.

Frequent inquiries for something at a much lower price than an album, for the holding together and preservation of photographs, has induced us to manufacture an article which we think will meet the want.

IT SERVES ALL THE PURPOSES OF AN ALBUM, FOR

A Series or a Set of Portraits,

A Series or a Set of Landscapes,

A Series or a Set of Photographs of any kind,

MAY BE NEATLY AND CHEAPLY BOUND IN THESE COVERS.

They are made with expanding backs, so that from six to twenty-four pictures may be They are made with expanding backs, so that from six to twenty-four pictures may be inserted in one cover. The pictures are mounted in the usual way, and then strips of linen, or strong paper, of the proper width, are pasted on one edge, by which the picture is inserted and held in place in the cover by a paper fastener. Fig. 1 represents the cover, with the perforations in the back, through which the spreading clasps of the paper fastener bind the whole together. These are so easily inserted or removed, that pictures are readily put in or taken out at any time. Fig. 2 represents the picture, with the guard pasted on ready for insertion. The arrangement is simple, and we are sure will be readily comprehended. For binding together views of your town or city, or portraits of celebrities, they are very neat

The following is a list of sizes and prices, without cards:

For Photograp												
Cabinet	512	e,	•	•	•	•	2.25	•			•	13.50
EXTRA HEAVY	cov	ER	s.									
5-8 Size	, .						4.50	٠		,		33.00
4-4 "							6.00					40.00
8-10 "												
11-14 "							9.00					65.00

Larger or special sizes made to order. Furnished with card board at best rates. Samples mailed at dozen price. Send for some.

> BENERMAN & WILSON, Photo. Publishers, 116 North Seventh Street, Philadelphia.

JAMES F. MAGEE & CO.

MANUFACTURERS OF

PURE

PHOTOGRAPHIC CHEMICALS,

No. 108 North Fifth Street,

PHILADELPHIA

Stock Dealers only Supplied.

THE ZENTMAYER LENS.

FOR VIEWS AND COPYING.

These Lenses possess pre-eminently, the following qualities:

Width of visual angle, ranging from 80° to 90°; depth of focus; extreme sharpness over the whole field; true perspective; freedom from all distortion in copying; portability and cheapness.

Each mounting is provided with a revolving Diaphragm, containing the stops of the different combinations for which they are designed. The larger ones are provided with an internal shutter for making and closing the exposure.

No.	1,	21	inch	focus,	3	x	3	plate,			\$20	00	No.	1	and	l No	. 2	combined,			\$33	00
	2	34	6.6	4.6	4	x	5				25	0.0		2		**	3	, tt			40	00
41	-,	E 1	٠.		6 1	_	01			Ť	20	00		3		tt	4				55	00
•	э,	9 \$			0 2	X	0		•	•	30	00	6.6	4	**	44	5	4.4			75	00
"	4,	8			10	x	12	"			42	00	64	5		66	6				110	00
																		44			48	
																					88	

No. 3, with large mounting to combine with No. 4 and No. 5, \$35.

No. 1 and No. 2, specially adapted for Stereoscopic Views, are furnished in matched pairs. No. 1 and No. 2, single, not to combine with other sizes, \$36 a pair.

Lenses and mountings to form all six combinations, from 2½ to 18 inches, \$173.

Zentmayer's Stereoscopic outfits, including a pair of No. 2 Lenses 4 x 7 box, 7 x 10 India Rubber Bath and Dipper, Tripod, Printing Frames, and outside box, \$60.

JOSEPH ZENTMAYER, Manufacturer,

147 South Fourth Street, Philadelphia.

BENJ. FRENCH & CO.,

319 Washington St., Boston,

IMPORTERS AND SOLE AGENTS FOR THE CELEBRATED

Voigtlander & Son Darlot LEWSES,

NEW STEREOSCOPIC LENSES.

New Stereoscopic Tube and Lens, made expressly for us, marked with our name (imitation Dallmeyer), with rack and pinion, central stops, for portraits or views. Will work in or out of doors. Also, for instantaneous pictures. Four inch focus, **price per pair**, **\$21.00**. By taking out back lens, and using only front lens in place of back, you get six inch focus. The great and increasing demand for all these lenses, is sure guarantee that they are the best. Read the following

Testimonials.

"I have tried the Mammoth Voigtlander you sent me, and I consider it the best large instrument I have ever seen, and I have tried those made by other makers, Dallmeyer's included, and they do not compare with the Voigtlander. All my baby pictures were made with half-size Voigtlander lenses."—J. Landy, 208 W. Fourth St., Cincinnati, Feb. 25, 1874.

"The Voigtlander lenses have always been favorites with me. My first experience, in the days of daguerrectype, was with one, since which I have owned and tried many of the different sizes and never saw one but was an excellent instrument. Lately again trying some for my own use and for a friend, I found them to be superior to other eminent makers, particularly in the large sizes."—W. J. Baker, Buffalo, N. Y.

"Twenty-four years ago I bought and commenced using my first Voigtlander lens. It was a good one. Since then I have owned and used a good many of the same brand, of various sizes. They were all and always good. Some of the larger sizes that I have recently bought seem to me better than any I have ever had or seen before."—J. F. Ryder, Cleveland, Ohio, Dec. 18, 1872.

"About a year ago I bought a Voigtlander & Son No. 3 4-4 size lens. Said instrument gives me great satisfaction, being very quick, at the same time has great depth of focus."—E. G. Maine, Columbus, Miss.

"Have never seen anything equal to the Voigtlander & Son Lens. The No. 5, Ex. 4-4 is the best instrument I ever used. I cannot keep house without it."—D. B. VICKERY, Haverbill. Mass.

"The pair of imitation Dallmeyer Stereoscopic Lenses you sent we are very much pleased with; they work finely."—GOODRIDGE BROS., East Saginaw, Mich.

"After a trial of your imitation Dallmeyer in the field with those of the Dallmeyer Rapid Rectilinear, side by side, I can say that for general views I like yours as well, for some objects far better, on account of their short focal length."—D. H. Cross, Mosher's Gal., Chicago.

New Catalogue of Prices Just Issued, to be had on Application.

WILSON'S

Lantern Journeys

By EDWARD L. WILSON,

Editor of the "Philadelphia Photographer."

This work will be found entertaining by all who like to read about the beautiful places and things of this world.

The contents are divided into six "Journeys," each one including a visit to 100 places, making 600 in all, as follows:

- JOURNEY A-Havre, Paris, Versailles, Rouen, Fontainebleau, and Switzerland.
- JOURNEY B—Compiegne, Brussels, Aix la Chapelle, Cologne, Up and Down the Rhine, Potsdam, Berlin, Dresden, Vienna, the Vienna Exposition, the Semmering Pass, Saxony, Munich, and Southwest Germany.
- JOURNEY C—Italy—Lake Maggiore and Como, Milan, Verona, Venice, Florence, Pisa, Rome, Naples, Pompeii, the Ascent of Vesuvius, Puteoli, and the Italian Art Galleries.
- JOURNEY D-Holland, Denmark, Norway, Sweden, Russia, and Spain.
- JOURNEY E-Egypt, Palestine, Syria, Turkey, Greece, and India.
- JOURNEY F-England, Scotland, and the United States of America.

It has been carefully prepared, and will be found amusing, very entertaining and instructive.

It contains 218 pages, Cloth bound, Gilt. Price, \$2.

BENERMAN & WILSON,

Photo. Publishers, Philadelphia, Penna.

PHILADELPHIA

PHOTOGRAPHER

THE LIVEST and BEST

Photographic Magazine Published.

ANNOUNCEMENT FOR 1876!

The publishers have a great many good things in anticipation for the year 1876, which they think will render their magazine more beautiful and more useful than ever before; and while they maintain that the beautiful example of photography, which accompanies each issue, is alone worth the subscription price, still more and more effort will be made to make the reading matter everything that it ought to be. Our correspondents from all the leading centres abroad will keep our readers posted on all matters of interest in their several sections, while our unrivalled staff at home will look diligently after your interests here. To make the Philadelphia Photographer the best practical helper which can possibly be obtained, is the aim and earnest desire of its publishers.

We ask your co-operation in extending its usefulness, and offer to all present subscribers, who secure us new ones, the following

For every new subscriber, for one year, \$1, payable in any of our publications, books, or, if preferred, \$1

PREMIUMS

worth of any of our prize pictures, or any other article for which we are agents, advertised in this magazine.

Operators, printers, etc., can secure all their necessary photographic literature in this way, by a little earnest effort.

EACH MONTHLY ISSUE IS A PHOTOGRAPHIC WORK IN ITSELF. NOTICE TO SUBSCRIBERS.

Subscription price, \$5 a year, \$2.50 for six months, 50 cents per copy, postpaid. positively in advance.

In remitting by mail a post-office order, or draft payable to the order of Benerman & Wilson, is preferable to bank-notes. Clearly give your Post-Office, County, and State.

Canada subscribers must remit 24 cents extra, to prepay postage.

Foreign subscriptions must be accompanied by the postage in addition.

ADVERTISING sheets are bound with each number of the Magazine. Advertisements are inserted at the following

1 Month. 6 Months. 1 Year.
One Page, . . . \$20 00 \$110 00 \$200 00
Half " . . . 12 00 66 00 120 00
Quarter Page, . 7 00 38 50 70 00
Eighth " . . 4 00 22 00 40 00

Cards, 6 lines, or less, 2 00 11 00

The attention of advertisers, and those having galleries, &c., for sale, is called to our Specialties pages. Terms, \$2 for six lines, and 25 cents for each additional line, seven words to a line, always in advance. Duplicate insertions, 50 cents less, each.

SURE TO PAY!

40 00 charge.

BENERMAN & WILSON, Publishers,

OFFICE, 116 NORTH SEVENTH STREET, PHILADELPHIA.

ENTREKIN BURNISHER OF PLANISHER

MANUFACTURED UNDER

Exclusive License

GRANTED BY

ASSIGNEE OF

J. F. SCHUYLER.



WHOSE PATENT BEARS

February 24, 1863.

RE-ISSUED

June 1, 1875.

PRICE LIST.

6-inch Roll, \$20: 10-inch Roll, \$30; 14-inch Roll, \$40; 18-inch Roll, \$50. Also, 30-tuch Roll, for hand or steam-power (this machine is especially adapted for large work). Price, \$300.

CAUTION.—The suit of J. P. BASS, assignee of E. R. Weston rs. Peck, tried in the United States Circuit Court, at Portland, Maine, October 8, 1875, the JURY in rendering a verdict for the defendant found:

First.—That Weston, assignor to Bass, was not the original and first inventor of a burnishing machine by which a surface is given to the article to be burnished, by feeding it under pressure over the surface of a burnishing tool.

Second.—That he was not the original and first inventor of the combination of a bur-

nishing tool and a friction feed-roll.

Third.—That he was not the original and first inventor of the combination of the

feed-roll and adjustable burnishing tool.

The evidence on which the jury based this finding was that relating to the invention and use by the late J. F. Schuyler of a machine by which a surface was given to the article to be burnished by feeding it under pressure over the surface of a burnisher, rendered stationary, the paper being fed over said burnisher by means of a friction feed-roll.

The patent of W. E. Lockwood, assignee of John F. Schuyler, dated February 24, 1863, was reissued June 1, 1875,

WITH THE FOLLOWING CLAIMS!

1.-As an improvement in the art of Planishing paper, submitting the paper to friction under pressure between a roughened feed roller and a Planisher, substautially as described.

2.-The combination in a Paper Planishing Machine, of a Planisher with a draw-filed roller, for controlling the paper while it is under pressure between the said roller and planisher, all substantially as set forth.

To Photographers and Dealers in Photographic Goods:

Whatever doubts may have existed in the minds of photographers as to the merits of the controversy between the undersigned, W. G. Entrekin, and the owners of the Weston Patents for Burnishers, will be set at rest by the perusal of the above claims, by the verdict

of the jury declaring the patent of Weston to be invalid.

While the undersigned feels disposed to treat with liberality, photographers who have been induced by threatening circulars to purchase the Weston and other machines that infringe the above claims, he will hold them responsible as infringers of the above-mentioned re-issued patent of Wm. E. Lockwood in the use of said machines without first paying the small license fee which is now demanded.

On the other hand, the most prompt and determined legal measures will be taken against those infringers who deliberately, and after being thus duly cautioned, make, use, or sell burnishing machines in which is embodied the invention claimed in the said re-issued patent.

W. G. ENTREKIN, Sole Licensee,

Under grant by WM. E. LOCKWOOD, Patentee.

Manayunk, Philada., April 25, 1876.

Number 151.

50 Cents.

T H E

PHILADELPHIA

Photographer.

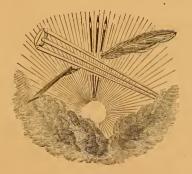
AN ILLUSTRATED MONTHLY JOURNAL,

DEVOTED TO PHOTOGRAPHY.

THE OFFICIAL ORGAN OF THE NATIONAL PHOTOGRAPHIO ASSOCIATION OF THE UNITED STATES.

EDITED BY EDWARD L. WILSON.

July, 1876.



PHILADELPHIA:

BENERMAN & WILSON,

PUBLISHERS,

116 NORTH SEVENTH STREET.

Subscriptions received by all News and Stock-Dealers.

FIVE DOLLARS PER ANNUM, IN ADVANCE.

Sherman & Co., Printers, Philadelphia.

SUMMARY OF CONTENTS.

r.	AGE	P	AGE
Matters of the N. P. A	193	Photographic Sketches from the Centennial Grounds.	
The National Photographic Association—What has		By Dr. H. VOGEL	213
it Accomplished?	193	Lecture on Lenses. By Joseph Zentmayer	215
Photography in the Great Exhibition. II	196	Professor Hermann Vogel	218
Organization. By E. K. Hough	202	The Coming Convention	219
French Correspondence. By E. Stebbing	203	The Centennial Photographic Diary	219
Art and Chemistry in Photography	206	Rocher's Exhibit	220
The Waterfalls of Pike County, Pa. By John C.		Correspondence. By Mrs. E. N. Lockwood	221
Browne	208	Our Picture.	221
Society Gossip	211	Encouraging Words	222
Photographic Society of Philadelphia	212	Photographic Hall Notes	222
		EDITOR'S TABLE	223

EMBELLISHMENT.—Promenade Portrait. Negatives by GILBERT & BACON, Philadelphia.

ADVERTISEMENTS.

BENERMAN & WILSON. Magic Lanterns and Slides. BULLOCK & CRENSHAW. Photographic Chemicals. CAMEO PRESS, THE UNIVERSAL. CENTENNIAL EXHIBITION VIEWS. COLLINS, SON & Co., A. M. Photograph Cards. CENTENNIAL LANTERN SLIDES. COOPER, CHAS. & Co. Dresden Albumen Papers, etc. DEAN, JOHN & Co. Ferrotype Plates. DEBANES, J., Glace Work. ENTREKIN, W. G. Burnisher or Planisher. FAIRBANK, MURPHY & Co. Passepartouts, Mats, etc. FRENCH, B. & Co. Voigtlander Lenses, &c. GEORGE & SATCAMP. Photographic Materials. GENNERT, G. Albumen Papers. GIHON, JOHN L. Opaque and Cut-Outs. HANCE'S PHOTO. SPECIALTIES. HEARN'S PRACTICAL PRINTER. HEARN'S PHOTOGRAPHIC PRINTING INSTITUTE. HERMAGIS' PORTRAIT LENSES. HOWSONS' PATENT OFFICES. IMPROVED PHOTOGRAPH COVERS. LAMBERT PROCESS.

MAGEE, JAMES F. & Co. Photographic Chemicals. PATTBERG, LEWIS & BRO. Passepartouts, &c. PHOTOGRAPHER'S POCKET REFERENCE-BOOK. PHOTOGRAPHIC PUBLICATIONS. PHOTOGRAPHER TO HIS PATRONS. PROMENADE PRIZE PICTURES. RICHARDSON, C. F. Sensitized Paper. ROBINSON'S PHOTO. TRIMMER AND METALLIC GUIDES. Ross' Portrait and View Lenses. SAUTER, G. Passepartouts. SOMERVILLE, J. C. Photographic Stock Depot. TABER, I. W. & Co. Background and Plate Holder. THE CENTENNIAL PHOTOGRAPHIC DIARY. U. S. NATIONAL MONUMENT TO ABRAHAM LINCOLN. VOGEL'S HAND-BOOK OF PHOTOGRAPHY. WALLACH, WILLY. Trapp & Munch's Albumen Paper WAYMOUTH'S VIGNETTING PAPERS. WILSON'S LANTERN JOURNEYS. WILSON, HOOD & Co. Catalogue of Photo. Requisites, &c. WOODWARD, D. A. Solar Cameras. ZENTMAYER, JOSEPH. Lenses.

119 South Fourth St. PHILADELPHIA.

Branch Office, 605 Seventh Street, WASHINGTON, D. C.



H. HOWSON,

Engineer and Solicitor of Patents.

C. HOWSON,

Attorney at Law, and Counsel in Patent Cases.



DOUBLE IODIZED PORTRAIT COLLODION.

ANDERSON'S PORTRAIT COLLODION.

WHITE MOUNTAIN LANDSCAPE COLLODION.

NIAGARA FALLS LANDSCAPE COLLODION.

TRASK'S FERROTYPE COLLODION.

HANCE'S BATH PRESERVATIVE.

HANCE'S GROUND GLASS SUBSTITUTE.

HANCE'S DELICATE CREAM GUN COTTON.

HANCE'S SILVER SPRAY GUN COTTON.

HEARN'S COLLODIO-CHLORIDE.

GILL'S CHROMO INTENSIFIER.

CUMMINGS' GRIT VARNISH.

Manufactured from the best chemicals that can be procured in the market, manipulated with the greatest care.

Each article warranted to do the work claimed for it, if used according to the directions plainly printed on the label accompanying each bottle or package. These preparations are noted for their purity and uniformity, and have for years been used in the most celebrated galleries in the United States and Canada.

FULL MEASURE GUARANTEED.

For Sale by all Stock-dealers in the United States and Canada.

A. L. HANCE, Manufacturer, 116 NORTH SEVENTH STREET, PHILADELPHIA.

Read detailed advertisments on succeeding pages.

HANCE'S PHOTOGRAPHIC SPECIALTIES

WARRANTED FULL MEASURE, AND CHEMICALLY PURE,

ARE SOLD BY ALL DEALERS, AS FOLLOWS:

HANCE'S BATH PRESERVA-

TIVE. A sure preventive of pinholes, stains, &c. It preserves the bath in good working condition, and will be found worth its weight in gold. See special advertisement. \$1.00 per bottle.

HANCE'S DOUBLE IODIZED

COLLOBION. This is made by compounding the different iodides according to their equivalents, and producing a new salt. It is being used by some of the best photographers, but its general use is retarded, no doubt, by the extra trouble in making it. The peculiarities of this Collodion are good keeping qualities, its improvement by age, and the richness of effect produced in the negative, the film being perfectly structureless. As it requires time to ripen, I have the advantage of making a quantity and keeping it always ready to supply any demand. \$1.50 per fb.; 80 cts. per ½ fb.

ELBERT ANDERSON'S PORTRAIT COLLODION is made according to the formula used by Mr. Anderson in Mr. Kurtz's gallery in New York. It is especially adapted to portrait work. \$1.75 per lb.; 90 cts. per ½ lb.

HANCE'S WHITE MOUNTAIN COLLODION is adapted more especially to outdoor work, and for quick working, delineating foliage, frost-work, or sky, it stands unrivalled. It is made after the formula used by that celebrated mountain artist, B. W. Kilburn, of Littleton, N. H., whose work is too well known to need any comments. \$1.50 per fb.; 80 cts. per ½ fb.

CURTIS' NIAGARA FALLS COLLODION is another used for landscapes. The wonderfully beautiful views made by Mr. Curtis, of the great cataract, with this collodion, have a world-wide reputation, and are an indisputable evidence that he could have nothing better to produce such magnificent work. \$1.50 per lb; 80 cts. per ½ lb.

TRASK'S FERROTYPE COL-LODION is made especially for positive pictures. Mr. Trask has no superior in this class of work, and this collodion is the result of his practice and experience for years in proving what was BEST. It is made after his formula and ferrotypers will find it all that can be desired. \$1.50 per ib.; 80 cts. per ½ ib. HANCE'S PECULIAR PORTRAIT COLLODION is peculiar in that it is prepared without bromides, and is adapted for use with Black's acid bath. To those using the acid bath this collodion is indispensable. Formula on the bottle. \$1.50 per ib.; 80 cts. per \(\frac{1}{2} \) ib.

CUMMINGS' GRIT VARNISH

gives a very fine surface for retouching. Those that use a varnish of this kind will find that this has no superior. By it the retouching is greatly facilitated and the same amount of work on a negative may be done with it in half the time that would be required without it. 40 ets. per 6 oz. bot.

HANCE'S SILVER SPRAY GUN COTTON is now being used by many of the best photographers, and the testimonials I am receiving are sufficient evidence of its excellence. I prepare it with great care, and warrant it free from acid, very soluble, gives good intensity so that no redevelopment is necessary, gives perfect detail, and a film pure and structureless. 50 cts, per oz.

HANCE'S DELICATE CREAM GUN COTTON is adapted to those who like a very delicate, soft-working collodion, giving all the modelling especially in the Rembrandt style, and with light drapery. Its sensitiveness renders it particularly adapted for children, or any work that requires short exposure. 80 cts. per oz.

CHROMO INTENSIFIER is intended to strengthen the negative. It imparts a beautiful tone and gives excellent printing qualities. 50 cts. per bottle.

HANCE'S GROUND-GLASS SUBSTITUTE is simply what its name implies, a substitute for ground-glass for any purpose that it is used for in the gallery. To the landscape photographer a bottle of it is indispensable. If he breaks his ground-glass, he has only to coat a plate, such as he is sure to have with him for negatives, with the substitute, and in a few moments his ground-glass is replaced and his work goes on. It is equally useful in the printing room, and any photographer who has once used it will never again be without it. 50 cts. per bottle.

HEARN'S COLLODIO-CHLO-

RIDE.—The best for Porcelain pictures. \$2.25 per ½ lb. bottle, and \$4.00 per lb. bottle. Try it, and get good porcelains.

HANCE'S GROUND GLASS SUBSTITUTE

Is an indispensable article in the photographic gallery. There are so many uses to which it can be applied that a photographer having once given it a trial, will never be without it, as there is nothing known that will take its place. There are a few base imitations in the market, but they are not used a second time, and will soon die a natural death.

The Substitute is in the form of a varnish, is flowed and dried the same as varnish, but dries with a granulated or ground-glass surface. Wherever ground glass is required, Hance's Substitute answers every purpose.

FOR VIGNETTE GLASSES.

- A RETOUCHING VARNISH.
- SOFTENING STRONG NEGATIVES.
- THE CELEBRATED BERLIN PROCESS.
- GROUND GLASS FOR CAMERAS.
- " GLAZING SKY AND SIDE LIGHTS.
- " OBSCURING STUDIO & OFFICE DOORS.
- " PRINTING WEAK NEGATIVES.

For skylights it must be flowed before glazing. The Substitute being very thin it will cover a large space. economical, and makes a surface equal to the finest ground glass. It can be easily removed by rubbing it with cotton wet with alcohol. GIVE IT A TRIAL.

PRICE, 50 CENTS PER BOTTLE.

Large quantities, for Studio Lights, etc., supplied low.

HANCE'S DELICATE CREAM **GUN COTTON**

IS THE KING COTTON, AND HAS NO PEER.

Prepared with particular care, warranted free from acid, and very soluble. I take particular pride in this cotton. It has made its way steadily and surely into most of the principal galleries in the country, where parties prefer to make their own collodion, and its superior qualities are shown in the medals awarded at the Vienna Exhibition, for photographs made with collodion in which it was used.

It is especially adapted to the Rembrandt style, and light drapery. Its sensitiveness renders it particularly adapted for children or any work that requires short exposure.

PRICE, 80 CENTS PER OUNCE.

Read next page.

COMMENDATORY LETTERS

Testifying to the superior qualities of

HANCE'S SPECIALTIES

WE HAVE ROOM ONLY FOR THE FOLLOWING:

"I consider the Cotton the best we have ever used as yet."-R. POOLE, Nashville, Tenn.

"The film of the Cotton you sent me was unusually smooth and firm, being entirely free from glutinosity, and setting like India-rubber. It was quite powdery and crumbled to pieces in my fingers, 'as if rotten.' It dissolved almost instantaneously, and it was 'by far' the very best material I have ever used. I sincerely trust that you will send me the same kind again."—ELBERT ANDERSON, Kurtz Gallery, New York.

"I received your Double-Iodized Collodion all right, and in good shape. Have tried it pretty well. It gives very fine negatives and good detail."—W. E. HART, Watertown, N. Y.

"We take pleasure in recommending Hance's Double-Iodized Collodion as a first-class article, in fact it is the best manufactured Collodion we have tried."—SCHREIBER & SONS, No. 818 Arch Street, Philadelphia.

"The goods by Express came safe to hand. I have tried a part of them and am greatly pleased. Will likely want more goods in your line."—R. POOLE, Nashville, Tenn.

"Your Ground Glass Substitute is the best I have ever tried, and I have tried nearly every kind advertised, as the long row of nearly full bottles will testify. It works like a charm,"—J. N. Webster, Barton, Vt.

"I take pleasure in recommending your Cottons and Collodions, before all others I have used. It is a blessing to know where you can get good Cotton."—B. W. KILBURN, Littleton, N. H.

"The last lot of Cotton you sent is the very best I have ever used. Please send me another pound at once."— ELBERT ANDERSON, Kurtz Gallery, New York.

"Have used some twenty-five pounds of your Collodion the past year with unvarying success."—G. W. HOPE, Middletown, New York.

"Your Double-Iodized Collodion is the most perfect working Collodion I have used in fifteen years. Every picture I make with it is a success."—R. L. Dale, Boston, Mass.



Has now become the standard Collodion in all first-class galleries. Although but a short time in the market it is rapidly superseding all other makes, and the quantity that has been sold is simply astonishing.

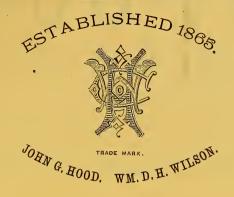
Give it but a single trial and you will be convinced. Can be used as soon as made, but improves with age, and will keep indefinitely.

Price, \$1.50 per pound.

A liberal discount to parties ordering by the gallon. READ ADVERTISEMENTS ON PRECEDING PAGES.

1776. PREPARE FOR THE CENTENNIAL. 1876.

NOW READY!



WILSON, HOOD & CO.'S

Photographic Requisites,

Frames,

Stereoscopes and Views.

SALESROOMS:

822 Arch Street, Philadelphia, Pa.

MAY, 1876.

FURNISHED GRATUITOUSLY TO ALL APPLICANTS.

GIHON'S CITT-OITTS

Are the very best that are made, and are now without a rival in the market. They are clean cut, most desirable shapes and sizes, and made of non-actinic paper, manufactured specially for the purpose. Each package contains 30 Cut-Outs, or Masks, with corresponding Insides, assorted for five differently sized ovals and one arch-top.

PRICE, \$1.00 PER PACKAGE. Sent by mail on receipt of price.

Parties wishing special sizes, or large lots of a few sizes, may have them cut to order promptly, by addressing the manufacturer. No lot costing less than \$1.00 made at a time.

No printer should attempt to make medallion pictures without them.

THEY HAVE NO EQUAL FOR QUALITY.

Beware of spurious imitations made of common paper, full of holes, badly cut, and odd shapes and sizes. Ask your stockdealer for GIHON'S CUT-OUTS, and see that they are in his envelopes with instruction circular included.

PROMENADE SIZE NOW READY! SOLD SEPARATELY AT 50 cts. per dozen

50 cts. per dozen.

GIHON'S

IS DESIGNED FOR

COMPLETELY OBSCURING THE IMPERFECT BACKGROUNDS OF COPIES, RETOUCHING NEGATIVES,
FAULTY SKIES IN LANDSCAPES,
COATING THE INSIDE OF LENSES OR CAMERA BOXES,
BACKING SOLAR NEGATIVES,

COVERING VIGNETTING BOARDS,

AND FOR ANSWERING

ALL THE REQUIREMENTS OF THE INTELLIGENT PHOTOGRAPHER IN THE PRODUCTION OF ARTISTIC RESULTS IN PRINTING.

WHEREVER YOU WANT TO KEEP OUT LIGHT, USE OPAQUE.

It is applied with a brush, dries quickly and sticks.

CUT-OUTS (thirty), \$1.00.

OPAQUE, 50 CENTS.

FOR SALE BY ALL DEALERS.

Address all orders to

JOHN L. CIHON, Inventor,

128 N. Seventh St., Philadelphia, Pa.

OUR NOVEMBER, 1875

PRIZE

RICTURES

Our second Promenade Picture competition has just been closed, and we are in possession of some of the finest Photographic work ever done in the world!

We offer prints from the competing negatives, for sale at the prices below. They are most useful to every photographer as examples of good negative work, artistic composition and lighting, and superior printing and finishing. We have done our part to make them models in every respect.





Was awarded for the best six negatives to

Mr. LYMAN G. BIGELOW, Detroit, Michigan,

Whose elegant work is familiar to many of our patrons.

THE SETS INCLUDE:

Nos. 1 to 8—Studies by L. G. Bigelow, Detroit, Michigan.
Nos. 9 to 20—Studies by F. B. Clench. Lockport, N. Y.
Nos. 21 to 28—Studies by G. M. Elton, Palmyra, N. Y.
Nos. 29 to 34—Studies by O. P. Scott, Abingdon, Ill.
Nos. 35 to 40—Studies by E. M. Collins, Oswego, N. Y.
Nos. 41 to 46—Studies by E. H. Alley, Toledo, Ohio.

See review in December number Philadelphia Photographer.

The whole set of 46, .									٠,				\$10	00
In two Photo. Covers,													11	50
Selections, per dozen,													4	00
" per two doz	en,												7	00
The 28 of Messrs. Clen	ch,	B	ige	low	,	and	E	ltoi	1,				6	00
Book Cover and Bindin	g,													75

Address all orders to

BENERMAN & WILSON, Publishers, 116 NORTH SEVENTH ST., PHILAD'A, PA.







GEORGE & SATCAMP,

58 South Meridian Street, Indianapolis, Ind.,

HAVE JUST OPENED UP A FRESH AND COMPLETE STOCK OF

PHOTOGRAPHIC MATERIALS.

CONSISTING OF

Pure Photographic Chemicals, Card Stock, Ferrotype Stock,
Camera Boxes, of every Style and Manufacture,
Parlet Larges, Veigtlander, & Son Larges, Rose Larges, Steinheil Le

Darlot Lenses, Voigtlander & Son Lenses, Ross Lenses, Steinheil Lenses,
Dallmeyer Lenses, Hermagis Lenses, Morrison View Lenses,
Compare Standa Head Rosts Reging Chairs

Camera Stands, Head Rests, Posing Chairs,

Backgrounds, Samuel Peck & Co.'s Printing Frames, Judkin's Photo. Printing and Tinting Frames,

Porcelain Trays, Glass Baths, Oval and Square Picture Frames, Mouldings, Picture Cord, Screw Eyes, Entrekin Burnishing Machines, etc., etc.

Everything called for by the photographer, for gallery work or viewing, can be furnished promptly and shipped without an hour's delay to any part of the country.

WE ARE THE SOLE MANUFACTURERS AND TRADE AGENTS FOR

JUDKIN'S PHOTO. PRINTING & TINTING FRAMES.

To which we Specially Invite the Attention of Photographers.

This improvement is admirably adapted for Graying and Tinting Vignette Pictures, Printing from Weak Negatives, etc., saving time and money, and producing beautiful and real artistic effects.

TWO SIZES NOW READY!

The $6\frac{1}{2}$ x $8\frac{1}{2}$ size can be used for card work. Liberal discount to the trade. Samples of work and circular, setting forth more fully its merits and advantages, sent on application.

SEND FOR PRICE LIST OF PHOTOGRAPHIC MATERIALS.

GEORGE & SATCAMP,

58 South Meridian Street, Indianapolis, Indiana.

THE PHOTOGRAPHER TO HIS PATRONS.

WHAT IS IT?

HE PHOTOGRAPHER TO HIS PATRONS is a little book or pamphlet of twelve pages, the intention of which is: 1st. To enable the photographer to say a few words in a kindly way to those who have photographs taken, in order that the intercourse between them and their photographer may be pleasant and result in the most successful pictures. Every photographer knows that he is constantly beset with a lot of questions, as to the proper way to dress, the best time to come, and so on, which take a great deal of his time to answer. This little book answers them all, and the mere handing of a copy to the questioner, which he or she can carry away and study at leisure, serves as admirably as a half-hour's conversation.

2d. It is a cheap mode of advertising What could you want better than to have your business card so attractive that people will come and ask for it, hand it around from one to another, discuss it, and then keep it for reference? This is what they do with this little "tract." Witness what those who

have tried it say below.

3d. It is also intended to convey to the public at large the fact that photography is not a branch of mechanics, nor photographers a sort of mechanic themselves, but that both are entitled to respect, the same as the family physician or the minister; that the photographer has rights as well as the public; that he must be trusted, and that he alone is responsible for his results. Moreover, that he must make

the picture and not they.

How far the work serves these three ends the reader must judge from the testimonials below, of a few of those who have been using our little publication in their business.

We believe it will pay you to use it, and that you will assist just that much in elevating your art and your craft, an object which we are all working for.

We get "The Photographer to his Patrons" up in neat style, on the best letter cap paper, assorted tints, green, pink, and buff. Eight pages are devoted to the body of the work, which contains paragraphs or chapters—1, on the object of the work; 2, on photography; 3, when to come; 4, how to come; 5, how to dress; 6, how to "behave; 7, the children; 8, general remarks on coloring, copying frames, prices. Ac.

ting, frames, prices, &c.

All this is inclosed in a cover of the same kind of paper, the pages of which are at the service of the photographer who orders them to have printed thereon anything he may please, which printing we do without extra charge. We publish this leaflet in English, German, and Spanish.

Cuts for the covers we supply free.

Over 500,000 have been sold.

TESTIMONIALS.

"I sent one out West to a friend, and she wrote that she was now posted, and when she came here to have a picture made, she would come 'according to directions.' "-A. Bogar-bus, New York.

"It assists me greatly."-JAMES MULLEN, Lexington, Ky.

- "A grand idea."-ELBERT ANDERSON.
- "You have conferred a great favor on the fraternity in supplying it."—A. C. McIntyre Co., Ogdensburg.
- "It is the best advertising medium I have ever found."-H. M. SEDGEWICK, Granville, O.

We send samples to any who may desire.

BENERMAN & WILSON, Photo. Publishers, 116 North Seventh Street, Philadelphia.

NEW STOCK HOUSE.

Somerville's St. Louis Photographic Stock Depot,

No. 8 South Fifth Street.

AMERICAN OPTICAL CO.'S CELEBRATED APPARATUS,
POWERS & WEIGHTMAN'S SILVER, GOLD, IODIDES AND BROMIDES,
VOIGTLANDER & SON AND DARLOT LENSES,
TILFORD'S CELEBRATED IODIZED AND NEGATIVE COLLODION,
AND EVERY WANT FOR THE TRADE.

FRAMES IN EVERY VARIETY.

J. C. SOMERVILLE, No. 8 S. Fifth St., Saint Louis, Mo.

FAIRBANK, MURPHY & CO.,

38 North Howard St., Baltimore, Md.,



MANUFACTURERS OF

PASSEPARTOUTS,

DOUBLE EMBOSSED,

DEEP GOLD,

AND BEVEL

MATIS,

SHOW MATTS.

FINEST GOODS. BEST STYLES. BOTTOM PRICES.

HEADQUARTERS FOR THE TRADE.

Show Displayers, Velvet Passepartouts, Velvet Passepartouts, Beveled Matts, Fancy Metal Frames,

Velvet Stands,
Velvet Cases,
Double Matts,
nes,
Standard Matts,

Fancy Paper Passepartouts.

These goods are entirely of our own manufacturing. A large assortment constantly on hand; odd sizes and styles made to order.

LEWIS PATTBERG & BRO., 709 (Formerly) Broadway, New York.



GLACÉ! GLACÉ!

J. DE BANES, 872 Broadway, N. Y., finishes Photographs of all sizes, for the trade, in the newest styles. Send in your orders early.

G. SAUTER.

No. 138 South Eighth Street, Philadelphia,
MANUFACTURER AND WHOLESALE DEALER IN

PASSEPARTOUTS.

The attention of the trade is particularly called to the superior quality of our Glass and materials and neatness of finish. A large assortment constantly on hand.

RICHARDSON'S SENSITIZED PAPER.

This paper keeps perfectly for four weeks or more, with ordinary care. Prints rapidly, tones readily in any bath, and gives very brilliant prints.

It is always ready to print, so that much time may be saved in the morning, at night, and in dull days. It is not necessary to tone the prints for several days, so that if a small amount of printing be done, the work of several days can be toned in one lot. It saves the trouble and mess of sensitizing. Work can be finished more promptly than by the usual method. For these reasons it is both convenient and economical.

THE FOLLOWING TESTIMONIALS SPEAK FOR THEMSELVES.

"Have used your paper and can recommend it as excellent. It was printed with my other kinds, and in the operations it was hard to pick it out. It is a most valuable and useful thing, both to the amateur and professional photographer."—Chas. W. Hearn, see "Printer's Corner," for June.

"Inclosed find \$2.25 for one dozen very light pink, or white paper. The last you sent me was nice."—E. M. ESTABROOKE, 31 Union Square, N. Y.

"I printed, yesterday, from a sheet of sensitized paper that you sent me three weeks ago, the results were very satisfactory, equally as good as my other paper silvered and printed the same day."—D. T. BURRELL, Brockton, Mass.

"Having used your sensitized paper exclusively for the past four months, I take pleasure in saying that I find it a great convenience, and that the results are perfectly satisfactory."—Thos. S. Estabrooke, 498 Washington Street, Boston, Mass.

PRICES.

Single Albumen, White or Pink, by mail, post-paid. Sample sheet, 25 cents; half dozen, \$1.25: one dozen, \$2.25: two dozen, \$4.25. By express—per ream, \$75; half ream, \$39; quarter ream, \$20.

Donble Albumen. White or Pink. by mail, post-paid. Sample sheet, 30 cents; half dozen, \$1.40; one dozen, \$2.60; two dozen, \$5. By express—per ream, \$88; half ream, \$45; quarter ream, \$23.

Those who are using double paper are respectfully invited to compare with my single albumen. Sample sheets will be cut in quarters for convenience of packing.

TERMS.-For mail orders, cash with order. For express orders, 10 per cent. with order, balance C.O.D.

ADDRESS ALL ORDERS TO

C. F. RICHARDSON, Wakefield, Mass.

PROMENADE ALL! HERMAGIS'

Celebrated French

PORTRAIT LENSES.

CABINET SIZE, ARE JUST THE LENS FOR THE NEW

PROMENADE PICTURE.

MR. HENRY ROCHER, the renowned Chicago photographer, says of them: "In my opinion they are truly lenses of great capacity, and must surely satisfy every purchaser." Mr. Rocher has purchased two Hermagis lenses of card size and one Salomon style. See further splendid testimonial from Mr. Rocher in Specialties.

Rocher in Specialties.

MR. F. GUTEKUNST, the celebrated Philadelphia photographer, was sent a Salomon Lens to try for us, and wont part with it. It cuts sharp a 9 inch standing figure, and beats a lens that has been his favorite many years, and where many makes of lenses have failed, on trial, to equal it.

The HERMACIS IS THEREFORE AHEAD

TRY THEM!

These celebrated lenses, are used by MONS. ADAM SALOMON, of Paris, exclusively for making his **WORLD-RENOWNED PORTRAITS**, and by the most famed photographers of Europe, from whom Mons. Hermagis has the Highest Testimonials.

We now have a FULL STOCK on hand.

The Salomon Style, 8 x 10 size, \$160.

For Cabinet Size, extra quick, \$100.

For Cabinet Size, quick, \$90.

For Carte Size, extra quick, \$50.

For Carte Size, quick, \$40.

They are being introduced in America steadily, and are liked wherever they go.

They will be sent on trial to responsible parties C. O. D., and instructions to Express Company to hold money one week for trial. If parties prefer to see the work of a lens before purchasing, we will make a negative and send with details of exposure, etc., and reserve the lens until answer is received (if the time is reasonable), on receipt of \$1 to pay cost. Having a skylight of our own we are enabled to do this.

Not a single person to whom we have sent these Lenses on trial, as above, has returned them.

BENERMAN & WILSON,

116 North Seventh Street, Philadelphia, Pa.

HEARN'S PHOTOGRAPHIC PRINTING INSTITUTE,

FOR PRINTING FOR THE TRADE, AND FOR INSTRUCTION IN THE ART OF PHOTOGRAPHIC PRINTING.

Below we insert a few letters, out of many that we have received since the first opening of the Institute, of which your perusal is respectfully solicited.

"I have received to-day the two cabinet pictures you sent me for inspection, and I can fairly say that I fully approve of your style of printing and toning—both are excellent in the extreme. I may just as well say that if I had not my own printing establishment where my exhibition pictures have been printed some time ago, I would have availed myself of your offer gladly. I wish you best success in your enterprise."—H. ROCHER, Chicago, Ill.

"Your communication of February 24th is at hand, and the samples therein inclosed are very fine. I commend the enterprise, and highly recommend such an institute as you represent. A place for instruction is an absolute necessity, and I have no doubt that it will be a blessing to the fraternity. I wish for you abundant success."—G. Frank E. Pearsall, Brooklyn, N. Y.

"The samples of printing you have forwarded me could not be excelled, and are hard to equal. They are very beautiful."—W. J. BAKER, Buffalo, N. Y.

"Your letter was received yesterday, and samples to-day. The prints you send are exquisite. They are clean and brilliant, yet very soft and velvety, notwithstanding the negatives are only ordinarily good. I cannot produce such prints, and I doubt it there is a gallery in America that does. I wish you success in your new enterprise."-FRANK JEWELL, Scranton, Pa.

"Your idea of giving practical instructions in printing is an excellent one, and should be encouraged. I know of no one better fitted for the position than yourself, as evidenced by your own work and The Practical Printer. You have my hearty wishes for the success of your undertaking."—ALVA PEARSALL, Brooklyn, N. Y.

"The three specimens on my desk now, from you, received this A.M. Truly, they are as fine samples of printing as I ever saw. The chemical harmony of the printing bath, with that of the gold, is apparent. You have got at the bottom of the 'secret.' Success to your new enterprise. I hope you will be gratified with your labors by seeing the much-neglected part of our profession (photo. printing) elevated from its too common degredation to that of, at least, a very great improvement in many of us."—Ferris C. Lockwood, Freehold, TO WHOM IT MAY CONCERN.

I most cheerfully give my unqualified commendation, both as to personal character and first-class professional abilities, of my former printer and toner, Mr. Charles W. Hearn, who was in my employ for about three years in that capacity. He is one of the very few who seemed really to love and enthusiastically devote his entire time to that interesting but somewhat neglected branch of our art. He often declared to me that he thought printing and toning the most interesting department of photography, and expressed his determination to make a specialty of it, which he has done with an energy and heartiness in his work and study that has won for him most deserved success, so that he is, though still quite a young man, one of the very first photographic printers of this or any other country. That the most abundant means may attend him in his new enterprise, is the earnest wish of his old employer,

J. H. Lamson, Portland, Me.

"Since having my views printed at the Institute nearly all my patrons are duplicating their orders, which speaks decidedly in favor of your careful and artistic printing."—FRANK ROBBINS, Oil City, Pa.

"The examples of Printing are received, and are simply PERFECT. I congratulate you upon having inaugurated a means of securing to the art and 'the trade' a certainty of obtaining the best print a negative will yield, and that you offer this great advantage to both proprietor and pupil. Success to your enterprise."—J. F. RYDER, Cleveland, Ohio.

SARONY'S GALLERY, 680 Broadway, New York, May 8, 1876.

DEAR SIR: I am in receipt of your splendid prints and must say they are the finest I ever saw. Accept my lanks for the same, and believe me, Yours respectfully, CHAS. HOFFMAN. thanks for the same, and believe me,

A trial order is respectfully solicited. Address

HEARN'S PHOTOGRAPHIC PRINTING INSTITUTE,

116 North Seventh St., Philadelphia.

THE BONANZA PLATE HOLDER.

Patented January 19, 1875.

This is one of the most useful appliances yet introduced in the Photographic business, and

one much needed for economy and neatness in every gallery.

The "Bonanza" Plate Holder has been in constant use in G. D. Morse's Gallery, in San Francisco, for over one year, and a test made from month to month of the savings. In the busy season it reached over \$12 per month in pure silver solution. The drippings from the plates do not come in contact with the wood frame, slide or door of the Holder, thereby saving it from destruction. Besides, it protects the camera-box, clothing of the operator, carpets, etc., from silver stains. Another great advantage of this Holder: The inside kit of frames which are in general use for accommodating the different size plates are dispensed with. The fittings are so adjusted that they take every size plate from a card to 8 x 10 size, uprights or crosswise, as may be desired, by simply moving the receptacle that holds the plate to the position required for any particular size. Every photographer will see at a glance the value of this invention.

"We have had your "Bonanza" Plate Holder in use in our establishment for about eight months. We take pleasure in testifying to their great superiority over all others we have employed or seen, not only as a silversaving appliance, but also in promoting cleanliness in work and protection of carpets and drapery from silver contamination. The very moderate price charged for these Holders will be returned to the purchaser, in the saving made, in a very short time."—W. H. RULOFSON, San Francisco, February 10, 1876.

"The constant use of a couple of your 'Bonanza' Plate Holders during the past year warrants me in saying they are unexcelled. The silver all being saved in a liquid state can be used again, and there is no soiling of clothes. carpets, or the floor of the studio. The silver not coming in contact with the camera, the focus is not disturbed by the eating away of the wood work. The saving in silver, clothing, and carpets, is astonishing, and I would not be without them on any consideration. I cordially recommend them to the craft."—G. D. MORSE, San Francisco, February 20, 1876.

"The past eight months I have used the "Bonanza" Plate Holder at Bradley & Rulofson's. It has been a great source of pleasure to work with a Holder free from drippings of silver solution. Every photographer will appreciate the cleanliness of this invention, as well as the dollars he will ave by its use. I am starting in business at 415 Montgomery Street, and wish you to send me two "Bonanza" Plate Holders."—D. B. TAYLOR, February 13, 1876.

"I believe it to be the best Photographic Plate Holder ever used in the art."—SILAS SELLECK, San Francisco, March 4, 1876.

The "BONANZA" PLATE HOLDER is manufactured of the very best material, and is now ready for the market. The retail price is \$20. They are made to fit and are in focus with the American Optical Co.'s 8x 10 boxes. Will forward a holder by mail to any address on the receipt of \$20 currency, or will send by express, C.O.D. It is much cheaper to send by mail, as we can forward them to any part of the United States for fifty cents.

All orders should be addressed to

I. W. TABER

YOSEMITE ART GALLERY.

26 Montgomery St., San Francisco, Cal.

THE "ATMOSPHERIC" BACKGROUND.

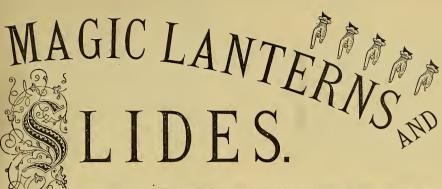
Patented November 23, 1875.

This Background which is made of wire cloth, is remarkable for its atmospheric effect. The wire cloth is of such a texture that the eye or lens cannot focus upon it, which has the effect of producing a sharper outline to the figure. This result makes it valuable for plain

effect of producing a sharper outline to the figure. This result makes it valuable for plain Backgrounds, as it produces negatives free from any blemish, as a dent or scratch on the wire cannot be photographed, owing to the open meshes of the cloth.

The durability of the Wire-Cloth Background cannot be questioned. One of them will last a lifetime. We have had them in constant use for over two years. They have been hit by head-rests, and every accessory used in a gallery have had their accidental contact, but they are as perfect to-day as when new. They are used in all the first-class galleries in San Francisco. We have manufactured them for this market, but as freights are high to ship them East, we have determined to offer gallery rights for sale at \$25-currency, with full instructions for making them. It is economy for photographers to purchase the with full instructions for making them. It is economy for photographers to purchase the right, for they can be made at a small expense.

W. TABER &



The attention of those interested in the Magic Lantern is called to the fact that we are MORE EXTENSIVELY ENGAGED in the sale of

LANTERN SLIDES AS A SPECIALTY,

Than any other house in America. Our continuous contact with photographic men gives us special advantages in this line, and as MANUFACTURERS AND DEALERS we offer the very best opportunities to secure

MUCH FOR YOUR MONEY,

AS WELL AS SUCH GOODS AS WILL PUT MONEY IN YOUR PURSE, NAMELY:

A GOOD LANTERN, THE BEST of SLIDES.

FOUR CATALOGUES MAILED ON RECEIPT OF 25 CTS.

DO NOT BUY UNTIL YOU HAVE CONSULTED HEAD-QUARTERS!
SUPPLEMENTARY CATALOGUE (March 1) READY!

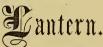
USE WILSON'S

Mantern

Journeys,

A Lecture Book describing graphically, as an eyewitness, 600 beautiful places and things in all parts of the world. SUBSCRIBE FOR THE





A Monthly Journal, devoted to the interests of lantern lovers.

\$1 per year, post-paid.

Special estimates and other information given gladly. No substituting of Slides. Prices very low.

* PROMPTNESS OUR RULE.

BENERMAN & WILSON, Photo. Publishers, 116 NORTH SEVENTH ST., PHILADELPHIA.

WHAT follows is a Catalogue of the best Photographic Publications, sent to remind all live photographers of the fact that good practical information is as essential to them as good lenses and pure chemicals. There are some "artists" who "get along" without any of these, but they do not progress, neither do they succeed. Do not be of their number. There is too much going on in photography in these "quick acting" times to enable any photographer to afford to do without reading and being posted. In anything you undertake you should take every precaution to be as bright as your neighbor, or he will get ahead. Keep alongside, any way. We will

1876

mail you any of the works named below, post-paid, on receipt

of price. Order now.

WILL BE A YEAR OF JUBILEE FOR PHOTOGRAPHERS THAT SHOULD NOT BE NEGLECTED.

THE CENTENNIAL EXHIBITION

Will present opportunities for study and improvement which should not be overlooked, and the study of the best books will not only do you good before, but after the inspection of Photographic Hall. READ! READ!! READ!!!

BENERMAN & WILSON,

Photographic Publishers, Philadelphia, Pa.

hiladelphia Photographer.

THE BEST PHOTOGRAPHIC MAGAZINE IN THE WORLD.

EACH NUMBER EMBELLISHED BY PHOTOGRAPHY.

THE THIRTEENTH VOLUME of our Magazine promises to be the most popular and brilliant of any that has preceded it. We have many good things in store for it. It shall be our endeavor to make it all the richer and more interesting on account of the Centennial. We expect to embellish it with some of the choicest geme the Exhibition can produce and add interest to its pages from month to month, by giving a sort of compendium of all that relates to Art or Photography. Among other attractions, we expect to have our old friend Dr. Vooghere during six months of next year, at least, and our readers may expect some of the fruits of his genius and talents to add to its interest and usefulness.

But while we intend to provide all these home attractions, we do not propose to neglect whatever may transpire abroad, but shall present as usual correspondence from such well-known writers as Prof. Streaming, Mr. W. J. Stillman, Mr. Chas. Waldack, and others. With all these good things in prespect for the year 1876, we hope to render our magazine more beautiful and more useful than ever before; and while we maintain that the beautiful example of photography, which accompanies each issue, is alone worth the subscription price, still more and more effort will be made to make the reading matter everything that it ought to be. Our correspondents from all the leading centres abroad will keep our readers posted on all matters of interest in their several sections, while our unrivalled staffath ome will look diligently after your interests here. To make THE PHILADELPHIA PHOTOGRAPHER the best PRACTICAL HELEPR which can possibly be obtained, Is the aim and earnest desire of its publishers. We ask your co-operation in extending its vesfulness, and offer to all present subscribers, who secure us new ones, the following

PREMIUMS.

For every new subscriber, for one year, \$1.00, payable in any of our publications, books, or, if preferred, one dollar's worth of any of our prize pictures, or any other article for which we are agents, advertised in this Magazine.

The subscription price of the *Philadelphia Photographer* is \$5 a year, \$2.50 for six months, 50 cents per month.

Each number, remember, contains a handsome photograph.

Abotographic Mosaics.

THE Centennial anniversary year of American Independence finds our little Annual in its eleventh year. It is developing rapidly for its age and size, and this year takes quite an interest in the Ceutennial. It is full and running over with fresh contributions from the most wide-awake members of the fraternity in all parts of the country. We here give a list of the

bers of the fraternity in all parts of the country. We here give a list of the CONTENTS.—Review; Eighteen Hundred and Seventy-six; Discoveries, Inventions, and Improvements; Work in the Studio; The Dark Room; The Pritting Department; Landscape Photography; Dry-Plate Work; Apparatus; Art Advances; The National Photographic Association; Our Publications; Our Prize Offer; Items of Interest; Obituary; The Art Progress; Fog; Come, Let us Reason Together; Experience; Provoking; A Suggestion Anent the Great Exhibition; Centennial Album of Photographic Studies; The Eliminating of Hyposulphite from Prints; A Treatise on Photography. Why not make Solars instead of Contact. etc.; Systematic Preservation of Negatives; Want of Enterprise; Lighting the Sitter; Theory and Practice; Ee Punctual; Formulæ for Photographs and Ferrotypes, which give Lights and Half-tones not surpassed; Exposure and Development of a Negative; A Cause for Faded Prints; How I Sunned a Bath under Difficulties; A Good Collodion; A Word to the Weak; How to Clean New and Old Glass Plates; Long's Bath Warmer; Albumen, its Preparation and Use in Photography; An Item of Real Value; The Negative Bath; How to Lubricate Prints for Burnishing; Then and Now; A Pair of Suggestions; How to Obtain Boiling Water in Winter; An Excellent Ware for Photographic Purposes; Hints on Composition; The Causes and Cure for some of the Difficulties pertaining to Photography; At and Mechanism; Breakfast for Dinner; Field Work; Marble Negatives—Stains From the Hands, etc.; Pyroxylim—Gun-Cotton; The Old Bath; The Upper Floor; Dry-Plates; The Art Privileges of our Great Centennial; Curtains as a Meanos A djusting Light; An Exposing Shutter; How to Touch out Finholes; Photography; The Toning Solution; A Chapter of Practical Matters; Climbing; Poor Negatives, their Cause and Cure; On Landscape Photography; A Cheap and Good Plateholder; The Way it is Done; To Correspondents; The Construction of Skylights; Blisters; At the Desk; On Photographic Lenses—How to Choose and Take Care of The

Price, bound in Cloth, \$1. Paper Cover, 50 Cts. 144 pages.

OUR BOOKS.

THE PRACTICAL PRINTER. By Chas. W. Hearn.

This very useful book is indispensable in the printing department. No one who wishes to be up with the times in printing, can afford to be without it. Its rapid sale and the favor with which it has been received, are the best recommendations we can give. Price, \$2.50.

BIGELOW'S ALBUM OF LIGHTING AND POSING.

This excellent work still maintains its popularity. It contains 24 beautiful photographs from life in different lights and positions, with an explanatory key, which makes it the most practical helper the Photographer can have. Price, \$6.00.

DR. VOGEL'S HANDBOOK OF PHOTOGRAPHY. Second Edition.

This is a really standard work, and the most complete hand-book ever published. The new edition has been thoroughly revised, and much additional matter introduced, together with new illustrations, new photographs, and a new arrangement all through. Now is the time to study up, and this book is ap-plicable to any department. Price, \$3.50.

DR. VOGEL'S PHOTOGRAPHERS' POCKET REFERENCE-BOOK.

This is in every sense a reference book. It is alphabetically arranged, and any process or formulæ in photography may be found at a moment's notice. All is arranged in a concise and practical form. It is particularly useful in the chemical department. Price, \$1.50.

THE FERROTYPERS' GUIDE.

This little work is by a practical ferrotyper, and gives just the instruction necessary to those who wish to do good work in this branch of our Art. Price, 75 cents.

LINN'S LANDSCAPE PHOTOGRAPHY

Is an excellent companion in the field, and may help you over many difficulties; can be carried in the pocket. Price, 75 cts.

GLIMPSES AT PHOTOGRAPHY. By Prof. Himes.

This work treats of some of the peculiar styles of printing, such as leaf-printing, etc., etc. Price, \$1.25.

WILSON'S LANTERN JOURNEYS.

To those who use the lantern this book is indispensable. It contains just the information required about six hundred different views, and enables any exhibitor to make his entertainments enjoyable and instructive. Price, \$2.00.

BURNET'S HINTS ON COMPOSITION.

We have reproduced this work by photo-lithography, and sell it at the low price named, while a copy of the original work could not be bought for five times that amount. It is fully illustrated, and supplies in a very attractive form, the art knowledge, in reference to composition, that so many photographers are seeking after. Price, \$3.50.

Specialties.

ADVERTISING RATES FOR SPECIALTIES.—It will be understood that matter under this head is not to be considered as always having editorial sanction, though we shall endeavor to clear it of anything tending to deceive or mislead. Stock-dealers will find his a beneficial mode of advertising, and sure to pay largely. Six lines, one insertion, \$2.00, and 25 cents for each additional line, seven words to a line—in advance. Operators desiring situations, no charge. Matter must be received by the 23d to secure insertion. Advertisers will please not ask us for recommendations. **S** We cannot undertake to mail answers to parties who advertise. Please always add your address to the advertisement.

For Sale. - The only gallery consisting of a complete outfit; in a small town of 1000 inhabitants, with rich farming country around it. No other gallery within fifteen miles. For information, address, W. A. STALLARD,

Waveland, Ind.

FOR SALE .- The leading gallery in Chester, Pa. Chester is a live city of 15,000 population, and rapidly increasing. Situated on the Delaware River, fourteen miles from Philadelphia. The gallery has been established for more than seven years, and is now doing a good paying business; has a good reputation in all respects, and is sold for no fault. Having been in the business for nearly thirty years I expect to retire from it. Any good photographer who would step into a good business, and be sure to lay up money every year, cannot find a better opportunity. Its proximity to the grand Centennial Exhibition will bring much extra work this year. Address, J. W. SNELL.

WAYMOUTH'S VICNETTE PAPERS.

For SALE.—The best located gallery in the city of Evansville. Population 40,000. Will be sold at half its value; must sell. Reasons for selling and further particulars can be obtained by addressing

A. I. FEÁY,

No. 2011 Main St., Evansville, Ind.

WANTED.—To buy a photograph or ferrotype gallery. Address with full particulars, diagram of rooms, lowest cash price, length of lease, amount of opposition, population, etc.

H. B., care Wm. B. Holmes, 646 Broadway, N. Y.

FOR SALE, CHEAP.—One extra 4-4 Harrison portrait tube, patent diaphragm, will cut 11 x 14, \$75; one pair (matched) Harrison 1-3 portrait tubes, \$30; 1-2 size Voigtlander lens, central stops, \$35; one 1-2 size (a fair instrument), \$15; one, No. 1 B, Dallmeyer portrait tube, for card pictures, \$35. Terms cash, or will take in exchange a 11 x 14 or 14 x 17 short focus view lens. Four days trial granted.

Address BACHRACH & BRO., Cor. Eutaw and Lexington Sts., Baltimore. FOR SALE.—Having two photographic rooms, and on account of my wife's sickness, will sell one. One is situated in Webster, Mass., the other in Spencer, Mass. Both have the very best north and side light, and are splendid galleries.

Address, J. N. Chamberlain, Jr., Webster, Mass.

For SALE.—An old established gallery, centrally located in the city of Rockland. Equipped with the very best Voigtlander instruments. Four thousand good paying negatives. Water throughout the building. Reason for selling satisfactorily explained. Address,

Mrs. A. J. Jackson, Rockland, Main.

For Sale.—First-class gallery. Customers, prices, apparatus, fixtures, and rooms first rate. Village 3500 inhabitants. Rare and very desirable chance in every respect. None but those who mean business need apply. Death of my husband, the late proprietor, the reason for selling. For particulars address J. A. W.

P. O. Box 238, Penn Yan, Yates Co., N. Y.

I WANT to buy a first-class gallery in a place of not less than 20,000 inhabitants, or would run one on shares, address with full particulars,

M. Wolfe,

care Benerman & Wilson, Philada.

For SALE.—A suit of photograph rooms in one of the most pleasant and active little cities on the Ohio river.

These rooms are now doing, and have done for the last 25 years, under the same management, the leading business of the city.

A first-rate chance for a competent, live photographer. Population of the city from 12,000 to 14,000, and surrounded by rich farming country. Satisfactory reason given for selling.

For further particulars address,

G. W. WEISER, Steubenville, Ohio.

Wanted—To buy a gallery for cash, in a city of over 50,000 inhabitants in one of the Middle or Southern States. Who has to sell?

Address with particulars, to

R. H. TUMAN, care of E. & H. T. Anthony & Co., 591 Broadway, N. Y.

USE WAYMOUTH'S VIGNETTE PAPERS.

SEAVEY'S SCENIC STUDIC

NEW YORK

LA FAYETTE W. SEAVEY makes a novel display at the Centennial of Photographic Backgrounds, Papier Maché Accessories, and numerous Photographs of new designs.

For results obtained by the use of his works, examine

the exhibits of the leading photographers.

List of Exhibitors at the Centennial Using Seavey's Backgrounds.

Collins, Urbanna, Ohio. Gentile, Chicago.

Howell, New York.

Busey, Baltimore, Md. Holler, Brooklyn, N. Y.

Schwind & Kreuger, New York. Sarony, New York.

> Alman & CO., New York. Kurtz, New York.

> > Anderson, Richmond, Va.

De Lamater, Hartford, Conn.

Bradley & Rulofson, San Francisco.

J. W. Kent, Rochester, N. Y.

Holyland, Baltimore, Md.

Rocher, Chicago, Ill.

Landy, Cincinnatti, Ohio (seven ages).

Gutekunst, Philadelphia, Pa.

Taylor, Philadelphia, Pa.

Gubleman, Jersey City, N. J.

FOR SALE! LESS THAN COST .- The leading gallery in Marshall, Texas, for \$1,000. 5,000 inhabitants; First-class prices; One other gallery only. A rare chance for any young man, or any one else, with small capitol, who wishes a first-class community, business, and prices for work; a magnificent climate, and a place where hard times are unknown.

Reasons for selling, I have another gallery and other business in another city to attend to. Address, E. C. LEWIS,

Marshall, Texas.

WAYMOUTH'S VICNETTE PAPERS.

Quite a commotion has occurred among cameras. The new head-gear, introduced by J. F. Ryder, of Cleveland, has improved the vision of many, and excited the sober consideration of others. Valuable improvements will be adopted. The farmer manures the soil for better crops. The photographer must put fine bonnets, or eye lashes, upon his camera for better results.



"YANKEE DOODLE"

Is the name of the picture, and there is very much Yankee Doodle in it. The painting is by A. M. Willard, a man who has carried a musket to the tune in the service of his country; a man whose brush tells a story with more point and power than any artist in America. This great picture hangs with the best in Memorial Hall, at the Centennial Exhibition, and excites both admiration and patriotic fire in the breasts of thousands. That all may possess a copy, a fine chromo reproduction has been made, in size 18 x 24 inches, printed in seventeen colors, and the work first-class. Every photograph gallery should have a copy. It will be the best advertisement for the price that could be used. Every photographer can turn a few honest dollars in selling them to their customers. The coming anniversary will be the hottest in patriotic fire ever known, and Yankee Doodle will be in great demand about that time. On receipt of \$2, I will mail a copy to photographers so ordering. The price of the picture mounted, ready for framing, is \$3.50. Send in your orders. Give vent to your patriotism, and make a little money withal

Address the publisher, J. F. RYDER. Cleveland, Ohio.

USE WAYMOUTH'S VIGNETTE PAPERS.

FOR SALE AT HALF ITS VALUE.—The best located gallery in the thriving city of Syracuse. Population, 70,000. Has always done the leading business, and being lately remodeled is now complete in all its appointments; rent but \$500 a year. This is a rare chance, and none but those who mean business need apply. The death of my husband, the late proprietor, is my reason for selling. The store under the gallery now rents for \$3,600; one may judge from this the value of the location and the business enterprise of our city. Address Mrs. John Austn,

58 S. Salina St., Syracuse, N. Y.

HERMAGIS LENS TESTIMONIAL.

Philadelphia, March 21, 1876. Messrs. WILSON, HOOD & CO.

I take pleasure in testifying to the perfect working of the "Hermagis" just purchased from you. We have tested it particularly as to its depth of focus, and find it to combine with this a rapidity of working which makes it doubly esteemed. Very respectfully,

> WM. CURTIS TAYLOR, 914 Chestnut Street.

BURREL'S CHART AND HINTS TO PATRONS.—Your gallery is not complete without them. For particulars, see advertisement in January, February, and March issues of this Journal. Price, \$1.25, unmounted, by mail, or by express mounted.

For Sale.—A new and handsomely fitted gallery, in a new building erected especially for the purpose, with every facility for making first-class work, in a Southern city of 40,000 inhabitants. Doing a prosperous business of several years' standing; being the only first-class gallery in the place. Terms moderate. Address, for further information, A, care Philada. Photographer.

For Sale.—Reilly's fine negatives of the Yosemite, California, Sierra Nevadas, Niagara, etc.

Apply to Benerman & Wilson,

Publishers Philada. Photographer.

Photographic Hall.—The four sizes of electrotypes of Photographic Hall, advertised last month, are as follows: $1\frac{1}{4} \times 2$ in., $2 \times 3\frac{1}{4}$ in., 4×6 in., $4\frac{1}{2} \times 7\frac{1}{4}$ in. For sale by

CROSSCUP & WEST,
702 Chestnut Street, Philadelphia.

PIANOS AND ORGANS.—Photographers wishing to buy a Beatty Piano or Organ, can get extra inducements through photographing. Address

DANIEL F. BEATTY, Manufacturer,

Washington, N. J.

THE ROBINSON TRIMMER.

RICHMOND, IND., August 11, 1875.

MR. EDW. L. WILSON.

DEAR SIR: I feel as though I should say a few words in praise of the Robinson Trimmer and Guides I received from you. The trimmer does its work admirably, do not know how I should do without it; and the round-cornered guides, for cards, is something new, and makes the picture look much neater when compared with the old square cut kind, from a glass pattern.

The guides, all sizes, are the nearest perfect of any I ever used. But what I wish to request of you in particular is, to publish in your Journal the right way for sharpening the trimmer, I am certain this will be looked for by a great many with interest. I have used mine now constantly for some time, and it does not need it yet; but, in case it does, would not like to spoil it with any experimenting. Yours respectfully,

M. WOLFE.

Mr. Charles Waldack, who is known to many of our readers, writes in the Photographic Times as follows: As Robinson's trimmer is getting to be used universally, I think I will do a good turn to photographers in telling them how to sharpen the little wheel when it gets dulled by use. I owe it to a photographic friend here, and although some may know it, I am sure many do not. Make a groove in a piece of lead by means of the trimmer, put in it a little fine emery and a drop of oil, and run the trimmer forward and back in the groove until it is sufficiently sharp. There is something else about the trimmer; ascertain by trial which side of the wheel should be on the inside of the zinc or iron mat to cut best, and mark it."

THE GORHAM STOVE.—No photographer can get more for his dollar than by investing in a "Gorham Stove." It is tiny in size but a giant in usefulness. See advertisement.

WILSON, HOOD & Co., 822 Arch Street, Philadelphia.

LUCKHARDT'S ELEGANT STUDIES.—We have just received an invoice of splendid studies of the female figure, by Fritz Luckhardt, Vienna. The size, 8 x 10; the price, \$3.50. Order quick!

WILSON, HOOD & Co.,

822 Arch Street, Philadelphia.

USE WAYMOUTH'S VIGNETTE PAPERS.



Photographic Hall.—Electrotypes of Photographic Hall, four sizes, from the above up to the size in February number of this magazine. For prices apply to CROSSCUP & WEST,

Seventh and Chestnut Sts.

Or, BENERMAN & WILSON, Philadelphia.

BUTTER AND EGGS.

Mansfield, Pa., December 31, 1875. Mr. Jno. R. Clemons.

Manufacturer of Albumen and Plain Paper, 915 Sansom Street, Philadelphia.

I am delighted with your "new" albumen paper. I have printed and toned it after it had been silvered over two weeks repeatedly, and in damp weather, kept in a room without fire to keep the air dry, yet it printed quickly and toned easily, and I was unable to select the finished prints from those on fresh paper.

You can "sail in 'Centennially'" and diurnally on your new papers, both plain and egged, and win. If any of your customers find any fault with them, and you want to give them a "blessing" by proxy, refer them to me.

Very truly yours,

F. M. SPENCER.

SITUATIONS WANTED.

No charge for advertisements under this head: limited to four lines. Inserted once only, unless by request.)

As printer and general assistant, by a young man of steady habits. Salary moderate. Address H. Langer, care of Gatchel & Hyatt, St. Louis, Mo.

By a young man who is a reliable and good workman. Specimens on application. Address M. Philbrook, 106 South Main Street, Bloomington, Ills.

By a lady who has had several year's experience in reception rooms of a first-class gallery. Understands retouching. Best of references given. For further particulars, address Miss Anna Lee, P. O. Box 1156, Providence, R. I.

By a young lady in a photograph gallery to attend reception room, retouch, spot out, and finish pictures generally. Address E. S. Gates, Box 823, Evanston, Ills.

As crayon, ink, and water color artist, and negative retoucher in first-class gallery. Address "Alexis," 404 West Chestnut Street, Louisville, Ky.

By a young man of steady habits, in some first-class gallery; has worked at all parts of the business over a year. Address W. T. Robinson, P. O. Box 1199, Bath, Maine.

By an operator of twelve year's thorough practice in all branches of photography. Is open for an engagement. Address Operator, care of J. Haworth, 626 Arch Street, Philadelphia.

By an operator, now with the Centennial Photo. Company, is open for an engagement. Has had a wide experience, and can give the best of reference. Address Artist, 3906 Powelton Ave., Philadelpbia, Pa.

By a young man of good habits who can retouch and operate very good, and print and tone, in some good gallery. Will send samples of work. Address C. R. Stevens, Bangor, Wis.

By a good photographer in a first-class gallery in Philadelphia during August and September. Object, to post up in photography. Have had twenty year's experience. Sample of work sent if desired. Price no object. Can fill any part, and is willing to work. Address G. T. Williams, Columbus, Geo.

By a good retoucher; also first-class printer and toner. Address Rely Tuttle, Box 236, Lebanon, Warren County, O.

As retoucher, printer, and assistant operator. Retouching a specialty. Can also do good crayon work. Address A. B., care of Geo. Stephenson, 474 Main St., Buffalo, N. Y.

As operator or assistant operator, by a young man with several year's experience in first-class galleries. Reference first-class.— Address Joseph H. Allen, 32 Hampden St., Springfield, Mass.

As a first class retoucher or printer, or as both, is capable of giving out No. 1 work. Please do not write unless you mean business. Can give good references. Any time between now and fall would be satisfactory. Central New York preferred. Address, stating terms, etc., Willis, Box 242, Adams, Jeff County, N. Y.

By a first-class operator, A No. 1 retoucher, and a fine printer. Will take charge of a gallery or work as an assistant. Address Box 498, Ottumwa, Iowa.

By a No. 1 operator and retoucher; can furnish the best of references and recommendations. None need apply but responsible parties. Eastern or Middle States preferred. Please state what salary can be given when you write. Address Operator, care of Lyon & Bissell, Effingham, Illinois.

BULLOCK & CRENSHAW,

No. 528 Arch Street, Philadelphia,

MANUFACTURERS AND IMPORTERS OF PURE CHEMICALS FOR PHOTOGRAPHY.

IMPORTERS OF GLASS AND PORCELAIN, APPARATUS, ETC.

U.S. NATIONAL MONUMENT

то

ABRAHAM LINCOLN,

OAK RIDGE CEMETERY, SPRINGFIELD, ILL.

We have just issued a most charming picture of this monument, including some of the surrounding scenery. The monument is situated on the bank of a beautiful little stream, which winds along in the foreground, reflecting the trees and foliage in its mirror-like surface; the whole forming a beautiful souvenir of our martyred President, who

"WITH MALICE TOWARD NONE, CHARITY TO ALL,"

won the affections of so many of his countrymen.

The print is 9×12 , mounted on a fine, tinted, lithographic mount, 18×22 inches. The picture is copyrighted, and can be had only of us.

PRICE, \$3.00.—Liberal discount to the trade.

BENERMAN & WILSON, Photo. Publishers,

116 North Seventh Street, Philadelphia, Pa.

CENTENNIAL VIEWS EXHIBITION

By arrangement with the CENTENNIAL PHOTOGRAPHIC CO., who have the exclusive right to photograph within the INTERNATIONAL EXHIBITION of 1876, we are enabled to offer our patrons a splendid line of

INTERIOR & EXTERIOR VIEWS of the BUILDINGS & GROUNDS.

Including charming interiors, rich exhibits, wonderful flora, beautiful panoramas, and lovely scenes, which meet the eye in all directions, comprising now some

FIVE HUNDRED SUBJECTS.

Stereos, \$3 per dozen; 5×8 at 50 cents each; 8×10 , \$1; 13×16 , \$2 50; and 17×21 , \$5. These views are all gotten up in the highest style of the art, can be sold by any photographer, and will bring a crowd to any gallery to see them.

CATALOGUES FREE. SAMPLE DOZEN STEREOS BY MAIL, \$3.

LIBERAL DISCOUNT BY THE GROSS.

Also, the CENTENNIAL SOUVENIR—16 Views of the Centennial Buildings and Philadelphia. Cloth bound, 50 cents, post-free. Trade supplied. Money in it!

BENERMAN & WILSON, Photo. Publishers,

116 North Seventh Street, Philadelphia.

LAMBERT'S PATENTED PROCESSES

Mr. C. L. Lambert, from Paris, has just arrived in the United States to introduce his

Mr. C. L. Lambert, from Faris, has just arrived in the United States to introduce his processes, now so popular in Europe, where they are used by 374 licenses.

For prices of licenses, including five patents for the whole term of existence, viz., seventeen years, and full practical demonstrations, which are essential, Mr. Lambert will follow the system he adopted in France and England. The price will be \$100 (gold or equivalent) for those either taking a license, or expressing by letter a wish to see samples and hear fuller particulars before August 15th. Mr. Lambert will call on the first opportunity on those writing to him.

Price of Exclusive Licenses According to Importance of Towns.

After August 15th, and before January 1st, the price will be raised to \$150; and after January 1st it will be raised to \$200, as now charged by Mr. Liebert, of Paris, and Autotype Co., of London, who bought the rest of France and England.

All the work done by the celebrated house of Brown, of Dornach, is made under one of the five patents, for the exclusive right of which he paid \$4000. All the work of Autotype Co., of London, is made by the use of three of the patents.

AT CENTENNIAL EXHIBITION WORKS OF LICENCES.

Col. STUART WORTLEY, WALLERY and LIEBERT,

PATENTS.

No. 153,577, A.D. 1874, L. Lambert. No. 92,836, A.D. 1869, J. R. Johnson. No. 173,547, A.D. 1876, L. Lambert. No. 171,392, A.D. 1875, L. Lambert. No. 61,368, A.D. 1867, J. W. Swan.

Mr. G. Lambert being the sole agent of Messrs. Johnson & Swan, so that holding all the patents for chromo processes, he can prosecute to the fullest extent of the law all infringers. Mr. Lambert will visit the principal towns in the United States, calling on those who will express a desire to see samples.

LAMBERTYPE.—Permanent photo-artistic enlargements obtained without large or solar instruments, by diffused light, and without retouching—either on negative, transparency, or print. These unrivalled enlargements are easily obtained in all kinds of weather, from either too weak or too dense, as well as from good negatives. All corrections, additions, or suppressions easily made without work on print. No special instruments required which are not to be found in the smallest photographic gallery. Permanent enlargement can be delivered day after pose. All desired tones or tints obtained without toning. Plain or fancy backgrounds added, changed, or suppressed when desired. Lights or shadows added, changed, or suppressed at will. Imitation Aristotypes (permanent, and finer than the Vanderweyde's) obtained in two minutes, without the use of powders, brushes, or pencils, and quite mechanically. Large transparencies for windows, in all colors, easily obtained at about fifteen cents per square foot.

CONTRETYPE.—Negatives and transparencies easily and quickly multiplied. Any old positives or negatives may be used to produce any number of perfected, quick-acting, enlarged, reduced, or same size negatives or positives, during the darkest days and at a nominal cost. Over-intensity or weakness of negatives is no bar to obtaining good prints, etc.

CHROMOTYPE.—Permanent impermeable prints, redressed, enamelled, and colored, are obtained in every tint on different colored, artistic borders and designs, mechanically, and quicker than by the other silver or carbon processes. The Chromotypes are admitted to be far superior and essentially different to all that has been obtained to this date by all the silver and carbon processes known. Colored prints are obtained mechanically, and can be delivered permanent and impermeable the day of the pose. Fifty prints easily made on a single sheet or card board. All the defects of negatives easily corrected without retouching prints. No airbubbles, stains, etc., possible. Rembrandt pictures obtained from ordinary negatives; lights or shadows added, if desired. Whites purer than in silver processes, and darks brighter. Matt, half-gloss, or enamel prints artained at will. All tones or colors mechanically obtained. No more silver, gold, enamelling, washing, toning, mounting, or pressing required. Whites purer than in porcelain, opal, or enamel pictures.

SELF-REGISTRATION.—Names, addresses, fancy borders, designs, and double tints, mechanically obtained. No more printed card mounts necessary, etc.

We claim that, without using our patents and special materials, it is impossible to produce, without the work of days, effects similar to those produced by our processes in as many minutes. The results cannot be equalled.

PERMANENT CHALLENGE TO THE WORLD SINCE MAY 1, 1874.

Mr. Lambert will give a challenge of \$1000 or a reward of \$200 to any party who, without using their patents or special materials, will produce, in the same length of time, the different styles of portraiture, permanent and artistic, obtained by Mr. Lambert's Patented Processes, as above specified.

Address letters, for three weeks,

Mr. LAMBERT, St. Charles Hotel, 648 Broadway, N. Y.

OHN DEAN & CO. Worcester, Mass.,

Manufacturers of the

NONPAREIL PLATE,

A substitute for porcelain. The new NONPAREIL PICTURES have elicited the most general expressions of approval and admiration. The latest improvement simplifies the formula and insures success. Our plates are stamped. Patented July 29, 1873, and June 16, 1874. All others are spurious.

FERROTYPE **ADAMANTEAN** PLATES.

BLACK, AND PATENT CHOCOLATE-TINTED, EGG-SHELL, AND GLOSSY.

The experience and extensive facilities of JOHN DEAN & Co., enable them to produce the most desirable FERROTYPE PLATES in the market.

> E. & H. T. ANTHONY & CO., Trade Agents. 591 Broadway, New York.

CENTENNIAL LANTERN SLIDES.

```
WE ARE NOW PREPARED TO FUR

40—Board of Finance Building, South Front.
60—Machinery Hall, from Finance Building.
64—Machinery Hall, South Avenue.
65—Horticultural Building, S. E. Forcing Room.
86—Art Gallery and Memorial Hall.
93—Horticultural Building, S. E. Forcing Room.
104—Main Exhibition Building, East end.
104—Main Building, Transept.
115—Main Building—Nave, from Transept looking East.
117—Main Building—Nave, from Transept looking East.
117—Main Building—Nave, from Transept looking E.
120—Horticultural Building, S. E. Forcing Room.
122—Morhicultural Building, S. E. Forcing Room.
123—Machinery Hall, East end.
131—Machinery Hall, Corliss Engine.
189—Main Building, Transept looking N. W.
150—Machinery Hall, South Avenue.
151—Agricultural Building, North Avenue.
153—Horticultural Building, Rorth Avenue.
153—Horticultural Building, Floral Hall.
155—Main Building, Swedish Section.
158—Main Building, Transept looking S. W.
161—Corliss Engine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NISH THE FOLLOWING SUBJECTS:

395—Main Building, from Nave, showing S. W. Tower.
397—Judges' Pavilion.
398—Machinery Hall.
400—Memorial Hall, Main Entrance.
401—Memorial Hall, Main Entrance.
412—Hawaiian Islands' Exhibit, Main Building.
444—Main Building—Transept, from S. Gallery.
446—Model of Calumet & Hecla Copper Co.'s Stamp Mill.
454—Main Building—Main Avenue, from N. E. Tower.
456—Main Building—Main Avenue, from Transept.
460—Main Building—Main Avenue, from Transept.
461—Horticultural Hall, from Grounds.
471—Sandwich Bessemer Steel Exhibit, Main Building.
491—Women's Pavilion, from Gallery.
535—Centennial Grounds, from Judges' Pavilion.
537—Horticultural Building, South Entrance.
541—Art Annex, Italian Department.
544—Art Annex, Italian Department.
545—Art Annex, Italian Department.
550—Connecticut State Building.
560—Memorial Hall.
                                                                                                                                                                                                                                                                                                                       WE ARE NOW PREPARED TO FURNISH THE FOLLOWING SUBJECTS:
153—Horticultural Building, Floral Hall.
155—Main Building, Swedish Section.
158—Main Building, Transept looking S. W.
161—Corliss Engine.
162—Rodman Gun, 20-inch bore.
164—Falstrom and Tornqvist's Exhibit.
171—Memorial Hall, Cornice of Vestibule.
173—Staffordshire Ceramic Ware.
176—Lambeth Pottery Exhibit.
177—Netherlands Section.
218—Horticultural Building, South side.
222—Women's Pavilion.
225—Agricultural Building—Main Avenue, looking East
226—Agricultural Building—Main Avenue, looking West
230—English Government Buildings.
231—Japanese Commissioners' Dwelling, Piazza.
232—Japanese Commissioners' Dwelling, Piazza.
233—New York State Buildings.
249—Norwegain 15th Century Furniture.
250—Netherlands Section, Kiosk
251—Gustafsberg China and Porcelain, Swedish Section.
254—Anthurum Scherzonanum, Horticultural Hall.
260—Kingsford Starch Exhibit.
261—Ceroxeylon Nevium, Floral Hall.
265—Ceroxeylon Nevium, Floral Hall.
266—Phoenia Doclylifera, Ploral Hall.
268—Lemon Tree, Floral Hall.
279—Banana, Floral Hall.
279—Banana, Floral Hall.
279—Banana, Floral Hall.
279—Banana, Floral Hall.
279—Enoral Hall, Horticultural Building.
288—Floral Hall, Horticultural Building.
288—Floral Hall, Horticultural Building.
289—Floral Hall, Horticultural Building.
290—Floral Hall, Horticultural Building.
290—Floral Hall, Horticultural Building.
293—Floral Hall, Horticultural Building.
294—Floral Hall, Horticultural Building.
295—Floral Hall, Horticultural Building.
294—Floral Hall, Horticultural Building.
295—Floral Hall, Horticultural Building.
296—Floral Hall, Horticultural Building.
296—Floral Hall, Horticultural Building.
297—Floral Hall, Horticultural Building.
298—Floral Hall, Horticultural Building.
299—Floral Hall, Horticultural Building.
290—Floral Hall, Horticultural Building.
290—Floral Hall, Horticultural Building.
290—Floral Hall, Horticultural Building.
290—Flor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   543—Art Annex, Italian Department.
544—Art Annex, Italian Department.
545—Art Annex, Italian Department.
550—Connecticut State Building.
566—Memorial Hall.
599—South Avenue, from West end—Machinery Hall.
601—The Dairy.
603—Agricultural Hall.
604—Swedish School-House.
650—New Jersey State Building, rear view.
651—The 20-inch Rodman Gun.
652—Main Building, West end.
656—Main Building, West side.
665—The Dying Lioness.
666—Navy Group for Lincoln Monument.
678—The American Volunteer (Granite Statue.)
692—Memorial Hall, Italian Section.
693—Horticultural Grounds.
700—Agricultural Hall, from Horticultural Hall.
702—Ilorticultural Hall, S. E. view.
703—Pennsylvania State Building.
704—New Hampshire State Building.
721—New York State Building.
722—Wisconsin State Building.
723—Illinois State Building.
723—Illinois State Building.
723—Monitor Turret.
737—Rhododendrons, Horticultural Grounds.
743—Memorial Hall, Main Avenue.
752—Horticultural Hall, Main Avenue.
752—Horticultural Hall, Main Avenue.
752—Horticultural Hall, Main Avenue.
805—Interior of Agricultural Hall, looking Westward.
807—Centennial Water-Works.
808—Machinery Hall—North Avenue, looking East.
815—Main Building, General View from Northern end.
816—Birds-eye View of Grounds, from Main Building.
818—Front of Centennial Photographic Co.'s Studio.
819—Machinery Hall, from Main Building.
819—Horticultural Grounds, from Horticultural Building.
819—Horticultural Hall, Swedish Department.
898—Brazilian Cotton Exhibit, Agricultural Building.
900—Steam Fire Engine Exhibit, Machinery Hall.
901—Scales Exhibit, Machinery Hall.
902—Gelmont Avenue, Looking North.
923—Horticultural Hall, Swedish Department.
934—Machinery Hall, Swedish Department.
935—Brazilian Cotton Exhibit, Agricultural Building.
946—Main Building, North Entrauce.
930—War Canoe and Models, U. S. Government Building.
946—Main Building, Western Entrance.
947—The Lake, from Machinery Hall.
949—Memorial Hall, American Department.
962—The Hunter's Camp.
964—Indiana State Building.
966—Machinery Hall—South Av
```

New ones are being con- PRICE, \$1 EACH. With liberal discounts on stantly added.

PROMENADE PRIZE PICTURES.

JULY COMPETITION.

To enable all photographers to study these

GEMS OF ART,

We offer prints from the competing negatives, for sale at the prices below

They are the most exquisite things we ever offered, and will teach any one, be he a good or poor operator.

THE GOLD MEDAL

Was awarded for the best six negatives to Mr. Henry Rocher, Chicago, Ill., whose pictures are marvels of beautiful photography. The studies are all mounted in tasteful style, on Collins' Mounts, and printed at our own rooms by Mr. Chas. W. Hearn, and are fine studies in posing, lighting, printing, and toning.

THE SETS INCLUDE:

Nos.	. 1	to	7,		÷	÷			Studies	by H. Rocher, Chicago.
**	8	to	16,						**	L. G. Bigelow, Detroit, Mich.
6.6	17	to	22,					÷	"	I. W. Taber, San Francisco, Cal.
44	23	to	27,						**	C. M. French, Youngstown, O.
66	28	to	31,		÷				**	Core & Frees, Tiffin, O.
66	32	to	37,					÷	**	E. M. Collins, Oswego, N. Y.
44	38	to	42,							J. H. Folsom, Panbury, Conn.
46	43	to	48,						**	E. H. Alley, Toledo, O.
Se	e F	lev	iew	in	A	ug	ust	n	umber 1	Philadelphia Photographer, page 242.

The whole set of 48,	200
In two Photo. Covers,	3 50
Selections, per dozen,	4 00
" per two dozen,	7 00
The 21 of Messrs. Rocher, Bigelow, and Taber,	6 00
Book Covers and Binding,	75

Address all orders to

BENERMAN & WILSON, Publishers, 116 North Seventh Street, Philadelphia.









ROSS' PORTRAIT VIEW LENSES

We have now successfully introduced to the American Photographers the Ross Lens, and by our increased sales we know they are appreciated. At the convention held at Buffalo, July 15, many fine photographs were exhibited by photographers, and ourselves, made with the Ross Lens, which attracted great attention.

While Ross & Co. are the oldest manufacturers of Photographic Lenses in existence, they also keep up with the requirements of the fraternity, by constantly manufacturing new combinations and improving on those already in existence. They have lately perfected, and will soon furnish us stock of, a new series of Card Lenses, extra rapid, peculiarly adapted for babies, and people who will not be quiet. We will give notice of their arrival.

WE HAVE NOW IN STOCK

Portrait Lenses, from 1-4 to 15 x 18.
Cabinet Lenses, Nos. 1, 2, and 3.
Card Lenses, Nos. 1, 2, and 3.
Triplets. Nos. 1, 2, 3, 4, 5, 6, and 7.
Symmetricals.
Rapid Symmetricals.
Instantaneous Doublets, all sizes.
Medium Angle Doublets, all sizes.
Large Angle Doublets, all sizes.
Stereographic Lenses, all sizes.
New Universal Lens.

Numerous testimonials pronounce them to be the best, as well as the cheapest Foreign Lens ever offered to the American Photographer. We will mail price-list on application, and promptly fill all orders.

STEINHEIL'S SONS' NEW APLANATIC LENSES.

We now have a full stock of these Celebrated Lenses, at the following prices:

No	1 1.4	size.	34	inch	focus.	 \$25	00	No.	5, 10-12	size	, 13 չ	inch	focus,	\$70	00
110.	0 19	66	51	6.6	66	 30	00		6,13-16	6.6	16 !	66	6.6	110	0.0
••	2, 1-2					 45	00		7 18 99	44				200	00
6.6	3,4-4		7	•••		 40	00		7,18-22						
66	4 8-1	0 "	101	6.6	"	 60	00	1 **	8,20-24	•••				350	00
	1,								a for Storoge						

We feel sure that at least one of these lenses is needful for the successful prosecution of your business, and so solicit your orders.

WILSON, HOOD & CO., THE UNITED STATES, 822 Arch St., Philadelphia, Pa.

The only genuine brand of DRESDEN ALBU-MEN PAPER is the CROSS-SWORD BRAND, all others are superannuated. We keep a full assortment of Single and Extra Brilliant always on hand.

CHAS. F. USENER'S Celebrated PORTRAIT LENSES are unexcelled. Before purchasing be sure and try a Usener.

CHARLES COOPER & CO., Wholesale Agents,

Manufacturing Chemists and Importers,

191 Worth Street, New York.

The Universal



EMBOSSING PATENTED JANUARY 9th, 1872.

This Press will cameo all sizes, from cards to cabinets, and is sold lower than any other that will do the same work. It has been greatly improved and made very complete in all its parts.

We furnish a card, victoria, and cabinet size.

PRICE, \$20.00.

MANUFACTURED AND SOLD WHOLESALE AND RETAIL BY

WILSON, HOOD & CO., 822 Arch St., Philadelphia.

CAUTION.—Photographers are cautioned against buying other presses that may use an elastic embossing substance, as they are an infringement on the above.

R. J. Chute, Patentee.

G. GENNERT,

53 Maiden Lane, New York,

IMPORTER OF THE CELEBRATED

S. & M. DRESDEN

ALBUMEN PAPERS

Rives and Steinbach-White, Pink, and Blue.

Every one says it WORKS THE MOST UNIFORM, ECONOMICAL, and GIVES FINER RESULTS than any other. To satisfy yourself that it is the best, send to your stock-dealer for a sample dozen. Kept by all stock-dealers in the United States.

ALSO,

Hyposulphite of Soda, Sulphate of Iron,

Solid German Glass Baths,
Saxe Evaporating Dishes,

AND French Filter Paper.

SPECIAL ATTENTION IS CALLED TO THE

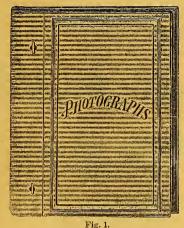
EXTRA BRILLIANT, OR DOUBLE GLOSSY PAPER,

Which is recognized by the best artists all over the world as the

FINEST ALBUMEN PAPER IN THIS COUNTRY OR EUROPE.

IMPROVED

PHOTOGRAPH COVERS.



The Outside Appearance.

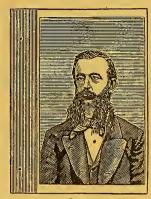


Fig. 2.

A Leaf Showing the Guard.

Frequent inquiries for something at a much lower price than an album, for the holding together and preservation of photographs, has induced us to manufacture an article which we think will meet the want.

IT SERVES ALL THE PURPOSES OF AN ALBUM, FOR

A Series or a Set of Portraits,
A Series or a Set of Landscapes,
A Series or a Set of Photographs of any kind,

MAY BE NEATLY AND CHEAPLY BOUND IN THESE COVERS.

They are made with expanding backs, so that from six to twenty-four pictures may be inserted in one cover. The pictures are mounted in the usual way, and then strips of linen, or strong paper, of the proper width, are pasted on one edge, by which the picture is inserted and held in place in the cover by a paper fastener. Fig. 1 represents the cover, with the perforations in the back, through which the spreading clasps of the paper fastener bind the whole together. These are so easily inserted or removed, that pictures are readily put in or taken out at any time. Fig. 2 represents the picture, with the guard pasted on ready for insertion. The arrangement is simple, and we are sure will be readily comprehended. For binding together views of your town or city, or portraits of celebrities, they are very neat

The following is a list of sizes and prices, without cards:

For Photograp	h.				Per hundred.					
Card Siz	e.					\$1.50				\$10.00
Cabinet										
EXTRA HEAVY	cov	ER	s.							
5-8 Size	, .					4.50		,		33.00
4-4 "						6.00		į.		40.00
8-10 "						8.00				56.50
11-14 "						9.00				65.00

Larger or special sizes made to order. Furnished with card board at best rates. Samples mailed at dozen price. Send for some.

BENERMAN & WILSON, Photo. Publishers, 116 North Seventh Street, Philadelphia.

JAMES F. MAGEE & CO.

MANUFACTURERS OF

PURE

PHOTOGRAPHIC CHEMICALS,

No. 108 North Fifth Street.

PHILADELPHIA

Stock Dealers only Supplied.

THE ZENTMAYER LENS,

FOR VIEWS AND COPYING.

These Lenses possess pre-eminently, the following qualities:

Width of visual angle, ranging from 80° to 90°; depth of focus; extreme sharpness over the whole field; true perspective; freedom from all distortion in copying; portability and cheapness.

Each mounting is provided with a revolving Diaphragm, containing the stops of the different combinations for which they are designed. The larger ones are provided with an internal shutter for making and closing the exposure.

1	No.	1,	21/2	inch	focus,	3	x	3	plate,		\$20	00	No.	1	and	l No	. 2	combined,					\$33	00
	"	2.	31	"	+6	4	x	5			25	00	"	2	"		3	"	•	•	•	•	40	00
	"	3	54		**	61	×	84	۱، در		30	00	"	3	"		4	4.6					55	
	"	1	0 3			10	_	10		•	49	00	1	4			5	**					75	
					44																		110	
					**																		48	
	66	6.	18	66	4.6	20	x	24	٠٠ إ		90	00	66	3,	4,	and	5,	6.6					88	00

No. 3, with large mounting to combine with No. 4 and No. 5, \$35.

No. 1 and No. 2, specially adapted for Stereoscopic Views, are furnished in matched pairs. No. 1 and No. 2, single, not to combine with other sizes, \$36 a pair.

Lenses and mountings to form all six combinations, from 2½ to 18 inches, \$173.

Zentmayer's Stereoscopic outfits, including a pair of No. 2 Lenses 4 x 7 box, 7 x 10 India Rubber Bath and Dipper, Tripod, Printing Frames, and outside box, \$60.

JOSEPH ZENTMAYER, Manufacturer,

147 South Fourth Street, Philadelphia.

BENJ. FRENCH & CO.,

319 Washington St., Boston,

IMPORTERS AND SOLE AGENTS FOR THE CELEBRATED

Voigtlander & Son AND Parlot LEWSES,

NEW STEREOSCOPIC LENSES.

New Stereoscopic Tube and Lens, made expressly for us, marked with our name (imitation Dallmeyer), with rack and pinion, central stops, for portraits or views. Will work in or out of doors. Also, for instantaneous pictures. Four inch focus, **price per pair**, **§21.00.** By taking out back lens, and using only front lens in place of back, you get six inch focus. The great and increasing demand for all these lenses, is sure guarantee that they are the best. Read the following

Testimonials.

"I have tried the Mammoth Voigtlander you sent me, and I consider it the best large instrument I have ever seen, and I have tried those made by other makers, Dallmeyer's included, and they do not compare with the Voigtlander. All my baby pictures were made with half-size Voigtlander lenses."—J. LANDY, 208 W. Fourth St., Cincinnati, Feb. 25, 1874.

"The Voigtlander lenses have always been favorites with me. My first experience, in the days of daguerrectype, was with one, since which I have owned and tried many of the different sizes and never saw one but was an excellent instrument. Lately again trying some for my own use and for a friend, I found them to be superior to other eminent makers, particularly in the large sizes."—W. J. Baker, Buffalo, N. Y.

"Twenty-four years ago I bought and commenced using my first Voigtlander lens. It was a good one. Since then I have owned and used a good many of the same brand, of various sizes. They were all and always good. Some of the larger sizes that I have recently bought seem to me hetter than any I have ever had or seen before."—J. F. RYDER, Cleveland, Ohio, Dec. 18, 1872.

"About a year ago I bought a Voigtlander & Son No. 34-4 size lens. Said instrument gives me great satisfaction, being very quick, at the same time has great depth of focus."—E. G. MAINE, Columbus, Miss.

"Have never seen anything equal to the Voigtlander & Son Lens. The No. 5, Ex. 4-4 is the best instrument I ever used. I cannot keep house without it."—D. B. VICKERY, Haver-hill, Mass.

"The pair of imitation Dallmeyer Stereoscopic Lenses you sent we are very much pleased with; they work finely."—GOODRIDGE BROS., East Saginaw, Mich.

"After a trial of your imitation Dallmeyer in the field with those of the Dallmeyer Rapid Rectilinear, side by side, I can say that for general views I like yours as well, for some objects far better, on account of their short focal length."—D. H. Cross, Mosher's Gal., Chicago.

New Catalogue of Prices Just Issued, to be had on Application.

WILSON'S

Lantern Journeys

By EDWARD L. WILSON,

Editor of the "Philadelphia Photographer."

This work will be found entertaining by all who like to read about the beautiful places and things of this world.

The contents are divided into six "Journeys," each one including a visit to 100 places, making 600 in all, as follows:

- JOURNEY A-Havre, Paris, Versailles, Rouen, Fontainebleau, and Switzerland.
- JOURNEY B—Compiegne, Brussels, Aix la Chapelle, Cologne, Up and Down the Rhine, Potsdam, Berlin, Dresden, Vienna, the Vienna Exposition, the Semmering Pass, Saxony, Munich, and Southwest Germany.
- JOURNEY C—Italy—Lake Maggiore and Como, Milan, Verona, Venice, Florence, Pisa, Rome, Naples, Pompeii, the Ascent of Vesuvius, Puteoli, and the Italian Art Galleries.
- JOURNEY D-Holland, Denmark, Norway, Sweden, Russia, and Spain.
- JOURNEY E-Egypt, Palestine, Syria, Turkey, Greece, and India.
- JOURNEY F-England, Scotland, and the United States of America.

It has been carefully prepared, and will be found amusing, very entertaining and instructive.

It contains 218 pages, Cloth bound, Gilt. Price, \$2.

BENERMAN & WILSON,

Photo. Publishers, Philadelphia, Penna.





GILBERT & BAGON, LVLLUI PUDIC LIDEARYILAGELPHIA.

Philadelphia Photographer.

Vol. XIII.

JULY, 1876.

No. 151.

Entered according to Act of Congress, in the year 1876,

BY BENERMAN & WILSON,
In the office of the Librarian of Congress, at Washington, D. C.

MATTERS OF THE



As we are to have a Convention in August, we feel the necessity of keeping the matter constantly before our readers, and giving them all the information possible. The dues to the Association are \$4.00 per year for employers and \$2.00 for employes. All members should look to their account, by conferring with Albert Moore, Treasurer, 828 Wood Street, Philadelphia, and try to pay up at once, so that funds may be in hand to defray the Convention expenses.

Now is the time for those who wish to become members, and have a part in this grand Centennial gathering, to send their names, with the entrance fee of \$5 00 to Edward L Wilson, Permanent Secretary, 116 North Seventh Street, Philadelphia. Life membership, with no dues to pay, \$25.00. Let us have an advance all along the line, and a grand gathering in the Centennial grounds on the 15th of August.

Think the matter up now, and determine to come; you will regree it as long as you live if you do not. Such opportunities as this come few and far between.

The National Photographic Association—What has it Accomplished?

WE have heard various opinions expressed as to the probable benefit the National Association has been to the fraternity. In the estimation of some it has been only a source of expense, without any adequate return; photographers would have been just as well, or better, off without it; the main thing it accomplished was the glorification of a few individuals who managed to control it in their own interests, while the poor photographers had to foot the bills and received no benefit. This view of the matter is popular with a few, and doubtless had much to do with the recent decline in National Photographic Association stock among those who were not over-enthusiastic in its support.

But is this a consistent and reasonable view to take of it? Has it not performed a work that is higher, broader, and nobler than any considerations of personal interest, or individual advantage or favoritism? A work that has shown itself in so many ways, and the fruit of which has been enjoyed so generally by photographers everywhere, as to preclude the possibility that any interest but that of the whole could have been served to any extent that would justify the charges which have been made, without a proper knowledge of facts, and

to which some degree of credence has been given by some of the members.

When the first convention met in Boston, seven years ago, nearly all the photographers throughout the country were entire strangers to each other. No man felt that he had any claim upon another; there was no bond of union, no brotherhood, no sympathy, but rather a feeling of distrust between the members of the craft, that made them, in many cases, shun rather than fraternize with each other. Photographers had become the victims of all sorts of persecutions; process venders flourished in every city and town throughout the country; patent-rights men had things all their own way, till in their extremity photographers felt like crying out to each other for relief. They began to see that their greatest enemies were not they of the same calling, but grasping speculators outside, who had no sympathy with them, but whose only object was to extort from them all they could of their hard-earned substance. They began to feel that they had a common interest; that, notwithstanding the jealousies and exclusiveness that existed among them, when one was in danger all were in danger; when one suffered all suffered, and that the converse of this was also true, viz., that the prosperity of one, or any number, tended to contribute to the prosperity of the whole.

How much were photographers in those days like our revolutionary fathers a hundred years ago, when in their colonial condition they were persecuted and oppressed? Scattered over a great extent of territory, with but little knowledge of each other, they were without organization, without leadership, without strength, power, or influence; till the resistance of a few made it appear that resistance was possible, and a common suffering soon drew them together to take counsel in a common cause, which resulted in a bond of union, from which has grown our great republic, and by which was made possible this Centennial year which we now celebrate.

Thus it was, to some extent, with photographers; they were scattered, were without organization, without means of resistance, except as individuals, and were con-

sequently the victims of schemers and speculators of every description.

The Stamp nuisance, like the Stamp Act of the Revolution, and the Bromide Patent, like the Tax on Tea, touched too sensibly the vital interests of the fraternity, and as did our fathers in their extremity, so they turned instinctively to each other for counsel, for strength, and for a union of all their forces that could be brought to bear in their behalf.

The result was the organization of the National Photographic Association of the United States of America, which held its first annual convention and exhibition in Boston on the first day of June, 1869. The photographers who met on that occasion were most of them strangers to each other; some were known by reputation, while others had never before been heard of by many present; but here they were brought face to face, the prominent and the obscure, into intimate brotherly relations, each feeling that all were his friends, and all feeling happy in their new relations with each other.

But the most important feature of this Convention was the exhibition of photographs brought together by members from various parts of the country. No such exhibition had ever been seen before. The different sections of the country had never had an opportunity to compare notes on any such scale as this. Each photographer had worked in his own way, producing work according to his ability or conception of what a photograph should be, with but little opportunity to learn the ways of others, or to study the productions of those who were qualified to teach.

At this time the then magnificent pictures by Adam Salomon, of Paris, and the wonderful "Berlin Heads," by Loescher & Petsch, had become sufficiently known to create an intense longing for something better than any here had yet been able to produce; so that, when the collection in Horticultural Hall, in Boston, was submitted to their inspection, the members of the young Association were thirsting for knowledge, their minds were open to the reception of all that was good; all jealousy, all prejudice was thrown aside; all work

was studied on its merits, and the good qualities were discussed with an appreciation that has seldom been equalled. As we said, enough had been known of the work of foreign artists, at this time, to satisfy our own photographers that they were far behind the best that our art was capable of producing. They examined carefully and critically; they saw where they were deficient, and, becoming imbued with new thoughts, new hopes, new and nobler determinations, they were filled with an enthusiasm which has probably never had a parallel within the history of our art. If this one exhibition were all the National Photographic Association had ever held, its purpose would have been more than accomplished, and the work of its organization a grand success. This convention and exhibition gave new relations to the members; socially they were on a higher plane than they had ever been before, both in their intercourse with each other, and in the estimation of the public; professionally they had come to have longings, aspirations, and strivings for that which they saw still above them, which was sure to lift them out of their former condition of self-satisfaction and contentment in which they had so long kept "the even tenor of their way."

The next convention, held in Cleveland, demonstrated unmistakably how deeply the whole fraternity had been moved by the brief work of this young organization, not only by the abolition of the stamp nuisance and the defeat of the bromide patent, but by the development of the new possibilities of our art; and the enthusiasm with which photographers all over the country were studying each other's work, and trying with all the skill they could command for something better than they had yet attained to, showed how sensible they were to their deficiencies, and how much there was for them yet to learn.

The awakened interest was manifest at Cleveland by the large increase of numbers, and the evidences of well-directed efforts were seen in the greatly improved quality of the work. The inspirations of the Boston Exhibition had taken tangible form, and some of our home artists were following

close upon Adam Salomon and the "Berlin Heads." The grand results at Cleveland gave a still greater impulse to the good work; its influence was more widely felt, and improvement seemed the order of the day, even in the remotest sections of our country. Thus the good work has gone on, each successive exhibition, at St. Louis, Philadelphia, Buffalo, and Chicago, showing a constant upward movement towards a higher and still higher standard of excellence, till now, after nearly two years since an exhibition was held, we find displayed in Photographic Hall such a collection as the world has never before seen.

Much of the later effort and teaching of the National Photographic Association has been in the direction of art education and the improvement of the æsthetic qualities of the work; and now we see, in this Centennial Exhibition, the fruit of it more than ever before. No man can go into that grand gallery, and inspect the beautiful products of our art, and justly say that the truly artistic work there does not owe its excellencies in a great measure to the influences of the National Photographic Association. He who is familiar with or studies the history of the Association cannot but see the good work it has done. Its novelty, as a new thing, and the excitement among photographers at discovering their true position, have subsided, but is it any less useful, is it any less productive of good now than in the first years of its existence? If it has accomplished all that it appears to have done, and is still capable of doing much more for us, let us come up fairly, and manfully acknowledge the fact, and resolve to make an effort to sustain so good an institution. All who are in favor of doing this should resolve to attend the Convention in August, and by their presence, their voice, and influence, endeavor to make profitable for the future an Association that has done us so much good in the past.

A PRIZE TO AMERICAN PHOTOGRAPHERS.—At a recent exhibition held in Buenos Ayres, S. A., a gold medal was awarded to Messrs. Chute & Brooks, of Montevideo, photographers from Massachusetts, they being the only photographers receiving an award of any kind.

PHOTOGRAPHY IN THE GREAT EXHIBITION.

II.

In continuing our journey in Photographic Hall, we will rectify somewhat the order of things from which we departed last month. The screens are numbered in order, from west to east, commencing on the north side, but we, not regarding this, commenced where the exhibits seemed most complete, and numbered the screens as we proceeded. We now propose to take the proper numbers, and continue our review in the order commenced; first noticing some exhibits which were not in place or complete last month.

We notice a great improvement in the appearance of the hall within the past two weeks, and with the completion of the exhibits the number of visitors has greatly increased, so that now Photographic Hall appears not to be the least attractive feature of the Great Exhibition.

To resume our review, we find on the east side of Screen No. 14, which we made No. 1 last month, the exhibit of the Centennial Photographic Company, whose studio is on Belmont Avenue, within the exhibition grounds, consisting of views of the principal buildings, exteriors and interiors, and a number of private exhibits, the sizes being 8 x 10, 13 x 16, and 17 x 21. This work is all remarkably well done, and shows that the company employ none but the best artists in every department. We shall expect to see their collection improve as they get some of the more choice things of the Exhibition.

On the west of No. 14 is an additional frame, by Messrs. Broich & Kremer, of Milwankee. Their small cabinet figures in light drapery are very neat and tasty.

On the east of No. 13 is a collection of 8 x 10 and stereo views of the Yellowstone Region, published by Mr. William J. Marshall, Fitchburg, Mass.

On the outer end of Screen No. 13 are two frames of portraits and views, by Messrs. Keim & Bundy, Helena, Montana.

On the west of No. 13 we find added a small but choice collection, by Mr. Leon Van Loo, Cincinnati, Ohio. His "Mamie

at the Well" and "Young '76" are very fine, and may be studied with profit. His large groups are also well executed.

In this alcove is the exhibit of Mr. T. H. McAllister, 49 Nassau Street, New York, consisting of microscopes, optical apparatus, magic lanterns, etc.

Also, a case containing Messrs John Stock & Bros.'s improved folding camera stand, and samples of their cameras with improved instantaneous shutter.

On the inner end of No. 12 is an immense photographic copy of an engraving, entitled "The Past and Present of the United States." This is noticeable for its size, the print being about 20 x 30 inches. The micro-photographs on this space, noticed last month, were by Dr. Carl Seiler, of Philadelphia.

On the inner end of No. 11 we find added a frame of plain photographs, by Mr. Samuel Root, of Dubuque, Iowa.

This brings us to the east side of Screen No. 9, where we take up our review from last month. Here we find a number of 20 x 24 views, by Mr. David W. Butterfield, of Boston, consisting mostly of White Mountain and New Hampshire scenery. One Centennial picture is attractive in the collection, it being a fine view of Bunker Hill Monument. This is a difficult subject, and Mr. Butterfield has succeeded remarkably well.

On the same screen is the exhibit of Mr. George Rau, of Philadelphia, consisting of portraits, plain and colored.

Opposite this alcove, on the wall, is quite a remarkable collection, being no less than eighteen whole-plate daguerreotypes, taken twenty-five years ago, by Mr. J. H. Fitzgibbon, of St. Louis. Here are the readily recognized portraits of P. T. Barnum, Jenny Lind, Maggie Mitchell, Eliza Logan, and a number of other public characters.

In this wall-space is also the exhibit of Mr. A. Hesler. He contributes quite a variety of plain work, but the conspicuous part of it is the collection of babies, which demonstrates by expressions and attitudes that Mr. Hesler has had many a struggle with these infantile specimens of humanity. The pictures exhibited are the best evidence of his success.

Turning to the west of Screen No. 9 we come upon an exhibit which challenges the admiration of all. Standing before this collection, we heard a lady exclaim, "I never saw such beautiful photographs in all my life!" She but expressed the verdict of the thousands who daily visit Photographic Hall. The exhibit in question is that of Mr. F. Gutekunst, of 712 Arch Street, Philadelphia. We feel all the more proud of our art and of our own city when representative men like Mr. Gutckunst give us such illustrations of the high character of photographic art as is displayed in this collection. They are from cabinet to life-size, comprising plain photographs, water-colors, and life-size in cravon and water-colors. Two of these last are portraits of children, and are admirable in finish and truthfulness. The large crayons are beautiful examples of photographic enlargements. The two of Generals Hawley and Goshorn are sufficiently lifelike to convince all who know them of the excellence of the work. The large, plain photographs, on 17 x 19 plates, are probably not equalled by anything in the whole exhibition. The heads of Longfellow, General Goshorn, M. Hall Stanton, and others, are simply superb. To that of Longfellow, particularly, we would call the attention of those who are interested in the question of retouching or not retouching. Here is a magnificent head, with every hair-line and wrinkle intact. It has not been retouched at all! The one next to it, of an old gentleman, is an equally beautiful specimen All the plain photographs have been finished in glacé, and possess wonderful depth and brilliancy. A collection of cabinets, and some of the larger full-length figures, of ladies, are worked in water-colors on the surface of the glacé. The finish is exquisitely fine, and the effect most charmingly rich and beautiful. In addition to the portraiture, there are in this collection seven mammoth landscapes, each about 18 x 36 inches in size, of scenery on the Pennsylvania Railroad. Mr. Gutekunst enjoys a wide reputation, and may be referred to as an example of a successful business man; worthy of imitation by all who are aiming for a like position. He has always been an exhibitor wherever there was an oppor-

tunity to show his work, and we would not hesitate to say that much of the excellence of this fine exhibit was due to his efforts in this direction. As to the encouragement he has received, the numerous medals he displays bear the best testimony.

On the east of Screen No. 8 is another magnificent collection, it being that of Mr. J. H. Kent, of Rochester, N. Y. We not only stand before these pictures and admire, but are puzzled. Here are mammoth photographs, life-size heads, full-length figures three feet high, and smaller sizes in the same style, all having the appearance of plain photography, yet of such proportions as to suggest enlargement as the only possible means by which they could be made. But here we are met with the label, "Contact prints, direct negatives." The direct negative theory is strongly supported by all the prominent characteristics of contact work, such as the perfect texture of the photograph, there being no loss of middle tints, as is usually seen in enlargements; the want of focus in some parts, which is peculiar to large lenses, but which would not exist in an enlargement from a small negative. Then, again, a background in one is reversed in another, which indicates an enlargement from a small negative. Thus one theory offsets another, till wewell, we were about to give it up, but we are disposed to believe they are enlarged by the Edwards process. If any one has a better theory to suggest he is at liberty to advocate it. The work is all in Mr. Kent's usual excellent style, only excelling, if possible. There is a remarkably well-executed group of three figures which troubles us: not to know how it was made, but why it was made thus. The gentleman sits with his back to the two ladies, apparently reading something interesting, while the two principal figures of the picture have nothing to do; looking as if they were left out in the cold. The unity of the picture is lost.

On the wall opposite this alcove, and dividing the exhibit of Mr. Gutekunst, which occupies it, is the door leading to Mr. Carbutt's office, in which he has displayed a number of fine transparencies by the Woodbury process, which attract a good deal of attention.

At the other end of this alcove, in the central avenue, is the exhibit of Messrs. Lewis Pattberg & Bros., 709 Broadway, New York. Passepartouts, mats, and metal frames make up the contents of their case. They show some very pretty styles, neatly and tastefully gotten up.

On the inner end of Screen No. 8 is a more remarkable collection of daguerreotypes than the one previously noticed. It is entitled "The Progress of a New Art, from August, 1839, to May, 1876. Illustrated by M. A. Root."

In examining No. 1 of this collection, the visitor will find it like the "Old Man of the Mountain," up at Franconia; in a certain position only can it be seen; a little one way or the other and you lose it. From this dim shadow the examples illustrate the various improvements of the daguerreotype, the ambrotype, the argentotype, the photograph, down to the present time. The collection, in connection with the wonderful results of photography, as illustrated by the grand exhibition in Photographic Hall, is peculiarly interesting, and will entitle Mr. Root to the thanks of all who desire to study the rise and progress of our art.

On the outer end of Screen 8 is a frame of choice little gems, consisting of a number of very successful "Vitrified Enamels," by Mr. A. Marshall, of Boston. These are by far the best we have seen produced in this country, and will lose but little in comparison with the best made abroad. We congratulate Mr. Marshall on his success.

The west of Screen No. 8 brings us among the subjects that take the attention of the "Fancy." Here are horses, cows, dogs, and chickens, all photographed from life, and most of them speaking likenesses. This is the work of Messrs. Schreiber & Son, 818 Arch Street, Philadelphia, who make this a specialty, and probably have no superiors in this particular line. Any one having to to do such work as this will do well to study this exhibit carefully. A group of children with a donkey attached to a wagon, and "The Last Load," are among the most interesting of these pictures.

Turning to Screen 7, on the east side, we notice along the top a sign which reads: "Ryder (1876), Cleveland, O." All who

know Mr. Ryder, and are familiar with the excellent work he produces, might expect a fine display of plain photography, but we are not favored with a specimen. Ryder has given his attention to illustrating character and events, by a number of finely executed life-size crayons. Here is the "News Boy," true to life; "Civil Rights Bill," illustrated by a genuine specimen of the Southern contraband taking a snooze. "He Could Get Up and Dust," is another wide-awake "Darkey," apparently very happy, with a feather duster over his shoulder. Events are represented by a portrait of "Colonel A. S. Park, of Elyria, Ohio, who, in 1820 carried the mail from Erie, Pennsylvania, to Cleveland, Ohio, on horseback;" again by another portrait of "General George S. Bangs, who in 1875 inaugurated a means of earrying the mail over the same route, in fifty-ton lots, a mile per minute." In addition to these are his celebrated chromo "Yankee Doodle," and two plain lithographs illustrating the "Declaration of Independence," and our "Centennial Celebration."

On the inner end of Screen 7, is the exhibit of Mr. L. J. Marcy, consisting of sciopticons and lantern slides, plain and colored. The sciopticon is here shown adapted for oil or gas, which will demonstrate to any one interested the utility of this instrument. The outer end of Screen 7 contains two frames of cabinets by Rice Bros., Washington, D. C.; here is some very creditable work, which indicates a careful, painstaking artist.

The west side of Screen 7 contains another of the choice collections, it being that of Mr. L. G. Bigelow, of Detroit, Michigan. Most of our readers are somewhat familiar with Mr. Bigelow's work from the part he has had in our recent prize competitions. He exhibits sets of the prize pictures in the Promenade size, but even these, excellent as they are, can hardly compare with those of larger size. A number of 13 x 16 prints are not surpassed by anything in the hall. The opera box group of three ladies, is beautifully gotten up, as well as two or three single figures in the same size; but the masterpiece, in which Mr. Bigelow seems to have excelled himself, is a group

of two ladies standing before an easel, on which is the portrait of a child, which they appear to be studying, or perhaps, with maternal interest, admiring. The pose, expression, ease, and grace of these figures are admirable, while the lighting and perfect rendering of light drapery are of the highest order of excellence. If we were to express a word of criticism it would be that the two heavy pilasters in the background give the appearance of more solidity than would seem to be required by the feminine character of the subjects. But this is a small fault, and we feel that we can point with pride to Mr. Bigelow's exhibit, as a whole, being, as it is, the work of a young American artist, and commend it to the study of all photographers who are aiming for a high standard by which to be guided. It is but justice to say, in this connection, that Mr. Bigelow is his own artist in every part of the work, even to that of preparing his backgrounds.

Turning to the east side of Screen 6, we find an exhibit which in its arrangements, the richness of its appointments, and the taste displayed throughout, indicate real artistic feeling. It is by Mr. William Curtis Taylor, 914 Chestnut Street, Philadelphia. When we find artistic skill shown in the arrangement of an exhibit, we expect to find it also in the work, and here we are not disappointed. There are several lifesizes in pastel, water-color, and crayon, including portraits of Generals Hawley and Goshorn, besides a number of smaller specimens of cards, cabinets, and 8 x 10, some of them on porcelain, and most beautifully finished in water-colors; but Mr. Taylor, as a photographic artist, excels in his plain work, some of which, in genré composition, possess the highest order of merit. Those that especially attract our attention are 13 x 16 prints, and each has its story; it is not only a photograph, but a picture. The first of these is entitled "Criticism," and represents an opera-box scene, where two ladies and a gentleman are discussing the merits of the play. The positions, expressions, and arrangements of drapery are all excellent. The next is entitled "Checkmate," and shows a lady and gentleman engaged in the fascinating game of chess.

He, supposing his victory an easy one over a woman, is rather careless in his play, till suddenly a cloud comes over his brow, and with puzzled expression he contemplates the situation-he is "checkmated," while she looks calmly on with an expression of satisfaction at her triumph. The next is a group of two ladies; one appears to have just read a letter which conveys to her some disappointing news, while the other, pointing to her, says, "I told you so," and she may have added, "I knew he would deceive you." Another represents a family scene, a group of two ladies and a gentleman, who are discussing some recently taken photographs, and the usual question is asked: "Is it good?" There are others that we might notice individually, but we must pass on. The conception and execution of these pictures are admirable, and reflect the highest credit on Mr. Taylor's artistic skill. In addition to these is a frame containing portraits of all the members of the Centennial Commission, and another illustrating the "Centennial Portrait Gallery of the Representative Men of Philadelphia," which Mr. Taylor is getting up. Photographers will find much to study and profit by in this collection.

Opposite this alcove, on the wall, is the card mount exhibit of Messrs. A. M. Collins, Son & Co., 18 South Sixth Street, Philadelphia. These comprise all the sizes of ornamental mounts, from card size to 8 x 10, and embrace some very choice and rich designs. The goods of this house are so well known that they require no words of commendation to attest their excellence.

On the same wall are several specimens of crayon work by Mr. Aitkin, Artist, No. 7 South Sixteenth Street, Philadelphia.

On the west of No. 6 are the exhibits of Mr. D. H. Anderson, of Richmond, Va., who has a fine collection of plain photographs, which are very rich and deserving of attention as examples of portraiture; and Mr. A. N. Hardy, of Boston, whose plain photographs in cabinet, Promenade, and 13 x 16, display some fine effects in Mr. Hardy's usual neat and careful style. A crayon of a very attractive young lady is a beautiful example of work in this line.

On this screen, also, are two frames of

fine stereos by Mr. W. M. Chase, of Baltimore, Md.

On the east of Screen 5 is a collection of landscapes and architectural views by Mr. Thomas T. Sweeny, of Cleveland, Ohio. Mr. Sweeny is an outdoor worker of long experience, and gives us some fine illustrations of his proficiency. Also, on the same screen, a large and varied collection of cabinet size and stereoscopic views of American scenery, by George W. Thorne, 60 and 62 Nassau Street, New York.

On the wall opposite this alcove are a number of 16 x 20 views of the Yosemite Valley by Messrs. Thomas Houseworth & Co., Nos. 9 and 12 Montgomery Street, San Francisco

In the main avenue, opposite this alcove, is the exhibit of Mr. J. Haworth, 626 Arch Street, Philadelphia, consisting of a camera stand, samples of H. extra albumenized paper, photographic dishes, and Weston burnishers; these last being from six to twenty inches in size.

On the west of Screen 5 we find an imposing display by Messrs. R. Newell & Son, 626 Arch Street, Philadelphia, consisting of views and commercial photography. There are all sorts of wares reproduced; giving a good illustration of the uses to which photography is put. Mr. Newell exhibits photographs of many of the old revolutionary points in and about Philadelphia, which will be found interesting.

On the east of Screen No. 4, and on the wall opposite this alcove, is the exhibit of Messrs. Bradley & Rulofson, of San Francisco, Cal. There are a few portraits, but the principal part of their plain work consists of large views, mostly in the Yosemite Valley. These are fine examples of landscape work, from which something may be learned by those interested in this department. But the most attractive part of Messrs, Bradley & Rulofson's exhibit is comprised in the charming life-size picture of a little miss finished in pastel, and several crayons. The pastel is a most lovely picture, full of life and motion, while happiness is expressed in the doll and sunshade which she carries, as well as in the expression of the charming little subject. Of the crayons, the head of the old man strikes us as peculiarly effective. The wonderfully plastic effect, together with the admirable play of light and shade, make it a study that is a pleasure to dwell upon.

The outer end of Screen 4 contains some very pretty views in England and Wales, photographed by Mr. Ellerslie Wallace, an amateur, of Philadelphia.

Turning to the west of Screen 4 we find several separate exhibits. The first is a frame of porcelain miniatures, plain and colored, by W. A. Cox, 56 North Charles Street, Baltimore, Md. The next is a large frame containing a new style of picture, "photographed and finished by N. Weston's patent, San Francisco, Cal. My first exhibition." We do not know in just what the patent consists, but, if success depends upon any merit in these pictures, except novelty, we fear it is a poor investment.

Three crayons on this screen are the work of Mr. L. Edgar, 219 South Sixth Street, Philadelphia.

Further along is the exhibit of Mr. S. R. Stoddard, Glens Falls, N. Y. We have had occasion to notice Mr. Stoddard's work before, and all the good we have ever said of it is fully sustained by these pictures. They consist of sizes from stereo to 11 x 14. They are contained in frames, and in three large books; these last being particularly available for inspection and study. scenery is mostly that about Lake George and vicinity, is most artistically chosen and admirably executed. Part of the stereos are colored, and in their natural tints are especially attractive. Beyond this is an elaborate gilt frame, containing a fine series of stereoscopic views of the Yosemite Valley and Sierra Nevada region, by J. J. Reilly, of Stockton, Cal. Mr. Reilly is at home amid the grand scenery of the Sierras, and these views indicate training in both art and photography.

On the east of No. 3 is a grand collection, being no less than thirty-four 17 x 21 views of the "Yosemite and Pacific Coast, by Watkins, of San Francisco." Mr. Watkins is said to be one of the pioneers of photography in California. These are certainly a magnificent series of views, and Mr. Watkins deserves great credit for his skill and energy in contributing to this exhibition

so many of these truthful representations of scenes in that interesting part of our country.

In the central avenue, opposite this alcove, is the exhibit of Mr. James Cremer, 18 South Eighth Street, Philadelphia. This consists of a large collection of stereos, in which he is publisher and dealer, and a fine assortment of his "Metallic Adjustable Graphoscope." This is a most beautiful instrument, and from its readiness of adjustment, superior lenses, and elegant appearance, must soon become very popular.

On the west of Screen 3, and occupying one half, is the exhibit of Mr. R. S. De Lamater, Hartford, Conn. This consists in size from cards and stereos to 16 x 20. The work evinces care and neatness in every department. Both views and portraiture are alike well executed. The other half of this screen is occupied by Messrs. Waller & Schrader, view photographers, 35 and 37. Fulton Street, Brooklyn, N. Y. This consists mainly of architectural views in and about New York.

On the east of Screen No. 2 we find the immense display of Mr. Charles Bierstadt, Niagara Falls, N. Y. It consists entirely of stereoscopic views, including scenery in nearly every part of our own country, and a very complete series of views in Egypt and the Holy Land. These last were secured by Mr. Bierstadt by a personal journey to those countries for the purpose. The extent of Mr. Bierstadt's operations has hardly been equalled by any photographer in this country, and his success is shown by the profusion, variety, and excellence of this exhibit.

In this alcove is a case containing a pair of combination stereopticons, by Mr. J. J. Wilson, New York. These are very neatly gotten up, and finely finished, but look very like Prof. Morton's patterns.

The inner end of Screen No. 2 contains the exhibit of Mr. D. T. Burrell, Brockton, Mass. This consists of two frames of plain photographs, and another with his chart of photographic drapery.

On the west of Screen No. 2 is an attractive display by Messrs. Alman & Co., 172 Fifth Avenue, New York. This consists of finely finished life-size portraits in

crayon, pastel, and oil. The pastels of children are particularly happy in style and finish. His examples of plain photography are also good work.

The east side of Screen No. 1 is occupied with the exhibit of Messrs. Wenderoth & Co., 1328 Chestnut Street, Philadelphia. This is a very attractive collection, consisting, with the exception of a few choice cards, cabinets, and Promenades, entirely of finished work, in which the sizes run from cabinet to life-size.

We find here "colored glacés" and "oleographs," styles which seem to be peculiar to Mr. Wenderoth, with one exception in the glacés, which we notice elsewhere. Mr. Wenderoth is one of our best artists, is always foremost in introducing new styles, and the visitor will find much to study and admire in this beautiful collection.

On the wall opposite this alcove is a large exhibit of life-size crayons, 8 x 10, and cabinet heads of public men, by Mr. James T. Brady. This exhibit is interesting, more from the character it represents than any especial merit of the work. A life-size of a lady in pastel is the most effective picture in the collection.

Opposite this alcove, in the central avenue, is a case containing stereopticons, graphoscopes, megascopes, gas cylinders, etc., exhibited by Messrs. E. & H. T. Anthony & Co., 591 Broadway, New York.

Screen No. 1 and the opposite wall contain the extensive exhibit of Mr. William Kurtz, Madison Square, New York. In approaching this exhibit, in either the central or side avenue, the visitor's attention will be attracted by a mammoth portrait hung high up on the wall. These are two immense heads in crayon. They are most wonderfully executed, and are best seen at a distance of at least forty or fifty feet. Besides these, in crayon, are a number of life-sizes and half life-sizes, all possessing the same characteristics of excellence. A large oil portrait of ex-Governor Morgan occupies the centre of the screen, with crayons of Carl Schurz and John Cochran on either side. The wall exhibit contains, as a centre piece, an exquisitely beautiful lifesize portrait of a child in pastel. This is a

picture that one can dwell upon, and see revealed beauty after beauty. The flesh, the drapery, the foliage, the sky, and even the poodle, are so true to life that it seems as if the sweet little miss must turn and pluck more of the flowers that blossom near her. Two other portraits, in pastel, comprise the colored work in this collection. There are besides a good display of card, eabinet, and 4-4 heads, all in Mr. Kurtz's peculiar style, and possessing that softness and delicacy of handling which has made his work so popular. The touch of the skilled artist is evident in this exhibit, and in whatever department a man may work, he cannot fail to be benefited by a thorough inspection of alcove No. 1.

This brings us to the north end of the hall, where we must leave the fascinating things that meet the eye on every hand till next month. Photographic Hall grows upon us the more we see of it. It will bear visiting and revisiting, for all the good pictures there, like good people, improve upon acquaintance. We cannot but rejoice at the circumstances that rendered Photographic Hall a necessity, and also at the generous and patriotic spirit manifested by a few photographers, and others interested in our art, that made its realization possible.

Under the efficient superintendence of Mr. John Carbutt, it has now become a favorite resort for visitors, who daily throng its cool, refreshing alcoves.

We are indebted to Mr. Carbutt for many courtesies which facilitated the work of this review.

ORGANIZATION.

BY E. K. HOUGH.

THERE are encouraging signs that members of the National Photographic Association will have positive and well-considered opinions on several subjects of importance to the craft, but heretofore not much discussed. For the past twenty years photographers generally have been fully occupied with business, each working out in practice his own ideas according to ability, while supplying the active demand everywhere for our productions.

There is now, everywhere, a lull in the

activity, giving each time to pause and look about, to take a broader survey than the narrow results of his own mere personal concerns; to consider somewhat the general benefit and progress.

There is opportunity for cultivating that esprit du corps that takes noble pride in the success common to all, in addition to that pardonable, though more selfish pride, each for his own success.

There will be occasion for expression of thoughts generated during the past busy years, but held in check for want of time to develop them.

There will be opinions and conclusions as varied as the men and the experience from which they are derived; but if honestly conceived and frankly expressed, they will all add to the common fund of wisdom from which must be drawn the principles to guide and control us through the next period of active progress.

It would seem that the watchword for this Centennial session will be organization, and if wisely planned and generally accepted, it is in organization that the best hopes of immediate improvement in photography rest. But effective organization cannot be generally instituted and successfully maintained without labor and sacrifice from some for the good of all.

If the majority come, each selfishly bent on his own aggrandizement, regardless of the common welfare, nothing worthy will be done.

Let us hope there will be few of those would-be artistic aristocrats, who look down upon their less skilful or less fortunate brethren, and like the Pharisees of old to "publicans and sinners," say in acts if not in words; "Stand aside; I am better than thou."

But if those natural leaders whom ability and good fortune have combined to place in prominent positions before the photographic world, acknowledge their success as imposing upon them corresponding duties in our Republic of art, where the wisest and the best may find honor in serving all; if they acknowledge those obligations, permanent and friendly organizations may be effected, with promise of immense benefit to the art and all its followers.

Those who recognize the immutable truth that everywhere men are judged by the average character of the class to which they belong—as each man in a regiment is credited with the character for cowardice or bravery which his regiment bears—will strive indirectly, each for his own elevation, by each striving to elevate the entire body.

Therefore we may justly hope that the meeting this memorial year, at a time and place so stimulating to all our pride of country and love of independence, may, by exciting unselfish emulation and honest pride of class, produce results of lasting benefit to photography through well-considered and widespread organization.

NEW YORK, June 17th, 1876.

FRENCH CORRESPONDENCE.

June Meeting of the Photographic Society of France—The Exhibition of 1878—Fatty Ink Printing—An Improvement by Mons. Léon Vidal—The Radiometer Experiments on the Fabrication of Nitrate of Silver Free from Nitrite—A New Apparatus to Indicate the Quantity of Acids in a Solution—Mons. Léon Vidal's Communication.

THE Photographic Society of France held its monthly meeting on Friday evening last, the 2d inst. The chair was filled by Monsieur Peligot, the newly elected President.

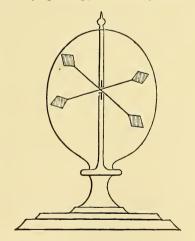
A discussion took place as to the classification of the photographic art in the next Universal Exhibition. It is now a certainty that in the year 1878 a magnificent exhibition will be opened in Paris, surpassing in splendor all that has been attempted previously, to which magnificent temple or palace of industrial art all the world will be invited by the young republic of France, desiring to win peaceful laurels in that friendly struggle for fame.

Fatty ink printing once more took the honors of the evening. Splendid proofs were exhibited by the Autotype Company of London, by a Russian gentleman as well as by Mons. Léon Vidal; this latter gentleman has lately made a great improvement in that branch of photography. Collotypic printers can now employ the surface of the

bichromized gelatin, not only to print helio proofs, but as a lithographic stone. Monsieur Vidal has discovered a means whereby a signature or an explanation of the print, or even a frame can be added in fine etching, the whole of which can be printed off at one stroke with the photographic print; moreover, he, Monsieur Vidal, tells us that retouching can now be done easily, as even different shades can be obtained by his system.

In the hopes that it will be of service to some of my American readers I will give Monsieur Vidal's communication in extenso.

The members of the Photographic Society were very much interested by the presentation of the "radiometer" of Mr. Crookes. Although this pretty little instrument has been the subject of much controversy in England and Germany, still it is very little known in France even at the present day. The radiometer presented to the Society was of the form and size of a large swan's egg, and made of blown glass. In the centre is a pedestal of the same substance, and rising half-way up the egg. Another pedestal de-



scends from the top and meets the lower one to within about an eighth of an inch. The two ends of those pedestals are hollow for about a quarter of an inch; the pedestals are employed, the lower one to support, the upper one to hold a light steel axis, to which is attached a kind of wind-mill sail, made of four pieces of very thin mica, a quarter of an inch square, and of exactly

the same weight; one side of the mica is painted black and the other is silvered. This kind of four-sail mill is placed in perfeet equilibrium between the two pedestals or pillars, a vacuum is then obtained, and, what is extraordinary, if the apparatus be placed in sunlight, it will revolve with astounding rapidity; if put in the shade, it will turn slowly; if in the dark, it will remain stationary. It might be supposed that the great stumbling-block to photographers was now removed, and that the actinic power of light could now be measured with precision, and that they would now be enabled to expose their models the exact length of time at any hour of the day without making a single error. Alas! it was soon discovered that not only light but heat had a great influence upon this instrument. Nevertheless, I am of opinion that we ought not to go to an excess in an opposite direction and east it away as useless, because it does not fill up the conditions of superiority with which we were pleased at first to endow it in our enthusiasm; with a little patience, common sense, and a few experiments, the instrument even as it is would render great service to photographers. A cross, star, or other sign could be painted on one of its sails, and the instrument be fixed in a corner of the studio. Now if a certain number of observations were made daily of the number of rotations per minute at a certain hour with the temperature at that moment, together with the time required for the exposure of the wet plate employed to make the portrait of the sitter, if all this were noted down carefully for a short time, the value of the instrument would soon become apparent, a table could then be drawn up for the time of exposure required at a certain temperature, the instrument making so many revolutions per minute.

Much has been said about the presence of nitrite of silver in the nitrate bath and of the havoc it often makes on the surface of the iodized collodion film. In consequence I determined to make a trial as to the best means to be employed to convert an alloy of silver and copper into pure nitrate of silver, free from nitrite. Having a certain quantity of plate a little the worse for wear, I

seized the occasion to convert it into nitrate by two or three processes.

First Experiment. - Twelve ounces of plate were dissolved in pure nitric acid containing half its weight of distilled water. The evaporation was continued to dryness without any erystallization; the product was then fused until the nitrate of copper was completely decomposed. Distilled water was then added; the solution when filtered gave no trace whatever of copper, but it was found to contain a great quantity of nitrite of silver in solution. In order to transform this nitrite into nitrate, the solution was evaporated (naturally after it had been filtered, and the copper salt separated from it) nearly to dryness, and an ounce of pure nitrie acid was added. The product was then brought to a state of fusion, but only for an instant; distilled water was added, and the solution was left to crystallize. A bath made of this salt works admirably; no trace of nitrite can be discovered.

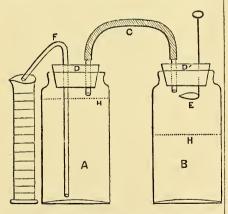
Second Experiment.—Ten ounces of plate were dissolved in nitric acid; a tenth part of the solution was poured into a bottle, and a solution of pure potash poured in upon it little by little until the brown-black precipitate of oxide ceased to fall. This was now well washed to free it from the excess of potash as well as from the nitrate of potash which had been formed. During these manipulations the remaining nine-tenths of the solution had been evaporated to dryness; when tested, it was found free from acid. Distilled water was now added, and the liquid raised to boiling-point. The solution containing the silver and copper oxide was now added little by little until all the nitrate of copper was decomposed, and the oxide of copper precipitated in forming nitrate of silver.

Third Experiment.—Ten ounces of plate were dissolved in nitric acid, and then precipitated into chloride; the product was well washed to free it from the nitrate of copper, and then dried; for ten ounces of chloride, seven ounces of chalk or whiting, and one-quarter of an ounce of pulverized charcoal were added. This mixture was put into a crucible, and then introduced into a gas furnace. In an hour a beautiful ingot of pure silver was ready to be dissolved in

nitric acid. The product was then evaporated to dryness; distilled water was now added; proper acidity was given by the addition of a drop or two of pure nitric acid; the solution was then left to crystallize.

This last method, although the most expensive of the three, gave the best results.

All persons who employ great silverbaths, either for wet or dry plate work, and who acidulate such solutions with acetic acid, are at a loss to know the quantity of acid evaporated, when they are obliged to subject their bath to that operation to drive out the excess of alcohol and ether with which the bath is impregnated, or to throw down organic matter. I have contrived a very simple apparatus, which performs this operation in a very satisfactory manner. A and B are two bottles containing about a pint of water each; these two bottles are connected together by means of an indiarubber tube, the ends of which are fixed upon two pieces of glass tubing, going through the two india-rubber corks, D D'. The cork D' is perforated, in order to let a piece of silver wire move up and down in the bottle with ease, to the end of which is riveted a small silver spoon, E. Through the cork of the other bottle, A, another tube is passed; this tube descends to the bottom, and is curved at its top; see F. In order to set this apparatus at work, fill the two bottles with water up to the dotted lines, H H. Take 120 minims of a new stock silver



solution containing a known quantity of acetic acid, pour it into the bottle, B, then take a few grains of bicarbonate of soda, roll

it in a piece of paper, and place it in the spoon, E; now push the corks firmly into the necks of the bottles; then put a graduated vase under the point of curved tube, F. Now, if the silver rod be pushed down into the liquid, the paper will burst, and an emission of carbonic acid gas will take place; this will flow along tube C, and press upon the surface of the water in bottle A. The water will then begin to rise and flow out of the curved tube, F. When this ceases, the bottle, B, must be slightly shaken until no more water will flow out. The exact quantity of this must be written down. The contents of the bottle, B, must be thrown into the silver-waste tray, the bottle well rinsed, and filled again with water up to the dotted lines. The same with bottle A. Now take exactly 120 minims of the silver solution which has been boiled, and operate in the same manner. If only half the quantity. of water as that driven out by the first operation is obtained, it is a proof that the solution lost half its acetic acid by evaporation. The quantity necessary to bring it up to its proper standard can be easily calculated and added.

Improvement in Fatty Ink Printing from Gelatin by Mons. Léon Vidal, communicated to the French Society of Photography.—
"At the moment when the magnificent exhibition of photography at Paris proves beyond doubt that a very great progress has been accomplished in collotypic printing, anything, ever so little as it may be for the amelioration of that process, must be acceptable. This is why I come forward, believing that I shall render service to many in describing a simple means of retouching gelatin films from which photographic proofs are to be printed in fatty ink.

"Those who occupy themselves with fatty ink printing, from bichromated gelatin, employ for that purpose patent plate-glass, and as soon as the proof is obtained on its surface they rarely attempt to modify it, so that if the image require a frame a second operation, from a lithographic stone, is necessary in order to obtain it.

"The same operation is necessary if a signature, description, etc., is to be printed at the bottom of the page.

"It is very often found necessary to re-.

touch the gelatin film in certain parts, where details are absent, and in others where white spots are visible.

"I have succeeded in this by the employment of a chemical agent having the same peculiarity as light in the insolubilization of that organic matter in presence of a chromic salt.

"I obtain this result with gallo-tannic acid, and even common ink containing a small quantity of tannin will do as well. After isolation, and even after the necessary washing, any design can be drawn upon the film: a signature or anything else can be written and then printed off without trouble.

"The surface of the glass is so flat and even that the most delicate design can be drawn upon it. This will be found of great value for the decoration of proofs with their frames, which can be drawn by hand around

"Typographic transfers can be obtained as easily as upon stone by employing a thin ink containing tannin.

"To sum up, this process enables the operator to draw from a bichromated gelatin film either a view, portrait, photographic proof, or a linear design, signature, etc.; in fact all that can be obtained from a lithographic stone, and what is more, a photographic proof and a lithographic drawing can be obtained at the same time.

"Different tints and shades can be obtained by employing tannin in different degrees of concentration. This will give from a light gray to a jet black."

I had the pleasure to see Mons. Vidal at work yesterday, at the photographic exhibition, where he was giving a public demonstration. The new system worked to the satisfaction of all present.

> E. STEBBING, Professor.

3 PLACE BREDA, June 6th, 1876.

Art and Chemistry in Photography.

It is not many years since the chemistry of our art was the all-absorbing topic; formulæ and processes were published almost without number; the subject in various forms was discussed in local and national associations; whenever a good picture was shown, the questions most likely to be asked were: How strong did you use your bath? What kind of collodion was this made with? Whose cotton do you use? Was the negative developed with plain or double sulphate of iron? How strong is your printing-bath; do you work it acid or alkaline? What paper do you use? How is your toning bath made? etc., etc. Of course, the agitation of this subject drew a great deal of attention to it, and photographers everywhere vied with each other in producing the best possible chemical effects, till at length there seemed to be but little room for improvement. The most perfect negatives were produced; no spots, streaks or stains; the lights and shadows were rendered with a fidelity that was surprising; there were the deepest blacks and the purest whites, with all the intermediate tints which are to be found in the most perfect and delicate gradations. Occasionally, a picture was produced which captivated everybody, but the artist could not at will produce another equally meritorious, notwithstanding, in its chemical effects, it was equally successful. What was the matter? No one seemed exactly to know, till some of the pictures by Adam Salomon and other European artists, together with the negatives from which they were made, were shown here. It was observed that many of these negatives were thin, somewhat foggy, and full of pinholes! How was this? The merit of these pictures surely did not consist in the finest chemical effects, or the most careful manipulation; not at all! It consisted of something more subtle and intangible than silver-baths, iodides, and bromides, or the dexterous mechanisms by which wonderful effects are produced. Their chief merit was that they were artistic. The chemistry of this work would not compare with that of many of our own photographers, and yet wherever it was shown, it was admired and praised by all. It was soon discovered that there was a necessary element claimed by photography, and yet but imperfectly understood, which was far above its chemistry; this element was art. Chemistry was useful as an auxiliary in giving expression to art, but that a mere chemical manipulator could sustain the name of artist, by producing works of art, became a fallacy and a delusion.

This truth having been seen and accepted by the progressive photographers of our country, a new field was open to them, new possibilities nerved them to effort in a new direction, the demand for books on art soon showed how the current was running; many of our best writers began to take up the subjeet; papers were read and discussed at the conventions; we saw the necessities of the hour, and published four series of papers on the subject, viz.: "Art Principles Applicable to Photography," "Position and Composition," " Landscape Lessons," and "Art Studies for All." Besides these we have supplied a number of works on art by different authors, such as "Art Culture," being selections from the works of John Ruskin; "The Study of Art," by Mr. A. Dwight; "The Old Masters and their Pictures," by Sarah Tyler; "Thoughts about Art," by Philip Gilbert Hamerton, and some others. During the past year we have reproduced, by photo-lithography, Burnet's work entitled Hints on Composition. All these have doubtless produced some good results. The work done in the way of diffusing a knowledge of the principles of art, has been small compared with the great field that lies open still, where but little seed has been sown. But from the few grains scattered here and there we already see an abundant fruitage, which assures us that ere long a harvest, profuse and rich, will reward us all who have made efforts in this direction.

Would any be convinced of this art improvement in photography, let him visit Photographic Hall, and examine carefully the elegant productions there. There we have art and chemistry combined. Handin-hand they have been so used as to produce the grandest exhibition under the name of photography that has ever been seen.

Are the chemical effects superior? We think we have seen just as good produced ten years ago; perhaps not so generally good; but among a large number of operators, photo-chemistry was just as well understood then as now; almost precisely the same formulæ were used, and the same effects produced. But how is it in the department of art? Ah, here is progress! while

chemistry has stood still, art has gone on with rapid strides, till to-day we need not be ashamed of the comparison between works of art, real ideal creations, full of sentiment, full of life, and full of beauty, in Photographic Hall, and those in her more imposing neighboring, the great Memorial Hall. Let him who finds any responsive thrill in his being to the beautiful in nature or art, study the exhibits of Rocher, Landy, Gutekunst, Taylor, Bigelow, Wenderoth, Kurtz, and many others, and we believe his verdict will be that photography is capable of producing works of art in the highest sense of the word.

We have drawn these comparisons between art and chemistry in photography, because we believe there are many who yet talk formulæ, as if that was the aim and end of photography; who do not yet seem to comprehend that there is something higher and better beyond and above all this, to which they must attain before they can begin to share all the good there is within their reach in the practice of the photographie art. We want to impress upon all that there is no stopping-place. There is no grand station on the summit of the hill we elimb, for it is ever up, up, up! There are always heights above us yet to explore, always something to work for, something to reach after.

A knowledge of chemistry is one of the best qualifications a photographer can have, and we know there are too many that are sadly deficient in this respect, but let no enthusiast for the filter or the precipitate rest with the thought that this is all of photography; when he has mastered this he has but commenced to succeed, and the longest and most active life, though reaching the highest pinnacle of fame, must, when the eye grows dim, and the nerves relax, leave to others conquest after conquest which will reach on and on through all the generations that shall follow.

Let no one, however, be discouraged at this, for the world's progress has been by live progressive men doing their duty, and being satisfied with having added their mite to the common stock, which summed up comprises the grand storehouse of the world's knowledge.

The Waterfalls of Pike County, Pa.

BY JOHN C. BROWNE.

For many years I have promised myself the pleasure of a photographic trip through Pike County, Penna., but for some reason there appeared to be a fatality against my ever accomplishing the expedition; each season of spring brought with it duties to be performed at home which could not be postponed. This year, however, I was able to accept the invitation of Mr. Jesse A. Graves, of the Delaware Water Gap, and after a hurried gathering together of the necessary apparatus, for an excursion of two weeks, we met by appointment at the Water Gap. I was armed with a complete outfit for wet work, embracing a 5 x 8 stereo box, and the endless assortment of chemicals, etc., that are required to make such a trip a success. At the Water Gap we carefully arranged our two separate outfits, laying aside many chemicals we would otherwise have taken in duplicate. A suitable buckboard was provided that carried all our packages, including ourselves and assistant "Eddie," who proved himself to be all that could be desired in that important capacity. Some of your readers may not be familiar with the name applied to our conveyance. A buckboard is a wagon admirably adapted to a rough country. Two or three long, narrow ash planks are securely fastened at each end to a pair of wheels, the planks being riveted to crosspieces so that the spring of all the boards is alike. A front and back seat carry the party, the load being arranged in the centre. With a pair of good horses we were able to accomplish long journeys over rough roads with little wear and tear to ourselves or chemicals. Our first stop was at Dingman's Ferry, where we deposited much of our extra baggage, this place being in the centre of our operations. Next morning we drove to the upper Dingman's Creek, wishing to make a picture of the Factory Falls, so named from a large stone cotton mill being located there many years ago. The speculation was not a success, and it has long been deserted by everything but snakes, of which we saw several fine specimens gracefully hanging from the window-frames enjoying the warmth of the sun. The charm of this particular spot is best appreciated during low water; our visit was not timed to see it to the best advantage, as the creek was full, and much of the beauty of the water lost in the photograph. A short distance down the stream may be found the Fulmer Fall, charming in location, but a fearfully rough place down which to carry the accessories of wet photography. In the judgment of the writer this fall is one of the finest in the surrounding region, and may be described as a fall of forty feet, tumbling into a semicircular basin of dark-colored shale; then a succession of smaller falls, until the dark deep pool at the bottom receives the struggling mass of water, and discharges it quietly down a gentle descent until it reaches the lower falls a mile below.

Perhaps a description of our tents may be instructive. Mr. Graves has already photographed nine times through Pike County, and has made probably in all his visits upwards of one thousand negatives, embracing everything of interest in the county. For many years he used a tripod, cone-shaped, dark-tent, preparing and developing his plates with the ground as his table. In this small space plates from stereoscopic to 11 x 14 were successfully prepared, but the labor was very severe.

For several years Mr. Graves has discarded this form of portable dark-room, and adopted a box mounted upon a tripod, having four upright posts held in place by crosspieces, and protected from light by a black covering, into which the upper part of the body of the operator is introduced. Although somewhat heavier than the first described, this tent gave great satisfaction.

My own contrivance for a like purpose was the same that I have used for the past fifteen years, and has been repeatedly described in print. It is simply a very light tripod with a cone-shaped covering of yellow and black material, using the ground as a table. While I am very enthusiastic in favor of my old tent for ordinary requirements, I am free to confess that it was not satisfactory when making pictures among the Pike County waterfalls. My first objection is that there are very few comparatively level places four feet square upon

The Centennial Photographic Diary.

The Centenni	al Photographic	OUR
Diary.		LATEST
66 66	66	воок
	46	IS
46 66	66	All and the second
44 64	66	NOW
.6 .6	46	READY!
A Guide to P	hotography.	Every Photographer will find it
		useful, especially if he visits Phi-
66	44	ladelphia.
46	44	
66	66	It is embellished with a fine en-
46	۶،	
66		graving of
		PHOTOGRAPHIC HALL,
A Guide to th	ne Centennial.	and a beautifully colored
46	46	MAP OF PHILADELPHIA,
	66	which contains engravings of eight
44	4.	of the principal
46	66	CENTENNIAL BUILDINGS.
A Memorandu	ım Book.	The BLANK LEAVES with
66	66	
		which the printed pages are inter-
.6		spersed are a most excellent feature
**		of the work.

Send for it early, as only a limited number have been printed, and the demand will be lively before the Convention.

See next page.

PHOTOGRAPHIC 3



31

32

83

84

84

88

96

96

97



Local Photographic Societies, .

Items of Photographic History,

Directions for Exhibitors,

N. P. A. Convention, .

Map of Philadelphia,

Important to Visitors,

Admission Tickets for the Public. .

CO

CONTENTS									
Rates of Postage,									
Places of Interest in Philadelphia,									
Railroad Depots and Ticket Offices, 6									
Calendar, with Photographic Hints,									

anasana.
4
0/336230
A TOWNSON
1000
LU
0

Photographic Processes,														36
The Negative Bath,														40
The Developer,								. '						44
Collodion,														47
Varnishes,														47
Retouching Varnish,														48
Printing and Toning,														51
Mr. Marston's Process,														51
Mr. Hearn's Process,														52
Collodio-Chloride for Por	cel	ain	P	rint	ing	ğ.	В	7 C	has	5. E	lva	ans	ξ,	59
Emulsion Process,														60
Photographic Hints, .														63
Executive Officers of the	υ	nit	eđ	St	tate	es	Ce	nte	enn	ial	C	on	1-	
mission,														68
The Centennial Buildings	i,													71
Photographic Hall,														79

2	
A.	A.
(1)	(8)
	₩.



Regulations for Admission to the Centennial Ground.

Admission Tickets for Exhibitors and Employees, .



FOR SALE BENERMAN & WILSON, PHOTOGRAPHIC BY

116 NORTH SEVENTH STREET, PHILADELPHIA.

which such a tent can be set up; and secondly, the rocks are very sharp, as I have proved to my cost a dozen times, cutting through clothes and epidermis with a reckless disregard to appearance and comfort.

We made quite a number of negatives of Fulmer Fall and its immediate surroundings, giving from two to eight minutes' exposure, with small stops of Ross's wideangle and Dallmeyer's rapid rectilinear lenses. Before the day's work was entirely finished rain began to fall, driving us to shelter, as was the case almost every day that we were out in the field.

Next morning found our party at Dingman's High Falls. This place is so well known as scarcely to require description. The water falling a distance of over one hundred feet, not in an unbroken pitch, but rushing down at a very acute angle, makes it at high water a most serious operation to reproduce upon a sensitive plate, the dark surrounding rocks, which together with the excessive high-light from the falling water and blinding spray, places it in my estimation the severest test upon chemicals that I have ever attempted. It is a grand mass of tumbling water, overhanging moss-covered rocks, and foreground of ferns and rhododendrons, but the subject is better suited for the pencil of the artist, who can at home make up his picture with less of the stern black and white reality of the photograph, substituting instead color, as an exchange for any shortcoming in failing to represent every object that the lens portrayed.

The results here were unsatisfactory to me, and many failures upon my part were no doubt prevented by the appearance of heavy clouds accompanied by rain.

Next in order comes the "Soap Trough," which is a short distance below the High Falls. We unpacked our tents in a drizzling rain, and with exposures of six minutes, made several good negatives of this curious cascade. The water rushes rapidly down an almost perpendicular declivity from a very considerable elevation, passing through a narrow split or stratum of rock scarcely two feet wide, giving the appearance of a soap trough in reality. That evening we spent at Dingman's High Falls Hotel, kept by Dr. Fulmer, who gave our party all the

facilities we could ask, and did not grumble over stained floors or chemical odors.

Our next work was at the Sawkill Falls, near Milford, Pennsylvania. I have no hesitation in saying that this fall impressed me more favorably than any other in this region. The Sawkill is quite a large creek, and makes two leaps to form what is known as the Sawkill Falls; the upper very insignificant, the lower a grand unbroken leap of over seventy feet. One characteristic feature of this fall is that the water runs from the top in thin sheets, and allows the rocks, covered with mosses and lichens, behind the fall to be observed through the water, as if the rocks were covered with a delicate tracery of lace, giving a most charming effect to the picture. Within a radius of five hundred feet from this point can be found enough material to occupy many days of uninterrupted work, and should satisfy the most fastidious taste with the endless beauty and variety of the scenery.

Wide-angle lenses are absolutely necessary when photographing the Sawkill Falls, and it was a constant source of regret to me that I was not provided with a better supply.

I was able upon this trip to see the practical use that Mr. Graves makes of his arrangement to obtain two stereo negatives, 5 x 8, or a single picture upon an 8 x 10 His box is a home-made contrivance, having a bellows somewhat similar to the Kinnear or conical form, with a movable front, so that two separate exposures can be given upon each plate. As a practical illustration of the day's work at Sawkill, while I was making eight negatives, Mr. Graves made twenty-two; all of the double exposures being good. This plan, however, is only admissible when exposures are given under three or four minutes' duration. Over that length of time will generally dry a portion of the plate, and render the second exposure useless. While photographing this fall, I made an experiment to determine which developer would give the most satisfactory results, ammonio-sulphate of iron or ordinary iron. In my hands the former had given the best results upon well-lighted subjects, and I felt anxious to make another trial. This experiment proved as conclusive to my mind as the former. With ammonio-sulphate of iron I succeeded in obtaining the best effects of rocks and water, although at a somewhat greater length of exposure.

Again I have to record that rain stopped our work, and we hurried back to Milford, there to remain closely housed all the next day, earnestly wishing that the weather probabilities would show a change other than "cloudy and occasional rains over the eastern portion of the Middle States."

The following morning was clear and cool, with no evidence of the rain except additional water in the creeks, which was unfavorable for our work. After a pleasant drive we approached the celebrated Raymondskill Falls. The upper and highest fall is very fine; but the lower leap, with its charming companion named the Bridal Veil, was to me all-absorbing. In proof of which, I confess to wading the cold, slippery, waist-deep stream ten times, with no chance of dry clothes until evening. At a former visit to these falls during the month of August, I was much impressed with the beauty and size of the ferns growing in great profusion close to the stream, and hoped that 1 might be able to obtain some to assist in making a picture, but unfortunately the season was not far enough advanced for their appearance. The time of exposure varied from one minute to six at Raymondskill. At one moment the falls were in a blaze of light, then having a dull diffused illumination, sometimes changing three or four times during the exposure.

Again, our return to Dingman's was heralded by a storm, obliging us to stay a portion of the next day at the hotel, which we spent in getting our overworked chemicals in order for the Bushkill Fails.

Pike County is justly celebrated for its excellent river road, extending from Port Jervis to Bushkill, and there is really no excuse for its being out of repair, as it is only necessary to scrape the finely divided shale from the sides to the middle of the road-bed, which soon becomes by use hard and smooth as a floor.

Arriving at Bushkill Falls, we found that the constant rain-storms had raised the stream so much that it was spoiled for our purpose. The dark-vellow water stained by the hemlock swamps poured with tremendous power over the precipitous cliff, causing the spray to fly in all directions, covering both lenses and boxes with moisture. This was not the only difficulty. The sky was filled with dark patches of clouds flying in rapid succession, obscuring the sun's rays for a few seconds, then allowing them to pour down with intense brightness; in short, it was almost impossible to obtain the proper exposure, and my best efforts failed to reward me with a first-class negative to preserve as a remembrance of my first experience at this wild ravine.

Journeying slowly through a beautiful country is always delightful, and it has seldom been my fortune to enjoy a trip more than my excursion through Pike County. The river road from Bushkill to the Water Gap is particularly pleasing. The picturesque farms of Pennsylvania sloping to the Delaware River, dotted here and there with apple, pear, eherry, and dogwood trees in full blossom, with a background of the Blue Ridge Mountains in New Jersey, presented a continuous stretch of charming scenery not easily to be forgotten.

In due course of time we arrived safe at the Kittatinny House, but feeling very tired and awfully dilapidated. A day's rest repaired all damages, and a week was pleasantly spent at the Water Gap, photographing its well-known points of interest.

It may properly be asked why I was not provided with dry plates, and, by so doing, have relieved myself from a large portion of the labor of transporting a wet outfit through these ravines. My answer is, that I distrusted all dry plates when obliged to subject them to such a severe test as the dimly lighted ravines to be met with in this locality.

I do not say that dry plates would have failed entirely, but I question what length of exposure would have been required with dry plates, when I was undertiming with wet exposures of six, eight, and ten minutes.

It was the intention of one of the members of the Photographic Society of Philadelphia, a most successful manipulator of the washed emulsion dry process, to have. joined our party, and I sincerely regret that he was prevented from accomplishing his purpose, as an opportunity would have occurred of making a practical test of the respective merits of wet versus dry plates under particularly trying circumstances.

In conclusion, let me say of Mr. Graves that his negatives made during this trip were first-class in chemical workmanship, and the best selected that I have ever seen of the difficult subjects in Pike County.

I am satisfied that if the labor of procuring photographs of out-of-the way places of interest was sufficiently understood by the public, that the efforts of the photographic artist would be better appreciated.

A photographic trip through this country is not complete without mention being made of the romantic Adams's Brook, Pond Run Falls, Decker's Creek, Saw Creek, and the wild surroundings of Shohola Falls. All of these localities are well worthy of a visit; but as this paper is already far too much extended, no attempt will be made at further description.

SOCIETY GOSSIP.

STATED meeting held Thursday, June 1st, 1876, the President in the chair.

The minutes of the last regular meeting and also of a special outdoor meeting held Wednesday, May 24th, were read and approved.

Messrs. John G. Hood and John Struthers were elected to membership.

A proposition for a second outdoor meeting was made by Mr. Barrington. On motion, a committee, with power to act in relation to the said proposition, was appointed by the Chair, with Mr. Barrington as President.

The pictures made by the members who had participated in the excursion on May 24th were now exhibited. The results may be considered as follows: In point of chemical effects producing first-class negatives, although the exposures were long, the Taupenot process, in the hands of Mr. Hewitt, was admirable. In quickness of exposures and good chemical results, the washed emulsion process, as worked by Mr. Young, was very good. The gum gallic process was almost as good in chemical results, with

rather a gain in time over the Taupenot. A large number of plates was exposed by the members, but mention is made only of the different processes giving the best results. With the exception of the President and Messrs. Leaming and Hacker, who used wet plates, all the remaining members used various dry processes. Three instantaneous exposures were made with a guillotine drop by the President, using a pair of Jamin lenses, 43-inch back focus, full opening (13 inches) of the front lens. Exposure 1 th of a second. The results were reasonably good, considering the unfavorable circumstances-a moving boat, etc. Negatives of groups, etc., were also made by the wet workers, but nothing of especial interest obtained.

The following named members of the Society composed the outdoor party.

Messrs. Graff, Browne, Young, Dixon, Seiler, Hacker, Wallace, Wilcocks, McCollin, Corlies, Vaux, Leaming, Barrington, Hewitt, Joseph W. Bates, besides invited guests.

The President introduced to the Society Dr. Vogel, of Berlin. After a short address, made by the Doctor, it was unanimously resolved, on motion of the Secretary, that all the privileges of membership of the Society be offered to Dr. Vogel during his stay in Philadelphia.

Mr. Dixon presented, on behalf of William H. Jackson, Esq., of Washington, a very fine mounted view of the Gunnison River, Colorado, made on a 20 x 24 wet plate. A vote of thanks was tendered to Mr. Jackson; also to Mr. Young, for a handsome table stereoscope which he donated to the Society.

Mr. Carbutt exhibited a negative made with a 6-inch Dallmeyer rapid rectilinear lens, which had had the front and back combinations brought nearer together by one-half the length of the mounting, according to a suggestion made by the editor of the British Journal of Photography. The effect of this was to shorten the focus about half an inch, and to very much increase the size of field and angle of view. The lens thus treated had been made to cover an 8 x 10 plate, with, however, considerable loss of marginal definition.

A proposition was made that the Society continue its regular meetings during the summer of this year. A motion to adjourn until the first Thursday in July was accordingly made and carried.

ELLERSLIE WALLACE, JR., Recording Secretary.

PENNSYLVANIA PHOTOGRAPHIC Association.—Philadelphia, June 13th, 1876.

—The stated meeting of the Pennsylvania Photographic Association was held at the gallery of Messrs. Mahan & Keller. President H. S. Keller in the chair.

Minutes of last meeting read and approved.

A vote of thanks was tendered to Messrs. Wilson, Hood & Co., for a handsome bound copy of their catalogue and price list for 1875, presented to the Association.

The evening was taken up by the members giving their views in regard to the photographic exhibition at the Centennial; not having had sufficient time to examine thoroughly the photographs, it was proposed that the members should study the exhibition, and endeavor to profit by what they saw, and at subsequent meetings give their views in regard to the same, there being photographs on exhibition that all may learn something from.

Mr. Clemons gave some ideas in regard to porcelain printing by the albamen process, and proposed to make that the subject for the next meeting.

On motion, adjourned.

CHARLES EVANS,

814 Chestnut Street.

Secretary.

Boston Photographic Society.—The regular monthly meeting of the Society was held June 2d, 1876, at the studio of J. W. Black.

The President, Mr. Benjamin French, called the meeting to order, and the Secretary read the minutes of the last meeting, which were approved.

The President then invited to the chair Vice-President Rowell, who presided during the evening.

The first business in order was in reference to the disposal of a stereo box, donated to the Society by the American Optical Co.; and tubes, by Benjamin French & Co., for

the best improvement or invention in aid of photography, made by any member of the Society.

It was voted that the subject be referred to the committee previously chosen, consisting of Messrs. Black, Rowell, Southworth, and Marshall, and that they report their decision upon all claims admitted at the next regular meeting. All claims to be presented to the committee, prior to that time, in writing.

It was voted that the subject of a reference of the claims to judges should be deferred until some future meeting.

Some 17 x 21 pictures were exhibited by Messrs. T. R. Burnham and A. N. Hardy, and were viewed with interest by the members present.

The business meeting was then adjourned until the first Friday evening in October, and the members present were entertained by a very interesting stereopticon exhibition, by Mr. Black, from French and Italian slides, furnished by the President, Mr. Benjamin French, which were well described by his son, Mr. William French.

A. N. HARDY, Secretary.

Photographic Society of Philadelphia.

THE second outdoor meeting of the Society was held Wednesday, May 24th, 1876.

Agreeably to a resolution passed at the last regular meeting, a tugboat had been engaged by the committee, and the party, sixteen in number, having assembled at No. 420 S. Delaware Avenue at 9 o'clock A.M., left the dock shortly after. A run up the river to Kensington was first made, and on turning to come down a short stop opposite one of the United States frigates was called for by some of the members who were working wet collodion. A small cabin in the after part of the boat had been converted into a dark-room, which afforded ample opportunity to those who had brought outfits for wet work. A second stop was made at the south end of Windmill Island, opposite South Street, where several "bits" of shipping, etc., were secured by the dryplate workers. A third stop was made opposite the Brazilian man-of-war. Both

wet and dry plates were in requisition here. The party then proceeded without further stopping to the Lazaretto, during which time lunch was served, and the various forms of boxes, lenses, etc., examined and criticized. On arrival at the Lazaretto, the President of the Society grouped the members near the landing and secured a good wet negative of the party, which then separated, some working dry in the Quarantine grounds, and others making quick wet studies on the river. Soon after leaving the Lazaretto dinner was served. wards 4 P.M. a landing was made at Marcus Hook, Pa., where some pretty studies were secured by the dry-plate men. After leaving Marcus Hook the party ran a few miles down the river, when the suggestion was made that, as the tide was ebbing and the hour already late, a turn had better be made. This was accordingly done, and a most delightful sail up the river, occupying some three hours or more, was enjoyed by the members, who took this opportunity of comparing notes on the day's work, and interchanging ideas in general upon that art in which they were all so heartily interested, and to which they owed the pleasure of this and many other field days.

Before reaching dock at Philadelphia a meeting of the Society was called, the President presiding. On motion, it was resolved that every gentleman who had exposed plates during the trip should so far as possible present prints from the same to the portfolio of the Society at the next meeting, together with data as to process used, lens, light, etc. It was also resolved that the Sccretary prepare a written report to be read at the next meeting. Also, that the thanks of the Society be tendered to the committee who had arranged the excursion, and to Mr. Leaming, who had very kindly offered the hospitalities of his country seat to the Society on the occasion of its next outdoor meeting.

On motion, adjourned.

ELLERSLIE WALLACE, JR., Recording Secretary.

ENTREKIN'S ENAMELLERS in Photographic Hall are handsome machines, and worth examining.

Photographic Sketches from the Centennial Grounds.

BY DR. H. VOGEL.

THE great International Exhibition is an accomplished fact. All branches of industry from every part of the world have participated in the great Centennial festival of America, and the photographers have not been backward. Worthy of the importance of our art, we see for the first time a Photographic Hall constructed, which contains everything belonging to photography, not pictures only, but also chemicals, apparatus, and accessories. It is the first time photography makes its appearance selfdependent-separated from art, separated from industry. It would have been desirable if this separation could have been extended over the jury also, so that photography, with everything belonging, had formed a separate group; but, unfortunately, this was not possible. The exhibition of the Photographic Hall has been parcelled. The pictures are given to the criticism of the jury of art; the chemicals are placed in the group of chemistry; the papers belong to the group of paper industry, and the apparatus and lenses to that of the instruments of precision.

All the photographers have not found a place in the Photographic Hall; the photographs from Australia, Egypt, India, Italy, and Switzerland are exhibited in the Main Building, and we have trouble to find them; in the division of Italy and Switzerland this is entirely impossible without the assistance of the commissioners. The Australian exhibition contains many things of interest and instruction; the photographs are not the very best, but the exhibition represents a picture of life in Australia which in many instances seems to be similar with that in America, only that there the plastic art, as yet, is far, far in the background. We observe in the Australian division some technic photographical works which almost startle and puzzle us-sharp, mammoth pieces, which, notwithstanding several technical defects, deserve to be acknowledged. One of them is the panorama of the city of Sidney, in New South Wales, thirty-one feet in length, composed of twenty-two single pieces, which present an

excellent view of the wonderfully situated city. Opposite this mammoth work there are two other prints from large plates, five by three feet, perhaps the largest negatives existing; and this giant work is the production of an amateur, Mr. Holtermann. He was the lucky finder of a large lump of quartz, containing gold to the amount of \$60,000, and we see his portrait in the middle of the compartment, with his treasure beside him. Another picture shows us the gold in large lumps.

We wish, for the interest of our art, that the photographers of Australia may make several such lucky findings, and then we hope they will work with the same passion for our art as Mr. Holtermann, and spend a small part of their gold for chloride of gold, for the purpose of the production of photographs.

Next to Holtermann there is another German, Mr. Lindt, who with his land-scape photographs gains honor; they are certainly the best from Australia, and some of them show indeed real artistic apprehension. As generally known, Osborne's process of photo-lithography, which at present has a perfect success in America, first saw the light in Australia. It seems as if Mr. Osborne's example is not without some good fruits, for Mr. Sharkey, in Sidney, has sent some very good photo-lithographs.

Of portrait photographers, I can name only Newman, in Sidney; his exhibits are in the Photographic Hall. Besides him, there are in the Main Building many other portrait photographers represented, but without any essentially first-class work. In portrait photography there is certainly much to be done yet in Australia before it will take the high position which America The moon-photogat present occupies. raphy, which is taken in Melbourne by means of the renowned large telescope, cannot stand a comparison with Rutherfurd's moon-photography. Of more interest are a number (about three hundred) of colored landscape photographs, by R. Dantree, at Queensland, a man of science, whose pictures tell us more than the best book of geography about the new province in the northeast part of Australia, which is rich in gold, lead, copper, tin, and coal (of which

giant lumps are exhibited). Besides there are many other photographs in the same department; they show us the most ugly faces of the Australian natives in life-size. Another province of Australia is represented, namely, New Zealand. mighty alpine land, with real Switzerland scenery, rises this wonderful island above the surface of the ocean. Hot springs flow out of the earth, and flourishing cities are springing up. Of all these wonders photography gives an interesting picture. We see the ice-mountains of the Highland, the geysers, and surprising is the similarity of these photographs with those of the Yellowstone River in Colorado, which Mr. Marshall has exhibited in Photographic Hall. We almost imagine we see the same scenery.

From Australia to Japan is on the map only one step, and the same it is in the Main There we find innumerable vases, bronzes, lac-work, all very fine and valuable; but Japanese photographs we find only in Photographic Hall. Baron von Stillfried has sent a very fine collection of landscapes and scenes of Japanese life, which found its place partly in the Austrian department. China has sent no photographs. The Chinamen are fearing perhaps the sharp critic of America. When the German Venus expedition arrived at Chefoo, in China, they met there a Chinese photographer, who took to his heels as soon as he noticed the European colleagues. As afterwards found out, the man had no lens or apparatus at all, but only a number of old negatives in size of carte-de-visite, all portraits of Chinese men and women, which he had bought of a colleague in Hong Kong. When any customer came to him, and ordered his picture, he picked out of the number of negatives one that had the most resemblance to the face of the customer, and this was not difficult, for one Chinese face is just as ugly as the other. He made only prints of the negatives, and they found a ready sale. As I am informed, in Hong Kong, there is done at present a good deal in negative retouching; thereby the skill is shown less on the faces, but so much the more on the wigs or pigtails, which are made longer and thicker by means of negative retouching.

From India there arrived only some interesting photographs of architecture, which were sent by the government. Egypt is represented by three very able photographers, whose exhibits are in the Main Building; especially ought to be named Beato and Schoefft. The latter has taken excellent gems of Egyptian life. We feel a kind of longing to see the wonderful land of the Pyramids when we look at the pictures.

The photographs from Switzerland are also in the Main Building. There are fine pieces amongst them; but it is a pity, the photographs can hardly be found. I name at first Taeschler Bros., in St. Fiden, who have exhibited fine portraits, the backgrounds of which are retouched in the negatives. They take the portrait on plain background, and cover the back of the plate with thin lac. On this they draw whatever they think to be proper, trees, walls, sea, clouds, etc., which are then copied in the portraits, and produce a good effect. Of course, this kind of retouching work is troublesome, and it requires a skilful apprehension. Besides Taeschler, I mention, as worthy of notice, Ganz, at Zurich, and Charnaud, at Geneva. The latter has exhibited a number of very good landscape photographs, amongst them panorama pictures, which are very seldom seen at exhibitions. From Switzerland we count eight exhibitors; but from France only a little more than half the number. I can find no reason for the slight participation of France, for the relations of France and America are intimate enough. The exhibition by Goupil in the Main Building is grand. There we find beautiful relief-prints, and also specimens of the new heliogravures, though not all of them are beautiful. Braun, at Dornach, has sent nothing; but we find exhibits of Walery and Liebert, at Paris, in Photographic Hall; both firms keep up a counterbalance between them; they are working nearly in the same style, which is taken from Adam Salomon's. Liebert has sent carbon prints, which at present, in Europe, are coming more and more in fashion, and deserve also the attention of the American photographers.

I cannot forbear observing that there are among the exhibited photographs from

all countries many old ones from the Vienna Exhibition. Of special interest are Vidal's photochromic pictures; but they are not by any means colored photographs taken from nature; the color is afterwards put on by means of a chromo-lithographic or heliographic process. Vidal is making at first a pigment print, which is overprinted with colors. This process produces pictures which do not look better than overpainted photographs. Should it be cheap enough, which I doubt, judging by their advertisements, it is possibly of some worth for the reproduction of colored carpet patterns, colored jars, and perhaps paintings. But the exhibited portraits cannot claim a general approbation.

It would have been desirable if Vidal had sent with the reproduction of an oil painting the original also; then we would be able to judge better about the process.

More in the next number.

LECTURE ON LENSES.

BY JOSEPH ZENTMAYER.

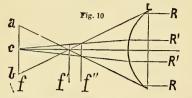
(Continued from page 177.)

WE come now to a somewhat more complicated and difficult part of the subject, the aberrations of lenses and the modes of their correction. So far we have supposed the lens as very small, in relation to its focal length, and that with such a lens all rays coming from one point are refracted by the lens in one point again; but in practical optics such is not the case, as lenses of very large aperture are often required in modern optical instruments, and the rays coming from one point are no longer collected in one point, and this optical defect occasions the different aberrations. For over a century the correction of these aberrations employed our most eminent mathematicians, as Euler, Fraunhofer, Herschel, Fresnel, Littrow, Gauss, Airy, Petzval, and others.

The most important of these aberrations are spherical aberration, chromatic aberration, curvature of field, distortion and astigmation.

The marginal parallel rays R R (Fig. 10), passing through a convex lens, L, cross the axis at f', nearer to the lens than the

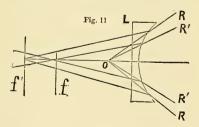
more central ones R' R', which cross at f. This is a result of the spherical surface of



the lens, and is called spherical aberra-

If we present a convex short focus lens to solar rays and produce a sharp image of the sun on a piece of white paper, we will find that the image at f, which is the one made by the central rays (and therefore is the sharpest), is surrounded by a halo, a b, which is what we call the lateral spherical aberration. This halo is, as you see, produced by the shorter marginal rays, R R, after crossing the axis, diverging, and is also called the circle of aberration. f'f, the distance of the difference of the central and marginal rays, constitutes the longitudinal aberration. The least spherical aberration is where the two cones intersect each other between f' and f. This aberration is called positive.

If converging rays R R and R' R' (Fig. 11), which we suppose would be collected in the point o, fall on a concave lens, the



marginal rays R R are refracted stronger than the more central ones R' R', consequently R R will cross the axis farther from the lens, at f', than the more central ones, R' R', which cross the axis at f. In this case the spherical aberration is of the opposite character, and is called negative aberration. It is evident, from the foregoing, that spherical aberration varies with the aperture of the lens and the material of which the lens is made. Therefore, the larger a lens is in proportion to its focal

length, the greater its spherical aberration. A lens of an aperture of, say 50th of its focal length, has no perceptible spherical aberration. The longitudinal spherical aberration increases as the square of the diameter of its aperture, and inversely, as its focal length, while the lateral aberration increases as the cube of its aperture, and inversely, as the square of its focal length.

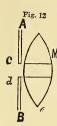
Thus, if we have two lenses of the same curvature, made of the same material, but the one of twice the aperture of the other, the longitudinal aberration of the larger one is four times as great, and the lateral or circle of aberration is eight times as great as that of the smaller one.

If two lenses have the same aperture, but the focal length of the one is twice as long as that of the other, the longer one has only one-half the longitudinal and one-fourth the lateral aberration. As a lens made of a denser medium, say of heavy flint glass or diamond, requires, for the same focal length a longer radius of curvature than one made of crown glass, it follows that its spherical aberration is less.

The single lens of ordinary glass, having an index of refraction of 1.5, has the form of lost spherical aberration when it is a crossed convex lens with the surfaces of different radii, the proportions of the radii depending on the index of refraction of the material of which the lens is made. For ordinary glass, index 1.5, the radii are as 1 to 6, the shortest curve towards parallel rays. The best form for a lens made of flint glass, index 1.6, is the plano-convex, and for diamond, is a meniscus, of which the convex radius is to the concave as 2 to 5, for radii of curvature.

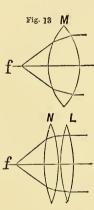
We see that in lenses of wide apertures the spherical aberration may be considerable enough to interfere with the sharpness of the image, especially if, as in a telescope and microscope, the image with all its errors is magnified by an eyepiece. Let us now see what means we have to reduce, correct, or destroy the spherical aberration. The most simple way is by the use of a diaphragm. A diaphragm is a non-transparent plate, commonly made of metal,

perforated in the centre. A B is such a diaphragm; c d, the aperture of it. If this



diaphragm is placed in contact with the lens, it is nearly equal to reducing the lens to the size of the aperture of the diaphragm, and as we have seen before, the spherical aberration is con iderably reduced, but the light also. If the loss of light is of little consequence, this mode of reducing spheri-

cal aberration may be adopted with advantage. Another way of reducing the spherical aberration is by adopting, for a given aperture and focal length, two or more lenses of the same aperture, and the same equivalent focus of the single lens. We have seen before, that two lenses of the same aperture, but their focal length as 1 to 2 to each other, the longer one has only one-fourth of the spherical aberration of the shorter one. Lens M (Fig. 13) has its

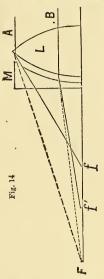


focus at f. The lenses L and N are of the same aperture as M. but each has twice the focal length of the lens M: therefore each has only one-fourth the spherical aberration of M; but L and N together have the same focal length as M, and as their apertures are alike, the combination L N has only one-half the lateral spherical aber-

ration of the lens M. But by this mode of correcting, it is not possible to destroy the spherical aberration completely, although it is stated in some works on optics, that a combination of two convergent lenses was calculated by Sir John Herschel, and said to be free of spherical aberration. This, however, is a mistake, which Herschel himself has rectified in his memoirs.

We now come to the most important method of correcting spherical aberration, that is, by a second lens of opposite character. Suppose we want to correct the spherical aberration of the positive lens, L (Fig.

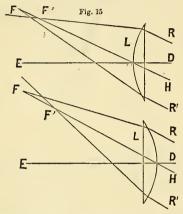
14) along its axis. ff' is the longitudinal spherical aberration of the rays AB, parallel to the axis A, at the margin of the



lens, and B near the centre of the lens L. If we combine this lens with a convergent negative lens M, it is not difficult to see, by what we learned before, that the lens M has very little power to change the direction of the ray bf', and bring it, say to F, but it will greatly change the course of A f, so as to bring it also to F, since the prismatic form is greater at the margin than at the centre. Of course, the form of the lens must be suited to the material of which it is made; for our present purpose, both of the lenses may be made of the same glass, but it is much better if the lens M is made of a denser glass, as we soon shall see, that the same lens may be used to correct the chromatic aberration also. By this method the spherical aberration can not only be corrected, but the marginal rays can be made to cross the axis farther from the lens than the central ones; in this case the lens is called over-corrected, while if not enough corrected, it is called under-corrected. So far we have considered the aberration of rays parallel with the axis. But magic lanterns, photographic and microscopic lenses include angles from 40° to 175°, and the foregoing is only applicable to a narrow angle near the centre of the lens. If

a lens, corrected, parallel to its axis, for spherical aberration, is struck obliquely by parallel rays, but the longitudinal aberration is different for two diameters, and is greatest in the plane laid through the axis of the lens and the radiating point; therefore, the circle of aberration becomes the more elongated, as the more obliquely and marginally the light strikes the lens, until it terminates in a point at their extreme margin, which is known as the coma.

L is a plano-convex lens; HF, an axis through the optical centre, making a con-



siderable angle with the axis D E. R and R' are parallel marginal rays. The ray Rwill cut the axis at F', and R' farther off at F, and therefore the image of a luminous point is no more a point, but appears elongated, and in the extreme has the shape of a coma, which in this case is directed downwards. If we reverse the lens, as in the next figure, so that the incident rays fall on the convex side, the coma is directed outwards. We see we have here, by reversing the lens, opposite comas; and by such lenses of opposite character properly combined, at the right distance, and furthermore, by the use of a diaphragm at the proper place, the spherical aberration for oblique rays can be reduced to a small amount.

(To be continued.)

PROFESSOR HERMANN VOGEL.

WE are happy to announce the safe arrival on our shores, on the 28th of May, of our good-friend, Dr. Vogel, of Berlin, who was

appointed a juror from Germany, and is the only photographic juror appointed from any country. It is with a great deal of satisfaction that we welcome him again to America, and we believe this welcome will be seconded by photographers in all parts of our country; especially will those who had the pleasure of meeting him on his first visit feel disposed to give him, if not a true' German, a true American greeting.

The learned and practical character of Professor Vogel's writings, both in our magazine and in his books which we have published, have brought him more prominently before the photographers of this country than any other leader in the art on the other side of the Atlantic. We rejoice that this is so, not wholly on personal grounds, but because we recognize in him a representative man. One of the most active, yet thorough experimenters, he takes the lead of all others, and represents the true progress of the science and chemistry of photography. Sound in theory and reliable in practice, his positions have usually been found impregnable, and we have all come to feel a confidence in him, and to love him as a leader on whom we may implicitly relv.

Whether pursuing his studies at Berlin, or obeying the call of his own or another government, to journey far away, through dangers and privations, beneath the torrid skies of Egypt and India, to promote the astronomical and historical interests of science, by observing the eclipse of the sun; the transit of Venus, or photographing ancient ruins, we have always followed him with the deepest interest and solicitude, sympathizing with his misfortunes and rejoicing at his successes. Since his former visit to us, six years ago, he has been honored with a professorship in the Royal Polytechnical Academy at Berlin, an honor richly deserved, and which he wears with the highest credit to himself, as well as to the institution to which he belongs.

As juror to the Great Exhibition we know his duties will be arduous, and he may not be able to give the attention to photography we know he would like to give, or as we wish he might. But the satisfaction of having him here with us is all the same,

and we are assured that his heart and interest are with the art he loves so well.

We expect he will honor us with his presence at the Convention in August, and while we must all try to make the occasion an enjoyable one for him, we are sure we shall all be happier from having him with us. Let us show him that we have not become indifferent since we met him at Cleveland, but come together in numbers that shall surpass any meeting we have ever had.

He goes to California early in July, and will halt at many places on the way. Make him welcome!

THE COMING CONVENTION.

RAILROAD RATES, HOTEL FARES, ETC.

THE question of expenses is one that will determine with a great many, whether they will come to the Convention, and we will here place the matter before our readers in such form that all may settle it for themselves without difficulty.

On the principal railroad routes leading to Philadelphia, the fares have been materially reduced—much lower than we have ever been able to secure for our Association alone; these are excursion rates, with tickets, good for from thirty to sixty days. Just what it will cost from any particular city or town, each person can readily ascertain upon inquiry of their local ticket agents.

As for hotel charges here, let no one be discouraged by high prices. Good hotel accommodations can be had near the Centennial grounds at one dollar per day for a room, and meals can be taken wherever most convenient. Or full fare may be had at hotels in the city or near the grounds at from \$1.50 to \$4.50 per day. Boardinghouses are also plenty, and where parties are intending to stay a week or more, good board may be had for from \$6 to \$10 per week.

The cry of extortionate prices here is without any foundation in fact at the present time, and we have no hesitation in saying that a visitor may now spend a week or any number of weeks in Philadelphia, as cheaply and with as many comforts as he can in any city in the country.

When the Exhibition first opened, there

were many grasping individuals who charged extortionate prices, but they soon found their occupation gone, and were obliged to come to reasonable terms. We think any photographer who finds it necessary to count the cost at all, may safely place the highest estimate on his hotel bill at \$3 per day, and from that down accordingly, as he is willing to put up with fewer comforts or inferior accommodations.

The Centennial Photographic Diary.

This useful work is already having quite a rapid sale, and we believe its merits only require to be known to have an order from every photographer in the country. To give a better understanding of what the book contains, we propose to make a brief review.

The first page of useful matter contains "Rates of Postage." Here are the postal rates in the United States, and with nearly all foreign countries. "Places of Interest in Philadelphia." This page is full of information to those who wish to see the interesting places in and about the city. "Railroad Depots and Ticket Offices." This gives the location of all the stations and ticket offices in the city, and will save any visitor much valuable time, and perplexity.

The Calendar gives most of the revolutionary dates connected with our country's independence, and the date of meeting of the various photographic societies, but most of the space against the days of the month, is occupied with good practical suggestions such as in January, "Use the long winter evenings to study the principles and art of photography." In February, "Different conditions in the negative or printing departments require different formulæ." "Study art rules; all pictures will help you." March closes with this proverb, "A wise man stores his mind with knowledge, but the foolish man wastes no money in books." In June we find this, "Do not use a low side-light to get a well-lighted face; a low top-light alone is better." In July the advice is, "When sitters perspire, keep cool yourself;" and, again, "Art study is profitable; all study is good." In August are these proverbs, "A pin in the dipper is

better than spots on the negative." "A good light is better than a marble front." "A dirty gallery is like a bad picture, neither is attractive." "A good lens is better than a Brussels carpet." In September we find this, "A good negative is better than a bushel of rejected prints." "A dozen good prints are better than a barrel of waste paper." In October we are told that, "A clean plate is better than a peeledoff negative." In November, "A cheerful operator is better than a sour sitter." "A fogging bath and a cross baby will try the spirit of any photographer." In December, "Do all work well." "Time lost is never regained." "A well-finished picture makes a glad customer." These are examples, taken here and there, of the contents of this part of the work. Under the calendar for each month is a paragraph containing suggestions appropriate to the season.

Following the Calendar are the names of the various "Local Photographic Societies," together with the names of the president and secretary, and the night and place of meeting.

"Items of Photographic History" give all the most interesting data relating to the early history of our art.

"Photographic Processes" contain instructions in the negative and printing departments that any one may work by successfully, for they are all from the experiences of practical men. The "collodiochloride" and "emulsion" processes are the most approved; while "Photographic Hints" are suggestive as well as instructive. The balance of the work is devoted mainly to Centennial matters, which are of interest to every visitor. The fine map of Philadelphia, embracing as it does all the principal parts of the city, including the Centennial grounds, and locations of eight of the principal buildings, engravings of which appear on the margin, will be found an indispensable guide of itself. We would call attention also to the blank leaves, which make it a ready account, memorandumbook or diary. The size is made to just fit the breast coat pocket; it is handsomely bound in cloth, and sells for the low price of seventy-five cents. See special advertising sheet.

ROCHER'S EXHIBIT.

As we said in our first review, this exhibit may, with profit, be revisited again and again. This work cannot be comprehended at a glance, but must be studied carefully to get the meaning and the many useful lessons it contains. Every picture is a study. Every pose is a composition combined with the highest artistic effects and the utmost simplicity and refinement.

Mr. Rocher has not chosen dashing characters, who represent something unapproachable by ordinary mortals; but has gone into the charmed recesses of domestic life, and given us scenes which at once appeal to the hearts of all who love home, who love beauty, and all the sweet association which cluster around mothers, sisters, wives, and daughters. In these life-pictures Mr. Rocher is very successful. Whether it be a group of girls twining wreaths in the garden, a handsome lass dressing for the ball, or the bride in her boudoir, they all display the same taste, the same careful arrangement, and conformity to the rules of art. It seems difficult to particularize on this collection, where all are so uniformly excellent; but if any are deserving of especial notice more than others, we would refer to the frame of eight 6 x 8 prints as possessing peculiar merits. The home scenes are very interesting, and one can almost seem to enjoy the fragrance of the flowers whose beauty and perfume are supposed to delight the senses of the fair subject. We feel an interest in the book that is being read by another, and admire the graceful form of her who prepares the candles for the evening visitor or social pastime; but the two which we admire most we should call "Solitude" and "Expectation." The first represents a fair woman, in neat but modest costume, seated where a few vines and leaves are clustering, while the distant landscape blending with the dark sky gives a sense of relief and singleness to the subject which seems very forcibly to illustrate the character we have given it. She has a book in her lap, and with chin resting upon her hand appears in deep meditation. The other is a young girl, seated in some favorite retreat, where probably she has been wont to pass happy hours with some dear one now absent; her

form is turned away with her face in profile, while her magnificent hair, full a yard in length, flows, like a river in ripples, down her back. The subject "Expectation," is illustrated by a beautiful white carrier dove in the distance, at whose breast appears suspended a billetdeux, for which the fair young creature looks with a great deal of interest and solicitude.

There are others that we feel strongly disposed to dwell upon, but space forbids. We can only advise every photographer who visits Photographic Hall to give his attention to the east side of Screen No. 10. This work may be taken as an example worthy to be followed, if any attempt at imitation is to be made at all, and we would not hesitate to advise any student of the photographic art to take Mr. Rocher as his guide.

CORRESPONDENCE.

RIPON, June 20th, 1876.

FRIEND WILSON: I am indeed glad there has been a convention appointed, for I do not want it to sink into oblivion, and the National Photographic Association classed with the "has beens;" it has done too much good to let it die.

I do most sincerely hope there will be the largest, most useful, and stirring convention in August ever known, and that from the long rest, each may come with renewed vigor and earnestness, each one determined to uphold the National Photographic Association, even if there is a change made in its constitution; but let there be a union of some kind, for it does us all good, and we can but feel its beneficial effects, though scattered all over the United States.

And Dr. Vogel, with his happy heart, sound head, and cheerful countenance, is an attraction that will draw every one to Philadelphia that was at Cleveland, when he met with the National Photographic Association, unless obstacles which cannot be overcome keep them at home.

As memory brings before me all the pleasant annual meetings of the Association, it seems as if the coming one must excel them all, and the intervening time until then seems far too long.

I am very anxious to be there, and shall do so if possible, but it was so recently we were turned out of home, gallery, and all by the fire demon, that I may not think it best to use the means necessary to go, but I felt I must tell you how glad I am there is to be a convention once more, and that you all have my most sincere and heartfelt wish that it may be successful. The past year has been a hard one for Mr. Lockwood and myself, but we hope soon to say we have fully recovered from the effects of the fire, and be free to take life easier.

Yours, fraternally, Mrs. E. N. Lockwood.

OUR PICTURE.

THE pretty example with which we embellish our magazine this month, is from the gallery of Messrs. Gilbert & Bacon, No. 40 North Eighth Street, Philadelphia. These young artists are among the most enterprising we have to do credit to our art in this city. A few years ago the apartments they now occupy were known as a "ferrotype gallery;" but they have completely revolutionized the business, and the high reputation they now have, together with the excellent work they produce, promise soon to place them in the front rank of our firstclass houses. Mr. Bacon, who has had considerable experience in some of the leading galleries of New York, is a gentleman of fine artistic abilities and pleasing address; and as he makes most of the sittings, these elements are of just the kind to please their patrons, and produce the most successful work.

They have a large top and side light combined, with direct northern exposure, which gives them a very steady, quick-working light at all hours of the day. Their studio is well furnished with carefully chosen accessories, and all the appliances necessary for the production of first class work. We refer to these matters for the encouragement of others. Messrs, Gilbert & Bacon have shown us what can be done in the way of making business, and earning a reputation, by producing good work; and good work of the class represented by "Our Picture" cannot be produced, unless the means are at

hand with which to work. Their example demonstrates these two points, viz., that the business of a gallery may be completely changed from an inferior class of work to that of a higher class, by well-directed, artistic effort; and secondly, that money spent in procuring such accessories as are necessary is always a good investment.

As a work of art, "Our Picture" indicates careful study, strict attention to all the details, and a successful expression of the conception of the artist. As an example of the Promenade style, we believe it will be hailed by all as very pretty and captivating.

As a Centennial picture, coming as it does with the one hundredth anniversary of the Declaration of Independence and Fourth of July, it may be interesting to the ladies to compare with this the promenade costumes of one hundred years ago.

The prints were made at Mr. Hearn's Printing Institute, and we believe do full justice to the negatives.

ENCOURAGING WORDS.

WE are all strengthened and encouraged by expressions of approval when we make an effort to help or please others. When our subscribers renew with such good words as are contained in the following brief epistles, we feel like redoubling our efforts to make our magazine still better and more useful. It shall be our endeavor to ever make it worthy of what is here said of it.

Jacksonville, Ill., June 19th, 1876. Benerman & Wilson.

DEAR SIRS: Inclosed please find postoffice order for \$5 to pay subscription for Philadelphia Photographer, 1876-1877. I need the Philadelphia Photographer as much as I need anything.

Very truly yours,
A. W. CADMAN.

BETHANY, Mo., June 17th, 1876.

EDWARD L. WILSON.

DEAR SIR: . . . I have a good trade in a town of seventeen hundred rich farmers; only one car in opposition; no other nearer than twenty-eight miles. I make also sizes up to solar, and what's nicer, read the *Philadelphia Photographer*. I get it from my stockdealer regular. Would not do without the *Philadelphia Photographer* for \$100 a year.

Yours, M. H. Barnes.

BENERMAN & WILSON:

Inclosed find \$5 for subscription to *Philadelphia Photographer* (if you can), from the time our subscription ran out.

We find we cannot do without it, no matter how hard the times are. Also 50 cents for the *Mosaics*.

Yours, Carson & Graham. Hillsdale, Mich.

June 19th, 1876.

BENERMAN & WILSON.

Gents: Inclosed please find \$3.25, for which renew my subscription for the balance of this year, and send me the Centennial Guide. Hoping you will enjoy this money as much as I do your magazine,

I am fraternally yours,
A. B. STEBBINS.

Carthage, Jasper Co., Mo., June 17th, 1876.
Messrs. Benerman & Wilson.

DEAR SIRS: Please find inclosed postoffice order for my subscription to the Philadelphia Photographer for the rest of the year. I find it a very great help, and would not like to be without it.

> Yours very truly, CHAUNCEY W. JUDD.

PHOTOGRAPHIC HALL NOTES.

VISIT and study Rocher's pictures.

Payne Jennings's Irish landscapes are charming.

For elegant apparatus, see Scovill Manufacturing Company's exhibit.

See Mosher's Autograph and Biographical Album of Representative Men.

For carbon pictures, Allen & Rowell's exhibit excels anything in Photographic Hall.

Watkins's California views are fine. Landscape workers should see them.

How are Kent's large pictures made?

Study them up, and see what conclusion you arrive at.

Kurtz's exhibit has something for all to study.

Some of the best lessons in art may be found in Memorial Hall and the annex.

Russia is just putting up a fine photographic display. The last is often best.

Mr. Carbutt, Superintendent of Photographic Hall, makes a fine exhibit of transparencies by the Woodbury process, including a number of beautiful lantern slides. We hope to notice his collection more fully at a future time.

Some excellent Egyptian views may be found in the Egyptian section in the Main . Building.

Editor's Table.

"MUSIC HATH CHARMS," ETC. - There are but few who can appreciate the effect of music upon sitters, if they have not proved it by actual experience. A good piano-forte or organ in the gallery, and a player to perform, will do more to soothe the nervous sitter than all the soft, persuasive talk that could be uttered. This is one feature. Then a good piano or organ is one of the most attractive pieces of furniture that can be put in the gallery. It creates a diversion for waiting sitters; it makes a delightful pastime, and the choice of many between two galleries would turn upon giving the preference to the one where there was a musical instrument. Now if any of our readers are induced from this, or any other circumstance, to invest in an instrument of this kind, we would advise them by all means to examine those manufactured by Mr. Daniel F. Beatty, Washington, N. J. The Beatty piano is said to be the sweetest toned and most perfect instrument ever manufactured in this country or Europe. The numerous testimonials received by Mr. Beatty, from competent judges, fully confirm this statement. His parlor and church organs are spoken of in the same high terms. Mr. Beatty solicits correspondence, and we would advise any one intending to purchase to confer with him. See advertisement.

ELEMENTS OF PHYSICAL MANIPULATION.—By Edward C. Pickering, Thayer Professor of Physics in the Massachusetts Institute of Technology, Part II. We have received from the publishers, Messrs. Hurd & Houghton, Cambridge, Mass., the second part of Professor Pickering's writings on Physical Manipulation. This volume treats in detail the subjects of Electricity, Heat, Mechanical Engineering, Meteorology, Practical Astronomy, and Lantern Projections, and from the brief examinations we have been enabled to make, we conclude it to be a most valuable work

for the use of students in the science of these subjects. The chapter on Lantern Projections is especially interesting to us, and we shall avail ourselves of the privilege granted us by the publishers to make some extracts for our little monthly, the Magic Lantern.

A PANORAMIC VIEW OF STOCKHOLM came to us a few days ago from Mr. Aug. Roesler.

The picture is about 8 x 36 inches in size, and is composed of four parts, which fold into neat covers. It is a most wonderfully successful piece of photography. The shipping in the harbor, the people and carriages on the streets, and all objects liable to move, are brought out as sharp and perfect as if the views were instantaneous. It gives us a great deal of pleasure to receive such beautiful work as this.

THE STAR-SPANGLED BANNER AT THE CON-VENTION.—Every one who can sing should come prepared to take part in this. Send ten cents for a copy of the music to Benerman & Wilson.

THE NATIONAL LINCOLN MONUMENT.—We have a fine photograph of this monument, which makes a beautiful sonvenir of our martyred President. (See advertising department.)

A most sad and sorrowful announcement comes to us through Mr. C. Irwing Page, of Penn Yan, N. Y., of the death of Mr. James A. Weld, photographer, of that place. That terrible scourge, diphtheria, entered the family of father, mother, and three children, prostrated them all at once, and within a week took the father and two children to that bourne whence no traveller returns. The mother and remaining child are convalescent. It is a sad story, that excites our warmest sympathy. Mr. Page was operator for Mr. Weld, and continues his business.

THE BROOKLYN EAGLE touches up Mr. Alva Pearsall, of that city, with some very complimentary remarks, especially as to his ability as a crayon artist, which we have no doubt are well merited. Mr. Pearsall is one of our most promising artists, and we are glad to see him thus noticed.

FOR CENTENNIAL VIEWS AND CENTENNIAL LANTERN SLIDES send your orders directly to us. We are the agents of the Centennial Photographic Company, and have all the good things as fast as they are produced. See advertisements.

A PROTOGRAPHIC PALACE.—Messrs. North & Oswald, Toledo, Ohio, have recently opened a new studio in that city, which receives from the Blade a most brilliant and complimentary description. We are glad to see this evidence of enterprise on the part of our friends, and wish them all the success they can ask for.

In Louisville, Ky., another new gallery has been opened, notwithstanding the hard times. This is Mr. Doerr's enterprise, and a local paper gives him a good puff. We wish him success.

PERMANENT SENSITIVE PAPER.—This is a great convenience in many cases connected with photography, and the want of a reliable sensitive paper has long been felt. We are glad to say that this want is now to be supplied by Mr. C. F. Richardson of Wakefield, Mass., who has experimented long in this direction, and from the testimonials of those capable of judging, has now produced a good thing, which he offers to the fraternity. See his advertisement.

PICTURES RECEIVED .- Promenade and cabinets from Mr. Well G. Singhi, Binghamton, N. Y., which are quite promising. Mr. Singhi is striving hard for improvement, and has made great progress since he became a reader of the Philadelphia Photographer. A number of fine stereos from Mr. James Zellner, Mauch Chunk, Pa., including views in Glen Onoko, Mauch Chunk, and on the Switchback Railroad. They are well executed, and reflect credit upon Mr. Zellner's photographic and artistic skill Promenades from Messrs. Copelin & Son, Chicago. These are a series of winter scenes, representing falling snow. As we sit in our sanctum with the mercury struggling up towards the nineties. there is a sort of sense of chilliness in the atmosphere as we look at these pictures, and our sympathy is excited for some of the subjects who appear to be exposed to the winter storm. They are quite novel and effective. An 8 x 10 view and card from H. Butler, Vermilion, Dakota, indicating good progress. Cabinets and cards from C. Irwing Page, Penn Yan, N. Y., being the work of the late James A. Weld Mr. Weld was quite a promising artist, and enjoyed a good local reputation. Samples of well-executed stereo work from W. A. Bairstow, Parker's City, Pa.; being views in and about that city, and one showing the burning of three oil tanks of twenty-two thousand barrels each. Stereos also from E. L. Crawford, Georgetown, Cal.; W. T. Robertson, Asheville, N. C., some successful efforts at local scenery, and one excellent genré picture entitled " A Civil Rights Political Discussion." An 8 x 10 print from Mr. Joshua Smith, Chicago, Ill., contains no less than one hundred and six Bubies, in all attitudes and expressions. They are grouped in the printing, which must have required about as much patience as the first efforts under the skylight, though these are nearly all good babies.

"LAKE GEORGE" AND THE "ADIRONDACKS."
—We have received from Mr. S. R. Stoddard,
Glen's Falls, N. Y., his two books entitled as
above. They are beautifully illustrated, and
contain complete maps of the regions referred
to; are elegantly gotten up, and just the thing
as guide-books for travellers who seek summer
recreation in that direction.

THE LAMBERT CHRONOTYPE.—Our readers will find in the proper department, the advertisement of this process, but it must not be understood that it has our indersement or recommendation, as we have had no means of having its merits verified to us. Some well-executed pictures have been shown us, purporting to have been made by this method, but we can only advise each one to be satisfied in his own mind before parting with his money.

THE BELL-RINGER AT THE DECLARATION OF INDEPENDENCE.—We have just published a photograph, in Promenade size, of a bas-relief cast, representing William Hurry, janitor of the State House in Philadelphia in 1776, ringing the old Independence Bell on that memorable Fourth of July, whose one hundredth anniversary we are about to celebrate. This is a thrilling and spirited memento of that great event in our country's history, when the old bell fulfilled its prophetic mission of "Proclaiming Liberty throughout all the land to all the inhabitants thereof." Sent by mail on receipt of 25 cents.

MR. LEISENRING, of Fort Dodge, Iowa, is highly complimented by the *Times* of that city for his artistic work. We are glad to see this, and hope he may continue to deserve it.

A. M. COLLINS, SON & CO.,

MANUFACTURERS OF

PHOTOGRAPHIC CARDS AND CARD BOARDS,

OF EVERY DESCRIPTION.

Warehouse:

No. 18 S. Sixth St., and No. 9 Decatur St.,

IMPERIAL CARDS.

Size, $6\frac{7}{8} \times 9\frac{7}{8}$.

BOUDOIR CARDS.

Size, $5\frac{1}{4} \times 8\frac{1}{2}$.

White, Gray, Granite-Blue, Pearl, Amber, Tea.

Plain; also, with Gilt Borders, and with Gilt or Red Beveled Edges.

See detailed advertisement in this number of the "Photographic Times."

PRICE LISTS FURNISHED ON APPLICATION.

TRAPP & MUNCH'S

Albumen Paper

Introduced into this country since 1868 has become the leading paper, and is

now better known and more appreciated than any other brand.

That this great success is well deserved and due to its excellent qualities may be judged from the fact, that of all the competitors of the Vienna Exhibition, Messrs. Trapp & Munch alone received the

MEDAL OF MERIT

for Albumenized Paper. For Sale at all the Stockhouses.

WILLY WALLACH,

GENERAL AGENT FOR THE UNITED STATES,

No. 4 Beekman St., and 36 Park Row, New York SPECIAL ACENTS:

SCOVILL MANUFG. Co., New York. E. & H. T. ANTHONY, "" "G. GENNERT, New York.

WILSON, HOOD & Co., Philadelphia. H. W. BRADLEY, San Francisco. G. S. BRYANT & Co., Boston.

PHOTOGRAPHER'S

POCKET

REFERENCE BOOK.

An Alphabetically arranged collection of practically important hints on the construction of the Gallery; selection and trial of lenses and chemicals; approved formulæ for the different photographic processes; tables of weights and measures; rules for avoiding failure, etc.

IT IS A BOOK EVERY PHOTOGRAPHER SHOULD HAVE.

Because it is a ready helper under all difficult circumstances.

For sale by all dealers. Price, \$1.50, post-paid.

BENERMAN & WILSON, Photo. Publishers,

PHILADELPHIA, PA.

Over 1000 Sold.

HEARN'S

PRACTICAL PRINTER

PHOTOGRAPHIC PRINTING

ON PLAIN AND ALBUMEN PAPER, AND ON PORCELAIN.

Too little attention has heretofore been given to Photographic Printing, which is indeed quite as important a branch of the art as negative making.

It is the hope of both author and publishers to create **REFORM** in this matter, by the issue of this work, and as it is to put money in the pockets of all who read it, the hope is that it will be generally read.

CONTENTS.

INTRODUCTION.

The Printing Room, with a Plan. The Silvering and Toning Room, with a Plan. The Drying Room, with a Plan.

PART I .- ALBUMEN PAPER PRINTING.

The Positive Bath for Albumen Paper. Silvering the Albumen Paper. Drying the Paper. Fuming the Paper. Preservation of Sensitive Albumenized Paper—Washed Sensitive Paper. Cutting the Paper. The Printing Boards. Keeping Tally. Vignette Printing Blocks. Treatment of the Negatives before Printing. Filling of the Boards. Fitting Vignette Boards to the Negatives for Printing. Medallion and Archtop Printing. Fancy Printing. Vignette Cameo and Medallion Vignette Cameo Printing. Printing the Bendann Backgrounds. Printing Intense Negatives. Printing Weak Negatives. A Few More Remarks about Printing—Treatment of Broken Negatives. Cutting the Prints. Washing the Prints. Toning Baths. Artistic Toning. Fixing Baths and Fixing Prints. Washing the Prints. Mounting the Prints. Finishing the Prints.

PART II.-PLAIN PAPER PRINTING.

Salting the Paper. Positive Baths for Plain Salted Paper. Silvering Plain Salted Paper. Drying, Fuming, and Cutting the Paper. Treatment of the Negatives before Printing. Printing-in False Backgrounds. General Plain Paper Printing. Further Treatment of the Prints after Printing. Causes of Failures in Albumen and Plain Paper Printing.

PART III .-- PORCELAIN PRINTING.

Selection of the Porcelain Plates. Cleaning of the Porcelain Plates. Albumenizing the Porcelain Plates. Making the Porcelain Collodion. Coating, Fuming, and Drying the Plates. Porcelain Printing Boards. Placing the Sensitive Plate on the Board for Printing. Printing Vignette Porcelains. Printing Medallion Percelains. Washing the Porcelains. Toning the Porcelains. Fixing the Porcelain. Final Washing of the Porcelain. Drying and Tinting of the Porcelain. Varnishing the Porcelain. Causes of Failures in Porcelain Printing.

Together with over 50 Wood Cuts, and an elegant Cabinet Portrait, from negatives by Mr. F. Gutekunst, printed by the author, Mr. Chas. W. Hearn.

A THOUSAND COPIES ALREADY GONE.

Mailed Post-paid on Receipt of \$2.50, by any dealer, or

BENERMAN & WILSON, Photo. Publishers, 116 North Seventh Street, Philadelphia.

ROBINSON'S METALLIC Guides,

FOR USE WITH THE ROBINSON PRINT-TRIMMER.

(See advertisement of Trimmer opposite.)

These Guides are made of Stout Iron and are turned in a Lathe, so that they are Mathematically True.

OVAL, ROUND, ELLIPTIC, and SQUARE, of all sizes; various shapes for Stereoscopic work, Drug Labels, etc., etc.

We have the following regular sizes always on hand at 10 cents per inch the longest way of the aperture, the fractions counting as one inch.

Special sizes made to order at 15 cents per inch the longest way of the aperture.

REGULAR SIZES:

	OVALS.	-	SUUARE	OR ROUND-CO	KNEKED.
$2 \times 2\frac{7}{8}$	$3\frac{1}{2} \times 4\frac{7}{8}$	$5\frac{3}{4} \times 7\frac{3}{4}$	$2\frac{1}{16} \times 3\frac{3}{4}$	$2\frac{5}{16} \times 3\frac{7}{8}$	$3\frac{7}{8}$ x $5\frac{1}{4}$
$2\frac{1}{8} \times 3\frac{1}{8}$	35 x 51	6 x 8	$2\frac{1}{8} \times 3\frac{3}{4}$	$2\frac{3}{4} \times 4\frac{1}{4}$	$4 \times 5\frac{5}{8}$
$2\frac{1}{8} \times 3\frac{1}{4}$	$4 \times 5\frac{3}{8}$	$6\frac{1}{4} \times 8\frac{1}{4}$	$\frac{2_8^1 \times 3_8^1}{2_8^2 \times 3_8^2}$	$2\frac{3}{4} \times 4\frac{1}{2}$	$4\frac{1}{8} \times 5\frac{7}{8}$
$2\frac{3}{8} \times 3\frac{3}{8}$	$4\frac{3}{8} \times 6\frac{3}{8}$	$6\frac{1}{2} \times 8\frac{1}{2}$	$\begin{array}{c} 2\frac{5}{16} \times 3\frac{15}{16} \\ 2\frac{5}{16} \times 3\frac{3}{4} \end{array}$	$2\frac{7}{8} \times 4\frac{5}{8}$	$3\frac{7}{8} \times 6$ $4 \times 6\frac{1}{8}$
$2\frac{5}{8} \times 3\frac{5}{8}$	5 x 7	7 x 9	10 1		Ü
$2\frac{7}{8} \times 4\frac{1}{4}$	$5\frac{1}{4} \times 7\frac{1}{4}$	$7\frac{1}{4} \times 9\frac{1}{4}$	FOR	STEREOGRA	PHS.
	* *		Arch Tops.	Round Cornered.	Round.
$3\frac{3}{8} \times 4\frac{3}{8}$	$5\frac{1}{2} \times 7\frac{1}{2}$	$7\frac{1}{2} \times 9\frac{1}{2}$	$3\frac{1}{16} \times 3\frac{3}{4}$	$3\frac{1}{16} \times 3\frac{3}{4}$	3×3
$3\frac{3}{8} \times 4\frac{5}{8}$	$5\frac{5}{8} \times 7\frac{5}{8}$	$7\frac{3}{4} \times 9\frac{3}{4}$	3 x 3	3 x 3	

The above sizes suit the Collins Card Mounts, and photographers knowing that they can be always had at the low price of ten cents per inch, would do well to make their sizes accord, as orders can also be filled more quickly. Ten days is required to make special sizes.

An allowance of ten inches (\$1 worth) of regular sizes of guides will be given with every Trimmer purchased. (See opposite page).

FOR SALE BY ALL DEALERS.

BENERMAN & WILSON, Manufacturer's Agents,

PHILADELPHIA, PA.

ROBINSON'S PHOTOGRAPH TRIMMER

IS A SUBSTITUTE FOR A KNIFE

FOR TRIMMING PHOTOGRAPHS, AND DOES THE WORK MUCH MORE EXPEDITIOUSLY AND ELEGANTLY THAN A KNIFE.

IT SAVES TIME, SAVES PRINTS, AND SAVES MONEY.



The accompanying cut represents the instrument in the act of trimming a photograph. It does not cut, but pinches off the waste paper, and leaves the print with a neatly beveled edge which facilitates the adherence of the print to the mount. Try one, and you will discard the knife and punch at once. For ovals and rounded corners it is worth its weight in gold.

A Trimmer and Ten Inches of Guides Mailed for \$3.50.

Oil the wheel bearings with Sewing Machine Oil.

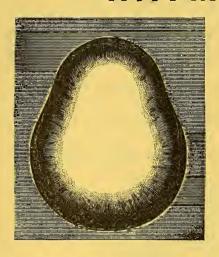
Given Away!

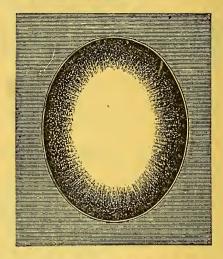
WITH EACH ROBINSON PHOTOGRAPH TRIMMER

WILL HEREAFTER BE GIVEN Ten Inches of Metallic Guides, your choice from the regular sizes named on the opposite page. The manufacturers and agents finding that they can save money by manufacturing in large quantities, make this liberal offer to the trade, as they want everybody to have these capital inventions in use. They are no humbug and are not glass cutters or anything like them.

BENERMAN & WILSON, Manufacturer's Agents,
FOR SALE BY ALL DEALERS. PHILADELPHIA, PA.

WAYMOUTH'S





VIGNETTING PAPERS

ARE NOW MADE OF TWO SHAPES, as shown in the drawings above. They consist of finely gradated, lithographed designs, mounted on protecting sheets of non-actinic paper, and are the lightest, neatest, and best means of producing vignette pictures ever offered.

RECENTLY IMPROVED.

The quality of the "papers" has just been much improved by the substitution of a peculiar French, fibrous, hard calendered paper, which is not only less opaque but has other qualities which produce quickly the most lovely and soft vignettes possible. We consider this a great improvement, as do others to whom we have sent samples. Below we give a letter from one of them, Mr. Ormsby, who has sent us also some exquisite vignettes:

The package of Vignette Papers has been received and tried; they are just the thing. They are a great improvement over the others; they will print in a little more than half the time required for the others, and the results are everything that can be desired, as you can see by samples inclosed. Please fill my order and send bill. I like the pear-shape best. Send them all that shape.

E. D. ORMSBY, Chicago.

FROM PROFESSIONAL AND AMATEUR PHOTOGRAPHERS.

"First-class."—"The sample sent answers perfectly."—"I consider them first-rate articles."—
"They answer the purpose admirably."—"They are the best vignettes I have ever had, and as you
can print in full sanlight, they are a great saving of time."—"They could not be better, oblige me
with another packet."—"I find them excellent, giving much softer pictures than the old way."—"I
have tried one of the Vignette Papers, and like it much; send me packets two and three."—"I am
much pleased with them, and shall thank you to send me another packet."—"I did not need any
copies of testimonials, having well-known by experience that your Vignette Papers were superior to
anything I have ever used."—"I found those you sent before excellent."—"Vignetting Papers received
and tested; can't be beat. I use by cutting an opening in a piece of cardboard and tacking to the
printing-frame, when I am ready for printing vignettes in the very best manner."—"Waymouth's
Vignette Papers I have tried, and they are just what I have been wanting for years."

Any number sent on receipt of price, by any stockdealer, or by

BENERMAN & WILSON, Manufacturers,

(See opposite page.)

PHILADELPHIA.

DO YOU USE

WAYMOUTH'S VIGNETTE PAPERS.

(DESIGNS COPYRIGHTED.)

of all pictures, the ## in the most artistic

When properly printed. But the clumsy devices generally in use for printing them, or rather for blending the shading about the figure, produce but very few really artistic vignette pictures. Either the shading is too intensely dark, not gradated in tint at all, or it shows an ugly direct, decided line, which is very repulsive. The shading should blend gradually from the dark tint nearest to the figure, off into the white buckground. The results are then soft, artistic, and beautiful. The easiest and best way to secure them is by the use of

WAYMOUTH'S VICNETTE PAPERS.

THEY ARE NOT CLUMSY; DO NOT BREAK; ARE ALWAYS READY; COST BUT LITTLE, AND ARE EASY OF APPLICATION TO ANY NEGATIVE.

THEY NEED BUT ONE ADJUSTMENT TO PRINT ANY QUANTITY.

They entirely do away with all the old and troublesome methods, either wood, metal, or cotton.

Eighteen sizes are now made, suiting all dimensions of pictures from a small carte figure to Whole-size, Victorias, Cabinets, &c. They are printed in black for ordinary negatives, yellow bronze for thin negatives, and red bronze for still weaker ones. Directions for use accompany each parcel.

PRICES:

In parcels containing one	of each size	Nos. 1	1 to 15, assorted colors\$	1 00
Assorted sizes and colors.	by number.	per pa	ackage of fifteen	1 00
Nos. 1, 2, 3, 4, and 5, assor	ted sizes and	d colors	s, for Cartes, by number, per dozen	50
" 6, 7, 11, 12, and 13 '		"	Large Cartes and Victorias, by number, per doz	75
" 8, 9, 10, 14, and 15 '		"	Cabinets and Whole-size, " "	1 00
" 16, 17, and 18,		44	Half " " " " "	1 25

(SEE OPPOSITE PAGE.)

When ordering, state the number and color you want.

BENERMAN & WILSON, Manufacturers, 116 N. 7th Street, Philada. FOR SALE BY ALL DEALERS.

DR. VOGEL'S HANDBOOK.

SECOND EDITION.

THE HANDBOOK OF THE PRACTICE AND ART OF PHOTOGRAPHY,

By Prof. H. VOGEL, Ph.D., Berlin, Prussia.

IS NOW READY.

ALTHOUGH IT IS MUCH ENLARGED WE OFFER IT AT THE OLD

PRICE, \$3.50.

It is Elegantly Illustrated, with Photographs and Engravings. Cloth Bound.

The reputation Dr. Vogel enjoys in this country as a practical photographic writer, is first-class, and insures a book of the best quality. That his Handbook is eminently so, we guarantee. It has been re-arranged and revised specially for the American photographer, giving the best German formulæ, &c., and is, in every sense of the word, a Handbook of the practical and artistic departments of Photography. Over fifteen hundred of the first edition were sold, and the demand continues.

IT ILLUSTRATES AND TELLS

How the Ateliers are built and used in Berlin and elsewhere;

How to make the best Photographs;

How to select and use your Lenses;

How to manage your Apparatus;

How to compose the Picture;

How to pose the Sitter;

How to choose Accessories;

How Berlin Cards are Made;

How to do everything in the Art.

TEACHES HOW TO BECOME A PERFECT PHOTOGRAPHER.

The whole includes, under one cover, everything needed for the practice of photography by the beginner, the amateur, and the professional—a complete Handbook. See contents of Book.

The engravings are numerous, elaborate, and expensive. Four photographs, illustrating the lighting of the subject, accompany the work. Please read future advertisements

ASK YOUR DEALER FOR IT.

BENERMAN & WILSON, Photo. Publishers,

116 North Seventh Street, Philada.

PHILADELPHIA

PHOTOGRAPHER

THE LIVEST and BEST

Photographic Magazine Published.

ANNOUNCEMENT FOR 1876!

The publishers have a great many good things in anticipation for the year 1876, which they think will render their magazine more beautiful and more useful than ever before; and while they maintain that the beautiful example of photography, which accompanies each issue, is alone worth the subscription price, still more and more effort will be made to make the reading matter everything that it ought to be. Our correspondents from all the leading centres abroad will keep our readers posted on all matters of interest in their several sections, while our unrivalled staff at home will look diligently after your interests here. To make the Philadelphia Photographer the best practical helper which can possibly be obtained, is the aim and earnest desire of its publishers.

We ask your co-operation in extending its usefulness, and offer to all present subscribers, who secure us new ones, the following

For every new subscriber, for one year, \$1, payable in any of our publications, books, or, if preferred, \$1

PREMIUMS

worth of any of our prize pictures, or any other article for which we are agents, advertised in this magazine.

Operators, printers, etc., can secure all their necessary photographic literature in this way, by a little earnest effort.

EACH MONTHLY ISSUE IS A PHOTOGRAPHIC WORK IN ITSELF. NOTICE TO SUBSCRIBERS.

Subscription price, \$5 a year, \$2.50 for six months, 50 cents per copy, postpaid. positively in advance.

In remitting by mail a post-office order, or draft payable to the order of Benerman & Wilson, is preferable to bank-notes. Clearly give your Post-Office, County, and State.

Canada subscribers must remit 24 cents extra, to prepay postage.

Foreign subscriptions must be accompanied by the postage in addition.

ADVERTISING sheets are bound with each number of the Magazine. Advertisements are inserted at the following

 1 Month. 6 Months. 1 Year.

 One Page, . . . \$20 00 \$110 00 \$200 00

 Half " . . . 12 00 66 00 120 00

 Quarter Page, . 7 00 38 50 70 00

 Eighth " . 4 00 22 00 40 00

 Cards, 6 lines, or less, 2 00 11 00 20 00

The attention of advertisers, and those having galleries, &c., for sale, is called to our Specialties pages. Terms, \$2 for six lines, and 25 cents for each additional line, seven words to a line, always in advance. Duplicate insertions, 50 cents less. each.

SURE TO PAY!

Operators desiring situations, no charge.

BENERMAN & WILSON, Publishers,

OFFICE, 116 NORTH SEVENTH STREET, PHILADELPHIA.

ENTREKIN BURNISHER OF PLANISHER

MANUFACTURED UNDER AN

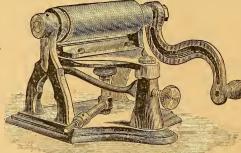
Exclusive License

GRANTED BY

W. E. LOCKWOOD,

ASSIGNEE OF

J. F. SCHUYLER.



WHOSE PATENT BEARS
DATE

February 24, 1863.

RE-ISSUED

June 1, 1875.

PRICE LIST.

6-inch Roll, \$20; 10-inch Roll, \$30; 14-inch Roll, \$40; 18-inch Roll, \$50.

Also, 30-inch Roll, for hand or steam-power (this machine is especially adapted for large work). Price, \$300.

CAUTION - The suit of J. P. BASS, assignee of E. R. Weston vs. Peck, October 8, 1875, the JURY in rendering a verdict for the defendant found:

First.—That Weston, assignor to Bass, was not the original and first inventor of a burnishing machine by which a surface is given to the article to be burnished, by feeding it under pressure over the surface of a burnishing tool.

under pressure over the surface of a burnishing tool.

Second.—That he was not the original and first inventor of the combination of a burnishing tool and a friction feed-roll.

Third.—That he was not the original and first inventor of the combination of the feed-roll and adjustable burnishing tool.

The evidence on which the jury based this finding was that relating to the invention and use by the late J. F. Schuyler of a machine by which a surface was given to the article to be burnished by feeding it under pressure over the surface of a burnisher, rendered stationary, the paper being fed over said burnisher by means of a friction feed-roll.

The patent of W. E. Lockwood, assignee of John F. Schuyler, dated February 24, 1863, was reissued June 1, 1875,

WITH THE FOLLOWING CLAIMS!

1.—As an improvement in the art of Planishing paper, submitting the paper to friction under pressure between a roughened feed roller and a Planisher, substantially as described.

2.—The combination in a Paper Planishing Machine, of a Planisher with a draw-filed roller, for controlling the paper while it is under pressure between the said roller and planisher, all substantially as set forth.

To Photographers and Dealers in Photographic Goods:

Whatever doubts may have existed in the minds of photographers as to the merits of the controversy between the undersigned, W. G. Entrekin, and the owners of the Weston Patents for Burnishers, will be set at rest by the perusal of the above claims, by the verdict of the jary declaring the patent of Weston to be invalid.

While the undersigned feels disposed to treat with liberality, photographers who have been induced by threatening circulars to purchase the Weston and other machines that infringe the above claims, he will hold them responsible as infringers of the above-mentioned re-issued patent of Wm. E. Lockwood in the use of said machines without first paying the small license fee which is now demanded.

On the other hand, the most prompt and determined legal measures will be taken against those infringers who deliberately, and after being thus duly cautioned, make, use, or sell burnishing machines in which is embodied the invention claimed in the said re-issued patent.

W. G. ENTREKIN, Sole Licensee,

Under grant by WM. E. LOCKWOOD, Patentee.

Manayunk, Philada., April 25, 1876.

Number 152.

50 Cents.

тне

PHILADELPHIA

Photographer.

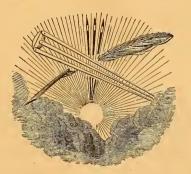
AN ILLUSTRATED MONTHLY JOURNAL.

DEVOTED TO PHOTOGRAPHY.

THE OFFICIAL ORGAN OF THE NATIONAL PHOTOGRAPHIC ASSOCIATION OF THE UNITED STATES.

EDITED BY EDWARD L. WILSON.

August, 1876.



PHILADELPHIA:

BENERMAN & WILSON.

PUBLISHERS.

116 NORTH SEVENTH STREET.

Subscriptions received by all News and Stock-Dealers.

FIVE DOLLARS PER ANNUM, IN ADVANCE.

Sherman & Co., Printers, Philadelphia,

SUMMARY OF CONTENTS.

P	AGE	P	AOE
Our 1876 Convention	225	Lessons in Photographic Hall. By ROBT. J. CHUTE,	246
Judges' Hall for the Convention	226	One of the Secrets of Success	247
Photography in the Great Exhibition. III	226	On the Use of a Ready-Sensitized Paper. By C. F.	
Talk and Tattle	231	RICHARDSON	249
Photographic Sketches from the Centennial Grounds.		Photographic Sensations on the Pacific	250
II. By Dr. H. VOGEL	234	Matters of the N. P. A	251
Our Advance Column	236	Artistic Photography	251
Centennial Lantern Slides	237	Papers at the Convention	251
About Cartography (Mapping)	238	The Sphynx	252
Boiling Lenses and Buruishing Tintypes. By L. W.		Photo-Criticism	252
Crawford	240	Wrinkles and Dodges	253
"Satisfaction or no Pay,"	240	Our Picture	254
False Economy. By T. D. LYON	242	The Photo-Chromic Reproductions of M. Leon Vidal,	254
Lecture on Lenses. By JOSEPH ZENTMAYER	242	EDITOR'S TABLE	255
Scattered Photography in our World's Fair	245		

EMBELLISHMENT.-Main Exhibition Building. Negatives by Centennial Photographic Co.

ADVERTISEMENTS.

ARTISTIC PHOTOGRAPHY. BENERMAN & WILSON. Magic Lanterns and Slides. BULLOCK & CRENSHAW. Photographic Chemicals. CAMEO PRESS, THE UNIVERSAL. CENTENNIAL EXHIBITION VIEWS. COLLINS, SON & Co., A. M. Photograph Cards. CENTENNIAL LANTERN SLIDES. CENTENNIAL PHOTOGRAPHIC DIARY. COOPER, CHAS. & Co. Dresden Albumen Papers, etc. DEAN, JOHN & Co. Ferrotype Plates. DEBANES, J., Glace Work. ENTREKIN, W. G. Burnisher or Planisher. FAIRBANK, MURPHY & Co. Passepartouts, Mats, etc. FRENCH, B. & Co. Voigtlander Lenses, &c. GENNERT, G. Albumen Papers. GIHON, JOHN L. Opaque and Cut-Outs. HANCE'S PHOTO, SPECIALTIES. HEARN'S PRACTICAL PRINTER. HEARN'S PHOTOGRAPHIC PRINTING INSTITUTE. HERMAGIS' PORTRAIT LENSES. HOWSONS' PATENT OFFICES.

IMPROVED PHOTOGRAPH COVERS. MAGEE, JAMES F. & Co. Photographic Chemicals Pattberg, Lewis & Bro. Passepartouts, &c. PHOTOGRAPHER'S POCKET REFERENCE-BOOK. PHOTOGRAPHIC PUBLICATIONS. PHOTOGRAPHER TO HIS PATRONS. PROMENADE PRIZE PICTURES. RICHARDSON, C. F. Sensitized Paper. ROBINSON'S PHOTO. TRIMMER AND METALLIC GUIDES. ROSS' PORTRAIT AND VIEW LENSES, SAUTER, G. Passepartouts. SEAVEY, L. W. Scenic Backgrounds. SOMERVILLE, J. C. Photographic Stock Depot. TABER, I. W. & Co. Background and Plate Holder. ' VOGEL'S HAND-BOOK OF PHOTOGRAPHY. WALLACH, WILLY. Trapp & Munch's Albumen Paper WAYMOUTH'S VIGNETTING PAPERS. WILSON'S LANTERN JOURNEYS. WILSON, HOOD & Co. Catalogue of Photo. Requisites, &c. WOODWARD, D. A. Solar Cameras. ZENTMAYER, JOSEPH. Lenses.

BULLOCK & CRENSHAW,

No. 528 Arch Street, Philadelphia,

MANUFACTURERS AND IMPORTERS OF PURE CHEMICALS FOR PHOTOGRAPHY. IMPORTERS OF GLASS AND PORCELAIN, APPARATUS, ETC.

119 South Fourth St. PHILADELPHIA.

Branch Office, 605 Seventh Street, WASHINGTON, D. C.



H. HOWSON,

Engineer and Solicitor of Patents.

C. HOWSON,

Attorney at Law, and Counsel in Patent Cases.



DOUBLE IODIZED PORTRAIT COLLODION.

ANDERSON'S PORTRAIT COLLODION.

WHITE MOUNTAIN LANDSCAPE COLLODION.

NIAGARA FALLS LANDSCAPE COLLODION.

TRASK'S FERROTYPE COLLODION.

HANCE'S BATH PRESERVATIVE.

HANCE'S GROUND GLASS SUBSTITUTE.

HANCE'S DELICATE CREAM GUN COTTON.

HANCE'S SILVER SPRAY GUN COTTON.

HEARN'S COLLODIO-CHLORIDE.

GILL'S CHROMO INTENSIFIER.

CUMMINGS' GRIT VARNISH.

Manufactured from the best chemicals that can be procured in the market, manipulated with the greatest care.

Each article warranted to do the work claimed for it, if used according to the directions plainly printed on the label accompanying each bottle or package. These preparations are noted for their purity and uniformity, and have for years been used in the most celebrated galleries in the United States and Canada.

FULL MEASURE GUARANTEED.

For Sale by all Stock-dealers in the United States and Canada.

A. L. HANCE, Manufacturer, 116 NORTH SEVENTH STREET, PHILADELPHIA.

Read detailed advertisments on succeeding pages. ,

HANCE'S PHOTOGRAPHIC SPECIALTIES

WARRANTED FULL MEASURE, AND CHEMICALLY PURE,

ARE SOLD BY ALL DEALERS, AS FOLLOWS:

HANCE'S BATH PRESERVA-

TIVE. A sure preventive of pinholes, stains, &c. It preserves the bath in good working condition, and will be found worth its weight in gold. See special advertisement. \$1.00 per bottle.

HANCE'S DOUBLE IODIZED

collobion. This is made by compounding the different iodides according to their equivalents, and producing a new salt. It is being used by some of the best photographers, but its general use is retarded, no doubt, by the extra trouble in making it. The peculiarities of this Collodion are good keeping qualities, its improvement by age, and the richness of effect produced in the negative, the film being perfectly structureless. As it requires time to ripen, I have the advantage of making a quantity and keeping it always ready to supply any demand. \$1.50 per ib.; 80 cts. per ½ ib.

ELBERT ANDERSON'S PORTRAIT COLLODION is made according to the formula used by Mr. Anderson in Mr. Kurtz's gallery in New York. It is especially adapted to portrait work. \$1.75 per ib.; 90 cts. per ½ ib.

HANCE'S WHITE MOUNTAIN COLLODION is adapted more especially to outdoor work, and for quick working, delineating foliage, frost-work, or sky, it stands unrivalled. It is made after the formula used by that celebrated mountain artist, B. W. Kilburn, of Littleton, N. H., whose work is too well known to need any comments. \$1.50 per fb.; 80 ets. per ½ fb.

CURTIS' NIAGARA FALLS
COLLODION is another used for landscapes. The wonderfully beautiful views
made by Mr. Curtis, of the great cataract,
with this collodion, have a world-wide reputation, and are an indisputable evidence
that he could have nothing better to produce such magnificent work. \$1.50 per 1b;
80 cts. per ½ 1b.

TRASK'S FERROTYPE COL-LODION is made especially for positive pictures. Mr. Trask has no superior in this class of work, and this collodion is the result of his practice and experience for years in proving what was BEST. It is made after his formula and ferrotypers will find it all that can be desired. \$1.50 per 1b.; 80 cts. per ½ lb. HANCE'S PECULIAR PORTRAIT COLLODION is peculiar in that it is prepared without bromides, and is adapted for use with Black's acid bath. To those using the acid bath this collodion is indispensable. Formula on the bottle.

\$1.50 per lb.; 80 cts. per 1 lb.

CUMMINGS' GRIT VARNISH

gives a very fine surface for retouching. Those that use a varnish of this kind will find that this has no superior. By it the retouching is greatly facilitated and the same amount of work on a negative may be done with it in half the time that would be required without it. 40 cts. per 6 oz. bot.

HANCE'S SILVER SPRAY GUN COTTON is now being used by many of the best photographers, and the testimonials I am receiving are sufficient evidence of its excellence. I prepare it with great care, and warrant it free from acid, very soluble, gives good intensity so that no redevelopment is necessary, gives perfect detail, and a film pure and structureless. 50 cts. per oz.

HANCE'S DELICATE CREAM GUN COTTON is adapted to those who like a very delicate, soft-working collodion, giving all the modelling especially in the Rembrandt style, and with light drapery. Its sensitiveness renders it particularly adapted for children, or any work that requires short exposure. 80 cts. per oz.

CHROMO INTENSIFIER is intended to strengthen the negative. It imparts a beautiful tone and gives excellent printing qualities. 50 cts. per bottle.

HANCE'S GROUND-GLASS

SUBSTITUTE is simply what its name implies, a substitute for ground-glass for any purpose that it is used for in the gallery. To the landscape photographer a bottle of it is indispensable. If he breaks his ground-glass, he has only to coat a plate, such as he is sure to have with him for negatives, with the substitute, and in a few moments his ground-glass is replaced and his work goes on. It is equally useful in the printing room, and any photographer who has once used it will never again be without it. 50 cts. per bottle.

HEARN'S COLLODIO-CHLO-

RIDE.—The best for Porcelain pictures. \$2.25 per ½ lb. bottle, and \$4.00 per lb. bottle. Try it, and get good porcelains.

HANCE'S GROUND GLASS SUBSTITUTE

Is an indispensable article in the photographic gallery. There are so many uses to which it can be applied that a photographer having once given it a trial, will never be without it, as there is nothing known that will take its place. There are a few base imitations in the market, but they are not used a second time, and will soon die a natural death.

The Substitute is in the form of a varnish, is flowed and dried the same as varnish, but dries with a granulated or ground-glass surface. Wherever ground glass is required, Hance's Substitute answers every purpose.

FOR VIGNETTE GLASSES.

- A RETOUCHING VARNISH.
- SOFTENING STRONG NEGATIVES.
- THE CELEBRATED BERLIN PROCESS.
- GROUND GLASS FOR CAMERAS.
- " GLAZING SKY AND SIDE LIGHTS.
- OBSCURING STUDIO & OFFICE DOORS.
- " PRINTING WEAK NEGATIVES,

For skylights it must be flowed before glazing. The Substitute being very thin it will cover a large space. economical, and makes a surface equal to the finest ground glass. It can be easily removed by rubbing it with cotton wet with alcohol. GIVE IT A TRIAL.

PRICE, 50 CENTS PER BOTTLE,

Large quantities, for Studio Lights, etc., supplied low.

HANCE'S DELICATE CREAM **GUN COTTON**

IS THE KING COTTON, AND HAS NO PEER.

Prepared with particular care, warranted free from acid, and very soluble. I take particular pride in this cotton. It has made its way steadily and surely into most of the principal galleries in the country, where parties prefer to make their own collodion, and its superior qualities are shown in the medals awarded at the Vienna Exhibition, for photographs made with collodion in which it was used.

It is especially adapted to the Rembrandt style, and light drapery. Its sensitiveness renders it particularly adapted for children or any work that requires short exposure.

PRICE, 80 CENTS PER OUNCE.

Read next page.

Cotton licate

COMMENDATORY LETTERS

Testifying to the superior qualities of

HANCE'S SPECIALTIES

WE HAVE ROOM ONLY FOR THE FOLLOWING:

"I consider the Cotton the best we have ever used as yet."-R. POOLE, Nashville, Tenn.

"The film of the Cotton you sent me was unusually smooth and firm, being entirely free from glutinosity, and setting like India-rubber. It was quite powdery and crumbled to pieces in my fingers, 'as if rotten.' It dissolved almost instantaneously, and it was 'by far' the very best material I have ever used. I sincerely trust that you will send me the same kind again."—ELBERT ANDERSON, Kurtz Gallery, New York.

"I received your Double-Iodized Collodion all right, and in good shape. Have tried it pretty well. It gives very fine negatives and good detail."—W. E. Hart, Watertown, N. Y.

"We take pleasuré in recommending Hance's Double-Iodized Collodion as a first-class article, in fact it is the best manufactured Collodion we have tried."—SCHREIBER & SONS, No. 818 Arch Street, Philadelphia.

"The goods by Express came safe to hand. I have tried a part of them and am greatly pleased. Will likely want more goods in your line."—R. POOLE, Nashville, Tenn.

"Your Ground Glass Substitute is the best I have ever tried, and I have tried nearly every kind advertised, as the long row of nearly full bottles will testify. It works like a charm."—J. N. Weester, Barton, Vt.

"I take pleasure in recommending your Cottons and Collodions, before all others I have used. It is a blessing to know where you can get good Cotton."—B. W. KILBURN, Littleton, N. H.

"The last lot of Cotton you sent is the very best I have ever used. Please send me another pound at once."—ELBERT ANDERSON, Kurtz Gallery, New York.

"Have used some twenty-five pounds of your Collodion the past year with unvarying success."—G. W. HOPE, Middletown, New York.

"Your Double-Iodized Collodion is the most perfect working Collodion I have used in fifteen years. Every picture I make with it is a success."—R. L. Dale, Boston, Mass.



Has now become the standard Collodion in all first-class galleries. Although but a short time in the market it is rapidly superseding all other makes, and the quantity that has been sold is simply astonishing.

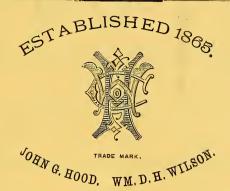
Give it but a single trial and you will be convinced. Can be used as soon as made, but improves with age, and will keep indefinitely.

Price, \$1.50 per pound.

A liberal discount to parties ordering by the gallon. READ ADVERTISEMENTS ON PRECEDING PAGES.

1776. PREPARE FOR THE CENTENNIAL. 1876.

NOW READY!



WILSON, HOOD & CO.'S

Photographic Requisites,

Frames,

Steveoscopes and Views.

SALESROOMS:

822 Arch Street, Philadelphia, Pa.

MAY, 1876.

FURNISHED GRATUITOUSLY TO ALL APPLICANTS.

CIHON'S

Are the very best that are made, and are now without a rival in the market. They are clean cut, most desirable shapes and sizes, and made of non-actinic paper, manufactured specially for the purpose. Each package contains 30 Cut-Outs, or Masks, with corresponding Insides, assorted for five differently sized ovals and one arch-top.

PRICE. \$1.00 PER PACKAGE. Sent by mail on receipt of price.

Parties wishing special sizes, or large lots of a few sizes, may have them cut to order promptly, by addressing the manufacturer. No lot costing less than \$1.00 made at a time.

No printer should attempt to make medallion pictures without them.

THEY HAVE NO EQUAL FOR QUALITY.

Beware of spurious imitations made of common paper, full of holes, badly cut, and odd shapes and sizes. Ask your stockdealer for GIHON'S CUT-OUTS, and see that they are in his envelopes with instruction circular included.

PROMENADE SIZE NOW READY!

SOLD SEPARATELY AT 50 cts. per dozen.

GIHON'S

IS DESIGNED FOR

COMPLETELY OBSCURING THE IMPERFECT BACKGROUNDS OF COPIES.

RETOUCHING NEGATIVES,
FAULTY SKIES IN LANDSCAPES,
COATING THE INSIDE OF LENSES OR CAMERA BOXES,
BACKING SOLAR NEGATIVES,

COVERING VIGNETTING BOARDS,

AND FOR ANSWERING

ALL THE REQUIREMENTS OF THE INTELLIGENT PHOTOGRAPHER IN THE PRODUCTION OF ARTISTIC RESULTS IN PRINTING.

WHEREVER YOU WANT TO KEEP OUT LIGHT, USE OPAQUE.

It is applied with a brush, dries quickly and sticks.

CUT-OUTS (thirty), \$1.00.

OPAQUE, 50 CENTS.

FOR SALE BY ALL DEALERS.

Address all orders to

JOHN L. CIHON, Inventor.

128 N. Seventh St., Philadelphia, Pa.

OUR NOVEMBER, 1875



RICTURES

Our second Promenade Picture competition has just been closed, and we are in possession of some of the finest Photographic work ever done in the world!

We offer prints from the competing negatives, for sale at the prices below. They are most useful to every photographer as examples of good negative work, artistic composition and lighting, and superior printing and finishing. We have done our part to make them models in every respect.





Was awarded for the best six negatives to

Mr. LYMAN G. BIGELOW, Detroit, Michigan,

Whose elegant work is familiar to many of our patrons.

THE SETS INCLUDE:

Nos. 1 to 8—Studies by L. G. Bigelow, Detroit, Michigan.

Nos. 9 to 20—Studies by F. B. Clench. Lockport, N. Y.

Nos. 21 to 28—Studies by G. M. Elton, Palmyra, N. Y.

Nos. 29 to 34—Studies by O. P. Scott, Abingdon, Ill.

Nos. 35 to 40—Studies by E. M. Collins, Oswego, N. Y.

Nos. 41 to 46—Studies by E. H. Alley, Toledo, Ohio.

See review in December number Philadelphia Photographer.

The whole	set of 46, .													\$10	00
In two Pho	oto. Covers,	٠,												11	50
Selections,	per dozen,				-									4	00
	per two doz														
The 28 of I	Messrs. Clen	ch,	В	ige	low	່, ຄ	ınd	E	tor	١,				6	00
Book Cover	and Bindin	g,													75

Address all orders to

BENERMAN & WILSON, Publishers, 116 NORTH SEVENTH ST., PHILAD'A, PA.







PROMENADE ALL! HERMAGIS'

Celebrated French

PORTRAIT LENSES.

CABINET SIZE, ARE JUST THE LENS FOR THE NEW

PROMENADE PICTURE.

MR. HENRY ROCHER, the renowned Chicago photographer, says of them: "In my opinion they are truly lenses of great capacity, and must surely satisfy every purchaser." Mr. Rocher has purchased two Hermagis lenses of card size and one Salomon style. See further splendid testimonial from Mr. Rocher in Specialties.

MR. F. GÜTEKUNST, the celebrated Philadelphia photographer, was sent a Salomon Lens to try for us, and wont part with it. It cuts sharp a 9 inch standing figure, and beats a lens that has been his

favorite many years, and where many makes of lenses have failed, on trial, to equal it.

The HERMACIS IS THEREFORE AHEAD

TRY THEM!

These celebrated lenses, are used by MONS. ADAM SALOMON, of Paris, exclusively for making his **WORLD-RENOWNED PORTRAITS**, and by the most famed photographers of Europe, from whom Mons. Hermagis has the Highest Testimonials.

We now have a FULL STOCK on hand.

The Salomon Style, 8 x 10 size, \$160.

For Cabinet Size, extra quick, \$100.

For Cabinet Size, quick, \$90.

For Carte Size, extra quick, \$50.
For Carte Size, quick, \$40.

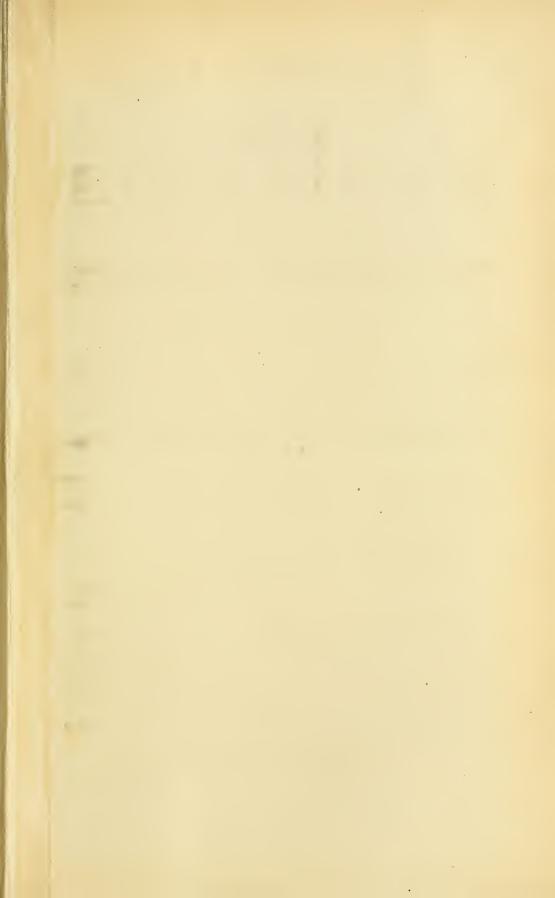
They are being introduced in America steadily, and are liked wherever they go.

They will be sent on trial to responsible parties C. O. D., and instructions to Express Company to hold money one week for trial. If parties prefer to see the work of a lens before purchasing, we will make a negative and send with details of exposure, etc., and reserve the lens until answer is received (if the time is reasonable), on receipt of \$1 to pay cost. Having a skylight of our own we are enabled to do this.

** Not a single person to whom we have sent these Lenses on trial, as above, has returned them.

BENERMAN & WILSON,

116 North Seventh Street, Philadelphia, Pa.





MAIN BUILDING,

PHILAGELPHIA.

CENTENNIAL PHOTO, CO.

Philadelphia Photographer.

Vol. XIII.

AUGUST, 1876.

No. 152.

Entered according to Act of Congress, in the year 1876, BY BENERMAN & WILSON, In the office of the Librarian of Congress, at Washington, D. C.

OUR 1876 CONVENTION.

WHO will come? Who will have it said that he attended the Convention of the National Photographic Association in the Centennial grounds, on the 15th of August, 1876? Let no one underrate the importance of this meeting. No one should let this year pass without having a part in some event that shall commemorate this one hundredth anniversary of our country's independence. And for the photographers of our land what better opportunity can offer than the meeting of our National Association under circumstances and amid seenes so well calculated to stir the deepest emotions of patriotism, and fill us all with enthusiasm for the promotion of every good work which shall promise to contribute to our country's greatness, and the elevation of our race.

That our own beautiful art of photography is one of these good works we firmly believe, and in laboring for its advancement we advance the interests of art, of science, and of one of the most promising industries of our country.

What we do this year we do as the initial work of the new century, and posterity will look to the events which crowd into the few months of our Centennial Exhibition for an expression of the interest and devotion of the present generation to all that pertains

to the welfare of those who come after us.

Our Convention is the opportunity for photographers, and every member of the Association should avail himself of it; but we fear that some have been deterred from attending this Covention by reports of threatened prosecutions, etc.; we trust, however, that not many will be kept from participating in this important meeting by any such reports. They are doubtless circulated in the interest of patent-rights men and process venders, as the dissolution of the Association would be a consummation devoutly wished for by them. They all feel that in this union of interests there is a barrier to their operations which they cannot well overcome, but once dissolve this bond of protection and each man would be at the mercy of every extortionist who chooses to trump up some swindling claim. No, brethren, let us do our whole duty and present a bold front. If you are wavering, decide to come and lend your presence to the numbers and influence which shall make the 1876 meeting of the National Photographic Association the most important and useful of any that has ever been held.

We leave the matter with you, and shall hope to meet you all, with wives and daughters, in the Centennial grounds on the 15th of August.

Judges' Hall for the Convention.

REASONS FOR ATTENDING.

THE hall in which the National Photographic Association will hold its seventh annual Convention is in the Judges' Pavilion, which is centrally located near the Main Building and Machinery Hall. It is a large spacious room, very high studded, with a gallery on each side, and capable of seating over one thousand persons. Besides this, there are a large number of offices, committee-rooms, reporters' rooms, etc., making it very complete for the purposes for which it is designed. The hall is on the first floor, is beautifully painted and frescoed, and is really one of the most attractive places the Association has ever met in. All this is furnished gratuitous, and it is hoped that on the morning of the 15th of August, such a gathering of photographers from all parts of our country will assemble here, as shall test the capacity of the hall, both as to numbers and its acoustic properties, as we join in that inspiring song, The Star-Spangled Banner.

REASONS WHY PHOTOGRAPHERS SHOULD COME.

There are a number of reasons why photographers should attend this convention, which have never existed in reference to any other that has ever been held. These I propose to name:

First. There will be no exhibits to prepare or look after; no hard work in putting up and taking down after you get here.

Second. The grandest photographic exhibition that has ever been held in the world is here for all to enjoy, and be benefited by. And the time in which it may be visited is only limited by your excursion-ticket or pocket-book, unless you propose to stay till after the 10th of November.

Third. In connection with this is the most magnificent World's Fair that has ever been held; it is perfectly stupendous in its vastness and profusion; no description can give any adequate conception of it, and the mind is almost overwhelmed by its immensity, when an attempt is made to see and comprehend it all; and yet it must be seen to be comprehended in the least.

Fourth. This great exhibition is an event of a lifetime; no intelligent man can afford to forego the privilege of seeing this wonderful collection of the world's products, and being benefited by the lessons it teaches.

Fifth. Our Association will meet here with less expense than it has ever met before, with a good prospect that it will be freed from debt, and be placed on a sound and permanent basis.

Sixth. Two years having elapsed since a convention was held, it is now time for us to come together, shake hands, renew friendships, compare notes, collect new thoughts, new processes, new courage, new hopes, and new energy for renewed efforts.

All these ought to be a sufficient inducement for every photographer in the land to join the National Photographic Association, and come to the convention.

With far less incentives than these, thousands will come from remote parts of the world to visit this Centennial Exhibition.

ROBERT J. CHUTE, Local Secretary, N. P. A.

PHOTOGRAPHY IN THE GREAT EXHIBITION.

III.

PHOTOGRAPHIC HALL, as it becomes more and more complete, grows in beauty and attractiveness. It appears to have its full quota of visitors, who hardly seem to tire of examining the great variety of faces and forms, representing all nations and peoples, and in which there is found something that excites a kindred interest and sympathy, such as are not called forth by any other class of exhibits in the whole great Exhibition. Is it not because here is illustrated so much of humanity-that humanity which the lifelike photographs here show us to be much the same in all countries and under all conditions? Then, Photographic Hall is attractive because it is roomy and airy. The pictures can be examined and comprehended in detail; while in some of the other departments, especially in the Main Building, there is such a profusion of material that the senses are almost bewildered, so that one scarcely knows where to commence or what to examine.

To continue our review, we will make our way to the southeast corner of the Hall, where we find a show-case, in which is placed an album containing the photographs of physicians and medical institutions in the city of Philadelphia, and which is to be deposited in Memorial Hall. The photographs are the work of Messrs. F. A. Wenderoth & Co., Philadelphia, are well executed, and make a very interesting collection. Mr. L. Schlesinger is the exhibitor. Immediately above this are two cases, containing Mr. J. Gurney's patent colored enamelled imperishable souvenirs. find but little to commend here, as the coloring gives a very cheap appearance to what otherwise might have been some very good plain photographs.

Higher up on the wall is a collection of very creditable architectural views, by Messrs. Waterman & Hall, 78 Fulton Street, New York. In this wall-space is also the apparatus exhibit of Messrs. August Semmendinger & Co., Fort Lee, N. J. Here may be found some novelties for indoor and outdoor workers.

Next to this are the patent photographic trunks, or tents, for outdoor work, by Mr. Frank Robbins, of Oil City, Pa. These should be examined by landscape photographers.

Still further along on this wall-space are the solar cameras, by Prof. D. A. Woodward, Baltimore, Md. These are handsomely gotten up instruments, and are adapted for either direct or reflected sunlight.

On the south wall of Alcove 15 may be found a fine display of Mr. L. W. Seavey's goods, Lafayette Place, New York, consisting of backgrounds, columns, balustrades, wainscotings, fireplaces, papier maché, furniture, vases, etc. In addition to the real samples exhibited are a large number of photographs, representing designs of almost every description, and adapted to all kinds of subjects. Mr. Seavey's skill in this department has enabled him to take the lead in the artistic improvements in photography which have been made within the past few years; till now, there is scarcely a meritorious production that is not backed up by some appropriate design from his artistic brush.

On half of the east of Screen 15 is exhibited quite a variety of work by Mr. J. P. Doremus, Paterson, N. J. These consist of life-size crayons, card and cabinet portraits, 5 x 8, and stereo views. Mr. Doremus will be remembered as the enterprising photographer who built a floating gallery a few years ago, with which to do the Mississippi. Here we have some of the results of his efforts, consisting mostly of views on the Upper Mississippi and its tributaries, in Wisconsin and Minnesota. His views excel, and show some very fine work.

The other half of this screen contains the exhibit of Mr. John Reid, also of Paterson, N J. Mr. Reid's forte appears to be railroad bridges, locomotives, steam-fire engines, etc., etc., and he has here given us some excellent representations of these useful constructions. The prints are about 13 x 16 in size, and every department of the work reflects credit upon Mr. Reid's artistic skill.

On the inner end of Screen 15 are two frames of very successful interiors, being the students' rooms at Yale College, by Abram M. de Silvia. Some notion of the inner college life of these candidates for presidents, congressmen, clergymen, and doctors, may be had from the accessories here introduced.

Turning Screen 15, we find on the wall opposite this alcove a varied and extensive exhibit, by Mr. G. W. Pach, 858 Broadway, N. Y. Mr. Pach makes a "specialty of college and private groups at residences." His collection consists mostly of work of this class, and is well executed.

On the east of Screen 16 are three exhibits. The first is that of Mr. W. T. Paullin, 1335 South Street, Philadelphia, consisting of cards, cabinets, 8 x 10, and crayons.

The second is that of Mr. Gentilé, of Chicago. His cabinet heads and character pictures display some quite artistic effects. But he has excelled in his winter scenes, and as we write with wilted collar and reeking pores, we seem to be refreshed by the cool atmosphere which these pictures suggest. We cannot admire the method by which they are produced, but they are decidedly effective nevertheless.

The third exhibit consists of views in the Yellowstone National Park, by Mr. William

J. Marshall, Fitchburg, Mass. These have already been noticed on the other side of the hall.

On the inner end of Sereen 16 are three frames of cards, cabinets, and Promenades, by Mr. E. D. Evans, Corning, N. Y., changed from the other side, and already noticed.

On the west of Screen 16 are some very good stereos, by Mr. F. Lewis, Cambridgeport, Mass. They are views in and about Boston, a number illustrating the centennial celebration of the Battle of Bunker Hill, in 1875.

Adjoining these are eight very fine Arctic views, by Messrs. J. W. Black & Co., Boston. Here we are shown seas and mountains of ice, the perils of navigation in those waters; the sport of hunting the polar bear, and the habitations of the Esquimaux.

Further on are several frames of stereos of Florida scenery, by Mr. E. A. Bonine, Jacksonville. These furnish some good illustrations of the people and products of that State.

The balance of Screen 16 is occupied with the exhibit of Mr. B. Schluter, Kansas City, Mo. This consists of crayon, India-ink, and colored work.

On the outer end of Screen 16 are two frames of colored genré pictures, stereo size, by Mr. J. A. French, Keene, N. H., which are quite well gotten up, and show Mr. French to be a successful operator with children.

Screen 17 has several exhibits; the first is by Mr. Alfred Freeman, Dallas, Texas, consisting of Promenades, 8 x 10's, and a panoramic view of the city. Mr. Freeman has displayed a good deal of care and taste in his work, which indicates that the exercise of these is not confined alone to the most accessible or favored localities.

The second exhibit on this sereen is a collection of architectural views, by Mr. Albert Levy, 77 University Place, New York; two frames being marked "United States," and the third "Europe."

The third and last is a series of views in "Bible Lands," by Dr. James Strong and Rev. A. F. Dotterrer. They are stereos, and 5 x 7, and comprise views in Egypt and Palestine. The work is remarkably good,

and any one familiar with Holy Land scenery will find these very interesting. They are published by Rev. A. F. Dotterrer, 1018 Arch Street, Philadelphia.

On the inner end of Sereen 17 is a frame of small colored portraits, by a process called "photo-oil painting," by Mrs. Wetherby, 2017 N. College Avenue, Philadelphia.

On the outer end of this screen are a number of well-executed "Self Prints," or what are known as Leaf Prints, by Mr. Thomas Gaffield, Boston, Mass. They are from feathers, ferns, and leaves, and tastefully arranged in emblems, wreaths, and mottoes.

Opposite this screen, on the wall, Mr. T. Brooks, 724 Arch Street, Philadelphia, exhibits several glacé embossing presses, and a number of negatives, made by a new method, by which the marbled marginal effect is produced upon the negative when it is made, and but a single printing is required. Prints from the negatives are placed beside them, so that the effect in the finished picture may be seen. Following along this wall and under the window are five frames, illustrating the experiments of Mr. Gaffield, of Boston, to show the comparative power of various qualities and tints of glass to transmit the chemical or actinic rays. These form a very interesting study for those interested in this direction, and nearly all photographers are interested, as these experiments answer, in some measure, the question, so often asked: "Which is the best glass for skylights?" It will be seen, by the samples in which the exposure was prolonged to thirty minutes, that red stained glass offers the greatest barrier to the actinie rays.

On the west of Screen 17 we find quite a large collection of fern-leaf mottoes, by Mrs. Anna K. Weaver, whose agency is at 415 S. Ninth Street, Philadelphia. These mottoes are well gotten up, and reflect a great deal of credit on Mrs. Weaver's taste and skill.

Adjoining these is the exhibit of Mr. J. H. Folson, Danbury, Conn., consisting of eard, cabinet, and life sizes. The latter are solars on plain and albumen paper, and compare very favorably with the large-negative processes of enlargement.

Further on are cards, cabinets, promenades, and 4-4 sizes, in portraiture, by Mr. George W. Collins, Urbano, Ohio. Mr. Collins's work, though lacking in some respects, possesses many good points, and conveys a good lesson on the neatness and finish of his work, which is so much wanting in many otherwise good pictures that we see.

Still further, and concluding Screen 17, is the exhibit of Mr. Julius Hall, Great Barrington, Mass, which comprises cards, cabinets, and stereos. Although Mr. Hall's portrait work is quite creditable, yet he excels in his stereo-landscapes and interiors.

Turning to Screen 18, we come upon a fine display of landscape work, by Mr. Jesse A. Graves, Delaware Water Gap, Pa. These are in sizes from stereo up to 16 x 20, and include some lovely things. Here are mountains, rivers, waterfalls, and glens, and many of them the same scenes so graphically described by Mr. J. C. Browne in his Trip to the Water Falls of Pike County, which we published last month. Mr. Graves's work may be dwelt upon with profit.

Adjoining these is a collection of plain and solar work, by Messrs. Bachrach & Bro., Baltimore, Md. Some of their plain work is quite effective, but the solars, with one exception, are ghastly in their intensity of black and white.

Views in the oil regions, by Frank Robbins, of Oil City, Pa., are the next that claim attention. These are stereo and 10 x 12 sizes. Mr. Robbins gives us here some very good examples of outdoor work, and at the same time illustrates, in the most faithful manner, the peculiar features of the oil regions.

From the derricks, the tanks, the barrels, and the burning oil here displayed, we leave photography in America for a time, and look over what our foreign brethren have done for us. We shall not, however, go into details, but must leave a more extended review till next month. Our design now is to notice some of the most characteristic of the foreign exhibits, as we know that many of our readers will visit the Exhibition before our next issue, and we want them all to know where the good things are, so that they may be benefited by them.

The first foreign collection we come to was among the last to be put up; it is that of Russia, on the west and east of Screens 18 and 19, and in it we find some beautiful pictures. Among the exhibitors are the names of J. Kostki i Mulerta; Ch. Bergamasco, St. Petersburg, A. O. Kapejinha, and Miczkowski, Varsovie; also, voyages in Africa by Mr. Bronislas Jaworski. East of Screen 19 are exhibits from Mexico and Buenos Ayres. The wall opposite this alcove contains a large collection of views and portraits from Japan, by Baron Stillfried. The east of Screen 20 bears the Swedish photographs by O. Wiklund, Westeras, Alex. Lindahl, and Wilhelm Lundberg, Stockholm, and Henry Osti, Upsala.

On the west of Screen 20 is Brazil's contribution, but we find but little to which to call especial attention.

East of Screen 21 may be found some good work from Vienna, by Mr. Joseph Ungar, and on the west of the same screen, the exhibits of Messrs. Julius Gertinger and Fritz Luckhardt, and on the east of 22 that of Mr. V. Angerer, all of Vienna. On the west of 22 are exhibits by M. Laffon and M. Walery, of Paris. The last is particularly noticeable, and will repay a careful visitation. On the east of Screen 23 are the photochromic pictures by M. Leon Vidal, of Paris, and specimens of photo-engraving, with plates, by Messrs. Gillot, of Paris. On the wall opposite this alcove are some photographs worth examining, by Mr. A. Liebert, also of Paris. On the west of 23 we come to the German Section, and here notice the firm name of Loescher & Petsch, Berlin; on the east of 24, Schultz & Suck, Carlsruhe; on the west of 24, specimens of Trapp & Munch's albumen paper; on the east of 25, Herman Rürkwardt and J. C. Scaarwächter, both of Berlin, the former architectural views, and the latter portraiture, both excellent work.

East of Screen 26 has the exhibit of Messrs. J. Bruce & Co., Toronto, Canada, and views by Mr. R. W. Barrow, Ottawa, and Mr. Alexander Henderson, Montreal. Canada is continued with the magnificent exhibit of Mr. William Notman, Montreal, which occupies the entire alcove, including the wall between Screens 26 and 27. There

are some beautiful examples of photography here which all interested will find profit in studying.

On the west of 27, commences the English collections, and among them we see the names of Mr. J. Hubert Newman, New South Wales; Mr. R. Slingsby, Lincoln, England; Mr. Robert Crawshay and Mr. F. York, of London; Messrs. Robinson & Cherrill, Tunbridge Wells; Mr. Frank Good, London, Holy Land views very fine; Mr. F. Hudson, Ventour; the London Stereoscopic Company, a large collection of celebrities; Mr. Payne Jennings's landscapes, the most exquisitely beautified photographs in the Hall. These are directly opposite the outer end of Screen 28, and should be seen by everybody. The sight of them is worth a journey to the Exhibition.

West of Screen 28, is a large collection of mammoth landscapes with some beautiful effects, by Mr. Vernon Heath. Mr. Carl Norman, Tunbridge Wells, fine views and interiors; Mr. Stuart Wortley, cloud effects n chromotypes, and large views with dry plates; Mr. W. England, a varied collection; Mr. William Bedford, pretty landscapes.

The last on the western wall are some carbon chromotypes, by Mr. J. Barnard, Bedford.

This completes the circuit of Photographic Hall so far as we can present it this month, but we hope to review the foreign exhibits more in detail in our September number.

Since our review of the American department on the north side of the Hall, some further additions have been made. On the east of Screen 13 are some fine photo-lithographic reproductions, by Mr. John Carbutt, 624 N. Twenty-fourth Street, Philadelphia. Among them is one of a little paper called *Dunlap's Pennsylvania Packet*, dated July 8th, 1776, and containing one of the first publications of the Declaration of Independence.

Mr. F. A. Wenderoth, 1328 Chestnut Street, Philadelphia, has also here some examples of photo-electrotype work. Some of these are "direct from nature," and have much the appearance of a fine engraving. He also shows examples by his photo-zincographic process.

But more than half of this screen is occupied with Messrs. James R. Osgood & Co.'s heliotypes. This process appears to be working up to middle tints, as shown by the portraits and views from nature here exhibited; but the tone is too cold to be pleasing. For line work this process appears to produce excellent results, as do the other mechanical processes we have named.

On the wall opposite Alcove 13 are a number of photo-lithographic prints (Osborne's process), by the American Photo-lithographic Company, 103 Fulton Street, New York. This process produces most faithful reproductions, as may be seen by comparing a copy with an original which are here placed together.

Directly over these in the window is a frame of lantern transparencies, by Messrs. Benerman & Wilson, 116 N. Seventh Street, Philadelphia, illustrating the International Sunday-school lessons for 1876, first and second quarters. To those engaged in Sunday-school work these are especially interesting. They make the most comprehensive and instructive review of the lessons that can possibly be had. Every one using the lantern should have them.

In Alcove No. 1 we find some additions. The first is a large group representing the Judges of the Supreme Court of the United States, by Mr. S. M. Fasset, Washington, D.C. The second are a number of those delicately manipulated plain photographs added to Mr. Kurtz's collection. And the third, the exhibit of Mr. Edward Bierstadt, New York, consisting of a great variety of prints by the Albert process. Here are some of the most successful prints from view and portrait negatives that we have ever seen by any process except the Weodbury. They were all printed with printers' ink

Before closing, we will say that it gives us pleasure to notice that Mr. Landy has accepted our suggestion in reference to the "last scene" in his "Seven Ages of Man," and has made another picture. This, we must say, is admirable. The shrunk shank is here in all its leanness, and the bandage becomes it well. From this being before the least successful of the series, it has now become, if possible, the best. Nothing could be more expressive than the drooping head,

and the limp and nerveless hand as it drops involuntarily at his side. With this improvement in the series, it is one of the grandest works ever produced by photography. We hope every photographer who visits the exhibition will look for these on the west side of Screen No. 10, and study them carefully. Do not take a surface glance at these pictures, but look clear into them. Mr. Landy says he has been years studying them up, and you must not expect to see all there is in them at once. Look not only at the figures, but at the backgrounds, for each has a different one, and see how grandly they harmonize with the subject, and how much thought must have been put into the whole to make them so complete.

With this, we commend Photographic Hall to every member of the National Photographic Association who may attend the convention, and would advise a careful inspection and study of its contents. There is a great deal here for American photographers to be proud of, but let no man relax his efforts because he or his countrymen have done well. There is much yet to learn, and much may be learned if we but hold our minds open for the reception of all that is instructive, both in the home and foreign exhibits.

TALK AND TATTLE.

THE following letter will indicate some of the difficulties of working in hot climates. We have written to our correspondent with suggestions something like the following: The indications are that his chemicals are too strong. A high temperature makes a great difference in the rapidity of wet plates, and very often a plate with what is supposed to be the right exposure is charged with fogging, when it is only overdone. We advised him to reduce his bath to at least 30 grains, and it might bear to be 25 grains; to add 1 grain of iodide to each ounce of his collodion; to reduce his developer to 15 or 20 grains to the ounce; to keep the bottles of collodion in cold water; and we would here add, keep the prepared plates in a cool place; as

the ether evaporates very rapidly in a high temperature, it is well to add a little to the collodion if it shows signs of thickening. It might be an improvement to make the collodion in the first place with an excess of ether; and do not allow the plates to coat any longer than is sufficient to clear them of greasy lines.

PARIS, TEXAS, May 24th, 1876.

E. L. WILSON,

Editor of the Philadelphia Photographer.

DEAR SIR: During my six years' travels in the South, I have been always troubled during the summers in getting sufficient intensity in my negatives, but just as soon as fall sets in everything goes well. No redevelopment necessary. Yesterday I received a letter from Mr. W. L. Knott's artist at Clarksville, who is evidently troubled in the same manner, asking me if I could explain the cause. In answer all I could say was "too hot" (both of us are in tents). I have, however, taken the precaution to wrap collodion vials in woollen cloth, which I keep saturated in cool well-water. My bath-tub I placed, box and all, in my watersupply tub, which I replenish with cool well-water. Developer always fresh, and plenty of acetic No. 8. I use it about 30 grains strong; have no occasion to use alcohol, because the bath works well and is evidently in good condition. My collodion is of reliable make. I often make my own as follows:

I sometimes use Lewis & Holt's negative collodion. I have used old and new, mixed and unmixed, and yet all the same; a thin transparent negative, which cannot be forced up to printing vigor, but prints flat and dark. Now if you will drop me a line by mail, and suggest anything that will produce a more vigorous negative, I shall never forget your kindness. I feel assured that every artist in the South is troubled to some extent in the same way. I forgot to say my skylight is glazed and fitted with blinds or screens on rollers, by which I have per-

feet control, and in fall and winter the effect is perfectly satisfactory.

Yours truly, GEORGE M. URIE.

Another writes us his first letter, and is quite complimentary to our magazine. It is gratifying to us to know that he has been helped so much; but a thousand years of life in this world is too much reward for a little service. This correspondent appears to have been so entirely exempt from an evil that seems to afflict so many others, that we give his letter in full, in which will be found the details of his process.

Others following his instructions may be as exempt from blisters as he.

PONTIAC, ILLS., June 6th, 1876.

MR. EDITOR: As this is the first time that I have ever written to you, I thought I would do so once in my life. I have been a constant reader of your journal ever since it has been published. What I would do without it I know not, for I am, as you might say, alone in regard to brother photographers; I see one once in a great while; so all the news and all the new things that come out I get through your journal. You ought to see some of my photographs that I made before I commenced reading your journal, and see what I am doing now; I tell you it would make a dog laugh. I do not see how any photographer could keep house without your valuable journal. think as much of getting the Philadelphia Photographer as I do of kissing my wife every day, and I could not do without either. All the bad luck I wish you, Mr. Editor, is this: hoping you may live a thousand years.

I see all brother photographers are troubled with blisters in their prints. Well, sir, I do not know what they are way out here in Illinois on the wide prairies. Probably they have not found me yet, and I hope they will not. I say I know not what they are; in one sense I do not, in another I do. Not that I have never seen a print spoiled with blisters, yet I never saw one on any of my prints since I have been working at the business, and that is eighteen years. I do not know whether I work any different from any other photographer; probably I

do. I make my silvering solution for the double extra S. M. paper almost neutral, with 40 grains to the ounce of water, a little alum and nitrate of ammonia. I float my paper one minute and no longer; fume thirty minutes.

When I tone my prints, I first wash them in salt water, just strong enough to make them turn red; then I change the water three different times; then I tone in a plain toning bath neutralized with a little sal soda and borax mixed together. I make my toning bath about one hour before I use it. When my prints are toned I put them in salt water again, and from the salt water direct to the fixing solution, very strong, and from the fixing solution to a weak solution of alum-water for a half hour. Keep the prints well in motion all the while they are in the fixing and alum solutions.

Now, if any brother photographer is bothered with blisters, if he will follow my directions he will never see any more blisters; no, not one.

Yours respectfully,
A. Hinsey.

HINTS for the National Photographic Association, and how to make a silver dipper, come from a California correspondent, as follows.

ESTEEMED PHOTOGRAPHER: As there are prospects of reviving the National Photographic Association, I would like to present a thought, if worthy of note.

Should there be a permanent healthy organization established, would it not be well to consider, in the routine of business, the matter of arranging a schedule of prices for the adoption of tyros in the United States? Elect judges to decide on quality, making said quality a test for membership; devise some plan by which the judges may know that members are continually working up to the standard; admit all good workmen who may not be in a field or position to warrant employing skilled operators in all the departments; discuss the question of prepayment, etc.

I am disgusted with copying daubs, and the public are also disgusted with paying the extra cost in producing a decent job from said daubs. I would like to force the large army of photographic murderers up to the standard, or let them die the death they have long since merited.

How I MAKE MY DIPPERS.

Information free to all without money or price. When a strap of silver of the right shape cannot be obtained, take fifteen half dollars, or seven trade dollars, melt the same, and run in a mould five-eighths of an inch wide (this is for bath-holder 12 x 16), roll the silver down to less than one-eighth of an inch thick, or until it is five inches longer than the bath-holder is deep. Should it twist in rolling, set the rolls a trifle closer on the concave side; always roll the same end from you every time; any little crook can be hammered out by striking on the concave side of the crook. Split one end some six inches up, and hammer on the inside, separating the forks, so that they will be four or five inches apart at the bottom; hammer on the outside of the ends of fork, making a better shape; turn up a lip at the ends of the fork to hold the plate on; make, if you wish, the outside of lip sharp, to facilitate in taking out a dropped plate; cut off two inches from upper end, and make of the piece a slide to run up and down on the dipper, with a lip on the lower end to hold the plate; put a small hole in the upper end of the dipper, some three-quarters of an inch shorter than the depth of the bathholder; when there is any precipitate in the bottom of the bath-holder, put a pin in the hole, thus keeping the plate from reaching quite down.

This dipper is very perfect; property always there; requires no shellacking; holds no solution to mark plates, as they are put on before immersion. I would not use any other; they will last a lifetime, and give perfect satisfaction. I would recommend giving the job of making to a silversmith.

J. E. SMALL.

P.S.—The silver must be annealed each time it is rolled.

THE following communication accompanied a picture we noticed briefly last month. The work indicates a good formula, and we give it for the benefit of others who may choose to use it. It will be seen that Mr. Butler takes the journal.

VERMILION, DAKOTA TERRITORY, June 12th, 1876.

Messrs. Benerman & Wilson: I send in to-day's mail one 4-4 photograph of house and mill; and will say that any friendly criticism will be thankfully received. I make my own collodion of

DEVELOPER.

Water, 16 ounces. Iron, 1 ounce. Acetic Acid, . . . 1½ "

Toning bath: Gold and bicarbonate of soda, with a little salt.

Paper bath, slightly alkaline, 48 grains. Negative bath, 35 grains, slightly acid with nitric acid.

I use Morgan's H. extra pink paper; think it the best paper I ever used.

I renew my subscription for six months, commencing with July number; cannot do without the *Photographer*; will try and send a few landscapes soon, if the wind will give me a chance to work.

The view I send was made with a portrait tube.

H. BUTLER.

THE POSITIVE PRINTING BATH.

CLEVELAND, OHIO, July 10th, 1876.

ED. L. WILSON, Esq.

DEAR SIR: Having been considerably troubled with my albumen silvering bath, I come to you to help me out of the mire. Have tried a great many receipts, including one of yours in the Mosaics for 1871, page 116, which works very good, but in a day or two it turns red, which is the trouble with all my silvering baths. I have tried Anthony's alum bath, but it also turned red in two or three days after using. I am very particular in mixing chemicals, and I try to use the best of everything, so this can be no fault of mine; so please publish a good, substantial, and unturnable receipt for silvering albumen paper, and you will confer a great favor to a promising printer.

VAC FRIEDL.

If our correspondent has tried the vari-

ous formulæ for printing baths, and they all work the same, we have only to suggest, as a remedy, the use of kaolin, or China clay. Put a quantity of this in the bottle in which the bath is kept, and each day after silvering pour the bath into the bottle, shake well, and set aside to settle. The next morning the bath will be found perfectly clear, when it may be decanted and filtered as usual for use. Care should be observed to let the kaolin remain in the bottom of the bottle when decanting.

We have seldom known a bath to turn red when made according to the directions given in the article referred to, on page 130 of Mosaics for 1871, except when reduced in strength, by the floating of a large quantity of paper, or by the floating of plain paper. The printing bath may also be freed from color by the addition of a small quantity of a solution of permanganate of potash and a few minutes' boiling; adding afterwards silver and water, to keep up the strength and bulk. See Vogel's Handbook, pages 138 and 195.

PHOTOGRAPHIC SKETCHES FROM THE CENTENNIAL GROUNDS.

II.

BY DR. H. VOGEL.

BESIDES in the Main Building, there are photographs exhibited in Memorial Hall, especially Swedish and Norwegian, and some German (of the Photographic Society in Berlin). All others received their places in the Photographic Hall. Nearly threefifths of the hall are filled with American photographs; and when we cast a look over the same, we notice instantly a great difference between the American and European pictures. Europe has sent, nearly exclusively, plain photographs (negative retouches not excepted), and, indeed, the plain pictures are the main exhibit of the European photographers; while America has exhibited a great number of life-size pictures, executed in crayon, pastel, and oil. We see at once that the position of the American photographer toward the public is an entirely different one from the European. From him the people expect work which in Europe would belong to

the artist. In Europe, portraits in crayon, pastel, etc., are not known as productions of photographers. Now, many perhaps will make the remark that they indeed do not belong to the line of photography; but certainly it would be wrong if we would exclude these works which are ordered, executed, and delivered in the atelier of the photographer. If, in America, crayons, pastels, etc., are executed in the atelier of the photographer, we have, of course, to judge them also. The art jury has therefore to look only at the result; the way and manner of production is a question which, for the artist, is to be a secondary consideration. At the Paris Exhibition, in 1867, they would probably have excluded these photographs, executed by the assistance of a designer, from judgment, as there the jury consisted only of photographers, who wanted the plain photographs to be acknowledged. We notice, therefore, how different the point of view is from which we have to judge the photographer, as it certainly would be for a jury, consisting in the greatest part of artists, the most competent to judge about pictures in oil, pastel, or crayon.

It must be acknowledged that the Americans show an astonishing skill in the production of these life-size pictures. Europe we would search in vain for hands to execute the same. Such pieces in crayon as exhibited by Kurtz, of New York, must be considered as first-class work; also the charcoal drawings by Sarony. Here a fine understanding of the form of nature is visible, which assists considerably in the change into the stroke manner, so necessary for a crayon. Kurtz made in this respect a further step. He has noticed very well that there exists a difference between the tint of a photograph and the tint of a crayon, which is so much more apparent when the photograph changes after some time. He therefore prefers to transfer, so to say, the whole picture into charcoal, and then to take prints of the same by means of a certain process. In this manner a whole picture in crayon is produced, whose durability is guaranteed, a progress not to be depreciated, though the fact, that at last nothing remains of the photograph in the picture is

of no consequence. The artist judges only the final result, and does not care about the chemical composition, and just as well, as there is nothing left in the plain photograph of the original negative taken at first.

It is well understood that in these crayons, and also in pastel and oil pictures, the individual differences of the artists are remarkably apparent, as the quiet, precise, artistical harmony of the whole by Kurtz; the effective, thorough work by Sarony; the peculiar inclination to sharp-pointed effects by Ryder (Cleveland); the conscientious work by Bradley & Rulofson, Gutekunst, Notman, and others. The manner of cutting out life-size photographs and pasting them on backgrounds to be worked over by drawing, seems to me to be a difficult matter; roughnesses in the contour are too easily seen.

The photographer being no artist, or having no artists at his disposal, must leave this field of work to his better situated colleagues.

Besides these pictures, which give a peculiar expression to American photography, there are a great number of plain photographs of all sizes, showing that the American photographers are in every respect at the highest position of the art; but what many wished and expected, a characteristic new style, is not to be seen at the Exhibition. As long as such are not existing, we still have to use the old styles, and therefore the Adam Salomon and the Rembrandt effects are as yet performing their great part at the Exhibition. Many photographers show a predilection for them, like Anderson, in Richmond; Kent, Rochester; and Kiewning, in Greifswald (Germany).

Yet it is much more astonishing to find that, properly speaking, the father of the Rembrandt effects, Kurtz, has disdained to exhibit them; but, on the contrary, has sent a large number of plain photographs, all of which avoid the dazzling contrasts of pitch-black and snow-white. In their place is to be observed a mild weakening in tints, which by the public is considered as less effective, but which certainly will attract the sympathy of the judge of fine arts. As in lights and shades, there are also avoided all extremes in position and illumination.

A quite different character is to be seen in the pictures of Sarony; they abound with what the Frenchman calls chic. We may shake the head as much as we please about the bold positions, the daring effects of light, they are chicful anyhow; they show the artist. It is surprising how well he understands how to adjust the too long and unpractical Promenade size to his figures; it looks as if the size was cut for the figures, In respect to various positions, Sarony produces some astonishing: he is never in want for ideas, and as he likes also strong effects of light, his pictures give an impression of brilliancy. We only regret that nearly all of his pictures show something of a theatrical air.

Right next to Sarony are the exhibits of Rocher, in Chicago, who this time has sent only plain photographs. He gives the most of his attention to the whole arrangement of the picture, to a stylish decoration, and a genré-like conception. The most of his pictures show in their selection of position, and their subtle gradations of tint, a certain nobleness of appearance, which make them very attractive, as in the group of the Two Sisters, Before the Looking-glass, the Fortune Teller, the Lady in Rococo Dress, and the excellent imperial border card.

The exhibits of Gutekunst, in Philadelphia, are grand. Besides large photographs of thorough work is a long row of pictures of medium size, among them especially half-length pictures in Cameo style, pressed out oval and on deep dark backgrounds which are finely executed. Besides these, there are among his exhibits a large number of land-scapes, which seem to be produced by combination-printing. We think they are a little too dark, but they show that Gutekunst is an artist in many respects.

Among the portrait photographs there are backgrounds which attract a great share of attention, and hereby ought to be mentioned, that America has an artist who produces very excellent backgrounds, namely Seavey in New York. I wish we had some one like him in Europe; but there, unfortunately, we are obliged to paint the necessary backgrounds partly ourselves. In deepness of tint, perspective and plasticity of effect, Seavey's backgrounds are certainly

unsurpassed. Just as recognizable are his plastic firesides and similar pieces.

Kent, in Rochester, exhibited several pictures which appear in half life-size, and, as advertised, are printed from direct negatives. The most of them are of the Rembrandt effect, and have a certain brilliancy. We find the same in Landy's pictures; but it seems to be a very precarious undertaking to try to represent the ages of man, after Shakspeare's known poem. Such a task should have its difficulties even for an artist, and can be considered as unsolvable by photography.

Landy's pictures of children are well known; besides him Hesler, in Evanston, and Schwind & Krüger, in New York, have delivered good pictures of children. The groups of the latter have an effect of uneasiness, on account of placing things that are too light in the foreground. Mosher, in Chicago; Broadbent & Phillips, Philadelphia; Bigelow, Detroit; Alman, New York; and Bradley & Rulofson, in San Francisco, have delivered work in plain portraits, which is worthy of acknowledgment.

Especially ought to be mentioned the enlargements of Paxon, in New York; he delivers them plain, and seems, to judge by the exhibited specimens, to receive numerous orders from foreign photographers. If we count, besides these mentioned, Brady, in New York; Gubelman, New Jersey; Wenderoth, Philadelphia; Cox, Baltimore; Hardy, Boston; Taylor, Philadelphia; Rice, Washington; Pach, New Jersey; and Freeman, Texas, then we think there can be no complaint about neglecting the branch of portraits in the American department.

The landscape compartment embraces a smaller domain, though among them are most respectable pieces. In the first line stands Watkins, in San Francisco, with his California views; next, following him, are Houseworth and Bradley & Rulofson, San Francisco; they have delivered especially large prints. After them are many photographers, who have taken landscapes in connection with architecture, namely, Sweeny, in Cleveland; Reid, Paterson, and Doremus, of the same place. The latter, to judge by the picture, had a floating atelier on the

Mississippi, and went with it from place to place, or followed some such original wandering existence.

Pach, in New York, is employed in taking pictures of horses, besides landscape scenes, and also outdoor groups, in which he is not without success.

Black, in Boston, has sent a row of his well-known Arctic pictures. In strong contrast to them are those of Marshall's. There icebergs, here hot springs, the renowned Geysers of the Yellowstone, in Colorado.

More yet is represented in the branch of stereoscopies, of which Bierstadt, in Niagara, has the greatest exhibition; he has six hundred pieces exhibited among which are stereos from all parts of the world.

Further are to be mentioned Stoddard, Glen's Falls, Reilly, Yosemite Valley, and Cremer, with views of Philadelphia and fine graphoscopes. Thorne, in New York, and Butterfield, in Boston, have also delivered several prints with success. Alman, in New York, is distinguishing himself by clouds in the English style.

(Conclusion in the next.)

OUR ADVANCE COLUMN.

A WORD ON TRANSPARENCIES AND ENLARGEMENTS.

BY A. HESLER.

THE great drawback heretofore felt in making transparencies, and enlarged negatives therefrom, has been the "fuzziness" or blurred appearance of the resulting pic-Where a transparency is made in direct contact with the negative by any of the known dry-plate processes (if contact is perfect), no blurring will be perceptible, and the resulting transparency will be as sharp as the original negative. Now take this transparency and use it for an enlarged negative by any means I have seen recommended, viz., place in front of your objectlens and pass the light through it, either direct from the sky or reflected from a white screen, and, in proportion to the diameters will be the blurring of your resulting negative. I have found that all this can be avoided by placing in front of the negative you wish to make transparencies from, either for the lantern or duplicate, or enlarged

negative, first next to the window, or, better still, clear daylight, a porcelain plate (a thin one); next to this two or even three thicknesses of (finely ground) ground-glass, ground side out. Inside of this place your negative, collodion side to the object-glass; focus with full, open tube, and, before exposing the plate, insert small stop. The result will be a transparency or negative free from all blurring, sharp and clear as the original negative. Now place this in place of the original negative, and proceed to make your enlarged negative. I never have seen this idea mentioned by any one, but all who will try it will at once be convinced of the great advantage to be gained by the use of porcelain and ground-glass as already mentioned.

STRENGTH OF CHEMICALS.

BY O. W. W. BALDWIN.

As another month is close at hand, we are verging into summer's longest days, and the penetrating rays of the great demon of light shine straight down upon us. This, no doubt, is the most perplexing season during the whole year to the photographic manipulators. This is due to intense heat and strength of chemicals. How many of the readers of the *Philadelphia Photographer* can call back to memory the perplexity of working chemicals on a hot sultry day in midsummer? When it was cooler, a day or two before, all worked in harmony, and they rejoiced over their success and flattering results.

Friendly readers, I feel incompetent to do justice to this subject, for the field is wide and very limitedly explored. While every other subject has been so vividly discussed, this seems to be almost lost sight of. I can remember well, and it is not many years ago, when the foggy mists visited me. No richness; no roundness; no beauty. No! Nothing but dead, flat, inexpressive results. Sitters out of patience, and chemicals out of order, and me at my wit's end, almost suffocating, I locked up my room, and commenced to make up new chemicals. With care and cleanliness, I obtained results fac simile to the day before. I wished I had never seen a gallery or a picture, and my money invested in something else more

profitable. But there is "a calm after a storm." My chemicals work smooth and uniformly; the hot weather does not seem to affect them. Why? Simply because I reduced their strength. Since that time I have used my chemicals 30 per cent. weaker in summer than in winter. My collodion, in winter, about 6 grains of bromo-iodide to the ounce; developer, 12 grains iron; negative bath, 40 grains silver; in summer, 30 per cent. off makes a negative in the same exposure soft and round, which gives a rich print.

With care and cleanliness, I have but little trouble with my chemicals. With one bottle of developer, one bottle of collodion, one bath without change or filtering, I have made over 300 sittings, all with uniform success.

Therefore, I say to beginners, as soon as the foggy days come weaken your chemicals, and be careful in preparing them, and you will be rewarded with astonishing results.

CENTENNIAL LANTERN SLIDES.

To photographers who use the lantern, and we know there are many who do, we would say that we are prepared to furnish the Centennial slides as fast as new subjects are produced. They promise to be the most popular slides for exhibition purposes that have ever been shown in this country, and we are satisfied that a good business can be done with them in almost any direction a man may start out, as is already being done in some sections. By means of the lantern, the Centennial Exhibition in all its beauty and reality may be shown to thousands who will never see it in any other way. It will make an exhibition that can be more easily managed, and require less pushing than any other that can be gotten up. We represent, in these slides, not only the immense buildings, and the great Exhibition as a whole, which, for vastness and grandeur, has no parallel in the history of the world, but the elegant exhibits, the lovely statuary, the almost innumerable curious things, and the general products of more than fifty nations of the earth. We would suggest to photographers who

intend coming to the convention in August to come prepared to give several days to the Exhibition as a whole, with a view to procuring a set of these slides, and presenting them to their people. It will make a most fruitful subject, and what a man has seen that he can talk about understandingly and with confidence.

We are the special agents of the Centennial Photographic Company for the sale of these views, and all orders should be sent directly to us. See advertisement.

About Cartography (Mapping).

(Translated from the Algemeen Handelsblad Newspaper, published in Amsterdam, and contributed by P. A. MOTTU.)

Amidst the objects exhibited at Philadelphia, by the Dutch department, will be found the maps of the residences of Java, executed at the topographic offices of the Department of War at Hague. At Paris and Vienna they obtained the highest rewards, and it is very probable that they will not leave the New World without having been remarked. Captain Bass, of the staff, gave recently, at the meeting of the Dutch Geographical Society, a very interesting lecture about the manufacture of maps in general, and particularly of that of the War Department at Hague, to which that gentleman is attached, and we will try here to give back his description.

The raising of the ground, the measurements, the bringing on paper as well as the printing of the maps of this most difficult ground, are works whose history is worthy to be known. These maps are the images of long years of struggles of intelligent men on the peaceful ground of science, and the victory has been obtained only by hard work and with great dangers. On the other side are those beautiful sheets, the consequent result of much mental labor, and the application of the last technical improvements obtained through science. They are the final effects of an invention, which, if we are not mistaken, will produce quite a revolution and a great simplification in cartography. The inventor, Mr. Eckstein, technical director of the topographical offices at Hague, makes no secret of his invention; just the contrary; he publishes it with the greatest liberality, with the minutest detail, in a small book, specially intended to be offered to the visitors of the Philadelphia Exhibition.

The maps are printed in colors. In ehromolithography, as every one knows, one employs for every shade or tint one separate stone, with the exception of some colors or shades which can be obtained by the combination of two tints. is a very dear manipulation, on account of the great quantity of stones wanted, sometimes fourteen or fifteen, and on account of the unavoidable wasted prints and difficulty of printing. Besides that, the light shades are liable to be indistinct. The harmonious combination of the tints depend for the greatest part on the ability of the printer. The process of Mr. Eckstein not only removes these difficulties, but facilitates also the long and dear process of engraving names and outlines. The maps of Java contain no less than two hundred different tints, and these and the letters of the names are all produced with four stones.

The manipulation is as follows: The stone is first covered, in a very easy way in a dark room, with a solution of nitras argenti, in order to receive the photographic image of the map. The negative of the map is then applied on the stone and exposed to light; afterwards fixed in hyposulphite of soda. Three other lithographic stones are then treated the same way with the same negative. In this manner you have four maps on four stones, all precisely alike, obtained in the shortest possible time and in the cheapest manner. The stones are now covered with a thin transparent solution of white wax, stearine, and asphalt,* and when this is dry, lines are drawn with a parallel machine by way of a diamond, as near as eight to twenty per millimetre; this is done in both senses of the stones. All the parts which must remain white are now covered with a solution of asphalt in turpentine, and the whole stone surrounded with a border or dike of wax. Now the stone is

^{*} Probably dissolved in ether or benzine.—
(Note of the translator.)

covered for half a minute with an acid which has the property to bite the stone only when it has been denuded by the point of the diamond. This acid is composed of nitric acid, water, and alcohol. After having been thoroughly washed with water, the stone is sufficiently engraved for the finest tints. Then when such fine tints are wanted for the final print, one must preserve these places with a thin coating of lithographic ink, which at the same time makes the crossed lines apt to take up the ink. As soon as the ink is dry, the stone is submitted to a second biting of the same acid, but a minute longer; then newly washed. Now one covers those parts which must have this second tint with lithographic ink. In the same manner you prepare the third tint by biting the stone two minutes and a half, the fourth tint four minutes, etc., only with this difference, that by the seventh tint you double the quantity of acid, but reduce the time to half a minute. After having repeated this as often as it is necessary for the map, you wash away all asphalt, wax, and ink with turpentine, and you have one stone ready for one color, with all its shades. The two other stones are treated the same way. One stone serves for the blue, one for the yellow, the third for red. In this way you can make every possible combination. When, for instance, only one of these colors is wanted in the map, say the blue for water, you cover the same places on the other stones, and leave them unbitten; when the same degree of two different tints cover each other, for instance blue and yellow, it forms green; is blue a shade darker, it forms blue-green; if yellow predominates, it forms yellowishgreen; violet is formed by blue and red, and so on ad infinitum.

The fourth stone is employed for black lines and the names. The black lines of ways, frontiers, etc., are drawn with pen and autographical ink on the stone directly, whereby the photographed image of the map on the stone serves as guide. The letters are brought on the stone by another method, which Mr. Eckstein calls typoautography. He employs therefore a small press, with which he prints all the names wanted for the map, in every size, type, and

curve necessary, and this with autographical ink on thin starched paper, and places these on their respective places upon a print of the blue stone, which serves as guide, and reports them on the black stone by the ordinary lithographic process. He moistens the paper, and so removes it from the stone.

This is, as shortly as possible, the description of Mr. Eckstein's process. Only those can appreciate it who know something of lithography, who know the difficulty of engraving upon stone, its cost, the long time thereto employed, the difficulty to obtain brilliant colors and sharp prints; who have seen the beautiful maps of Java and Switzerland, which are indeed gems of execution, and which served as models at the last exhibition of the Geographical Society of Paris; only such persons can conceive the exactness of Mr. Versteeg's words: that the topographic office at Hague is the pride of Netherland.

BOILING LENSES AND BURNISH-ING TINTYPES.

FORT WORTH, TEXAS, May 24th, 1876. EDITOR PHILADELPHIA PHOTOGRAPHER.

SIR: I am not in the habit of writing much, but must give some of the old veterans a few hints as to a successful mode of doing things, in accordance with the more appropriate way of business, not as they do but as the floating photographers of Northwest Texas do. One of the lights of this country came in to my rooms a few days since, and said: "Mr. Potagraffer, how do you clean your tube when it gits greesey?" I told him the way I used mine, and he said, "I see I missed it. I put my tube in a pot and biled it, and when I took it out I tried it, and it cut the face to the chin nicely, but all around the head and shoulders it was all sprangley like Christ's picture! What must I do now? I biled my Yankee clock and it worked all right, and my tube is a Yankee fix! Then the glass looks kinder greenish and sorter reddish, too."

Another of the craft came in when I was retouching a negative, and said, "What is that for; do you make negro pictures in that way?" I explained its use to him.

Then he saw the burnisher, and asked what it cost, and if I brightened my tintypes in it, as he had heard of the improvement it made on the picture; he wanted to know where he could get one, etc.

Now, Mr. Editor, you may think this a burlesque on the fraternity, but it is as I state it. Go on with the *I hiladelphia Photographer*. I cannot wait till the time comes for it to make its round without wonder and anxious looking for the good things it contains, besides the study of the beautiful embellishments, which are lessons to the old as well as the young.

Yours truly, L. W. CRAWFORD.

"SATISFACTION OR NO PAY."

This is an old motto that partakes very much of the quack-doctor style of "no cure, no pay," and sounds well in the ears of a certain class, who accept it as a guarantee that they are to be fairly dealt with. It was a motto that worked 'well with many in the early days of photography, especially those who made cheap work, and had but little to lose even if an occasional crusty customer did compel them to comply with the terms. We say this worked well, because the popularity gained among a large number of the people in any community, by so magnanimous an offer, offset the losses in complying with it more than tenfold. But in these days, when among our best artists photography has risen to the dignity of an art, and pictures are produced upon which, not only time and money are expended, but talent and skill of the highest order, it is foolish and humiliating to imply any such terms.

Whether stated or implied, the notion seems to have got abroad that the photographer's time may be taken up, and he put to effort and expense so long as the patron chooses to demand these of him, till finally the limit of endurance or disposition to proceed further is reached on one side or the other—generally that of the customer—and he, being still dissatisfied, refuses any compensation for what has been done. But we think it is a matter for congratulation that the law has stepped in here, and

promises soon to put an end to this onesided and pernicious principle of doing business. It has said in substance that time employed, talent exercised, and work skilfully executed must be paid for, whether the result be satisfactory to the patron or not. This has been the result in two cases within a year past, one on either side of the Atlantic. The first was that of Mr. G Frank E. Pearsall, of Brooklyn, where he made seventeen sittings of a fair subject, and payment was refused, and the other has just come off in London, where a Mr. Lee engaged Messrs. Lock & Whitfield, photographers and miniature painters, to execute a portrait of his wife, for which he was to pay the sum of £37 4s. (\$166); but upon the completion of the picture it was pronounced unsatisfactory, returned to the artists, and payment refused; whereupon the case was carried into court, was argued in all its bearings on either side, before a judge and jury, and a verdict rendered for the plaintiffs in the full amount claimed.

The objections to the picture were similar to those we hear so often. The lady had seen a picture of a fair young girl that was very beautiful, and—the same old story—she wanted it like that. So when it was done she and her friends thought it made her look older than she was. Mr. Lee thought it badly colored, and the chin was made to look "jowly." On the other hand the work was submitted to competent artists, who pronounced it admirable and the likeness good, and on this evidence judgment was rendered.

As an illustration of how these cases are regarded outside the profession, and the interest the public at large take in them, we quote from the London Daily Telegraph some very good points, as follows:

"They (the defendant and his wife) did not like the portrait when it was sent home; but, resolved not to rely upon their own opinion, they called in some friends as judges, and 'the result was that it was unanimously disapproved of by them all.' The lady herself was examined, and said that the picture, instead of being a watercolor drawing, was a badly colored photograph, and that 'her friends told her that



PHOTOGRAPHIC 3

CONTENTS





0

W I



Rates of Fostage,							
Places of Interest in Philadelphia,	i						
Railroad Depots and Ticket Offices,	;						
Calendar, with Photographic Hints,	;						
Local Photographic Societies,							
Items of Photographic History,							
Photographic Processes,	;						
The Negative Bath,	,						
The Developer,							
Collodion,							
Varnishes,							
Retouching Varnish,							
Printing and Toning, 51							
Mr. Marston's Process, 51							
Mr. Hearn's Process,							
Collodio-Chloride for Porcelain Printing. By Chas. Evans. 59							
Emulsion Process,	,						
Photographic Hints, 63							
Executive Officers of the United States Centennial Com-							

Photographic Hall,

Admission Tickets for the Public. . .

Important to Visitors.

N. P. A. Convention,

The Centennial Buildings,

Directions for Exhibitors,

Map of Philadelphia,

-
2
and the same
20
1000
70
m
Na B
TO ACCUME
O

71

79

83

84

84

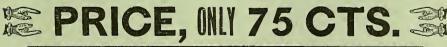
88

92

96

96





Regulations for Admission to the Centennial Ground.

Admission Tickets for Exhibitors and Employees, .

FOR SALE BENERMAN & WILSON, PHOTOGRAPHIC BY

116 NORTH SEVENTH STREET, PHILADELPHIA.

The Centennial Photographic Diary.

The Centennial	Photographic	OUR
Diary.		LATEST
66 66	44	ВООК
"	"	IS
دد دد	46	
66 66		NOW
ç¢ ç¢	"	READY!
A Guide to Phot	ography.	Every Photographer will find it
= 66	"	useful, especially if he visits Phi-
44	**	ladelphia.
"		
66	66	It is embellished with a fine en-
44	"	graving of
66	66	
	•	PHOTOGRAPHIC HALL,
A Guide to the	Centennial.	and a beautifully colored
66	٠,	MAP OF PHILADELPHIA,
6.6	66	which contains engravings of eight
¢¢	66	of the principal
66		CENTENNIAL BUILDINGS.
A Memorandum	Book.	The BLANK LEAVES with
	64 -	which the printed pages are inter-
"	¢¢	
"	66	spersed are a most excellent feature
e t	46	of the work.

Send for it early, as only a limited number have been printed, and the demand will be lively before the Convention.

See next page.

it made her look much older than she really was.' As for the defendant, that gentleman's objection to the portrait was mainly to the effect that the cheeks were so red that it gave them the appearance of having been rouged. But what would the gentleman have said to one of Mr. Millais's thousand-guinea portraits, in which carmines are applied to the cheeks and lips with a liberality far more suggestive of the celebrated 'bloom of Ninon de l'Enclos' at eleven and sixpence a bottle than of the subdued carnations of 'Madre Natura?' Another of the defendant's objections was that his wife's neck in the picture was of so dark a color that it more resembled the skin of a mulatto than that of a fair-skinned Englishwoman. But may not the exigencies of the law of shadows have had something to do with the adumbration of the lady's flesh-tints?

"We are well aware that shadows in portraiture are often an inscrutable mystery to many otherwise well-educated persons. When Queen Elizabeth sat to Zucchero she desired to be painted 'neither with shades to the right nor to the left, but in an open garden light;' in other words, her Majesty's evident preference was for having her countenance depicted, sciographically speaking, in the similitude of a muffin. Again, when Lord Amherst's embassy visited Pekin, and the mandarins were shown a portrait of George III, which was destined as a present for the Emperor of China, and the features of which were in half-shadow, a Celestial critic asked why the King of England had one side of his face covered with dirt? What would the hypercritical mandarin have thought of a 'Rembrandt?' Into the further objection of the defendant at the trial on Saturday, that his lady's chin was made to look 'jowly,' we are deterred by reasons of gallantry from entering. A fish has a 'jowl,' and very nice indeed is that part of the anatomy of a salmon and a turbot; but for a lady to be 'jowly' must be accounted a simple impossibility. Perhaps it was the inexorable canon of foreshortening that did the mischief. The sun draws upturned maxillaries more correctly, although less flatteringly, than Guido did; and we are afraid that the

beauteous neck of Cleopatra, if viewed through the medium of the lens, might harbor a slight suspicion of 'jowliness.' The jury in this case were not in a position to enter into such minute matters of technical analysis and comparison; and, the learned judge having summed up, they returned a verdict in favor of the plaintiffs for the full amount claimed. We have not the slightest doubt that the defendant will be exceedingly dissatisfied with the result, nor can we withhold our sympathy from a lady whose husband has been adjudged to pay £37 odd, to say nothing of costs, for a picture which he does not like, and which his friends unanimously declare to be an unsatisfactory counterfeit of his wife.

"The real question at issue, however, was obviously, not whether the picture was a faithful or flattering portrait, but whether it had been executed in a proper and workmanlike manner. Sitters have been systematically dissatisfied with their portraits for the last five thousand years at the least; but there has in all times existed a common consensus among experts as to the modes of ascertaining whether a picture reaches the due standard of artistic capacity and manipulative efficiency. To be worth the price demanded for it a painting must be 'up to the mark,' and the real question to be decided in the case which we have discussed was whether the portrait was a wellexecuted work of art or a daub. The evidence of the experts seems to have been decisive enough as to its not having been a daub; and the long and brilliant reputation of the firm of photographers and miniature painters who were plaintiffs in the action should surely be regarded as well-nigh tantamount to a guarantee that no daubs would under any circumstances be allowed to leave their establishment. As to the fidelity of resemblance the dilemma remains as embarrassing as ever; and, looking at the difficulties so frequently arising between portraitists and their sitters, it would be almost as well if the former took a hint from the worldly wisdom of the French photographer, who advertised a sliding scale of charges for his productions. 'Guaranteed resemblance, 20f.; pleasing resemblance, 10f.; air de famille, 2f. 50c.'

The charmingly vague generalization of a 'family likeness' might be accepted as satisfactory to both artist and model."

FALSE ECONOMY.

BY T. D. LYON.

A GREAT mistake is made by many photographers in thinking it is economy to employ cheap help, especially operators. I have noticed the result of the experiment by a number of establishments the past year. When times became dull and money scarce, economy was necessary to keep running, and as cheap assistance is always plenty, parties would be most likely to commit the error of trying to curtail their expenses by employing cheap help.

But is it economy to lose several dollars where you save one, and lose your reputation for doing good work?

I know of several photographers who have lost their best-paying customers by employing such help and turning out inferior work.

It does not take the public long to discover the change in our work, and they will not remain with you long if they can get better work at some other gallery. Where a man understands his business thoroughly, he should receive fair prices for his work; then he can pay fair compensation to his help, and he will find it cheaper in the end.

The above was brought to my mind by one of our photographers the other day. He said he could not imagine the reason his trade fell off so much lately; but I saw the reason when I compared the work he was doing a year ago, and that he is doing now—he has a cheap operator.

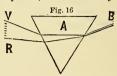
LECTURE ON LENSES.*

BY JOSEPH ZENTMAYER.

(Continued from page 218.)

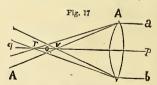
So far we have considered a ray of light, refracted by a transparent medium, to be still a single ray. Such would be the case were the white ray of light of a single homogeneous color; but what we call white

light is composed of different-colored rays, which, by passing through a refracting medium, are refracted in different degrees. This is the source of another aberration of even more importance than the spherical aberration—the chromatic aberration. By passing a beam of white light, B (Fig. 16), through a prism, it is not only refracted,



but decomposed into seven colors, red, orange, yellow, green, blue, indigo, and violet. These different-colored rays are differently refracted by the prism. The violet ray, as the most refrangible one, is refracted towards V, and the red one, as the least refrangible, is refracted towards R, and other colored rays fill out the space between V and R in the order of their refrangibility. This is known as dispersion. The dispersion of refracting media is measured by the length of the spectrum which they produce. Flint glass has more dispersive power than crown glass, because the spectrum which it produces is longer than that of crown glass. The dispersion of a medium is indicated by the difference of refraction between the index of refraction of the red and the violet. Let us now see what effect the dispersion has on images produced by single lenses.

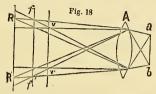
White light a and b is falling on a double convex lens (Fig. 17). The ray a is decomposed into the different-colored rays as soon



as it enters the lens, and the red ray, as the least refracted, will cross the axis $p \neq 0$ in r, while the violet ray crosses the axis in v. Between the red and violet the other colored rays cross the axis. The same is with the ray b, and if we do not consider the spherical aberration of the rays between a and b, all the red rays will have their focus at r, and all the violet ones at v. Between r and

^{*} Delivered before the Franklin Institute, Philadelphia.

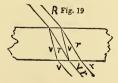
v, the foci of all the other colored rays are situated. The space between r and v is called the longitudinal chromatic aberration. The length of the aberration changes with the dispersive power of the media out of which the lens is made; it is, for instance, twice as great if the lens is made of flint glass, as if the lens were made of crown glass. The influence of the chromatic aberration on the image of a lens is shown in Fig. 18. The white light from the object a b, refracted and dispersed by



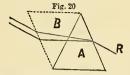
the lens A, does not form a colorless image ff', but the red rays form one at R and R', and the violet at VV'. But between these, an endless number of colored images of rays of different refrangibility are produced. The red image is the largest. If we place a screen at RR' we do not get simply a red image, as all the other dispersed images are formed on the screen; and as the mixing of all the different colors of the solar light make white light again, so the mixed images, that is, the central part, is colorless, and only the margin is blue, because it is surrounded by the diffusion image of the blue diverging rays.

If the screen is moved to VV', then the image is surrounded by a red margin; if it is moved to ff', the colored margin disappears, but the image, composed of the different dispersed images, appears undefined and not clear. This effect is more increased, because each colored image has its spherical aberration also. Chromatic aberration alone would place the different colored images in regular succession behind each other; but spherical aberration mixes these images of different colors, and only the two outer ones, red and violet, remain. From the foregoing, it is clear that chromatic aberration must necessarily interfere with the definition of a lens, and that it is desirable to find a way to correct this evil. From the moment when Newton unravelled the nature of solar light, proving that light is composed of rays of different refrangibility, our greatest philosophers and opticians have spent their time and skill in the attempt to produce lenses without chromatic aberration, or at least to reduce it to a minimum. Sir Isaac Newton was of the opinion that refraction and dispersion of different refracting substances are always in the same ratio to each other, and concluded, that it was hopeless to produce refraction without color, by combining convex and concave glasses. Leonhard Euler, the great mathematician, on the other hand, reasoned in another way, and this is a curious instance of how a correct conclusion was drawn from false premises. He assumed that the human eye is achromatic, and consequently a lens could be made achromatic too, and Newton must be in error; he constructed theoretical rules for making achromatic lenses, and Dollond, the optician, succeeded in carrying them out. But Dollond, by comparing the eye with his lenses, observed that the eye cannot be achromatic; and Fraunhofer afterwards measured the chromatic aberration of the human eye, and found that an eye that is able to bring parallel rays of red light to focus on the retina, can only bring violet rays to a focus coming from a distance of two feet.

Now, let us see how we get rid of these beautiful colors, which we admire so much in the rainbow and the glittering dewdrop, but which hurt the eye of an optician in an optical instrument. If a ray of white light, R (Fig. 19), falls obliquely on a parallel plane glass, it is decomposed as soon as

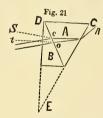


it enters the glass; but on the other side all the colored rays which made white light are, on leaving the glass, parallel to its former direction, and if we think the whole surface of the glass struck by white rays, they all will be dispersed, and come out parallel on the other side; but if the different-colored rays are mixed homogeneously, it makes white light again. But if a prism, A (Fig. 20), is struck by an oblique ray, R, the ray is dispersed in the glass, and the colored rays leave the



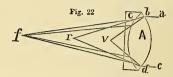
prism diverging, and they cannot be properly mixed again to white light, except we can give to the leaving rays their parallelism again. Now, if we combine a prism, B, of the same angle and material, in a reversed position to A, it is evident that we restore the diverging rays again to parallel rays; but, unfortunately, we destroy not only the dispersion, but the refraction—we make a thick, parallel glass out of the prism.

Let us try it in another way. The ray, R (Fig. 21), passes into a prism of crown glass, A, and a colored image would be



formed at st, if the prism B would not interfere. If we now could combine with the prism A, one of a less angle, but made from material like flint glass, of greater dispersive power, so as to have the same dispersive power as the larger angle prism A, we can restore the diverging into parallel rays, and the light will come out white again, although it went through the compound prism CDE. This is perfectly practicable, if we make the prism B of flint glass; this having a greater dispersive power than the crown glass, and the rays c and d, when entering the prism B, are somewhat refracted-the violet more than the red-and their divergency is smaller; and if the prisms have the right proportions, the red and violet rays come out into the air parallel, and, at the same time, the rays passing from the prism B will have a different angular direction than that with which they entered the prism A. Thus we have refraction without dispersion.

Let us adapt this principle to a lens, A (Fig. 22), made of crown glass. The rays a and c enter the lens at b and d, and are



dispersed; the red would cross the axis at r, and the violet at v. We associate the planoconcave c, of flint glass, with the lens A. As the negative flint lens is of a denser medium, the violet, as well as the red rays, will be refracted, but the violet more so than the red; and, if form and dispersive power of the two lenses are in the right proportions, the red, as well as the violet, will meet at the point f; the image formed there, is colorless, or achromatic, or, in other words, it will appear in its natural colors. But even in the best achromatic lenses there is still a small amount of color left, which cannot be destroyed. If we compare the spectrum of a prism of crown glass with one of flint glass of the same angle, we find that the more refrangible blue, indigo, and violet, take not only absolutely, but also relatively, more space than one in the spectrum of the crown-glass prism. So, if we succeed in uniting the outer rays, red and violet, the intermediate colors cannot unite completely, and this remainder of not corrected colored rays we call the secondary spectrum. Complete achromatism, therefore, cannot be obtained, but we must be content to come as near as possible to the requirements. A selection of crown and flint glass, in which the proportion of length of the spectra of the different rays are nearly related, will bring us very near to our purpose. Fortunately, the colors of the secondary spectrum are feeble, and do not interfere much with the sharpness of the image, and we are well pleased if a lens exhibits only the secondary colors-light purple and greenish, as it is a proof that the most objectionable effects from achromatism are removed. The association of flint and crown glass serves not only to correct chromatic aberration, but, as we have seen

before, if the right form for each of a pair of lenses be selected, it corrects spherical aberration also. Such a lens, corrected for spherical and chromatic aberration, we call an *aplanatic* lens.

(To be continued.)

SCATTERED PHOTOGRAPHY IN OUR WORLD'S FAIR.

As a great many photographers will visit the Exhibition, and improve the only opportunity they will have to see all there is to be seen of photography, as well as the many other interesting things there, before we have an opportunity to address them again through the columns of this magazine, we will here call their attention to the fact that all the photographs are not in Photographic Hall. Why this is so we are not able to explain. But we should have supposed that after having a building erected, devoted especially to this branch of art, so well adapted for the purpose, and while there was yet plenty of room, that the authorities having charge of the exhibits would have placed all the specimens of our art, that were exhibited as such, in their proper place. But since they have not done so we must look up the good things in their various localities. We have had no opportunity to search for or classify these stray exhibits, but have noticed them casually as we have passed through the various departments. In the Main Building a great many photographs may be found, and some of them are especially noticeable. All will be interested in seeing the mammoth pictures in the Australian department, by Mr. B. O. Holterman, Sydney, N. S. W. These are remarkable for their size, the negatives being 31 x 5 feet. But we regret that they could not have been printed on paper large enough to make an entire print. As it is they are printed on ordinary albumen sheets, which are joined together in the mounting. The long panoramic view by the same party, though deficient in some of the qualities of a good photograph, is worth a careful examination.

In the Egyptian department some excellent views of scenery in that country may be found. These would have been a valuable contribution to the foreign section of Photographic Hall, which is rather deficient when compared with the American side of the house.

There are also a few photographs in the Art Gallery; but the greatest number to be found outside of Photographic Hall is probably in the Government Building. These, however, are Government photographs, and are in their appropriate departments there, illustrating science, education, exploration. etc., etc. The piscatorial department is particularly interesting, there being a great number of photographs of fishes of every size and kind. We said the greatest number of photographs to be found outside of Photographic Hall was probably in the Government Building; this is doubtless true so far as they are hung and catch the eye of the promenading visitor; but it just occurs to us that there is another building in which a large number of photographs may be found. This is situated a little northeast of the Art Gallery, and contains an exhibition of the French Department of Public Works. Besides the many beautiful models of bridges, piers, docks, lighthouses, etc., there are a large number of very fine photographs from nature, all bound in huge volumes, about 20 x 30 inches in size, and which are arranged on tables for inspection. They will well repay a visit to this building, as they are fine examples of French landscape photography.

A good deal of excellent work may be found in the various departments done up in this way. In the German section in the Main Building is an interesting collection of mechanical prints, bound in similar form. This is a style of exhibiting photographs that seems to be almost exclusively foreign. There is one exception in Photographic Hall, and that is by Mr. S. R. Stoddard, Glens Falls, N. Y. It is a plan we like very much for any work that requires to be examined in detail, as the pictures are well protected, and at the same time most conveniently arranged for inspection.

Thus any one who will go through the whole extent of the great Exhibition, and notice the photographs in almost every department, of all kinds of wares as well as of people and scenery, will be convinced of

the multifarious applications and usefulness of our art.

The time was when photography was considered merely as a luxury, but it has now become so associated with almost every kind of business, that its industrial importance and necessity are scarcely less than that of its artistic.

Lessons in Photographic Hall.

BY ROBERT J. CHUTE.

Workers in every department of photography will visit the Exhibition, and each will look for something that may help him in his regular work. It is not always possible to get at the lessons to be learned, as we might do if every part and process of the works were as clearly revealed as are the results. These last are all we see. The boy who cleans the glass; the operator in the laboratory or dark-room, who compounds the chemicals, keeps all in good working order, and manipulates, with trained eye and skilful hands; the artistic touch of him who softens the rugosities, obliterates the freckles, and gives that fleshly texture that we all admire under an effective distribution of light and shade; the combination of processes and methods by which a rich and beautiful effect in the print is produced by the competent printer; the deft fingers that mount, spot, and give the finishing touches; all these are behind the scenes, and here we only see the results of this multiplicity of work. Could each one who may be striving for improvement but look in and see the inner working of all these departments, much more would doubtless be learned. But with only the effects produced, there is still much left to be gained by the earnest seeker after knowledge. A picture will show upon its surface whether it was from a clear negative. An absence of spots, stains, or streaks are sufficient evidence that they did not exist in the negative. A picture finely modelled, perfect in middle-tints, and full of detail, was not made with an old acid collodion, or one that produced intense blacks and whites. The retouching will at once indicate whether the artist possessed the knowledge and feeling to produce the best effect, and know when to stop. A sandpapered or polished effect is not of the highest order of retouching. A bold, brilliant print, deep and rich in tone, with pure whites, was not made from weakly silvered paper, nor did untidy fingers convey any trace of hypo into the toning bath.

A print with straight and perfectly trimmed edges, neatly mounted, neither uneven or askew, indicates a careful attention to the smallest details of the work. Now any one finding that these good qualities are absent, or are exceptions with him, may rest assured that there are many lessons yet for him to learn; and he should not rest content, or be satisfied to return home, till he has got the keys to his deficiencies. Our conventions are for the purpose of disseminating knowledge among the members of the Association, and each member has a claim upon every other member; it is his privilege to ask for information of those who are better informed, and in this way he may discover the inner working of this or that process in which he may have found himself deficient.

But there are other lessons there that are of more importance, and have a greater value, that are plainly visible on the face of every picture; and yet they are of that subtle, intangible sort that the student must be trained to see them before they can be comprehended. I refer to chiaroscuro and composition. Light and shade on a picture are much the same as on the living model; the eye must be accustomed to observing and estimating its quality or it cannot understand its merits.

A person without training of this kind may be unfavorably impressed with an effect; but why it is so, or how it might be remedied, he cannot tell. But with these we have little to do here. Those who are to be benefited by the lessons of light and shade in Photographic Hall are those who have already acquired this artistic eyesight, and are capable of profiting by whatever they may find there that is instructive.

The extremes of light and shade which have caused so much argument between photographer and patron, and to which the public never became fully reconciled, appear to have given way to a modified or more con-

servative chiaroscuro, which seems to harmonize with the more advanced tastes, and is considered altogether more artistic. This may be readily seen by an examination of the work of our best artists, such as Kurtz, Rocher, Sarony, Gutekunst, Taylor and Wenderoth at home, and Luckhardt, Scharwächter, Loescher & Petsch, and Bergamasco abroad. The work of all these eminent photographic artists possesses, in a greater or less degree, that delicacy of handling in light and shade, which, without startling, always pleases, and is such as may be produced under any ordinary conditions or the usual constructions of skylights. In what respect then is it superior? it may be asked. It is superior in the perfect harmonizing of the lights and shadows, without loss of middle-tints in the lights, or the faintest detail in the shadows, producing thereby a perfect modelling, which must necessarily delineate correctly every feature, and result in a truthful and pleasing portrait.

Even many of those who have heretofore been distinguished for their brilliant and startling effects appear here in more subdued tones, and are evidently feeling the influence of the tendency towards a more truthful and more artistic standard; while a few are still struggling down among the deep shadows, wasting their substance and effort in attempts to produce effects unnatural, which by their flash or brilliancy shall draw the attention from, or excuse other and more glaring defects. If these same efforts were turned to securing a natural effect of light and shade, and a strictly truthful presentation of the subject, both in lighting and composition, their advance would doubtless be more marked, and their work more artistic.

In lighting then the lesson seems to be not a striving for something new, but rather a going back to the old, and bringing that up to the highest state of perfection.

In composition there is more real improvement than in any other department of the work. Our American artists especially have made rapid advances in this direction, and here the really most valuable lessons are to be learned. The student will find that not only have the rules of composition

been observed in the arrangement of lines, the graceful positions, etc, but they have gone far beyond these into the higher realm of art, which represents action, motive, purpose, and which appeals to the emotions as well as the senses of the beholder.

This truly aesthetic element will be found illustrated in the works of Landy, Rocher, Taylor, Bigelow, and others. It is an element for which no rules can be given. It cannot be learned and delivered as a school-boy recites his lesson, but must be felt in order to be expressed. This is what photography is reaching up to, and from the advances already made, there is a promise that the current will soon set strongly in this direction, till ere long the expression of some sentiment, some purpose, some object, either of the artist or the subject, will be as inseparable from the products of the camera as are their lights and shadows.

One of the Secrets of Success.

ALL who are in business, or those about commencing, are usually anxious to know by what means they can insure success. Many are looking for some light, easy business, where they will not have to work very hard, and if perchance they find such a business, they then expect to play the gentleman while some hired boy does the work. These never succeed. The world always goes hard with them; they are forever the victims of bad luck. Failure always stares them in the face.

But the man who succeeds is he who gives his personal attention and effort to the work. He looks for no light business or easy position, but goes at it with a will in whatever capacity he may find himself, or however hard the work be may have to do.

All this is as true in photography as in any business, and in none is the necessity for personal application more imperative. Many men have gone into photography because they thought it a light, genteel business. Their time could be easily divided between hunting, fishing, games, and a little business. These seldom know what kind of work they are producing, or whether it proves satisfactory or otherwise; but a business conducted on this plan does not last

long. There is soon a closing up, a sheriff's sale, or some such termination; the business was a failure. It was not the business, it was the man that was the failure. This is how a man may fail; now let us see how one can succeed.

We may take any of the leading photographers in our own country or Europe, and it will be found that they have made their reputations, and many of them their fortunes, by strict personal attention to business. Their customers always find them at the gallery, and almost invariably receive the personal attention of the proprietor. Such a man makes his own sittings, and puts himself, as it were, into his work; it bears the stamp of his own personality. either in the lighting, the composition, or the taste displayed in the whole; it bears the individual characteristics of the man in such a degree that it becomes his work, and upon it he builds his reputation. Such a man not only gives his personal attention to his sitters, but to every part and detail of the work as it progresses. He inspects his negatives, he inspects his prints, and finally when the work is finished if it be not up to his standard, he refuses to deliver it, and insists upon its being done over. This is the man that will succeed; this personal attention to business is the secret of success. It begets a confidence among the people that is sure to bring patronage. His customers know that when they place themselves in his hands they will receive none but first-class work; this confidence disarms criticism, and they are much more easily satisfied with whatever he may produce.

This being true of portraiture or gallery work, it is none the less true of landscape photography. The same care and personal attention in every department of the work are here demanded. A man may not always be able to attend personally to every part of the work, on account of the extent of his business, and the necessity of employing others to do it for him; but there are certain stages of the work that should come under his inspection, so that wherever there are deficiencies he may note them, and hold the proper parties responsible. In this way an extensive establishment, employing a large number of hands, soon comes to par-

take of the personality of the proprietor. Each person employed, from the highest to the lowest, feels that the eye of a master is over him, and that a certain standard, that is characteristic of the house, must be observed and maintained.

The importance of this personality in business was brought forcibly to our mind recently by a letter received from an English landscape photographer, Mr. Frank M. Good, who stands at the head of his profession, and whose superior work has won for him a reputation that has made his name familiar to all travellers, and lovers of beautiful stereos, both in this country and in Europe. Mr. Good has distinguished himself by personally journeying, under all the attendant difficulties of transporting apparatus and material for photographic work on donkeys and dromedaries, over the burning sands of Egypt, and through the most inhospitable sections of Palestine and Syria, and bringing thence some of the finest views of those countries that have ever been produced. Now the secret of this excellence we find stated in Mr. Good's letter, from which we take the liberty to quote. He says: "My work is part and parcel of myself. I may not be always successful, but this does not prevent my striving to get each subject perfect, even to the sacrifice of self. I mean by self, that even my life goes too much into the composition of each negative. Nor does it end there. I still go on till they are printed, and much I regret that every print cannot be done by my own hands in all its parts."

Thus we see how he puts himself-his very life, as it were—into his work. Any one who will inspect his exhibit in Photographic Hall, may see how this personality has operated. Not only is there evidence of the trained artist in the composition, lighting, etc., but it would seem as if a personal magnetism must have operated upon the animate subjects we see there represented. Of the great number of Mr Good's pictures we have had the pleasure of inspecting, in which are introduced natives and animals, we have seldom seen one where there was a movement; they are as still as statues, and as gracefully and appropriately arranged.

We commend these thoughts to young photographers particularly, and would advise them to study this matter of personality in business; let them strive to emulate those who have been prosperous, and they will soon discover that they have the key to at least one of the secrets of success.

On the Use of Ready-Sensitized Paper.

BY C. F. RICHARDSON.

Although many of the advantages of using a sensitized paper which will keep in good condition for several weeks would seem to be apparent at a glance, I think, from conversation with various photographers, that some of these advantages are little understood. Having used such a paper exclusively for some years, I will endeavor to state some of its uses which have been proved by this experience.

There are a large number of photographers who do all their work without assistance. After having sensitized their paper for the day, it often happens that the time is taken up by sittings, so that it is impossible to use up the paper. The time best suited to printing, when the light is good, is popularly supposed by the public to be the best time to sit, and so the two operations interfere with each other. If no sitters appear, the operator is still nervous lest they may, and prints his negatives as rapidly as possible to be ready for them. Now most of the best negatives made will produce better prints if printed slowly than if done rapidly in the sun. A paper which will keep well, both before and after printing, meets both these cases. With paper always ready, he may print whenever there is light enough, and not worry about interruptions, because the work can be finished another day. He may print in weak light because the paper will keep till the work is done, and the lot toned together.

If paper has to be sensitized freshly, there is always a delay of an hour or two in the morning before printing can be commenced, whether in large or small establishments. Printing must also be discontinued an hour or two before dark, to allow of toning the prints. With a ready-sensitized paper, however, the printing may be commenced at

daylight and continued till dark, thus often completing orders which would otherwise remain unfinished.

It is of great importance to fill orders punctually. In the dull winter months this is often rendered difficult by several successive days of dark weather. With paper ready, the work can often be done in these two or three dull days, while waiting in vain for one pleasant one.

Frequently after sensitizing a quantity of paper in the full expectation of a pleasant day to print it, suddenly the sky is overcast, and the paper is lost for want of light to use it. On the other hand, the morning may promise badly, but the afternoon may be clear; but if paper is not ready, valuable time is lost.

As to the quality of the prints made on ready-sensitized paper, I have found them more uniformly good than by any other process. In the hot summer months clearer lights and more brilliant shadows are secured, after keeping several weeks, than are usual on fresh paper. In short, while the results equal those secured by the best printers, they far surpass those obtained by many.

To offset these advantages, the paper is slightly more expensive than usual; but the difference is not so great as is generally supposed. Few photographers have a clear idea of the amount of silver consumed in sensitizing paper. I am unable to give from my own experience satisfactory data on this point, but I think it would be useful if those who have used large quantities of paper, and have kept accurate accounts of the silver used, would publish the figures. It is necessary, of course, to take into account the weakening of a solution which has been in use, as well as the silver which has been added to it. Hardwich states that fifty sheets of paper floated on a 55-grain bath removed 17 ounces of liquid from the bath, and impoverished what remained to the extent of 5 grains per ounce, so that the amount actually taken up by each sheet was 30 grains.

A committee of the American Photographic Society tested two baths, one 100 grains strong and the other 25 grains, with the result that in silvering sixteen sheets of

paper 560 grains were consumed of the strong bath, or 35 grains per sheet; of the weak bath the same number of sheets consumed 212 grains or a fraction over 13 grains per sheet. But probably no printer uses so weak a bath as 25 grains.

When the subject was discussed in the Boston Photographic Society some years ago, several members stated that in their experience three-quarters of an ounce of silver was consumed by 12 sheets of paper, which accords with Hardwich's statement.

In making a comparison of the cost of the two systems, the time and trouble saved, and the cost of freshly silvered paper, which is often lost for want of opportunity to print it, should be taken into account.

INFLUENCE OF RESIN ON SENSITIVE PAPER.—If a pine backboard be placed in contact with sensitive paper, either at the front or back, it will discolor much quicker than otherwise. Many samples of brown or manilla paper act in a similar manner. If a piece of thin brown paper, such as is used for wrapping ferrotype plates, be placed on the back of a sensitive sheet, that portion will show a brown stain long before the rest of the sheet has changed.

C. F. R.

Note.—Mr. Richardson has been induced to prepare his paper for the trade, so that all may have the advantages of it. See his advertisement.—Editor.

Photographic Sensations on the Pacific.

Honors to Dr. Vogel—President Rulofson coming to Philadelphia.

THE following correspondence, and item from a local paper, indicate an enthusiastic interest in matters photographic among our brethren in San Francisco. We are glad to see the disposition to give Dr. Vogel so hearty a welcome, and believe he will find hearts as large and warm on the Western shores of our continent, as those which have heretofore gladdened his presence in the Eastern States. We predict for him a most happy visit to the Golden State.

It will be seen also that quite an excitement has been created by the advent of Mr.

B. O. Holterman, from Sydney, N. S. W., with one of his monster negatives. Prints from these negatives may be seen in the Australian department in the Main Building of the Centennial Exhibition.

SAN FRANCISCO, July 7th, 1876.

FRIEND WILSON: I expect Dr. Vogel in a few days. We have Holterman's negative on view at our gallery. It will remain here till the Doctor arrives. Our Society will hold a special meeting, deliver an address of welcome, and take other appropriate action in earnest of our appreciation of his presence. I hope to secure a return ticket for him; believing our photographers will leave nothing undone to make him happy during his stay among us,

I remain yours always, W. H. Rulofson.

P. S. Think I will leave here about the 5th or 7th of August for Philadelphia.

"Wonders in Photography .- Mr. B. O. Holterman, an amateur photographer from Sydney, N. S. W., arrived lately by the steamship Australia. The gentleman has brought with him, for exposition at the Centennial, a collection of photographs and negatives, which, in the opinion of Mr. Rulofson, the President of the Photographic Society, surpasses anything that has ever been done in the world. Mr. Holterman has with him a negative on ordinary glass, 5 feet by 3½, the largest ever taken in the Colonies or elsewhere. The surface is good all over, and its peculiarity is not only its size, according to the dictum of our photographs, but the general chemical effect, and the superb details of the negative make it a perfect triumph of photographic art. Mr. Rulofson informed a Call reporter that it would cost \$10,000 to produce the same negative here, and that every print would be worth at least \$1000. The largest negatives made in this town are 20 x 24 inches, and they require unusual artistic skill. Mr. Holterman also exhibited to the reporter a print of a view from his own house in Sydney, which is twenty-two feet long, and some of the buildings photographed therein are at least three miles distant from the camera. Messrs. Bradley & Rulofson have offered the use of their studio to Mr. Holterman for the purpose of exhibiting his prints and negatives, which will attract the attention of the public, as well as that of the practical workmen in the art of photography."—San Francisco Daily.

MATTERS OF THE



THE Convention number of our journal is about to go out, and we are about to say a few last words before we hope to meet you all here in the Quaker City. If any have not paid their dues, they should come prepared to square up the old account and to make a fresh start. The dues to the Association are \$4 per year for employers, and \$2 for employés. Mr. Moore, the Treasurer, will be on hand to receive your dues, and return you his happiest smile with the receipt.

The entrance fee to the Association is \$5; and life membership \$25, with no more dues to pay.

Let us have a grand rally on the 15th.

GENERAL HAWLEY AT THE CONVENTION.—It gives us pleasure to announce an additional attraction at the opening of the National Photographic Association Convention, as will be seen by the following letter. General Joseph R. Hawley is President of the Centennial Commission.

PHILADELPHIA, July 20th, 1876.

DEAR SIR: It gives me pleasure to accept your kind invitation to make a brief welcoming address to the National Photographic Association at its annual meeting, in Judges' Hall, August 15th.

I shall be glad to contribute in any manner possible to the pleasure and interest of the occasion.

Respectfully yours,
Joseph R. Hawley.

EDWARD L. WILSON, Esq., 116 North Seventh Street, Philadelphia.

CHEMICALS carefully kept in order are better than a profane tongue.

ARTISTIC PHOTOGRAPHY.

This is the title of a new work we are about to issue, from the pen and camera of Mr. L. G. Bigelow, author of Bigelow's Album of Lighting and Posing. The new book is illustrated with twelve beautiful Promenade and Cabinet photographs in Mr. Bigelow's best style, and contains full instructions in every department for producing the pictures shown.

Mr. Bigelow, in this work, has sought to meet the requirements of the advanced demands of our art, which are tending strongly towards the more esthetic qualities as of pre-eminent importance compared with the chemical and manipulatory. We are sure Mr. Bigelow's reputation as an artist and teacher will commend this book to all who desire improvement in their work. Its tendency is in the right direction, and its influence will be to elevate photography to the same high standard of excellence among the many that it has already reached among a few.

We have only room for this brief notice at this time, but shall review it more fully next month. In the meantime, if you come to the Convention, call at our publication office and inspect the work for yourself. We know it will benefit all who will study it.

PAPERS AT THE CONVENTION.

WE issued a few days ago the usual invitations to those who we know are accustomed to write, to prepare papers for the Convention, and already they have been responded to very liberally, indicating a degree of interest and readiness to help along the work, on the part of some of our prominent photographers, that we had hardly dared hope for.

The following well-known gentlemen have accepted the invitation, and given the subject they expect to present: E. T. Whitney, on "Photographic Rights;" J. H. Fitzgibbon, "How to Climb the Ladder;" Wm. Curtis Taylor, "On Various Distortions in Photography;" E. K. Hough, "On Co-operative Unions in Photography;" B. Frank Saylor, "National and other Societies;" I. B. Webster, subject not announced; promises "something prac-

tical and to the point;" Mrs. E. N. Lockwood, "Insurance;" H. B. Hillyer, "Photography from a Monetary Standpoint."

This is a very creditable starting, and we trust that this promptness on the part of our leading men is but an indication of how the call for the Convention will be answered by the great body of the members of the National Photographic Association.

If there are any to whom we have not sent an invitation to contribute a paper who would esteem it a privilege to do so, we would be most happy to hear from them. Any such will please send their names with the subject they propose to treat to the office of the *Philadelphia Photographer* at their earliest convenience, before the meeting of the Convention, addressed to Edward L. Wilson, Permanent Secretary.



EDINBORO', ERIE Co., PENNA., May 13th, 1876.

Gents: Your Mosaics of 1875, on page 39, tells how to make a bath that will work in one-third the usual time. Please inform me through the Philadelphia Photographer how to treat said bath when it gets out of order, and oblige,

Yours truly,

WILLIAM H. VAN DYKE.

Will Mr. E. P. Libby answer?-Ed.

PHOTO-CRITICISM.

In our review of the exhibits in Photographic Hall we have endeavored to express a fair and honest opinion, uninfluenced by fear or favor from any quarter. But we have made it a point not to criticize the poor or indifferent work, or to say anything to discourage those of humble pretensions, who have probably done the best they could.

There is nothing to be gained by this that would compare with the injury that might be done. But when we have criticized at all, it has been upon the work of those who were able to bear it, and where we believed it would result in good to others; work that is attractive, and that all interested will delight to study. Our critical comments have been very few, but have been aimed at some of the best work in the Hall, for we know such pictures will be examined by all, and by many taken as examples for imitation, and for this reason, when there are defects, we feel disposed to point them out.

This is our view of the matter, and those whose productions we have ventured to criticize should consider it rather complimentary than otherwise! But we are not trying to set up a defence of our position. We have not been lectured by anybody, but on the other hand have been much gratified that our criticisms have been so kindly received.

Mr. Landy, of Cincinnati, has already remedied the defect in his "Seven Ages of Man," to which we called attention in No. 1 of our review, and has thereby added immensely to the value of this beautiful series.

Mr. Kent, of Rochester, N. Y., has been called out by our notice of his remarkable work, and his letter below will relieve us all of the doubt or uncertainty which may have been implied by our criticism. We are sorry that Mr. Kent should have understood us to infer an attempt on his part to deceive, for nothing was farther from us. We hung our doubts on the possibility that Mr. Kent's meaning of the term "direct negatives" might have been different from ours; so we threw out the suggestions merely as a guess that they were enlargements; but Mr. Kent's letter settles the question, and we gladly accept it, and wonder! We only regret that he had not told us how they were produced. But we will wait patiently; he may have something good of this kind in store for us at the Con-

We are glad to have the title of the group referred to, viz, "Making a Call," but cannot but continue to regret that the goodlooking gentleman should not have been included; no one would object to his age, or

even suppose him to be so much older than the ladies. Our opinion is that had he been admitted to this conference, we should have had represented, both in the subjects and the composition, the trio of "Wisdom, Strength, and Beauty," as in "Union there is Strength."

But here is Mr. Kent's letter:

ROCHESTER, N. Y., July 4th, 1876.

MY DEAR WILSON: Thanks for your notice of my pictures. I was sorry, however, that, notwithstanding you were confronted with the card "Contact prints from direct negatives," you should have come to the conclusion they were "enlargements." Of course, if they were such I would not have labelled them otherwise. I trust you give me credit for too much truthfulness for that. Whether good or bad, the pictures are from "direct negatives" printed in contact, and there is no dodge or cheat about them. Furthermore, they are among the first I have made, and only faintly show to what photography may be brought. It would seem to me that in small work perfection has been nearly attained, and that progress now should be in the direction of large pictures at large prices. Any advancement in such a direction, I am sure, will be a benefit to our art.

I am sorry the story of the group was so stupidly told that you who see an idea so quickly failed to read it. Instead of the two figures of the ladies being "left out in the cold," with no employment, they are really the chief figures in the group. The picture is "Making a Call." The lady in white is receiving a call from the one having on her hat, and they are supposed to be conversing together about matters not particularly interesting to the figure reading, who seems so much older than they, that it would be inappropriate to have given him a different relation to the group. Of course, if he had been a young man, his position would have been unnatural and faulty. Do you not see how natural such a grouping would be under such circumstances?

However, I have no fault to find for what you have written about the pictures, and only regret that you should have thought me trying to deceive. I trust you are prospering photographically, and will get rich out of your enterprise.

Sincerely yours,

J. H. KENT.

WRINKLES AND DODGES.

CAZENOVIA, N. Y., May 2d, 1876.

I HAVE adopted a new way to heat the plate of a burnisher, and it works to perfection, and at a great saving in expense; you can publish it if you think best.

Enlarge the hole in bottom of machine sufficiently to pass an Argand chimney-top through; cut a large hole through the bench upon which the machine is fastened, then make a shelf under the bench to set your lamp upon, so that the top of the chimney will be within half an inch of the plate, and you have a means of heating your burnisher that is equally rapid with alcohol, and at a minimum of the expense An Argand chimney is the only one that works well, because the length gives it a strong draft.

> Respectfully yours, A. A. Johnson.

THORNTOWN, IND., May 8th, 1876.

I notice a good deal of discussion lately on the subject of blisters in albumen prints. Without attempting to give the cause for these blisters, I will give my preventive. My experience is, that rain-water used for washing immediately after the hypo, will (with the papers now in use) nearly invariably produce blisters.

My way of "fixing" is this: Make hypo bath of hard water to fix in about eight minutes. Add a little liquid ammonia, just sufficient to make the solution slippery to the touch. After fixing, rinse in well-water. Prints may be washed in rain-water after having been first rinsed in hard water.

Can an oil-painting on canvas, cracked on account of varnish, be restored?

Fraternally,

A. Q. ROUTH.

HOT WEATHER .- While it continues, reduce the strength of all solutions. Negative bath to 30 grains; developer, 15 to 20 grains; printing bath, if it has been used 50 or 60 grains, reduce to 40, and keep in a cool place.

OUR PICTURE.

WE present our readers this month with our first Centennial Picture. And we begin, as nearly all visitors do, with the Main Building. This colossal edifice excites the wonder and admiration of all who see it. Vast as it is, the proportions and style of architecture are such, that the beholder can scarcely believe in its immensity; it looks so light and graceful.

But let us look at the figures. Its length is 1880 feet and its width 464 feet, covering over twenty acres of ground. Let any one curious enough estimate how many houses, churches, stores, etc., such as are usually found in country towns, could be placed on this space, and in many cases it would doubtless prove that there would not be much of the town left outside. To give a little more definite conception of it we will divide it up into house lots, when it will be found to make 218 lots 40 x 100 feet in size. But as these are larger than lots are often laid out, we will reduce the size and run streets through it. This arrangement will give us 380 lots 30 x 60 feet, and two streets each 50 feet wide running the entire length. Thus we see that quite a town could be located on this space; or it would make a very creditable cornfield for some of our Western farmers. The four central towers are each 48 feet square, and rise to a height of 120 feet. From these may be had fine views of the interior of the building, and from the top magnificent panoramas outside.

This building, with its annexes, contains the exhibits of over forty different nations in the departments of Mining and Metallurgy, Manufactures, Education, and Science, which fill every part of its immense area to overflowing. To inspect the exhibits on each side of the avenues requires a walk of over eleven miles. This structure is built mainly of iron and glass, and cost \$1,600,000.

Our Picture was made last spring, and is the work of the Centennial Photographic Company, and gives as good a presentation of the building as can be had in a photograph. It is a difficult subject, on account of its great length, requiring so much of it in perspective. It is lost in the distance before we reach the farther end. The Centennial Photographic Company are producing some lovely things in the various departments of the Exhibition, especially in the Art Gallery, some of which we hope to secure for future illustrations.

The prints were made at Mr. Hearn's Photographic Printing Institute, and will be found in keeping with the usual excellence of his work.

TRANSLATION.

THE PHOTOCHROMIC REPRODUCTIONS OF M. LÉON VIDAL.*

In giving an account of the recent visit made to the ateliers of Photochromy of the Quai Voltaire by Mr. Wallon, then Minister of Public Instruction, we announced that Mr. Léon Vidal had been officially authorized to reproduce the works of art contained in the galleries of the Louvre. Mr. Vidal has gone immediately to work. On the other hand, Mr. Paul Dalloz has confided to some of his most competent coworkers the editing of an explanatory text, destined to form, with the colored plates, a work which, under the name of Artistic Treasures of France, will be in itself a veritable work of art.

The numbers of the first series, the subjects of which have been selected from the Gallery of Apollo, will shortly be for sale, and will give successively the exact reproduction of the Casket of Ann of Austria, seventeenth century; the Shield of Henry II, by Benvenuto Cellini; the Portrait of the Constable of Montmorency, enamel of Limoges; Ewer and Dish of Charles V, metal. Then will follow: The Shield and Helmet of Charles IX; the Tabernacle of the Altar of the Holy Ghost; the Breastplate of Henry II; the Cup with Eagle's Beak made of sardonyx, enamels, etc.

Enamels, potteries, engraved crystals, ewers, gold and silver dishes, jewels, armor inlaid and repoussé, precious stones, are reproduced with perfect exactness, showing the most delicate colors and tints. We can almost imagine, in looking on these faithful representations, that we have the originals before us.

^{*} From the Paris Moniteur de la Photographie.

Editor's Table.

SOUTH KENSINGTON MUSEUM PHOTOGRAPHS.—
Mr. Frederick York, 87 Lancaster Road, Notting
Hill, London, has commenced the publication of
a work intended to illustrate the South Kensington Museum. It is published in parts, each part
containing four photographs with descriptive
letter press. We have received the first number,
which presents a handsome appearance, being
produced on fine tinted paper. The photographs
are printed by the Woodbury process and are
exceedingly well executed. It promises to make
an interesting work.

The following copy of a postal card notice will show how Dr. Vogel is being treated in San Francisco:

SAN FRANCISCO, July 15th, 1876.

You are earnestly and cordially invited to attend a special meeting of the entire photographic profession, of the Pacific Coast, to be held at Bradley & Rulofson's gallery, on Tuesday evening, the 18th inst., at 8 o'clock P.M., for the purpose of extending an appropriate welcome to the distinguished Photographic Author and Scientist Dr. Herman Vogel, of Berlin.

All are invited to be present.

GEO. D. MORSE, C. E. WATKINS, JACOB SHEW.

As a further evidence of the wide-awake interest in matters photographic among our Pacific brethren, we quote the following report of a meeting held by their Society on the evening of July 7th, from the Daily Alta Californian.

The Photographers' Art Society of the Pacific Coast held a regular monthly meeting last evening in the gallery of Messrs. Bradley & Rulofson, on Montgomery Street, which was well attended, not only by members, but by representatives of the fair sex with their invited escorts. President Shew presided. The Secretary, Mr. Rieman, called the roll of officers, and then read the minutes of the previous meeting, which stood approved as read.

Mr. Rulofson proposed the name of B. O. Holterman, of Australia, for membership, and the Chairman the name of W. F. Norcross, of San Francisco. Messrs. Marden and Lovejoy were appointed a committee to report on the applications.

The amendments to the by-laws, proposed on May 5th, were laid over for one month.

Mr. Rulofson offered the following resolutions:

Resolved, That as photographers, we are indebted to the liberality of B. O. Holterman for demonstrating the possibility and perfecting the production of the largest negative; and we tender him the thanks of this Society for kindly placing this negative on view for our benefit. Adopted.

Resolved, That this Society hold a special meeting on the arrival of Dr. H. Vogel, of Berlin, in our city, and extend the hand of welcome and fellowship to that distinguished scientist and genial gentleman. Adopted.

Mr. Helterman responded to the resolution passed respecting himself, and begged the Society to accept his sincere thanks for the reception he had received in San Francisco by his fellow-members of the profession.

The President answered the last resolution offered by Mr. Rulofson. He spoke highly of the expected guest, Dr. Vogel; he said that his name was known wherever the art of photography was understood; that he was not only one of the most successful inventors, but also a practical operator, and had done more for the advancement and perfection of the art than any one man living. Mr. Rulofson, in introducing the resolution, spoke for some little time in the same strain.

Professor Hanks described, in a carefully collated lecture, and by the use of apparatus, the system of metric weights and measures. He thought the subject elucidated was one of great importance to every photographer, and it would be to their benefit to accept the metric system, as the chemists had already done. His explanation of the system was very clear, and at its conclusion he received the applause of his hearers. After a short recess, many handsome views were displayed by means of a magic lantern, and the company dispersed. The next regular meeting will be held at the Imperial Gallery, on Market Street.

HOLTERMAN'S GREAT NEGATIVE.

On exhibition in the rooms of Messrs. Bradley & Rulofson, was seen last evening the largest negative ever produced by means of photography. It is about three feet long and two feet wide, a rough guess. Mr. B. O. Holterman is the inventor

of the apparatus which has successfully demonstrated a problem in the art that has long bothered the heads of experimenters. The subject is a view of Sydney, Australia. It has cost Mr. Holterman over \$12,000 to perfect his invention, and when seen in the East and in Europe, it will no doubt create a stir in their photographic circles as it has in ours.

A CORRESPONDENT sends us the following paragraph from the Philadelphia Ledger, and asks if "anything like this has ever been done by photography?" No. We think this is new. The petrified forests are a new feature on the moon. How wonderful is Photography!

"The Paris Journal says that the Observatory in that city has received from M. Melandez, a Spanish photographer, a most remarkable photograph of the moon. Melandez invented an adjunct to the machinery which enabled him to obtain a wonderful picture, showing mountains and volcances upon the face of the orb, and indicating forests of huge trees, now petrified. The photograph attracted much attention."

ERRATA.—In Mr. Zentmayer's paper in our July number, page 216 line 31 from the top, read least instead of lost. Page 218, third line from top, omit "but."

In these hard times it is encouraging to hear that some are prospering. One appears to be Mr. Frank French, Pecatonica, Iil., who has recently erected a fine gallery at that place. From a description of it, it appears to be very complete, with some additions not usually down on the list of fittings. Among these are a bath-room with hot and cold water, a gymnasium, an elevator from a dark-room below to the skylight above, telegraphic wires running to different parts of the gallery, and from that to Mr. French's residence. He must be an enterprising man; it is said he reads the Philadelphia Photographer. We wish him success.

Mr. B. H. Gurnsey, Colorado Springs, Colorado, has been photographing the top of Pike's Peak; away above the clouds, in the regions of snow in July. The Mountaineer* gives him a good notice.

PICTURES RECEIVED.—From Messrs. George R. Elliott & Co., some finely executed cabinets of Gov. Rutherford B. Hayes, of Ohio, Republican candidate for President of the United States. Cabinets also from Mr. T. I. Bradshaw, Quincy, Ill. Very good effects. A little more care in trimming would give a neater finish to the work.

Stereos from Mr. J. W Pendergast, Indianapolis, Ind., being a number of panoramic views of the city. Stereos also from Mr. W. M. Lockwood, Ripon, Wis. A collection of very pretty views in and about that city, including one of his new gallery, and another of his "Steamer Camera." "Sunset on the Lake" is a very fine effect. We conclude that Mr. and Mrs. Lockwood must be popular with their townspeople, for they not only have encouragement to build a new and more beautiful gallery than ever, after having been burned out, but they have a handsome little steamboat called the "Camera," which they run on the lake, and turn to account in some way; and then wherever their camera is turned there seems to be groups of happy young people disposing themselves in graceful attitudes, to give interest to the scene. We hope their prospects will continue to brighten.

MR. J. J. REILLY, Stockton, Cal., has just sent us a set of beautiful negatives of a charming scene in the Yosemite Valley, from which we shall print for a future number of our magazine. Who else will send us a pretty landscape before the season is over?

THINGS TO BE CONSIDERED EARLY THIS MONTH.—1. To examine our notice and advertisement of our new book, Artistic Photograyhy, by L. G. Bigelow. 2. To send for a copy of the Centennial Photographic Diary, with which to visit the Exhibition; and, 3. To send for a copy of the Star-spangled Banner, which we propose to sing at the opening of the Convention.

OUR FRENCH CORRESPONDENCE.—Up to the time of going to press, this had not been received. We are crowded nevertheless, and several matters have to lay over.

Animus: Intention; purpose; spirit; temper—Webster. It is that element in Photography which, when mixed with a few grains each of prudence, firmness, and independence, enables a dealer or publisher to look more to the interests of his patrons than to those of patentrights men and secret process venders. Any mixture of avarice in the composition will cause it to turn green, and produce an entirely opposite effect to that desired.

THE CONVENTION.—A last call. We say, come, come, come! And you will have the grandest time you have ever had. Bring the Convention circular with you, as it contains a complete list of exhibitors in Photographic Hall, which will be useful to you. Again we say, Come.

Specialties.

ADVERTISING RATES FOR SPECIALTIES.—It will be understood that matter under this head is not to be considered as always having editorial sanction, though we shall endeavor to clear it of anything tending to deceive or mislead. Stock-dealers will find this a beneficial mode of advertising, and sure to pay largely. Six lines, one insertion, \$2.00, and 25 cents for each additional line, seven words to a line—in advance. Operators desiring situations, no charge. Matter must be received by the 23d to secure insertion. Advertisers will please not ask us for recommendations. ** We cannot undertake to mail answers to parties who advertise. Please always add your address to the advertisement.

FOR SALE .- First-class gallery. Customers, prices, apparatus, fixtures, and rooms first rate. Village 3500 inhabitants. Rare and very desirable chance in every respect. None but those who mean business need apply. Death of my husband, the late proprietor, the reason for selling. For particulars address J. A. W.

P. O. Box 238, Penn Yan, Yates Co., N. Y.

A RARE CHANCE. - One of the leading photographic studios in the city of Chicago. Firstclass run of custom; reputation second to none; doing a splendid business. Can be bought for cash at about half its value. Address

PHOTOGRAPHER.

434 West Madison Street, Chicago.

FOR SALE .- A 9 x 11 camera, with cone and holders in good condition. Price, \$15.

> Address PHOTOGRAPHER,

3908 Powelton Avenue, Philada., Pa.

WAYMOUTH'S VICNETTE PAPERS.

FOR SALE .- A good photograph and frame business. We wish to sell our portable house and stock, which is now located in the village of The house is 15 x 30 feet and is the best one of the kind in the country. For par-MOORE & BEEBE, ticulars, address

136 Lodi St., Syracuse, N. Y.

FOR SALE .- A flourishing gallery, in central Georgia; situated in the centre of a city of 5000 inhabitants. No opposition. Good prices, fine north sky and side light. Splendid instruments. Gallery well appointed and established. Price, \$1000. Cash only will buy it. Call on or ad-R. J. DEANE, Griffin, Geo.

FOR SALE.—The leading gallery in Windham County, Conn. Has taken highest premium at every county fair. Price, \$400. Full particulars will be given by addressing

A. S. BARBER, Willimantic, Conn.

For Sale.—A new and handsomely fitted gallery, in a new building erected especially for the purpose, with every facility for making first-class work, in a Southern city of 40,000 inhabitants. Doing a prosperous business of several years' standing; being the only first-class gallery in the place. Terms moderate. Address, for further information, A, care Philada. Photographer.

BURREL'S CHART AND HINTS TO PATRONS .-Your gallery is not complete without them. For particulars, see advertisement in January, February, and March issues of this Journal. Price, \$1.25, unmounted, by mail, or by express mounted.

FOR SALE .- Reilly's fine negatives of the Yosemite, California, Sierra Nevadas, Niagara, etc. Apply to

BENERMAN & WILSON,

Publishers Philada. Photographer.

HERMACIS LENS TESTIMONIAL.

Philadelphia, March 21, 1876. Messrs. WILSON, HOOD & CO.

I take pleasure in testifying to the perfect working of the "Hermagis" just purchased from you. We have tested it particularly as to its depth of focus, and find it to combine with this a rapidity of working which makes it doubly es-Very respectfully, teemed.

> WM. CURTIS TAYLOR, 914 Chestnut Street.

Риотоскарию Hall .- The four sizes of electrotypes of Photographic Hall, advertised last month, are as follows: $1\frac{1}{4} \times 2$ in., $2 \times 3\frac{1}{4}$ in., 4×6 in., $4\frac{1}{2} \times 7\frac{1}{4}$ in. For sale by

> CROSSCUP & WEST, 702 Chestnut Street, Philadelphia.

BUTTER AND EGGS.

Mansfield, Pa., December 31, 1875.

MR. JNO. R. CLEMONS,

Manufacturer of Albumen and Plain Paper, 915 Sansom Street, Philadelphia.

I am delighted with your "new" albumen paper. I have printed and toned it after it had been silvered over two weeks repeatedly, and in damp weather, kept in a room without fire to keep the air dry, yet it printed quickly and toned easily, and I was unable to select the finished prints from those on fresh paper.

You can "sail in 'Centennially'" and diurnally on your new papers, both plain and egged, and win. If any of your customers find any fault with them, and you want to give them a "blessing" by proxy, refer them to me.

Very truly yours,

F. M. SPENCER.

USE WAYMOUTH'S VIGNETTE PAPERS.

SCENIC STUDIO EAVEY'S

M 山 Z No. 8 Lafayette Place,

For results obtained by the use of his works, examine La Fayette W. Seavey makes a novel display at the Sentennial of Photographic Backgrounds, Papier Maché Accessories, and numerous Photographs of new designs the exhibits of the leading photographers.

List of Exhibitors at the Centennial Using Seavey's Backgrounds.

Collins, Urbanna, Ohio.

Gentile, Chicago.

Howell, New York.

Busey, Baltimore, Md. Holler, Brooklyn, N. Y.

Schwind & Kreuger, New York.

Sarony, New York.

Alman & CO., New York.

Kurtz, New York.

Anderson, Richmond, Va.

De Lamater, Hartford, Conn. .

Bradley & Rulofson, San Francisco.

J. W. Kent, Rochester, N. Y.

Holyland, Baltimore, Md.

Rocher, Chicago, Ill.

Landy, Cincinnatti, Ohio (seven ages).

Gutekunst, Philadelphia, Pa.

Taylor, Philadelphia, Pa.

Gubleman, Jersey City, N. J.

Mr. Charles Waldack, who is known to many of our readers, writes in the Photographic Times as follows: As Robinson's trimmer is getting to be used universally, I think I will do a good turn to photographers in telling them how to sharpen the little wheel when it gets dulled by use. I owe it to a photographic friend here, and although some may know it, I am sure many do not. Make a groove in a piece of lead by means of the trimmer, put in it a little fine emery and a drop of oil, and run the trimmer forward and back in the groove until it is sufficiently sharp. There is something else about the trimmer; ascertain by trial which side of the wheel should be on the inside of the zinc or iron mat to cut best, and mark it."

THE ROBINSON TRIMMER.

RICHMOND, IND., August 11, 1875.

MR. EDW. L. WILSON.

DEAR SIR: I feel as, though I should say a few words in praise of the Robinson Trimmer and Guides I received from you. The trimmer does its work admirably, do not know how I should do without it; and the round-cornered guides, for cards, is something new, and makes the picture look much neater when compared with the old square cut kind, from a glass pattern.

The guides, all sizes, are the nearest perfect of any I ever used. But what I wish to request of you in particular is, to publish in your Journal the right way for sharpening the trimmer, I am certain this will be looked for by a great many with interest. I have used mine now constantly for some time, and it does not need it yet; but, in case it does, would not like to spoil it with any experimenting. Yours respectfully,

WAYMOUTH'S VICNETTE PAPERS.



PHOTOGRAPHIC HALL .- Electrotypes of Photographic Hall, four sizes, from the above up to the size in February number of this magazine. CROSSCUP & WEST For prices apply to Seventh and Chestnut Sts.

Or. BENERMAN & WILSON, Philadelphia.

PIANOS AND ORGANS -Photographers wishing to buy a Beatty Piano or Organ, can get extra inducements through photographing. Address DANIEL F. BEATTY, Manufacturer, Washington, N. J.

USE WAYMOUTH'S VIGNETTE PAPERS.

THE GORHAM STOVE.—No photographer can get more for his dollar than by investing in a "Gorham Stove." It is tiny in size but a giant in usefulness. See advertisement.

WILSON, HOOD & Co., 822 Arch Street, Philadelphia.

LUCKHARDT'S ELEGANT STUDIES.—We have just received an invoice of splendid studies of the female figure, by Fritz Luckhardt, Vienna. size, 8 x 10; the price, \$3.50. Order quick!
WILSON, HOOD & Co.,

822 Arch Street, Philadelphia.

SITUATIONS WANTED.

No charge for advertisements under this head: limited to four lines. Inserted once only, unless by request.)

By an operator with a wide experience and best of testimonials. Now with the Centennial Photo. Co. Is open for an engagement. Address Artist, 3906 Powelton Avenue, Philadelphia, Pa.

By a crayon and color artist and negative retoucher, after the first of September. Best of reference given. Specimens of crayon work seen in Photo. Hall. 7 South 16th St., Philadelphia.

By a young man of good reputation and one year's experience in a first-class gallery. Address Charlie S. Enswinger, Crawfordsville, Ind.

By a young man who has been a year in a first-class gallery. Desires an engagement where he can be useful and improve. Can assist at operating, retouch, print, and tone. Good reference. Curtis, Box 233, Kingston, N. Y.

- By a young man, to take charge of a gallery, or as assistant in a good room. Jas. W. Bailey, Rockville, Ind.

An operator of several year's experience and good habits desires a situation. Is willing to work and make himself useful. Would run a gallery on shares, or would rent a room equipped. Speaks German and English. Address Photo., in care of J. A. Benjamin, Warrenton, Va.

As operator in some good gallery, or would not object to taking charge of a gallery. Well posted in retouching and printing. Address C. W. Phillips, Nebraska City, Neb.

By a printer and toner who understands both branches. For particulars, please address J. D. Davis, 33 McKanna St., Providence, R. I.

As a gallery assistant. I have had nearly three years' experience in gallery and outdoor work. Willing to make myself generally useful. Address W. M. Smith, Brookville, Franklin Co., Indiana.

By a young man, as an assistant in a gallery. Can operate, print, tone, and do outdoor view ing. Can give satisfactory reasons for quitting present employer, and furnish recommendations as to ability, etc. Address O. G. Forrer, Parker City, Armstrong Co., Pa.

By a first-class retoucher. Must be study work. Will accept moderate wages. Edward Pandawalker, Rome, Oneida Co., N. Y.

By an operator of twelve years' constant experience; one who understands thoroughly photography in all its branches, having had charge of operating rooms in some of the best galleries in the country. Would like to make an engagement with some first-class photographer. Best of references given as to ability, business capac-ity, etc. Address S. W., care of this office.

By a lady of experience, as finisher in ink and crayon. Address Mary E. Hart, East Wallingford, Conn.

Mr. John L. Gihon has just returned from South America, and is now ready to engage with any leading photographic establishment. He has over twenty years' experience, is thoroughly acquainted with every branch of the business, and is an accomplished colorists as well as photographer. Artistic posing and lighting a specialty. He has also devoted much attention to viewing with introduction of cloud effects. Address John L. Gihon, Office of Philadelphia Photographer, 116 North Seventh St., Philadelphia.

By a young man, of five years' experience, as operator, assistant operator, or printer. Posted on photographing, ferrotyping and viewing. Can give good recommendations from former employers. Terms to correspond with times. Address Vincent, Springfield, Mass.

As general assistant, in a first-class gallery. Retouching, printing and toning a specialty. Please address W. Ballard, Lebanon, Warren Co., Ohio.

By a young man, works in ink, water colors, erayon, and pastel; artistic retoucher; understands printing and toning. Address L. S., 418 Master Street, Philadelphia, Penn.

ARTISTIC PHOTOGRAPHY

A NEW WORK ON PHOTOGRAPHY AND ART.

ILLUSTRATED WITH TWELVE BEAUTIFUL PROMENADE PHOTOGRAPHS.

By LYMAN G. BIGELOW.

AUTHOR OF "BIGELOW'S ALBUM OF LIGHTING AND POSING."

This is a beautifully gotten up work and contains full instructions in every Department of Photography.

Mr. Bigelow is well known as an accomplished artist and excellent teacher, and we are sure his new work will be welcomed by all who are aiming for improvement in the higher technical elements of photography.

PRICE, \$5.00

FOR SALE BY

BENERMAN & WILSON,

Photo. Publishers, 116 North Seventh St., Philada.

PHOTOGRAPHIC PRINTING INSTITUTE.

PRINTING FOR THE TRADE.

Instructions Given in Artistic Printing.

SEND FOR NEW PRICE LIST.

All communications should be addressed to the proprietor, at the Institute,

24 Winfield Place, Philadelphia.

C. W. HEARN, Proprietor.

RICHARDSON'S SENSITIZED PAPER.

This paper keeps perfectly for four weeks or more, with ordinary care. Prints rapidly, tones readily in any bath, and gives very brilliant prints.

It is always ready to print, so that much time may be saved in the morning, at night, and in dull days. It is not necessary to tone the prints for several days, so that if a small amount of printing be done, the work of several days can be toned in one lot. It saves the trouble and mess of sensitizing. Work can be finished more promptly than by the usual method. For these reasons it is both convenient and economical.

THE FOLLOWING TESTIMONIALS SPEAK FOR THEMSELVES.

"Have used your paper and can recommend it as excellent. It was printed with my other kinds, and in the operations it was hard to pick it out. It is a most valuable and useful thing, both to the amateur and professional photographer."—Chas. W. Hearn, see "Printer's Corner," for June.

"Inclosed find \$2.25 for one dozen very light pink, or white paper. The last you sent me was nice."—E. M. ESTABROOKE, 31 Union Square, N. Y.

"I printed, yesterday, from a sheet of sensitized paper that you sent me three weeks ago, the results were very satisfactory, equally as good as my other paper silvered and printed the same day."—D. T. BURRELL, Brockton, Mass.

"Having used your sensitized paper exclusively for the past four months, I take pleasure in saying that I find it a great convenience, and that the results are perfectly satisfactory."—Thos. S. ESTABROOKE, 498 Washington Street, Boston, Mass.

PRICES.

Single Albumen, White or Pink, by mail, post-paid. Sample sheet, 25 cents; half dozen, \$1.25; one dozen, \$2.25; two dozen, \$4.25. By express—per ream, \$75; half ream, \$39; quarter ream, \$20.

Double Albumen, White or Pink, by mail, post-paid. Sample sheet, 30 cents; half dozen, \$1.40; one dozen, \$2.60; two dozen, \$5. By express—per ream, \$88: half ream, \$45; quarter ream, \$23.

Those who are using double paper are respectfully invited to compare with my single albumen. Sample sheets will be cut in quarters for convenience of packing.

TERMS.-For mail orders, cash with order. For express orders, 10 per cent. with order, balance C.O.D.

ADDRESS ALL ORDERS TO

C. F. RICHARDSON, Wakefield, Mass.

JOHN DEAN & CO.

Worcester, Mass.,

Manufacturers of the

Nonpareil Plate,

A substitute for porcelain. The new NONPAREIL PICTURES have elicited the most general expressions of approval and admiration. The latest improvement simplifies the formula and insures success. Our plates are stamped. Patented July 29, 1873, and June 16, 1874. All others are spurious.

ALSO, THE CELEBRATED

ADAMANTEAN TPE FERROPLATES.

BLACK, AND PATENT CHOCOLATE-TINTED, EGG-SHELL, AND GLOSSY.

The experience and extensive facilities of JOHN DEAN & CO., enable them to produce the most desirable FERROTYPE PLATES in the market.

E. & H. T. ANTHONY & CO., Trade Agents,
591 Broadway, New York.

THE BONANZA PLATE HOLDER.

Patented January 19, 1875.

This is one of the most useful appliances yet introduced in the Photographic business, and

one much needed for economy and neatness in every gallery.

The "Bonanza" Plate Holder has been in constant use in G. D. Morse's Gallery, in San Francisco, for over one year, and a test made from month of the savings. In the busy season it reached over \$12 per month in pure silver solution. The drippings from the plates do not come in contact with the wood frame, slide or door of the Holder, thereby saving it from destruction. Besides, it protects the camera-box, clothing of the operator, carpets, etc., from silver stains. Another great advantage of this Holder: The inside kit of frames which are in general use for accommodating the different size plates are dispensed with. The fittings are so adjusted that they take every size plate from a card to 8 x 10 size, uprights or crosswise, as may be desired, by simply moving the receptacle that holds the plate to the position required for any particular size. Every photographer will see at a glance the value of this invention.

"We have had your "Bonanza" Plate Holder in use in our establishment for about eight months. We take pleasure in testifying to their great superiority over all others we bave employed or seen, not only as a silversaving appliance, but also in promoting cleanliness in work and protection of carpets and drapery from silver contamination. The very moderate price charged for these Holders will be returned to the purchaser, in the saving made, in a very short time."—W. H. RULOFSON, San Francisco, February 10, 1876.

"The constant use of a couple of your 'Bonanza' Plate Holders during the past year warrants me in saying they are unexcelled. The silver all being saved in a liquid state can be used again, and there is no soiling of clothes carpets, or the floor of the studio. The silver not coming in contact with the camera, the focus is not disturbed by the eating away of the wood work. The saving in silver, clothing, and carpets, is astonishing, and I would not be without them on any consideration. I cordially recommend them to the craft."—G. D. Morse, San Francisco, February 20, 1876.

"The past eight months I have used the "Bonanza" Plate Holder at Bradley & Rulofson's. It has been a great source of pleasure to work with a Holder free from drippings of silver solution. Every photographer will appreciate the cleanliness of this invention, as well as the dollars he will save by its use. I am starting in business at 415 Montgomery Street, and wish you to send me two "Bonanza" Plate Holders."—D. B. TAYLOR,

"I believe it to be the best Photographic Plate Holder ever used in the art."—SILAS SELLECK, San Francisco, March 4, 1876.

The "BONANZA" PLATE HOLDER is manufactured of the very best material, and is now ready for the market. The retail price is \$20. They are made to fit and are in focus with the American Optical Co.'s 8 x 10 boxes. Will forward a holder by mail to any address on the receipt of \$20 currency, or will send by express, C. O. D. It is much cheaper to send by mail, as we can forward them to any part of the United States for fifty cents. All orders should be addressed to

I. W. TABER &

YOSEMITE ART GALLERY,

26 Montgomery St., San Francisco, Cal.

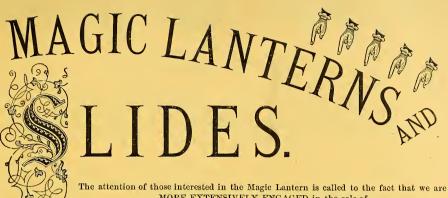
THE "ATMOSPHERIC" BACKGROUND.

Patented November 23, 1875.

This Background which is made of wire cloth, is remarkable for its atmospheric effect. The wire cloth is of such a texture that the eye or lens cannot focus upon it, which has the effect of producing a sharper outline to the figure. This result makes it valuable for plain Backgrounds, as it produces negatives free from any blemish, as a dent or scratch on the

The durability of the Wire-Cloth Background cannot be questioned. One of them will last a lifetime. We have had them in constant use for over two years. They have been hit by head-rests, and every accessory used in a gallery have had their accidental contact, but they are as perfect to-day as when new. They are used in all the first-class galleries in San Francisco. We have manufactured them for this market, but as freights are high to ship them East, we have determined to offer gallery rights for sale at \$25 currency, with full instructions for making them. It is economy for photographers to purchase the with full instructions for making them. It is economy for photographers to purchase the right, for they can be made at a small expense.

I. W. TABER & CO.



MORE EXTENSIVELY ENGAGED in the sale of

LANTERN SLIDES AS A SPECIALTY,

Than any other house in America. Our continuous contact with photographic men gives us special advantages in this line, and as MANUFACTURERS AND DEALERS we offer the very best opportunities to secure

MUCH FOR YOUR MONEY,

AS WELL AS SUCH GOODS AS WILL PUT MONEY IN YOUR PURSE, NAMELY:

A GOOD LANTERN, THE BEST of SLIDES.

FOUR CATALOGUES MAILED ON RECEIPT OF 25 CTS.

DO NOT BUY UNTIL YOU HAVE CONSULTED HEAD-OUARTERS! SUPPLEMENTARY CATALOGUE (March 1) READY!

USE WILSON'S

A Lecture Book describing graphically, as an eyewitness, 600 beautiful places and things in all parts of the world.

SUBSCRIBE FOR THE



Monthly Journal, devoted to the interests of lantern lovers. \$1 per year, post-paid.

Special estimates and other information given gladly. No substituting of Slides. Prices very low. PROMPTNESS OUR RULE.

> BENERMAN & WILSON, Photo. Publishers, 116 NORTH SEVENTH ST., PHILADELPHIA.

1876.

WHAT follows is a Catalogue of the best Photographic Publications, sent to remind all live photographers of the fact that good practical information is as essential to them as good lenses and pure chemicals. There are some "artists" who "get along" without any of these, but they do not progress, neither do they succeed. Do not be of their number. There is too much going on in photography in these "quick acting" times to enable any photographer to afford to do without reading and being posted. In anything you undertake you should take every precaution to be as bright as your neighbor, or he will get ahead. Keep alongside, any way. We will mall you any of the works named below, post-paid, on receipt of price. Order now.

1876

WILL BE A YEAR OF JUBILEE FOR PHOTOGRAPHERS THAT SHOULD NOT BE NEGLECTED.

THE CENTENNIAL EXHIBITION

Will present opportunitles for study and improvement which should not be overlooked, and the study of the best books will not only do you good before, but after the inspection of Photographic Hall. READ! READ!! READ!!!

BENERMAN & WILSON.

Photographic Publishers,

Philadelphia, Pa.

THE

hiladelphia Photographer.

THE BEST PHOTOGRAPHIC MAGAZINE IN THE WORLD.

EACH NUMBER EMBELLISHED BY PHOTOGRAPHY.

THE THIRTEENTH VOLUME of our Magazine promises to be the most popular and brilliant of any that has preceded it. We have many good things in store for it. It shall be our endeavor to make it all the richer and more interesting on account of the Centennial. We expect to embellish it with some of the choicest gems the Exhibition can produce and add interest to its pages from month to month, by giving a sort of compendium of all that relates to Art or Photography. Among other attractions, we expect to have our old friend Dr. Vocebere during six months of next year, at least, and our readers may expect some of the fruits of his genius and talents to add to its interest and usefulness.

But while we intend to provide all these home attractions,

may expect some of the fruits of his genius and talents to add to its interest and usefulness.

But while we intend to provide all these home attractions, we do not propose to neglect whatever may transpire abroad, but shall present as usual correspondence from such well-known writers as Prof. Symbuse, Mr. W. J. Syllman, Mr. Chas. Waldack, and others. With all these good things in prospect for the year 1876, we hope to render our magazine more beautiful and more useful than ever before; and while we maintain that the beautiful example of photography, which accompanies each issne, is alone worth the subscription price, still more and more effort will be made to make the reading matter everything that it ought to be. Our correspondents from all the leading centres abroad will keep our readers posted on all matters of interest in their several sections, while our unrivalled staff at home will look diligently after your interests here. To make THE PHILADELPHIA PHOTOGRAPHER the best PRACTICAL HELPER which can possibly be obtained, is the aim and earnest desire of its publishers.

We ask your co-operation in extending its usefulness, and offer to all present subscribers, who secure us new ones, the following

PREMIUMS.

For every new subscriber, for one year, \$1.00, payable in any of our publications, books, or, if preferred, one dollar's worth of any of our prize pictures, or any other article for which we are agents, advertised in this Magazine,

The subscription price of the *Philadelphia Photographer* is \$5 year, \$2.50 for six months, 50 cents per month. Each number, remember, contains a handsome photograph.

Photographic Mosaics.

HE Centennial anniversary year of American Independence finds our little Annual in its eleventh year. It is developing rapidly for its age and size, and this year takes quite an interest in the Centennial. It is full and running over with fresh contributions from the most wide-awake members of the fraternity in all parts of the country. We here give a list of the

bers of the fraternity in all parts of the country. We here give a list of the

CONTENTS.—Review; Eighteen Hundred and Seventy-six; Discoveries, Inventions, and Improvements; Work in the Studio; The Dark Room; The Printing Department; Landscape Photography; Dry-Plate Work; Apparatus; Art Advances; The National Photographic Association; Our Publications; Our Prize Offer; Items of Interest; Obituary; The Art Progress; Gg, Come, Let us Reason Together; Experience; Provoking; A Suggestion Anent the Great Exhibition; Centennial Album of Photographic Studies; The Eliminating of Hyposulphite from Prints; A Treatise on Photography; Why not make Solars instead of Contact, etc.; Systematic Preservation of Negatives; Want of Enterprise; Lighting the Sitter; Theory and Practice; Be Functual; Formulie for Photographs and Perrotypes, which give Lights and Half-tones not surpassed; Exposure and Development of a Negative; A Cause for Faded Prints; How I Sunned a Bath under Difficulties; & Good Collodion; A Word to the Weak; How to Clean New and Old Glass Plates; Long's Bath Warmer; Albumen, its Preparation and Use in Photography; An Item of Real Value; The Negative Bath; How to Lubricate Prints for Burnishing; Then and Now; A Pair of Suggestions; How to Obtain Boiling Water in Winter; An Excellent Ware for Photographic Murpose; Hints on Composition; The Causes and Cure for some of the Difficulties pertaining to Photography; Art and Mechaulism; Breakfast for Dinner; Field Work; Marble Negatives—Stains From the Hands, etc.; Pyroxylim—Gun-Cotton; The Old Bath; The Upper Floor; Dry-Plates; The Art Privileges of our Great Centennial; Curtains as a Meansof Adjusting Light; An Exposing Shutter; How to Touch out Finholes; Photography; The Toning Solntion; A Chapter of Practical Matters; Climbing; Poor Negatives, their Cause and Cure; On Landscape Photography; A Cheap and Good Plateholder; The Way it is Done; To Correspondents; The Construction of Skylights; Blisters; At the Desk; On Photographic Lenses—How Choose and Take Care of Them

Price, bound in Cloth, \$1. Paper Cover, 50 Cts. 144 pages.

OUR BOOKS.

THE PRACTICAL PRINTER. By Chas. W. Hearn.

This very useful book is indispensable in the printing department. No one who wishes to be up with the times in printing, can afford to be without it. Its rapid sale and the favor with which it has been received, are the best recommendations we can give. Price, \$2.50.

BIGELOW'S ALBUM OF LIGHTING AND POSING.

This excellent work still maintains its popularity. It contains 24 beautiful photographs from life in different lights and positions, with an explanatory key, which makes it the most practical helper the Photographer can have. Price, \$6.00.

DR. VOGEL'S HANDBOOK OF PHOTOGRAPHY. Second Edition.

This is a really standard work, and the most complete hand-book ever published. The new edition has been thoroughly revised, and much additional matter introduced, together with new illustrations, new photographs, and a new arrangement all through. Now is the time to study up, and this book is ap-plicable to any department. Price, \$3.50.

DR. VOGEL'S PHOTOGRAPHERS' POCKET REFERENCE-BOOK.

This is in every sense a reference book. It is alphabetically arranged, and any process or formulæ in photography may be found at a moment's notice. All is arranged in a concise and practical form. It is particularly useful in the chemical department. Price, \$1.50.

THE FERROTYPERS' GUIDE.

This little work is by a practical ferrotyper, and gives just the instruction necessary to those who wish to do good work in this branch of our Art. Price, 75 cents.

LINN'S LANDSCAPE PHOTOGRAPHY

Is an excellent companion in the field, and may help you over many difficulties; can be carried in the pocket. Price, 75 cts.

GLIMPSES AT PHOTOGRAPHY. By Prof. Himes.

This work treats of some of the peculiar styles of printing, such as leaf-printing, etc., etc. Price, \$1.25.
WILSON'S LANTERN JOURNEYS.

To those who use the lantern this book is indispensable. It contains just the information required about six hundred different views, and enables any exhibitor to make his entertainments enjoyable and instructive: Price, \$2.00.

BURNET'S HINTS ON COMPOSITION.

We have reproduced this work by photo-lithography, and sell it at the low price named, while a copy of the original work could not be bought for five times that amount. It is fully illustrated, and supplies in a very attractive form, the art knowledge, in reference to composition, that so many photographers are seeking after. Price, \$3.50.

A. M. COLLINS, SON & CO.,

MANUFACTURERS OF

PHOTOGRAPHIC CARDS AND CARD BOARDS,

OF EVERY DESCRIPTION.

Warehouse:

No. 18 S. Sixth St., and No. 9 Decatur St.,

IMPERIAL CARDS.

Size, $6\frac{7}{8} \times 9\frac{7}{8}$.

BOUDOIR CARDS.

Size, $5\frac{1}{4} \times 8\frac{1}{2}$.

White, Gray, Granite-Blue, Pearl, Amber, Tea.
Plain; also, with Gilt Borders, and with Gilt or Red Beveled Edges.

See detailed advertisement in this number of the "Photographic Times."

PRICE LISTS FURNISHED ON APPLICATION.

TRAPP & MUNCH'S

Albumen Paper

Introduced into this country since 1868 has become the leading paper, and is

now better known and more appreciated than any other brand.

That this great success is well deserved and due to its excellent qualities may be judged from the fact, that of all the competitors of the Vienna Exhibition, Messrs. Trapp & Munch alone received the

MEDAL OF MERIT

for Albumenized Paper. For Sale at all the Stockhouses.

WILLY WALLACH,

GENERAL AGENT FOR THE UNITED STATES,

No. 4 Beekman St., and 36 Park Row, New York SPECIAL ACENTS:

SCOVILL MANUFG. Co., New York. E. & H. T. ANTHONY, ""G. GENNERT, New York.

WILSON, HOOD & Co., Philadelphia. H. W. BRADLEY, San Francisco. G. S. BRYANT & Co., Boston.

PHOTOGRAPHER'S

POCKET

REFERENCE BOOK.

An Alphabetically arranged collection of practically important hints on the construction of the Gallery; selection and trial of lenses and chemicals; approved formulæ for the different photographic processes; tables of weights and measures; rules for avoiding failure, etc.

IT IS A BOOK EVERY PHOTOGRAPHER SHOULD HAVE.

Because it is a ready helper under all difficult circumstances.

For sale by all dealers. Price, \$1.50, post-paid.

BENERMAN & WILSON, Photo. Publishers,
PHILADELPHIA. PA.

Over 1000 Sold.

HEARN'S

PRACTICAL PRINTER

PHOTOGRAPHIC PRINTING

ON PLAIN AND ALBUMEN PAPER, AND ON PORCELAIN.

Too little attention has heretofore been given to Photographic Printing, which is indeed quite as important a branch of the art as negative making.

It is the hope of both author and publishers to create **REFORM** in this

It is the hope of both author and publishers to create **REFORM** in this matter, by the issue of this work, and as it is to put money in the pockets of all who read it, the hope is that it will be generally read.

CONTENTS.

INTRODUCTION.

The Printing Room, with a Plan. The Silvering and Toning Room, with a Plan. The Drying Room, with a Plan.

PART I .-- ALBUMEN PAPER PRINTING.

The Positive Bath for Albumen Paper. Silvering the Albumen Paper. Drying the Paper. Funning the Paper. Preservation of Sensitive Albumenized Paper—Washed Sensitive Paper. Cutting the Paper. The Printing Boards. Keeping Tally. Vignette Printing Blocks. Treatment of the Negatives before Printing. Filling of the Boards. Fitting Vignette Boards to the Negatives for Printing. Medallion and Archop Printing. Fancy Printing. Vignette Cameo and Medallion Vignette Cameo Printing. Printing the Bendann Backgrounds. Printing Intense Negatives. Printing Weak Negatives. A Few More Remarks about Printing—Treatment of Broken Negatives. Cutting the Prints. Washing the Prints. Acidifying the Prints. Toning Baths. Artistic Toning. Fixing Baths and Fixing Prints. Washing the Prints. Hinishing the Prints. Mounting the Prints. Finishing the Prints.

PART II .- PLAIN PAPER PRINTING.

Salting the Paper. Positive Baths for Plain Salted Paper. Silvering Plain Salted Paper. Drying, Fuming, and Cutting the Paper. Treatment of the Negatives before Printing. Printing-in False Backgrounds. General Plain Paper Printing. Further Treatment of the Prints after Printing. Causes of Failures in Albumen and Plain Paper Printing.

PART III.-PORCELAIN PRINTING.

Selection of the Porcelain Plates. Cleaning of the Porcelain Plates. Albumenizing the Porcelain Plates. Making the Porcelain Collodion. Coating, Fuming, and Drying the Plates. Porcelain Printing Boards. Placing the Sensitive Plate on the Board for Printing. Printing Vignette Porcelains. Printing Medallion Percelains. Washing the Porcelain. Toning the Porcelain. Fixing the Porcelain. Final Washing of the Porcelain. Drying and Tinting of the Porcelain. Varnishing the Porcelain. Causes of Failures in Porcelain Printing.

Together with over 50 Wood Cuts, and an elegant Cabinet Portrait, from negatives by Mr. F. Gutekunst, printed by the author, Mr. Chas. W. Hearn.

A THOUSAND COPIES ALREADY GONE.

Mailed Post-paid on Receipt of \$2.50, by any dealer, or

BENERMAN & WILSON, Photo. Publishers, 116 North Seventh Street, Philadelphia.

ROBINSON'S METALLIC

Guides,

FOR USE WITH THE ROBINSON PRINT-TRIMMER.

(See advertisement of Trimmer opposite.)

These Guides are made of Stout Iron and are turned in a Lathe, so that they are Mathematically True.

OVAL, ROUND, ELLIPTIC, and SQUARE, of all sizes; various shapes for Stereoscopic work, Drug Labels, etc., etc.

We have the following regular sizes always on hand at 10 cents per inch the longest way of the aperture, the fractions counting as one inch.

Special sizes made to order at 15 cents per inch the longest way of the aperture.

REGULAR SIZES:

	OVALS.		SQUARE	OR ROUND-CO	RNERED.
$2 \times 2\frac{7}{8}$	$3\frac{1}{2} \times 4\frac{7}{8}$	$5\frac{3}{4} \times 7\frac{3}{4}$	$2\frac{1}{16} \times 3\frac{3}{4}$	$2\frac{5}{16} \times 3\frac{7}{8}$	$3\frac{7}{8} \times 5\frac{1}{4}$
$2_8^1 \times 3_8^1$	35 x 51	6 x 8	$2\frac{1}{8} \times 3\frac{3}{4}$	$2\frac{3}{4} \times 4\frac{1}{4}$	$4 \times 5\frac{5}{8}$
$2\frac{1}{8} \times 3\frac{1}{4}$	$4 \times 5\frac{3}{8}$	$6\frac{1}{4} \times 8\frac{1}{4}$	$2\frac{1}{8} \times 3\frac{1}{8}$	$2\frac{3}{4} \times 4\frac{1}{2}$	$4\frac{1}{8} \times 5\frac{7}{8}$
$2\frac{3}{8} \times 3\frac{3}{8}$	$4\frac{3}{8} \times 6\frac{3}{8}$	$6\frac{1}{2} \times 8\frac{1}{2}$	$2\frac{5}{16} \times 3\frac{15}{16}$	$2\frac{7}{8} \times 4\frac{5}{8}$	$3\frac{7}{8} \times 6$
25 x 35	5 x 7	7 x 9	$2\frac{5}{16} \times 3\frac{3}{4}$		$4 \times 6\frac{1}{8}$
$2\frac{7}{8} \times 4\frac{1}{4}$	$5\frac{1}{4} \times 7\frac{1}{4}$	7½ x 9½	FOR	STEREOGRA	PHS.
3\frac{3}{8} \times 4\frac{3}{8}	$5\frac{1}{2} \times 7\frac{1}{2}$	$7\frac{1}{2} \times 9\frac{1}{2}$	Arch Tops.	Round Cornered.	Round.
33 x 45	$\frac{5_2 \times 7_2}{5_8^5 \times 7_8^5}$	$7\frac{3}{4} \times 9\frac{3}{4}$	$\frac{3\frac{1}{16} \times 3\frac{3}{4}}{3 \times 3}$	$3\frac{1}{16} \times 3\frac{3}{4}$ 3 x 3	3 x 3
08 Y 48	08 X 18	14 x 94	o x o	6 X 6	

The above sizes suit the Collins Card Mounts, and photographers knowing that they can be always had at the low price of ten cents per inch, would do well to make their sizes accord, as orders can also be filled more quickly. Ten days is required to make special sizes.

An allowance of ten inches (\$1 worth) of regular sizes of guides will be given with every Trimmer purchased. (See opposite page).

FOR SALE BY ALL DEALERS.

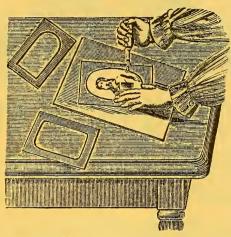
BENERMAN & WILSON, Manufacturer's Agents, PHILADELPHIA, PA.

ROBINSON'S PHOTOGRAPH TRIMMER

IS A SUBSTITUTE FOR A KNIFE

FOR TRIMMING PHOTOGRAPHS, AND DOES THE WORK MUCH MORE EXPEDITIOUSLY AND ELEGANTLY THAN A KNIFE.

IT SAVES TIME, SAVES PRINTS, AND SAVES MONEY.



The accompanying cut represents the instrument in the act of trimming a photograph. It does not cut, but pinches off the waste paper, and leaves the print with a neatly beveled edge which facilitates the adherence of the print to the mount. Try one, and you will discard the knife and punch at once. For ovals and rounded corners it is worth its weight in gold.

A Trimmer and Ten Inches of Guides Mailed for \$3.50.

Oil the wheel bearings with Sewing Machine Oil.

Given Away!

WITH EACH ROBINSON PHOTOGRAPH TRIMMER

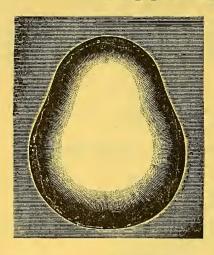
WILL HEREAFTER BE GIVEN Ten Inches of Metallic Guides, your choice from the regular sizes named on the opposite page. The manufacturers and agents finding that they can save money by manufacturing in large quantities, make this liberal offer to the trade, as they want everybody to have these capital inventions in use. They are no humbug and are not glass cutters or anything like them.

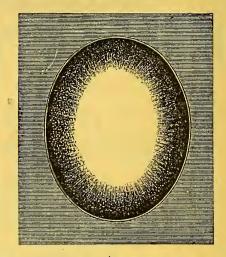
BENERMAN & WILSON, Manufacturer's Agents,

FOR SALE BY ALL DEALERS.

PHILADELPHIA, PA.

WAYMOUTH'S





VIGNETTING PAPERS

ARE NOW MADE OF TWO SHAPES, as shown in the drawings above. They consist of finely gradated, lithographed designs, mounted on protecting sheets of non-actinic paper, and are the lightest, neatest, and best means of producing vignette pictures ever offered.

RECENTLY IMPROVED.

The quality of the "papers" has just been much improved by the substitution of a peculiar French, fibrous, hard calendered paper, which is not only less opaque but has other qualities which produce quickly the most lovely and soft vignettes possible. We consider this a great improvement, as do others to whom we have sent samples. Below we give a letter from one of them, Mr. Ormsby, who has sent us also some exquisite vignettes:

The package of Vignette Papers has been received and tried; they are just the thing. They are a great improvement over the others; they will print in a little more than half the time required for the others, and the results are everything that can be desired, as you can see by samples inclosed. Please fill my order and send bill. I like the pear-shape best. Send them all that shape.

E. D. ORMSBY, Chicago.

FROM PROFESSIONAL AND AMATEUR PHOTOGRAPHERS.

"First-class."—"The sample sent answers perfectly."—"I consider them first-rate articles."—
"They answer the purpose admirably."—"They are the best vignettes I have ever had, and as you can print in full sunlight, they are a great saving of time."—"They could not be better, oblige me with another packet."—"I find them excellent, giving much softer pictures than the old way."—"I have tried one of the Vignette Papers, and like it much; send me packets two and three."—"I am much pleased with them, and shall thank you to send me another packet."—"I did not need any copies of testimonials, having well-known by experience that your Vignette Papers were superior to anything I have ever used."—"I found those you sent before excellent."—"Vignetting Papers received and tested; can't be beat. I use by cutting an opening in a piece of cardboard and tacking to the printing-frame, when I am ready for printing vignettes in the very best manner."—"Waymouth's Vignette Papers I have tried, and they are just what I have been wanting for years."

Any number sent on receipt of price, by any stockdealer, or by

BENERMAN & WILSON, Manufacturers,

(See opposite page.)

PHILADELPHIA.

DO YOU USE

WAYMOUTH'S VIGNETTE PAPERS.

(DESIGNS COPYRIGHTED.)

of all pictures, the **Dinnette** is the most artistic.

When properly printed. But the clumsy devices generally in use for printing them, or rather for blending the shading about the figure, produce but very few really artistic vignette pictures. Either the shading is too intensely dark, not gradated in tint at all, or it shows an ugly direct, decided line, which is very repulsive. The shading should blend gradually from the dark tint nearest to the figure, off into the white buckground. The results are then soft, artistic, and beautiful. The easiest and best way to secure them is by the use of

WAYMOUTH'S VICNETTE PAPERS.

THEY ARE NOT CLUMSY; DO NOT BREAK; ARE ALWAYS READY; COST BUT LITTLE, AND ARE EASY OF APPLICATION TO ANY NEGATIVE.

THEY NEED BUT ONE ADJUSTMENT TO PRINT ANY QUANTITY.

They entirely do away with all the old and troublesome methods, either wood, metal, or cotton.

Eighteen sizes are now made, suiting all dimensions of pictures from a small carte figure to Whole-size, Victorias, Cabinets, &c. They are printed in black for ordinary negatives, yellow bronze for thin negatives, and red bronze for still weaker ones. Directions for use accompany each parcel.

PRICES:

In parcels containing one of	each size. N	Vos. 1	to 15, assorted colors		\$1 00
Assorted sizes and colors, by	number, pe	er pac	kage of fifteen		1 00
Nos. 1, 2, 3, 4, and 5, assorted	d sizes and c	olors,	for Cartes, by number, per d	ozen	50
" 6, 7, 11, 12, and 13 "	44	44	Large Cartes and Victorias, 1	ov number, per	r doz 75
" 8, 9, 10, 14, and 15 "	"	66	Cabinets and Whole-size,	" "	" 1 00
" 16, 17, and 18, "	"		Half " "	44	" 1 25

(SEE OPPOSITE PAGE.)

When ordering, state the number and color you want.

BENERMAN & WILSON, Manufacturers, 116 N. 7th Street, Philada.

FOR SALE BY ALL DEALERS.

DR. VOGEL'S HANDBOOK.

SECOND EDITION.

THE HANDBOOK OF THE PRACTICE AND ART OF PHOTOGRAPHY,

By Prof. H. VOGEL, Ph.D., Berlin, Prussia.

IS NOW READY.

ALTHOUGH IT IS MUCH ENLARGED WE OFFER IT AT THE OLD

PRICE, \$3.50.

It is Elegantly Illustrated, with Photographs and Engravings. Cloth Bound.

The reputation Dr. Vogel enjoys in this country as a practical photographic writer, is first-class, and insures a book of the best quality. That his *Hand*book is *eminently* so, we guarantee. It has been re-arranged and revised specially for the American photographer, giving the best German formulæ, &c., and is, in every sense of the word, a *Hand*book of the *practical* and *artistic* departments of Photography. Over fifteen hundred of the first edition were sold, and the demand continues.

IT ILLUSTRATES AND TELLS

How the Ateliers are built and used in Berlin and elsewhere;
How to make the best Photographs;

How to select and use your Lenses;

How to manage your Apparatus:

How to compose the Picture;

How to choose Accessories;

How Berlin Cards are Made;

How to do everything in the Art.

How to pose the Sitter;

TEACHES HOW TO BECOME A PERFECT PHOTOGRAPHER.

The whole includes, under one cover, everything needed for the practice of photography by the beginner, the amateur, and the professional—a complete Handbook. See contents of Book.

The engravings are numerous, elaborate, and expensive. Four photographs, illustrating the lighting of the subject, accompany the work. Please read future advertisements

ASK YOUR DEALER FOR IT.

BENERMAN & WILSON, Photo. Publishers,

116 North Seventh Street, Philada.

PROMENADE PRIZE PICTURES.

JULY COMPETITION.

To enable all photographers to study these

GEMS OF ART,

We offer prints from the competing negatives, for sale at the prices below

They are the most exquisite things we ever offered, and will teach any one, be he a good or poor operator.

THE GOLD MEDAL

Was awarded for the best six negatives to Mr. Henry Rocher, Chicago, Ill., whose pictures are marvels of beautiful photography. The studies are all mounted in tasteful style, on Collins' Mounts, and printed at our own rooms by Mr. Chas. W. Hearn, and are fine studies in posing, lighting, printing, and toning.

THE SETS INCLUDE:

Nos.	1 to 7,						Studies by	H. Rocher, Chicago.
**	8 to 16,						**	L. G. Bigelow, Detroit, Mich.
"	17 to 22,						**	I. W. Taber, San Francisco, Cal.
"	23 to 27,						11	C. M. French, Youngstown, O.
44	28 to 31,			2			4.6	Core & Frees, Tiffin, O.
"	32 to 37,						**	E. M. Collins, Oswego, N. Y.
**	38 to 42,						**	J. H. Folsom, Danbury, Conn.
"	43 to 48,						+6	E. H. Alley, Toledo, O.
Se	e Review	in	A	ugi	ust	n	umber Phi	ladelphia Photographer, page 242.

The whole set of 48,	12 00
In two Photo. Covers,	13 50
Selections, per dozen,	4 00
" per two dozen,	7 00
The 21 of Messrs. Rocher, Bigelow, and Taber,	6 00
Book Covers and Binding,	75

Address all orders to

BENERMAN & WILSON, Publishers, 116 North Seventh Street, Philadelphia.









ROSS' PORTRAIT VIEW LENSES.

We have now successfully introduced to the American Photographers the Ross Lens, and by our increased sales we know they are appreciated. At the convention held at Buffalo, July 15, many fine photographs were exhibited by photographers, and ourselves, made with the Ross Lens, which attracted great attention.

While Ross & Co. are the oldest manufacturers of Photographic Lenses in existence, they also keep up with the requirements of the fraternity, by constantly manufacturing new combinations and improving on those already in existence. They have lately perfected, and will soon furnish us stock of, a new series of Card Lenses, extra rapid, peculiarly adapted for babies, and people who will not be quiet. We will give notice of their arrival.

WE HAVE NOW IN STOCK

Portrait Lenses, from 1-4 to 15 x 18.

Cabinet Lenses, Nos. 1, 2, and 3.

Card Lenses, Nos. 1, 2, and 3.

Triplets, Nos. 1, 2, 3, 4, 5, 6, and 7.

Symmetricals.

Rapid Symmetricals.

Instantaneous Doublets, all sizes.

Medium Angle Doublets, all sizes.

Large Angle Doublets, all sizes.

Stereographic Lenses, all sizes.

New Universal Lens.

Numerous testimonials pronounce them to be the best, as well as the cheapest Foreign Lens ever offered to the American Photographer. We will mail price-list on application, and promptly fill all orders.

STEINHEIL'S SONS' NEW APLANATIC LENSES.

We now have a full stock of these Celebrated Lenses, at the following prices:

No	1, 1-4	size	31	inch	focus,.	\$	25 (00	No.	5, .	10-12	size	,131	inch	focus	\$70	00
110.	2, 1-2		51	66	4.6		30 1	ല	6.6	6	13-16	66	164	6.4	6.6	110	0.0
	2, 1-2		4					0.0		σ,	10.00	.,				000	0.0
4.6	3,4-4	66	7	"	٠٠.	4	45	00	• • •	7,	18-22	•••	*****			200	00
	4 0 1/	٠.,	101	"	6.6	4	60	വ	"	8	20-24	6.6				350	0.0
**	4, 8-16	,	104			• • • • •	00	00		0,							00

Nos. 1 & 2 are in matched pairs for Stereoscopic Work.

We feel sure that at least one of these lenses is needful for the successful prosecution of your business, and so solicit your orders.

WILSON, HOOD & CO., THE UNITED STATES, 822 Arch St., Philadelphia, Pa.

The only genuine brand of DRESDEN ALBU-MEN PAPER is the CROSS-SWORD BRAND, all others are superannuated. We keep a full assortment of Single and Extra Brilliant always on hand.

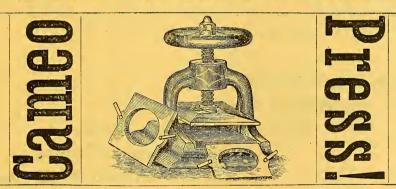
CHAS. F. USENER'S Celebrated PORTRAIT LENSES are unexcelled. Before purchasing be sure and try a Usener.

CHARLES COOPER & CO., Wholesale Agents,

Manufacturing Chemists and Importers,

191 Worth Street, New York.

The Universal



EMBOSSING PATENTED JANUARY 9th, 1872.

This Press will cameo all sizes, from cards to cabinets, and is sold lower than any other that will do the same work. It has been greatly improved and made very complete in all its parts.

We furnish a card, victoria, and cabinet size.

PRICE, \$20.00.

MANUFACTURED AND SOLD WHOLESALE AND RETAIL BY

WILSON, HOOD & CO., 822 Arch St., Philadelphia.

CAUTION.—Photographers are cautioned against buying other presses that may use an elostic embossing substance, as they are an infringement on the above.

R. J. Сните, Patentee.

G. GENNERT,

53 Maiden Lane, New York,

IMPORTER OF THE CELEBRATED

S. & M. DRESDEN ALBUMEN PAPERS

Rives and Steinbach-White, Pink, and Blue.

Every one says it WORKS THE MOST UNIFORM, ECONOMICAL, and GIVES FINER RESULTS than any other. To satisfy yourself that it is the best, send to your stock-dealer for a sample dozen. Kept by all stock-dealers in the United States.

ALSO,

Hyposulphite of Soda, Sulphate of Iron,

Solid German Glass Baths,
Saxe Evaporating Dishes,

AND French Filter Paper.

SPECIAL ATTENTION IS CALLED TO THE

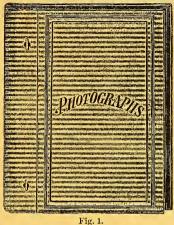
EXTRA BRILLIANT, OR DOUBLE GLOSSY PAPER,

Which is recognized by the best artists all over the world as the

FINEST ALBUMEN PAPER IN THIS COUNTRY OR EUROPE.

IMPROVED

PHOTOGRAPH COVERS.



The Outside Appearance.

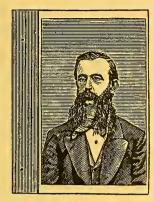


Fig. 2.

A Leaf Showing the Guard.

Frequent inquiries for something at a much lower price than an album, for the holding together and preservation of photographs, has induced us to manufacture an article which we think will meet the want.

IT SERVES ALL THE PURPOSES OF AN ALBUM, FOR

A Series or a Set of Portraits,

A Series or a Set of Landscapes,

A Series or a Set of Photographs of any kind,

MAY BE NEATLY AND CHEAPLY BOUND IN THESE COVERS.

They are made with expanding backs, so that from six to twenty-four pictures may be inserted in one cover. The pictures are mounted in the usual way, and then strips of linen, or strong paper, of the proper width, are pasted on one edge, by which the picture is inserted and held in place in the cover by a paper fastener. Fig. 1 represents the cover, with the perforations in the back, through which the spreading clasps of the paper fastener bind the whole together. These are so easily inserted or removed, that pictures are readily put in or taken out at any time. Fig. 2 represents the picture, with the guard pasted on ready for insertion. The arrangement is simple, and we are sure will be readily comprehended. For binding together views of your town or city, or portraits of celebrities, they are very neat

The following is a list of sizes and prices, without cards:

For Photogr	aph.					Per dozen.				Per hundred.
Card S	ize,					\$1.50				\$10.00
Cabinet	Sia	ze,				2.25				13.50
EXTRA HEAVY	COV	ER	s.							
5-8 Siz	e					4.50		,		33.00
										40.00
8-10 "										
11-14 "						9.00				65.00

Larger or special sizes made to order. Furnished with card board at best rates. Samples mailed at dozen price. Send for some.

BENERMAN & WILSON, Photo. Publishers, 116 North Seventh Street, Philadelphia.

JAMES F. MAGEE & CO.

MANUFACTURERS OF

PURE

PHOTOGRAPHIC CHEMICALS,

No. 108 North Fifth Street,

PHILADELPHIA

Stock Dealers only Supplied.

THE ZENTMAYER LENS.

FOR VIEWS AND COPYING.

These Lenses possess pre-eminently, the following qualities:

Width of visual angle, ranging from 80° to 90°; depth of focus; extreme sharpness over the whole field; true perspective; freedom from all distortion in copying; portability and cheapness.

Each mounting is provided with a revolving Diaphragm, containing the stops of the different combinations for which they are designed. The larger ones are provided with an internal shutter for making and closing the exposure.

No.	1,	21	inch	focus,	3	x	3	plate,			\$20	00	No.	1	and	l No	. 2	combined,					\$33	00
4.6	2.	34	6.6	4.6	4	x	5				25	00	- 66	2	6.6		3	- 44	•	•	٠	٠	40	00
6.5	3	54	6.6	4.6	64	×	81				30	0.0	"	3	"		4	- "					55	
	,	0 3			102		10		•	•	40	00	6.6	4	66	66	5	44					75	00
• • • • • • • • • • • • • • • • • • • •	4,	8	• • •	4.6	10	х	12		٠	•	42	00	66	5		"	6	4.6					110	00
	5,	12		* *	14	X	17				60	00	"	1,	2,	and	3,	6.4					48	00
	6,	18	"		20	X	24	٠٠ إ			90	00	6.6	3,	4,	and	5,	4.					88	00

No. 3; with large mounting to combine with No. 4 and No. 5, \$35.

No. 1 and No. 2, specially adapted for Stereoscopic Views, are furnished in matched pairs. No. 1 and No. 2, single, not to combine with other sizes, \$36 a pair.

Lenses and mountings to form all six combinations, from 2½ to 18 inches, \$173.

Zentmayer's Stereoscopic outfits, including a pair of No. 2 Lenses 4 x 7 box, 7 x 10 India Rubber Bath and Dipper, Tripod, Printing Frames, and outside box, \$60.

JOSEPH ZENTMAYER, Manufacturer,

147 South Fourth Street, Philadelphia,

BENJ. FRENCH & CO.,

319 Washington St., Boston,

IMPORTERS AND SOLE AGENTS FOR THE CELEBRATED

Voigtlander & Son Darlot LEWSES,

NEW STEREOSCOPIC LENSES.

New Stereoscopic Tube and Lens, made expressly for us, marked with our name (imitation Dallmeyer), with rack and pinion, central stops, for portraits or views. Will work in or out of doors. Also, for instantaneous pictures. Four inch focus, **price per pair**, \$21.00. By taking out back lens, and using only front lens in place of back, you get six inch focus. The great and increasing demand for all these lenses, is sure guarantee that they are the best. Read the following

Testimonials.

"I have tried the Mammoth Voigtlander yon sent me, and I consider it the best large instrument I have ever seen, and I have tried those made by other makers, Dallmeyer's included, and they do not compare with the Voigtlander. All my baby pictures were made with half-size Voigtlander lenses."—J. Landy, 208 W. Fourth St., Cincinnati, Feb. 25, 1874.

"The Voigtlander lenses have always been favorites with me. My first experience, in the days of daguerreotype, was with one, since which I have owned and tried many of the different sizes and never saw one but was an excellent instrument. Lately again trying some for my own use and for a friend, I found them to be superior to other eminent makers, particularly in the large sizes."—W. J. Baker, Buffalo, N. Y.

"Twenty-four years ago I bought and commenced using my first Voigtlander lens. It was a good one. Since then I have owned and used a good many of the same brand, of various sizes. They were all and always good. Some of the larger sizes that I have recently bought seem to me better than any I have ever had or seem before."—J. F. Ryder, Cleveland, Ohio, Dec. 18, 1872.

"About a year ago I bought a Voigtlander & Son No. 3 4-4 size lens. Said instrument gives me great satisfaction, being very quick, at the same time has great depth of focus."—E. G. MAINE, Columbus, Miss.

"Have never seen anything equal to the Voigtlander & Son Lens. The No. 5, Ex. 4-4 is the best instrument I ever used. I cannot keep house without it."—D. B. VICKERY, Haverhill, Muss.

"The pair of imitation Dallmeyer Stercoscopic Lenses you sent we are very much pleased with; they work finely."—GOODRIDGE BROS., East Saginaw, Mich.

"After a trial of your imitation Dallmeyer in the field with those of the Dallmeyer Rapid Rectilinear, side by side, I can say that for general views I like yours as well, for some objects far better, on account of their short focal length."—D. H. Cross, Mosher's Gal., Chicago.

New Catalogue of Prices Just Issued, to be had on Application.

WILSON'S

Lantern Journeys

By EDWARD L. WILSON,

Editor of the "Philadelphia Photographer."

This work will be found entertaining by all who like to read about the beautiful places and things of this world.

The contents are divided into six "Journeys," each one including a visit to 100 places, making 600 in all, as follows:

- JOURNEY A-Havre, Paris, Versailles, Rouen, Fontainebleau, and Switzerland.
- JOURNEY B—Compiegne, Brussels, Aix la Chapelle, Cologne, Up and Down the Rhine, Potsdam, Berlin, Dresden, Vienna, the Vienna Exposition, the Semmering Pass, Saxony, Munich, and Southwest Germany.
- JOURNEY C—Italy—Lake Maggiore and Como, Milan, Verona, Venice, Florence, Pisa, Rome, Naples, Pompeii, the Ascent of Vesuvius, Puteoli, and the Italian Art Galleries.
- JOURNEY D-Holland, Denmark, Norway, Sweden, Russia, and Spain.
- JOURNEY E-Egypt, Palestine, Syria, Turkey, Greece, and India.
- JOURNEY F-England, Scotland, and the United States of America.

It has been carefully prepared, and will be found amusing, very entertaining and instructive.

It contains 218 pages, Cloth bound, Gilt. Price, \$2.

BENERMAN & WILSON,

Photo. Publishers, Philadelphia, Penna.

PHILADELPHIA

PHOTOGRAPHER

THE LIVEST and BEST

Photographic Magazine Published.

ANNOUNCEMENT FOR 1876!

The publishers have a great many good things in anticipation for the year 1876; which they think will render their magazine more beautiful and more useful than ever before; and while they maintain that the beautiful example of photography, which accompanies each issue, is alone worth the subscription price, still more and more effort will be made to make the reading matter everything that it ought to be. Our correspondents from all the leading centres abroad will keep our readers posted on all matters of interest in their several sections, while our unrivalled staff at home will look diligently after your interests here. To make the Philadelphia Photographer the best practical helper which can possibly be obtained, is the aim and earnest desire of its publishers.

We ask your co-operation in extending its usefulness, and offer to all present subscribers, who secure us new ones, the following

For every new subscriber, for one year, \$1, payable in any of our publications, books, or, if preferred, \$1

PREMIUMS

worth of any of our prize pictures, or any other article for which we are agents, advertised in this magazine.

Operators, printers, etc., can secure all their necessary photographic literature in this way, by a little earnest effort.

EACH MONTHLY ISSUE IS A PHOTOGRAPHIC WORK IN ITSELF. NOTICE TO SUBSCRIBERS.

Subscription price, \$5 a year, \$2.50 for six months, 50 cents per copy, postpaid. positively in advance.

In remitting by mail a post-office order, or draft payable to the order of Benerman & Wilson, is preferable to bank-notes. Clearly give your Post-Office, County, and State.

Canada subscribers must remit 24 cents extra, to prepay postage.

Foreign subscriptions must be accompanied by the postage in addition.

ADVERTISING sheets are bound with each number of the Magazine. Advertisements are inserted at the following

1 Month. 6 Months. 1 Year.
One Page, . . . \$20 00 \$110 00 \$200 00
Half " . . . 12 00 66 00 120 00
Quarter Page, . 7 00 38 50 70 00
Eightb " . . 4 00 22 00 40 00

Cards, 6 lines, or less, 200 1100

The attention of advertisers, and those having galleries, &c., for sale, is called to our Specialities pages. Terms, \$2 for six lines, and 25 cents for each additional line, seven words to a line, always in advance. Duplicate insertions, 50 cents less, each.

SURE TO PAY!

Operators desiring situations, no charge.

BENERMAN & WILSON, Publishers,

OFFICE, 116 NORTH SEVENTH STREET, PHILADELPHIA.

20 00

ENTREKIN BURNISHER OF PLANISHER

MANUFACTURED UNDER

Exclusive License

GRANTED BY

W. E. LOCKWOOD,

ASSIGNEE OF

J. F. SCHUYLER.



WHOSE PATENT BEARS
DATE

February 24, 1863.

RE-ISSUED

June 1, 1875.

PRICE LIST.

6-inch Roll, \$20; 10-inch Roll, \$30; 14-inch Roll, \$40; 18-inch Roll, \$50.

Also, 30-inch Roll, for hand or steam-power (this machine is especially, adapted for large work). Price, \$300.

CAUTION.—The suit of J. P. BASS, assignce of E. R. WESTON vs. PECK, October 8, 1875, the JURY in rendering a verdict for the defendant found:

First.—That Weston, assignor to Bass, was not the original and first inventor of a burnishing machine by which a surface is given to the article to be burnished, by feeding it under pressure over the surface of a burnishing tool.

Second.—That he was not the original and first inventor of the combination of a burnishing tool and a friction feed-roll.

Third.—That he was not the original and first inventor of the combination of the feed-roll and adjustable burnishing tool.

The evidence on which the jury based this finding was that relating to the invention and use by the late J. F. Schuyler of a machine by which a surface was given to the article to be burnished by feeding it under pressure over the surface of a burnisher, rendered stationary, the paper being fed over said burnisher by means of a friction feed-roll.

The patent of W. E. Lockwood, assignee of John F. Schuyler, dated February 24, 1863, was reissued June 1, 1875,

WITH THE FOLLOWING CLAIMS!

1.—As an improvement in the art of Planishing paper, submitting the paper to friction under pressure between a roughened feed roller and a Planisher, substantially as described.

2.—The combination in a Paper Planishing Machine, of a Planisher with a draw-filed roller, for controlling the paper while it is under pressure between the said roller and planisher, all substantially as set forth.

To Photographers and Dealers in Photographic Goods:

Whatever doubts may have existed in the minds of photographers as to the merits of the controversy between the undersigned, W. G. Entrekin, and the owners of the Weston Patents for Burnishers, will be set at rest by the perusal of the above claims, by the verdict of the jury declaring the patent of Weston to be invalid.

While the undersigned feels disposed to treat with liberality, photographers who have

While the undersigned feels disposed to treat with liberality, photographers who have been induced by threatening circulars to purchase the Weston and other machines that infringe the above claims, he will hold them responsible as infringers of the above-mentioned re-issued patent of Wm. E. Lockwood in the use of said machines without first paying the small license fee which is now demanded.

On the other hand, the most prompt and determined legal measures will be taken against those infringers who deliberately, and after being thus duly cautioned, make, use, or sell burnishing machines in which is embodied the invention claimed in the said re-issued patent.

W. G. ENTREKIN, Sole Licensee,

Under grant by WM. E. LOCKWOOD, Patentee.

Manayunk, Philada., April 25, 1876.

Number 153.

50 Cents.

THE

PHILADELPHIA

Photographer.

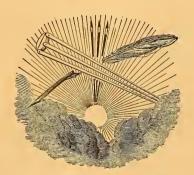
AN ILLUSTRATED MONTHLY JOURNAL,

DEVOTED TO PHOTOGRAPHY.

THE OFFICIAL ORGAN OF THE NATIONAL PHOTOGRAPHIC ASSOCIATION OF THE UNITED STATES.

EDITED BY EDWARD L. WILSON.

September, 1876.



PHILADELPHIA:

BENERMAN & WILSON,

PUBLISHERS,

116 NORTH SEVENTH STREET.

Subscriptions received by all News and Stock-Dealers.

FIVE DOLLARS PER ANNUM, IN ADVANCE.

Sherman & Co., Printers, Philadelphia.

SUMMARY OF CONTENTS.

, F	AGE	P	AGI
The N. P. A. Convention	257	Proceedings of the Seventh Annual Convention of	
Photography in the Great Exhibition	258	the National Photographic Association	275
Dr. Vogel in San Francisco	264	Photographic Sketches from the Centennial Grounds.	
Academy of Sciences	265	III. By Dr. H. Vogel	28-
Baths for Cleaning Plates. By S. Root	266	Edinburgh Photographic Society's Exhibition	28
Lecture on Lenses. By Joseph Zentmayer	267	Our Picture.	287
French Correspondence. By Prof. P. Stebbing	269	EDITOR'S TABLE	288

EMBELLISHMENT.—Photographic Hall, Interior. Negatives by CENTENNIAL PHOTOGRAPHIC Co.

ADVERTISEMENTS.

ARTISTIC PHOTOGRAPHY. BENERMAN & WILSON. Magic Lanterns and Slides. BULLOCK & CRENSHAW. Photographic Chemicals. CAMEO PRESS, THE UNIVERSAL. CENTENNIAL EXHIBITION VIEWS. COLLINS, SON & Co., A. M. Photograph Cards. CENTENNIAL LANTERN SLIDES. CENTENNIAL PHOTOGRAPHIC DIARY. COOPER, CHAS. & Co. Dresden Albumen Papers, etc. DEAN, JOHN & Co. Ferrotype Plates. DEBANES, J., Glace Work. ENTREKIN, W. G. Burnisher or Planisher. FAIRBANK, MURPHY & Co. Passepartouts, Mats, etc. FRENCH, B. & Co. Voigtlander Lenses, &c. GENNERT, G. Albumen Papers. GIHON, JOHN L. Opaque and Cut-Outs. HANCE'S PHOTO. SPECIALTIES. HEARN'S PRACTICAL PRINTER. HEARN'S PHOTOGRAPHIC PRINTING INSTITUTE. HERMAGIS' PORTRAIT LENSES. HOWSONS' PATENT OFFICES.

IMPROVED PHOTOGRAPH COVERS. MAGEE, JAMES F. & Co. Photographic Chemicals. PATTBERG, LEWIS & BRO. Passepartouts, &c. PHOTOGRAPHER'S POCKET REFERENCE-BOOK. PHOTOGRAPHIC PUBLICATIONS. PHOTOGRAPHER TO HIS PATRONS. PROMENADE PRIZE PICTURES. ROBINSON'S PHOTO, TRIMMER AND METALLIC GUIDES. Ross' Portrait and View Lenses. SAUTER, G. Passepartouts. SEAVEY, L. W. Scenic Backgrounds. SHAKSPEARE'S SEVEN AGES OF MAN. SOMERVILLE, J. C. Photographic Stock Depot. TABER, I. W. & Co. Background and Plate Holder. VOGEL'S HAND-BOOK OF PHOTOGRAPHY. WALLACH, WILLY. . Trapp & Munch's Albumen Paper WAYMOUTH'S VIGNETTING PAPERS. WILSON'S LANTERN JOURNEYS. WILSON, HOOD & Co. Revolving Photo. Cabinet, Heating Stove, etc. WOODWARD, D. A. Solar Cameras.

BULLOCK & CRENSHAW,

No. 528 Arch Street, Philadelphia,

MANUFACTURERS AND IMPORTERS OF PURE CHEMICALS FOR PHOTOGRAPHY.
IMPORTERS OF GLASS AND PORCELAIN, APPARATUS, ETC.

119 South Fourth St. PHILADELPHIA.

Branch Office, 605 Seventh Street, WASHINGTON, D. G.

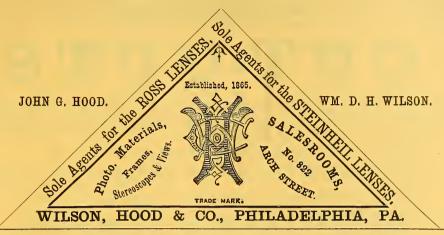


H. HOWSON,

Engineer and Solicitor of Patents.

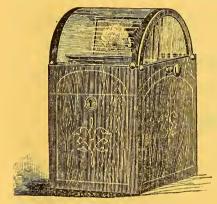
C. HOWSON.

Attorney at Law, and Counsel in Patent Cases.



We have been appointed Agents for the sale of the

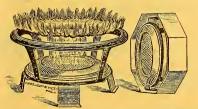
REVOLVING PHOTO, CABINET.



PRICES AS FOLLOWS:

No. 1-Velvet, ornamented (holds 48 cards,)	\$5	50
" 2-Velvet, ornamented, mirrors in sides,		
(holds 48 cards)	7	00
No. 3-Engraved walnut, gilt lined (holds 48		
cards)	6	00
No. 4-Engraved walnut, mirrors in sides	7	50
,		

THE GORMAN HEATING STOVE.



Price, \$1.00 each, by mail, post-paid.

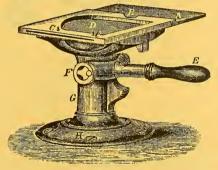
ALSO, AGENTS FOR THE

PUBLICATIONS

CENTENNIAL PHOTOGRAPHIC COMPANY.

Catalogues and prices on application.

BERGNER'S PATENT PRINT-CUTTERS.



Card size \$30 00 Small stereo 30 00 Artistic stereo 33 00	Cabinet	\$35 30 50	00 00
--	---------	------------------	----------

THE ENTREKIN PLANISHER.

Size	6 in.	10 in.	14 in.	18 in.	30 in.
Price	\$20	. \$30	\$40	\$50	\$300

THE AMERICAN OPTICAL CO.

Have reduced prices of many of their goods. Send for their new Price List, also for our "New Illustrated Price List of May, 1876."

WILSON, HOOD & CO., PHILADELPHIA.

GIHON'S

Are the very best that are made, and are now without a rival in the market. They are clean cut, most desirable shapes and sizes, and made of non-actinic paper, manufactured specially for the purpose. Each package contains 30 Cut-Outs, or Masks, with corresponding Insides, assorted for five differently sized ovals and one arch-top.

PRICE. \$1.00 PER PACKAGE. Sent by mail on receipt of price.

Parties wishing special sizes, or large lots of a few sizes, may have them cut to order promptly, by addressing the manufacturer. No lot costing less than \$1.00 made at a time.

No printer should attempt to make medallion pictures without them.

THEY HAVE NO EQUAL FOR QUALITY.

Beware of spurious imitations made of common paper, full of holes, badly cut, and odd shapes and sizes. Ask your stockdealer for GIHON'S CUT-OUTS, and see that they are in his envelopes with instruction circular included.

PROMENADE SIZE NOW READY! SOLD SEPARATELY AT 50 cts. per dozen.

GIHON'S

IS DESIGNED FOR

COMPLETELY OBSCURING THE IMPERFECT BACKGROUNDS OF COPIES,

RETOUCHING NEGATIVES,
FAULTY SKIES IN LANDSCAPES,
COATING THE INSIDE OF LENSES OR CAMERA BOXES, BACKING SOLAR NEGATIVES,

COVERING VIGNETTING BOARDS,

AND FOR ANSWERING

ALL THE REQUIREMENTS OF THE INTELLIGENT PHOTOGRAPHER IN THE PRODUCTION OF ARTISTIC RESULTS IN PRINTING.

WHEREVER YOU WANT TO KEEP OUT LIGHT, USE OPAQUE.

It is applied with a brush, dries quickly and sticks.

CUT-OUTS (thirty), \$1.00.

OPAQUE, 50 CENTS.

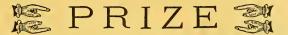
FOR SALE BY ALL DEALERS.

Address all orders to

JOHN L. CIHON, Inventor,

128 N. Seventh St., Philadelphia, Pa.

OUR NOVEMBER, 1875



RICTURES

Our second PROMENADE PICTURE competition has just been closed, and we are in possession of some of the finest Photographic work ever done in the world!

We offer prints from the competing negatives, for sale at the prices below. They are most useful to every photographer as examples of good negative work, artistic composition and lighting, and superior printing and finishing. We have done *our* part to make them *models* in every respect.

THE



Was awarded for the best six negatives to

Mr. LYMAN G. BIGELOW, Detroit, Michigan,

Whose elegant work is familiar to many of our patrons.

THE SETS INCLUDE:

Nos. 1 to 8—Studies by L. G. Bigelow, Detroit, Michigan.

Nos. 9 to 20—Studies by F. B. Clench. Lockport, N. Y.

Nos. 21 to 28—Studies by G. M. Elton, Palmyra, N. Y.

Nos. 29 to 34—Studies by O. P. Scott, Abingdon, Ill.

Nos. 35 to 40—Studies by E. M. Collins, Oswego, N. Y.

Nos. 41 to 46—Studies by E. H. Alley, Toledo, Ohio.

See review in December number Philadelphia Photographer.

The whole set of 46, .													\$10	00
In two Photo. Covers,													11	50
Selections, per dozen,														
" per two doze	en,												7	00
The 28 of Messrs. Clene	ch,	B	ige	low	, ;	and	E	tor	ı,				6	00
Book Cover and Binding	g,				•									75

Address all orders to

BENERMAN & WILSON, Publishers, 116 NORTH SEVENTH ST., PHILAD'A, PA.



CENTENNIAL LANTERN SLIDES.

WE ARE NOW PREPARED TO FUR

40—Board of Finance Building, South Front.
60—Machinery Hall, from Finance Building.
64—Machinery Hall, South Avenue.
65—Horticultural Building, S. E. Forcing Room.
86—Art Gallery and Memorial Hall.
93—Horticultural Building, Saxe end.
104—Main Building, Nave.
105—Main Building, Transept.
115—Main Building, Transept.
116—Main Building, Nave.
117—Main Building, Nave.
118—Main Building, Nave.
119—Morticultural Building, S. E. Forcing Room.
129—Horticultural Building, S. E. Forcing Room.
129—Horticultural Building, S. E. Forcing Room.
129—Main Building, Interior S. E. Central Tower.
145—Main Building, Transept looking N. W.
150—Machinery Hall, South Avenue.
153—Horticultural Building, Floral Hall.
155—Main Building, Swedish Section.
158—Main Building, Swedish Section.
158—Main Building, Transept looking S. W.
161—Corliss Engine.
162—Rodman Gun, 20-inch hore.
164—Falstrom and Tornqvist's Exhibit.
177—Netherlands Section.
178—Staffordshire Ceramic Ware.
178—Staffordshire Ceramic Ware.
178—Agricultural Building—Main Avenue, looking East.
225—Agricultural Building—Main Avenue, looking East.
226—Agricultural Building—Main Avenue, looking West.
230—English Government Buildings,
231—Japanese Commissioners' Dwelling,
232—Japanese Commissioners' Dwelling, Piazza.
233—New York State Buildings—Willing, Piazza.
233—New York State Buildings.
249—Norwegain 15th Century Furniture.
250—Netherlands Section, Kiosk.
251—Garalsberg China and Porcelain, Swedish Section.
254—Anthurum Scherzonanum, Horticultural Hall.
265—Ceroxylon Nevium, Floral Hall.
269—Kingsford Starch Exhibit.
260—Kingsford Starch Exhibit.
261—Cereus Monstrosa Opuntia Peruvianus.
264—Dicksonia Antistica, Floral Hall.
265—Ceroul Hall, Horticultural Building.
268—Floral Hall, Horticultural Building.
269—Floral Hall, Horticultural Building.
269—Floral Hall, Horticultural Building.
269—Floral Hall WE ARE NOW PREPARED TO FURNISH THE FOLLOWING SUBJECTS: 395—Main Building, from Nave, showing S. W. Tower.
397—Judges' Pavilion.
398—Machinery Hall.
400—Memorial Hall, Main Entrance.
401—Memorial Hall, Main Entrance.
412—Hawaiian Islands' Exhibit, Main Building.
444—Main Building—Transept, from S. Gallery.
446—Model of Calumet & Hecla Copper Co.'s Stamp Mill.
454—Main Building—Main Avenue, from N. E. Tower.
456—Main Building—Main Avenue, from Transept.
460—Main Building—Main Avenue, from Transept.
461—Horticultural Hall, from Grounds.
471—Sandwich Bessemer Steel Exhibit, Main Building.
491—Women's Pavilion, from Gallery.
500—Memorial Hall.
534—Lansdowne Valley.
535—Centennial Grounds, from Judges' Pavilion.
537—Horticultural Building, South Entrance.
541—Art Annex, Italian Department.
544—Art Annex, Italian Department.
544—Art Annex, Italian Department.
554—Art Annex, Italian Department.
556—Memorial Hall.
599—South Avenue, from West end—Machinery Hall.
601—The Dairy. 395-Main Building, from Nave, showing S. W. Tower. 550—Connecticut State Building.
566—Memorial Hall.
599—South Avenue, from West end—Machinery Hall.
601—The Dairy.
603—Agricultural Hall.
604—Swedish School-House.
650—New Jersey State Building, rear view.
651—The 20-inch Rodman Gun.
652—Main Building, West side.
665—Main Building, West side.
665—The Dying Lioness.
666—Navy Group for Lincoln Monument.
678—The American Volunteer (Granite Statue).
692—Memorial Hall, Italian Section.
693—Horticultural Grounds.
700—Agricultural Hall, Irom Horticultural Hall.
702—Iforticultural Hall, From Horticultural Hall.
702—Iforticultural Hall, From Horticultural Hall.
704—New Hampshire State Building.
705—Queensland Court, Main Building.
722—Wisconsin State Building.
723—Illinois State Building.
723—Monitor Turret.
737—Rhododendrons, Horticultural Grounds.
743—Memorial Hall, Marin Avenue.
745—Agricultural Hall, Main Avenue.
752—Horticultural Hall, Main Avenue.
752—Horticultural Hall, Interior.
784—King & Brown Manufacturing Co.'s Exhibit.
805—Interior of Agricultural Hall, looking Westward.
807—Centennial Water-Works.
808—Machinery Hall—North Avenue, looking East.
815—Main Building, General Yiew from Northern end.
816—Birds-eye View of Grounds, from Main Building.
817—Machinery Hall—South Avenue, looking East.
820—Missouri State Building.
829—Horticultural Grounds, from Horticultural Building.
831—Birds-eye View form Machinery Hall, looking W.
833—Transept, Machinery Hall.
839—Memorial Hall, swedish Department.
838—Paralian Cotton Exhibit, Machinery Hall.
900—Steam Fire Engine Exhibit, Machinery Hall.
900—Steam Fire Engine Exhibit, Machinery Hall.
900—Steam Fire Engine Exhibit, Machinery Hall.
900—Seles Bayes Researance Peartment.
947—The Lake, from Main Building.
946—Main Building, Western Entrance.
947—The Hunter's Camp.
966—Medinory Holl—South Avenue from Foot and 599—South Avenue, from West end—Machinery Hall. 601—The Dairy. 326—Horticultural Building, West Front.
327—Lansdowne Bridge.
329—Agricultural Building, from Horticultural Building
349—Torso Washington, Art Gallery.
351—Group, America—Art Gallery.
352—Group, America—Art Gallery.
353—Group, America—Art Gallery.
355—Centennial Opening, the Choristers.
371—Main Building, from Machinery Hall.
375—Washington Glass Works Exhibit, Main Building.
376—New England Glass Co.'s Exhibit, Main Building.
380—Art Gallery, Main Entrance. [Grand St., N. Y.
383—Main Building, Transept from S. Gallery.
394—Main Building, Transept from S. E. Tower. 961—Japanese Bazaar. 962—The Hunter's Camp. 964—Indiana State Building. 966—Machinery Hall—South Avenue, from East end.

New ones are being con- PRICE, \$1 EACH. With liberal discounts on large orders.

By BENERMAN & WILSON, II6 North Seventh St., Philada.

THE PHOTOGRAPHER TO HIS PATRONS.

WHAT IS IT?

HE PHOTOGRAPHER TO HIS PATRONS is a little book or pamphlet of twelve pages, the intention of which is: 1st. To enable the photographer to say a few words in a kindly way to those who have photographs taken, in order that the intercourse between them and their photographer may be pleasant and result in the most successful pictures. Every photographer knows that he is constantly beset with a lot of questions, as to the proper way to dress, the best time to come, and so on, which take a great deal of his time to answer. This little book answers

them all, and the mere handing of a copy to the questioner, which he or she can carry away and study at leisure, serves as admirably as a half-hour's conversation.

2d. It is a cheap mode of advertising What could you want better than to have your business card so attractive that people will come and ask for it, hand it around from one to another, discuss it, and then keep it for reference? This is what they do with this little "tract." Witness what those who

have tried it say below.

3d. It is also intended to convey to the public at large the fact that photography is not a branch of mechanics, nor photographers a sort of mechanic themselves, but that both are entitled to respect, the same as the family physician or the minister; that the photographer has rights as well as the public; that he must be trusted, and that he alone is responsible for his results. Moreover, that he must make the picture and not they.

How far the work serves these three ends the reader must judge from the testimonials below, of a

How far the work serves these three ends the reader must judge from the testimonials below, of a few of those who have been using our little publication in their business.

We believe it will pay you to use it, and that you will assist just that much in elevating your art and your craft, an object which we are all working for.

We get "The Photographer to his Patrons" up in neat style, on the best letter cap paper, assorted tints, green, pink, and buff. Eight pages are devoted to the body of the work, which contains paragraphs or chapters—1, on the object of the work; 2, on photography; 3, when to come; 4, how to come; 5, how to dress; 6, how to "behave; 7, the children; 8, general remarks on coloring, copying frames prices for

ing, frames, prices, &c.

All this is inclosed in a cover of the same kind of paper, the pages of which are at the service of the photographer who orders them to have printed thereon anything he may please, which printing we do without extra charge. We publish this leaflet in English, German, and Spanish.

Cuts for the covers we supply free.

\$20 00 3000 copies, cover include 5000 " " "	
Ones 500 000 hour hour sold	

TESTIMONIALS.

"I sent one out West to a friend, and she wrote that she was now posted, and when she came here to have a picture made, she would come 'according to directions.' "-A. Bogar-bus, New York.

"It assists me greatly."-JAMES MULLEN, Lexington, Ky.

"A grand idea."-ELBERT ANDERSON.

"You have conferred a great favor on the fraternity in supplying it."—A. C. McIntyre Co., Ogdensburg.

"It is the best advertising medium I have ever found."-H. M. SEDGEWICK, Granville, O.

We send samples to any who may desire.

BENERMAN & WILSON, Photo. Publishers, 116 North Seventh Street, Philadelphia.

NEW STOCK HOUSE,

Somerville's St. Louis Photographic Stock Depot,

No. 8 South Fifth Street.

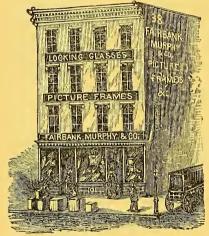
AMERICAN OPTICAL CO.'S CELEBRATED APPARATUS,
POWERS & WEIGHTMAN'S SILVER, GOLD, IODIDES AND BROMIDES,
VOIGTLANDER & SON AND DARLOT LENSES,
TILFORD'S CELEBRATED IODIZED AND NEGATIVE COLLODION,
AND EVERY WANT FOR THE TRADE.

FRAMES IN EVERY VARIETY.

J. C. SOMERVILLE, No. 8 S. Fifth St., Saint Louis, Mo.

FAIRBANK, MURPHY & CO.,

38 North Howard St., Baltimore, Md.,



MANUFACTURERS OF

PASSEPARTOUTS,

DOUBLE EMBOSSED.

DEEP GOLD,

AND BEVEL

MATTS,

SHOW MATTS.

FINEST GOODS. BEST STYLES. BOTTOM PRICES.

HEADQUARTERS FOR THE TRADE.

Show Displayers, Velvet Passepartouts, Beveled Matts,

Fancy Metal Frames, Star Fancy Paper Passepartouts.

Velvet Stands,
Velvet Cases,
Double Matts,
nes, Standard Matts,

These goods are entirely of our own manufacturing. A large assortment constantly on hand; odd sizes and styles made to order.

LEWIS PATTBERG & BRO., 709 (Formerly) Broadway, New York.



GLACÉ! GLACÉ!

J. DE BANES, 872 Broadway, N. Y., finishes Photographs of all sizes, for the trade, in the newest styles. Send in your orders early.

G. SAUTER.

No. 138 South Eighth Street, Philadelphia,
MANUFACTURER AND WHOLESALE DEALER IN

PASSEPARTOUTS.

The attention of the trade is particularly called to the superior quality of our Glass and materials and neatness of finish. A large assortment constantly on hand.

CENTENNIAL VIEWS EXHIBITION

By arrangement with the CENTENNIAL PHOTOGRAPHIC CO., who have the exclusive right to photograph within the INTERNATIONAL EXHIBITION of 1876, we are enabled to offer our patrons a splendid line of

INTERIOR & EXTERIOR VIEWS of the BUILDINGS & GROUNDS.

Including charming interiors, rich exhibits, wonderful flora, beautiful panoramas, and lovely scenes, which meet the eye in all directions, comprising now some

FIVE HUNDRED SUBJECTS.

Stereos, \$3 per dozen; 5×8 at 50 cents each; 8×10 , \$1; 13×16 , \$2 50; and 17×21 , \$5. These views are all gotten up in the highest style of the art, can be sold by any photographer, and will bring a crowd to any gallery to see them.

CATALOGUES FREE. SAMPLE DOZEN STEREOS BY MAIL, \$3.
LIBERAL DISCOUNT BY THE GROSS.

Also, the **CENTENNIAL SOUVENIR**—16 Views of the Centennial Buildings and Philadelphia. Cloth bound, 50 cents, post-free. Trade supplied. Money in it!

BENERMAN & WILSON, Photo. Publishers, 116 North Seventh Street, Philadelphia.

PROMENADE ALL! HERMAGIS'

Celebrated French

PORTRAIT LENSES.

CABINET SIZE, ARE JUST THE LENS FOR THE NEW

PROMENADE PICTURE.

MR. HENRY ROCHER, the renowned Chicago photographer, says of them: "In my opinion they are truly lenses of great capacity, and must surely satisfy every purchaser." Mr. Rocher has purchased two Hermagis lenses of card size and one Salomon style. See further splendid testimonial from Mr. Rocher in Specialties.

MR. F. GUTEKUNST, the celebrated Philadelphia photographer, was sent a Salomon Lens to try for us, and wont part with it. It cuts sharp a 9 inch standing figure, and beats a lens that has been his favorite many years, and where many makes of lenses have failed, on trial, to equal it.

The HERMACIS IS THEREFORE AHEAD

TRY THEM!

These celebrated lenses, are used by MONS. ADAM SALOMON, of PARIS, exclusively for making his **WORLD-RENOWNED PORTRAITS**, and by the most famed photographers of Europe, from whom Mons. Hermagis has the Highest Testimonials.

We now have a FULL STOCK on hand.

The Salomon Style, 8 x 10 size, \$160.

For Cabinet Size, extra quick, \$100.

For Cabinet Size, quick, \$90.

For Carte Size, extra quick, \$50.

For Carte Size, quick, \$40.

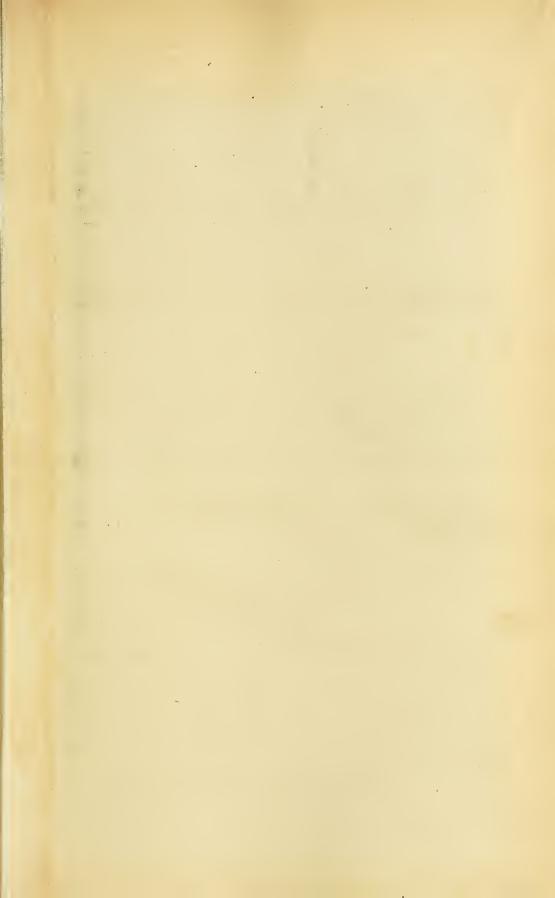
They are being introduced in America steadily, and are liked wherever they go.

They will be sent on trial to responsible parties C. O. D., and instructions to Express Company to hold money one week for trial. If parties prefer to see the work of a lens before purchasing, we will make a negative and send with details of exposure, etc., and reserve the lens until answer is received (if the time is reasonable), on receipt of \$1 to pay cost. Having a skylight of our own we are enabled to do this.

Not a single person to whom we have sent these Lenses on trial, as above, has returned them.

BENERMAN & WILSON.

116 North Seventh Street, Philadelphia, Pa.





PHOTOGRAPHIC HALL, INTERIOR,

CENTENNIAL PHOTO, 00.

Philadelphia Photographer.

Vol. XIII.

SEPTEMBER, 1876.

No. 153.

Entered according to Act of Congress, in the year 1876,
BY BENERMAN & WILSON,
In the office of the Librarian of Congress, at Washington, D. C.

THE N. P. A. CONVENTION.

THE Seventh Annual Convention of the National Photographic Association was held in Judges' Hall, according to announcement, commencing Tuesday, August President Rulofson presided, and infused much of his own enthusiastic spirit into the proceedings. The Convention opened with singing the Star-spangled Banner, which was led at the piano by our good friend, Dr. Vogel; thus Germany and America united in photographic convention in giving tone to our patriotic national song. It was a thrilling moment, and one long to be remembered by those present. Gen. Joseph R. Hawley, President of the Centennial Commission, followed with a felicitous address of welcome to the Association, after which the usual programme was followed out.

The exercises were interesting and profitable, and showed that the spirit of the N. P. A. was as firm and resolute as ever. Many important subjects were discussed, and a number of valuable papers read. There were also several papers presented which could not be read for want of time, but these will appear in the published report.

The large number of the solid, active men of the Association present was a noticeable feature of this meeting; a larger proportion than has been usual at former conventions. This was most gratifying, as it indicates that those upon whom the Association must depend are the most earnest in its support. They are the men who comprise the working force of the Association. Many familiar faces were missing, however.

Among the important measures adopted were some amendments to the constitution and a resolution referring the future meetings of the Association, as to time and place, to the discretion of the Executive Committee. Nearly the whole of the old board of officers was elected so far as they could serve.

The finances were considerably improved by this Convention, as there was very little expense attending it aside from the item of reporting the proceedings.

It was very gratifying to see the indications of life in the Association, and the determination on the part of the members present to sustain it. On the whole the Convention was a complete success, and not the least interesting feature of it was the grand exhibition in Photographic Hall, which was visited by the Association in a body on Wednesday afternoon. The best of feeling prevailed, and many old friendships were renewed.

A portion of the report of proceedings may be found in our columns this month.

Photography in the Great Exhibition.

FROM the hasty glance we took of the foreign photographs last month, we now come to a more detailed examination. We begin with the inner end of Screen 18, where we find a collection of cabinets and large heads by Mr. John Treckhoff, Ekaterinburg, Russia. The work is very good, without possessing any particularly striking features. On the west of Screen 18 we are attracted by the beautiful work of Mr. C. Bergamasco, St. Petersburg. There are two large heads from direct negatives, and a number of cabinets; the latter are especially worthy of notice, as displaying the finest artistic feeling, and the most consummate taste and skill in every department. For exquisite delicacy and perfect detail these are seldom excelled.

There are two other exhibits on this screen, the names of which baffle all attempts to harmonize them with the catalogue, or translate the fantastic shapes and arrangements of letters which the Muscovite orthography has imposed upon us. In one of these there are some bold effects in portraiture produced in full sunlight. They are remarkable for their transparency and detail in the deepest shadows, and yet no effects of solarizing in the lights. There are several of groups and single figures in this exhibit that may be studied with profit. The other exhibit on this screen has a number of large heads and some cabinets, all of which are bold and effective in execution, and show careful, judicious treatment. On the wall in Alcove 19, is the work of Count Tyszkiewicz, illustrating his travels in Africa. Here are views, groups of natives, and individual portraits of the dark-skinned Arabs, all executed in a highly creditable and successful manner. These are arranged in an elaborate ornamental frame, which is very attractive.

On the east of Screen 19 are a number of cards, cabinets, and large 17 x 21 plain photographs, by Mr. Misczkowski, of Warsaw, Russia. Excellent results in the artistic lighting and chemical parts of the work are here produced. On the inner end of Screen 19 is a frame of heliominiatures, by Eli, of Warsaw. These have the appearance somewhat of colored porcelain, but are overdone

in coloring, so that they possess but little merit.

In plain photography, the Russian artists have made a most excellent showing, that will compare favorably with any of the foreign exhibits.

On the west of Screen 19, is the exhibit of Mr. Crucesy Campa, City of Mexico. This consists of 13 x 16 plates of half-length figures, plain and colored. Very creditable.

A collection of colored porcelains and vitrified enamels, by F. M. Maya, City of Mexico. Some of the enamels are quite successful, but the porcelains tend to flatness, and are wanting in the essential qualities of a good picture.

Christiano Junior, Buenos Ayres, displays a number of eards and cabinets which are quite promising.

C. Bizeoli and Carl Feltscher, both of Buenos Ayres, are also represented here, the former with portraits, and the latter with architectural views.

L. B. Moazon, Buenos Ayres, exhibits four pictures representing American history. He represents Washington in a large picture in the centre, with the succeeding presidents of the United States arranged around the outside. In the same manner emancipation is illustrated, with Lincoln, and pictures of slaves on the outside; the American army, with Grant and a number of officers on the margin. The fourth frame contains cabinet portraits of the eighteen presidents of the United States. There is but little merit in the work aside from its historical associations, as the large photographs are enlargements from engravings, and are exceedingly coarse and unphotographic.

On the wall of Alcove 20 is a large collection of views and portraits from Japan, by Baron Stillfried, of the Japan Photographic Association, Stillfried & Anderson, Yokohama. Some of the views are 16 x 20 in size, and the work is all exceedingly well executed. They are fine illustrations of the scenery and many of the manners and customs of that country.

On the east of Screen 20, we find the Swedish photographs. Mr. O. Wiklund, Westeras, has some pretty views, and a few well-chosen examples of portraiture. His native groups are very characteristic.

Alexander Lindahl, a fine panorama of Stockholm, and other views. J. Jaeger, Stockholm copies of paintings and sculpture. Thorwaldsen's group of "John Preaching," is particularly effective. Mr. Wilhelm Lundberg, Stockholm, has some quite pretty card and cabinet portraits, though they are a little faulty in too much contrast, and want of detail in the shadows. Mr. Sophje Löfstrom, Upsala, cards and whole size, badly lighted. Mr. Henri Osti, Upsala, shows some cabinets and larger sizes, which are very creditable, though not without their faults.

Turning to the west of Screen 20, we find the exhibit from Brazil. Mr. J. Insley Pachéco, Rio Janeiro, has quite a large collection of cabinet and larger portraits, but there is room for much improvement in this work. Some examples of a style of coloring by the same artist are well executed, but the effect is not pleasing. Mr. F. A. Fidanzi, Para, has a frame of cards and large heads, which show some very passable effects. Mr. J. S. Sabino, also of Para, cards, very ordinary. Mr. Marc Ferrez, views and photographs of coral specimens. A few finely executed colored photographs, somewhat after the ivorytype style, by Mr. Pedro Satyro, are quite attractive, but possess little artistic merit. A couple of cabinet photographs by L. Tragus & Co., and a few small views without name, complete the collection from Brazil.

On the wall, Alcove 21, are cabinets and life-size portraits, by Beernaert Freres, Ghent, Belg. These have the appearance of being produced by the Lambert process, though this is not designated. They are evidently on carbon, and have the effect of an overdone silver print. They have the appearance of being from fine negatives. Mr. K. Kundsen, Bergen, a collection of 5 x 7 views.

Mr. E. E. Aubert, Christiana, Norway, cards, cabinets, and larger work, which evinces a good deal of artistic feeling, and many very pleasing effects. Mr. Aubert is evidently a promising artist. Mr. Claus Kundsen, Christiana, shows some 11 x 14 full-length portraits, which are fine in lighting and chemical effects, but are wanting in accessories and expressive action.

On the east of Screen 21, we find a large exhibit by Mr. Joseph Ungar, Vienna. These are cards, cabinets, and 11 x 14 sizes, and all of children; here are the little ones of every age and size included in childhood, and in every conceivable attitude, mood, and expression, dressed and undressed, standing, sitting, and lying down. Mr. Ungar must have a love for the little ones, as his success is very marked. The work is all excellent. On the same screen are a number of groups and single portraits, by Michael Rupprecht, Oedenburg. These are very rich in photographic effects, and wonderfully expressive in their composition. Mr. Rupprecht displays medals from the exhibitions in London, Moscow, and Vienna. On the outer end of Screen 21, is a collection of fine stereos, by G. B. Unterveger, Trento, Austria.

On the west of Screen 21, are a number of large 17 x 21 portraits, single and in groups, by Mr. Julius Gertinger, Vienna. These are beautiful examples of photography, and may be dwelt upon with profit and satisfaction. The Austrian capital may be proud of such work. Mr. Fritz Luckhardt, Vienna, is also here with some charming examples of his inimitable work. The high reputation that Mr. Luckhardt has long enjoyed, is fully sustained by the beautiful work here shown. A revolving stereoscope contains six of his stereo portraits exquisitely colored; they attract a great deal of attention. Mr. Hubert Ginzel, Reichenberg, enlargements in india ink and colors. Mr. Lud. Schodisch, Oberwarth, a number of fine landscape views, with animals and birds; and Mr. S. Wasservogel, Olmutz, portrait of an old man, and a couple of very successful pictures of horses, are all on this same screen. On Screens 21 and 22, are also more of Baron Stillfried's views and portraits from Japan. The east of Screen 22 contains some remarkable reproductions from paintings and architectural pieces, by Mr. V. Angier, Vienna. These pictures are of mammoth size, the largest being about 2 x 3 feet, and perfect examples of photography in every respect. Eight landscape studies, by F. Kuebel, Sabaria, are well executed. Mr. F. Largajoli Meran, Tyrol, has a number of charming landscapes which

it does one good to dwell upon. On a table in this alcove are two portfolios containing work by Mr. H. Eckhert, Prague, Bohemia. One has examples of photo-lithography and photo-mechanical printing, and the other a large number of beautiful landscapes and interiors. Turning to the west of Screen 22 are found the exhibit of M. Walrey, of Paris. Here is some elegant work, in a most elegant and elaborate frame, the whole of which is a credit to Parisian photographic art. M. Laffon, Paris, contributes a collection of reproductions of antique sculpture and vases.

On the wall, Alcove 23, is the cardmount exhibit of Mr. D. Hutinet, Paris. These are in all sizes and embrace many choice and tasty designs. J. W. de Bray, Nice, France, exhibits landscape views of local scenery. Mr. A. Liebert, Paris, a collection of cabinets and large sizes in chromotype. These are all from negatives of the finest character, but they lack the brilliancy and beauty of the silver print. On this are also some pretty landscapes by Dr. Von David, Paris.

East of Screen 23 presents to us the wonderful photochromic pictures by M. Leon Vidal, Paris. From all that we have heard of this process, these examples do not meet our expectations. These, however, may be but the indications of progress that may yet reach something really meritorious. For patterns or objects in which the colors come in sharp contrast with each other, this may produce very satisfactory results, but for the delicate flesh tints and gradations of color in portraiture, it produces an effect that is anything but pleasing. The reproductions of paintings indicate a fidelity to details which makes coarseness the most conspicuous feature of the work. On this screen also are examples of the photo-engraving process of Messrs. Gillot, of Paris. Here are exhibited a number of the engraved plates from which the prints are made.

On the inner end of Screens 23 and 24 are a couple of fine large portraits, by Mr. M. H. Nof, Atelier Adele, Vienna. The one of Adelina Patti is a lovely picture. Two large groups by the same artist are also successful.

On the west of Screen 23 are several ex-

hibits. Mr. E. Kiewning, Stettin, has some fine large-size portraits. His dark backgrounds give great depth and brilliancy, but some of them we think are too dense -a deep blackness from which no other blackness has any relief. G. A. Ritschel Hirschberg in Schlesien, Warmbrunn, has some cards, cabinets, and 8 x 10, that are not often excelled. The most of them are little gems. Mr. J. Kësler, Bad Landëck, landscapes and architectural views, which appear to possess considerable merit, but are not printed sufficiently deep. Mr. C. H. Jacobi, Coblentz, and Mr. Robert Scholz, Goerlitz, exhibit views also. The latter has some very pretty effects. Messrs. Loescher & Petsch, Berlin, exhibit a number of their full-length portraits in large size, but we are disappointed here. We had expected something fresh and progressive, but instead we find some of the same as were sent here several years ago. The group of brigands is the best piece in their collection, and appears to be original. They have scarcely maintained the high position they occupied a few years ago.

On the table in Alcove 24, Mr. R. Hennig has a large book of mats, mounts, and envelopes, which include some very neat designs. Mr. J. B. Obernetter, Munich, exhibits a book of beautiful prints by the collotype process. Those interested in mechanical printing will find these a profitable study. Mr. P. H. Remelé has on the same table a book of fine Egyptian views. On the wall of Alcove 24, Messrs. Adolph Braun & Co., of Dornach, Alsace, exhibit several carbon portraits in colors, which are executed in the printing process. We think we should prefer the carbon prints without the coloring. We had expected a fine display of carbon work by Messrs, Braun & Co., but this seems to be all they have sent. "Little Feefee" is a very perfect life-size plain picture of a child, by Mr. J. C. Schaarwachter, of Berlin. Mr. Emil Busch, Rathnow, Prussia, has an exhibit of photographic lenses, with pictures by various artists, showing their workings. The work indicates good capacity and execution. Mr. J. Cremer, of Gladbach, has a frame of various sizes of small portraiture, printed in carbon. They indicate some very successful negatives of children, but the prints cannot compare with silver. George Wolf & Co., Hamburg, have some fine cards and a large head, showing excellent work.

On the east of Screen 24, Messrs. Brauneck & Maier, Mayence, exhibit a large collection of mechanical prints. Mr. K. Schwier, Weimar, copies of oil paintings. Mr. F. Heiler, views and portrait studies among the Cayuganga Indians. Some very good photography of very ugly subjects, real bronzes. Their costumes are particularly interesting. Messrs. Reichard & Linduer, Berlin, cabinets and 11 x 14 sizes, showing some very fine work. Messrs. Schulz & Suck, Carlsruhe, finish this screen with a number of very creditable full-length portraits, on 13 x 16 plates.

Screen 24, west, and the wall, Alcove 25, contains the extensive exhibit of Messrs. Trapp & Munch, Friedberg, consisting of prints by various artists on their paper. They also have a case in this alcove containing samples of the various brands. The artists here represented are as follows: Atelier Adele and E Rabending, Vienna, portraits; Leich Haufstangl, Dresden, a beautiful picture of a lady playing guitar; F. Frith, Ryegate, England, interior; A. Braun, Dornach, landscape; J. Reitmayer, Munich, large portraits; A. Liebert, and Goupil & Co., Paris, portraits and reproductions; C. Naya, Venice, large views in Venice and Rome; Dr. Heid, Vienna, interior; Antonio Sorgato, Venice, portraits; Schmidt & Weener, Kiel, portraits; B. Johannes, view in the Tyrol; Gebr. Lehman, Breslau; Baldi & Wurthle, Salzburg, landscapes; W. Berndt, Dresden, reproductions; Angerer, Munich, family groups. East of Screen 25 has some very fine architectural views, interiors and exteriors, by Mr. Herman Rükwardt, Berlin. These are exceedingly well done, and owe much of their merit to the very effective lighting. In this respect they afford profitable study. Mr. J. Schaarwächter, Berlin, exhibits a collection of portraits of celebrities, with names attached, which are all executed in his usual elegant style. Mr. Schwaarwächter has few superiors as an artist-photographer. Mr. Mischenski, Dantzig, is next, with some of the loveliest artistic work in the foreign department. The few pictures he has are perfectly charming; each one is a gem that is a delight to study. In portraiture this little exhibit is the nearest to being faultless of any in the hall.

On the inner end of Screen 25, Mr. F. W. Geldmacher shows examples of permanent printing on various materials, such as paper, cloth, wood, leather, enamels, ivory, porcelain, etc. On the west of Screen 25 are a number of exhibits, as follows: J. Valentine, Dundee, Scotland, landscapes; E. Delden, Breslau, portraits; R. Henig, Berlin, card portraits; further examples of Trapp & Munch's paper, by artists already named; Mr. Valentine Blanchard, London, portrait. Mr. J. Albert, Munich, exhibits a number of large portraits and reproductions by the Albert process. We like the latter better than the former, though in some of these there is want of detail in the dark parts, but this may have been the fault of the original. It is quite remarkable, however, that such mammoth work should be produced with ordinary printers' ink. It is one of the promising directions in which photography is reaching out to more extensive applications and usefulness. Mr. F. Charnaux, Geneva, Alpine scenery.

On the wall, Alcove 26, Messrs. Farmer & Rees, London, Ontario, two frames of pretty cabinet portraits, and Mr. R. W. Barrow, Kingston, Canada, landscapes. Mr. Barrow has some very creditable work; his views are also on the east of Screen 26. On this screen, also, Mr. R. W. Henderson, Toronto, Canada, landscapes; J. S. Climo, St. John, New Brunswick, stereoscopic views; Mr. J. Bruce, Toronto, Canada, has some very excellent card and cabinet work, besides two life-size portraits, and a large skating group, in oil. Mr. Bruce may certainly take rank among our first-class artist photographers.

On the inner end of Screen 26, Mr. H. N. Grenier, Montreal, exhibits samples of printing on wood blocks for engraving.

Alcove 27 presents an appearance at once attractive, and full of artistic merit in every department of photography. It is the splendid exhibit of Mr. Wm. Notman, Montreal. This is the largest collection contributed by any one house, and in elegance of work, rich-

ness of mounting, framing, etc , fully sustains the high reputation Mr. Notman has long enjoyed, not only in Canada, but throughout the United States. Here are plain photographic portraits in card, cabinet, and 8 x 10 sizes, larger portraits in india-ink and water colors, and life sizes in crayon and oil. Mr. Notman not only produces the most faithful and artistic portraits, but also illustrates some of the sports and customs of his people. In this direction he shows us hunting scenes, travelling on snowshoes, snow storms, a skating carnival,-a beautiful large painting in oil,-and many other interesting subjects. No one can leave a careful inspection of this exhibit without gaining some new thoughts, or being impressed with the high character and capabilities of the photographic art.

On the inner end and west side of Screen 27 are some cards, cabinets, and larger sizes, by Mr. Hubert Newman, Sydney, N. S. W. These show careful, conscientious work, which is promising for a section so remote. Mr. R. Slingsby, Lincoln, England, has a few choice portraits in large size, showing excellent work. Mrs. Julia Margaret Cameron, of Lindula, Ceylon, character portraits. The author of these has expressed more of sentiment than of photographic or artistic skill. Mr. Robert Crawshay, Wales, some pretty landscapes; Mr. Frederick York, London, stereoscopic views of scenery, architecture, interiors, zoological, etc.; also 6 x 8 and cabinet sizes, all excellent. Mr. Adolphe Beau, London, examples of the heliotechnic process.

On the wall, Alcove 28, Mr. H. P. Robinson & Cherrill, Tunbridge Wells, England, portraits, landscapes, and character pictures, mostly produced by combination printing. We are disappointed here, as in some other of the foreign exhibits, in seeing nothing new. These have all been exhibited here before, and their merit and novelty to American photographers is an old story. Mr. Frank Good, Hartley Wintney, England, makes a fine display of his views in Holy Land and Syria. They are in stereoscope and 8 x 10 sizes. Mr. W. Hanson, Leeds, England, has a frame of neat card and cabinet portraits, and two large heads, finely done; and directly underneath these are the wonderful landscapes by Mr. Payne Jennings, Dublin, Ireland. In these nine 10 x 12 photographs, Mr. Jennings has excelled our most ardent conceptions of what might be produced by pure, simple photography. Here are the most charming compositions, the most enchanting perspective, the tenderest skies, all full of feeling, life, and beauty, and executed on one plate with an effect and perfection that we have seldom if ever seen equalled. The beauty of the work is much enhanced by being mounted with gelatin on plate glass.

Screen 28 has some successful photographs of animals by Mr. David Hedges, Lytham, England, and fine large landscapes by Mr. F. Hudson, Ventor, England. A large collection of card and cabinet portraits, all excellent work, of actresses, operatic, scientific, and literary celebrities, ambassadors and ministers, clerical dignitaries, members of the House of Commons, the Disraeli and Gladstone ministries, and distinguished men, the whole forming an exhibit that is a credit to the London Stereoscopic Company, by whom the work was executed. Messrs. A. & J. Bool have also some large landscapes well done.

The inner wall of Screen 28 has landscapes and interiors, by Mr. M. Devanne; also portraits by Messrs. Hugo Thiele, R. Crawshay, Valentine Blanchard, W. England, and R. Slingsby, some of them being fine in lighting and composition.

The west side of Screen 28 contains a magnificent display of mammoth landscapes by Mr. Vernon Heath. Two of these are about two by three feet in size, and all are as perfectly executed, as far as the movements of foliage and all the finer effects are concerned, as the smallest stereo. We are almost as much puzzled before these pictures, as when confronted by Mr. Kent's portraits, but here we have no intimation of direct negatives, while a friend at our elbow suggests "enlargements," and upon turning to the catalogue, we read "Landscape Studies, enlarged and printed in carbon." This settles the question, and we are filled with admiration for the process by which such work can be produced, and feel to thank Mr. Heath for exhibiting these beautiful examples.

Alcove 29, south wall, large portraits and marine views with colored effects, by Col. Stuart Wortley; several fine Scotch views without name; Mr. Carl Norman, Tunbridge Wells, landscapes, architectural and interior views, all excellent work.

Mr. W. England, southwest wall, landscapes and sculpture. Mr. William Bedford has quite a large collection of rather pretty landscapes of about 10 x 12 size, mostly of English scenery. In the west window, Mr. F. York, London, exhibits lantern transparencies. Mr. C. P. Lee, Cardiff, colored enamels; rather pretty but a little exaggerated in coloring. Mr. A. L. Henderson, vitrified enamels, plain and colored, quite successful. Fradelle & Marshall, London, eards and 8 x 10, good work. Mr. J. Barnard, Bedford, England, exhibits portraits and architectural views by the chromotype process. Unless this process finds some more successful worker than Mr. Barnard, we fear its permanence will not save it. That same overdone appearance exists in these which characterizes nearly all the work we have seen by this process. Mr. F. Baum, Manchester, England, has a couple of carbon portraits, but he has evidently not attained to the highest success in working the process. This space closes with some Scotch scenes, contributed by Messrs. Wilson, Hood & Co., to show the working of the Ross new symmetrical lens. On the table in this alcove are several books of architectural photographs, by Messrs. Bedford, Lemere & Co., London. Mr. G. W. Wilson, Aberdeen, Scotland, a fine collection of his beautiful Scotch scenery, in book form. They are well worth a perusal. Mr. Wilson has also a stereoscope box of transparencies which are very fine, and attract a great deal of attention. Thus endeth the circuit of Photographic Hall.

We now come to some additional exhibits not before noticed. The first of these is on the north wall, in the first alcove, and is a collection of fine prints of 8 x 10 size, made from emulsion plates, by Mr. H. J. Newton, New York. In some respects this work is remarkable and possesses great interest for photographers everywhere. Here are beautiful pictures possessing all the qualities of the best photographs by any

process, executed "without the silver bath." When we see such work as this produced by such means, we are almost ready to conclude that we are on the eve of a new era in photography. Soon the negative bath will be known no more, with its eccentricities and obstreperous fluctuations, but the photographer will take in his pocket a bottle containing bath, collodion, and all, and go forth untrammelled to woo and capture the beauties of nature. Mr. Newton has certainly demonstrated wonderful progress in this direction, and from so intelligent and zealous a worker as he, we shall expect greater triumphs in the future. The portraits by the same process are not less successful than the views.

In Alcoves 3 and 4, against the windows, is a fine display of beautiful transparencies, by Messrs. J. Levy & Co., Paris. These are from lantern size up to plates 11 x 14. In Alcove 4 are two large stereoscope boxes filled with views of the same make. The work is all of that high character for which Messrs. Levy & Co. are so celebrated, and attracts a great deal of attention. Messrs. Benerman & Wilson, No. 116 North Seventh Street, are the American agents for the sale of these transparencies.

Mr. C. D. Mosher, Chicago, Screen 11, east, has added a few cabinet size heads to his exhibit, mounted in circular form, which he dubs "Elite." They are very pretty.

The Centennial Photographic Company, Screen 14, east, have added to theirs, a collection of portraits, entitled "Our Foreign Visitors," which shows the characteristic features of Tunisians, Algerians, Japanese, Chinese, Persians, Turks, Egyptians, etc.; a frame also of their beautiful statuary, illustrating the character of the sculpture in Art 'Hall. Their work is excellent, and justifies the great demand they are constantly having for it.

LOOK OUT FOR COOL WEATHER.—The last of this month in many sections will bring cool nights that will begin to affect the working of chemicals. When you find it difficult to get sufficient exposure and plates do not develop satisfactorily, do not mistake the cause.

DR. VOGEL IN SAN FRANCISCO.

The following extracts from the San Francisco papers indicate the popularity of Dr. Vogel on the Pacific coast, and the generous welcome that has been extended to him there.

DR. HERMANN VOGEL.

Reception to the Great Photographer, Author, and Scientist, by the Camera Artists of the Pacific Coast.

The photographers of the Pacific coast gave a reception last evening to Dr. Hermann Vogel, of Berlin, their distinguished brother artist and scientist, at the rooms of Bradley & Rulofson. A company of fifty or sixty assembled, including a few ladies. Mr. Jacob Shew presided, and on his left sat the honored guest, a pleasant, good-humored gentleman, not more than forty, with an open, hearty face, beaming with health; bright ardent eyes, and a prodigious expanse of forehead. There were representatives present from all parts of the State, and possibly other portions of the coast; also a notable photographer from Australia, whose specimens of art in chemical pictorials have somewhat astonished our local men.

The chairman, in welcoming Dr. Vogel in the name of the photographic profession of the Pacific coast, addressed him in a speech profoundly expressive of respect and admiration at the great services he had rendered photography by his researches, experiments, and writings, these services having made his name among photographers familiar as household words. He also alluded to the Professor's mission to this country-that of passing upon the merits of the photographic exhibition at the Centennial Exhibition, and gave appropriate utterance to the pleasure with which the honor of a visit from him to this city has been received by all who are engaged in the art. The recollections of his visit would be agreeable, he trusted, in after years.

Dr. Vogel, who was loudly applauded on rising to respond, confessed himself utterly astonished that he is here on the coast of the Pacific, but asking himself the reason for coming here the only answer was—photography. In his life he had studied a good many things, but generally not with much

success. His father used to call him a lazy boy, and his mother used to say he was useful for nothing. For five years he was assistant in a grocery. At the age of twelve he made a camera obscura, and also an electrical machine, crude apparatus, which he still possesses. When he made the camera he had little anticipation that it would be the chief instrument of his future. [Applause.] At eighteen his father allowed him to study chemistry, and at the end of six years his studies were attended with good success. Chemistry is a wide field. It has many branches, and he asked himself which he had better follow. The conclusion he arrived at was that the best branch for him was that which gives light. Light was the first thing brought into the world with the creation; light we want now in the present; light we want in the future; and it was his opinion that the science of light is the science of the universe. [Applause.] Very soon he was acquainted with photography, but how to study it, and how to improve it was not an easy task. He had travelled in France and Germany, but at the outset of his career he had no expectation that his art would take him to Africa, to the East Indies, and twice to America, he having six years ago attended the meeting in Cleveland of the National Photographic Association, and enjoyed there one of the happiest periods of his life. It had then been his pleasure to study photography in the Eastern States. Now, for the second time, he was in America, and had the opportunity to study the photography of the Pacific Coast. He was happy in saying that the position of the art here has such rank that we can compare favorably with the art in any other part of the world. Among the diploma takers at the Centennial would be found the names of artists in California, and it would be found that the photography of the Pacific coast is held in high appreciation everywhere in Europe. The Professor concluded with some encomiums on the people, the climate and soil of California.

Mr. R. A. Marsden submitted a series of resolutions eulogistic of Dr. Vogel's career and his visit, and on motion of Mr. Rulofson, it was ordered that an engrossed copy,

signed by the members, be presented to the Doctor.

Dr. Vogel was also declared an honorary member of the Society, and it was resolved to present him with cabinet portraits of all who attended the meeting.

A sociable half hour was then passed over refreshments.—Daily Morning Call.

ACADEMY OF SCIENCES.

DR. VOGEL'S LECTURE ON PHOTOGRAPHY.

The announcement of a lecture in English by Professor Dr. Hermann Vogel, of Berlin, to be delivered before the Academy of Sciences, attracted a considerable audience last night, who were entertained for an hour by an extremely interesting paper on the principles, progress, successes, present state and probable future of photographic art and science. Besides members of the Academy, the Microscopical Society and Photographists' Association were largely represented.

After a neat prologue, expressing his appreciation of the kind reception he had met in California, the Professor said that photography had value and interest, not for scientists only, but for the whole people. Before its discovery, there was no connection between art and natural science. The differences between photography and painting were illustrated by comparison of a photographic view of Yosemite Valley and a sketch of the same scene in chromo, after a work by Hill, the artist. The painting was analyzed, as showing more clearly what is characteristic; the artist's standpoint was good, but he had allowed himself some license in varying the quantity of the distant mountain, and the foreground is lacking. The photograph is true in every respect; its foreground and trees appear as they exist in nature, but there is that deficiency which all photography presentsthe white is too light, and the dark too dark. It does not critically represent the exact order of light and shade. Light objects require a short exposure, dark ones longer, and as both must be taken together, it is not always easy for the operator to

" Get a Good Picture."

He must select appropriate furniture for

accessories, must decide a tasteful position, and secure a good expression of the face; but this expression is ever varying, from a thousand circumstances, so that the photographer is not necessarily to blame. He is responsible for his chemical compounds, but not for accidents or eccentricity of expression. The painter, on the other hand, soon learns to distinguish the characteristic expression from that which is accidental.

Other Uses of Photography.

Dr. Vogel devoted a portion of his paper to a review of the subjects, other than landseape, and taking portraits from life, to which photography has been applied with wonderful power and success. It is employed much more in America than in Europe. In microscopy and astronomy it was particularly distinguished, and had been applied with magnificent success by Americans in views of the solar eclipse, and the Transit of Venus. Photography was of more importance to astronomical science than any other. In all, something like a thousand plates of the transit of 1874 had been taken. California photography had made itself celebrated by the great views taken of the seenery on the Pacific railroads. Besides the foregoing uses, photography was capable of carrying art to all the people, by its power of reproducing great pictures and drawings. These are not so expensive, and reach many who are unable to pay for originals. In copying maps for engineers and surveyors, and for many purposes of warfare, and for light on questions in the sciences of organization, photography had proved of the utmost importance and value. Among other instances of the wonderful minuteness of photographic power, the lecturer mentioned the case of a lady in Paris, in whose portrait specks were discovered, which were not observable to the eye. It transpired that symptoms of small-pox soon developed, showing curiously the intensity of the photographic principle. Referring to the

Future of Photography,

Dr. Vogel said the art was still young. It had not yet solved the question of luminosity, as dependent on the coloration of the object. Will it be possible to get a photo-

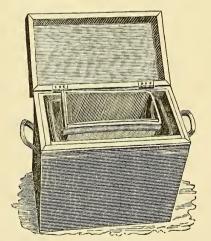
graph of natural color? Can plates be made sensible to color without resorting to the pencil and brush? The study of photochemistry must solve these questions. As the press fixes ideas, so photography fixes external form and phenomena, and the future triumphs of photography may be expected from its achievements in the past.

The lecturer was warmly applauded at the conclusion of his valuable and interesting paper.—Daily Alta California, August 1st.

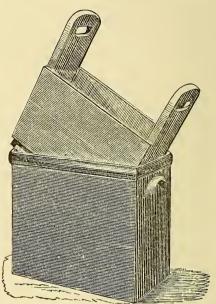
BATHS FOR CLEANING PLATES.

THERE are doubtless many who are at a loss to know what is best to use for acid and lye baths for cleaning glass. Mr. S. Root, of Dubuque, Iowa, has sent us photographs of a device of his, of which we have had cuts made, as will be seen below, and which we think may answer the purpose admirably. As will be seen, he uses one of stoneware for acid, and one with the inner box of wood for lye or soda. Mr. Root describes its working as follows:

"I send photographs of a little affair I have got up for cutting off varnish from old negatives, also for soaking new glass; as every photographer uses something, either acid, lye or soda, and most of them use a flat dish, which is very inconvenient, or a



erock, and have to fish the glass out as best they can, frequently letting a plate fall back, giving you a little splash of nitric acid. "I think I have got just the thing for that purpose. I have had two boxes made at the pottery, in this State, one fitting inside of the other to put the glass in, which I set on the edge. The advantage of this is, all the varnish will be cut off, which is not always the case when the glass lays flat. There will be spots not touched, besides the great convenience in getting it out. You draw up the inside box, let it rest on the two ends, as you will see in the photograph,



and by the time you have it in position the acid will all be out, having gone through the bottom, as it is perforated with holes. Then you can get at the glass without any trouble; it will hold glass enough to run an ordinary gallery a week these times. This one takes in a 11 x 14 glass. I know they will sell when seen once.

"They will stand anything they choose to put into them. I have a crock from the same pottery, with commercial nitric acid in it for three years, and it is just as good as when first used.

"I intended to send one on to you, and if you thought well of it, to have you put it into the Centennial for me, but I could not get it done in time. The one I use for lye I have a wood box for inside; for acid I use the stone, as the wood would soon eat

up. It is not necessary to case it, but it costs but a little more, and shuts up tight; you get no smell of the acid.

"Yours truly,

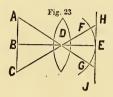
"S. Root."

LECTURE ON LENSES.

BY JOSEPH ZENTMAYER.

(Continued from page 245.)

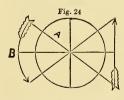
WE now come to another aberration of a lens, the curvature of field. The image of a flat object, formed by a lens, cannot be received on a plane screen; the screen ought to be concave. A, B, and C (Fig.



23), are very distant points, and, therefore, nearly equal distant from the lens D, of which the point B is situated in the line of the axis of the lens, while the

points A and C are above and below the axis. It is evident that the images of these points are formed at nearly equal distances from the optical centre, not far from the principal focus. The field FEG is therefore curved, and cannot be received on the screen HI equally sharp. The curvature of field is generally attributed to spherical aberration; sometimes it is even thought to be spherical aberration itself, but it has nothing to do with it. If lenses could be made with parabolic curves, free of spherical aberration, the curvature of field would be about the same.

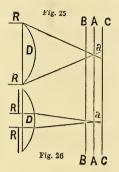
Suppose we have a globular lens A (Fig. 24), with a diaphragm in the middle, so small as to reduce spherical aberration to almost nothing. Now we know that the focus of a sphere of crown glass is situated one-quarter of the diameter behind the globe, at B, and as all the pencils are normal, they all will form their image one-



quarter of the diameter of the globe behind it; that is, the image lies in a curve, concentric with the lens, although the spherical ab-

erration is not perceptible. To understand

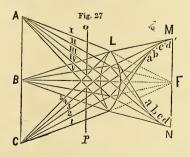
the correction of the curvature of field, we must make clear what is meant by depth of focus, and what the effect of a diaphragm is. Depth of focus is the property of a lens, to give a tolerably clear image of objects, not in one plane. Figs. 25 and 26 will make it plain. In Fig. 25 we make use



of the whole aperture of a lens D; RR are parallel rays, striking the margin of the lens. The image is formed at a screen A; if the screen is moved to B or C, the image of the point a spreads out, because the angle of the crossing rays

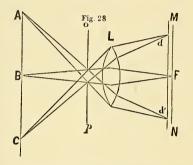
is large. When the same lens, D (Fig. 26), is provided with a diaphragm, so as to reduce the aperture considerably, the focus of the rays RR is still at α . If we now move the screen the same distance as before, to C or D, we find that the image of the point a is considerably reduced. If we now look at Fig. 23 we see that only E can be sharp on the screen, and if the screen be moved towards the lens until the points F and G are sharply defined upon it, then the point E will lie beyond the screen and become indistinct; but if we provide the lens with a small central diaphragm, we can find a place for the screen, where all three points can be brought to it, without the images being sensibly diminished in sharp-

Now let us see what takes place, if we



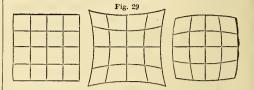
move the diaphragm to a proper distance from the lens. A, B, C (Fig. 27), are dis-

tant points, L a converging lens. Let us trace the course of the rays, commencing from the points A, B, C. The rays from the points B, situated in the axis, and the image of the point B will be formed at F, the principal focus. But it is different with the rays coming from A and C. The rays proceeding from the point $A-A^i$, A^{ii} , A^{ii} , A^{iv} , A^v , are refracted to a, b, c, d, e; similarly the rays from the point C are refracted to a', b', c', d', e'; occasioning, as we have seen before, spherical aberration. If we place a screen at the principal focus F, it will not receive a distinct image, even if we have a



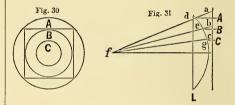
concave screen; as will be observed, all the rays outside of the axis arrive at different distances behind the lens. You notice that none but the rays A^{1v} and A^{v} , C_{4} and C_{5} , have their focus near the plane of the screen MN. Now if we find a place for a diaphragm, so that only these rays pass the lens, and the depth of the lens is as great as d M, we may expect a pretty sharp image on a plane screen. By looking over the figure, we see that such a plane is in O P (Figs. 27 and 28). A diaphragm in this place, and of the proper size, will allow only the most favorable rays to pass, and a tolerably flat and sharp image is obtained. The smaller the diaphragm the sharper and flatter the image. But as we mentioned before, small diaphragms have the disadvantage that the light is cut off to such an extent: and for most purposes the lens becomes useless. But suppose we would employ a negative lens, under the same conditions, we would have no real image, but a virtual one, the curvature of the field would be reversed, and the marginal rays have a longer focus than the central ones. Therefore, it is possible to associate a negative with a positive lens and to render the field flat.

The next aberration which we have to



deal with is the distortion. If we describe a network of straight lines, and hold a convex lens over it, placing the eye at a distance from it in the axis of the lens, only the two right angle lines of the centre appear straight; the others appear curved. When the upper is in the reverse position to the lower one, they appear pincushion shaped. Distortion of the negative lens is reversed; the lines appear as the curved sides of a barrel.

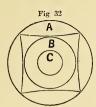
The cause of distortion is somewhat difficult to explain, but the following figures



make it clear. Let us describe upon a plate or plane surface a number of circles, A, B, C, equidistant from each other (Fig. 30 in front view, and Fig. 31 in profile), and place in front of them (Fig. 31) the lens L. Now the rays which proceed from A, B, C, parallel to the axis of the lens, strike it at d, e, g, from whence they will be refracted, and meet at f, the principal focus. If we place the eye at f, we see the circle A, not where it really is, but in the direction f d, the circle B in the direction f e, and the circle C in the direction f g. By prolonging the lines of direction until they meet the plane of the circles A B C we observe that the circles do not appear equally apart, but their distance is increasing from C to A; they will appear as in Fig. 32.

We will suppose for a moment that the

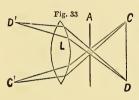
circles A and B (Fig. 30) are of such rela-



tive diameters that a square inclosing B, with its sides tangential, shall have its corners in the circle A. Now if we draw the circle A and B (Fig. 32), (as they will appear from f), the distance between A

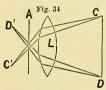
and B will be greater, or equal to a b (Fig. 31), and as the contact of the side of the square with B (tangentially) and with A at the ends must be kept, the line of the side will now appear curved or bent (Fig. 32).

A single lens without distortion cannot be made, but by combining two or more lenses in connection with diaphragms in a certain position the distortion may be corrected completely. If a diaphragm is placed in front of a lens L (Fig. 33), dif-



ferent parts of the lens are employed to form different parts of the object CD. In this case the distortion is

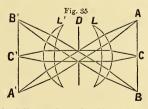
barrel-shaped, but by placing the diaphragm behind the lens, as in Fig. 34, the distortion



is of the opposite nature, that is pincushion-shaped. Rays coming from D (Fig. 33) pass through the upper part of the D lens, while in the

latter, through the lower part.

Now you will readily see that, by uniting two lenses equal to each other, L, L' (Fig. 35), and placing a diaphragm, D, between



them, it follows that the distortion accompanying the lens L, with its diaphragm behind it, is corrected by the action of the

same diaphragm, upon the rays entering the lens L', where the diaphragm is now in front of the lens L'. The modern photographic objectives to be used for architectural work and copying are constructed on this principle.

Unfortunately this advantage is obtained at the sacrifice of aperture, that is, of light. I mentioned before that the negative lens has the opposite distortion of the positive lens, so that by proper combination of lenses of suitable curves any material distortion can nearly be overcome upon a limited field.

Photographic objectives used for portrait purposes, when a large quantity of light is desirable for brief exposure, are thus corrected; but these are again open to the fault of a restricted angle of vision. In all other lenses, when the light is the desirable element to be preserved, the correction of distortion must be made, as far as possible, by a combination of lenses.

(Concluded in our next.)

FRENCH CORRESPONDENCE.

A Visit to Mons. Liebert's Photographic Establishment—The Great Universal Exhibition of 1878—Meeting of the Photographic Society of France—A Newly-constructed Photometer—Presentation of a Collection of Fatty Ink Proofs from Spain—Mons. Léon Vidal's Photometer—A New Camera—A New Heating Apparatus—Alkaline Development.

MY DEAR MR. WILSON: I beg pardon of the readers of the Philadelphia Photographer, as well as of yourself, for having been obliged, let it be said against my own will, to suppress my monthly letter to your interesting journal. Dame Nature must bear the blame; I have been laid up with a stomach and chest disease, and, as soon as convalescence permitted me, I went on search, if peradventure I could find anything to interest my American readers. It is, indeed, a great word to employ when there is so much that is interesting to see and hear in the magnificent Exhibition at Philadelphia.

I paid a visit to the establishment of Mons. Liebert, who shades himself under that symbol of freedom, the "star-spangled banner of America," for he bears the title of "The American Philosopher;" and the title "Fear Not!" is in good hands.

Mons. Liebert received me in a very flattering manner, and became my cicerone through the magnificent establishment which he has constructed in the Rue de Londres.

The device, "E Pluribus Unum," is written in golden letters over the door of the palace (for palace it is), dedicated to photographic art by its successful votary. Mons. Liebert is a go-ahead man, and embraces every occasion to prosper an art to which he has given his time and intelligence. Any new idea he seizes, any amelioration he introduces, any difficulty he strives with he overcomes. If he has won fame and fortune, it is owing to his indefatigable perseverance.

Mons. Liebert is at the same time a generous benefactor to a science which he calls his own. It was he who paid a short time ago the sum of 500 francs into the hands of the Secretary of the Photographic Society of France, to be awarded to any person, of whatever nationality he may be, who could discover a chemical and a reliable means to shorten exposure for the sitter.

Mons. Liebert is not only a distinguished photographer, he is also the author of several works on photography—La Photographie en Amérique, La Photographie au Charbon mis a la Portée de Tous, etc., etc. All have obtained a legitimate success.

His show-rooms are numerous, of the best productions of the photographic art; every room bespeaks the success of the owner by the wealth spent in its ornamentation. A magnificent billiard-room is at hand for the amusement of those wearied by waiting their turn. The sitting-room or studio is fitted up with every convenience to please the sitters and to give an artistic value to their portraits.

On the top of the establishment is the printing department—all in carbon. Mons. Liebert was one of the first in Paris to foresee the value of carbon for positive printing, and that it would ere long replace silver salts. The carbon tissue is made on the premises on a large scale.

The proofs after impression are lowered down into the cellar, where they are devel-

oped. Here the organization is complete, hot and cold water at will. A place for everything, and everything in its place, is the "consigne" obeyed throughout the establishment.

In taking leave of that gentleman, I must confess, notwithstanding the admiration which I felt for the splendid organization and the wealth with which he is surrounded, I left him, carrying with me a most agreeable remembrance of the amiable and at the same time the simple manner in which he rendered me the honors of his abode.

The Photographic Society of France had but just closed the doors of its eleventh Exhibition, which has been one of the best organized and the most successful which has taken place, when the foundations were commenced for the great Universal Exhibition, which will take place in Paris in A.D. 1878. The government has taken it in hand, and if all we hear be true it will be something, extraordinary. No time is being lost, in order that it may be a success and the wonder of the world. A journal is now published in Paris bearing the title of Journal de l'Exposition Universel de 1878.

The Photographic Society of France assembled on Friday evening last, Mons. Audra in the chair. The meeting was but poorly attended, undoubtedly on account of the excessive heat which has reigned during the last few weeks in Paris.

Mons. Schülte presented a new photometer, of his invention, which, he says, can give the time of exposure required for outdoor work. It is made in the same form as the common focussing lens, only at the bottom is a metal disk, having a hole about the size of a pea near its edge; behind this disk is a revolving ring, in which is placed a ground glass, on which is pasted transparent paper in different layers as in the ordinary photometers. On the single sheet is printed No. 1, on the double No. 2, and so on to No. 20. If we look through the instrument one of the printed figures will be visible. It must then be turned until the figure before the hole is barely visible. Let us suppose it to be No. 12; if the day before No. 14 was seen, and an exposure of ten seconds gave a good negative in seeing only No. 12 on the photometer, is a proof that the light is not so intense, and therefore a longer exposure is required; it may be presumed that thirteen seconds would suffice.

This reasoning appears just to persons unacquainted with chemical photography, but, unhappily for our ease and convenience, this instrument cannot give the photogenic power of light; for it is well known by photographers, even by intuition, that they are obliged to expose longer on a very bright day than they would if the sky were filled with silver clouds.

The inventor has constructed an optical instrument which cannot give an appreciation of the photogenic power of light. Nor is he the only one who has fallen into this error, and it is well to mention it in the photographic journals, in order to save time and money to others.

Mons. Laurent, of Madrid, sent a large collection of fatty ink proofs, reproductions of works of art in the industrial museum of Milan. Spain is waking out of its torpor towards the photographic art, excited, no doubt, by Portugal, which little kingdom is far ahead of its large neighbor in science and in art, thanks to the patriotism of a few of its inhabitants.

Mons. Léon Vidal presented a collection of photometers for facilitating carbon printing. The instrument is very small, and intended to be nailed to the printing-frame; it bears three tints, in the centre of which a hole has been punched to allow the light to fall upon the paper, prepared with chloride of silver, placed behind.

Mons. Koch, the photographic apparatus manufacturer, presented a new camera for the inspection of the members. The camera is very light, takes up very little room, but has nothing new in its construction worthy of special notice.

Mons. Liebert, previously spoken of, presented to the Society an apparatus employed by him to obtain hot water for his carbon development. The apparatus consists of a galvanized iron cylinder 2 feet high and 8 inches in diameter, the interior of which is filled with a series of small copper tubes in spirals. The apparatus is heated by means of a gas stove placed underneath it. A small stream of cold water runs into the

top and filters through the heated spirals, and is immediately converted into steam, which, in endeavoring to make its way out at the top, meets with the cold water running down, is condensed, and falls out at the lower part of the apparatus quite hot. No caloric is thus lost, and therefore the cost of hot water is trifling. One litre can be obtained per minute at a temperature of 212° Fahrenheit, and two litres at 113°, at the cost of twenty centimes per 100 litres.

The great advantage is, that, as soon as the gas is lighted, the hot water runs out, and continues to do so as long as the gas is left burning. The temperature of the water is under complete control; the smaller the stream of cold water running into the top the hotter will be the water which runs out at the bottom, and vice versa.

Business was finished at 10 o'clock, and the members separated to take their holidays, until the month of November.

Alkaline development is now in public favor, and I hope to be agreeable to some of the readers of the *Philadelphia Photographer* in giving them a formula, with which I have always had a continual success:

			A.			
Water,					100	ounces.
Carbona	te of A	hmm	onia,		10	4.6
			В.	•		
Water,					100	ounces.
Bromide	of Po	tass	ium,		4	drachms.
			C.			
Alcohol,					50	ounces.
Pyrogall	ic Aci	d,			5	6.6
Water,					50	4.6
			D.			
Water,					100	ounces.
Sugar,					10	4.6
Slacked	Lime,				50	6.6

When the sugar is dissolved add the slacked lime.

To develop the plates, take a tray large enough to develop four or more at a time, and for every 10 ounces of water take 3 drachms of A and 3 drachms of B; mix well, and, when the plates are well washed, plunge them into the tray. The image ought not to appear, or they are over-exposed. But it will do so by adding 3 drachms of solution C, taking care to take the plates

out of the tray in order to mix well. The image will now gradually appear; add 3 drachms of solution D, mixing it well, and the image will acquire density, and the whites remain perfectly clear. Although the solution will become muddy, there is no danger of fog.

If a plate is over-exposed the quantity of solution C must be diminished, and the quantity of solution B increased.

The sugar of lime solution can be advantageously replaced by a sugar of ammonia solution; this will prevent the muddy appearance which the former communicates to the bath.

PROF. P. STEBBING.

3 PLACE BREDA, PARIS, August 6th, 1876.

PROCEEDINGS

OF THE

Seventh Annual Convention

OF THE

NATIONAL PHOTOGRAPHIC ASSOCIATION.

Held in the Judges' Hall, Centennial Grounds, Philadelphia, commencing Tuesday, Aug. 15, 1876.

THE Convention met at 10 o'clock, A.M., President William H. Rulofson in the chair. The President, in calling the Convention to order, congratulated the Association upon the delightful and promising auspices under which they had met, and said he believed that there was much in store for them that would be both interesting and instructive.

The Star-spangled Bauner was then sung, with Dr. Hermann Vogel, the guest of the Association, from Berlin, at the piano, and leading in the singing. A number of ladies present joined in the exercises, and added much to the success of the effort.

President Rulofson then, in a few happy and well-chosen remarks, introduced General Joseph R. Hawley, President of the Centennial Commission, who came forward and spoke as follows:

MR. PRESIDENT, LADIES AND GENTLEMEN: I find upon looking over the programme that it is somewhat curiously laid down that I am to make an address. I am not prepared with anything that will be worthy of that dignified title. I

gave the invitation of the Centennial Commission to your Convention to hold its sessions here, and welcome you most cordially to this Exhibition, and welcome you to this hall, which has been gladly placed at your disposal, and we wish you a pleasant and profitable meeting in the city of Philadelphia, and a happy return to your homes. Whatever we have that may serve to add to your convenience and pleasure is entirely at your service. We are very glad to see you and welcome you, and all similar scientific or other organizations who can find time or make it convenient to use this hall for their purposes.

Perhaps somebody in the course of your delib. erations will read a speech on the progress of photography in the United States. I do not know whether it is on your programme, but I suppose it is. I have been thinking of it myself. I know nothing of its scientific character, but only so much as a passer-by would see in the articles exposed in the windows or the pictures in our parlors. I know very well the daguerreotypes, as we used to call them, and I doubt very much whether you surpass the beauty and delicacy of those pictures made years ago. I am sure I would be willing to sit for an old-fashioned dagnerreotype. I remember the beginning, and how a few men went about the country, stopping in different places, and again going on, and so going through the country. This I remember was about 1843 or 1844. I remember some young men then talked of learning the business; that was when I was in college. One of the professors was learning something about this business, and he proposed to go into it. He was told it was already overcrowded, and that it was not much of a business, and was not one which people would be very much interested in; that there was not much money in it; that people would be likely to find very little profitable employment in it. The idea was that a person would have one daguerreotype taken of himself, and it would answer for life; very much as most of us are content if we are able to afford it at all, with one oil painting of the head of the family. At that time they had a very meagre idea of the future of that great art as we see it to-day. Nobody anticipated the illimitable extent of ground which has been covered by your art and its uses, and the pleasure that would be taken in preserving the likenesses of ourselves and of our friends. It has greatly extended all the arts and sciences, and is useful aside from its pleasure. And I do not doubt but that you have in the future photographic triumphs as great to win as those you have seen in the past I have no doubt you have yet to see the science still more greatly and more

widely extended. I sincerely hope your conference here, by reason of the views that may be expressed, may be of great use to you in still further extending the usefulness of this great science and art. I do not pretend to address you formally, and certainly did not intend to make any extended remarks. I have simply to say, as I have said before, that I welcome you to the Exhibition. [Applause.]

At the conclusion of General Hawley's remarks a vote of thanks was tendered him, also the thanks of the Association to the Centennial Commission and Board of Finance for the use of the hall.

The Local Secretary, Mr. Robert J. Chute, then welcomed the Association in the following address:

MR. PRESIDENT AND MEMBERS OF THE NA-TIONAL PHOTOGRAPHIC ASSOCIATION: It is with pleasure I offer you a welcome here to-day. Coming as you do from all sections embraced between the shores of the Atlantic and Pacific, and from the neighboring Dominion beyond the lakes on the north to the borders of the Gulf and Rio Grande on the south of our great country, it is gratifying to contemplate that one interest, one motive, the advancement of one great purpose, has been the main, the moving influence that has brought you all here within the charmed precincts of our country's Centennial festival, and as visitors to the most sacred shrines of our country's liberty. Here, within our good old Quaker City, was the birthplace of Freedom. Here stands that venerable edifice in which met the first Congress of the United States, where tyranny was defied, where our fathers pledged to their suffering country their lives, their fortunes, and their sacred honors; where was proclaimed that immortal Declaration which secured our country's independence and rendered possible the unexampled prosperity and greatness of the American Republic; where has been cherished the memory of the wise men and heroes of the Revolution, to whose worth, from day to day, through the generations that have followed, has been paid the homage of a grateful people. Here our own art found some of its first and most successful votaries, and here it has reached as high a state of perfection as can be claimed for it in any city or country, as may be witnessed by a visit to Photographic Hall; and here, as the place above all others the most fitting, has been constructed these vast buildings which surround us, and in them have been gathered the products of the fields, the mines, the art, and the industries of the nations in such quality and profusion as the world has seldom or never seen before. To all these, fellow-members and friends of the photographic fraternity, in the name of the photographers, and in behalf of the citizens of Philadelphia, I extend to you all a most hearty and cordial welcome. Here our friends of the Centennial Commission have prepared a feast for you such as we Americans have never before enjoyed; here every sense may be gratified, and this world in miniature may be studied with profit and delight.

But of all the grand and curious things to be seen here, there is no department to which so much professional interest attaches for us as the magnificent collection of art photography in Photographic Hall. There you will all love to go and dwell upon the splendid products of the camera; to study them with eager interest and critical eyes; to compare the East and the West, the North and the South; to place Europe and America in the balance, and note the progress of the isles of the sea. And, fellow-photographers of America, may we not be excused for a feeling of pride, a feeling of congratulation, and be stimulated to nobler efforts in the future, when we come to the only conclusion to which all impartial minds seem to arrive, which is, that in photographic art in the great Centennial Exhibition America leads the world! This is certainly most gratifying, when but a few years ago we were so far behind the best European artists. And who will say that this progress has not been mainly due to the work of the National Photographic Association? But there is still room for improvement, there is still use for organized effort, and there is noble work for our Association in the future, which may be made to promote the interests of our art as well as it has done in the past.

Let none of us aim to be finished artists, but rather progressive. The man who arrives at the top of his ladder soon discovers that his neighbor has a much longer one that reaches far above him. We may do well to emulate the ancient Greeks in practicing our art for the love of it, rather than with the expectation of arriving at any certain stage of perfection. Ignoring monstrosities and improbable effects, adhere to the simplicity and truth of nature, and in portraiture put all we can of humanity into our work. In this way we, like them, may reach the highest attainments of art, or transmit it in such progressive form to our children, that they, following the good example set them by us, may go on unfolding and developing this art science till in photography's Centennial year it shall be a marvel of usefulness, approaching the completeness and perfection of art. Trusting we may have a most enjoyable and profitable Convention, and that you may all return to your homes freighted with new thoughts, new impulses, new energy, and feel amply repaid for your visithere, I again bid you welcome to our city and to this international event of 1876, the great Centennial Exhibition. [Applause.]

President Rulofson replied as follows:

It is announced upon the programme that the address of the Local Secretary should be responded to by the President. I had hoped that I would occupy the position taken by Mr. Chute, in offering the address of welcome that San Francisco, Cal. In that I was disappointed. I can only say, however, that I thank him in your behalf for his hearty, able, and encouraging address of welcome delivered before you; and, as he has truly said, let it not be supposed that the position of the photographers of to-day has been gained outside of or independent of the National Photographic Association. This is the Centennial year. One hundred years ago the Declaration of Independence was signed, and then whilst American independence was a fixed fact it was not an acknowledged fact. Six, seven, eight years immediately succeeding that came dark years of bloodshed and true discouragement, trial, and treason. So with us six, or seven, or eight years ago, when this organization was originally formed, there was a declaration of independence. I need not enumerate the particular causes and the large number of combined influences that originally brought you together. Your concentrated and assembled wisdom was not slow to discover that the only efficient way of meeting difficulties that surrounded our way, was to unite in one solid phalanx and meet the opposition in a body, and that you have done. For seven years you have labored in that direction; but as our forefathers, in signing the Declaration of Independence, simply declared themselves ready to fight the battle of liberty, so we, in forming our constitution, said, under this banner we will fight, victory will be sure. It has been said by many that this organization was upon its last legs, and was about to-pass out of existence. I think and believe that it is not so. I hope that if there are but six or twelve men in the United States that are willing to maintain this organization, that they will continue to do so, and that year after year, or once in two years, or once in every five years, as it may be, we will sit under the delightful influence of some of our brothers who will make us welcome to the city of his home. [Applause.] In behalf, then, of the National Photographic Association, I again tender to Mr. Chute my sincere thanks, and the thanks of this body, for the very able, feeling, and instructive manner in which he has welcomed us to this great feast, not only of photography, but of the assembled industries of the world. [Applause.]

The reading of the minutes being next in order, on motion this was dispensed with.

The report of the Executive Committee was then called for, and presented by Mr. Edward L. Wilson, Permanent Secretary, as follows:

To the Officers and Members of the National Photographic Association assembled at Philadelphia, August 15th, 1876.

Ladies and Gentlemen: At your annual meeting, held about two years ago, at Chicago, it was your pleasure to elect us as your Executive Committee. Since then we have held thirteen regular and special meetings, and beg to present herewith our record books, and the following report:

At our opening meeting, held at Chicago, July 14th, 1874, W. Irving Adams, Esq., was elected our Chairman, and Mr. Edward L. Wilson, Secretary. You are well aware of the fact that, at the opening of our convention in Chicago, this Association was deeply burdened with debt, and that the great subject of consideration with our predecessors was how to remove this debt, and place our Association upon good financial footing.

Those of you who visited the Chicago Convention, and heard the last report of this committee, well know that noble efforts were made to remove this debt, and with what success. It looked at the close of that convention as though it were entirely removed, but a number of promises that were then made have never been fulfilled, and a few months after the convention, much to the regret of those who made such strenuous efforts to secure a different result, it was found the Association was still several hundred dollars in debt.

Every effort in our power was made to collect the subscriptions that were made, and unpaid, at the convention, and urgent appeals were directed to the membership at large to make one strong pull and remove the debt, and place the Association in funds.

All these efforts, however, have proven unavailing, and there is still a balance of \$1339 due by the Association to various parties.

We trust it may meet your pleasure, should new dues paid in be sufficient, to entirely wipe ont these claims, and with renewed vigor, and a liberal treasury, go forward with more zeal, and earnestness, and a better heart, than has inspired you heretofore.

At the last convention a resolution was passed making Boston the place for the holding of the convention in 1875, and Mr. J. W. Black was chosen Local Secretary.

It was also resolved, should the Executive Committee or Boston photographers see best, to change the locality to any other city.

It was soon reported to this committee that objections were made to holding the convention in Boston, because of the liability which many of the membership would incur by visiting Boston, to arrest, for supposed infringement of sundry well known patents.

The communication was made to the President of the Association with reference to the subject, and they accorded with the views of this committee at large, that San Francisco would be a much more desirable place, and therefore Boston was dropped, and San Francisco was resolved upon as the place for the holding of the convention in May, 1875.

After these resolutions, the serious season of dulness, which you have no doubt all shared in, came upon us.

The effort to erect a suitable building for the display of photography at the Centennial was engaged in, and after calling for the voice of the membership upon the subject, it was deemed most expedient to hold no convention at all during 1875, but that all should make extra effort to prepare handsomely for the Centennial celebration. Consequently, in due course, effort was made to secure from the Centennial authorities the erection of Photographic Hall. The result you have before you-such a building as was never known before at any International Exhibition, such a display of photographic products as was never known in the world before, and such a push forward for our blessed art as nothing else could give.

You who have given of your means to erect this structure, and who have given of your time to secure the means, must feel very happy, and much cheered and strengthened, by what you see.

Although we do not, in our pockets, yet feel the result, as we are sure to feel it, yet this accomplishment has done more for photography, in the way of lifting it up and elevating it in the estimation of the public, who heretofore had too little opinion of our art and its votaries, than you have yet found out.

It is the wonder of all who see it and under-

stand it, and it certainly must be the delight of all those who listen to this report.

We should have all felt still more pride, had we been enabled to pay for the whole of its building, but we may, nevertheless, take much honest pride in it, and we trust none of you will fail to derive from it all its lessons and all its benefits.

Study it well; fill your memorandum-books with such hints and ideas as you may gather, that you may refer to them for years to come; for he who cannot look upon this collection and learn many good lessons, is certainly not worthy to wear silver stains upon his fingers, or wear out his eyes at the camera, or waste his disposition upon obstreperous subjects.

Permit us, then, to congratulate you upon this much that is cheering in photography. Let not the dulness depress you. The sun does not shine always, neither are we always compelled to work on the north side of the building.

We do not suppose that in these Centennial grounds, with so much to see and to learn, that you will spend much time in discussing matters of business. We hope you will not, but we would suggest that matters involving the expenditure of money, and matters of vital interest to the craft, should be referred to the wisdom of well-chosen committees, who will honestly consider the interest of the whole, and whose fiat you will be willing to abide by.

Let no man say that this Association shall not live; if he does, do with him as was suggested to be done with him who attempted to tear down that most beautiful of all flags which you see floating in these grounds in such great numbers, provided you can find the spot. But let us, with better hopes, filled with good lessons, and practical ideas, once more shake hands, and go home more strongly than ever impressed with the fact that the life of our fraternity depends upon our being united. The moment we disband, we go back to ten years ago, when our country was flooded with sharks and photographic "dead beats" and process venders, and you will be bewildered and bothered on all sides to such an extent that you, especially of the younger and less experienced, will scarce know what you have a right to use or how to use it.

If for nothing but the moral effect that a banded Association has upon these wretches, it will pay each member of the fraternity to stand fast by this Association and pay his honest dues promptly. You well know that the man who is in debt must pay more for the expense of doing business than he who works upon a cash basis, and that no association can thrive if the spring

from which it derives its refreshing power is cut off, and if an effort is made to run without this power, it must be done at much greater expense than when the supply is kept up.

Our expenses need not be heavy, and they are not, but they are heavier when they are not promptly met.

As to the expediency of holding conventions less frequently than once a year, as to the working upon new plans and under a new constitution, let this be left to your honorable body to consider.

We now have only to say in closing, that we look forward with cheerful hope to the future, and wish you every prosperity.

It is our desire that an entire new committee be elected by you, and that we who have served you so many years be allowed to retire and rest.

You are met to-day in this pleasant hall, granted us free of charge by the kindness of Director-General A. T. Goshorn, and we trust that the arrangements that have been made for you will be acceptable and gratifying to you.

We commend to you the arrangements that have been made by our Local Secretary, Mr. Robert J. Chute, who has worked with us in trying to do what he could for your comfort and convenience while sitting in this busy city.

Death has disturbed our number considerably during the two years past since our last convention. Among those who have been taken, we number particularly one who was at our Chicago Convention, active in promoting its prosperity, and eager and earnest in removing the debt of the Association.

We refer to Mr. Barhydt, of Rochester, N. Y. There are others who are as much mourned by their circle of friends, and no doubt a number, of whose deaths no knowledge has come to our Secretary.

Trusting that you will give our report a careful consideration, we are,

Fraternally yours,

W. IRVING ADAMS,
V. M. WILCOX,
J. W. BLACK,
I. B. WEBSTER,
A. HESLER,
WILLIAM H. RULOFSON,
EDWARD L. WILSON,
ALBERT MOORE,
ABRAHAM BOGARDUS,
WILLIAM H. RHOADS.

On motion, the report of the Executive Committee was accepted and approved as read.

Mr. Albert Moore, the Treasurer, being called upon, presented the following report.

MR. PRESIDENT, LADIES AND GENTLE-MEN: As your Treasurer for the term and extra term, I have to report that I have received as dues and donations at Chicago the amount of \$3469.09. I have paid out \$3539.18. I have bills passed by the committee and ordered to be paid amounting to \$1339.12; some of these bills are for balances due from Chicago.

I would respectfully ask that an Auditing Committee be appointed to see whether they are correct.

The Chair announced as the Auditing Committee, W. H. Rhoads, Daniel Sewell, and A. N. Hardy.

In response to a suggestion of the President that the Treasurer give us some idea as to how this money was to be raised, Mr. Moore said that if one-fifth of the amount due the Association were received, there would be more than enough to pay all we owe. But how even that was to be collected he must leave to the Association to determine.

On motion, the report of the Treasurer was received, and referred to an Auditing Committee.

The roll call being in order was dispensed with.

The question of appointing a committee to nominate officers raised considerable discussion, and it was finally voted that the nominations be made in open convention, and a full list of candidates were nominated, to be voted upon at the election on Thursday morning.

The Chair appointed as Committee on Progress of Photography the following: A. L. Southworth, Edward L. Wilson, John Carbutt, William H. Sherman, R. J. Chute, Dr. H. Vogel.

The Local Secretary read an invitation from the Philadelphia Photographic Society to visit and use their room during the Convention. Also one from the Academy of Natural Sciences, offering free admission of the members to that institution, both of which were accepted, and thanks returned.

He also said that Messrs. Gould & Fischer had responded very cheerfully to a request made to place a piano at our disposal, and Messrs. Decker Bros., of New York, also consented to send in one of their grand pianos for the use of the Convention during its session.

The decorations also had been kindly furnished by the janitor, and this was all free of charge to the Association.

On motion, a vote of thanks was tendered to Messrs. Gould & Fischer and Decker Bros., and to the janitor.

The President then spoke as follows:

I take pleasure, ladies and gentlemen, before a motion to adjourn reaches my ear, to announce to you that we have among us a gentleman whose social qualities has endeared him to all with whom he has come in contact; a gentleman whose words have not only charmed our ears and delighted our senses, but put dollars in our pockets, and enabled us to climb a little higher on the ladder of photographic excellence. I say to you officially that he is among us; I think it eminently proper and becoming in us to recognize his presence, and that he beinvited to deliver an address, or make a few remarks to us this afternoon or to-morrow morning. I refer to Prof. Hermann Vogel, of Berlin. Is it your pleasure to hear him now, or at some future time? I feared a motion to adjourn would reach my ear, and be seconded, before the official announcement of his presence was made. I would be glad to know that the Doctor has honored us, and will make some remarks this afternoon or to-morrow morning. I hope you will all be present, with your wives and little children, and that the photographers who are wandering about looking at the wonders of this Exhibition will come in and hear what the Doctor has to say.

The Doctor talked to us all in San Francisco. There was only one sick crowd; that was the crowd that did not hear him. You will find that to be the case here.

PROF. HERMANN VOGEL. MR. PRESIDENT, LADIES AND GENTLEMEN: I fear that my bad and poor English will not be very well understood; and allow me to prepare a little address for to-morrow, for now I think it is a little late. I am sorry to say that I am not only engaged with the National Photographic Association, but also by my duty as a judge. It was suggested in the meantime that I was invited by one of the chief officers of the Centennial Commission to look over some new things that have

arrived during my voyage in California. I hope to meet you to morrow, and if you will allow me I will tell you how glad I feel to meet you after six years. [Applause.]

The Chair then read the printed programme for the afternoon, and the Convention adjourned until 2 o'clock.

AFTERNOON SESSION.

THE PRESIDENT. Gentlemen, you will please come to order; the first business in order this afternoon is the reading of the report on the progress of photography. Is the committee ready to make their report?

A. S. SOUTHWORTH, Esq., of Boston. MR. PRESIDENT, LADIES AND GENTLEMEN: I appear on the stand not for the purpose of making a report, and I also fear that such an apology as I have to make will hardly be accepted, and yet the members of the committee to which I belong have been very much scattered, and we have had no opportunity for conference; some of them may have something to say before the sessions close. I have no formal report to make; I will simply occupy your time for two or three minutes. I know full well that if time could be spent in collecting all the little improvements, the proper and successful experiments that have been made in the past two years, that if the different departments of photography or different departments of science to which photography has been applied, could be shown to you, so you could really understand how much improvement has been made within the last two years, it will be exceedingly interesting, and likewise instructive. But there are not more than two or three individuals that could prepare such a report; I could not do it. Only those could who are conversant with all the operations, who are conversant with all the members, by correspondence of this society and of the photographic fraternity generally, and who are continually devoting their time to it; but permit me aside from a report to say, that two years ago it was a fixed determination, and a fact, that we were to have a Centennial and an Exhibition in Philadelphia. Since that was settled, more than two years since, it became in my mind clear that if I lived to see that day I should have an opportunity to learn what pictures are, and to learn the character of pictures, and to improve my own mind and judgment with regard to pictures, and carrying it from pictures to the art of photography, which is but a manifestation through those pictures from poetry of sculpture, and the poetry

of painting to the art of making pictures with the camera, and assisting the photographer as much as possible to make real pictures. I was then hoping that there would be a meeting in Philadelphia for the purpose of bringing photographers together, that they might here learn by seeing good work, and learn what is expected of them. They would learn what they could not learn unless they had an opportunity of travelling in Europe.

Well, my friends, three weeks ago last Friday I arrived in Philadelphia, and went into the picture gallery first, and took them clean. I spent eight days in those rooms, and I am like the little boy who sat down to the table to a plate of dumpling, "he ate till he was full, and cried because he couldn't eat any more." My time is almost expired, and I tell you this, those of you who intend to make pictures for a living ought to make them for the pleasure of it; if you can help yourselves in any way in the world it will be by means of those pictures. I tell you now it is such an opportunity as you will never have again unless you travel in Europe. If you have sufficient money to travel, you will take yourselves out of photography. It is such an opportunity that you can never have again; and now for the purpose simply here of impressing you with my own feeling and my own interest, my own zeal in the matter, I say to you, instead of listening here to such men as myself, in making remarks, you had better go and spend your time in looking at the picture gallery, until you can tell the difference between a good picture and a poor one, and what makes the difference. Our mistake was in imitating photographs and European pictures when they were first introduced into this country; after that we had the faults of European pictures which were introduced here. If you will go into the rooms where our photographs are exhibited, you will find that the very men who first practiced and produced the very first pictures of a certain school-I will simply give the name so that you will understand it, the brilliant pictures, the Rembrandt pictures - have abandoned them. They are all gone; there is not a single one hanging on the walls where they make their exhibition. Now I want you, for me, to look at the pictures. I don't name individuals because one is better than another, but simply to call your attention to them. I want you to look at Kurtz's and Sarony's pictures and the English pictures. You will find none of them have what are called the Rembrandt style. The shadow of every picture is lighted to the bottom; it is clear, transparent; there is no charcoal or water; it

has the photographic action on the photograph, showing it was sufficient to develop the form of the picture to the bottom. Now, I say, beware of imitating faults. It is very easy for those who are imitators to imitate faults more so than to correct them.

Now I come to the progress, and I simply say in reference to that, that one-half of the American photographers are as far along as the very best of them were three years ago at our exhibition in Cleveland, and at our exhibitions in Philadelphia, in Chicago, in Boston, and in St. Louis. These exhibitions have done it more than anything else; it just brought them to think. They began to look and see what they could do. They got excited in the matter, and it pains me much when I reflect and see so very few of the society before me now. But I cannot help it. But, ladies and gentlemen, if we would be picture-makers, we must learn to imitate in the character and the expression. I do not expect you will do anything with that, but in the character of the expression of the feelings, you must learn to imitate the best pictures you will see in the galleries; to do that you have got to labor just as you have done, with the greatest effort and perseverance, to labor constantly as long as you live, and you will go on improving and improving. And those who stay away from the conventions I hope will be improved. There are thousands of photographers who would be glad to come here, who are not present, who would be glad of the opportunity, but they are not able on account of pecuniary reasons, and that probably is one of the reasons why we have so few with us. If you feel disposed to ask me any questions, I should be glad to reply, but now I desire to be excused from occupying any more of your time. I feel that you could occupy it very much better by looking at some of the pictures I have referred to.

THE PRESIDENT: The reading of papers is in order. I understand Mr. Fitzgibbons comes on as the law directs.

Mr. Fitzgibbons then read the following paper:

How to CLIMB THE LADDER.

BY J. H. FITZGIBBONS.

First and foremost put your foot down on the bottom round; be careful not to place it on the second round first, because it is easy, and seems useless to commence so very low down; but not so, my brethren; by so commencing you know you are at the bottom; as it were, the foundation, the superstructure, and as you climb upwards go

steady, take a firm foothold on each round. As you advance look back occasionally, and see the height you have attained by perseverance, and how easy the thing seems. Now if you should be undecided whether to still ascend, stand still, or return, you will be like many that follow the photographic business, satisfied that you have advanced far enough, and become as it were a middle man, neither great nor small; but to the ambitious, he again will mount higher and higher, until he gains the topmost round, and there behold at the summit the pinnacle of his fame, his desire, and ambition. He may now rest, with the assurance that the glorious outlook of all he surveys was well worth the climbing to obtain. Such, brethren, should be the aim and study of the student of photography, to commence at the beginning, and by perseverance and study, not to stop till he reaches the ambition of his desires, the production of photographic work as good as the best (not better, for that is a big word), and let his motto be Excelsior.

My experience of climbing the ladder has been extensive, not only to myself, but to others that I have had business connections with for over thirty years.

Young men, especially those that go to learn the business, think they know it all in a year or less, and it is hard to convince them otherwise, until, after years of trial, experience teaches them that in one year they actually knew nothing except the routine, or going it blind, as it were, through a beaten track or formula that they could not help seeing surrounding them in their everyday work; even the sweeping and dusting of the skylight and dark-rooms they don't seem to understand the importance of, and that it is a part of their business to learn. Many of them think themselves above such work, but those that do never become masters of the art. The drudgery of the gallery is another point they seem to ignore, the cleaning of glass, the saving of wastes, the careless handling and soiling of cards, mats, mounts, and paper, and the importance of having clean hands so as not to make dirty, slovenly work, for hundreds of dollars are lost annually to some galleries by the careless and reckless working of their help. Another bad habit: furnishing inferior work, and saying that it will do, when they really know it is not good and below the average, and hurts the reputation of the gallery, and often has to be taken over again. After the young operator learns those things, then it is time to think of handling the chemicals in the dark-room, and then and there get conversant with every phase of the working of the same, in hot or cold weather, the changing and working of the different chemicals and formulæ, the variety of subjects and difference in light. Next, he can go under the skylight with some confidence, and study the posing of sitters, according to the light and their features before him. Here he finds himself at home, for he has learned the lower grades of the business, and feels a certainty and confidence in himself in being able to produce good, clean, artistic negatives, commencing at the foundation and going upwards, dusting and cleaning out his own dark-room, preparing his own glass, mixing his own chemicals, sitting his own subjects, and developing his own negatives; and now he knows the result, and if a failure should take place, he knows just where it comes from. By such a course he gains credit for himself and reputation for the gallery.

How many are there who are certain of these results? Echo answers, how many. Still there are a great many that do those things themselves, or see they are done right. The result is perfectly clean work in all stages of manipulation of photography.

In concluding this short article of how to climb the ladder, I would say beware of a misstep or broken round in ascending, for such may impede your progress. Go, study; the world was not made in a day, no more than photography can be learned in a short space of time. After the practical knowledge is gained, then turn your attention to the business portion of the gallery, the making of money, which we all are after. See to it that all your departments are kept in order, your help polite and attentive, your gallery attractive, and nothing in it to offend the eye or good taste of your patrons. Be yourself always on hand as master of the situation.

Mr. E. D. Whitney then read a paper on "Photographic Rights," as follows:

PHOTOGRAPHIC RIGHTS.

BY E. T. WHITNEY.

MR. PRESIDENT, LADIES AND GENTLE-MEN OF THE NATIONAL PHOTOGRAPHIC As-SOCIATION: Before entering upon the subject-matter of this paper, I would simply say that mere words are inadequate to express the pleasure of meeting my brother artists again in convention, especially at such an historic time, amid such surroundings; surely we can sing the Star-spangled Banner with new zest hereafter. How different our meetings now from those in former years; no jealousies, no selfish isolation, each

willing to aid the other to make the best work. When we look about in yonder hall and see the progress of photography, when we read our journals replete with interest and instruction, can we remain passive while such wonderful results are attained, and can be attained by each one of us. Surely we should love our art with tenfold ardor, and appreciate its capabilities; let eyes be open to see, and ears quick to hear all that is passing, and catching an inspiration from each other's presence, grasp hands more firmly in brotherly love, and resolve united to stand. Yes, as was remarked by our worthy Secretary this morning, disband this Association and we go back ten years, and be subjected to all the peddlers and process venders.

Now for Photographic Rights: I was pleased to see in the May number of the Photographic Journal a criticism on my article in the Mosaics, page 24, 1876, entitled "Experience;" I say pleased, because that is what we want, discussion, not only in the journal, but in our Association, always conducted, however, in a friendly spirit. No one appreciates more highly than I do the zeal and fervor of Mr. Hough's articles on Photographic Rights; they have done us all good, but from his standpoint he sees differently than I from mine, and yet each may be right. Mr. Hough urges the importance of payinadvance of sitting. That would suit us all, and would be a decided advantage, provided it could be done without producing a feeling of antagonism unfavorable to securing a good expression, getting which makes you master of the situation, enabling you to get a much better order than if paid in advance. Now they know what they want; in the other case they paid for an uncertainty, probably with a protest; if not outspoken, still it rankled and produced this feeling (I'll get the worth of my money), and the result would be, that instead of one, two or more sittings would have to be made. Excepting with strangers, monetary considerations should be ignored until after a successful picture has been produced. The first and paramount object of the proprietor should be to make his subjects feel at home, keep them good-natured, and should you succeed, you can make them dance from a

small insignificant picture at first contemplated to a life-size in crayon or oil.

There are, however, good reasons why persons doing business in large cities should require pay in advance. I from my standpoint (a country town), where I know everybody, and they me, and have in my gallery such a home feeling, that it would shock their honest souls if asked to pay in advance, I could not do it; thus showing that one man's way of doing business in New York will not be acceptable to all galleries in the country.

But thanks to Mr. Hough and the Pearsalls, and all others who stand up for their photographic rights, there is progress. Three years ago we needed a bookkeeper and a collector, and when you sent your bills, after waiting six months, they said, "Oh! I want those pictures taken over." Now we get cash after showing the proof, and if we are all getting that we do well.

Mr. President, not forgetting the long and tiresome journey you have taken to be with us, for which we owe you many thanks, allow me to say in conclusion to the members of the National Photographic Association, if you have gained any new ideas from this or any other paper, or from what you have seen or felt in connection with this gathering, remember that to our worthy Secretary, and to the Executive Committee, you owe a debt of gratitude for their arduous labors to bring about this convention.

THE PRESIDENT. It is a grateful thing to announce. The Secretary has just slipped over to me a note saying that there have been ten new-born members.

THE SECRETARY. Ten brave, new members

THE PRESIDENT. I say they are both brave and new born. We ought to have a hundred new members.

Mr. Chute. We have a communication here from Mr. Spooner, of Stockton, Cal., entitled:

"FOR THE VERY BEST PHOTOGRAPHS GO
TO SMITH."

BY J. P. SPOONER.

"For the very best photographs go to Smith;" so reads the advertisement of an enterprising worker. Only a few adver-

tisements below we find the same words, but this time it's Brown who has the very best. The daily press in every town and city are good mediums of keeping our art before the public; but we look in vain for any art, craft, or trade that has so many who so persistently claim the very best as ours: ours should show every one of the trades that dealing almost exclusively with ladies, as we are, we can be courteous, gallant, if you will, and truthful, to say the least in our advertising: for if Smith and Brown both claim to make the "very best," one must be mistaken. Fellow-eraftsmen, let us have no more of such impossible and unfortunate words printed; unfortunate, because among many who are not most thoroughly schooled, there are some who will assuredly feel hurt at such a continuous stream of advertisements that are little else than self-laudation. Many, very many, of our patrons have spoken to the writer in terms of anything but kindly mention on this same score. Let us mark a new era on this our Centennial year, and discard and disclaim forever the stale and threadbare words, "For the very best photographs go to Smith."

STOCKTON, CAL., July 21st, 1876.

Mr. Bogardus. I have often heard ladies say in going to our gallery, that they would just as leave go to a dentist's; and I found out where it came from this morning. I read an advertisement in a New York paper of a photographer who took four pictures for twenty-five cents. In the next line, the advertisement reads, "Teeth extracted for twenty-five cents." I have no doubt he is a poor photographer and a miserable dentist.

A paper from Mrs. E. N. Lockwood was, by her request, read by the President, as follows:

ON INSURANCE.

MR. PRESIDENT, LADIES AND GENTLE-MEN: Three years ago at the Buffalo Convention, I presented a paper suggesting the formation of a "Life Insurance League" in connection with the National Photographic Association. The paper was favorably received by the majority of the members present, and a committee appointed to confer together upon the subject.

As it seemed to be a new idea to most of the committee, I was asked to put my thoughts into a form which might be acted upon by the Convention. I did so, but the time was so filled up with other business that the subject was not discussed, but the matter published in the report of the Convention.

Many were of the same opinion as myself in regard to the beneficial effect of adopting some such plan, and by their request I rearranged the articles and presented them before the Chicago Convention.

During the year and for three years previous the question of fire insurance has been agitated a good deal, and committees appointed to look into the matter.

My having given so much thought and investigation to the best plan for a life insurance, seemed to unfold to me a way which was simple and easily put into use; and accordingly I placed my ideas on paper and carried it with me to the Convention at Chicago, with the intention of showing it to a few who had seemed most interested in the subject, and if they thought best presenting it before the fraternity; but through an oversight and mistake, the two papers were read at the same time, which rather confused the whole idea in the minds of many of the members, and especially those who came in late and only heard the last articles of those intended for the fire insurance, as did Brother Loomis, who was very much excited "to think any such thing as insurance, of any kind, should be brought into the Convention. He was one of the organizers of the National Photographic Association, and it was the intention of this body to work wholly in the interests and advancement of photography, and he objected and should withdraw from the society if it could not hold to its first principles, and that alone."

I think had he known he had not the whole truth of the matter, he would have been less hasty in his conclusions, and thought more favorably of a subject which, were it carried into effect, might before many years be a benefit and blessing to his

own family, when he shall have passed "over the river."

I have reviewed this matter from its first agitation, as there will doubtless be many listeners to this paper to whom the subject will be entirely new; and it was to be fully decided at the next meeting of the National Photographic Association after the one held in Chicago.

I know each moment in Philadelphia will be precious; and, therefore, I hope the committee who have this subject intrusted to them, will withhold the fire insurance paper from discussion, and devote what time and attention they have to spare on the subject of life insurance, as I deem it most important.

Every article in the paper is calculated to benefit the National Photographic Association as a body, and each member separately. It does not "accumulate a fund," which may be the cause of strife and contention or dishonesty.

It does not interfere with any of the photographic interests; on the contrary, it will induce members to be more prompt in remitting their dues, and also of interest to each one to try and add members to the National Photographic Association, and also something in which any one can see will benefit them, if belonging to the Association and keeping up their dues.

Even in this place and surrounding towns there are many who would to-day be paying members of the National Photographic Association, could they see wherein they would receive any good, by being within than without the Association; as they can read all the reports if they choose, and there is no photographer in the United States who has not felt the good effect of the National Photographic Association, even though they have not read one word, attended any of its meetings, or seen one of its members.

I do not for a moment doubt there are some members of the National Photographic Association who would veto the adoption of my plan for a "mutual life insurance league," solely because it was first presented by a woman. If that is to make any difference in doing that which may be a great good to all its members sooner or later, I sincerely hope every word I have written

on the subject may be blotted from their memory, and the matter be taken up by men in whom every one will have the utmost confidence and respect.

I have no feeling in the matter only for the good which may be done. I do not want to see the National Photographic Association in mourning for lack of united effort and energy, and I will not stand in the way of any effort or idea advanced, which will be beneficial to the interests of the members of this society; but will do all within my power to help, sustain, and strengthen the National Photographic Association; and earnestly hope every one in this audience will go home from Philadelphia, feeling they have improved both their time and eyes to the very best advantage, and feel like singing praises because they are members of the most pleasant, active, and honorable united body of people in the United States.

Regretting very much that business matters prevented myself and husband from enjoying this Convention, and meeting you all once more, I can only tell you through the medium of the pen how earnestly I desire health, happiness, and prosperity to each member of this Association; and may the National Photographic Association hold its annual meetings until the next Centennial.

Fraternally,
Mrs. E. N. Lockwood.

RIPON, WIS.

THE PRESIDENT. Are there any remarks touching the paper of Mrs. Lockwood? The Chair feels called upon to commend the spirit in which this paper was written to every member of the Association.

Mr. A. Bogardus. I believe this is the first year within the existence of this Association that we have missed the pleasant faces of Mrs. Lockwood and her husband. I regret their absence to-day. I understand they have suffered severely from a fire, which has constrained them to stay at home. I feel as many others do, that it is the true spirit in which we should act. I feel encouraged with regard to this Association when I hear anybody speak in that tone; it stirs up within me the feelings that I have had since its organization, for I feel

proud that I was one of the originators of it. I feel proud that I helped to lift photography out of the meanness and selfishness that existed at the time this Association was formed. If we have done nothing better, we have learned to look in one another's faces, and learn that we are a body of men that have some principle, and that we have something at stake, and that there is an upward, higher course for us to pursue. We have got to have something to lift photography up. If this Association has done nothing more, it has done that. You would be astonished to see what opposition there is to us. Twice have I had it thrown into my face by different parties that I had gone and given the knowledge to the Association, and learned the countrymen to make pictures just as good as they did. do not admit any such doctrine as that. feel where I have learned to make a man make a better picture, I have done the art and myself a service in every respect. others feel like letting the Association go down, I do not. I do not feel that a majority of the members desire it. I never closed the Association during the five years I had the honor to preside over it, without asking the question, "Is this Association worthy of being kept up? If not, let it adjourn now." The question was never asked but what a response came, "Let us keep it up. We cannot afford to let it go down." I say let us all go to work and keep it up. [Applause.]

THE PRESIDENT. Are there any more papers, Mr. Secretary?

Mr. R. J. Chute. I have one here from the President of the Photographic Art Society of the Pacific, Mr. Jacob Shew, of San Francisco, as follows:

San Francisco, August 3d, 1876.

To the Officers and Members of the National Photographic Association:

GENTLEMEN: The undersigned, on behalf of the Photographic Art Society of the Pacific, and in accordance with the patriotic impulses of the profession on this coast, desires to extend to you on the occasion of the meeting of your Association in this Centennial year of our nation, the appropriate congratulations incident to so imposing an anniversary. And we desire to make our fraternal greeting none the less fervent, though coming from this distant Occidental shore, looking out across the broad Pacific to the Orient, and including in our scope the Australian Continent and the I-lands of the Ocean.

Although confessing to a feeling of disappointment at the failure of your society to hold its annual assemblage in San Francisco, last year, as resolved at your meeting two years ago, we feel that it would be treasonable to the inspirations of this Centennial anniversary to harbor a thought or feeling but of the kindest nature towards you and the members of our profession throughout the broad expanse of our country. These fraternal impulses have been intensified by the recent happy opportunity we have enjoyed of extending a cordial greeting and welcome to our distinguished fellow co-worker in the photographic field, Dr. Vogel, whom we know it is also your especial delight to honor. We trust that your convocation this year may be especially satisfactory in every particular, that your deliberations may be guided by Divine wisdom, and redound to the best interests and elevation of our art throughout the world.

In conclusion, we trust that after a pleasant and profitable meeting you may be permitted to return in safety to your homes, carrying happy memories of your association with each other, and feeling refreshed and invigorated for the labors of the coming year.

Respectfully and fraternally,

JACOB SHEW,

President of the Photographic Art

Society of the Pacific.

On motion, the communication was received and placed on file, and a vote of thanks tendered to Mr. Jacob Shew.

Mr. Seavey requested that at a future session the members give him the benefit of any suggestions they might have about using backgrounds, and he promised to give his views by making some charcoal sketches. He said this was a matter of importance to photographers, and he would like to illustrate to them how a background should be used.

THE PRESIDENT. We will take great pleasure in allowing Mr. Seavey to present his views. It would be very instructive and entertaining. That is what we all want to learn a great deal about, how to use the background. I have got a great many of them, I am sure, that I know very little about using them.

MR. EDWARD L. WILSON said he had

been absorbed with the thought suggested in Mr. Spooner's paper; and in a humorous vein he called the President to account for some statements made on a card in the form of a bank-note, among which were: "For the best Photographs go to Bradley & Rulofson's," and "The only Elevator connected with photography in the world." He thought that we should either recall our action on Mr. Spooner's paper, or our president should alter his card claiming the " best photographs." He said, also, that it was presumptive to claim the only elevator connected with photography, as every man who was trying to improve his work was an elevator; every negative he develops, every one he places upon his rack, shouldlike the mason, who places one piece of material after another-raise him higher and higher. He should strive to have each one better than the preceding, and thus his course would be continually upward.

A motion having been made that when the Convention adjourn it adjourn subject to the call of the Executive Committee, considerable discussion followed, and the subject was finally made the special order for Wednesday morning, at 11 o'clock. Adjourned.

PHOTOGRAPHIC SKETCHES FROM THE CENTENNIAL GROUNDS.

BY DR. H. VOGEL.

(Conclusion.)

THE foreign countries are apparently not so much concerned in the Exhibition as America, the latter filling two-thirds of the hall. But my opinion is that, if all those foreign pictures hanging around in the Main Building and in Photographic Hall were brought together, the pictures from abroad would occupy more space than the American. We need only examine the grand exhibit of Goupil, and the many photographs from Australia, to be convinced that the foreign countries have made a larger display in the American than America ever has in any foreign exhibition.

Of all the foreign countries France is the least represented, there being only two noteworthy exhibitors in the portrait branch,

namely, Liebert and Walery, who are at present the leading photographers of Paris, and both are, it seems, foreigners. Liebert's pictures cause some interest on account of their execution in pigment (carbon); unfortunately, they hang in a very unfavorable place, and are printed too black, so that they will hardly be considered good specimens of the carbon process. Walery has shown some taste, and his pictures have a certain brilliancy; but exhibits of equal excellency are also made by many other photographers. Vidal's photo-chromos will hardly win the approbation of the American photographers. The portraits produce the impression on the mind of being ordinary paintings; the reproductions from artistic pieces seem to be better. Quite noticeable are the high-print zinc-plates, which Gillot has produced by heliography. The landscapes by Bray, at Nizza, also show a tasteful artist.

Russia at this Exhibition takes a front rank, it being represented by its best photographers. A peculiarity with all its exhibitors is the prevailing style of executing half-length pictures on deep, dark backgrounds, which sometimes seem to be black. Large half-length pictures especially are nearly all made in this manner. This gives the figures a certain plasticity. Further, the eye is attracted by the many pictures in half life-size taken direct; they are retouched with great delicacy in the positive, and may at the first glance deceive even the connoisseur. The quality of the productions of nearly all the Russian photographers is almost the same. Small card pictures are only exhibited by Bergamasco. Some peculiar pictures by Karlin, at Wischin, Noogorod, with large but not readable Russian description, deserve special notice, though I cannot praise everything he has exhibited. Karlin has, among others, taken some pictures in direct sunlight; they are rather an artificial work than a work of art; but he has been successful. One of these pictures is his own portrait, with a pencil in his hand, and another a Russian country girl in white chemise. The shadows are sufficiently exposed, but thereby the lights are not burned or overexposed.

Karlin has success also in several of his groups. That there is such an artist in the far East, near the borders of Europe and Asia, should not be overlooked. Another Russian photographer, Jacovrsky, has taken his scenes from Algiers, and shows us some very interesting types of Algerian life.

Not far from the Russian display we find Bernaert Frères, of Brussels, who exhibit good carbon prints; and the few photographers from Norway and Sweden, among them Jaeger, of Stockholm, are distinguished by good reproductions.

Austria is represented by only a small number of photographers, and but two have exhibited in a large degree, namely, Baron von Stillfried, in Japan, who has delivered from Japan excellent genré pictures, and Joseph Ungar, the children's photographer. Luckhardt has sent excellent stereoscope pictures, and a series of fine cabinet pictures. Less attractive will be found the enlargement in the centre of the tableau, as in enlargements the Americans are ahead. The genré pictures of Ruprecht, at Oldenburg, exceed the limits of what photography can produce; but Schodisch's pictures of animals deserve attention; they are worthy to be placed side by side with Schreiber's pictures (Philadelphia).

V. Angerer, Vienna, has sent several good reproductions and interiors; but still more attractive are Larcajoli's excellent landscapes. Miss Bogner presents a specialty; she colors glass pictures with great effect, and not without taste.

Germany is represented by thirty exhibitors, and among them are the best names. In the foremost rank we place Loescher & Petsch, Berlin. Many young and able photographers have endeavored to compete with them, but they are not as yet overtaken. On the contrary, they have established a school—a style—in Germany, to which we observe, belong many other exhibitors, as Reichardt & Lindner, of Berlin, and Schulz & Suck, of Carlsruhe.

Unfortunately, Loescher & Petsch's pictures are not hanging in a very favorable place, and suffer by glass reflex. Several of the pictures—especially the costume pictures taken at the masquerade festivals of the Crown Prince—are excellent on account

of their positions, fine selection of backgrounds, decoration, and distribution of light and shade.

Different from the style of Loescher & Petsch, are those of Mieschewsky, at Dantzig, and Kiewning and Schaarwächter, at Berlin, the works of the latter being remarkable for a certain air noblesse, and their very delicate modulation. In the decoration of his tableaux he proceeds like Walery; even the tableaux are similar. The pictures are put on dark-brown velvet or plush, so that they lie deep-In Walery's we find the large pictures above and ranged along in a row; the smaller ones are put in rows under them. More taste is shown in the arrangement of Schaarwächter's, who has encircled six large pictures with small ones. Besides that, the color of the backgrounds and the pictures of the latter harmonize better than they do in Walery's pictures, which have a cold appearance from the brown tone of the velvet. These points deserve attention, for the effect depends considerably on the arrangement of the pictures. My opinion is that Loescher & Petsch's pictures would appear to a great deal better advantage on dark ground than on the gray carton upon which they are pasted.

Trapp & Munch have made a colossal show; they have sent specimens of their albumen paper in the form of pictures from nearly all the photographers in the world. Their manufacture fully merits the recognition which it has already received in America.

More modestly, however, appears another exhibitor, namely, Busch, from Rathenow. He exhibits several of his excellent portraitlenses, with specimens of pictures by Schaarwächter. Busch's lenses acquired a great reputation in Europe. In capacity for work they are not inferior to any of the other firms, and they should readily find friends in America, especially as their prices are not at all high. Rückwardt's architectures as well as Schaarwächter's portraits show the excellence of Busch's lenses far better than mere words could do.

Germany is represented by two landscape photographers, one of whom is a most excellent one; that is Scholz, of Görlitz. I

might assert that after Jennings's landscapes (Dublin), those of Scholz deserve the most attention.

Every one knows what great attention the "Lichtdruck" process, or Albertype, received in Germany. It is also fully represented at the Exhibition. Albert has sent several of his best photographs; also, Obernetter and Jacobi. Their way to success was paved by Browning & Meyer, at Mentz. They have succeeded in applying the steam-power press, and are able to deliver 1500 impressions off one plate. A part of the German exhibits in "Lichtdruck" is placed in the Main Building, for instance: Strumper, at Hamburg, and Römler & Jonas, of Dresden.

I have still something to add in favor of "Lichtdruck." Other countries have so far given this process very little attention; but the time is not far distant when it will be generally introduced. For with the portrait branch it is of no importance, but for art publishers it is most valuable.

Geldmacher has sent several specimens of pigment-print, which are transferred on porcelain, glass, wood, linen, etc. They show what can be done in that branch.

I understand they have introduced it again in America, with all the latest improvements, giving it, however, another name, and calling it chromotypy, which is nothing more than the carbon-printing process, improved by Johnson and Sawyer.

I have already described this simple process in my letters at the beginning of this year. There now remains not the least secret in regard to it. I will remark, also, that there is no difficulty at all in the performing of the operation in cool weather, as there is in warm, as then the sensitized gelatin easily melts down. If the air is damp, it dries very slowly, and decomposes before it is dry. These are the two obstacles; they, however, can be overcome. We may hasten the drying process by quick drafts of air, and at high temperature we may lay the sheets horizontal, in order to prevent the gelatin from running down.

For the production of large imperishable pictures, as well as window pictures, this process is most valuable.

Canada, in all its exhibits, is leaning

more to America than to England. The similarity in all its proportions can be noticed very easily. Here and there are prevailing life-size pictures, which have received more or less changes by retouch; and we also notice here the same highly cultivated photographic routine. Ahead of all stands Notman. I am not satisfied with the painting in several pictures executed in oil. The groups in the skating rinks show skill, but what most attracted me was the smaller pictures, especially the handsome groups of hunters and skaters. In these Notman shows the man of inventive genius and taste.

Henderson is distinguished in the landscape branch, and approaches therein more to England. The latter takes in this department without dispute the supremacy. At the London Exhibition, in 1862, the Englishmen were already ahead of all other exhibitors in landscape photography, and to the present time they have retained this high position. It is difficult to select among so many excellent things the best; but in the Photographic Hall we do not hesitate a moment to award the palm to Mr. Payne Jennings, of Dublin. He exhibits nine prints, 8 x 10, all in one frame, which, indeed, leave all others far behind on account of the fine selection of subjects, tender gradation of tone, finishing of clouds, and fine effects of light.

If permitted, I would here make some objections to the American landscapes, especially in regard to those of the Yosemite Valley. Very often too little attention is given to the effect of the foreground, though nothing else has a greater influence. If the foreground is too large it will intrude on the background, which perhaps may be the most important part, and in consequence it appears small and insignificant. Nearly all the Englishmen have calculated on the effect of the foreground. The excellency of English landscapes does not solely depend on a certain technic, but in the study of the landscape itself, in finding out the best point for taking, the best moments for sensitizing, the right time of exposure, and certainly the careful preparation of the negative.

The landscapes of Robinson are also very

fine and harmonizing; his shore pictures are really little masterpieces. Likewise in forest landscapes he gives some excellent work of clouds. Stuart Wortley, the well-known dry-plate man, has also worked in shore pictures with success. The specimens of his uran-drying plates deserve the most attention. Vernon Heath's landscapes are attractive from the advantageous size; they are enlargements in carbon from small negatives. It is astonishing how little they lost thereby in sharpness and fine gradation of tone. Carbon enlargements have certainly a future.

Besides Heath there is W. Bedford, in England, working in excellent landscapes, after Fr. Bedford. W. England and Frank Good have sent many creditable things, but they do not rank among the best. Hudson (Ventner) merits acknowledgment.

In relation to the portrait branch England occupies a peculiar position. It gives specimens of keen experiments, which, however, do not entirely satisfy. Life-size heads, taken direct by Crashaw and Wortley, are bold pieces of work, but they leave the beholder unmoved. Our lenses do not perform everything, and our sitters do not keep still as long as is required for taking such large heads. Mrs. Cameron shows in her studies, which remind us vividly of the pictures of old masters, eminent artistic taste, but here and there the technic leaves something to be desired. The remainder of the portraits sent from England is of average good work-not more! Worthy of mention are the burnt-in pictures by Henderson, in London, and the animal pictures by York, Lancaster. It is queer that the former is not more represented at the Exhibition. Till the present time all trials to introduce generally burnt-in pictures for use as decorations on emaille, porcelain, etc., have been without success.

In conclusion, I mention one expositor whose pictures have remained for months in the cellar of the Exhibition building, entirely forgotten until lately, when they have been brought to daylight; that is J. Levy, of Paris, who has sent numerous excellent transparencies and lantern slides, which certainly can be counted as the best things in the French department at the

Exhibition, and the best of their kind anywhere.

H. VOGEL.

Edinburgh Photographic Society's Exhibition.

This will be held in the Royal Scottish Academy National Galleries, and consist of photographs, photographic apparatus, and material. The Exhibition will open on the 15th December, and continue till about the middle of January. Circulars have been issued to the leading American photographers, and we hope they will be well represented. A large number of medals will be awarded.

For further information see advertisement in Specialties, or address Dr. John Nicol, Exhibition Secretary, 16 Warriston Crescent, Edinburgh.

OUR PICTURE.

THE scene we present this month we are sure will interest all our readers. It is another Centennial picture, and conveys some idea of the arrangement and space in Photographic Hall. It was by no means an attractive subject to photograph, and we were obliged to be satisfied with a portion of that of which we found it impossible to get the whole. Our picture was made from the centre, looking along the main avenue, towards the end, and shows the arrangement of the screens and exhibits. We have taken views looking towards the four corners of the Hall, which include exhibits in the American and foreign departments. There is but little to be drawn from our picture, other than the assurance it conveys to those who have not seen it, that there is a splendid gallery devoted to photography in the great Exhibition, and in it is a collection of photographs that justifies all the praise that has been bestowed upon them. It is the grandest uplifting of photography that has ever been known, and there is no department of this great world's fair that has a more continuous quota of visitors than Photographic Hall. If the public are interested in this beautiful exhibit, how much more so should photographers be? It is

worth travelling the length and breadth of or near, our land to inspect and study, and we would advise all who are interested in our art, far vember.

or near, to visit this grand exhibition of photography before the tenth day of November.

Editor's Table.

"SHAKSPEARE'S SEVEN AGES OF MAN. IIlustrated by J. Landy."-This is the title of a book we have received, gotten up in beautiful style with bevelled covers and gilt edges, and containing cabinet-size photographs in duplicate of his large series in Photographic Hall. The prints are on thick, substantial mounts, which resist their action and remain perfectly straight, without any disposition to curl or cockle. The work is dedicated to Mr. John McCullough, and forms a beautiful souvenir for all who admire Shakspeare's plays. To photographers the book has a double value, the least of which is not its artistic merit, which will be apparent to all who study these interesting pictures. We have copies for sale at \$5 each.

BENECKE & GOEBEL is the latest new photographic firm in St. Louis. They are both good fellows and good photographers, and make a strong team. We are glad to see such combinations of force and talent. In their hands we are sure our art will make rapid advances. They have our best wishes for both artistic and material success. Mr. R. Benecke has long been in business in St. Louis, and Mr. R. Goebel was formerly located in St. Charles, Mo.

TRAIN & BUNDY, Helena, Montana. In the July number of our review of Photographic Hall the types made us refer to this firm as Keim & Bundy. Mr. Train has called our attention to the error, and we gladly make the correction.

CAPTAIN H. R. MARKS, who came all the way from Austin, Texas, to attend the National Convention and visit the Exhibition, expects to open a new gallery on his return, which, for comfort, convenience, and luxury, promises to be equal to anything in the United States. We are glad to note this evidence of Captain Marks's prosperity, and have no doubt he will go home with many new and useful lessons to put in practice in his new gallery.

"APPALACHIA."—This is the name of a publication issued by the Appalachian Mountain

Club, which was organized early in the present year. Article II of its constitution declares the objects of the Club to be the exploration of the mountains of New Eugland and the adjacent regions, both for scientific and artistic purposes. It is expected that in carrying out these objects photography will play an important part in the several departments into which the work of the Club is divided. Edward C. Pickering, Professor of Physics in the Massachusetts Institute of Technology, Boston, is President of the Club, and J. B. Henck, Jr., of the same institute, Secretary.

On account of getting in a portion of the Convention report, our magazine will be a few days late this month.

THE CENTENNIAL PHOTOGRAPHIC DIARY.—As there are many photographers yet to visit the Centennial, this book is just what they want. Every visitor wants a guide-book; this serves the purpose. He wants a memorandum-book; here he has it. Photographic processes and hints are always in order; the Diary is well supplied. It has the whole process of photography complete, and you get it without going through any superfluous matter to find it. It will be found very useful, whether you come to the Centennial or not. See advertisement. Price, 75 cts.

The blunders and misunderstandings at the Centennial are often amusing. Among those connected with photography is the very common one of visitors mistaking the Centennial Photographic Company's studio for Photographic Hall, and vice versa. Even daily papers outside the city persist in the same error, and allude to the meeting of the National Photographic Association as being held in "Photographic Building." Visitors may be excused for these errors, but for correspondents, whose business it is to know better, there is but little excuse.

SEE advertisements of Bigelow's Artistic Photography, and Landy's Seven Ages of Man. They are both instructive.

Specialties.

ADVERTISING RATES FOR SPECIALTIES.—It will be understood that matter under this head is not to be considered as always having editorial sanction, though we shall endeavor to clear it of anything tending to deceive or mislead. Stock-dealers will find this a beneficial mode of advertising, and sure to pay largely. Six lines, one insertion, \$2.00, and 25 cents for each additional line, seven words to a line—in advance. Operators desiring situations, no charge. Matter must be received by the 23d to secure insertion. Advertisers will please not ask us for recommendations. & We cannot undertake to mail answers to parties who advertise. Please always add your address to the advertisement.

For Sale.—Gallery established ten years. Nearest for the population of 120 square miles in the richest part of the Connecticut Valley. Over 300 stereoscopic negatives of New England scenery, and a full outfit for viewing. Rent low. For full particulars, Address C. B. Cheney,

Orford, N. H.

By a capable man of fifteen years experience in the leading stock-houses of New York and Boston. Can command a good trade. Well posted in buying and selling. Address Taft.

Care of Philadelphia Photographer.

MR. John L. Gihon is ready to enter into an engagement with any leading photographer. He has had over twenty years of practical experience. He was an artist by profession before adopting photography, and can, therefore, fill the position of either colorist, poser, or operator. Specimens of his work have appeared in this Magazine, and his writings have rendered his name familiar to most of its readers. Address John L. Ghon.

Office of *Philadelphia Photographer*, 116 North Seventh St., Philadelphia.

Wanted.—A man of good moral standing; one who also has had long experience in all branches of photography, to take a half interest in my photograph gallery, located in the most prominent part of Ottumwa. For those meaning businesss a rare chance. For particulars,

Address B. E. Goldsberry, Ottumwa, Iowa, Lock Box 81.

For Sale.—On account of my health I will have to retire from business. I therefore offer for sale my photographic studio, which is one of the finest and the most centrally located of any in Chicago. It is the leading gallery in the city for transient trade, and by a little push can be made to do the leading business for the local trade. Call on or address J. K. Stevens,

75 East Madison St., corner State.

For SALE.—One of the best and most convenient galleries in the City of Syracuse. Population, 70,000. Established ten years. Good in every respect. Price, \$1,500 to \$2,000. Rent of rooms, \$200. Owner wishes to engage in more extensive business. Address

L. F. RENARD, 26 Wolf St., Syracuse, N.Y. FOR SALE.—A suit of photograph rooms in one of the most pleasant and active little cities on the Ohio river.

These rooms are now doing, and have done for the last 25 years, under the same management, the leading business of the city.

A first-rate chance for a competent, live photographer. Population of the city from 12,000 to 14,000, and surrounded by rich farming country. Satisfactory reasons given for selling.

For further particulars address,

G. W. WEISER, Steubenville, Ohio.

For Sale.—Established twenty years, a firstclass photograph gollery, located in the town of Smyrna, Delaware. Next to Wilmington, the largest town in the state. No competition within a circuit of thirty miles. Will be sold at a sacrifice. Apply or address

ROBERT BENSON, Smyrna, Del.

For Sale.—The only gallery in Paris, Ky. Population, 5,000, Bourbon Co. is known far and wide as the finest and wealthiest section of Kentucky. Gallery doing a good business and commanding first-class prices: for cards, \$5; cabinets, \$9 per dozen, and larger work in proportion. This is an unusual opportunity. Satisfactory reasons for selling. Address

P. H. Rose, Box 28, Paris, Ky.

For Sale.—For \$125, an elegant photograph gallery, all fitted up and furnished. Large and small instruments, and everything pertaining to the business, and now doing a splendid business in a country town of from two to three thousand inhabitants. Fine surrounding farming country, and no photographer within twenty miles of it. Reasons for selling: attends to other business.

Address Photographer,
Quakertown, Richland Centre P. O.,
Bucks Co., Pa.

FOR SALE CHEAR.—A good gallery, well furnished, located in one of the best towns in central New York, on the line of the N. Y. C. R. R. Population 5,000 and growing rapidly. Very low rent, and lease for four years. A splendid chance for a live man. Address H. B.,

Care of W. M. Smith, Ilion, N. Y.

USE WAYMOUTH'S VIGNETTE PAPERS.

EDINBURGH PHOTOGRAPHIC SOCIETY .- The council respectfully intimate that they have made arrangements for holding in Edinburgh an exhibition of photographs, photographic apparatus, and material, on a very extensive scale, in December and January, next, at which a number of medals in gold, silver, and bronze will be awarded; and they invite the American photographers to send pictures for competition. Full particulars will be forwarded on application to

JOHN NICOL, Ph D. Exhibition Secretary. 16 Warreston Crescent, Edinburgh.

WAYMOUTH'S VICNETTE PAPERS.

For SALE .- A new and handsomely fitted gallery, in a new building erected especially for the purpose, with every facility for making first-class work, in a Southern city of 40,000 inhabitants. Doing a prosperous business of several years' standing; being the only first-class gallery in the place. Terms moderate. Address, for further A, care Philada. Photographer information.

BURREL'S CHART AND HINTS TO PATRONS .-Your gallery is not complete without them. For particulars, see advertisement in January, February, and March issues of this Journal. Price, \$1.25, unmounted, by mail, or by express mounted.

FOR SALE .- Reilly's fine negatives of the Yosemite, California, Sierra Nevadas, Niagara, etc. Apply to BENERMAN & WILSON,

Publishers Philada. Photographer.

HERMACIS LENS TESTIMONIAL.

Philadelphia, March 21, 1876. Messrs. WILSON, HOOD & CO.

I take pleasure in testifying to the perfect working of the "Hermagis" just purchased from you. We have tested it particularly as to its depth of focus, and find it to combine with this a rapidity of working which makes it doubly esteemed. Very respectfully,

> WM. CURTIS TAYLOR. 914 Chestnut Street.

PHOTOGRAPHIC HALL .- The four sizes of electrotypes of Photographic Hall, advertised last month, are as follows: 11 x 2 in., 2 x 31 in., 4×6 in., $4\frac{1}{2} \times 7\frac{1}{4}$ in. For sale by

CROSSCUP & WEST,

702 Chestnut Street, Philadelphia.

SCEZIO

No. 8 Lafayette Place,

La Fayette W. Seavey makes a novel display at the Centennial of Photographic Backgrounds, Papier Maché

YORK

M 田 区 日 M

For results obtained by the use of his works, examine Accessories, and numerous Photographs of new designs.

the exhibits of the leading photographers.

List of Exhibitors at the Centennial Using Seavey's Backgrounds.

Collins, Urbanna, Ohio.

Gentile, Chicago.

Howell, New York.

Busey, Baltimore, Md.

Holler, Brooklyn, N. Y.

Schwind & Kreuger, New York.

Sarony, New York.

Alman & CO., New York.

Kurtz, New York.

Anderson, Richmond, Va.

De Lamater, Hartford, Conn.

Bradley & Rulofson, San Francisco.

J. W. Kent, Rochester, N. Y.

Holyland, Baltimore, Md.

Rocher, Chicago, Ill.

Landy, Cincinnatti, Ohio (seven ages).

Gutekunst, Philadelphia, Pa.

Taylor, Philadelphia, Pa.

Gubleman, Jersey City, N. J.

USE WAYMOUTH'S VIGNETTE PAPERS.

Mr. Charles Waldack, who is known to many of our readers, writes in the Photographic Times as follows: As Robinson's trimmer is getting to be used universally, I think I will do a good turn to photographers in telling them how to sharpen the little wheel when it gets dulled by use. I owe it to a photographic friend here, and although some may know it, I am sure many do not. Make a groove in a piece of lead by means of the trimmer, put in it a little fine emery and a drop of oil, and run the trimmer forward and back in the groove until it is sufficiently sharp. There is something else about the trimmer; ascertain by trial which side of the wheel should be on the inside of the zinc or iron mat to cut best, and mark it."

THE ROBINSON TRIMMER.

RICHMOND, IND., August 11, 1875.

MR. EDW. L. WILSON.

DEAR SIR: I feel as though I should say a few words in praise of the Robinson Trimmer and Guides I received from you. The trimmer does its work admirably, do not know how I should do without it; and the round-cornered guides, for cards, is something new, and makes the picture look much neater when compared with the old square cut kind, from a glass pattern.

The guides, all sizes, are the nearest perfect of any I ever used. But what I wish to request of you in particular is, to publish in your Journal the right way for sharpening the trimmer, I am certain this will be looked for by a great many with interest. I have used mine now constantly for some time, and it does not need it yet; but, in case it does, would not like to spoil it with any experimenting. Yours respectfully,

M. WOLFE.

WAYMOUTH'S VIGNETTE PAPERS.



PHOTOGRAPHIC HALL .- Electrotypes of Photographic Hall, four sizes, from the above up to the size in February number of this magazine. For prices apply to CROSSCUP & WEST,

Seventh and Chestnut Sts. Or, BENERMAN & WILSON, Philadelphia.

PIANOS AND ORGANS .- Photographers wishing to buy a Beatty Piano or Organ, can get extra inducements through photographing. Address DANIEL F. BEATTY, Manufacturer, Washington, N. J.

THE GORHAM STOVE.—No photographer can get more for his dollar than by investing in a "Gorham Stove." It is tiny in size but a giant in usefulness. See advertisement.

WILSON, HOOD & Co. 822 Arch Street, Philadelphia.

LUCKHARDT'S ELEGANT STUDIES .- We have just received an invoice of splendid studies of the female figure, by Fritz Luckhardt, Vienna. size, 8 x 10; the price, \$3.50. Order quick!
WILSON, Hoon & Co.,

822 Arch Street, Philadelphia.

SITUATIONS WANTED.

No charge for advertisements under this head: limited to four lines. Inserted once only, unless by request.)

As operator, or would run a gallery on shares, or buy or rent on easy terms a furnished gallery, car, or portable house. Address Artist, P. O. Box 1111, Fort Wayne, Ind.

Having a thorough practical experience in all branches of photography for the past twelve years warrants the undersigned in soliciting a No. 1 position; or will take charge of a gallery. Address Alex., care of J. Haworth, 626 Arch St., Philadelphia.

By an unmarried man of twelve years' experience in nearly all branches of photography, as assistant operator or printer in some first-class gallery. Salary secondary consideration for six or eight months. Only those meaning business will address Assistant, Loperton, Ontario.

By a lady who has a thorough knowledge of the business, in the reception room of a first-class gallery, or as retoucher. No second-rate gallery need apply. For further particulars, address P. O. Box 1156, Providence, R. I.

By a young man of experience, as printer in a first-class gallery. Has been employed since opening of exhibition with the Centennial Photo. Company, Exhibition Grounds, Philadelphia, Penna. Terms reasonable. Address Box 242, Skaneateles, Onondaga Co., N. Y.

By an operator, printer, toner, or general assistant. Improvement more of an object than salary. Address M. B. Stebbins, Box 213 St. Charles, Minn.

By a young man of steady habits; has worked at the business six months, can print and tone, and assist generally. Address, with terms, C. Brown, P. O. Box 1364, Janesville, Wisconsin.

By a young lady, as retoucher, in Boston or vicinity. Address Lock Box 25, Marlboro, Mass.

As printer, toner, and retoucher. Have had six years' experience. Address Geo, Renwick, Halifax, Nova Scotia.

In a first-class gallery, by a No. 1 retoucher of negatives (varnished or unvarnished), also water colorist. The best of references given and required. Address Miss Katie H. Thomas, No. 83 Felicity St., New Orleans, La.

USE WAYMOUTH'S VIGNETTE PAPERS.

As retoucher (good), will assist at operating or printing if necessary. Can do crayon work. Salary, \$10. Address Retoucher, Pierce's Photograph Gallery, 474 Broad St., Newark, N. J.

As assistant, and printer and toner in a gallery. I would like to connect myself with a party of good standing, on shares, or a fair salary. Robert Rudolph Coste, No. 47 East Bay, next door South Cotton Press, Charleston, S. C.

By a lady of five years' experience, to retouch negatives or print and tone. Can be of assistance in operating. Salary moderate for a permanent position. Miss C. H. C., care of B. B. Tiffany, Box 75, Indiana, Pa.

As printer; one who understands his business. Has been with E. Decker for the past year and half. Refer to him. Address Frank S. Smith, 116 Goodell St., Buffalo, N. Y.

By a young man, as retoucher. The best of references given. Address F. C. C., P. O. Box 1237, Norwich, Conn.

In a first-class gallery, by a young man who is reliable and of steady habits, with two years' experience. Salary moderate. For turther particulars, address J. C. Fickes, P. O. Box, 183, Steubenville, Ohio.

As retoucher and printer, or general worker. For sample and terms address Clark Stephenson, Deerfield, Warren Co., Ohio.

Open for an engagement by fall. Experience eighteen years. Reference first class. Speak English and German. Address Operator, 844 Franklin St., Philadelphia. By a young lady of six months' experience, as negative retoucher and general assistant. Address Miss Carrie Smith, Ripon, Wis.

By a first-class operator; understands all branches thoroughly. Lighting and posing strictly first-class. Address Reliable, No. 323 Endise Ave., Cleveland, Ohio. Room 35.

After October 1st, by an experienced workman in crayon, and also a first-class negative retoucher. Address Artist, care of F. Sage, 264 Race St., Cincinnati, Ohio.

By a young lady of long experience, in a firstclass gallery, either as retoucher or printer, or to take charge of reception room. Understands porcelain and solar printing thoroughly. Good references given and specimens of work sent if required. Address Miss K. Rose, No. 824 Washington Street, Boston, Mass.

By a good, smart young man, either as operator, assistant operator, or printer and toner. Wages no object. Address J. D. Avery, Constantine, St. Jo. County, Mich.

By a young man of one year's experience, in a first-class gallery where he can improve and make himself generally useful. Can give good reference. W. L. V., Box 45, Wyalusing, Pa.

As printer and toner, or retoucher. Can operate if necessary. Address E. C. D, Auburn, New York.

By a young lady, as printer. Will wait on reception room. Good references given. Address Miss Annie Hopkins, Utica, N. Y.

THE CENTENNIAL PHOTOGRAPHIC DIARY

NOW READY.

CONTENTS.—Rates of Postage—Places of Interest in Philadelphia—Railroad Depots and Ticket Offices—Calendar, with Photographic Hints—Local Photographic Societies—Items of photographic History—Photographic Processes—The Negative Bath—The Developer—Collodion—Varnishes—Retouching Varnish—Printing and Toning—Mr. Marston's Process—Mr. Hearn's Process—Collodio-Chloride for Porcelain Printing. By Charles Evans—Emulsion Process—Photographic Hints—Executive Officers of the United States Centennial Commission—The Centennial Buildings—Photographic Hall—Directions for Exhibitors, Important to Visitors—Regulations for Admission to the Centennial Ground—Admission Tickets for Exhibitors and Employees—Admission Tickets for the Public—Hotel Charges—N. P. A. Convention—Map of Philadelphia.

PRICE, ONLY 75 CENTS.

For sale by BENERMAN & WILSON, Photographic Publishers, 116 North Seventh Street, Philadelphia, Pa.

JOHN DEAN & CO.

Worcester, Mass.,

Manufacturers of the

Nonpareil Plate,

A substitute for porcelain. The new NONPAREIL PICTURES have elicited the most general expressions of approval and admiration. The latest improvement simplifies the formula and insures success. Our plates are stamped. Patented July 29, 1873, and June 16, 1874. All others are spurious.

ALSO, THE CELEBRATED

ADAMANTEAN TPE FERROPLATES.

BLACK, AND PATENT CHOCOLATE-TINTED, EGG-SHELL, AND GLOSSY.

The experience and extensive facilities of JOHN DEAN & CO., enable them to produce the most desirable FERROTYPE PLATES in the market.

E. & H. T. ANTHONY & CO., Trade Agents,

591 Broadway, New York.

THE BONANZA PLATE HOLDER.

Patented January 19, 1875.

This is one of the most useful appliances yet introduced in the Photographic business, and

one much needed for economy and neatness in every gallery.

The "Bonanza" Plate Holder has been in constant use in G. D. Morse's Gallery, in San Francisco, for over one year, and a test made from month to month of the sayings. In the busy season it reached over \$12 per month in pure silver solution. The drippings from the plates do not come in contact with the wood frame, slide or door of the Holder, thereby saving it from destruction. Besides, it protects the camera-box, clothing of the operator, carpets, etc., from silver stains. Another great advantage of this Holder: The inside kit of frames which are in general use for accommodating the different size plates are dispensed with. The fittings are so adjusted that they take every size plate from a card to 8 x 10 size, uprights or crosswise, as may be desired, by simply moving the receptacle that holds the plate to the position required for any particular size. Every photographer will see at a glance the value of this invention.

"We have had your "Bonanza" Plate Holder in use in our establishment for about eight months. We take pleasure in testifying to their great superiority over all others we bave employed or seen, not only as a silversaving appliance, but also in promoting cleanliness in work and protection of carpets and drapery from silver contamination. The very moderate price charged for these Holders will be returned to the purchaser, in the saving made, in a very short time."—W. H. RULOFSON, San Francisco, February 10, 1876.

"The constant use of a couple of your 'Bonanza' Plate Holders during the past year warrants me in saying they are unexcelled. The silver all being saved in a liquid state can be used again, and there is no soiling of clothes carpets, or the floor of the studio. The silver not coming in contact with the camera, the focus is not disturbed by the eating away of the wood work. The saving in silver, clothing, and carpets, is astonishing, and I would not be without them on any consideration. I cordially recommend them to the craft."—G. D. MORSE, San Francisco, February 20, 1876.

"The past eight months I have used the "Bonanza" Plate Holder at Bradley & Rulofson's. It has been a great source of pleasure to work with a Holder free from drippings of silver solution. Every photographer will appreciate the cleanliness of this invention, as well as the dollars he will save by its use. I am starting in business at 415 Montgomery Street, and wish you to send me two "Bonanza" Plate Holders."—D. B. TAYLOR, February 13, 1876.

"I believe it to be the best Photographic Plate Holder ever used in the art."—SILAS SELLECK, San Francisco, March 4, 1876.

The "BONANZA" PLATE HOLDER is manufactured of the very best material, and is now ready for the market. The retail price is \$20. They are made to fit and are in focus with the American Optical Co.'s 8 x 10 boxes. Will forward a holder by mail to any address on the receipt of \$20 currency, or will send by express, C.O.D. It is much cheaper to send by mail, as we can forward them to any part of the United States for fifty cents.

All orders should be addressed to

I. W. TABER & CO.,

YOSEMITE ART GALLERY,

26 Montgomery St., San Francisco, Cal.

THE "ATMOSPHERIC" BACKGROUND.

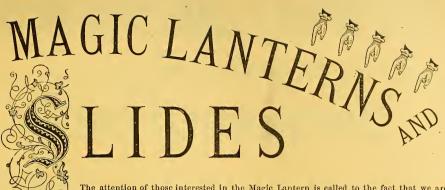
Patented November 23, 1875.

This Background which is made of wire cloth, is remarkable for its atmospheric effect. The wire cloth is of such a texture that the eye or lens cannot focus upon it, which has the effect of producing a sharper outline to the figure. This result makes it valuable for plain Backgrounds, as it produces negatives free from any blemish, as a **dent** or **scratch** on the

Backgrounds, as it produces negatives free from any blemish, as a dent of scratch of the wire cannot be photographed, owing to the open meshes of the cloth.

The durability of the Wire-Cloth Background cannot be questioned. One of them will last a lifetime. We have had them in constant use for over two years. They have been hit by head-rests, and every accessory used in a gallery have have had their accidental contact, but they are as perfect to-day as when new. They are used in all the first-class galleries in San Francisco. We have manufactured them for this market, but as freights are high to ship them East, we have determined to offer gallery rights for sale at \$25 currency, with full instructions for making them. It is economy for photographers to purchase the right, for they can be made at a small expense.

I. W. TABER & CO.



The attention of those interested in the Magic Lantern is called to the fact that we are MORE EXTENSIVELY ENGAGED in the sale of

LANTERN SLIDES AS A SPECIALTY,

Than any other house in America. Our continuous contact with photographic men gives us special advantages in this line, and as MANUFACTURERS AND DEALERS we offer the very best opportunities to secure

MUCH FOR YOUR MONEY,

AS WELL AS SUCH GOODS AS WILL PUT MONEY IN YOUR PURSE, NAMELY:

A GOOD LANTERN, THE BEST of SLIDES.

FOUR CATALOGUES MAILED ON RECEIPT OF 25 CTS.

DO NOT BUY UNTIL YOU HAVE CONSULTED HEAD-QUARTERS!

SUPPLEMENTARY CATALOGUE (March 1) READY!

USE WILSON'S

Lantern Journeys,

A Lecture Book describing graphically, as an eyewitness, **600** beautiful places and things in all parts of the world. SUBSCRIBE FOR THE

Magic Cantern

A Monthly Journal, devoted to the interests of lantern lovers.

\$1 per year, post-paid.

Special estimates and other information given gladly. No substituting of Slides. Prices very low.

PROMPTNESS OUR RULE.

BENERMAN & WILSON, Photo. Publishers, 116 NORTH SEVENTH ST., PHILADELPHIA.

WHAT follows is a Catalogue of the best Photographic Publications, sent to remind all live photographers of the fact that good practical information is as essential to them as good lenses and pure chemicals. There are some "artists" who "get along" without any of these, but they do not progress, neither do they succeed. Do not be of their number. There is too much going on in photography in these "quick acting" times to enable any photographer to afford to do without reading and being posted. In anything you undertake you should take every precaution to be as bright as your neighbor, or he will get ahead. Keep alongside, any way. We will mail you any of the works named below, post-paid, on receipt of price. Order now.

1876

WILL BE A YEAR OF JUBILEE FOR PHOTOGRAPHERS THAT SHOULD NOT BE NEGLECTED.

THE CENTENNIAL EXHIBITION

Will present opportunities for study and improvement which should not be overlooked, and the study of the best books will not only do you good before, but after the inspection of Photographic Hall. READ! READ!! READ!!!

BENERMAN & WILSON.

Photographic Publishers, Philadelphia, Pa.

Photographic Mosnics.

THE Centennial anniversary year of American Independence finds our little of provider ence finds our little Annual in its eleventh year. It is developing rapidly for its age and size, and this year takes quite an interest in the Centennial. It is full and running over with fresh contributions from the most wide-awake members of the fraternity in all parts of the country. We here give a list of the

bers of the fraternity in all parts of the country. We here give a list of the CONTENTS.—Review; Eighteen Hundred and Seventy-six; Discoveries, Inventions, and Improvements; Work in the Studio; The Dark Room; The Frinting Department; Landscape Photography; Dry-plate Work; Apparatus; Art Advances; The National Photographic Association; Our Publications; Our Prize Offer; Items of Interest; Ohituary; The Art Progress; Fog; Come, Let us Reason Together; Experience; Provoking; A Suggestion Aneut the Great Exhibition; Centennial Album of Photographic Studies; The Eliminating of Hyposulphite from Prints; A Treatise on Photography; Why not make Solars instead of Contact, etc.; Systematic Preservation of Negatives; Want of Enterprise; Lighting the Sitter; Theory and Practice; Be Punctual; Formulæ for Photographs and Perrotypes, which give Lights and Half-tones not surpassed; Exposure and Development of a Negative; A Cause for Faded Exposure and Development of a Negative; A Cause for Faded Collodion; A Word to the Weak; How to Clean New and Old Glass Plates; Long's Bath Warmer; Albumen, its Preparation and Use in Photography; An Item of Real Value; The Negative Bath; How to Lubricate Prints for Burnishing; Then and Now; A Pair of Suggestions; How to Obtain Boiling Water in Winter; An Excellent Ware for Photographic Purposes; Hints on Composition; The Causes and Cure for some of the Difficulties pertaining to Photography; An and Mechanism; Breakfast for Dinner; Field Work; Marble Negatives—Stains From the Hands, etc.; Pyroxylin—Gun-Cotton; The Old Bath; The Upper Floor; Dry-Plates; The Art Privileges of our Great Centennial; Curtains as a Meanof Adjusting Light; An Exposing Shutter; How to Touch out Pinholes; Photography; A Cheap and Good Plateholder; The Way it is Done; To Correspondents; The Construction of Skylights; Blisters; At the Desk; On Photographic Lenses—How Yor Choose and Take Care of Them; The General and I have a Talk; Eyes Right; Many Mites from Many Minds.

Price, bound in Cloth, \$1. Paper Cover, 50 Cts. 144 pages.



hiladelphia Photographer.

THE BEST PHOTOGRAPHIC MAGAZINE IN THE WORLD.

EACH NUMBER EMBELLISHED BY PHOTOGRAPHY.

THE THIRTEENTH VOLUME of our Magazine promises to be the most popular and brilliant of any that has preceded it. We have many good things in store for it. It shall be our endeavor to make it all the richer and more interesting on account of the Centennial. We expect to embellish it with some of the choicest gems the Exhibition can produce and add interest to its pages from month to month, by giving a sort of compendium of all that relates to Art or Photography. Among other attractions, we expect to have our old friend Dr. Vooelhere during six months of next year, at least, and our readers may expect some of the fruits of his genius and talents to add to its interest and usefulness.

But while we intend to provide all these home attractions, we do not propose to neglect whatever may transpire abroad, but shall present as usual correspondence from such well-known writers as Prof. Stebanso, Mr. W. J. Stillman, Mr. Chas. Waldack, and others. With all these good things in prospect for the year 1876, we hope to render our magazine more beautiful and more useful than ever before; and while we maintain that the beautiful example of photography, which accompanies each issue, is alone worth the subscription price, still more and more effort will be made to make the reading matter everything that it ought to be. Our correspondents from all the leading centres abroad will keep our readers posted on all matters of interest in their several sections, while our unrivalled staff at home will look diligently after your interests here. To make THE PHILADELPHIA PHOTOGRAPHER the best PRACTICAL HELERR which can possibly be obtained, is the aim and earnest desire of its publishers, We ask your co-operation in extending its usefulness, and offer to all present subscribers, who secure us new ones, the following

PREMIUMS.

For every new subscriber, for one year, \$1.00, payable in any of our publications, books, or, if preferred, one dollar's worth of any of our prize pictures, or any other article for which we are agents, advertised in this Magazine.

The subscription price of the Philadelphia Photographer is \$5 a year, \$2.50 for six months, 50 cents per month.

Each number, remember, contains a handsome photograph.

OUR BOOKS.

THE PRACTICAL PRINTER. By Chas. W. Hearn.

This very useful book is indispensable in the printing department. No one who wishes to be up with the times in printing, can afford to be without it. Its rapid sale and the lavor with which it has been received, are the best recommendations we can give. Price, \$2.50.

BIGELOW'S ALBUM OF LIGHTING AND POSING.

This excellent work still maintains its popularity. It contains 24 beautiful photographs from life in different lights and positions, with an explanatory key, which makes it the most practical helper the Photographer can have. Price, \$6.00.

DR. VOGEL'S HANDBOOK OF PHOTOGRAPHY, Second Edition.

This is a really standard work, and the most complete hand-book ever published. The new edition has been thoroughly revised, and much additional matter introduced, together with new illustrations, new photographs, and a new arrangement all through. Now is the time to study up, and this book is ap-plicable to any department. Price, \$3.50.

DR. VOGEL'S PHOTOGRAPHERS' POCKET REFERENCE-BOOK.

This is in every sense a reference book. It is alphabetically arranged, and any process or formulæ in photography may he found at a moment's notice. All is arranged in a concise and practical form. It is particularly useful in the chemical department. Price, \$1.50.

THE FERROTYPERS' GUIDE.

This little work is hy a practical ferrotyper, and gives just the instruction necessary to those who wish to do good work in this branch of our Art. Price, 75 cents.

LINN'S LANDSCAPE PHOTOGRAPHY

Is an excellent companion in the field, and may help you over many difficulties; can be carried in the pocket. Price, 75 cts.

GLIMPSES AT PHOTOGRAPHY. By Prof. Himes.

This work treats of some of the peculiar styles of printing, such as leaf-printing, etc., etc. Price, \$1.25.

WILSON'S LANTERN JOURNEYS.

To those who use the lantern this book is indispensable. It contains just the information required about six bundred different views, and enables any exhibitor to make his entertainments enjoyable and instructive. Price, \$200.

BURNET'S HINTS ON COMPOSITION.

We have reproduced this work by photo-lithography, and sell it at the low price named, while a copy of the original work could not be bought for five times that amount. It is fully illustrated, and supplies in a very attractive form, the art knowledge, in reference to composition, that so many photographers are seeking after. Price, \$3.50.

A. M. COLLINS, SON & CO.,

MANUFACTURERS OF

PHOTOGRAPHIC CARDS AND CARD BOARDS,

OF EVERY DESCRIPTION.

Warehouse:

No. 18 S. Sixth St., and No. 9 Decatur St.,

IMPERIAL CARDS.

Size, $6\frac{7}{8} \times 9\frac{7}{8}$.

BOUDOIR CARDS.

Size, $5\frac{1}{4} \times 8\frac{1}{2}$.

White, Gray, Granite-Blue, Pearl, Amber, Tea.

Plain; also, with Gilt Borders, and with Gilt or Red Beveled Edges.

See detailed advertisement in this number of the "Photographic Times."

PRICE LISTS FURNISHED ON APPLICATION.

TRAPP & MUNCH'S

lbumen

Introduced into this country since 1868 has become the leading paper, and is

now better known and more appreciated than any other brand.

That this great success is well deserved and due to its excellent qualities may be judged from the fact, that of all the competitors of the Vienna Exhibition, Messrs. Trapp & Munch alone received the

MEDAL OF MERIT

for Albumenized Paper. For Sale at all the Stockhouses.

WILLY WALLACH,

GENERAL AGENT FOR THE UNITED STATES,

No. 4 Beekman St., and 36 Park Row, New York SPECIAL ACENTS:

SCOVILL MANUFG. Co., New York. E. & H. T. ANTHONY, "" G. GENNERT, New York.

WILSON, HOOD & Co., Philadelphia. H. W. Bradley, San Francisco. G. S. Bryant & Co., Boston.

DR. VOGEL'S PHOTOCRAPHER'S

POCKET

REFERENCE BOOK.

An Alphabetically arranged collection of practically important hints on the construction of the Gallery; selection and trial of lenses and chemicals; approved formulæ for the different photographic processes; tables of weights and measures; rules for avoiding failure, etc.

IT IS A BOOK EVERY PHOTOGRAPHER SHOULD HAVE,

Because it is a ready helper under all difficult circumstances.

For sale by all dealers. Price, \$1.50, post-paid.

BENERMAN & WILSON, Photo. Publishers.

PHILADELPHIA, PA.

Over 1000 Sold.

HEARN'S

PRACTICAL PRINTER

PHOTOGRAPHIC PRINTING

ON PLAIN AND ALBUMEN PAPER, AND ON PORCELAIN.

Too little attention has heretofore been given to Photographic Printing, which is indeed quite as important a branch of the art as negative making.

It is the hope of both author and publishers to create **REFORM** in this matter, by the issue of this work, and as it is to put money in the pockets of all who read it, the hope is that it will be generally read.

CONTENTS.

INTRODUCTION.

The Printing Room, with a Plan. The Silvering and Toning Room, with a Plan. The Drying Room, with a Plan.

PART I.-ALBUMEN PAPER PRINTING.

The Positive Bath for Albumen Paper. Silvering the Albumen Paper. Drying the Paper. Fuming the Paper. Preservation of Sensitive Albumenized Paper—Washed Sensitive Paper. Cutting the Paper. The Printing Boards. Keeping Tally. Vignette Printing Blocks. Treatment of the Negatives before Printing. Filling of the Boards. Fitting Vignette Boards to the Negatives for Printing. Medallion and Archtop Printing. Fancy Printing. Vignette Cameo and Medallion Vignette Cameo Printing. Printing the Bendann Backgrounds. Printing. Printing the Bendann Backgrounds. Printing Intense Negatives. Printing Weak Negatives. A Few More Remarks about Printing—Treatment of Broken Negatives. Cutting the Prints. Washing the Prints. Toning Baths. Artistic Toning. Fixing Baths and Fixing Prints. Washing the Prints. Mounting the Prints. Finishing the Prints.

PART II. -PLAIN PAPER PRINTING.

Salting the Paper. Positive Baths for Plain Salted Paper. Silvering Plain Salted Paper. Drying, Fuming, and Cutting the Paper. Treatment of the Negatives before Printing. Printing-in False Backgrounds. General Plain Paper Printing. Further Treatment of the Prints after Printing. Causes of Failures in Albumen and Plain Paper Printing.

PART III.-PORCELAIN PRINTING.

Selection of the Porcelain Plates. Cleaning of the Porcelain Plates. Albumenizing the Porcelain Plates. Making the Porcelain Collodion. Coating, Fuming, and Drying the Plates. Porcelain Printing Boards. Placing the Sensitive Plate on the Board for Printing. Printing Vignette Porcelains. Printing Medallion Percelains. Washing the Porcelains. Toning the Porcelain. Fixing the Porcelain. Final Washing of the Porcelain. Drying and Tinting of the Porcelain. Varnishing the Porcelain. Causes of Failures in Porcelain Printing.

Together with over 50 Wood Cuts, and an elegant Cabinet Portrait, from negatives by Mr. F. Gutekunst, printed by the author, Mr. Chas. W. Hearn.

A THOUSAND COPIES ALREADY GONE.

Mailed Post-paid on Receipt of \$2.50, by any dealer, or

BENERMAN & WILSON, Photo. Publishers, 116 North Seventh Street, Philadelphia.

ROBINSON'S METALLIC

Guides,

FOR USE WITH THE ROBINSON PRINT-TRIMMER.

(See advertisement of Trimmer opposite.)

These Guides are made of Stout Iron and are turned in a Lathe, so that they are Mathematically True.

OVAL, ROUND, ELLIPTIC, and SQUARE, of all sizes; various shapes for Stereoscopic work, Drug Labels, etc., etc.

We have the following regular sizes always on hand at 10 cents per inch the longest way of the aperture, the fractions counting as one inch.

Special sizes made to order at 15 cents per inch the longest way of the aperture.

REGULAR SIZES:

	OVALS.		SQUARE	OR ROUND-COI	RNERED.
$2 \times 2\frac{7}{8}$	$3\frac{1}{2} \times 4\frac{7}{8}$	$5\frac{3}{4} \times 7\frac{3}{4}$	$2\frac{1}{16} \times 3\frac{3}{4}$	$2\frac{5}{16} \times 3\frac{7}{8}$	$3\frac{7}{8} \times 5\frac{1}{4}$
$2\frac{1}{8} \times 3\frac{1}{8}$	$3\frac{5}{8} \times 5\frac{1}{8}$	6 x 8	$2\frac{1}{8} \times 3\frac{3}{4}$	$2\frac{3}{4} \times 4\frac{1}{4}$	$4 \times 5\frac{5}{8}$
$2\frac{1}{8} \times 3\frac{1}{4}$	$4 \times 5\frac{3}{8}$	$6\frac{1}{4} \times 8\frac{1}{4}$	$2\frac{1}{8} \times 3\frac{1}{8}$	$2\frac{3}{4} \times 4\frac{1}{2}$	$4\frac{1}{8} \times 5\frac{7}{8}$
$2\frac{3}{8} \times 3\frac{3}{8}$	$4\frac{3}{8} \times 6\frac{3}{8}$	$6\frac{1}{2} \times 8\frac{1}{2}$	$\begin{array}{c} 2\frac{5}{16} \times 3\frac{15}{16} \\ 2\frac{5}{16} \times 3\frac{3}{4} \end{array}$	$2\frac{7}{8} \times 4\frac{5}{8}$	$3\frac{7}{8} \times 6$ $4 \times 6\frac{1}{8}$
$2\frac{5}{8} \times 3\frac{5}{8}$	5 x 7	7 x 9			· ·
$2\frac{7}{8} \times 4\frac{1}{4}$	5½ x 7½	$7\frac{1}{4} \times 9\frac{1}{4}$		STEREOGRA:	
33 x 48	$5\frac{1}{2} \times 7\frac{1}{2}$	$7\frac{1}{2} \times 9\frac{1}{2}$	Arch Tops.	Round Cornered.	Round.
0 0			$3\frac{1}{16} \times 3\frac{3}{4}$	$3\frac{1}{16} \times 3\frac{3}{4}$	3 x 3
$3\frac{3}{8} \times 4\frac{5}{8}$	$5\frac{5}{8} \times 7\frac{5}{8}$	$7\frac{3}{4} \times 9\frac{3}{4}$	3 x 3	3 x 3	

The above sizes suit the Collins Card Mounts, and photographers knowing that they can be always had at the low price of ten cents per inch, would do well to make their sizes accord, as orders can also be filled more quickly. Ten days is required to make special sizes.

An allowance of ten inches (\$1 worth) of regular sizes of guides will be given with every Trimmer purchased. (See opposite page).

FOR SALE BY ALL DEALERS.

BENERMAN & WILSON, Manufacturer's Agents

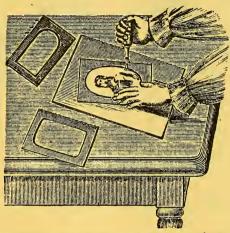
PHILADELPHIA, PA.

ROBINSON'S PHOTOGRAPH TRIMMER

IS A SUBSTITUTE FOR A KNIFE

FOR TRIMMING PHOTOGRAPHS, AND DOES THE WORK MUCH MORE EXPEDITIOUSLY AND ELEGANTLY THAN A KNIFE.

IT SAVES TIME, SAVES PRINTS, AND SAVES MONEY.



The accompanying cut represents the instrument in the act of trimming a photograph. It does not cut, but pinches off the waste paper, and leaves the print with a neatly beveled edge which facilitates the adherence of the print to the mount. Try one, and you will discard the knife and punch at once. For ovals and rounded corners it is worth its weight in gold.

A Trimmer and Ten Inches of Guides Mailed for \$3.50.

Oil the wheel bearings with Sewing Machine Oil.

Given Away!

WITH EACH ROBINSON PHOTOGRAPH TRIMMER

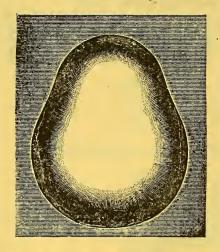
WILL HEREAFTER BE GIVEN Ten Inches of Metallic Guides, your choice from the regular sizes named on the opposite page. The manufacturers and agents finding that they can save money by manufacturing in large quantities, make this liberal offer to the trade, as they want everybody to have these capital inventions in use. They are no humbug and are not glass cutters or anything like them

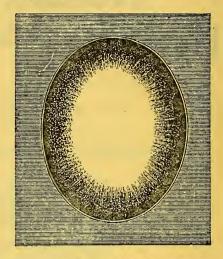
BENERMAN & WILSON, Manufacturer's Agents,

FOR SALE BY ALL DEALERS.

PHILADELPHIA, PA.

WAYMOUTH'S





VIGNETTING PAPERS

ARE NOW MADE OF TWO SHAPES, as shown in the drawings above. They consist of finely gradated, lithographed designs, mounted on protecting sheets of non-actinic paper, and are the lightest, neatest, and best means of producing vignette pictures ever offered.

RECENTLY IMPROVED.

The quality of the "papers" has just been much improved by the substitution of a peculiar French, fibrous, hard calendered paper, which is not only less opaque but has other qualities which produce quickly the most lovely and soft vignettes possible. We consider this a great improvement, as do others to whom we have sent samples. Below we give a letter from one of them, Mr. Ormsby, who has sent us also some exquisite vignettes:

The package of Vignette Papers has been received and tried; they are just the thing. They are a great improvement over the others; they will print in a little more than half the time required for the others, and the results are everything that can be desired, as you can see by samples inclosed. Please fill my order and send bill. I like the pear-shape best. Send them all that shape.

E. D. ORMSBY, Chicago.

FROM PROFESSIONAL AND AMATEUR PHOTOGRAPHERS.

"First-class."—"The sample sent answers perfectly."—"I consider them first-rate articles."—
"They answer the purpose admirably."—"They are the best vignettes I have ever had, and as you can print in full sunlight, they are a great saving of time."—"They could not be better, oblige me with another packet."—"I find them excellent, giving much softer pictures than the old way."—"I have tried one of the Vignette Papers, and like it much; send me packets two and three."—"I am much pleased with them, and shall thank you to send me another packet."—"I did not need any copies of testimonials, having well-known by experience that your Vignette Papers were superior to anything I have ever used."—"I found those you sent before excellent."—"Vignetting Papers received and tested; can't be beat. I use by cutting an opening in a piece of cardboard and tacking to the printing-frame, when I am ready for printing vignettes in the very best manner."—"Waymouth's Vignette Papers I have tried, and they are just what I have been wanting for years."

Any number sent on receipt of price, by any stockdealer, or by

BENERMAN & WILSON, Manufacturers,

(See opposite page.)

PHILADELPHIA.

DO YOU USE

WAYMOUTH'S VIGNETTE PAPERS.

(DESIGNS COPYRIGHTED.)

of all pictures, the Higherth is the most artistic.

When properly printed. But the clumsy devices generally in use for printing them, or rather for blending the shading about the figure, produce but very few really artistic vignette pictures. Either the shading is too intensely dark, not gradated in tint at all, or it shows an ugly direct, decided line, which is very repulsive. The shading should blend gradually from the dark tint nearest to the figure, off into the white background. The results are then soft, artistic, and beautiful. The easiest and best way to secure them is by the use of

WAYMOUTH'S VICNETTE PAPERS.

THEY ARE NOT CLUMSY; DO NOT BREAK; ARE ALWAYS READY; COST BUT LITTLE, AND ARE EASY OF APPLICATION TO ANY NEGATIVE.

THEY NEED BUT ONE ADJUSTMENT TO PRINT ANY QUANTITY.

They entirely do away with all the old and troublesome methods, either wood, metal, or cotton.

Eighteen sizes are now made, suiting all dimensions of pictures from a small carte figure to Whole-size, Victorias, Cabinets, &c. They are printed in black for ordinary negatives, yellow bronze for thin negatives, and red bronze for still weaker ones. Directions for use accompany each parcel.

PRICES:

In p	arcels containing o	ne of	each size.	Nos. 1	to 15, assorted colors			\$1 00
Asso	rted sizes and color	rs, by	number,	per pa	kage of fifteen			1 00
Nos.	1, 2, 3, 4, and 5, ass	orted	sizes and	colors	for Cartes, by number, pe	r dozen		50
"	6, 7, 11, 12, and 13	"	66	"	Large Cartes and Victoria	s, by numbe	r, per do	z 75
44	8, 9, 10, 14, and 15	"	"	"	Cabinets and Whole-size,	"	" "	1 00
"	16, 17, and 18,	44	66	"	Half " "	66	66	1 25

(SEE OPPOSITE PAGE.)

When ordering, state the number and color you want.

BENERMAN & WILSON, Manufacturers, 116 N. 7th Street, Philada. FOR SALE BY ALL DEALERS.

DR. VOGEL'S HANDBOOK.

SECOND EDITION.

THE HANDBOOK OF THE PRACTICE AND ART OF PHOTOGRAPHY,

By Prof. H. VOGEL, Ph.D., Berlin, Prussia.

IS NOW READY.

ALTHOUGH IT IS MUCH ENLARGED WE OFFER IT AT THE OLD PRICE. \$3.50.

It is Elegantly Illustrated, with Photographs and Engravings. Cloth Bound,

The reputation Dr. Vogel enjoys in this country as a practical photographic writer, is first-class, and insures a book of the best quality. That his *Hand*book is *eminently* so, we guarantee. It has been re-arranged and revised specially for the American photographer, giving the best German formulæ, &c., and is, in every sense of the word, a *Hand*book of the *practical* and *artistic* departments of Photography. Over fifteen hundred of the first edition were sold, and the demand continues.

IT ILLUSTRATES AND TELLS

How the Ateliers are built and used in Berlin and elsewhere;

How to make the best Photographs;

How to select and use your Lenses;

How to manage your Apparatus;

How to compose the Picture;

How to pose the Sitter:

How to choose Accessories;

How Berlin Cards are Made:

How to do everything in the Art.

TEACHES HOW TO BECOME A PERFECT PHOTOGRAPHER.

The whole includes, under one cover, everything needed for the practice of photography by the beginner, the amateur, and the professional—a complete Handbook. See contents of Book.

The engravings are numerous, elaborate, and expensive. Four photographs, illustrating the lighting of the subject, accompany the work. Please read future advertisements

ASK YOUR DEALER FOR IT.

BENERMAN & WILSON, Photo. Publishers,

116 North Seventh Street, Philada.

PROMENADE PRIZE PICTURES.

JULY COMPETITION.

To enable all photographers to study these

GEMS OF ART,

We offer prints from the competing negatives, for sale at the prices below

They are the most exquisite things we ever offered, and will teach any one, be he a good or poor operator.

THE GOLD MEDAL

Was awarded for the best six negatives to Mr. Henry Rocher, Chicago, Ill., whose pictures are marvels of beautiful photography. The studies are all mounted in tasteful style, on Collins' Mounts, and printed at our own rooms by Mr. Chas. W. Hearn, and are fine studies in posing, lighting, printing, and toning.

THE SETS INCLUDE:

	Nos.	1	to	7,				Studies by	H. Rocher, Chicago.
,	66	8	to	16,				44	L. G. Bigelow, Detroit, Mich.
	**	17	to	22,				**	I. W. Taber, San Francisco, Cal.
				27,				**	C. M. French, Youngstown, O.
	44	28	to	31,				**	Core & Frees, Tiffin, O.
	**	32	to	37,				44	E. M. Collins, Oswego, N. Y.
	44	38	to	42,				66 -	J. H. Folsom, Danbury, Conn.
	+4	43	to	48,				44	E. H. Alley, Toledo, O.
	0.		٠		- :		 	name box DLII	adalatia Dhatamanton mana 040

The whole set of	48, .									. 5	512	00
In two Photo. Co	vers,								•		13	50
Selections, per do	zen,.										4	00
" per tw	o doz	en,									7	00
The 21 of Messrs. I	Roche	r, B	ige	lo	w	, aı	nd '	Ta	be	r,	6	00
Book Covers and	Bindi	ng,										75

Address all orders to

BENERMAN & WILSON, Publishers, 116 North Seventh Street, Philadelphia.





ROSS' PORTRAIT VIEW LENSES.

We have now successfully introduced to the American Photographers the Ross Lens, and by our increased sales we know they are appreciated. At the convention held at Buffalo, July 15, many fine photographs were exhibited by photographers, and ourselves, made with the Ross Lens, which attracted great attention.

While Ross & Co. are the oldest manufacturers of Photographic Lenses in existence, they also keep up with the requirements of the fraternity, by constantly manufacturing new combinations and improving on those already in existence. They have lately perfected, and will soon furnish us stock of, a new series of Card Lenses, extra rapid, peculiarly adapted for babies, and people who will not be quiet. We will give notice of their arrival.

WE HAVE NOW IN STOCK

Portrait Lenses, from 1-4 to 15 x 18. Instantaneous Doublets, all sizes.
Cabinet Lenses, Nos. 1, 2, and 3. Medium Angle Doublets, all sizes.
Card Lenses, Nos. 1, 2, and 3. Large Angle Doublets, all sizes.
Triplets. N°s. 1, 2, 3, 4, 5, 6, and 7. Stereographic Lenses, all sizes.
Symmetricals. Rapid Symmetricals. New Universal Lens.

Numerous testimonials pronounce them to be the best, as well as the cheopest Foreign Lens ever offered to the American Photographer. We will mail price-list on application, and promptly fill all orders.

STEINHEIL'S SONS' NEW APLANATIC LENSES.

We now have a full stock of these Celebrated Lenses, at the following prices:

No.	1, 1-4	size	,3 ₁	inch	focus	S,	\$25	00	No.	5, 10-12	size	131	inch	focus.	\$70	00
6.	2, 1-2	66	5 1	6.6	66		30	00	66	6,13-16	66	164		44	110	00
66	3,4-4	6.6	7	66			45	00	66	7, 18-22	4.6				200	00
6.6	4,8-1	0 "	104		6.6		60	00	66	8,20-24	6.6				350	00
			_													

Nos. 1 & 2 are in matched pairs for Stereoscopic Work.

We feel sure that at least one of these lenses is needful for the successful prosecution of your business, and so solicit your orders.

WILSON, HOOD & CO., THE UNITED STATES, 822 Arch St., Philadelphia, Pa.

The only genuine brand of DRESDEN ALBU-MEN PAPER is the CROSS-SWORD BRAND, all others are superannuated. We keep a full assortment of Single and Extra Brilliant always on hand.

CHAS. F. USENER'S Celebrated PORTRAIT LENSES are unexcelled. Before purchasing be sure and try a Usener.

CHARLES COOPER & CO., Wholesale Agents,

Manufacturing Chemists and Importers,

191 Worth Street, New York.

The Universal



EMBOSSING PATENTED JANUARY 9th, 1872.

This Press will cameo all sizes, from cards to cabinets, and is sold lower than any other that will do the same work. It has been greatly improved and made very complete in all its parts.

We furnish a card, victoria, and cabinet size.

PRICE, \$20.00.

MANUFACTURED AND SOLD WHOLESALE AND RETAIL BY

WILSON, HOOD & CO., 822 Arch St., Philadelphia.

CAUTION.—Photographers are cautioned against buying other presses that may use an *elustic* embossing substance, as they are an infringement on the above.

R. J. Chute, Patentee.

G. GENNERT,

53 Maiden Lane, New York,

IMPORTER OF THE CELEBRATED

S. & M. DRESDEN ALBUMEN PAPERS

Rives and Steinbach-White, Pink, and Blue.

Every one says it WORKS THE MOST UNIFORM, ECONOMICAL, and GIVES FINER RESULTS than any other. To satisfy yourself that it is the best, send to your stock-dealer for a sample dozen. Kept by all stock-dealers in the United States.

ALSO,

Hyposulphite of Soda, Sulphate of Iron,

Solid German Glass Baths,
Saxe Evaporating Dishes,
AND French Filter Paper.

SPECIAL ATTENTION IS CALLED TO THE

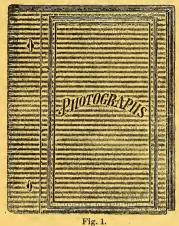
EXTRA BRILLIANT, OR DOUBLE GLOSSY PAPER,

Which is recognized by the best artists all over the world as the

FINEST ALBUMEN PAPER IN THIS COUNTRY OR EUROPE.

IMPROVED

PHOTOGRAPH COVERS.



The Outside Appearance,

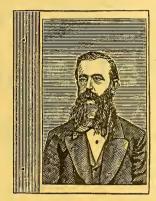


Fig. 2.

A Leaf Showing the Guard.

Frequent inquiries for something at a much lower price than an album, for the holding together and preservation of photographs, has induced us to manufacture an article which we think will meet the want.

IT SERVES ALL THE PURPOSES OF AN ALBUM, FOR

A Series or a Set of Portraits,
A Series or a Set of Landscapes,
A Series or a Set of Photographs of any kind,

MAY BE NEATLY AND CHEAPLY BOUND IN THESE COVERS.

They are made with expanding backs, so that from six to twenty-four pictures may be inserted in one cover. The pictures are mounted in the usual way, and then strips of linen, or strong paper, of the proper width, are pasted on one edge, by which the picture is inserted and held in place in the cover by a paper fastener. Fig. 1 represents the cover, with the perforations in the back, through which the spreading clasps of the paper fastener bind the whole together. These are so easily inserted or removed, that pictures are readily put in or taken out at any time. Fig. 2 represents the picture, with the guard pasted on ready for insertion. The arrangement is simple, and we are sure will be readily comprehended. For binding together views of your town or city, or portraits of celebrities, they are very neat

The following is a list of sizes and prices, without cards:

For Photograph	ι.					Per dozen.				Per hundred.
Card Size	3.					\$1.50				\$10.00
Cabinet S										
EXTRA HEAVY C	OVE	R	s.							
5-8 Size,						4.50		,		33.00
4-4 66										
8-10 "										
11-14 "										

Larger or special sizes made to order. Furnished with card board at best rates. Samples mailed at dozen price. Send for some.

BENERMAN & WILSON, Photo. Publishers, 116 North Seventh Street, Philadelphia.

JAMES F. MAGEE & CO.

MANUFACTURERS OF

PURE

PHOTOGRAPHIC CHEMICALS,

No. 108 North Fifth Street,

PHILADELPHIA

Stock Dealers only Supplied.

PHOTOGRAPHIC PRINTING INSTITUTE.

PRINTING FOR THE TRADE.

Instructions Given in Artistic Printing.

SEND FOR NEW PRICE LIST.

All communications should be addressed to the proprietor, at the Institute,

24 Winfield Place, Philadelphia.

C. W. HEARN, Proprietor.

BENJ. FRENCH & CO.,

319 Washington St., Boston,

IMPORTERS AND SOLE AGENTS FOR THE CELEBRATED

Voigtlander & Son AND Parlot LEWSES,

NEW STEREOSCOPIC LENSES.

New Stereoscopic Tube and Lens, made expressly for us, marked with our name (imitation Dallmeyer), with rack and pinion, central stops, for portraits or views. Will work in or out of doors. Also, for instantaneous pictures. Four inch focus, **price per pair**, **821.00.** By taking out back lens, and using only front lens in place of back, you get six inch focus. The great and increasing demand for all these lenses, is sure guarantee that they are the best. Read the following

Testimonials.

"I have tried the Mammoth Voigtlander you sent me, and I consider it the best large instrument I have ever seen, and I have tried those made by other makers, Dallmeyer's included, and they do not compare with the Voigtlander. All my baby pictures were made with half-size Voigtlander lenses."—J. LANDY, 208 W. Fourth St., Cincinnati, Feb. 25, 1874.

"The Voigtlander lenses have always been favorites with me. My first experience, in the days of daguerreotype, was with one, since which I have owned and tried many of the different sizes and never saw one but was an excellent instrument. Lately again trying some for my own use and for a friend, I found them to be superior to other eminent makers, particularly in the large sizes."—W. J. Baker, Buffalo, N. Y.

"Twenty-four years ago I bought and commenced using my first Voigtlander lens. It was a good one. Since then I have owned and used a good many of the same brand, of various sizes. They were all and always good. Some of the larger sizes that I have recently bought seem to me better than any I have ever had or seen before."—J. F. RYDER, Cleveland, Ohio, Dec. 18, 1872.

"About a year ago I bought a Voigtlander & Son No. 34-4 size lens. Said instrument gives me great satisfaction, being very quick, at the same time has great depth of focus."—E. G. MAINE, Columbus, Miss.

"Have never seen anything equal to the Voigtlander & Son Lens. The No. 5, Ex. 4-4 is the best instrument I ever used. I cannot keep house without it."—D. B. Vickery, Haver-hill, Mass.

"The pair of imitation Dallmeyer Stereoscopic Lenses you sent we are very much pleased with; they work finely."—Goodridge Bros., East Saginaw, Mich.

"After a trial of your imitation Dallmeyer in the field with those of the Dallmeyer Rapid Rectilinear, side by side, I can say that for general views I like yours as well, for some objects far better, on account of their short focal length."—D. H. Cross, Mosher's Gal., Chicago.

New Catalogue of Prices Just Issued, to be had on Application.

WILSON'S

Lantern Journeys

By EDWARD L. WILSON,

Editor of the "Philadelphia Photographer."

This work will be found entertaining by all who like to read about the beautiful places and things of this world.

The contents are divided into six "Journeys," each one including a visit to 100 places, making 600 in all, as follows:

- JOURNEY A-Havre, Paris, Versailles, Rouen, Fontainebleau, and Switzerland.
- JOURNEY B-Compiegne, Brussels, Aix la Chapelle, Cologne, Up and Down the Rhine, Potsdam, Berlin, Dresden, Vienna, the Vienna Exposition, the Semmering Pass, Saxony, Munich, and Southwest Germany.
- JOURNEY C—Italy—Lake Maggiore and Como, Milan, Verona, Venice, Florence, Pisa, Rome, Naples, Pompeii, the Ascent of Vesuvius, Puteoli, and the Italian Art Galleries.
- JOURNEY D-Holland, Denmark, Norway, Sweden, Russia, and Spain.
- JOURNEY E-Egypt, Palestine, Syria, Turkey, Greece, and India.
- JOURNEY F-England, Scotland, and the United States of America.

It has been carefully prepared, and will be found amusing, very entertaining and instructive.

It contains 218 pages, Cloth bound, Gilt. Price, \$2.

BENERMAN & WILSON,

Photo. Publishers, Philadelphia, Penna.



A NEW WORK ON

PHOTOGRAPHY AND ART.

ILLUSTRATED with 12 BEAUTIFUL Promenade Photographs.

BY

LYMAN G. BIGELOW,

Author of "Bigelow's Albam of Lighting and Posing."

This is a beautifully gotten up work, and contains full instructions in every department of Photography.

Mr. Bigelow is well known as an accomplished artist and excellent teacher, and we are sure his new work will be welcomed by all who are aiming for improvement in the higher technical elements of photography.

Price, \$5.00.

FOR SALE BY

BENERMAN & WILSON.

Photo. Publishers,

116 NORTH SEVENTH ST., PHILADELPHIA.

ANOTHER NEW BOOK.

7 SHAKSPEARE'S 7 AGES OF MAN.



ILLUSTRATED BY JAMES LANDY.

This book is beautifully gotten up, and contains cabinet size duplicates of Mr. Landy's wonderful pictures, which are attracting so much attention in Photographic Hall.

As studies, they are full of artistic merit. The work will make a valuable addition to any photographic library.

Price, \$5.00.

FOR SALE BY

BENERMAN & WILSON, Photo. Publishers,

116 North Seventh Street, Philadelphia.

PHILADELPHIA

PHOTOGRAPHER

THE LIVEST and BEST

Photographic Magazine Published.

ANNOUNCEMENT FOR 1876!

The publishers have a great many good things in anticipation for the year 1876, which they think will render their magazine more beautiful and more useful than ever before; and while they maintain that the beautiful example of photography, which accompanies each issue, is alone worth the subscription price, still more and more effort will be made to make the reading matter everything that it ought to be. Our correspondents from all the leading centres abroad will keep our readers posted on all matters of interest in their several sections, while our unrivalled staff at home will look diligently after your interests here. To make the Philadelphia Photographer the best practical helper which can possibly be obtained, is the aim and earnest desire of its publishers.

We ask your co-operation in extending its usefulness, and offer to all present subscribers, who secure us new ones, the following

For every new subscriber, for one year, \$1, payable in any of our publications, books, or, if preferred, \$1

PREMIUMS

worth of any of our prize pictures, or any other article for which we are agents, advertised in this magazine.

Operators, printers, etc., can secure all their necessary photographic literature in this way, by a little earnest effort.

EACH MONTHLY ISSUE IS A PHOTOGRAPHIC WORK IN ITSELF. NOTICE TO SUBSCRIBERS.

Subscription price, \$5 a year, \$2.50 for six months, 50 cents per copy, postpaid. positively in advance.

In remitting by mail a post-office order, or draft payable to the order of Benerman & Wilson, is preferable to bank-notes. Clearly give your Post-Office, County, and State.

Canada subscribers must remit 24 cents extra, to prepay postage.

Foreign subscriptions must be accompanied by the postage in addition.

ADVERTISING sheets are bound with each number of the Magazine. Advertisements are inserted at the following

The attention of advertisers, and those having galleries, &c., for sale, is called to our Specialities pages. Terms, \$2 for six lines, and 25 cents for each additional line, seven words to a line, always in advance. Duplicate insertions, 50 cents less, each.

SURE TO PAY!

Operators desiring situations, no charge.

BENERMAN & WILSON, Publishers,

OFFICE 116 NORTH SEVENTH STREET, PHILADELPHIA.

ENTREKIN BURNISHER OF PLANISHER

MANUFACTURED UNDER

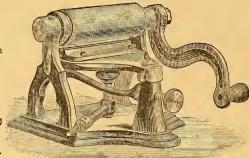
Exclusive License

GRANTED BY

W. E. LOCKWOOD

ASSIGNEE OF

J. F. SCHUYLER.



WHOSE PATENT BEARS

February 24, 1863.

RE-ISSUED

June 1. 187*5.*

PRICE LIST

6-inch Roll, \$20; 10-inch Roll, \$30; 14-inch Roll, \$40; 18-inch Roll, \$50. Also, 30-inch Roll, for hand or steam-power (this machine is especially adapted for large work). Price, \$300.

CAUTION.—The suit of J. P. BASS, assignee of E. R. Weston vs. Peck, tried in the United States Circuit Court, at Portland, Maine, October 8, 1875, the JURY in rendering a verdict for the defendant found:

First.—That Weston, assignor to Bass, was not the original and first inventor of a burnishing machine by which a surface is given to the article to be burnished, by feeding it under pressure over the surface of a burnishing tool.

Second .- That he was not the original and first inventor of the combination of a burnishing tool and a friction feed-roll.

Third.—That he was not the original and first inventor of the combination of the feed-roll and adjustable burnishing tool.

The evidence on which the jury based this finding was that relating to the invention and use by the late J. F. Schuyler of a machine by which a surface was given to the article to be burnished by feeding it under pressure over the surface of a burnisher, rendered stationary, the paper being fed over said burnisher by means of a friction feed-roll.

The patent of W. E. Lockwood, assignee of John F. Schuyler, dated February 24, 1863, was reissued June 1, 1875,

WITH THE FOLLOWING CLAIMS!

1.-As an improvement in the art of Planishing paper, submitting the paper to friction under pressure between a roughened feed roller and a Planisher, substantially as described.

2.-The combination in a Paper Planishing Machine, of a Planisher with a draw-filed roller, for controlling the paper while it is under pressure between the said roller and planisher, all substantially as set forth.

To Photographers and Dealers in Photographic Goods:

Whatever doubts may have existed in the minds of photographers as to the merits of the controversy between the undersigned, W. G. Entrekin, and the owners of the Weston Patents for Burnishers, will be set at rest by the perusal of the above claims, by the verdict of the jury declaring the patent of Weston to be invalid.

While the undersigned feels disposed to treat with liberality, photographers who have been induced by threatening circulars to purchase the Weston and other machines that infringe the above claims, he will hold them responsible as infringers of the above-mentioned re-issued patent of Wm. E. Lockwood in the use of said machines without first paying the small license fee which is now demanded.

On the other hand, the most prompt and determined legal measures will be taken against those infringers who deliberately, and after being thus duly cautioned, make, use, or sell burnishing machines in which is embodied the invention claimed in the said re-issued patent.

W. G. ENTREKIN, Sole Licensee,

Under grant by WM. E. LOCKWOOD, Patentee.

Manayunk, Philada,, April 25, 1876.

TRY HERMACIS' "PROMENADE" LENSES.

Number 154.

ТHЕ

50 Cents.

PHILADELPHIA

Photographer.

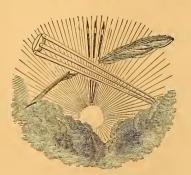
AN ILLUSTRATED MONTHLY JOURNAL,

DEVOTED TO PHOTOGRAPHY.

THE OFFICIAL ORGAN OF THE NATIONAL PHOTOGRAPHIC ASSOCIATION OF THE UNITED STATES.

EDITED BY EDWARD L. WILSON.

October, 1876.



PHILADELPHIA:
BENERMAN & WILSON,

PUBLISHERS,

116 NORTH SEVENTH STREET.

Subscriptions received by all News and Stock-Dealers.

FIVE DOLLARS PER ANNUM, IN ADVANCE.

Sherman & Co., Printers, Philadelphia.

SUMMARY OF CONTENTS.

P	AGE	P	AGE
Mosaics for 1877	289	Proceedings of the Seventh Annual Convention of	
Blass and Actinism	289	the National Photographic Association	303
Photographic Hall	290	Society Gossip	315
Scattered Photography in the Great Exhibition	292	"A Little Gentle Criticism." By E. K. Hough	317
Lecture on Lenses. By Joseph Zentmayer	295	Our Picture.	319
Glass for the Studio and Dark-room. By Thomas		Centenuial Awards	319
Gaffield	297	EDITOR'S TABLE	320

EMBELLISHMENT.-Photographic Hall, Exterior. Negatives by Benerman & Wilson.

ADVERTISEMENTS.

BENERMAN & WILSON. Magic Lanterns and Slides. BULLOCK & CRENSHAW. Photographic Chemicals. CAMEO PRESS, THE UNIVERSAL. CENTENNIAL EXHIBITION VIEWS. COLLINS, Son & Co., A. M. Photograph Cards. CENTENNIAL LANTERN SLIDES. CENTENNIAL PHOTOGRAPHIC DIARY. COOPER, CHAS. & Co. Dresden Albumen Papers, etc. DEAN, JOHN & Co. Ferrotype Plates. DEBANES, J., Glace Work. FRENCH, B. & Co. Voigtlander Lenses, &c. GENNERT, G. Albumen Papers. GIHON, JOHN L. Opaque and Cut-Outs. HANCE'S PHOTO. SPECIALTIES. HEARN'S PRACTICAL PRINTER. HEARN'S PHOTOGRAPHIC PRINTING INSTITUTE. HERMAGIS' PORTRAIT LENSES. Howsons' Patent Offices.

ARTISTIC PHOTOGRAPHY.

MAGEE, JAMES F. & Co. Photographic Chemicals. PATTBERG, LEWIS & BRO. Passepartouts, &c. PHOTOGRAPHER'S POCKET REFERENCE-BOOK. PHOTOGRAPHIC PUBLICATIONS. PHOTOGRAPHER TO HIS PATRONS. PROMENADE PRIZE PICTURES. ROBINSON'S PHOTO. TRIMMER AND METALLIC GUIDES. Ross' Portrait and View Lenses. SAUTER, G. Passepartouts. SHAKSPEARE'S SEVEN AGES OF MAN. SOMERVILLE, J. C. Photographic Stock Depot. TABER, I. W. & Co. Background and Plate Holder. VOGEL'S HAND-BOOK OF PHOTOGRAPHY. WALLACH, WILLY. Trapp & Munch's Albumen Paper WAYMOUTH'S VIGNETTING PAPERS. WILSON'S LANTERN JOURNEYS. WILSON, HOOD & Co. Revolving Photo. Cabinet, Heating Stove, etc. WOODWARD, D. A. Solar Cameras.

BULLOCK & CRENSHAW,

No. 528 Arch Street, Philadelphia,

MANUFACTURERS AND IMPORTERS OF PURE CHEMICALS FOR PHOTOGRAPHY.
IMPORTERS OF GLASS AND PORCELAIN, APPARATUS, ETC.

119 South Fourth St. PHILADELPHIA.

IMPROVED PHOTOGRAPH COVERS.

Branch Office,
605 Seventh Street,
WASHINGTON, D. C.



H. HOWSON,

Engineer and Solicitor of Patents.

C. HOWSON,

Attorney at Law, and Counsel in Patent Cases.



DOUBLE IODIZED PORTRAIT COLLODION.

ANDERSON'S PORTRAIT COLLODION.

WHITE MOUNTAIN LANDSCAPE COLLODION.

NIAGARA FALLS LANDSCAPE COLLODION.

TRASK'S FERROTYPE COLLODION.

HANCE'S BATH PRESERVATIVE.

HANCE'S GROUND GLASS SUBSTITUTE.

HANCE'S DELICATE CREAM GUN COTTON.

HANCE'S SILVER SPRAY GUN COTTON.

HEARN'S COLLODIO-CHLORIDE.

GILL'S CHROMO INTENSIFIER.

CUMMINGS' GRIT VARNISH.

Manufactured from the best chemicals that can be procured in the market, manipulated with the greatest care.

Each article warranted to do the work claimed for it, if used according to the directions plainly printed on the label accompanying each bottle or package. These preparations are noted for their purity and uniformity, and have for years been used in the most celebrated galleries in the United States and Canada.

FULL MEASURE GUARANTEED.

For Sale by all Stock-dealers in the United States and Canada.

A. L. HANCE, Manufacturer, 116 NORTH SEVENTH STREET, PHILADELPHIA.

Read detailed advertisments on succeeding pages.

HANCE'S PHOTOGRAPHIC SPECIALTIES

WARRANTED FULL MEASURE, AND CHEMICALLY PURE,

ARE SOLD BY ALL DEALERS, AS FOLLOWS:

HANCE'S BATH PRESERVA-TIVE. A sure preventive of pinholes, stains, &c. It preserves the bath in good working condition, and will be found worth its weight in gold. See special advertisement. \$1.00 per bottle.

COLLODION. This is made by compounding the different iodides according to their equivalents, and producing a new salt. It is being used by some of the best photographers, but its general use is retarded, no doubt, by the extra trouble in making it. The peculiarities of this Collodion are good keeping qualities, its improvement by age, and the richness of effect produced in the negative, the film being perfectly structureless. As it requires time to ripen, I have the advantage of making a quantity and keeping it always ready to supply any demand. \$1.50 per 1b.; 80 cts. per ½ lb.

TRAIT COLLODION is made according to the formula used by Mr. Anderson in Mr. Kurtz's gallery in New York. It is especially adapted to portrait work. \$1.75 per lb.; 90 cts. per ½ lb.

HANCE'S WHITE MOUNTAIN COLLODION is adapted more especially to outdoor work, and for quick working, delineating foliage, frost-work, or sky, it stands unrivalled. It is made after the formula used by that celebrated mountain artist, B. W. Kilburn, of Littleton, N. H., whose work is too well known to need any comments. \$1.50 per lb.; 80 cts. per ½ lb.

CURTIS' NIAGARA FALLS COLLODION is another used for land-scapes. The wonderfully beautiful views made by Mr. Curtis, of the great cataract, with this collodion, have a world-wide reputation, and are an indisputable evidence that he could have nothing better to produce such magnificent work. \$1.50 per b; 80 cts. per ½ ib.

TRASK'S FERROTYPE COL-LODION is made especially for positive pictures. Mr. Trask has no superior in this class of work, and this collodion is the result of his practice and experience for years in proving what was BEST. It is made after his formula and ferrotypers will find it all that can be desired. \$1.50 per lb.; 80 cts. per ½ lb. HANCE'S PECULIAR PORTRAIT COLLODION is peculiar in that it is prepared without bromides, and is adapted for use with Black's acid bath. To those using the acid bath this collodion is indispensable. Formula on the bottle. \$1.50 per ib.; 80 cts. per ½ ib.

CUMMINGS' GRIT VARNISH

gives a very fine surface for retouching. Those that use a varnish of this kind will find that this has no superior. By it the retouching is greatly facilitated and the same amount of work on a negative may be done with it in half the time that would be required without it. 40 cts. per 6 oz. bot.

HANCE'S SILVER SPRAY GUN COTTON is now being used by many of the best photographers, and the testimonials I am receiving are sufficient evidence of its excellence. I prepare it with great care, and warrant it free from acid, very soluble, gives good intensity so that no redevelopment is necessary, gives perfect detail, and a film pure and structureless. 50 cts. per oz.

HANCE'S DELICATE CREAM GUN COTTON is adapted to those who like a very delicate, soft-working collodion, giving all the modelling especially in the Rembrandt style, and with light drapery. Its sensitiveness renders it particularly adapted for children, or any work that requires short exposure. 80 cts. per oz.

GILL'S CONCENTRATED CHROMO INTENSIFIER is intended to strengthen the negative. It imparts a beautiful tone and gives excellent printing qualities. 50 cts. per bottle.

HANCE'S GROUND-GLASS SUBSTITUTE is simply what its name implies, a substitute for ground-glass for any purpose that it is used for in the gallery. To the landscape photographer a bottle of it is indispensable. If he breaks his ground-glass, he has only to coat a plate, such as he is sure to have with him for negatives, with the substitute, and in a few moments his ground-glass is replaced and his work goes on. It is equally useful in the printing room, and any photographer who has once used it will never again be without it. 50 cts. per bottle.

HEARN'S COLLODIO-CHLO-RIDE.—The best for Porcelain pictures. \$2.25 per ½ lb. bottle, and \$4.00 per lb. bottle Try it, and get good porcelains.

Hance's

HANCE'S GROUND GLASS SUBSTITUTE

Is an indispensable article in the photographic gallery. There are so many uses to which it can be applied that a photographer having once given it a trial, will never be without it, as there is nothing known that will take its place. There are a few base imitations in the market, but they are not used a second time, and will soon die a natural death.

The Substitute is in the form of a varnish, is flowed and dried the same as varnish, but dries with a granulated or ground-glass surface. Wherever ground glass is required, Hance's Substitute answers every purpose.

FOR VIGNETTE GLASSES.

- " A RETOUCHING VARNISH.
- " SOFTENING STRONG NEGATIVES.
- " THE CELEBRATED BERLIN PROCESS.
- " GROUND GLASS FOR CAMERAS.
- " GLAZING SKY AND SIDE LIGHTS.
- " OBSCURING STUDIO & OFFICE DOORS.
- " PRINTING WEAK NEGATIVES.

For skylights it must be flowed before glazing. The Substitute being very thin it will cover a large space. It is economical, and makes a surface equal to the finest ground glass. It can be easily removed by rubbing it with cotton wet with alcohol. GIVE IT A TRIAL.

PRICE, 50 CENTS PER BOTTLE,

Large quantities, for Studio Lights, etc., supplied low.

HANCE'S DELICATE CREAM GUN COTTON

IS THE KING COTTON, AND HAS NO PEER.

Prepared with particular care, warranted free from acid, and very soluble. I take particular pride in this cotton. It has made its way steadily and surely into most of the principal galleries in the country, where parties prefer to make their own collodion, and its superior qualities are shown in the medals awarded at the Vienna Exhibition, for photographs made with collodion in which it was used.

It is especially adapted to the Rembrandt style, and light drapery. Its sensitiveness renders it particularly adapted for children or any work that requires short exposure.

PRICE, 80 CENTS PER OUNCE.

Read next page.

ance's Delicate Ci

COMMENDATORY LETTERS

Testifying to the superior qualities of

HANCE'S SPECIALTIES

WE HAVE ROOM ONLY FOR THE FOLLOWING:

"I consider the Cotton the best we have ever used as yet."-R. POOLE, Nashville, Tenn.

"The film of the Cotton you sent me was unusually smooth and firm, being entirely free from glutinosity, and setting like India-rubber. It was quite powdery and crumbled to pieces in my fingers, 'as if rotten.' It dissolved almost instantaneously, and it was 'by far' the very best material I have ever used. I sincerely trust that you will send me the same kind again."—ELBERT ANDERSON, Kurtz Gallery, New York.

"I received your Double-Iodized Collodion all right, and in good shape. Have tried it pretty well. It gives very fine negatives and good detail."—W. E. Hart, Watertown, N. Y.

"We take pleasure in recommending Hance's Double-Iodized Collodion as a first-class article, in fact it is the best manufactured Collodion we have tried."—SCHREIBER & SONS, No. 818 Arch Street, Philadelphia.

"The goods by Express came safe to hand. I have tried a part of them and am greatly pleased. Will likely want more goods in your line."—R. POOLE, Nashville, Tenn.

"Your Ground Glass Substitute is the best I have ever tried, and I have tried nearly every kind advertised, as the long row of nearly full bottles will testify. It works like a charm."—J. N. Webster, Barton, Vt.

"I take pleasure in recommending your Cottons and Collodions, before all others I have used. It is a blessing to know where you can get good Cotton."—B. W. KILBURN, Littleton, N. H.

"The last lot of Cotton you sent is the very best I have ever used. Please send me another pound at once."—ELBERT ANDERSON, Kurtz Gallery, New York.

"Have used some twenty-five pounds of your Collodion the past year with unvarying success."—G. W. HOPE, Middletown, New York.

"Your Double-Iodized Collodion is the most perfect working Collodion I have used in fifteen years. Every picture I make with it is a success."—R. L. Dale, Boston, Mass.

EEE FORTRAIT COLLODION

Has now become the standard Collodion in all first-class galleries. Although but a short time in the market it is rapidly superseding all other makes, and the quantity that has been sold is simply astonishing.

Give it but a single trial and you will be convinced. Can be used as soon as made, but improves with age, and will keep indefinitely.

Price, \$1.50 per pound.

A liberal discount to parties ordering by the gallon. READ ADVERTISEMENTS ON PRECEDING PAGES.

1776. -- PREPARE FOR THE CENTENNIAL. -- 1876.

PROMENADE PRIZE PICTURES.

JULY COMPETITION.

To enable all photographers to study these

GEMS OF ART,

We offer prints from the competing negatives, for sale at the prices below

They are the most exquisite things we ever offered, and will teach any one, be he a good or poor operator.

THE GOLD MEDAL

Was awarded for the best six negatives to Mr. Henry Rocher, Chicago, Ill., whose pictures are marvels of beautiful photography. The studies are all mounted in tasteful style, on Collins' Mounts, and printed at our own rooms by Mr. Chas. W. Hearn, and are fine studies in posing, lighting, printing, and toning.

THE SETS INCLUDE:

Nos.	1	to	7,						Studies b	y H. Rocher, Chicago.
44	8	to	16,						**	L. G. Bigelow, Detroit, Mich.
44	17	to	22,						• •	I. W. Taber, San Francisco, Cal.
44	23	to	27,						**	C. M. French, Youngstown, O.
"	28	to	31,					÷	**	Core & Frees, Tiffin, O.
44	32	to	37,						**	E. M. Collins, Oswego, N. Y.
46	38	to	42,						**	J. H. Folsom, Danbury, Conn.
+6	43	to	48,						44	E. H. Alley, Toledo, O.
See	e F	e v	iew	in	Α	12.01	nst.	n	umber Ph	iladelphia Photographer, page 242

The whole set of 48,	12 00
In two Photo. Covers,	13 50
Selections, per dozen,	4 00
" per two dozen,	7 00
The 21 of Messrs. Rocher, Bigelow, and Taber,	6 00
Book Covers and Binding,	75

Address all orders to

BENERMAN & WILSON, Publishers, 116 North Seventh Street, Philadelphia.

* *



ROSS' PORTRAIT VIEW LENSES.

We have now successfully introduced to the American Photographers the Ross Lens, and by our increased sales we know they are appreciated. At the convention held at Buffalo, July 15, many fine photographs were exhibited by photographers, and ourselves, made with the Ross Lens, which attracted great attention.

While Ross & Co. are the oldest manufacturers of Photographic Lenses in existence, they also keep up with the requirements of the fraternity, by constantly manufacturing new combinations and improving on those already in existence. They have lately perfected, and will soon furnish us stock of, a new series of Card Lenses, extra rapid, peculiarly adapted for babies, and people who will not be quiet. We will give notice of their arrival.

WE HAVE NOW IN STOCK

Portrait Lenses, from 1-4 to 15 x 18.
Cabinet Lenses, Nos. 1, 2, and 3.
Card Lenses, Nos. 1, 2, and 3.
Triplets, Nos. 1, 2, 3, 4, 5, 6, and 7.
Symmetricals.

Instantaneous Doublets, all sizes.
Medium Angle Doublets, all sizes.
Large Angle Doublets, all sizes.
Stereographic Lenses, all sizes.
New Universal Lens.

Numerous testimonials pronounce them to be the best, as well as the cheapest Foreign Lens ever offered to the American Photographer. We will mail price-list on application, and promptly fill all orders.

STEINHEIL'S SONS' NEW APLANATIC LENSES.

We now have a full stock of these Celebrated Lenses, at the following prices:

M	1,.,1-4	ciza	31	inch	focus	 \$25	00	No.	5	10-12	size	13 ֈ	inch	focus.	\$70	00
6.	9 1-2	66	5.4		**	 . 30	00		6,	13-16	• • •	104	44	"	110	00
66	3,4-4	"	7	"	"	 45	00		7,	18-22					200	00
"	48-1	0 "	101	. "	6.6	 60	00	66	8,	20-24	64				350	00

Nos. 1 & 2 are in matched pairs for Stereoscopic Work.

We feel sure that at least one of these lenses is needful for the successful prosecution of your business, and so solicit your orders.

WILSON, HOOD & CO., THE UNITED STATES, 822 Arch St., Philadelphia, Pa.

The only genuine brand of DRESDEN ALBU-MEN PAPER is the CROSS-SWORD BRAND, all others are superannuated. We keep a full assortment of Single and Extra Brilliant always on hand.

CHAS. F. USENER'S Celebrated PORTRAIT LENSES are unexcelled. Before purchasing be sure and try a Usener.

CHARLES COOPER & CO., Wholesale Agents,

Manufacturing Chemists and Importers,

191 Worth Street, New York.

The Universal



EMBOSSING PATENTED JANUARY 9th, 1872.

This Press will cameo all sizes, from cards to cabinets, and is sold lower than any other that will do the same work. It has been greatly improved and made very complete in all its parts.

We furnish a card, victoria, and cabinet size.

PRICE, \$20.00.

MANUFACTURED AND SOLD WHOLESALE AND RETAIL BY

WILSON, HOOD & CO., 822 Arch St., Philadelphia.

CAUTION.—Photographers are cautioned against buying other presses that may use an elastic embossing substance, as they are an infringement on the above.

R. J. Chute, Patentee.

G.

GENNER 7

38 Maiden Lane, New York,

IMPORTER OF THE CELEBRATED

S. & IVI. DRESDEN

ALBUMEN PAPERS

SINGLE OR EXTRA BRILLIANT.

This paper has been imported by me to the great satisfaction of Photographers for the last eight years, and has not been surpassed by the many different brands sprung up since.

Hyposulphite of Soda, Sulphate of Iron,

Solid German Glass Baths,
Saxe Evaporating Dishes,
French Filter Paper,
Porcelain Trays.

FERROTYPE PLATES.

I ALSO IMPORT EXTRA BRILLIANT

CROSS-SWORD PAPER,

Second Choice,

Which 1 offer as follows:—10 Ko Rives, pink or white, 1 rm. \$24; ½ rm. \$12.50; ¼ rm. \$6.75

SAMPLES CIVEN ON APPLICATION.

IMPROVED

PHOTOGRAPH COVERS.



The Outside Appearance.

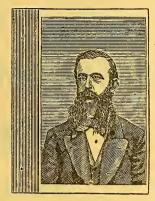


Fig. 2.

A Leaf Showing the Guard.

Frequent inquiries for something at a much lower price than an album, for the holding together and preservation of photographs, has induced us to manufacture an article which we think will meet the want.

IT SERVES ALL THE PURPOSES OF AN ALBUM, FOR

A Series or a Set of Portraits, A Series or a Set of Landscapes, A Series or a Set of Photographs of any kind,

MAY BE NEATLY AND CHEAPLY BOUND IN THESE COVERS.

They are made with expanding backs, so that from six to twenty-four pictures may be They are made with expanding backs, so that from six to twenty-four pictures may be inserted in one cover. The pictures are mounted in the usual way, and then strips of linen, or strong paper, of the proper width, are pasted on one edge, by which the picture is inserted and held in place in the cover by a paper fastener. Fig. 1 represents the cover, with the perforations in the back, through which the spreading clasps of the paper fastener bind the whole together. These are so easily inserted or removed, that pictures are readily put in or taken out at any time. Fig. 2 represents the picture, with the guard pasted on ready for insertion. The arrangement is simple, and we are sure will be readily comprehended. For binding together views of your town or city, or portraits of elebrities, they are very neat

The following is a list of sizes and prices, without eards:

For Photogra	ph.					Per dozen.				Per hundred.
Card Si	ze.					\$1.50				\$10.00
Cabinet										
EXTRA HEAVY	cov	ER	s.		٠,					
5-8 Size						4.50		,		33.00
4-4 66										
8-10 "						8.00				56.50
11-14 "						9.00				65.00

Larger or special sizes made to order. Furnished with eard board at best rates. Samples mailed at dozen price. Send for some.

BENERMAN & WILSON, Photo. Publishers, 116 North Seventh Street, Philadelphia.

JAMES F. MAGEE & CO.

MANUFACTURERS OF

PURE

PHOTOGRAPHIC CHEMICALS,

No. 108 North Fifth Street,

PHILADELPHIA.

Stock Dealers only Supplied.

PHOTOGRAPHIC PRINTING INSTITUTE.

PRINTING FOR THE TRADE.

Instructions Given in Artistic Printing.

SEND FOR NEW PRICE LIST.

IF All communications should be addressed to the proprietor, at the Institute,

24 Winfield Place, Philadelphia.

C. W. HEARN, Proprietor.

BENJ. FRENCH & CO.,

319 Washington St., Boston,

IMPORTERS AND SOLE AGENTS FOR THE CELEBRATED

Voigtlander & Son Darlot LEWSES,

NEW STEREOSCOPIC LENSES.

New Stereoscopic Tube and Lens, made expressly for us, marked with our name (imitation Dallmeyer), with rack and pinion, central stops, for portraits or views. Will work in or out of doors. Also, for instantaneous pictures. Four inch focus, **price per pair**, **\$21.00**. By taking out back lens, and using only front lens in place of back, you get six inch focus. The great and increasing demand for all these lenses, is sure guarantee that they are the best. Read the following

Testimonials.

"I have tried the Mammoth Voigtlander you sent me, and I consider it the best large instrument I have ever seen, and I have tried those made by other makers, Dallmeyer's included, and they do not compare with the Voigtlander. All my baby pictures were made with half-size Voigtlander lenses."—J. LANDY, 208 W. Fourth St., Cincinnati, Feb. 25, 1874.

"The Voigtlander lenses have always been favorites with me. My first experience, in the days of daguerrectype, was with one, since which I have owned and tried many of the different sizes and never saw one but was an excellent instrument. Lately again trying some for my own use and for a friend, I found them to be superior to other eminent makers, particularly in the large sizes."—W. J. Baker, Buffalo, N. Y.

"Twenty-four years ago I bought and commenced using my first Voigtlander lens. It was a good one. Since then I have owned and used a good many of the same brand, of various sizes. They were all and always good. Some of the larger sizes that I have recently bought seem to me better than any I have ever had or seen before."—J. F. Ryder, Cleveland, Ohio, Dec. 18, 1872.

"About a year ago I bought a Voigtlander & Son No. 34-4 size lens. Said instrument gives me great satisfaction, being very quick, at the same time has great depth of focus."—E. G. MAINE, Columbus, Miss.

"Have never seen anything equal to the Voigtlander & Son Lens. The No. 5, Ex. 4-4 is the best instrument I ever used. I cannot keep house without it."—D. B. VICKERY, *Haver-hill, Mass.*

"The pair of imitation Dallmeyer Stereoscopic Lenses you sent we are very much pleased with; they work finely."—Goodridge Bros., East Saginaw, Mich.

"After a trial of your imitation Dallmeyer in the field with those of the Dallmeyer Rapid Rectilinear, side by side, I can say that for general views I like yours as well, for some objects far better, on account of their short focal length."—D. H. Cross, Mosher's Gal., Chicago.

New Catalogue of Prices Just Issued, to be had on Application.

WILSON'S

Lantern Journeys

By EDWARD L. WILSON,

Editor of the "Philadelphia Photographer."

This work will be found entertaining by all who like to read about the beautiful places and things of this world.

The contents are divided into six "Journeys," each one including a visit to 100 places, making 600 in all, as follows:

- JOURNEY A-Havre, Paris, Versailles, Rouen, Fontainebleau, and Switzerland.
- JOURNEY B—Compiegne, Brussels, Aix la Chapelle, Cologne, Up and Down the Rhine, Potsdam, Berlin, Dresden, Vienna, the Vienna Exposition, the Semmering Pass, Saxony, Munich, and Southwest Germany.
- JOURNEY C—Italy—Lake Maggiore and Como, Milan, Verona, Venice, Florence, Pisa, Rome, Naples, Pompeii, the Ascent of Vesuvius, Puteoli, and the Italian Art Galleries.
- JOURNEY D-Holland, Denmark, Norway, Sweden, Russia, and Spain.
- JOURNEY E-Egypt, Palestine, Syria, Turkey, Greece, and India.
- JOURNEY F-England, Scotland, and the United States of America.

It has been carefully prepared, and will be found amusing, very entertaining and instructive.

It contains 218 pages, Cloth bound, Gilt. Price, \$2.

BENERMAN & WILSON,

Photo. Publishers, Philadelphia, Penna.





PHOTOGRAPHIC HALLY, INTERNATIONAL EXHIBITION, 1876.

Philadelphia Photographer.

Vol. XIII.

OCTOBER, 1876.

No. 154.

Entered according to Act of Congress, in the year 1876,
BY BENERMAN & WILSON,
In the office of the Librarian of Congress, at Washington, D. C.



MOSAICS FOR 1877.

WE are now soliciting contributions to our popular annual, and hereby extend an invitation to any, or all who may not have been otherwise invited, to contribute a short article. There are few who may not find something in their practice or experience that will be useful to others; and we know there are many who esteem it a privilege to communicate whatever they think may be for the general good. This is the way improvement is carried forward, and we know that Mosaics has been the medium through which a great deal of this intercommunication has found expression.

We desire that the experiences of our Centennial year shall make *Mosaics* richer and better than ever before. An early response to this invitation will be acceptable.

A cloth-bound copy will be sent to each contributor whose article is accepted.

We would here request each and every contributor to be careful to sign his name to his communication. We had articles last year without the names of the authors, and were obliged to publish them so. If the authors of those articles thought strangely that their names were omitted and no copy of *Mosaics* sent them, this is the explanation, and we respectfully ask them to try again.

GLASS AND ACTINISM.

WE have many inquiries as to the best kind of glass for the studio, or which colored glass is best for the dark-room. There is little doubt that photographers have labored under a great deal of difficulty, and been perplexed beyond measure from a want of knowledge on these subjects. In some cases skylights that worked well when first constructed come to work very slow after a year or two, and the quality of the photographer's work has consequently depreciated. This was sought to be remedied by substituting blue glass for the colorless; but this was soon proved to be worse than the other. But since Mr. Thomas Gaffield, of Boston, took up the subject several years ago, there has been a better understanding on the subject of glass for skylights, and he has been our authority in answering all questions of this kind. But there is still a great deal to learn, and we are glad that Mr. Gaffield has again taken up his pen to give us the results of his scientific researches and valuable experience in this direction.

His exhaustive and interesting paper which will be found on the pages of our current issue, and which is illustrated by the careful and thorough tests exhibited in Photographic Hall, will be found to controvert some of the notions in reference to the power of various colored glasses to exclude the

chemical rays. It has generally been supposed that yellow or orange transmitted the least actinism, and these colors have been used very generally for the windows of dark rooms. But they have not been found satisfactory; plates were fogged, and it was proved that light from the window produced it. Then yellow paper was put up; still it was suspected. Then the window was barricaded with thick brown paper, and a gas jet or lamp had to be resorted to, so that the dark-room became literally what its name implies, and it might as well have been without any window as far as the light received from it was concerned. But Mr. Gaffield's experiments show that yellow is the fourth and orange the third on the list of single colored glasses, while even yellow and orange together are No. 14 on the table which shows the order in which double colored glasses transmit the chemical or actinic rays. Even red and blue, red and violet, green and violet, and green and blue, are more impermeable than yellow and orange. Red is the least actinic of all the single colors, while red and green offer the greatest resistance of any two colors combined. With this table before us do we wonder that dark-rooms lighted with a single yellow or orange glass fogged the plates? We believe the table referred to will be found perfectly reliable, as it is the result of a great variety of experiments by Mr. Gaffield, and photographers certainly owe him a debt of gratitude for giving them thus freely this valuable information.

He promises to pursue his researches still further, and to communicate whatever of interest he may discover. We have no doubt that one so thoroughly conversant with the subject as he, and so deeply interested in its application to photography, will find new fields for research, and develop facts that may have an important bearing upon the future of our art.

We hope that at some future time he will elucidate still further the question of glass for skylights. What photographers want to know in this direction is which is the best kind or quality of glass for this purpose; not considering plate glass, of course, because that is too expensive; but of the ordinary glasses, sheet, crystal, crown, etc.,

which is the best to begin with, and which will remain unchanged by time and the action of sunlight upon it?

We notice in Mr. Gaffield's exhibit in Photographic Hall, that American Crystal Glass prints about the same depth, in the same time, as French Plate. This would seem to indicate it as desirable for the studio.

We commend Mr. Gaffield's paper to all who are interested in the subject of Glass for the Studio and Dark-room, believing a perusal of it will help to a better understanding on these important questions.

PHOTOGRAPHIC HALL.

RÉSUMÉ.

HAVING reviewed from month to month since the opening the exhibition in Photographic Hall, we now come to a brief summing up to see where and what progress has been made.

In portraiture, character pictures, and genré groups the highest attainments in art photography are to be looked for; and here we find that real progress, of the most gratifying and substantial character, has been made.

There is but little to note in the chemical or manipulatory departments of the work other than that excellence has become more general, and many show proficiency here who are deficient in the higher technical features of the work.

The progress that is marked by this exhibition over those of former years is of that kind which combines true art with photography. The real æsthetic elements which give value to all works of art are to be found here appealing to the sympathies, the love, the patriotism, or ambition of the beholder. The purpose of this element, which seems an advance step in photography, is not merely to reproduce an effigy that sits bolt upright, without any appearance of motive or ability to act, but to endow every subject with life and action, in which is expressed some sentiment, some impulse which is peculiar to our common humanity, and which finds a response in every heart.

In this direction our American photogra-

phers have made rapid advances, as may be witnessed by an inspection of their department. Five years ago European artists led in this respect to such an extent as to astonish us of the western world with the magnificence of their productions. From these America received a new impulse, and while she has advanced Europe has stood still, till to-day there is probably a larger proportion of the higher order of photographic art in the American department of Photographic Hall than was ever seen before in any exhibition. The magnitude as well as the beauty of the work in this department commands the attention of visitors, and demonstrates that in the direction of what is grand and imposing, as well as artistic, American photographers require no one to lead. There is some beautiful work in the foreign department-some that is not excelled by any in the exhibition, but it consists mostly of small pictures, which do not display any marked degree of progress over the results of former exhibitions. Austria, Germany, and Russia take the lead, and are quite evenly balanced in point of merit, though we think that in the direction of true æsthetic attainments Russia holds a rather higher position than either of the others. As in this exhibition nearly all France is Paris, we find Paris progressive. She is engaged in Chromotypie, Lambertypic, Collotypie, etc., etc., to such an extent that we hardly can draw any comparison between her and Berlin, Vienna, or St. Petersburg.

Permanent photography is attracting a great deal of attention in Europe, and much of the portrait work there is being done in carbon, as, for instance, Mons. Liebert, of Paris, prints all his portraits, both direct and enlargements, in carbon, but notwithstanding the execution of this work indicates the master hand in every department, it does not compare in beauty of results with the best silver prints. Even the enlargements by this house do not impress one as do the magnificent reproductions in carbon by Messrs. Allen & Rowell, of Boston.

In mechanical printing also we find a superiority in favor of American work, as may be witnessed by an examination of the exhibit of Mr. J. Albert, of Munich, screen 25 W, and then that of Mr. Edward Bierstadt, of New York, in Alcove No. 1, by the same process. Mechanical printing in a great variety of processes now claims the attention of many workers, both in Europe and this country, and for cheap and rapid production promises to supply in the future the most important demands for commercial photography. In this direction we shall look for great advances at no distant day.

In landscape photography there is much to interest those who love to woo nature in the field, and the American department has a fine display. The large work from direct negatives is mainly of a high order, though in some of the technical points there seems to have been more care exercised by European artists. But in stereo work America has shown a profusion that possesses, to a large extent, the merit of excellent work, while the other side of the house has very little. Great Britain has sent a few fine examples of portraiture, but she has excelled in her landscapes. The productions of G. W. Wilson, Payne Jennings, and Vernon Heath are subjects for profitable study. The latter especially are remarkable as indicating progress in a direction that has scarcely been anticipated. Such beautiful carbon enlargements of landscapes as these open up a wonderful field for the outdoor photographer, who is enabled to operate with small plates in localities difficult of access, and reproduce from these, at home, most excellent pictures of any size his orders or fancy may dietate.

In lighting there has been in portraiture a considerable modification of the styles which prevailed four or five years ago. The strong shadows, against which the public protested and upon which photographers insisted, have given way among the better class of photographers, thus acknowledging that the public were right, and instead we find delicate shadows, perfect modelling, and pictures which are full of life and beauty, and which please all who see them. . Strong shadows produce an expression of severity on a face which might otherwise appear placid and serene, while the more tender shades give life and vivacity wherever it exists, thereby combining truth with

beauty. This seems to be the present progressive tendency of photography, and those who are still resisting the demand for *more light* will soon yield to better convictions, and this improvement in our art will become general.

In the lighting of landscapes also there is evidence of a more judicious use of sunlight, the time of day having been chosen in which the best possible effect would be produced. In the work of some artists this is most admirably illustrated, and the lessons their pictures teach to the careful student cannot but be of great value to all who are aiming for improvement.

In photographic apparatus and appliances there are no very marked improvements, but a strong tendency to combine elegance with utility. In apparatus the leading exhibitor is the Scovill Manufacturing Company, New York, whose beautiful work attests the truth of what we have said.

In backgrounds and accessories Mr. L. W. Seavey has the field almost entirely to himself, and he has led American photographers especially to a better appreciation of what is becoming and artistic. His excellent paper with illustrations, which we print with the N. P. A. report in the present issue of this magazine, will be found highly instructive in this direction.

Thus the good work goes on; and while there have been no very striking discoveries or improvements in photography developed by our Centennial Exhibition, there are many evidences of our art having attained a higher position than ever before. This grand Exhibition will, we believe, be productive of much good, and the fruits of it will be seen in future exhibitions wherever they may be held.

Scattered Photography in the Great Exhibition.

MAIN BUILDING.

In the northwest corner of the Main Building, in the Italian Section, are some mammoth photographs, about 2 x 3 feet, by Carlo Naya, of Venice. They are all scenes in Venice, and are remarkably well executed for work so large. Several 8 x 10 portraits illustrate the costumes of the Italian peas-

antry. Enrico Vergaschi, Rome, exhibits two immense photographs about 2 x 5 feet each. One is a view of the Roman Forum, and the other of that grand old ruin, the Coliseum. In this department also is a frame of card and cabinet portraits by Andrea Vidan, Ancona.

In the Norwegian Department, near the north side, is a collection of rather curious photographs, showing the costumes of the people. They are made more effective by being colored. As specimens of photography they are very ordinary.

The Swedish Department has a large collection of views in Spitzbergen. Many of these are genuine Arctic scenes. The name of the photographer is not given.

In the Queensland, Australian Department, there are a great number of 18 x 22 photographs of native scenery, all colored. The photography has been covered in many cases by the artist's brush, but enough is shown to indicate that the work was well executed. The photographer's name is not given. There are also several life size solars of the ugly-looking natives. In the Tasmanian Section are a number of native portraits, some of them being the last survivors of the aboriginal race; also landscape views. As photographers, we notice the names of M. Gibson, Jr., and Hugh M. Hull.

The New Zealand Section has quite a collection of landscapes from that country. Some of the Australian photographs have been already noticed, but we find others that have not before come under our inspection. The artists thus represented are C. Nettleton and Patterson Bros., Melbourne, D. McDonald, St. Kilda, and a number of others whose names are not attached to the work. In the Bermuda Section are a number of 8 x 10 views of scenery about the island, by J. B. Heyl, Hamilton.

In the Canadian Department some very good architectural views in London, Ont., by J. Egan. Architectural views also in Toronto, well executed, but without name of artist. Views in Montreal and on the river by S. McLaughlin. In a number of folding frames is a collection of large photographs of school and college buildings, illustrating the educational department of

Ontario. In the same section are a number of well-executed photographs of the Albert Memorial, London, Eng., by A. & G. Taylor.

A number of views in British Columbia illustrate the natives of the country, their habits, and style of living.

In the department of India is a large collection of Bourne's wonderful views of the old temples and other scenery in that country.

In the Great Britain Department we find a frame of lantern transparencies by Negretti & Zambra, London. These are albumen prints, plain and colored, and appear very fine. In the same section is the magic lantern exhibit of Thomas J. Middleton, London. He also has some fine transparencies, plain and colored.

The next that claims our attention is in the French section, where we find the exhibit of Darlot, of Paris, consisting in part of his celebrated photographic lenses. A mammoth view of the new opera house indicates their capacity and execution. We find also in this department a fine collection of photographic lenses by Derogy, of Paris. He exhibits also portrait and solar cameras.

In the Swiss Department we find all the photography from that country that has been sent to the Exhibition. A collection of magnificent views, by Emil Nicola Karlen, Berne, bound in book form, are worth a careful study. These have been presented by Mr. Nicola to the Pennsylvania Museum and School of Industrial Art. J. Ganz, Zurich, has in a case two large albums, one with colored portraits, and the other plain landscapes, all fine work. Mr. Ganz has also some 10 x 12 portraits, which are excellent in every respect. They would have been a credit to Photographic Hall.

Jean Gut & Co., Zurich, exhibit portraits in card, cabinet, and life size. C. Zachu, also of Zurich, has a similar exhibit. Two fine carbon prints of Alpine scenery by Braun, of Dornach, are on the same space. J. Linck, Winterthur, has some beautiful cabinet and 8 x 10 portraits that prove him to be a first class artist. We regret that such work should be mixed up in an obscure corner with "Kirschwasser," table sauce, and condensed milk.

In the Brazilian Department is a large collection of fine landscapes by Marc Fenez, photographed for the Imperial Geological Commission of Brazil. Henschel & Benque, Rio Janeiro, have also a number of well-executed views.

In the Netherlands, illustrating the department of public works, are photographs by A. L. Preuninger, Plissingen, and P. Oosterhuis, Amsterdam, and Deutmann, Zwolle.

The Mexican Department has a few photographs by Miguel Rul, illustrating agriculture and sports. There are also a number of landscapes without name of photographer. A couple of large portraits by Miss Vicenta Salazar, City of Mexico, are quite creditable; one especially is very well executed.

In our journey through the Main Building we cannot pass without a word in reference to the Massachusetts Educational Department in the east gallery of the Main Building. Here is illustrated the work that is being done by the Old Bay State in the way of diffusing a knowledge of the principles of art among all classes of her people. This good work is commenced in the public schools, and earried on through all the branches of technical education till in the State Normal School of Art and the Institute of Technology, the student is fitted to teach in turn. We trust it will not be long before other States will follow the example of Massachusetts in what she is doing for art education. Some fine photographs may also be found in this department, among which is a series illustrating the Hoosac Tunnel region, by H. D. Ward, and Hurd & Smith, North Adams.

In the American Department we find an exhibit which bears so close a relation to photography that we must mention it. It is the splendid display of scientific apparatus by George Wale & Co., Hoboken, N. J., which includes Prof. Henry Morton's magnificent college lantern with all its attachments, which is the admiration of all who see it. For those interested in the lantern this exhibit possesses a great deal of interest.

In the exhibits of iron bridges we find some fine photographs by T. F. Crane & Co.,

and F. L. Huff, Newark, N. J., and Whitney & Beckwith, Norwalk, Conn.

In the German Department are a number of samples of mechanical printing by Ræmmler & Jonas, Dresden, "printed by fly presses."

In this department also are the celebrated Voigtlander lenses, which are too well known to require any description. B. French & Co., Boston, are the agents.

The Austrian section has a large number of fine architectural views by Dr. Heid, of Vienna.

In the Portugal Department we find all there is of photography from that country in the Exhibition. Carlos Relevas, Amador, exhibits some excellent work in portraits, landscapes, and architecture. His portraits have the merit of being of beautiful finish with but very little retouching. Some good prints by the phototypie process are exhibited here also. Camacho's views of Madeira are gems of artistic beauty. They will repay a careful examination. His portraits are also excellent. Souza Fernandes, Porto, has eards and 8 x 10's, showing very fair work. F. Rocchini, Lisbon, exhibits architectural and interior views all of which indicate the work of an accomplished artist. They are excellent in every respect. Henrique Nunes has a frame of finely colored porcelains which are quite pretty. Emilo Biel and F. Burett, Oporto, exhibit a number of fine portraits in cards, eabinets, and 10 x 12's, which are in the highest degree Antonio Correa da Fonseca. creditable. Oporto, has a large frame of various sizes of portraits and groups; some of his efforts are quite successful, but many of the specimens are badly lighted. He is evidently afflicted with a high top-light. But altogether we are surprised and delighted with the excellence of the photographs from Portugal. We think there is hardly any country or state that has sent so large a proportion of good work.

In the Egyptian section the photographs by O. Schoefft, both portraits and views, are admirably executed. Of the same order of excellence are also a series of views of the city of Cairo by A. Beato, and of equal merit are a number of views of the Egyptian ruins by the same artist. E. Edwards,

Cairo, exhibits photographs of monuments, statues, and hieroglyphics.

Photography in the Argentine Republic is represented in a large number of views bound in book form, by Antonio Pozzo, Buenos Ayres; Luchmann, B. Rocca, and Inglesa, Cordova; Feria Agricola, Buenos Ayres; and Correntina, Corrientes. Some of these are very good, while others are inferior. But these, we presume, like many of the other examples in the various departments, are intended to illustrate the character of the country rather than the progress of the photographic art; so we must be charitable.

PHOTOGRAPHIC HALL.

Under the head of Scattered Photography we come back again to Photographic Hall, where we find an addition made since our last review. This is the exhibit of W. R. Howell, of 867 Broadway, New York. Mr. Howell gives us some exquisite examples of photography, and shows a masterly skill in handling his subjects, but some of the efforts at displaying feminine muscle seem to overdo the mark. The arrangement and grouping of his pictures in the elegant frame, together with the dark velvet ground on which they are placed, gives a splendid effect. The life-size portrait in pastel, which forms the centre piece in the tableaux, is a charming production. The whole is very creditable, and we regret that it had not been sooner in order.

GOVERNMENT BUILDING.

In the Government Building we find several albums of views, illustrating the Red River Raft, and Improvements in Galveston Harbor, by R. B. Talfor; three large albums, The Geological Surveys on the 40th and 100th Parallel, photographs by T. H. O'Sullivan and William Bell; some fine large views of marble quarries and other scenery in Vermont, by Bell & Rau, Philadelphia; United States Geological Survey views by Hillers. Some of these, from direct negatives, are fine work, but there are a number of enlargements representing Indians that are very ordinary. But the grandest examples of Government photography are on the north side of the

building, and consist of a large number of transparencies by William H. Jackson, of Washington. Mr. Jackson has displayed no less skill in the production of these immense plates containing the positives than he did in that of the splendid negatives from which they were made. Some of these plates are at least 28 x 36 inches, and yet as perfect in every detail as one of stereo size. An examination of these pictures will convey an idea of the magnificent scenery there is in our own country. In another part of the building Indian education is illustrated by a large collection of photographs, which will be found interesting to examine.

ART GALLERY.

In room Y, American Department, are several fine crayons by Kurtz, similar in style to those in his exhibit in Photographic Hall.

ART GALLERY ANNEX.

G. De Jong, Groningen, Netherlands, three photographs; F. J. von Kolkow, Groningen, microscopic pigment transparencies for the lantern; C. W. Bauer, Middleburg, full-length portraits, colored; H. W. Wollrabe, the Hague, portraits, land-scapes, and interiors.

With a frame of excellent photograph portraits in the Norwegian Department, by L. Szacinski, Christiana, which hang too high to be favorably seen, we conclude our search for photography, believing we have noticed everything intended for exhibition, and some that were not.

If we find any that have been overlooked we will refer to them in our next.

LECTURE ON LENSES.

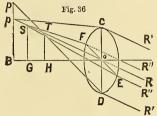
BY JOSEPH ZENTMAYER.

(Concluded from page 269.)

WE come now to the last of the more important aberrations, that is the astigmation, a word coming from the Greek, meaning, not coming to one point. If we focus a well-defined round object, situated in the axis of a lens of a wide aperture, on a screen, we find the image round, even if we move the screen in and out of the focus, the image will get only less sharp; but if

we turn the lens sideways, so as to get the image of the same object formed by pencils oblique to the axis, then we will observe that it is no longer possible to form a sharp image of the object, and by moving the screen in and out of the focus the image appears elongated, horizontally or vertically.

Now let us see whether it can be made clear, in the following figure (36). CD is



a convex lens, of which A B is the axis. The lens is represented in perspective, as we have to show two planes, in different directions. The radiating point R is situated at infinity, and outside of the principal axis. We will lay a plane through the axis A B and the point R, which will cut the lens in its diameter CD. Let us lay another plane through the point R, at a right angle to the former, and which will cut the lens in its diameter E F. If we draw the line R p through the optical centre of the lens, a ray following it would not be refracted, as we have seen before, and constitutes a secondary axis. R p is the line where the two planes cut each other, and consequently belongs to both planes. Let us draw the two extreme rays, R' C and R' D, of the diameter C D, which, after refraction are T and p', as we learned by analyzing spherical aberration. If we now look to the other plane, the rays $R^{\prime\prime}$ F and R'' E are symmetrical to the axis, and are exactly equally refracted, meeting at the point S. If the lens is now diaphragmed down, so as to improve the aberration of the plane CD, we find that we have for one lens two distinct foci. If we focus, for instance, a brick wall, we will have the horizontal white mortar lines in focus, while the vertical ones are out of focus, and vice versa. By looking to the figure you can easily see that that universal doctor in optics, the diaphragm, will also cure

astigmation, at least will bring it to a minimum. Fig. 35 will suggest a way by which astigmation may be destroyed almost completely. The diaphragm D divides the lens L into an infinite number of lenses, of which each acts on a different radiating point, and the pencils in or out of the axis strike the lenses almost normal, hence such a combination is not only nearly free of distortion, but of astigmation also.

Many of you are aware that in nearly all human eyes there exists an aberration, also called astigmation. Although in its effect similar to the astigmation of lenses, just mentioned, it is of a different character. Nature intends that the curves of the cornea and crystalline lens of the human eye should be spherical; but the exceptions seem to be the rule. The curves of the cornea and crystalline lens of the eye are in nearly all cases more or less elliptical, egg-shaped, and consequently have in one meridian a longer focus than in the other. If such an eye brings the image of a line parallel to one meridian to a focus at the retina, the images of lines parallel to all the other meridians do not collect at the retina, especially the one at right angles to the former, and a distorted, blurred image is the result. The advancement of science has lately enabled our oculists to correct this evil by spectacles, of which the glasses are parts of cylinders instead of spheres.

Now, knowing all the defects of lenses, and the different modes of correcting the same, let us look back to that primitive instrument-the pinhole camera. pinhole camera is free from all the errors, as spherical and chromatic aberrations, distortion, curvature of field, astigmation, and the only objection against it is the extremely small aperture. What an amount of speculation and hard labor of the most eminent men were necessary to furnish a substitute, equally free from errors, having a larger aperture, giving a brighter image. And, even now, none of the aberrations can be completely corrected, and the best that can be done, and that for a limited aperture only, is to reduce the errors so far as to diminish their extension, so as to make them appear to our eye at a smaller angle than the eye is able to distinguish. In lenses

used as objectives, where the image is magnified by high eye-pieces, even that is extremely difficult, as the errors are also magnified. Our most celebrated opticians, such as Fraunhofer, never attempted to give a telescope objective a larger aperture than the focus divided by ten, except in very small pocket telescopes. And his larger telescope, the one he made for the Dorpat Observatory, and which he considered his best objective, has a focus of 160 inches, while the aperture is only 108 lines, that is 17th of the focal length, and its highest magnification is 720 times. The larger telescopes of Dollond are nearly twice as long. The same artist, Fraunhofer, took precaution to warn young opticians and amateurs not to listen to the very natural desire to try their skill on larger apertures, and giving higher magnification, if they do not wish to be disappointed, and lose time and money. But the school of experience seems to be the only one to cure this desire.

But here I feel bound to mention that, a few years ago, Mr. Steinheil, of Munich, read a paper before the Academy of Sciences of that city, on an improved telescope objective. It is composed of four lenses—one positive crown-glass lens, combined with a compound negative lens, which itself is a triplet of two flint and one crown glass lenses. By this formula a 4-inch telescope is only two feet long, while in the ordinary way it is twice as long.

While I am speaking about wide apertures, I cannot pass without mentioning a

very serious obstacle connected with large apertures; it might be called the parallactic error. I was frequently asked why a large photographic objective does not give the same sharp image that a



small one does. It is somewhat more difficult to correct a large objective than a small one, even if the aperture stands in the same relation to the focal length. But it is not only this. Suppose we have a large photographic objective, say of six inches aperture, L (Fig. 37). Each part of the lens receives radiating rays from each point of the ob-

ject, and brings them to a focus at the respective place. Now, if we cover the lens by pasting paper over it, leaving only the aperture A free, we, still get an image, only more feeble in light. Again, cover the aperture A, and open the aperture B, you get an image of the same object; but the apertures A and B are say four inches apart. Both cannot give precisely the same image, as they are taken from another base. The images will be similar to the two images of a stereograph, which are taken in a similar way by two lenses. Now open both apertures, A and B, and, as the images are not equal, they cannot cover each other, but will overlap, especially the images of the nearer objects. If we now use the whole aperture of six inches diameter, it is clear that we will have an infinite number of images none equal to the other, every one overlapping the other, and the image necessarily must be a blurred one. For this there is no remedy but cutting down the aperture.

Ladies and gentlemen, we have now a reasonable knowledge of what a lens is, and I would like to go over to the more interesting part of optics—to the combinations of lenses—such as the telescope, the microscope, and camera, which not only have given us so much pleasure, but have enlarged our knowledge so wonderfully; but this would require more time than we have on hand to-night, and I will not tax your patience any longer, but thank you for the attention you paid to the rather wearisome subject, and for the interest with which you followed the lecture during the evening.

Glass for the Studio and Dark-room.

BY THOMAS GAFFIELD.

An experience of a few years as a manufacturer, and of many years as a dealer in glass, has brought me into frequent and pleasant relations with the photographic fraternity, and led me to make several series of experiments, which have proved of some interest to its members.

The first, commenced in 1863, and pursued to the present time, concerned the action of

sunlight in changing the color or shade of many kinds of colorless and colored glass. These experiments were kindly noticed in the photographic journals in 1867 and 1872, and are alluded to now only to show their connection with the second series, commenced in 1867, which concerned the action of sunlight on sensitive paper under differently colored glasses. I have exhibited some of the prints showing the results obtained to photographic friends in Boston. and to the societies in New York and Philadelphia, and brief notices appeared in the journals in 1868. But never having written a full and connected article on the matter, at the request of my friend, Mr. Wilson, I will make an humble effort to do so, hoping that it will not be without some interest or value to the fraternity. With the same view, I have also placed some of my illustrative prints in the Photographic Hall at the Centennial Exhibition.

Perhaps I cannot better commence my essay than by quoting the following passages from an article on my first series of experiments, which appeared in the *American Journal of Science* in 1867:

"I have been pleased to find the interest in these experiments by photographers, who have long noticed that they could take better pictures under a newly glazed skylight than under one which has long been exposed to sunlight. The cause of this change is, that the slightest yellow color interferes with the transmission of the actinic rays, and a very deep shade will cut them off in a very great degree. My experiments with glasses under other glasses proved which was the best for photographers' use, information which all can gain by exposure of the specimens of various manufacturers which may be offered them. The most pure glasses of light green or bluish-white color are the best for photographers; and when I say pure glasses, I mean those most free from oxide of iron or manganese, but especially of the latter, which, I think, is the cause of nearly all the changes which I have observed.

"Mr. J. W. Osborne, of New York, the gentleman who has done so much to bring the art of photo-lithography to perfection and into practical use, writes as follows:

"I believe your researches will prove of much practical importance, and I wish the glass manufacturers could be got to give serious attention to the subject. It takes but a very slight tinge of yellow to cut off twenty-five per cent. of the actinic rays. I am forced to work under glass, because of the protection from the wind and weather, but, in doing so, I sacrifice in any ease much of the light. I have to increase the time of exposure proportionately. With the best of glass, the loss from reflection and absorption is considerable. This may be fearfully increased by the color, and if that undergoes a continual change for the worse, the state of things is exceedingly unpleasant. I was warned by a photographic friend in England to take care of a certain kind of cheap French glass made for glass-rooms, which turned yellow, but I had no notion that the evil was so general as you appear to have found it. The subject is of such vital importance to photographers that I intend drawing the attention of that friend to what you have done."

I had frequently heard that yellow glass eut off more of the chemical ravs of sunlight than any other color. I was therefore desirous to test the accuracy of this statement, and also to know the comparative power of all the colors in this respect, for the practical purpose of ascertaining how far the changes of color in colorless glass by sunlight exposure, alluded to by Mr. Osborne, were injurious to its power of transmitting these chemical rays, so necessary in some operations of the photographer's studio. I accordingly procured some glass of the red, orange, yellow, green, blue, indigo, and violet colors, cut them into the uniform and convenient size of 4 x 2 inches, and placed them in this order in a large pressure-frame upon a sheet of plate glass. I had one row of pot-metal, the name given when the colors permeate the whole body of the glass, the glassblower gathering all his material from the pot of colored metal. (Metal is the technical name given by manufacturers to glass in the molten state.)

I had another row under the first of flashed and stained glass, in which the colors are upon the surface only.

Flashed glass is made by the glassblower,

who, dipping his pipe first into the pot of colored metal, gathers a small quantity and covers it with a much larger amount, gathered from a pot of colorless glass, and then blows a cylinder, which is afterwards cut open and flattened out, thus producing a sheet which shows, when looked at through its edges, a colorless body with a skin or very thin surface of color. The flashed colors are ruby red, green, blue, and violet. The stained colors are red, orange, and yellow, and are made by the glass-stainer, who takes the ordinary colorless glass, and, by brushing or floating on its surface, with spirits of turpentine or water, an oxide of silver, burns in the color in the muffle of the staining kiln, the color varying with the amount of oxide used from a light lemon to a dark red. This red stained is not so beautiful as the red flashed, made with oxide of copper, and generally called ruby. There is no sheet glass made of red pot-metal, as it would be almost entirely opaque, like the so-called black glass formerly used for ambrotype purposes. In order to have a complete set of specimens, however, a piece of red or ruby pot-metal was made for me at a flint-glass factory in my neighborhood. To produce a print which should tell its own story, I surrounded the two rows of glass with strips of brass, the upper one containing a description of the print ent out in small letters by a skilful stencil-cutter. The names of the various glasses were cut out of small pieces of brass in the same way, and affixed to them with Canada balsam, portions of the surface under the stencils being ground off and polished by the glasscutter from the flashed and stained pieces, and, in order to let the light through the pot-metal specimens, a portion of the body itself being cut out.

To obtain for comparative purposes in the finished print a specimen of the original light color of the sensitive paper and of the dark shade produced by full exposure to sunlight, I placed a protecting piece of brass, 4×2 inches in size, at one end of the upper row, and allowed the same space in the lower row to be uncovered. I then placed a sheet of sensitive paper upon the glass, put on the necessary pad, to make the pressure equal, closed up the back of the pressure

sure-frame, and exposed the whole perpendicularly to the direct rays of sunlight at the studio of a photographic friend, who fixed and toned my prints. I made a series of prints, showing the interesting effects of exposure for one, two, three, six, twelve, and thirty minutes, and for one, two, and four hours. The results showed a decided mistake in the common idea concerning yellow glass, under which a shading of the paper is seen in the finished print after the very short exposure of one minute. Instead of being first, it was fourth on the list in its power of cutting off the chemical rays.

The red cut off the greatest amount, showing no effect of shading in the finished print until after an exposure of thirty minutes. Then followed the orange, green, yellow, violet, and blue, in the order hamed.

From these early and some later experiments with glasses colored on the surface, and others colored throughout the body, my opinion is that a flashed or stained specimen of any color will generally cut off as much chemical influence as a piece of pot-metal of the same color and shade. Indeed, I have some pieces which will cut off more, and probably for the following reason: In the pot-metal, the coloring material being diffused throughout the whole body, furnishes not so strong a resistance to the passage of the chemical rays as the thin but very compact colored layer which composes the surface of the flashed and stained specimens. Therefore, in making an experiment, or in procuring glass for the darkroom, it will matter little whether we use the one or the other, provided we obtain specimens of a shade dark enough to accomplish the object desired.

By the substitution of some pieces of colorless plate, crown, and sheet glass in the lower row of my first print, and an exposure to sunlight of two or three minutes, I obtained an interesting print, illustrating the comparative power of colorless and colored glasses to transmit the chemical rays.

I think I have heard or read of photographers who have placed blue glass in their studios, with the idea that they should thus obtain more of the chemical rays than by using colorless glass. This second print

proved that all colorless glass, even the whitest and clearest plate, will cut off a certain, although small proportion of the chemical rays; while the darkest and poorest colorless glass will transmit more than the blue, the best or most actinic of the colored glasses. Colorless glass transmits easily and almost completely all the light, heat; and chemical rays of sunlight; a small percentage only being absorbed or reflected, while the blue cuts off a large amount of light and heat, and a very sensible proportion of the chemical rays.

I produced a third print with colorless and ground-glass, by an exposure of one or two minutes, showing the effects of the grinding of one or both surfaces in cutting off the chemical rays. I cannot speak in mathematical terms of the proportion thus cut off, but the much lighter shading of the sensitive paper under the ground pieces showed quite a loss of actinic power, which was sensibly increased when both surfaces were ground.

I made another print with various specimens of colorless plate, crown, and sheet-glass, showing different colors when observed through the edges of the 4 x 2 inch pieces. An exposure of a minute, or half a minute, is sufficient to show the comparative transmissive power of these glasses. The white French plate passed the most, and some dark-green and bluish-green sheet-glass the least chemical influence.

I made another print showing the effect of colorless glass of different thicknesses, and of several intervening surfaces in cutting off the chemical rays. In the upper row I placed glasses one-quarter, one-half, three-quarters, and one inch in thickness, and immediately beneath them, of the same kind of glass, one, two, three, and four pieces respectively, each one-quarter of an inch thick. The result of an exposure of a minute showed that increasing thickness or increasing number of surfaces diminishes the power of passing the chemical rays; that is to say, a piece one inch thick cuts off more than one-half or a quarter of that thickness, and four pieces each one-quarter of an inch thick, superposed on each other, cut off more than a single piece one inch thick.

I made another illustrative print by placing some of my specimens of glass, changed in color by sunlight exposure of one year, between original and unexposed pieces of the same kind, arranged on either side, and by an exposure of a minute or half a minute, showing, by the different shading of the sensitive paper, that the yellowish or purplish color of the changed specimens have sensibly diminished their power to transmit the chemical rays.

I made another print with colored glasses of the same color, but of different shades and tints, the darkening of the latter always showing a decreasing power to transmit the chemical rays.

I trust that these experiments, if of no other value, will prove to my photographic friends two facts: First, that in studios where one needs all the chemical rays that can possibly be obtained, care must be taken in glazing the skylights with colorless glass unground on either side, and of a kind that will not easily change to a yellow or purplish tinge by sunlight exposure. Second, that in dark-rooms, where little or no chemical influence of the sun's rays can properly be admitted, yellow glass of any kind or shade is entirely unfit for the purpose required; and that orange or green, or better, orange and green, or two thicknesses of orange must be substituted.

Red is known to be by far the most non-actinic glass, and would be recommended, but for its dazzling effect, which is injurious to the eyes of the operator. During the past few years, I have read so many wails in our photographic journals, from operators who have been troubled with the fogging of plates in the dark-room from the use of yellow glass, and so many suggestions about the substitution of yellow cloth or paper, or some other color or colors of glass, that I thought the publication of the results of my experiments, as above given, could not fail to be of some practical importance to the fraternity.

Perhaps it may add a little interest to my essay, if I give a brief account of some supplementary experiments in the same direction made during the present summer. I had a curiosity to know how soon the chemical rays would begin to show any influence

on the sensitive paper under glasses of the main colors, red, orange, yellow, green, blue, and violet. I used for my experiments ordinary albumenized paper, sensitized for me by my friend Mr. Marshall, of Boston. Taking several sheets into the country with me, I used it for many days, as it did not turn very yellow by keeping. I also made confirmatory experiments with fresh paper obtained from a photographer located in the place of my temporary sojourn. Placing some pieces of the colors named, of the uniform size of two inches by one, upon a sheet of clear glass in a pressureframe, I put a narrow strip of brass over the middle portion of the whole line of glasses, then covered them with a piece of sensitive paper, put on the back board, and commenced an exposure to the light, counting off the seconds, and making constant examination of the paper At the end of one second, the paper under the blue, violet, and yellow showed a distinct line of shading, plainly contrasting with the lighter color under the brass strip, proving that chemical action had already commenced on the sensitive surface of chloride of silver. In six seconds, orange showed the same effect, and in eight seconds the green. The red did not show any change until after an exposure of three minutes. The effect of these short exposures of a few seconds, of course, is not visible after washing, toning, and fixing the print; but it is interesting to know how soon chemical action commences in these cases.

The effect under colorless glass commences instantaneously, and so great is the contrast between the two extremes of red and of colorless glass, that I have produced a picture in purple color upon a piece of colorless glass, easily changed by sunlight exposure, simply by the following method: Having a design of leaves and flowers cut upon the surface of a piece of red or ruby-flashed glass, I fastened it with copper wires over a piece of colorless glass, of the kind above named, and exposed it several months to direct suntight. Enough chemical action took place under the red glass to make the body of the colorless glass beneath of a purplish color; but enough more took place under the transparent design to show a much

darker contrasting shade of purple, and thus produced the picture.

I have endeavored by a multitude of experiments with these various colors of glass and varying lengths of exposure, to arrive at a mathematical statement of the comparative powers of the six colored glasses named to transmit or cut off the chemical rays of sunlight. But I will not venture on any positive and exact statement at present, because I should not wish to make a mistake. and because I have seen so many premature and erroneous opinions in print on matters in connection with glass. I think it an approximation to the truth, however, to sav that blue having been clearly proved to be the most actinic of all colored glasses, cutting off only a comparatively small proportion of the chemical rays, violet may be said to cut off twice as much, yellow to transmit a little less than the violet, orange and green to cut off about twice as much as the vellow. Red will cut off almost all the chemical rays, requiring several hours to produce beneath it in the finished print the shade which appears under the orange or green after a few minutes of sunlight exposure.

Colorless glass cuts off so little that an exposure to sunlight of one second will produce a distinct shading under twenty thicknesses of about ten to an inch. Six pieces of ground-glass, or six of blue glass, will produce a similar shading in the same time.

I have thus far spoken only of the effect of the chemical rays on sensitive paper under one thickness of glass. I have made several experiments for varying lengths of time, from a few minutes to four hours or more, under all the various double combinations which can be made, in connection also with a single and double set of these several colors.

I made a careful observation before and after toning and fixing the prints, noting the short exposures to obtain the comparative transmissive power of the most actinic glasses, like the yellow, violet, and blue; and noting the long exposures for the effect under the red, green, and orange combinations. It will be seen that the green used by me was more effective than the orange. The orange and green of a similar intensity

of color and shade do not generally differ much in actinic power.

A slight difficulty in classification arose from the fact that some of the adjoining combinations—as, for instance, orange and green, and two greens, or orange and blue, and yellow and violet—have nearly or exactly the same transmissive power.

There is a great variety of shades and colors produced in the sensitive paper under differently colored glasses, and with the same color exposed for different periods of time.

I will not fill your columns with a long table which I once made, showing the colors before and after toning and fixing, in a series of exposures, from one minute to eight hours. I will only briefly say, what may be known to many, that little or no effect is obtained under the red, except a very slight shading, varying with length of exposure, from light-reddish to a slatish color. Under the orange, green, and yellow, colors of a light-bluish slate to a reddish-brown are produced. Under the blue and purple, different shades of slate, reddish-brown and black appear. These differences make it difficult sometimes to assign the exact place to some colors in an enumeration like the following, which we think will be found to be a close approximation to the order in which the glasses or combinations of glasses cut off the actinic rays; the first, the red and green, transmitting the least; and the last, the blue, transmitting the most chemical influence.

It presents some unexpected effects; the red and the blue, one the most and the other the least actinic, cutting off, when united, more than two reds, or red and orange, or red and yellow. I will not attempt any fanciful theory in explanation, but only state the fact and subjoin the table.

Table showing the order in which the glasses named transmit the chemical or actinic rays of sunlight:

- 1. Red and green.
- 7. One red.
- 2. Red and blue.
- 8. Orange and green.
- 3. Two reds.
- 9. Two greens.
- 4. Red and violet.
- 10. Green and violet.
- 5. Red and orange.
- 11. Green and blue.
- 6. Red and yellow.
- 12. Green and yellow.

- 13. Orange and violet. 21. One orange.
- 14. Two oranges. 22. Two violets.
- 15. Orange and yellow. 23. Violet and blue.
- 16. Orange and blue. 24. Two blues.
- 17. Yellow and violet. 25. One yellow.
- 18. One green. 26. One violet.
- 19. Yellow and blue. 27. One blue.
- 20. Two yellows.

The above list may be of value to photographers, in enabling them to know what combinations to select, when they desire to cut off the utmost amount of chemical influence, or a proportionally smaller degree, from their dark-rooms.

In order to avoid the fogging of plates with certainty, it would be advisable to use any of the double combinations in the first balf of the list, rather than a single piece of any color, as no one but the red stands high in the enumeration, and that is too dazzling for the comfort of the operator.

In making experiments for the preparation of a table like the above, it is necessary always to cut all the pieces of any one color from the same sheet of glass, as the slightest difference of thickness or tint may make a variation in the result obtained. Even this precaution is not always sufficient, as I have sometimes seen varying degrees of thickness, and varying tints of color in different portions of the same sheet. This difficulty can be remedied, and a source of error removed, only by a critical examination of each piece, and a rejection of any one which is not of the requisite and uniform thickness and tint.

When I return to Boston, I propose to provide myself with a new set of specimens thus critically examined, and, as I find opportunity, to repeat my experiments of the past summer. Should I obtain any new or essentially different results, and deem the matter of sufficient importance, I will write a supplementary note for publication in some future number of the *Photographer*.

While we cannot yet, and perhaps never may, produce photographs in colors, I would suggest that pleasing effects may be obtained in the borders of cabinet or larger prints by a judicious use of shields and colored glasses. For instance, by means of a shield of brass, or of opaque paper, of the size of any pressure-frame, with an oval piece cut out, one

can obtain an oval-shaped print of a portrait or a leaf. Then by covering the print with the oval piece of brass or paper, and placing it on a piece of green glass in the pressure-frame, and exposing for ten or fifteen minutes to direct sunlight, a pretty border of light slate color may be obtained, and quite a variety of shades and colors can be produced, by varying the colored glass and the length of exposure. A tasteful design upon flashed or stained glass by a skilful glass-cutter will be printed in a dark color, whose contrast will add to the attractiveness of the border. But superior and artistic work, perhaps, does not need any such superficial attraction.

My experiments with different colored glasses led me also to use differently colored autumn leaves as negatives, and to produce some very interesting leaf-prints, showing the same comparative effects in cutting off the chemical rays as the glasses of the same colors. These were followed by similar experiments in making designs and mottoes from leaves, ferns, feathers, and sea-mosses, producing what I have named "Photographic Self-prints from Nature," of which I have exhibited a few specimens at the Centennial Exhibition. I need not enlarge on the interesting field which this development of one of the many possibilities of the photographic art opens up to artists and amateurs, for it has already been done in previous numbers of the Philadelphia Photographer, in 1869 and 1872.

Having thus given an account of my humble amateur experiments in elucidating the connection of glass with the photographer's art, I shall be amply repaid for my effort, if it shall communicate anything of interest or value to those whose daily work is in this interesting field.

The tremendous press of matter upon our columns is compelling us to defer much of the usual variety which we know our readers expect; but we trust they will be patient, as we have many good things in store for them. Of contributors we also ask indulgence, as we have tried to put off those articles that would keep the best. All shall appear in time.

PROCEEDINGS

OF THE

Seventh Annual Convention

OF THE

NATIONAL PHOTOGRAPHIC ASSOCIATION.

(Continued from page 284.)

SECOND DAY.

Wednesday Forenoon Session.

CONVENTION called to order, President Rulofson in the chair.

The first business was the reports of committees.

The Auditing Committee reported that they had examined the Treasurer's account and found it correct.

The Committee on Revision of the Constitution not being represented by any members present, were, on motion, discharged.

Mr. Fitzgibbon offered a resolution to amend the constitution by striking out Section 2, Article III, whereby the Permanent Secretary is empowered to employ an assistant at \$500 per annum, and adding to Section 5 to the effect that the Permanent Secretary shall be paid for his actual expenses.

As all amendments to the constitution must lay over one session, it was voted, on motion of Mr. Sewell, that a committee of three be appointed to revise the constitution, and report at the afternoon session.

Dr. Hermann Vogel was then invited to take a seat upon the platform.

ANNUAL ADDRESS BY THE PRESIDENT.

The President. Ladies and Gentlemen: That Dr. Vogel has presented himself is a source of great relief to me. By reference to the programme it will be seen that an annual address from the President has been arranged for this morning. It was not then known, however, that Dr. Vogel would be among us, and hold himself in readiness to address us on this occasion, to speak words of instruction and encouragement.

I am sure I would be recreant to the high trust you have so generously confided to my keeping were I to permit myself to occupy your time to the exclusion of one whose rare qualifications as an instructor, whose profound research as a scientist, has placed himself in the front rank among the great men of the earth. "The poor are with you always." There is but one Dr. Vogel. And when, in the largeness of his heart and the generosity of his genial nature, he volunteers to appear before you—when, I say, such rich intellectual food awaits your digestion, then of all other times should I feel admonished to keep silent.

At the time it was deemed advisable to place my name among the distinguished persons who were to address you, it was not known that Mr. Seavey, of New York (a man than whom none have done more to add lustre to the name of American photography), would hold himself in readiness to impart to us that most needed of all information, "how to use our background" I repeat it, ladies and gentlemen, it is most fitting that, in view of these circumstances, all lesser considerations should be laid aside; that we should hold ourselves in readiness to mark well their words, to make their thoughts our thoughts, their ways our ways. Let us give such heed to the words from their mouths, that we can each, one and all, smite upon our breasts and sav. "Verily, it is good to be here!"

And when we return to our far-distant homes let us demonstrate by the improved character of our work the usefulness of this organization. Let us impart to our less practical brethren, whom circumstances prevented from being present, the much that is good and true we here acquire. Let us distribute its benefits among the people, that every photographer from the Atlantic to the Pacific will unite in the cry, "Long live the National Photographic Association!"

You have heard the reports for the two years last past of your Secretary, Treasurer, and Executive Committee. So exhaustive have been these reports that I deem anything more than a reference to the conclusion reached by them as out of place and uncalled for. But I cannot let this occasion pass without congratulating you upon the improved state of your finances, the large accession to your membership, and the greatly increased interest exhibited by photographers everywhere in the growth and prosperity of this organization. Which one of you, ladies and gentlemen, who have listened to the venerable Father Southworth, and heard his graphic description of the much which demands your careful consideration without these walls, this photographic display, so eloquently appealing to your understanding, but will agree with me, that the time has come when I should attempt some feeble expression of gratitude for the renewed assurances of your confidence, and that come weal, or come woe, this meeting in Philadelphia on the centennial anniversary of our nation's independence, will be indelibly impressed on the tablets of my memory, and cherished among the most delightful recollections of my life.

Permit me, ladies and gentlemen, to thank you for the efficient aid in the discharge of my novel duties, and to present to you Dr. Hermann Vogel, of Berlin, who will now address you.

Dr. Vogel, of Berlin.

Dr. Vogel said: That he could not, even in his mother tongue, express all that he felt in his heart. Six years have passed since I have had the honor to follow the invitation of the National Photographic Association to attend her meeting in Cleveland. You have given me the opportunity to study American photography. You have kindly received me not only in Cleveland, but in every place I visited, and so I travelled through nearly all the Eastern States of your grand country, and the beautiful view I have had with my college fellows of America I will never forget.

It was my hope that I would have a chance to meet you again, and this hope is now fulfilled. I crossed the ocean again. I have crossed the whole continent of the United States; have visited the golden land on the Pacific coast ; and I have found there the same interest in our beautiful art, the same efforts to elevate it as shown in the East, and even I have found there sound hospitality, wherever I met a photographer, so that I felt myself quite homelike in California. I have seen a good deal of the world, from the Indian Ocean across Asia, Africa. Europe, and America. I have studied the whole of photography everywhere, and perhaps you desire that I give you here the general impression photography has made on me in the different parts of the world. I would do that if it could be done here in a better manner than in words; it can be and is done by the

Grandest Display of Photographs

which I have ever seen, which are in Photographic Hall, and which give you a hetter impression as to what photography can do in the present than I could give you by words. Look on this excellent show. Study it any how, and you can learn more than you can learn from us.

I have studied as Professor of Photo-Chemistry, and as an exhibitor in Paris in 1867, and Vienna in 1873. I have heard some complaints, only from a few here of foreign photographers who have sent their products. Allow me some objection to these complaints. It is true you find only very few French photographers here,

not much of Italian ones. You look for a good deal of the celebrated Austrian; but England, Germany, Switzerland, Portugal, and Russia have contributed many very interesting and beautiful proofs of our art, and, excuse me, if I say freely my opinion, they have contributed by far more to your exhibition than at any time America has contributed to any European fair.

I have read many reproaches against the German part of the Exhibition in general. I agree that in the Main Building Germany is not quite so well represented as it could be, nevertheless you find there a great many very interesting things, also photography; and it is, perhaps, more the arrangement which is responsible for the bad impression. But in regard to photography, I am happy to say that

Germany is perhaps Batter Represented

than any other state of Europe, and there is especially one branch of photography in which Germany is ahead, that is the photo-mechanical printing process called Albertype or Lichtdruck. In the English part I call your attention to the beautiful landscapes, and in the Main Building you find in the exhibition from the Australian colonies the biggest pictures in the Exhibition. But I may avoid dispute over the standpoint of photography in different countries. You find in nearly all of the leading countries good photographers who understand how to employ art principles for improving their work, and in the chief part of photography, their portraiture, you see first-rate pictures in America even as in Europe, though my opinion is that in enlargements and in direct large portraits from life

America is now Ahead

of all countries.

Great attention is given now in Europe, especially to the development of new processes. There is the carbon process, from which you find proofs in the French and English part, and which is simplified now so nicely that every photographer could employ it; it delivers durable pictures, beautiful enlargement, and excellent transparency; but there is no hurry to introduce it. In general, it is my opinion, that the ordinary

Silver Printing Process

will be employed in future still, and only for larger pictures will the new carbon process be introduced by and by. The other photographic processes, the Heliotype, the Heliograph, the Woodbury, and others have made much progress in the meantime, but in general they are of more importance for scientific purposes than for publishers. Pho-



A NEW WORK ON

PHOTOGRAPHY AND ART.

ILLUSTRATED with 12 BEAUTIFUL Promenade Photographs.

BY

LYMAN G. BIGELOW,

Author of "Bigelow's Album of Lighting and Posing."

This is a beautifully gotten up work, and contains full instructions in every department of Photography.

Mr. Bigelow is well known as an accomplished artist and excellent teacher, and we are sure his new work will be welcomed by all who are aiming for improvement in the higher technical elements of photography.

Price, \$5.00.

FOR SALE BY

BENERMAN & WILSON,

Photo. Publishers,

116 NORTH SEVENTH ST., PHILADELPHIA.

ANOTHER NEW BOOK.



ILLUSTRATED BY JAMES LANDY.

This book is beautifully gotten up, and contains cabinet size duplicates of Mr. Landy's wonderful pictures, which are attracting so much attention in Photographic Hall.

As studies, they are full of artistic merit. The work will make a valuable addition to any photographic library.

Price, \$5.00.

FOR SALE BY

BENERMAN & WILSON, Photo. Publishers,
116 North Seventh Street, Philadelphia.

tographers are not yet in condition to employ printing-presses and other complicated apparatus. Photography is a universal art. It is employed by nearly every nation now, even by Japanese, Chinamen, and native Australians. Every day it is more and more employed in sciences, especially in natural sciences, and you will remember the grand day of the 9th of December, 1875, when more than five hundred photographers in different parts of the world were engaged in taking pictures of the transit of Venus. And every year we can notice new progresses of our art. new employments, and new triumphs. printing-press fixes and multiplies the ideas of man, photography fixes and multiplies the phenomena, and in this direction photography will be appreciated more and more in the future.

On motion of Mr. Wilson, a unanimous vote of thanks was tendered to Dr. Vogel for his address, the members standing.

Mr. Sewell moved to take up the special order for the location of the next place of meeting. Agreed to.

The Chair stated that the special order was that when the Convention adjourn it be to meet at the call of the Executive Committee.

The special order was agreed to.

Mr. I. B. Webster was called for, and spoke as follows:

Mr. President, Ladies and Gentlemen: I did promise that I would read a paper during the sessions of our present meeting, but I was taken with a very severe weakness, which I could not overcome in time to get up the paper. As you all know, all the papers I have read before this Convention have been of a practical nature. Being a practical man, and there being so little theory in me, I could not do anything except to say what I have done and what it is necessary for you to do. I am wholly unprepared now to give you anything practical or theoretical. However, in listening to Dr. Vogel's address, this morning, I had some ideas prophetically occur to me, which I might give you.

I understood that he refers there to photography being universal; and when you think of that point it covers a wonderful sight of ground. It is universal, but it is difficult to bring such processes as are said to be good and permanent into universal use.

I was amazed, entertained, instructed, and delighted with the report that came from our President not long since, in referring to the visit of Dom Pedro. I presume you have all read that article. It strikes me that in looking into so many of the intelligent faces of those members who read the *Philadelphia Photographer*, I can see that you are aware how enterprising our President has become, and how fast he turned out work for Dom Pedro.

Now, you cannot do that without having a universal process to do it with; unless you have a machine with a crank which you can turn, and grind it out like the old coffee-mills; just keep on turning and you have the product ready at hand. Hence Dr. Vogel is right, when he says it is a universal process which must be simplified and brought down to men of common intellect.

Now, I prophecy that the time is coming when the dark-room will be obsolete and you will have no use for it. The time is coming when you will make pictures instantaneously, and before the sitter knows it. That will be something very important to do, for then you will not be troubled, and annoyed, and vexed with their moving and changing. I say the time is coming when you will not have to dirty your fingers, when you will not have to use the dark-room, when you will not have to use all these chemicals, and when that is done Dr. Vogel will be our man to do it; and before we go home, before we leave this Hall this morning, Mr. President, I make a motion. I move now that Dr. Vogel be instructed to do that for us. I think he is the man to do it. I know whatever he undertakes to do he will work out. We are moving in the right direction; we are aiming at instantaneous work.

That is another point that must be attained: the difficulties in that direction must be overcome. Now, look at the difficulties that have been overcome in photography, and see how easy it is to do what was very difficult before. It is an easy matter now to take pictures in your room, and the time will come when you can take pictures of a man and his family by the bushel. or by the peck. But you need not sell them for five cents a peck, because they will be worth more. These things I prophecy: that the darkroom will become obsolete and that pictures will be made instantaneously. There is plenty of room in that direction. I do not know whether you will ever reach it, but it can be accomplished.

I have not visited the Photographic Hall yet, but I am told that our exhibition is grand. I regret that I cannot tell you more as to the exhibition, but you can go and visit it, and form an idea of it for yourselves.

Of all the meetings that I have ever attended,

those of the Photographic Association have been the most instructive, interesting, and entertaining. They were instructive in many ways.

There has been more accomplished in photography in the last six years than there had been in the thirty five years preceding. There will be more accomplished in the next five years, by a good, thorough, genuine, and earnest effort on the part of the members of the National Photographic Association than has ever been done. I regret to see the spirit that I saw here, and saw first at Chicago, in reference to discontinuing the sessions of our Convention. The meetings of this Association should be annual gatherings. We should come together and compare notes, and look at each other's notes. Photographers should come together from different parts of the country and make an exhibition of their work. The trouble has been in our exhibitions, that we have been overshadowed by the wealthy exhibitors; and we little fellows don't feel like bringing forward our work and make an exhibition. But still all efforts in this direction would be well worth admitting.

Now, I regret more on that account that it seems necessary to have vacations, and by skipping two years I have lost a great deal, more than I could tell you. I think the placing of the matter in the hands of the Executive Committee is right.

THE PRESIDENT: We learned incidentally that our esteemed friend, whom it has been the delight of this Association to honor, ex-President Bogardus, leaves us at twelve o'clock. I regret exceedingly that we have not seen him upon the stand, and I can assure you that we cannot afford to dispense with his services. I wish that, for a moment, he would tell us what he thinks of us. (Applause.)

ABRAHAM BOGARDUS, of New York: I may take your time for five minutes, gentlemen. I said yesterday something in relation to our Association, and you will excuse me if I speak a few words again on that same subject. For out of the abundance of the heart the mouth speaketh, and I certainly take a great interest in our Association, and hope to do so. I think almost that I will make a prophecy, too, as my brother Webster did, and that is this, that this Association will have to bring itself down to number one hundred (100) or one hundred and fifty (150) members; men who take an interest, who will attend its meetings, and will do the work. And if outsiders are determined not to have anything to do with us, perhaps we can get along without them as well as they can get along without the Association (Applause.)

Still, I hope it will not be necessary to do this. There is a great deal of enthusiasm in numbers, I know; still, sometimes half a dozen good workmen will do more than a crowd who only make a noise, and because we are few in numbers here to-day it may perhaps be discouraging, but not so much to me as to some others. I see so many reasons for its being so thin. And I was going to make this comparison, and I will say it is not always a bad sign that we are not numerous, and not noisy, for an empty wagon going down hill will make three times the noise a full one will. We may not make so much noise, but I believe we are in earnest and that we have met here for a purpose. I believe we are going to profit and do good to ourselves. I could state perhaps some reasons why the Association has been so thin this year. You know as well as I it is hard times; people have not the money to spend, a great many of them. It is a very warm season to come here; and then some people have taken special pains to talk against the Association. They are the men who never attend it.

I once met a young man who, I think, is no more fit to be a photographer than some others are—a miserable creature he was—and he said to me, "Mr. Bogardus, I used to think considerable of you, until you started that society." He said it just in that tone. As near as I could get at the facts, he had never attended one of our meetings and knew nothing whatever about it, but he was going around ridiculing the Photographers' Association. I think him a cousin to the man that was spoken of yesterday, whose advertisement read, "Four elegant pictures for twenty-five cents." All in one advertisement. I think he must have been a relative of his.

But how will the Executive Committee decide? Let them decide as they will, if they feel that it is necessary that we shall have a meeting every year-and I regret that we cannot-I am ready to go. If they decide upon a meeting every two years, let us be there, and let each one come with a purpose; let each one come to speak on some subject. Let us shut up our shops and come and speak on the subject with which we are familiar. I do not care how many men get their heads full of knowledge, they will find some man here who has ideas or some point that they have not got. One man will have one point and another another. Let us come and compare notes, and present our cases before this Association, and we will go away benefited.

Now, sir, I do not take a discouraging look at

all, Mr. Chairman, and I know our President will not. I am glad we have a chairman who is alive and up to the emergency, and who will not say die under any circumstances. I congratulate the Association on having such a man at the head of it. And before I leave, I would say I am not discouraged at all. I am encouraged, and wherever the Association shall meet next—be it in two or three years—or whatever time it may be, if I am alive, I shall be there with you. (Applause.)

An invitation was received to visit the Campbell Press building, on the grounds; and a vote of thanks was tendered for the courtesy.

MR. EDWARD L. WILSON said he had heard a great many inquiries about the heat in Philadelphia, and it had just occurred to him why it was so hot. He said it was well known that friction caused heat, and he accounted for the extreme heat bere by the great gatherings at our Centennial Exhibition and the rubbing together of the nations. And as this friction of the nations tends to advance the arts, the sciences, and the industries of the world, so we of the National Photographic Association should meet and rub together for our mutual improvement. With this thought in view, he had a motion to make, which was, that this afternoon we hold a session of one hour, and then adjourn in a body to Photographic Hall, there to rub together for an hour, and make it as hot for each other as we could. He remembered that, in Chicago, one of the most instructive hours he spent there was with a gentleman who accompanied him on an inspection of the exhibits and made comments upon the work. This was what he called rubbing together, and he would like to see the members of the Convention go into the friction business for a while in Photographic Hall, the only hall in the world which was ever erected especially for photography.

At the conclusion of Mr. Wilson's remarks, his motion in reference to visiting Photographic Hall in the afternoon was agreed to.

Mr. Fitzgibbon, as a member of the committee appointed to consider the question, introduced the subject of Mrs. Lockwood's Life Insurance League, and moved that the articles relating to it, presented by her at Chicago, be added to the By-laws of the Association. Pending the discussion on this motion, it was moved and voted that

the matter be referred to the Committee on Revision of the Constitution.

Adjourned.

SECOND DAY.

AFTERNOON SESSION.

Convention came to order, and the President introduced Mr. L. W. Seavey, of New York, who spoke as follows:

I can hardly say photography is my profession, notwithstanding I consider you all as brothers. Now, my object in making these illustrations this afternoon, is to convey to you some idea of how I conceive a background should be used. Every background is painted for some particular kind of picture, or to produce some particular effect. Shadows are placed here, and lights there, that when you place your subject before it, the features and drapery will be so relieved that the figure will seem to stand forth from the background. Great pains is taken that lines may not intersect those of the figure at points that will produce unpleasant angles.

I may mention here Mr. Ormsby's paper on artistic sight, the value of which I fully appreciated. I remember that when I first began to pay attention to painting I used chiefly pure colors, and not long ago I was reminded of my former method by hearing an artist say that the same was true of all amateurs; hence their pictures are usually crude; and delicate only after they have had experience. They subdue their colors and mix them with white, making them more neutral; the result of it is that when you examine a good oil painting or a water color, you hardly see traces of the pure colors of the palette. The tints are almost indescribable. You don't know exactly how they are made. After you have had experience in handling these colors you can then perhaps solve the problem.

I remember in my early experience looking through a camera at a sitter, I could not see where the shadows were that afterwards developed themselves on the plate, and I have no doubt that many young photographers, in posing their subjects, put them in certain positions because they know a good effect will be produced, although they are not able to see in the camera the shadows just mentioned. Now, a painter learns to arrange lines and shadows by drawing figures, landscapes, and architecture; and were the photographer to draw his figures, he would realize the necessity of a good arrangement of light, shade, and the principal lines. As photographers you can scarcely appreciate that, I am afraid. I know that in painting theatrical

scenery in order to make one object stand prominently forward as the subject of the picture, we have to put either a broad shadow behind it, and put the figure in light against the broad shadow, or reverse the process. Doré's pictures, if you examine them closely, reveal that they are very simply constructed, so far as light and shade is concerned. In one of the scriptural subjects that I have seen, the figures are placed on elevated ground in shadow against a light sky. (Sketch No. 1.) Another thing that probably applies to photography as much as to painting, is that the artist's character, is impressed indelibly on his work. If he is a refined, intelligent, and cultivated man, you will see it in his pictures. If, on the contrary, he is gross,



boorish, uncultivated, you will see that. If he is an awkward man you will see the same in his pictures. He will pose his subjects as he feels himself, and according to his understanding. Notwithstanding his subjects may be awkward, if he is an intelligent and a refined man, if he has a high idea, it will still be manifested in the posing. We see that more particularly in painting. A man who is a rough, coarse man, will produce pictures which will be stiff and angular. He will use dark browns, sombre greens, strong colors, and he will paint more with the pure colors from the palette than from tints produced therefrom.

I am acquainted with quite a number of scenic artists in New York, and I have taken a great deal of pleasure in noticing the similarity of their paintings to the character of the men themselves. Now in photography, I have noticed in the exhibition down here, that there are some pictures that are what we would call weak, there is a large amount of light in them. A rambling arrangement of accessories, no broad shadows, and no grand effect or high ideal. If a man is weak in his character, if he is insipid

in his conversation, you will see it in his paintings or in his photographs. If he is energetic and full of vim you will see that in the posing of his figures. I hardly need mention names, but to illustrate probably the extreme of energy as manifested in photography, I may mention one of our highest lights in the profession, Mr. Sarony, of New York; and there are other photographers possessing a great deal of refinement, and you will see it manifested in their photographs.

Engravings and copies of paintings can well be studied and probably understood and better appreciated by photographers than the paintings themselves, because you deal solely in light and shade. As you do not deal in color, you are consequently more or less color-blind; but when the tints in a painting are translated (as I may say) into black and white by engraving, it is then akin to your own work, and you understand it more readily. Our illustrated papers are now publishing engravings of some of the most important figure-paintings of the day, and their low price brings them within the reach of all who have a desire for improvement.

Photographers should surround themselves in the gallery and at home by works of art, not alone by pictures, but by bronzes, plaster, or other casts, according to their means. You don't need necessarily to invest large amounts of money in these, in order to get beautiful forms, because there are many inexpensive productions which you can use to ornament your home and gallery. Their effect will be to refine and elevate, and your work will partake of the higher character of these surroundings. If you surround yourself with rude forms, rude statuary, such as the sculpture of Yucatan and South America of thousands of years ago, they will probably drag you down. But as you surround vourselves with fine forms, fine pictures, and with works that are above you, you are sure to be elevated by them. You will find that they adorn the walls of your reception-room and skylight, and your customer will feel when he enters that he is surrounded by a new influence, that he is in the realm of art, where the beautiful is made a study.

Our brotherhood in photography is as important as it is in painting and sculpture. You all know how the artists of Europe and those in the principal cities in this country are interested, and aid in the exhibitions which are given from time to time. Artists cluster their studios together in one building, thus fraternizing; exhibit together in galleries, and grow mutually strong. I have no doubt the photographers who attend these conventions from time to time, in comparison

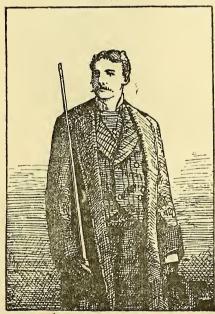
^{*} These illustrations were made from Mr. Seavey's rawings by a photo-engraving process.

with those who do not attend, are the stronger. They are the ones who know their ground. They know where they stand, and are probably the leading ones in the country. There is not, I am sorry to say, a similar union or spirit among the members of the photographic fraternity that there is among the votaries of the brush and pencil; but there is something akin to it in the larger cities. I think it is the duty of photographers to encourage conventions, and particularly photographic journals and photographic literature, for it is by means of this literature that you are all educated, and it is an education that you cannot get in any other way. If you were to isolate yourself from other photographers from works of art, and the literature of the journals. I do not think your improvement would be very rapid.

I will now make a few sketches illustrating some of the ideas I have in my mind, when I am painting a background for you. (Turning to the wall on which was stretched a sheet of paper three feet by twenty five feet.)

The first one will be that of a comparatively plain background for a standing figure. I will not attempt to make elaborate figures, but





Deckground for Standing figure.

simply sketches: my object being to present the idea and not the details.

We will suppose this (No. 2) to represent a

figure of a gentleman. Now the figure, as you see, stands independently and alone on the background; it has nothing to support it. Now, if the background is made lighter at the top and darker at the bottom (sketching), the interest then instead of being distributed through the whole length of the figure will be directed towards the head, and the lower part of the figure will be scarcely noticeable. The shadows will in a measure blend into the lower part of the background! When you look at it, the first thing you will notice will be the face, as that really should be the most noticeable part.

One of the most difficult things in photography is to pose a full-length figure; but it is still more difficult to pose it without the aid of auxiliaries of any kind. It requires a knowledge of anatomy and composition, which even schools of drawing have difficulty in giving. Now, suppose that you are posing a full-length figure, you will not make it a square front view; of course, with us this is gone by except on rare occasions. And the producing of an object on the background in this case would be by having it dark at the bottom, to still keep the interest at the top and divert the attention from the lower part of the figure; This position is only one of the many kinds that are used when employing the aid of accessories.

This line is broken (indicating), and by the

Fig. 3.



effect of the shadow this portion of the figure (pointing to head and bust) will be prominently brought out.

This figure, in sketch No. 3, is supported by leaning against the shadow, and the shadow

serves to break the severe lines that would otherwise be occasioned.

It is well always with full-length figures to



convey the idea that the figure is doing something, looking towards something, reading or



examining the surroundings (sketching). I think it best not to let the horizon line cross the figure

at too high a point. You will observe in No. 4 that the horizontal line of the ocean does not have a parallel one in the foreground.

I will now give illustrations of the tendency of lines. The first will be that of a picture I saw in the Russian collection yesterday. This was, I think, a very curious one, and the spectator's eyes were unconsciously directed to the hands of the subject instead of to the face (sketching).

You see that the effect of the lines in this picture (No. 5) is to lead the eyes of the spectator towards the hands. The lines all come to one point; those of the drapery and those of the accessories all centering in the hands.

No. 6 will be a sketch of a position that you have seen probably many times; it is a simple figure of a lady leaning with her elbow on a table. The light runs down the arm, returns along the forearm and hands to the face, and the light being the strongest there, even if you look at the shoulders first your eye is led involuntarily to the face.



In order to show you how lines lead to the face I will make sketch No. 7. This figure, of course, depends very much for relief on the background and accessories. All these lines have a tendency to concentrate the interest in the face. This (indicating) is a neutral tint, which relieves the shadow side of the figure. There is sufficient depth of the background to relieve the high lights. Now that would look very different photographed in front of a plain blank wall. The background gradually goes into shadow towards the bottom; and in order that there may be something to relieve the picture and give it force, these accessories, darker than the background, are placed on either side, and the light falling in this direction relieves that whole entire side of the figure.

It is always best to indicate a point from which the light comes. Thus, a light placed in the background as a complementary light to the one on the face, should not be of the same strength. The pose. Here the figure is well relieved by the shadows in the background.

The lady is supposed to be leaning, if that term may be applied, against the shadow that

> is produced by an accessory.

Under the head of peculiar positions, where the background plays an important part, you have in No. 9 that which is known as a circular composition, in which the background is used to carry out the line of the figure.

Now, as to some of the errors I have noticed in using backgrounds. Here is one you may see in the Russian department of Photographic Hall, a landscape, and the subject has been so placed that a tree appears to be coming right out of the top of the head. (No. 10.)

Here is one in the American department in which you have what may be called the pyarmidal composition!! (No. 11.)

I have an incident to tell you, which I think has never been told. Some two years ago I received a letter from a stock-house in Philadelphia ordering a landscape sea view background, one which we

designate as the Evangeline, which some of you know; also for a rustic arbor and fence. Quite a little bill! The photographer had been successful, he thought he would invest some money in backgrounds and accessories. The order was filled at my establishment, and being shipped to the stockdealer we did not know who finally received it. About a month afterwards I was making a short tour through the country, calling on my photographic friends for the purpose of drumming up business. I was very much surprised one day, on entering a gallery, at seeing a background, which in color made me think it had been executed either by myself or by one



principal light should always or nearly always be the one on the face, and I say to those using my backgrounds, in case the light in them happens to be too strong you can very easily subdue it, and graduate it, so as to produce the desired effect, by the use of ordinary charcoal such as crayon artists use; and in case too great a change has been produced you can dust off the superfluous charcoal with a handkerchief. I mention this, because yesterday a gentlemen said he had a background in which the light on the wall was too strong, and he did not know what to do with it.

Here is another position (No. 8), one of re-

of my artists; but the design was something new to me, I had never seen anything like it before. The rustic arbor and fence I recognized at once.



After a moment I comprehended the matter. The photographer had, in mounting the background, turned it so that the horizon line was vertical; he afterwards told me he could not tell which end should be up, so in his dilemma he called in his friends and they had a regular consultation, and finally concluded that a point of land extending into the water was a church steeple, and therefore it should be placed in the way in which I found it. I will make a sketch of the background, showing the effect produced by the manner in which they placed it. (No. 12.)

When he posed his subjects he put them directly under that line (indicating). I have frequently seen the old-fashioned baseboards in front of landscape backgrounds; they should never be used with even plain or interior backgrounds. I hardly need mention this to you, for I am sure those present never make such mistakes. If possible, the junction of the background and floor should be hidden, either by shadows or by placing an accessory to hide the line. The foregoing is essential in order that the picture may have a realistic appearance.

Occasionally a customer on seeing a proof,

complains that the hair sticks out (No. 13), or something else sticks up, and you reply that you do not photograph hair and bows. I claim that

you do photograph them. I claim that it is the duty of every photographer to look at the personal adornments of the subject, and arrange them with the same degree of care that an artist in a studio does in posing his model for a picture which he desires to paint.

If a lady enters a gallery having ribbons and bows over the top of her head, I think it would be hardy proper to make them look like this (indicating), or letting them stick up so (No. 14) (indicating). (Applause and laughter.) The photographer holds a very important place in the community in which he is located, especially when he puts out his sign as an artistic one. The people look to him as the leader of and authority on art in their particular neighborhood. I don't know whether all realize it or not. You represent their friends, their homes, and their families, and they are dependent upon you, and it is your duty to elevate the artistic tastes of the community and thereby benefit yourself by interesting

them in your work.

I wish to say something about the Photographic Convention. The photographic conventions or exhibitions are to me a source of valuable instruction. By them about the only opportunity is afforded by which I can ascertain your standing, by which I can see how my backgrounds are used, or how you have improved upon my efforts. Our welfare is mutual. And if I make mistakes, as I frequently do, you should point them out in a friendly and kindly way, and allow me to do the same when you have erred.

At the conventions I examine the pictures carefully, to see how my backgrounds have been used. I often see instances where they have been well used. Valuable suggestions are made to me, and if I see good result I make a memorandum or sketch of it, and lay it away for future reference. I have, at this Exhibition, obtained quite a number of new ideas, which in the course of time will be scattered abroad in works going to you from my studio.

Occasionally I receive letters finding fault with my backgrounds, that they are not dark enough

in the shadows, or that they are too light; and I have occasionally sent for proofs; and in sev-



eral instances where the complaint had been that they were too light, have found the photogra-



pher had been using the background turned somewhat towards the side-light. We have great difficulty in painting backgrounds make the shadows as intense as they are in nature. It is really impossible. As the photographic value depends upon the relative degree of light and shade in the background, it should be placed

at right angles to the side-light or with the sidewall of the room. Mr. Whitney, of Norwalk, here asked what style of background Mr. Seavey would recommend for heads and busts.



I think, for those purposes there should be no design in a background, except of a simple ar-



rangement of light and shade. For bust work it should be darkest at the bottom growing gradually lighter towards the top. I think, in bust

pictures, the background should be so retiring that the spectator will not notice that a background has been used.

I wish to say about skylights, that most of



you make your skylight rooms so small that you have not room for more than one or two backgrounds, with scarcely any accessories.

Fred such bown

What would be thought of the portrait artist, or of the painter of figure subjects, were he to paint one background which would be found in every picture coming from his easel. You should have room for several backgrounds for producing different kinds of pictures in vogue, and room for your accessories, so that you may use them without being annoyed or worried by having them in the way.

At the conclusion of Mr. Seavey's address, he was complimented by the President and others, and a vote of thanks tendered him for the admirable manner in which he had shown the use and workings of backgrounds.

Mr. J. Cadwalader then offered the following resolution:

Whereas, The universal system and mode of doing husiness is based upon equivalents; the world has established the value of money; custom, supply, and demand, and the rules of trade establish the value of merchandise, and of labor, skilled or otherwise;

And whereas, The mode adopted the world over, in every manner of business, is pay on delivery, or pay after service has been performed;

And whereas, The system of advance payment in any business enterprise is distasteful to the

public, and tends materially to lessen such business, and to create a distrust in the public which legitimate enterprise cannot afford to encounter:

Therefore resolved, That the plan adopted by photographers, of demanding payment in advance for photographs, is a blunder, a clog, and a hindrance to photographic success financially considered, and should, therefore, be abandoned.

Mr. B. F. Saylor. I move that the preamble and resolution be laid upon the the table.

Agreed to.

The Convention then adjourned to Photographic Hall in a body.

After reassembling in the Hall, President Rulofson addressed the members as follows:

Ladies and Gentlemen: Under circumstances of this kind, I think a barrel or box, or any other pedestal, upon which to stand, is good enough, because I have nothing to say. As soon as that fact dawns upon your minds as fully as it has dawned upon mine you will have had enough, and I can drop out of sight. Notwithstanding, I can say that a man must be dumb indeed, having nothing to say in this spacious hall dedicated to the photographic art, surrounded by the sights of such a startling exhibition of the power of our beautiful art as is to be seen here upon every hand.

The circumstances, ladies and gentlemen, which bring us together to-day are peculiar. How much we are indebted for this grand display, for this magnificent building, the movement for which was inaugurated only one year ago! It must not for one moment be supposed that art runs independent of literature, or science, or politics, or religion; each are dependent upon the other in the great sphere of human action, and together make the great whole; and as when the first shot was fired for the defence of the Declaration of Independence, then commenced, and to this hour has been continued, the great struggle for freedom and national greatness, so have been the efforts for excellence, out of which we as American photographers have ultimately carved this immense success. So much for the past. For the present I can only say that I immediately, upon arriving in Philadelphia, entered this sacred precinct devoted to photography. I had not been here half an hour before I closed my eyes and hurried out of the edifice; distinctly understand that I was afraid to look, from the thought that it would take years for me to aocomplish that which was spread out to my astonished gaze.

We are invited to dedicate this hall. It has been dedicated. Let us give thanks unto Almighty God for his providence which has brought us together in this beautiful building dedicated to the art of photography.

To say that I have nothing to say, that I have no feeling upon the subject, would be denouncing myself as a traitor to the cause to which I have devoted my entire life. It is not that I have nothing to say, but it is because I have so much that I know not what to say. I congratulate you all; and to the Centennial Commission, and Edward L. Wilson, the father of Photographic Hall; to Mr. John Carbutt, the superintendent, and his associates, and Mr. Chute, the Local Secretary, and every man, woman, and child, who by word or deed have contributed to this exhibition, we owe our most heartfelt gratitude. I am at a loss how to give expression to that gratitude. It would seem that I was hoisted upon this box for no motive further than to say that and to give expression to that thought. I say I have no words wherewith to give utterance to my feelings. I hope I have not omitted any gentleman to whom my thanks are due. For there are many individuals, no doubt, who are entitled to our regards for this magnificent exhibit of photography. This will elevate our standard together in the art, and this will bring us together in a stronger bond of sympathy. [Cheers.]

SOCIETY GOSSIP.

Photographic Society of Philadel-Phia.—A regular stated meeting was held Thursday evening, July 6th, 1876, the President, Mr. J. C. Browne, in the chair.

The President stated, on calling the meeting to order, that owing to the absence of Mr. Wallace the Society would be, for a few months, without a Secretary, and the appointment of a Secretary pro tem. would be in order. On motion, L. T. Young was appointed to the position.

The minutes of the last meeting were then read, and approved.

The resignation of Mr. Robert E. Patterson was read, and, on motion, was accepted.

The Room Committee reported having sent to Dr. Vogel a key of the room according to their instructions, and that the Doctor had returned the key, with thanks and best compliments, as he was about to leave the city.

Report of the Committee on Outdoor

Meeting was read, and, before being acted on, the President suggested that the report be revised and put in proper form for publication. Mr. Hacker moved that Messrs. Barrington, Hewitt, and Browne be appointed a committee to revise the report, and that it be placed on the minutes. Carried.

The report was then approved as read.

REPORT.

The committee appointed by the Photographic Society of Philadelphia to arrange for the Third Outdoor Meeting of the Society, make the following report:

All arrangements having been made for a three days' trip on the Middle Division of the Pennsylvania Railroad, we started from the depot, Thirty-second and Market Streets, June 21st, 5.45 p.m., in a special car, arriving at Harrisburg at 9.30, where we remained over night, some of the members partaking of the luxury of a hotel, while others prepared for "a night out" in the car, which proved to be very pleasant.

The next morning the special train, consisting of our passenger car, photograph car, engine, and crew, being in waiting, we left Harrisburg about 9 A.M., and made the run to Marysville, where we remained but a short time.

Our next stop was at Perdix, where we also made but a short stay. We then made the run to the Thompsontown Middle Track, where the wet men made their first exposures. It might be well to mention that Messrs. Browne and Barrington comprised the wet force; while Messrs. Bates, Corlies, Hacker, Dixon, Seiler, Hewitt, and McCollin composed the dry men; Messrs. Vaux, Zentmayer, and Sharpless not working. We spent an hour or more very pleasantly at this stop, and then started for Mifflin, where we were to remain overnight, having first run to Lewistown to let three of the party off for trout fishing.

The night at Mifflin was passed in the car very plea antly. The photographic car was fitted up with a good stove, and all necessary appliances, and having p ovided an abundant stock of provisions we prepared, not only a good meal, but one we all very much enjoyed.

Messrs. Hacker and Hewitt joined us here Friday morning, when we again started, and ran to Mount Union Bridge. All the force reported for duty, and numerous exposures were made. Our next halt was at Petersburg, where we displayed full ranks, dry men having a strong majority. Leaving this point we continued on to Altoona, where we arrived at 5.30 P M., and remained overnight at the Logan House. After a refreshing night's sleep in this well-known mountainous town, we left at 8.30 Saturday morning for Juniata Bridge, No. 8. On arriving at the bridge we all disembarked, and sent the train to a siding. We remained in this neighborhood until 3 P.M. All hands were busy, and a great number of plates, both wet and dry, were exposed. At the time appointed we started again, and had a delightful ride to Harrisburg, arriving there at 9 P.M. And here we bade good-by to our engine and her crew, whom I am sure we all will remember with the kindest and most pleasant recollections. car was then, at 1115, attached to the through train, and arrived at West Philadelphia at 3.30 A.M. We remained in the car until 6 o'clock, and then departed for our respective homes, all greatly pleased with the trip and regretting it was over.

The engine appointed for our use was fitted up with a seat above the "cowcatcher" that accommodated five persons; it is scarcely necessary to say that it was never empty while in our service. The members fully appreciated the delightful rides they had on the trip.

The practical results of the trip showed that the washed emulsion dry process will give uniformly good negatives when exposed upon well-lighted subjects, and even when subjected to deep shadows the plates stood the test in a satisfactory manner. With the exception of Mr. Bates, all the dry men used washed emulsion. The wet plates were exposed principally upon groups, views of the train, etc.

All of which is respectfully submitted.

(Signed,) CHARLES BARRINGTON,
Chairman.

After the approval of the report, a general conversation occurred in reference to

the outdoor meetings, and the feasibility of raising a fund for special expenses connected therewith. Dr. Seiler moved that a committee be appointed to inquire into the feasibility of raising a fund for special expenses on outdoor meetings, and that they report when in their judgment it seemed best. Carried.

Messrs. Dr. Seiler, Dixon, and Corlies were then appointed.

The following minutes of the Outdoor Meeting were then read by the Secretary:

ON THE CARS, HARRISBURG, June 24th, 1876.

President in the chair?

On motion of Mr. Barrington, it was resolved that the Photographic Society of Philadelphia tender to Mr John McCrea, Superintendent of the Middle Division, Pennsylvania Railroad, their sincere thanks for his attention upon this the excursion of the Photographic Society. The members of the Society have experienced much pleasure on this excursion, and desire to express to the officers of the Middle Division their appreciation of the many attentions conferred during the trip.

Mr. Hewitt moved a vote of thanks to the committee who organized the Third Outdoor Meeting, and to the Chairman of said committee, Mr Barrington, for the very satisfactory manner in which they had arranged the trip. Carried.

Dr. Seiler moved that prints from the different negatives made on this trip be brought to the next meeting, and that a scrapbook be provided for the insertion of these and the future work of the members. Carried.

Mr. Corlies moved that a set of the prints be sent to the Superintendent, Mr. McCrea, and to the other members of the railroad company who were present, at an early date. Carried.

Mr. Bates suggested the propriety of the members doing their utmost to increase the membership of the Society, by inducing those of their friends who were at all interested in their art to join the Society.

On motion, adjourned.

GEORGE W. HEWITT,
Secretary pro tem.

On motion, the minutes were approved.

A communication, accompanied by three prints, from Mr. M. Carey Lea was read, and the Corresponding Secretary was instructed to return to Mr Lea the thanks of the Society. The prints were from negatives by the chloriodo-bromide washed emulsion process.

Dr. Seiler reported that Mr. Young gave to him a washed emulsion negative which was badly covered with insensitive spots. for him to submit it to critical examination, and try to find out what the cause was. He stated that after a micro-polariscopic and microscopic examination he could find no crystallization, and finally found they came from dirt either in the albumen solution used on the plates, or dirt adhering to the plates before they were coated. He was satisfied this was the cause, as plates which were not albumenized made with the same emulsion showed no spots. Dr. Seiler then stated he got freedom from spots by using ice-water for making the albumen solution, and advocated its use, as the dirt did not seem to be soluble in ice-cold water, and could be filtered clean immediately after making it up.

Mr. Dixon stated he used ice-water, and his plates made with washed emulsion were entirely free from insensitive spots.

Before adjournment, the President called the attention of the members to a scrapbook which was placed on the table for their inspection. It was kindly placed at his service by Mr. R. W. Thornton, of Boston, and contained photographs from oil paintings photographed by the Berlin Photographic Company.

On motion, adjourned.

L. T. Young, Secretary pro tem.

"A LITTLE GENTLE CRITICISM."

BY E. K. HOUGH.

To criticize is not necessarily to find fault, but for intelligent criticism it is not sufficient to say this is good and that is bad arbitrarily, for that is only the expression of individual preference, which the next observer may reverse; and the merit or demerit could only be decided by a majority vote.

Intelligent criticism must not only say what is bad, but why it is bad, as well as what is good and why it is good. And this I shall try to do regarding a certain class of minor faults that, like spots on the sun, slightly mar the perfect brightness of the noble exhibition in Photographic Hall.

But why assume the thankless and disagreeable office of faultfinder where there is so much to praise? Because the faults I shall mention are of that needless kind that spring from carelessness, not ignorance, and although they may be excused in the hurry of ordinary gallery work, they are almost inexcusable in high-class work set up to challenge the criticism of the world. Exhibitors are debarred by courtesy from criticizing each other, but I may be pardoned for having my say, while I make no pretence of competition or rivalry.

The only class of faults I shall notice are incongruities of background effects and improper use of accessories.

I was first led to notice them in detail by a slight oversight in one of Kurtz's pictures. On the screen facing the entrance he has two pictures of single figures in landscape form, requiring an unusual arrangement of accessories. In the one of the man reclining with his feet elevated, there is a curtain pulled across to preserve the balance of lines, and thereby exposing beneath, the standard which held the curtain, with its foot projecting into the picture.

Now that is a fault not worth mentioning, you will say; but it struck me painfully; much as if a portion of the fair flesh on the face of Beauty had been pulled aside, exposing the bony frame-work—the ugly skeleton—beneath. I thought if such oversight can be shown by such a man in such a place, there must be more, and worse, by others. I will look especially for them.

Next came the splendid display of Bradley & Rulofson, and sure enough there was one large picture of a lady in riding habit, standing in a room bare of accessories, with a background intended to represent a large piece of elegant furniture and a frescoed parlor wall, but with the whole effect destroyed by a baseboard with the black shadow beneath extending in an unbroken line across the picture, giving it a grotesque effect of theatrical unreality. It seemed strange that operators capable of producing such uniformly fine chemical effects could have so little artistic feeling as to produce and exhibit such a picture. But hanging near it is another the same size that increases the wonder to amazement.

A lady in light dress standing with her back to a bright moonlit landscape, with full moon in sight shining broadly, with the bright lights and deep shadows of moonlight over all the distance and up to within ten feet or so back of her, when (miracle of nature or art!) the moonlight abruptly ceases, and upon the lady and all the foreground shines a strong sunlight effect from the contrary direction, the moon shining from her right toward the left, while the sun apparently shone from the left toward her right. Moreover, the sun must be three or four hours high, judging by the shadows-an angle of about 45°-so it is not evening, and yet the moon is shining brightly in midsky. And, if the moon could be visible thus in daylight, it could not possibly be a full moon, but must show as a narrow · new moon, thus doing violence to a truthful representation of nature in every way.

Yet, as photographs go, it is a good picture, clean, sharp, and brilliant, and you can easily say one need not be so "pizen particular." But these totally unnecessary faults are of the kind that give art critics opportunity to say with sneers, that photographers are mechanics, not artists; and were a painting shown with such errors, how the painter would be scourged by the critics, yet why is it any worse in one case than the other.

The next similar fault I noticed was in the exhibit of Bigelow, of Detroit, being a picture of three ladies in what purports to be an opera box; the box represented so slight and fragile that you feel it is a painted screen, and fear it will tip over any moment and carry them down with it. Its unsubstantial nature is farther shown by the thin, sharp edge, against which the lady leans, that looks as if it would cut into her shoulder with the least pressure.

It is a well-established principle of all

architecture, that every support should look as if it was strong enough to hold the weight imposed upon it; and even if a column is strong enough, but looks too slight, it must be built up large enough to look strong, or it gives a feeling of insecurity and consequent discomfort to the observer. The principle applies equally to pictures, and the contrast is distinctly shown by a similar picture in the exhibit of Mr. Wm. Curtis Taylor of three persons in an opera box, which has a satisfying appearance of substantial reality.

Mr. Kent, of Rochester, has a noble exhibit of large pictures with only one of them bad in the faults of which I am now speaking; that, however, is very bad. It is the group of a lady sitting and a gentleman standing, the background printed in from an engraving apparently enlarged until the lines are coarser than a woodcut, also the column and vines near, with a cupid peeping out upon the supposed lovers. There is a total want of harmony between the foreground and background. The carpet runs back under the tiled floor, without any pretence of realistic effect, the outlines of figures blend imperfectly with the ground; in short, a jumble of line engraving with the mezzotint of photography that compels one to say, it is neither "fish, flesh, or fowl, nor good red herring."

The artistic oversight that could mar so noble an exhibit of its triumph over the technical difficulties of photography by showing one such picture, seems almost incredible.

The next in order is the exhibit of Moscher, of Chicago, a large picture of a lady at an easel, with part of the background, an open-air scene, in which the carpet runs under the grass in an impossible way, while the foot and castor of the screen are distinctly shown. While, worse than that, in the fine large picture, "Dressing the Bride," there is represented an open window looking out upon a landscape clearly shown, but the ground probably being too short, a slip has been put in to eke it out, and this slip also represents a window looking out upon totally different scenery, presenting the marvel of two different landscapes seen out of the same window.

Now these may seem trivial faults to most photographers, because, in various ways, they are constantly committed, as swearing and drunkenness are regarded as slight offences in communities where they are constantly practiced. But the exhibits of Messrs. Rocher, Gutekunst, Taylor, Anderson, and others, among our native exhibitors, show that all such glaring incongruities can be avoided without appearance of effort, or, if they make pictures with such faults, at least they do not exhibit them.

My self-imposed task is done. The higher offices of criticism I leave to abler hands; trusting you will believe, that if in this I "nothing extenuate," at least I "set down naught in malice."

NEW YORK, September 14th, 1876.

OUR PICTURE.

LAST month we gave an interior view of Photographie Hall, where there is so much of our art that is beautiful and attractive, and which we believe is helping photographers to a better appreciation of its capabilities, especially in an artistic point of view, more than any exhibition or effort that has ever been made. We present this month an exterior, which gives not only a view of Photographic Hall, but also the principal structure of the Art department of the exhibition, viz., Memorial Hall, whose graceful dome rises in the centre of the picture. This grand gallery, with its extensive annex, presents, if possible, a more profitable field of study for the artist-photographer than Photographic Hall itself, and we know that many have availed themselves of its privileges. That we shall see the results of this study in the near future, together with a general improvement in business, we confidently predict. We believe, too, that this onward movement is not to be confined to our country, but its influence will be felt across the water and in all lands, so that at Paris, in 1878, we shall witness achievements that shall be far in advance of the very gratifying results of our great Centennial.

As American photographers have done so well at home, we trust they will not be backward in making an effort for a like supremacy in the next World's Fair in a foreign city. Our European brethren will, doubtless, make an effort to reverse the order of things at Paris, so that then it will be necessary for America to do her best by being as far as possible in advance of the high attainments reached at Philadelphia.

The negatives for our picture were made by Mr. John L. Gihon, whose artistic skill has produced some of the most beautiful things of the exhibition in the work of the Centennial Photographic Company.

The prints were made at the Printing Institute of Mr. Charles W. Hearn.

CENTENNIAL AWARDS.

THE distribution of the awards to exhibitors at the Centennial Exhibition was made on Wednesday, September 27th, and we find among those connected with photography the following successful names:

Bradley & Rulofson, San Francisco, Cal., photographs; Henry Rocher, Chicago, Ill., photographs; J. F. Ryder, Cleveland, Ohio, photographs; William Kurtz, New York, photographs; N. Sarony, New York, photographs; J. H. Kent, Rochester, N. Y., photographs; L. G. Bigelow, Detroit, Mich., photographs; Centennial Photographic Company, Philadelphia, photographs; C. D. Mosher, Chicago, Ill., photographs; Carl Seiler, Philadelphia, photographs; Charles Bier stadt, Niagara Falls, N. Y., photographs; C. E. Watkins, San Francisco, Cal., photographs; D. H. Anderson, Richmond, Va., photographs; John Reid, Paterson, N. J., photographs; Dr. Woodward, Washington, D. C., photographs; John Carbutt, Philadelphia, heliographs; American Photo-lith. Company, New York, heliographs; Wm. B. Hazzard, Philadelphia, skylight shades; James Cremer, Philadelphia, graphoscopes; Alfred L. Hance, Philadelphia, photo-specialties, consisting of gun-cotton, collodion, varnishes, etc.

The above list was hurriedly prepared from such information as we could gather, and we learn that it is very incomplete, so those whose names do not appear here may yet be hopeful that there is an award in store for them. All will doubtless know before our next issue, but we shall then publish a complete and revised list.

We are among those left out, but are hopeful, nevertheless, that our exhibit of photographic publications may not have been deemed unworthy of notice and an award.

Editor's Table.

"THE ART MONTHLY REVIEW AND PHOTO-GRAPHIC PORTFOLIO.' This is the title of a new magazine, published in London, and devoted to the fine and industrial arts and illustrated by photographs. The letter-press is finely executed, and treats of current art topics, art exhibitions, art literature, etc., while the photographs are copies of paintings and sketches by contemporary artists, illustrating the various schools and tendencies of art. That such works as this are demanded, or have encouragement sufficient to justify publication, is an evidence of the growing interest in art matters among the people of all countries, and that photography is called in to assist in the production of such works is the best evidence of how much it is recognized as having done in educating the people at large to a higher appreciation and love of art. May all such enterprises find a large field for effort and usefulness.

THE LARGEST NEGATIVE IN THE WORLD .-Through the courtesy of Mr. F. Gutekunst, in whose gallery it has been placed for a few days, we have had the pleasure of inspecting the mammoth negative, by Mr. B. O. Holterman, which that gentleman has brought with him from Sydney, New South Wales. We were surprised and delighted with the excellence of the work, which would shame many a man who uses nothing larger than a quarter-plate. We had supposed, from the appearance of the prints in the Australian department of the Exhibition, that the negatives from which they were made must be rather inferior, and that immensity, and the possibility they demonstrated of working such plates, were their principal merits. But we are happy to testify that this is not so. The prints have scarcely done the negatives justice. This one is remarkably perfect in every respect. Entirely free from spots or markings, and of excellent printing intensity. The plate measures three feet two inches by five feet, and the impression is perfect to the very edges. The apparatus with which the negative was made was constructed especially for it, and the lens alone cost \$2500. Mr. Holterman is on his way to Europe, and takes his negative with him.

PENNSYLVANIA DAY AT THE GREAT EXHIBITION.—September 28th, 1876, will doubtless be memorable as the great day of the Centennial Exhibition, when the vast multitude of 274,919 persons were in attendance. Among the many attractions of the day and evening

was a Lantern exhibition by Messrs. Benerman & Wilson, 116 North Seventh Street, Philadelphia, and the Centennial Photographic Company. The pictures consisted of patriotic scenes and views of the Exhibition, including panoramas of the grounds, exteriors and interiors of buildings, beautiful statuary, etc., from the Centennial Photographic Company's negatives, by the Woobury photo-relief process, besides a large number of colored slides and comics. The views were projected on a screen thirty-three feet square, by one of Professor Morton's Experimenter's Lanterns; the whole concluding with some piscatorial and scientific illustrations, with the vertical attachment. The screen was placed against Cook's World's Ticket Office, and the lantern in front of the Centennial Photographic Company's Studio. The exhibition was highly enjoyed by the great concourse of spectators, whose attention was divided between this and the magnificent illumination of the grounds by colored lights, and the bursting shells and flying rockets, with their dazzling colors, which formed a gorgeous closing to this most brilliant of all the centennial days.

Practical Portrait Photography, by William Heighway. This is a new work of one hundred and fifty-two pages, just issued by Messrs. Piper & Carter, London. Mr. Heighway is well known to our readers as an intelligent, capable writer, and from the hasty glance which only we have had time to take of his book, we believe it is full of good, sound, practical instruction, which will render it useful to every photographer.

DAMAGE TO PHOTOGRAPHIC HALL.—The great gale of Sunday, September 17th, ripped off a portion of the tin roof and threw it clear off the building. Fortunately no glass was broken, and no damage resulted to the exhibits.

Notes on the Hudson comprise a neat little pamphlet, by Mr. Leo Daft, Troy, N. Y. The work is intended as a descriptive guide to accompany a series of thirty stereoscopic views. Samples of the views, which we have also received, indicate good work, and are very creditable to Mr. Daft's artistic skill.

A SERIES of magnificent views on the Pacific Railroad have been sent us by Mr. C. R. Savage, Salt Lake City, Utah. Such excellent work deserves more than a passing notice, and we hope to say more about them in a future number.

Specialties.

ADVERTISING RATES FOR SPECIALTIES.—It will be understood that matter under this head is not to be considered as always having editorial sanction, though we shall endeavor to clear it of anything tending to deceive or mislead. Stock-dealers will find this a beneficial mode of advertising, and sure to pay largely. Six lines, one insertion, \$2.00, and 25 cents for each additional line, seven words to a line—in advance. Operators desiring situations, no charge. Matter must be received by the 23d to secure insertion. Advertisers will please not ask us for recommendations. & We cannot undertake to mail answers to parties who advertise. Please always add your address to the advertisement.

FOR SALE.—In Clinton, Mass., a first-class Photo. Gallery, in good running order. Everything pertaining to the business will be sold cheap to a cash customer. Good north, top, and side light. Roomy and convenient. Up only one flight. Rent, \$225. This is a rare chance to a man that means business. For further particulars, apply or address J. L. SWEET,

Box 391, Clinton, Mass.

Wanted to Rent a well established Photographic Gallery; good instruments, north light, and of some local repute, to a responsible party.

Address Photographer,

P.O. Box, 514, South Bend, Ind.

FOR SALE. — A Gallery and Photographic Stock Business combined, or will sell the Gallery separate. Population, 30,000. Will sell on very reasonable terms. Reason for selling, change of business. Address Mozart,

Care Philadelphia Photographer.

For Sale.—Ormsby's Gallery, in the city of Chicago; splendid location, first-class run of custom, ground-floor studio, doing a fine trade, will be sold low for cash. Those meaning business, please investigate. Address

E. D. ORMSBY, 309 W. Madison St., Chicago.

NEW! NEW!!

We make them for the trade.

Bromide Solar prints on albumen paper—a finished life-size picture, as soft, rich, and fine as a small print from the same ordinary contact negative. No loss of detail in the whites. Specimens at Centennial. Folsom's Gallery,

Danbury, Conn.

To RENT.—Rooms suitable for a Photograph Gallery, 2d and 3d floors. Rooms 60 feet deep, and in the very best location in the city of Syracuse. For information, address

HENRY LOFTIE, Syracuse, N. Y.

A BARGAIN can be had by any one who wants a Photograph Gallery in a live city of 12,000 to 15,000 inhabitants. Good country trade. Rent low. For further information, address

Box 591, Tiffin, Ohio.

FOR SALE.—A nice little Photograph Gallery in a town of 3000 inhabitants, with good country all round; well fitted up—at very reasonable figures. In the Eastern Townships, Canada. For particulars, address

I. C. Peacock,

Waterloo, P. Q., Canada.

For Sale.—One of the leading Galleries in Allegheny City. Cost over \$2000. Will sell for less than half the cost. Reason for selling, health failing. Must sell soon. Population, 80,000. For full particulars, address

J. M. REYNOLDS, 43 & 45 Federal St., Allegheny City, Pa.

Wanted.—A strictly first-class operator in every respect. Must be a man of good address, strictly temperate, and a perfect master of photographic chemistry. He will be required to take entire charge of the dark-room, and do posing and lighting as required. To the right man a permanent situation in one of the finest galleries in the country will be given. Address, giving reference, age, and salary expected,

E. L. BRAND, 210 & 212 Wabash Av., Chicago, Ill.

By a capable man of fifteen years' experience in the leading stock-houses of New York and Boston. Can command a good trade. Well posted in buying and selling. Address Taft.

Care of Philadelphia Photographer.

MR. John L. Gihon is ready to enter into an engagement with any leading photographer. He has had over twenty years of practical experience. He was an artist by profession before adopting photography, and can, therefore, fill the position of either colorist, poser, or operator. Specimens of his work have appeared in this Magazine, and his writings have rendered his name familiar to most of its readers. Address John L. Gihon,

Office of *Philadelphia Photographer*, 116 North Seventh St., Philadelphia.

PIANOS AND ORGANS.—Photographers wishing to buy a Beatty Piano or Organ, can get extra inducements through photographing. Address DANIEL F. BEATTY, Manufacturer,

Washington, N. J.

USE WAYMOUTH'S VIGNETTE PAPERS.

EDINBURGH PHOTOGRAPHIC SOCIETY.—The council respectfully intimate that they have made arrangements for holding in Edinburgh an exhibition of photographs, photographic apparatus, and material, on a very extensive scale, in December and January, next, at which a number of medals in gold, silver, and bronze will be awarded; and they invite the American photographers to send pictures for competition. Full particulars will be forwarded on application to

JOHN NICOL, Ph.D. Exhibition Secretary. 16 Warreston Crescent, Edinburgh.

WAYMOUTH'S VICNETTE PAPERS.

For Sale.—A new and handsomely fitted gallery, in a new building erected especially for the purpose, with every facility for making first-class work, in a Southern city of 40,000 inhabitants. Doing a prosperous business of several years' standing; being the only first-class gallery in the place. Terms moderate. Address, for further information, A, care Philada. Photographer

BURREL'S CHART AND HINTS TO PATRONS.—Your gallery is not complete without them. For particulars, see advertisement in January, February, and March issues of this Journal. Price, \$1.25, unmounted, by mail, or by express mounted.

For Sale.—Reilly's fine negatives of the Yosemite, California, Sierra Nevadas, Niagara, etc.

Apply to Benerman & Wilson,

Publishers Philada. Photographer.

HERMACIS LENS TESTIMONIAL.

Philadelphia, March 21, 1876. Messrs. WILSON, HOOD & CO.

I take pleasure in testifying to the perfect working of the "Hermagis" just purchased from you. We have tested it particularly as to its depth of focus, and find it to combine with this a rapidity of working which makes it doubly esteemed. Very respectfully.

> WM. CURTIS TAYLOR, 914 Chestnut Street.

Photographic Hall.—The four sizes of electrotypes of Photographic Hall, advertised last month, are as follows: 1\frac{1}{4} \times 2 \text{ in., } 2 \times 3\frac{1}{4} \text{ in., } 4 \times 6 \text{ in., } 4\frac{1}{2} \times 7\frac{1}{4} \text{ in. } For sale by

CROSSCUP & WEST, 702 Chestnut Street, Philadelphia.

SEAVEY'S SCENIC STUDIO,

No. 8 Lafayette Place,

LA FAYETTE W. SEAVEY makes a novel display at the Centennial of Photographic Backgrounds, Papier Maché

NEW YORK

Accessories, and numerous Photographs of new designs.

For results obtained by the use of his works, examine the exhibits of the leading photographers.

List of Exhibitors at the Centennial Using Seavey's Backgrounds.

Collins, Urbanna, Ohio.

Gentile, Chicago.

Howell, New York.

Busey, Baltimore, Md.

Holler, Brooklyn, N. Y.

Schwind & Kreuger, New York.

Sarony, New York.

Alman & CO., New York.

Kurtz, New York.

Anderson, Richmond, Va.

De Lamater, Hartford, Conn.

Bradley & Rulofson, San Francisco.

J. W. Kent, Rochester, N. Y.

Holyland, Baltimore, Md.

Rocher, Chicago, Ill.

Landy, Cincinnatti, Ohio (seven ages).

Gutekunst, Philadelphia, Pa.

Taylor, Philadelphia, Pa.

Gubleman, Jersey City, N. J.

USE WAYMOUTH'S VIGNETTE PAPERS.

THE GORHAM STOVE.—No photographer can get more for his dollar than by investing in a "Gorham Stove." It is tiny in size but a giant in usefulness. See advertisement.

> Wilson, Hood & Co., 822 Arch Street, Philadelphia.

LUCKHARDT'S ELEGANT STUDIES.—We have just received an invoice of splendid studies of the female figure, by Fritz Luckhardt, Vienna. The size, 8 x 10; the price, \$3.50. Order quick!

Wilson, Hood & Co., 822 Arch Street, Philadelphia.

WAYMOUTH'S VICNETTE PAPERS.



PHOTOGRAPHIC HALL.—Electrotypes of Photographic Hall, four sizes, from the above up to the size in February number of this magazine. For prices apply to CROSSCUP & WEST,

Seventh and Chestnut Sts.

Or, BENERMAN & WILSON, Philadelphia.

Mr. Charles Waldack, who is known to many of our readers, writes in the Photographic Times as follows: As Robinson's trimmer is getting to be used universally, I think I will do a good turn to photographers in telling them how to sharpen the little wheel when it gets dulled by use. I owe it to a photographic friend here, and although some may know it, I am sure many do not. Make a groove in a piece of lead by means of the trimmer, put in it a little fine emery and a drop of oil, and run the trimmer forward and back in the groove until it is sufficiently sharp. There is something else about the trimmer; ascertain by trial which side of the wheel should be on the inside of the zinc or iron mat to cut best, and mark it."

GREAT BARGAIN OFFERED.—A first-class outfit in prime running order, for photographing or ferrotyping; cost over \$300 per invoice of Walzl, Baltimore, two years ago, and used during that time by an old operator in stationary gallery only. Failing sight cause of selling. Price, \$150 cash. For inventory and full particulars, address

E. F. CLARKE,

174 Whitehall St., Atlanta, Georgia.

THE ROBINSON TRIMMER.

RICHMOND, IND., August 11, 1875.

MR. EDW. L. WILSON.

DEAR SIR: I feel as though I should say a few words in praise of the Robinson Trimmer and Guides I received from you. The trimmer does its work admirably, do not know how I should do without it; and the round-cornered guides, for cards, is something new, and makes the picture look much neater when compared with the old square cut kind, from a glass pattern.

The guides, all sizes, are the nearest perfect of any I ever used. But what I wish to request of you in particular is, to publish in your Journal the right way for sharpening the trimmer, I am certain this will be looked for by a great many with interest. I have used mine now constantly for some time, and it does not need it yet; but, in ease it does, would not like to spoil it with any experimenting. Yours respectfully,

M. WOLFE.

SITUATIONS WANTED.

No charge for advertisements under this head: limited to four lines. Inserted once only, unless by request.)

By a young lady of experience and good address, to attend reception-room and retouch, in a first-class gallery. Good references. Address LaVenia Hyde, Oshkosh, Wisconsin.

By a No. 1 artist, perfect in crayon, India ink, pastel and water colors. Samples of work to be found in Photographic Hall, on Centennial grounds, under No. 118. Address B. Schluter, Kansas City, Mo.

Photographers read this! I want a good permanent situation in a first-class gallery, where there is plenty of work the year around. As printer and toner; can retouch some; am handy with carpenter's tools, the broom, and like to put my spare time to good use. Address, stating wages, etc., Geo. A. Simnons, West Side, Cleveland, Ohio.

A lady wishes a position in a good gallery, is a fine retoucher of negatives, and can finish photographs in graphite and water colors. Has been six years in the business. Can give good reference. Terms moderate. Address Mrs. G. E. L., Station H, New York.

By a lady with some artist, or in a copying house, where she would be allowed to finish draperies or backgrounds only. Has had some years' experience in colors and India ink. Address M., 116 North Seventh St., Philada.

In a reception-room and to retouch negatives, by a lady. Specimens sent. Address G. M. P., P.O. Box 266, Waterbury, Conn.

USE WAYMOUTH'S VIGNETTE PAPERS.

As an operator, by a reliable, competent man. References first-class, and wages moderate. Western States preferred. Do not write unless you mean business. Address Photographer. New Paris, Preble Co., Ohio.

As printer and toner, or retoucher, or both; can operate. Five years' experience. First-class copyist and retoucher. Address Wm. C. S., Wilkesbarre, Luzerne Co., Penna.

As printer and toner; have been chief printer in a first-class gallery for seven years. Address G. W. C., office "Philadelphia Photographer," Philadelphia.

By a practical photographer, either in darkroom, printing-room, or as retoucher. Firstclass references can be given as to ability and character. Address J. Leon Pease, Adams, Jefferson Co., New York.

By a lady of years' experience, a place comfortable to work in. Can retouch, spot, mount, work in ink and water colors. Will give best of reference from employers. Address Artist, Box 53, East Greenwich, R. I.

As operator and retoucher, understands all the branches of photography. Can give the best of references to that effect. Will engage for a year. Salary from \$15 to \$20 per week, owing to the size of the place. Married. Address Artist, Columbia, Lancaster Co., Penna.

By an operator, over sixteen years in the business; understands it in all its branches. From five to ten years' engagement desired; or will take a gallery on shares. Best of reference furnished as to morals, sobriety, and capability. Address Industry, care Lon. Blackburn, Box 723, Youngstown, Ohio.

By a young married man, of good business capacity, as operator, retoucher, printer, or to take charge of a good gallery on salary or share; or would rent with privilege of buying. Best references, character and ability. If you mean business, address Reliable, care Thomas H. McCollin, 624 Arch Street, Philadelphia.

In some first-class gallery, as printer or operator. Can give references if required. Address D. F. Barry, Columbus, Wisconsin.

By a man, experienced in the business, as printer, having had charge of a New York house for some years. Best of references. Address Mr. Terringedts, 707 Broadway, New York.

By an experienced hand as retoucher or operator, or would take full charge of a good gallery. Have just closed a long engagement in a large establishment in an eastern city. The best recommendations shown. Address Thomas, office "Philadelphia Photographer."

By an operator, capable of making fine artistic negatives every day without fail, and is also an excellent printer and toner, competent to take entire charge of a first-class room; does not care to accept a position in any other than a good gallery. Best of references. Address A. B., Box L., Rome, Oneida Co., N. Y.

In a photograph gallery, by a young lady who has had experience in landscape and portrait painting; can pencil, etc. References exchanged. Address Cassie Walford, Olcott, Niagara Co., New York.

By a young man of five years' experience, as operator, assistant operator, or printer. Posted on photographing, ferrotyping, and viewing. Can give good recommendations from former employers. Terms to correspond with times. Address Vincent, care H. Buchholtz, Springfield, Mass.

In a photograph gallery, by a young man, as general assistant, who can do printing, toning, retouching, and ferrotyping. Address E. H. Colson, 32 Hampden St., Springfield, Mass.

In a gallery, by a young man who has had three years' experience in the business, two of which have been spent in one of the largest and leading galleries in the U.S. Understands operating and printing. Best of reference and good reasons for leaving present employer. Address W.A., care of Teal & Sargent, Cleveland, Ohio.

The undersigned, who has had charge of the Alden photograph gallery for the past year, will be open for an engagement as operator after October 18th, or will take charge of a first-class gallery. Address W. K. Manus, Alden's Photograph Gallery, Springfield, Mass.

By a first-class operator of fourteen years' experience; can furnish the use of a 14 x 11 box and lens, a 2 C. Dallmeyer, and a complete stereo outfit. Services and use of both, \$20.00 per week. Address W. E. B., care N. Cochrane, Neenah, Wis.

By a good operator, or to rent a gallery in a place of 5000 to 10,000 inhabitants. Good references given. Address operator, care of T. Hartwell, Danville, Ill.

By a young lady of six months' experience in a first-class gallery, as retoucher. Best of reference given and required. Address F., Lock Box 90, Monmouth, Illinois.

As operator, ten years' experience, either under the skylight or in the dark-room. Address E. T., 247 North Ninth St., Philadelphia.

By a retoucher and assistant operator; understands printing, etc. Address H. B., General P. O., Philadelphia, Pa.

By an operator, posted in all branches of the art. Salary to suit the times, or will run a gallery on shares. References, L. G. Bigelow, Detroit; and J. F. Ryder, Cleveland, Ohio. Address A. C. Burnham, 244 Woodward Ave., Detroit, Mich.

As retoucher of negatives. Two years' experience near New York. Can print, trim, and retouch with ink. Address Mollie S. King, Box 720, Stokes, Oneida Co., N. Y.

OHN DEAN & CO.

Worcester, Mass.,

Manufacturers of the

NONPAREIL PLATE,

A substitute for porcelain. The new NONPAREIL PICTURES have elicited the most general expressions of approval and admiration. The latest improvement simplifies the formula and insures success. Our plates are stamped. Patented July 29, 1873, and June 16, 1874. All others are spurious.

FERROTYPE **ADAMANTEAN**

BLACK, AND PATENT CHOCOLATE-TINTED. EGG-SHELL, AND GLOSSY.

The experience and extensive facilities of JOHN DEAN & CO., enable them to produce the most desirable FERROTYPE PLATES in the market.

E. & H. T. ANTHONY & CO., Trade Agents,

591 Broadway, New York.

MEW STOCK HOUSE, TO

Somerville's St. Louis Photographic Stock Depot,

No. 8 South Fifth Street.

AMERICAN OPTICAL CO.'S CELEBRATED APPARATUS,
POWERS & WEIGHTMAN'S SILVER, GOLD, IODIDES AND BROMIDES,
VOIGTLANDER & SON AND DARLOT LENSES,
TILFORD'S CELEBRATED IODIZED AND NEGATIVE COLLODION,
AND EVERY WANT FOR THE TRADE.

FRAMES IN EVERY VARIETY.

J. C. SOMERVILLE, No. 8 S. Fifth St., Saint Louis, Mo.

HEADQUARTERS FOR THE TRADE.

Show Displayers, Velvet Stands,
Velvet Passepartouts, Velvet Cases,
Beveled Matts, Double Matts,
Fancy Metal Frames, Standard Matts,
Fancy Paper Passepartouts.

These goods are entirely of our own manufacturing. A large assortment constantly on hand; odd sizes and styles made to order.

LEWIS PATTBERG & BRO., 709 (Formerly) Broadway, New York.

THE CENTENNIAL

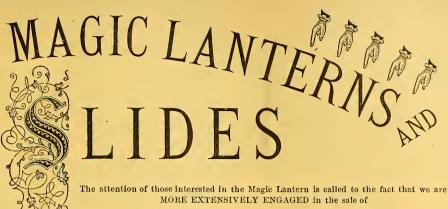
PHOTOGRAPHIC DIARY

NOW READY.

CONTENTS.—Rates of Postage—Places of Interest in Philadelphia—Railroad Depots and Ticket Offices—Calendar, with Photographic Hints—Local Photographic Societies—Items of photographic History—Photographic Processes—The Negative Bath—The Developer—Collodion—Varnishes—Retouching Varnish—Printing and Toning—Mr. Marston's Process—Mr. Hearn's Process—Collodio-Chloride for Porcelain Printing. By Charles Evans—Emulsion Process—Photographic Hints—Executive Officers of the United States Centennial Commission—The Centennial Buildings—Photographic Hall—Directions for Exhibitors, Important to Visitors—Regulations for Admission to the Centennial Ground—Admission Tickets for Exhibitors and Employees—Admission Tickets for the Public—Hotel Charges—N. P. A. Convention—Map of Philadelphia.

PRICE, ONLY 75 CENTS.

For sale by BENERMAN & WILSON, Photographic Publishers, 116 North Seventh Street, Philadelphia, Pa.



LANTERN SLIDES AS A SPECIALTY,

Than any other house in America. Our continuous contact with photographic men gives us special advantages in this line, and as MANUFACTURERS AND DEALERS we offer the very best opportunities to secure

MUCH FOR YOUR MONEY,

AS WELL AS SUCH GOODS AS WILL PUT MONEY IN YOUR PURSE, NAMELY:

A GOOD LANTERN, THE BEST of SLIDES.

FOUR CATALOGUES MAILED ON RECEIPT OF 25 CTS.

DO NOT BUY UNTIL YOU HAVE CONSULTED HEAD-OUARTERS! SUPPLEMENTARY CATALOGUE (March 1) READY!

USE WILSON'S

A Lecture Book describing graphically, as an eyewitness, 600 beautiful places and things in all parts of the world.

SUBSCRIBE FOR THE

Monthly Journal, devoted to the interests of lantern lovers. \$1 per year, post-paid.

Special estimates and other information given gladly. No substituting of Slides. Prices very low. PROMPTNESS OUR RULE.

> BENERMAN & WILSON, Photo. Publishers, 116 NORTH SEVENTH ST., PHILADELPHIA.

WHAT follows is a Catalogue of the best Photographic Publications, sent to remind all live photographers of the fact that good practical information is as essential to them as good lenses and pure chemicals. There are some "artists" who "get along" without any of these, but they do not progress, neither do they succeed. Do not be of their number. There is too much going on in photography in these "quick acting" times to enable any photographer to afford to do without reading and being posted. In anything you undertake you should take every precaution to be as bright as your neighbor, or he will get ahead. Keep alongside, any way. We will mail you any of the works named below, post-paid, on receipt of price. Order now.

1876

WILL BE A YEAR OF JUBILEE FOR PHOTOGRAPHERS THAT SHOULD NOT BE NEGLECTED.

THE CENTENNIAL EXHIBITION

Will present opportunities for study and improvement which should not be overlooked, and the study of the best books will not only do you good before, but after the inspection of Photographic Hall. READ! READ!! READ!!!

BENERMAN & WILSON,

Photographic Publishers,

Philadelphia, Pa.

1876 Photographic Mosaics.

THE Centennial anniversary year of American Independence finds our little Annual in its eleventh year. developing rapidly for its age and size, and this year takes quite an interest in the Centennial. It is full and running over with fresh contributions from the most wide-awake members of the fraternity in all parts of the country. We here give a list of the

bers of the fraternity in all parts of the country. We here give a list of the CONTENTS.—Review; Eighteen Hundred and Seventy-six; Discoveries, Inventions, and Improvements; Work in the Studio; The Dark Room; The Printing Department; Landscape Photography; Dry-plate Work; Apparatus; Art Advances; The National Photographic Association; Our Publications; Our Prize Offer; Items of Interest; Obituary; The Art Progress; Fog; Come, Let us Reason Together; Experience; Provoking; A Suggestion Anent the Great Exhibition; Centennial Album of Photographic Studies; The Eliminating of Hyposulphite from Prints; A Treatise on Photography; Why not make Solars instead of Contact, etc.; Systematic Preservation of Negatives; Want of Enterprise; Lighting the Sitter; Theory and Practice; Be Functual; Formulæ for Photographs and Perrotypes, which give Lights and Half-tones not surpassed; Exposure and Development of a Negative; A Cause for Fade Frints; How I Sunned a Bath under Difficulties; A Good Collodion; A Word to the Weak; How to Clean New and Old Glass Plates; Long's Bath Warmer; Albumen, its Preparation and Use in Photography; An Item of Real Value; The Negative Bath; How to Lubricate Prints for Burnishing; Then and Now; A Pair of Suggestions; How to Obtain Bolling Water in Winter; An Excellent Ware for Photographic Purposes; Hints on Composition; The Causes and Cure for some of the Difficulties pertaining to Photography; At and Mechanism; Breakfast for Dinner; Pield Work; Marble Negatives—Stains From the Hands, etc.; Pyroxylin—Gun-Cotton; The Old Bath; The Upper Floor; Dry-Plates; The Art Privileges of our Great Centennial; Curtains as a Meansof Adjusting Light; An Exposing Shutter; How to Touch out Finholes; Photography; A Cheap and Good Plateholder; The Way it is Done; To Correspondents; The Construction of Skylights; Blisters; At the Desk; On Photographic Lenses—How Way it is Done; To Correspondents; The Construction of Skylights; Blisters; At the Desk; On Photographic Lenses—How Way it is Done; To Correspondents; The Con

Price, bound in Cloth, \$1. Paper Cover, 50 Cts. 144 pages.



hiladelphia Photographer.

THE BEST PHOTOGRAPHIC MAGAZINE IN THE WORLD.

EACH NUMBER EMBELLISHED BY PHOTOGRAPHY.

THE THIRTEENTH VOLUME of our Magazine promises to be the most popular and brilliant of any that has preceded it. We have many good things in store for it. It shall be our endeavor to make it all the richer and more interesting on account of the Centennial. We expect to embellish it with some of the choicest gems the Exhibition can produce and add interest to its pages from month to month, by giving a sort of compendium of all that relates to Art or Photography. Among other attractions, we expect to have our old friend Dr. Voeschere during six months of next year, at least, and our readers may expect some of the fruits of his genius and talents to add to its interest and usefulness.

here during six months of next year, at least, and our readers may expect some of the fruits of his genius and talents to add to its interest and usefulness.

But while we intend to provide all these home attractions, we do not propose to neglect whatever may transpire abroad, but shall present as usual correspondence from such well-known writers as Prof. Strebbing, Mr. W. J. Stillman, Mr. Ghas, Walnder, and others. With all these good things in prospect for the year 1876, we hope to render our magazine more beautiful and more useful than ever before; and while we maintain that the beautiful example of photography, which accompanies each issue, is alone worth the subscription price, still more and more effort will be made to make the reading matter everything that it ought to be. Our correspondents from all the leading centres abroad will keep our readers posted on all matters of interest in their several sections, while our unrivalled staffat home will look diligently after your interests here. To make THE PHILADELPHIA PHOTOGRAPHER the best PRACTICAL HELEER which can possibly be obtained, is the aim and earnest desire of its publishers. We ask your co-operation in extending its usefulness, and offer to all present subscribers, who secure us new ones, the following

PREMIUMS.

For every new subscriber, for one year, \$1.00, payable in any of our publications, books, or, if preferred, one dollar's worth of any of our prize pictures, or any other article for which we are agents, advertised in this Magazine.

The subscription price of the Philadelphia Photographer is \$5 a year, \$2.50 for six months, 50 cents per month.

Each number, remember, contains a handsome photograph.

OUR BOOKS.

THE PRACTICAL PRINTER. By Chas. W. Hearn.

This very useful book is indispensable in the printing department. No one who wishes to be up with the times in printing, can afford to be without it. Its rapid sale and the favor with which it has been received, are the best recommendations we can give. Price, \$2.50.

BIGELOW'S ALBUM OF LIGHTING AND POSING.

This excellent work still maintains its popularity. It contains 24 heautiful photographs from life in different lights and positions, with an explanatory key, which makes it the most practical helper the Photographer can have. Price, \$6.00.

DR. VOGEL'S HANDBOOK OF PHOTOGRAPHY. Second Edition.

This is a really standard work, and the most complete handbook ever published. The new edition has been thoroughly revised, and much additional matter introduced, together with new illustrations, new photographs, and a new arrangement all through. Now is the time to study up, and this book is applicable to any department. Price, \$3.50.

DR. VOGEL'S PHOTOGRAPHERS' POCKET REFERENCE-BOOK.

This is in every sense a reference book. It is alphabetically arranged, and any process or formule in photography may be found at a moment's notice. All is arranged in a concise and practical form. It is particularly useful in the chemical department. Price, \$1.50

THE FERROTYPERS' GUIDE.

This little work is by a practical ferrotyper, and gives just the instruction necessary to those who wish to do good work in this branch of our Art. Price, 75 cents.

LINN'S LANDSCAPE PHOTOGRAPHY

Is an excellent companion in the field, and may help you over many difficulties; can be carried in the pocket. Price, 75 cts.

GLIMPSES AT PHOTOGRAPHY. By Prof. Himes.

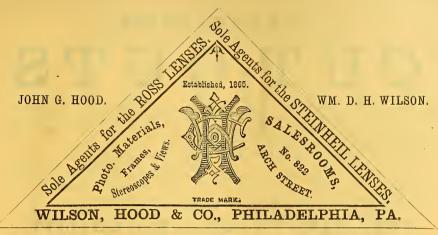
This work treats of some of the peculiar styles of printing, such as leaf-printing, etc., etc. Price, \$1.25.

WILSON'S LANTERN JOURNEYS.

To those who use the lantern this book is indispensable. It contains just the information required about six hundred different views, and enables any exhibitor to make his entertainments enjoyable and instructive. Price, \$2.00.

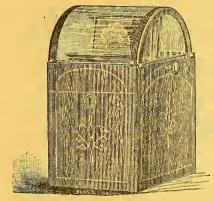
BURNET'S HINTS ON COMPOSITION.

We have reproduced this work by photo-lithography, and sell it at the low price named, while a copy of the original work could not be bought for five times that amount. It is fully illustrated, and supplies in a very attractive form, the art knowledge, in reference to composition, that so many pho-tographers are seeking after. Price, \$3.50.



We have been appointed Agents for the sale of the

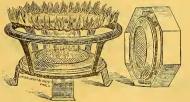
REVOLVING PHOTO. CABINET.



PRICES AS FOLLOWS:

No. 1-Velvet, ornamented (holds 48 cards,)	\$5	50
" 2-Velvet, ornamented, mirrors in sides,		
(holds 48 cards)	7	00
No. 3-Engraved walnut, gilt lined (holds 48		
cards)	6	00
No. 4-Engraved walnut, mirrors in sides	7	50

THE GORMAN HEATING STOVE.



Price, \$1.00 each, by mail, post-paid.

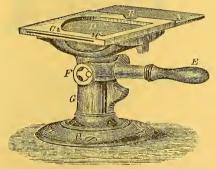
ALSO, AGENTS FOR THE

PUBLICATIONS

CENTENNIAL PHOTOGRAPHIC COMPANY.

Catalogues and prices on application,

BERGNER'S PATENT PRINT-CUTTERS.



Card size	\$30	00	Cabinet	\$35	00
Small stereo	30	00	Cabinet 4 x 4 size 4 x 7 ''	30	00
Artistic stereo	33	00	4 x 7 ''	50	00

THE ENTREKIN PLANISHER.

Size	6 in.	10 in.	14 in.	18 in.	30 in.
Price	\$20	\$30	. \$40	. \$50	. \$300

THE AMERICAN OPTICAL CO.

Have reduced prices of many of their goods. Send for their new Price List, also for our "New Illustrated Price List of May, 1876."

WILSON, HOOD & CO., PHILADELPHIA.

GIHON'S

Are the very best that are made, and are now without a rival in the market. They are clean cut, most desirable shapes and sizes, and made of non-actinic paper, manufactured specially for the purpose. Each package contains 30 Cut-Outs, or Masks, with corresponding Insides, assorted for five differently sized ovals and one arch-top.

PRICE, \$1.00 PER PACKAGE. Sent by mail on receipt of price.

Parties wishing special sizes, or large lots of a few sizes, may have them cut to order promptly, by addressing the manufacturer. No lot costing less than \$1.00 made at a time.

No printer should attempt to make medallion pictures without them.

THEY HAVE NO EQUAL FOR QUALITY.

Beware of spurious imitations made of common paper, full of holes, badly cut, and odd shapes and sizes. Ask your stockdealer for GIHON'S CUT-OUTS, and see that they are in his envelopes with instruction circular included.

PROMENADE SIZE NOW READY!

SOLD SEPARATELY AT 50 cts. per dozen.

IS DESIGNED FOR

COMPLETELY OBSCURING THE IMPERFECT BACKGROUNDS OF COPIES,

RETOUCHING NEGATIVES,
FAULTY SKIES IN LANDSCAPES,
COATING THE INSIDE OF LENSES OR CAMERA BOXES,
BACKING SOLAR NEGATIVES,

COVERING VIGNETTING BOARDS,

AND FOR ANSWERING

ALL THE REQUIREMENTS OF THE INTELLIGENT PHOTOGRAPHER IN THE PRODUCTION OF ARTISTIC RESULTS IN PRINTING.

WHEREVER YOU WANT TO KEEP OUT LIGHT, USE OPAQUE.

It is applied with a brush, dries quickly and sticks.

CUT-OUTS (thirty), \$1.00.

OPAOUE, 50 CENTS.

FOR SALE BY ALL DEALERS.

Address all orders to

JOHN L. GIHON, Inventor,

128 N. Seventh St., Philadelphia, Pa.

OUR NOVEMBER, 1875



? ICTURES

Our second PROMENADE PICTURE competition has just been closed, and we are in possession of some of the *finest Photographic work ever* done in the world!

We offer prints from the competing negatives, for sale at the prices below. They are most useful to every photographer as examples of good negative work, artistic composition and lighting, and superior printing and finishing. We have done our part to make them models in every respect.





Was awarded for the best six negatives to

Mr. LYMAN G. BIGELOW, Detroit, Michigan,

Whose elegant work is familiar to many of our patrons.

THE SETS INCLUDE:

Nos. 1 to 8—Studies by L. G. Bigelow, Detroit, Michigan.
Nos. 9 to 20—Studies by F. B. Clench. Lockport, N. Y.
Nos. 21 to 28—Studies by G. M. Elton, Palmyra, N. Y.
Nos. 29 to 34—Studies by O. P. Scott, Abingdon, Ill.
Nos. 35 to 40—Studies by E. M. Collins, Oswego, N. Y.

Nos. 41 to 46—Studies by E. H. Alley, Toledo, Ohio. See review in December number *Philadelphia Photographer*.

The whole set of 46,.														\$10	00
In two Photo. Covers,												v		11	50
Selections, per dozen,											٠			4	00
" per two do															
The 28 of Messrs. Cler	nch,	В	ige	lov	₹,	and	E	ltor	1,					6	00
Book Cover and Bindin	ng.														75

Address all orders to

BENERMAN & WILSON, Publishers, 116 NORTH SEVENTH ST., PHILAD'A, PA.









CENTENNIAL LANTERN SLIDES.

WE ARE NOW PREPARED TO FURNISH THE FOLLOWING SUBJECTS:

NISH THE FOLLOWING SUBJECTS:

395—Main Building, from Nave, showing S. W. Tower.

397—Judges' Pavilion.

398—Machinery Hall.

400—Memorial Hall, Main Entrance.

410—Memorial Hall, Main Entrance.

412—Hawaiian Islands' Exhibit, Main Building.

444—Main Building—Transept, from S. Gallery.

446—Model of Calumet & Hecla Copper Co.'s Stamp Mill.

454—Main Building—Main Avenue, from N. E. Tower.

456—Main Building—Main Avenue, from Transept.

460—Main Building—Main Avenue, from Transept.

461—Horticultural Hall, from Grounds.

471—Sandwich Bessemer Steel Exhibit, Main Building.

491—Women's Pavilion, from Gallery.

500—Memorial Hall.

533—Centennial Grounds, from Judges' Pavilion.

537—Horticultural Building, South Entrance.

541—Art Annex, Italian Department. WE ARE NOW PREPARED TO FUR

40—Board of Finance Building, South Front.
60—Machinery Hall, from Finance Building.
64—Machinery Hall, South Avenue.
65—Horticultural Building, S. E. Forcing Room.
86—Art Gallery and Memorial Hall.
93—Horticultural Building, East end.
104—Main Exhibition Building, East end.
104—Main Building, Transept.
115—Main Building, Transept.
115—Main Building—Nave, from Transept looking East.
117—Main Building—Nave, from Transept looking E.
120—Horticultural Building, S. E. Forcing Room.
122—Horticultural Building, S. E. Forcing Room.
123—Machinery Hall, Corliss Engine.
133—Machinery Hall, Corliss Engine.
134—Machinery Hall, Corliss Engine.
145—Main Building, Transept looking N. W.
150—Machinery Hall, South Avenue.
151—Agricultural Building, North Avenue.
153—Horticultural Building, North Avenue.
153—Horticultural Building, Swedish Section.
153—Main Building, Swedish Section.
154—Main Building, Transept looking S. W.
161—Corliss Engine.
162—Rodman Gun, 20-inch bore.
164—Falstrom and Tornqvist's Exhibit.
171—Memorial Hall, Cornice of Vestibule.
173—Staffordshire Ceramic Ware.
176—Laubeth Pottery Exhibit.
177—Netherlands Section.
188—Horticultural Building, South side.
222—Women's Pavilion.
222—Women's Pavilion.
225—Agricultural Building—Main Avenue, from Centre. 40-Board of Finance Building, South Front. 551—Art Annex, Italian Department. 543—Art Annex, Italian Department. 543—Art Annex, Italian Department. 545—Art Annex, Italian Department. 550—Connecticut State Building. 566—Memorial Hall. 599-South Avenue, from West end-Machinery Hall. 601—The Dairy. 603—Agricultural Hall. 603—Agricultural Hall.
604—Swedish School-House.
650—Nev Jersey State Building, rear view.
651—The 20-inch Rodman Gun.
652—Main Building, West end.
656—Main Building, West side.
665—The Dying Lioness.
666—The Dying Lioness.
666—Any Group for Lincoln Monument.
678—The American Volunteer (Granite Statue).
693—Horticultural Hall, Italian Section.
693—Horticultural Grounds.
700—Agricultural Hall, from Horticultural Hall.
702—Horticultural Hall, Section.
693—Pennsylvania State Building.
704—New Hampshire State Building.
705—Queensland Court, Main Building.
721—New York State Building.
722—Wisconsin State Building.
723—Illinois State Building. 222—Women's Favinor. 225—Agricultural Building—Main Avenue, looking East. 226—Agricultural Building—Main Avenue, from Centre. 227—Agricultural Building—Main Avenue, looking West. 230—English Government Buildings. 230—English Government Buildings.
531—Japanese Commissioners' Dwelling.
232—Japanese Commissioners' Dwelling, Piazza.
233—New York State Buildings.
249—Norwegain 15th Century Furniture.
250—Netherlands Section, Kiosk.
251—Gustafsberg China and Porcelain, Swedish Section.
254—Anthurum Scherzonanum, Horticultural Hall.
260—Kinsford Straub Exhibit. 250—Netherlands Section, Kiosk.
251—Gustafsberg China and Porcelain, Swedish Section.
254—Anthurum Scherzonanum, Horticultural Hall.
260—Kingsford Starch Exhibit.
261—Cereus Monstrosa Opuntia Peruvianus.
264—Dicksonia Antistica, Floral Hall.
265—Ceroxylon Nevium, Floral Hall.
265—Ceroxylon Nevium, Floral Hall.
266—Phoenia Doclylitera, Floral Hall.
276—Lemon Tree, Floral Hall.
278—Lemon Tree, Floral Hall.
279—Lemon Tree, Floral Hall.
279—Banana, Floral Hall.
279—Banana, Floral Hall.
279—Banana, Floral Hall.
285—Floral Hall, Horticultural Building.
286—Floral Hall, Horticultural Building.
286—Floral Hall, Horticultural Building.
287—Floral Hall, Horticultural Building.
290—Floral Hall, Horticultural Building.
292—Floral Hall, Horticultural Building.
293—Floral Hall, Horticultural Building.
294—Floral Hall, Horticultural Building.
294—Floral Hall, Worticultural Building.
294—Floral Hall, West End.
312—Floral Hall, West End.
313—Horticultural Building, Promenade.
324—Horticultural Building, Promenade.
325—Horticultural Building, Promenade.
325—Horticultural Building, Promenade.
326—Horticultural Building, Promenade.
327—Lansdowne Bridge.
329—Agricultural Building, From Horticultural Building 349—Torso Washington, Art Gallery.
351—Group, America—Art Gallery.
352—Group, America—Art Gallery.
353—Group, America—Art Gallery.
354—Group, America—Art Gallery.
355—Centennial Opening, the Choristers.
371—Main Building, from Machinery Hall.
375—Washington Glass Works Exhibit, Main Building.
380—Art Gallery, Main Entrance.
383—Dorman Mig. Co., S. H. Penley, Patentee, 173 & 175
393—Main Building, Transept from S. E. Tower.

New ones are being constanty added. 705—Queensland Court, Main Building.
721—New York State Building.
722—Wisconsin State Building.
723—Hlinois State Building.
723—Hlinois State Building.
723—Monitor Turret.
737—Rhododeudrons, Horticultural Grounds.
743—Memorial Hall, American Department.
745—Agricultural Hall, Main Avenue.
752—Horticultural Hall, Interior.
784—King & Brown Manufacturing Co.'s Exhibit.
805—Interior of Agricultural Hall, looking Westward.
807—Centennial Water-Works.
808—Machinery Hall—North Avenue, looking East.
815—Main Building, General View from Northern end.
816—Birds-eye View of Grounds, from Main Building.
817—Machinery Hall, from Main Building.
818—Front of Centennial Photographic Co.'s Studio.
819—Machinery Hall—South Avenue, looking East.
820—Missouri State Building.
820—Horticultural Grounds, from Horticultural Building.
881—Birds-eye View from Machinery Hall, looking W.
883—Transept, Machinery II all.
889—Memorial Hall, Swedish Department.
888—Brazilian Cotton Exhibit, Agricultural Building.
900—Steam Fire Engine Exhibit, Machinery Hall.
901—Scales Exhibit, Machinery Hall.
902—East Free Engine Exhibit, Machinery Hall.
903—Group of Deer, Government Building.
911—Horticultural Hall, from Gallery.
920—Belmont Avenue, Looking North.
922—American Steamship Co.'s Exhibit, Machinery Hall.
926—Main Building, North Entrance.
934—Main Building, Western Entrance.
947—The Lake, from Machinery Hall.
946—Main Building, Western Entrance.
947—The Lake, from Machinery Hall.
964—Indiana State Building.
966—Machinery Hall—South Avenue, from East end.

New ones are being con- PRICE, \$1 EACH. (With liberal discounts on stantly added.

By BENERMAN & WILSON, II6 North Seventh St., Philada.

THE PHOTOGRAPHER TO HIS PATRONS.

WHAT IS IT?

HE PHOTOGRAPHER TO HIS PATRONS is a little book or pamphlet of twelve pages, the intention of which is: 1st. To enable the photographer to say a few words in a kindly way to those who have photographs taken, in order that the intercourse between them and their to those who have photographs taken, in order that the intercourse between them and their photographer may be pleasant and result in the most successful pictures. Every photographer knows that he is constantly beset with a lot of questions, as to the proper way to dress, the best time to come, and so on, which take a great deal of his time to answer. This little book answers them all, and the mere handing of a copy to the questioner, which he or she can carry away and study at leisure, serves as admirably as a half-hour's conversation.

2d. It is a cheap mode of advertising What could you want better than to have your business card so attractive that people will come and ask for it, hand it around from one to another, discuss it, and then keep it for reference? This is what they do with this little "tract." Witness what those who

have tried it say below.

3d. It is also intended to convey to the public at large the fact that photography is not a branch of mechanics, nor photographers a sort of mechanic themselves, but that both are entitled to respect, the same as the family physician or the minister; that the photographer has rights as well as the public; that he must be trusted, and that he alone is responsible for his results. Moreover, that he must make the picture and not they.

How far the work serves these three ends the reader must judge from the testimonials below, of a few of those who have been using our little publication in their business.

few of those who have been using our little publication in their business.

We believe it will pay you to use it, and that you will assist just that much in elevating your art and your craft, an object which we are all working for.

We get "The Photographer to his Patrons" up in neat style, on the best letter cap paper, assorted tints, green, pink, and buff. Eight pages are devoted to the body of the work, which contains paragraphs or chapters—1, on the object of the work; 2, on photography; 3, when to come; 4, how to come; 5, how to dress; 6, how to "behave; 7, the children; 8, general remarks on coloring, copying frames prices he

ing, frames, prices, &c.

All this is inclosed in a cover of the same kind of paper, the pages of which are at the service of the photographer who orders them to have printed thereon anything he may please, which printing we do without extra charge. We publish this leaflet in English, German, and Spanish.

Cuts for the covers we supply free.

1000 copies, cover included, 2000 " " "				
	Over 500,000	have been sold.		

TESTIMONIALS.

- "I sent one out West to a friend, and she wrote that she was now posted, and when she came here to have a picture rade, she would come 'according to directions.' "-A. Bogar-DUS, New York.
- "It assists me greatly."-JAMES MULLEN, Lexington, Ky.
- "A grand idea."-ELBERT ANDERSON.
- "You have conferred a great favor on the fraternity in supplying it."-A. C. McINTYRE Co., Ogdensburg.
- "It is the best advertising medium I have ever found."—H. M. SEDGEWICK, Granville, O.

We send samples to any who may desire.

BENERMAN & WILSON, Photo. Publishers, 116 North Seventh Street, Philadelphia.

THE BONANZA PLATE HOLDER.

Patented January 19, 1875.

This is one of the most useful appliances yet introduced in the Photographic business, and

one much needed for economy and neatness in every gallery.

The "Bonanza" Plate Holder has been in constant use in G. D. Morse's Gallery, in San Francisco, for over one year, and a test made from month to month of the savings. In the busy season it reached over \$12 per month in pure silver solution. The drippings from the plates do not come in contact with the wood frame, slide or door of the Holder, thereby saving it from destruction. Besides, it protects the camera-box, clothing of the operator, carpets, etc., from silver stains. Another great advantage of this Holder: The inside kit of frames which are in general use for accommodating the different size plates are dispensed with. The fittings are so adjusted that they take every size plate from a card to 8 x 10 size, uprights or crosswise, as may be desired, by simply moving the receptacle that holds the plate to the position required for any particular size. Every photographer will see at a glance the value of this invention.

"We have had your "Bonanza" Plate Holder in use in our establishment for about eight months. We take pleasure in testifying to their great superiority over all others we bave employed or seen, not only as a silversaving appliance, but also in promoting cleanliness in work and protection of carpets and drapery from silver contamination. The very moderate price charged for these Holders will be returned to the purchaser, in the saving made, in a very short time."—W. H. RULDESON, San Francisco, February 10, 1876.

"The constant use of a couple of your 'Bonanza' Plate Holders during the past year warrants me in saying they are unexcelled. The silver all being saved in a liquid state can be used again, and there is no soiling of clothes. carpets, or the floor of the studio. The silver not coming in contact with the camera, the focus is not disturbed by the eating away of the wood work. The saving in silver, clothing, and carpets, is astonishing, and I would not be without them on any consideration. I cordially recommend them to the craft."—G. D. Morse, San Francisco, February 20, 1876.

"The past eight months I have used the "Bonanza" Plate Holder at Bradley & Rulofson's. It has been a great source of pleasure to work with a Holder free from drippings of silver solution. Every photographer will appreciate the cleanliness of this invention, as well as the dollars he will save by its use. I am starting in buslices at 415 Montgomery Street, and wish you to send me two "Bonanza" Plate Holders."—D. B. TAYLOR, February 13, 1876.

"I believe it to be the best Photographic Plate Holder ever used in the art,"-SILAS SELLECK, San Francisco, March 4, 1876.

The "BONANZA" PLATE HOLDER is manufactured of the very best material, and is now ready for the market. The retail price is \$20. They are made to fit and are in focus with the American Optical Co.'s 8 x 10 boxes. Will forward a holder by mail to any address on the receipt of \$20 currency, or will send by express, C.O.D. It is much cheaper to send by mail, as we can forward them to any part of the United States for fifty cents.

All orders should be addressed to

I. W. TABER C 0.,

YOSEMITE ART GALLERY.

26 Montgomery St., San Francisco, Cal.

THE "ATMOSPHERIC" BACKGROUND.

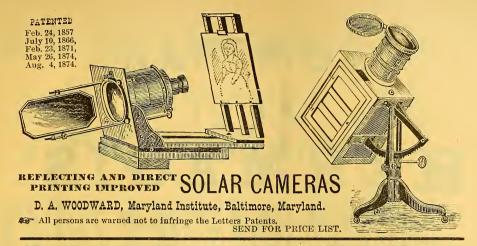
Patented November 23, 1875.

This Background which is made of wire cloth, is remarkable for its atmospheric effect. The wire cloth is of such a texture that the eye or lens cannot focus upon it, which has the effect of producing a sharper outline to the figure. This result makes it valuable for plain Backgrounds, as it produces negatives free from any blemish, as a dent or scratch on the

The durability of the Wire-Cloth Background cannot be questioned. One of them will last a lifetime. We have had them in constant use for over two years. They have been hit by head-rests, and every accessory used in a gallery have had their accidental contact, but they are as perfect to-day as when new. They are used in all the first-class galleries in San Francisco. We have manufactured them for this market, but as freights are high to ship them East, we have determined to offer gallery rights for sale at \$25 currency, with full instructions for making them. It is economy for photographers to purchase the with full instructions for making them. It is economy for photographers to purchase the right, for they can be made at a small expense.

W. TABER &

BENERMAN & WILSON, Trade Agents, 116 NORTH SEVENTH STREET, PHILADELPHIA.



GLACÉ! GLACÉ!

J. DE BANES, 872 Broadway, N. Y., finishes Photographs of all sizes, for the trade, in the newest styles. Send in your orders early.

G. SAUTER.

No. 138 South Eighth Street, Philadelphia,
MANUFACTURER AND WHOLESALE DEALER IN

PASSEPARTOUTS.

The attention of the trade is particularly called to the superior quality of our Glass and materials and neatness of finish. A large assortment constantly on hand.

CENTENNIAL VIEWS EXHIBITION

By arrangement with the CENTENNIAL PHOTOGRAPHIC CO., who have the exclusive right to photograph within the INTERNATIONAL EXHIBITION of 1876, we are enabled to offer our patrons a splendid line of

INTERIOR & EXTERIOR VIEWS of the BUILDINGS & GROUNDS.

Including charming interiors, rich exhibits, wonderful flora, beautiful panoramas, and lovely scenes, which meet the eye in all directions, comprising now some

FIVE HUNDRED SUBJECTS.

Stereos, \$3 per dozen; 5×8 at 50 cents each; 8×10 , \$1; 13×16 , \$2 50; and 17×21 , \$5. These views are all gotten up in the highest style of the art, can be sold by any photographer, and will bring a crowd to any gallery to see them.

CATALOGUES FREE. SAMPLE DOZEN STEREOS BY MAIL, \$3.
LIBERAL DISCOUNT BY THE GROSS.

Also, the **CENTENNIAL SOUVENIR**—16 Views of the Centennial Buildings and Philadelphia. Cloth bound, 50 cents, post-free. Trade supplied. Money in it!

BENERMAN & WILSON, Photo. Publishers, 116 North Seventh Street, Philadelphia.

PROMENADE ALL! HERMAGIS'

Celebrated French

PORTRAIT LENSES.

CABINET SIZE, ARE JUST THE LENS FOR THE NEW

PROMENADE PICTURE.

MR. HENRY ROCHER, the renowned Chicago photographer, says of them: "In my opinion they are truly lenses of great capacity, and must surely satisfy every purchaser." Mr. Rocher has purchased two Hermagis lenses of card size and one Salomon style. See further splendid testimonial from Mr. Rocher in Specialties.

MR. F. GUTEKUNST, the celebrated Philadelphia photographer, was sent a Salomon Lens to try for us, and wont part with it. It cuts sharp a 9 inch standing figure, and beats a lens that has been his favorite many years, and where many makes of lenses have failed, on trial, to equal it.

The HERMACIS IS THEREFORE AHEAD

TRY THEM!

These celebrated lenses, are used by MONS. ADAM SALOMON, of Paris, exclusively for making his WORLD-RENOWNED PORTRAITS, and by the most famed photographers of Europe, from whom Mons. Hermagis has the Highest Testimonials.

We now have a FULL STOCK on hand.

The Salomon Style, 8 x 10 size, \$160. For Cabinet Size, extra quick, \$100.

For Cabinet Size, quick, \$90.

For Carte Size, extra quick, \$50. For Carte Size, quick, \$40.

They are being introduced in America steadily, and are liked wherever they go.

They will be sent on trial to responsible parties C. O. D., and instructions to Express Company to hold money one week for trial. If parties prefer to see the work of a lens before purchasing, we will make a negative and send with details of exposure, etc., and reserve the lens until answer is received (if the time is reasonable), on receipt of \$1 to pay cost. Having a skylight of our own we are enabled to do this.

Not a single person to whom we have sent these Lenses on trial, as above, has returned them.

BENERMAN & WILSON.

116 North Seventh Street, Philadelphia, Pa.

A. M. COLLINS, SON & CO.,

MANUFACTURERS OF

PHOTOGRAPHIC CARDS AND CARD BOARDS,

OF EVERY DESCRIPTION.

Warehouse:

No. 18 S. Sixth St., and No. 9 Decatur St.,

IMPERIAL CARDS.

Size, $6\frac{7}{8} \times 9\frac{7}{8}$.

BOUDOIR CARDS.

Size, $5\frac{1}{4} \times 8\frac{1}{2}$.

White, Gray, Granite-Blue, Pearl, Amber, Tea.

Plain; also, with Gilt Borders, and with Gilt or Red Beveled Edges.

See detailed advertisement in this number of the "Photographic Times."

PRICE LISTS FURNISHED ON APPLICATION.

TRAPP & MUNCH'S

Albumen Paper

Introduced into this country since 1868 has become the leading paper, and is

now better known and more appreciated than any other brand.

That this great success is well deserved and due to its excellent qualities may be judged from the fact, that of all the competitors of the Vienna Exhibition, Messrs. Trapp & Munch alone received the

MEDAL OF MERIT

for Albumenized Paper. For Sale at all the Stockhouses.

WILLY WALLACH,

GENERAL AGENT FOR THE UNITED STATES,

No. 4 Beekman St., and 36 Park Row, New York

SPECIAL ACENTS:

SCOVILL MANUFG. Co., New York. E. & H. T. ANTHONY, ""G. GENNERT, New York. WILSON, HOOD & Co., Philadelphia. H. W. BRADLEY, San Francisco. G. S. BRYANT & Co., Boston.

PHOTOGRAPHER'S

POCKET

REFERENCE BOOK.

An Alphabetically arranged collection of practically important hints on the construction of the Gallery; selection and trial of lenses and chemicals; approved formulæ for the different photographic processes; tables of weights and measures; rules for avoiding failure, etc.

IT IS A BOOK EVERY PHOTOGRAPHER SHOULD HAVE,

Because it is a ready helper under all difficult circumstances.

For sale by all dealers. Price, \$1.50, post-paid.

BENERMAN & WILSON, Photo. Publishers,

PHILADELPHIA, PA.

Over 1000 Sold.

HEARN'S

PRACTICAL PRINTER

PHOTOGRAPHIC PRINTING

ON PLAIN AND ALBUMEN PAPER, AND ON PORCELAIN.

Too little attention has heretofore been given to Photographic Printing, which is indeed quite as important a branch of the art as negative making.

It is the hope of both author and publishers to create **REFORM** in this matter, by the issue of this work, and as it is to put money in the pockets of all who read it, the hope is that it will be generally read.

CONTENTS.

INTRODUCTION.

The Printing Room, with a Plan. The Silvering and Toning Room, with a Plan. The Drying Room, with a Plan.

PART I.—ALBUMEN PAPER PRINTING.

The Positive Bath for Albumen Paper. Silvering the Albumen Paper. Drying the Paper. Fuming the Paper. Preservation of Sensitive Albumenized Paper—Washed Sensitive Paper. Cutting the Paper. The Printing Boards. Keeping Tally. Vignette Printing Blocks. Treatment of the Negatives before Printing. Filling of the Boards. Fitting Vignette Boards to the Negatives for Printing. Medallion and Archtop Printing. Fancy Printing. Vignette Cameo and Medallion Vignette Cameo Printing. Printing the Bendann Backgrounds. Printing Intense Negatives. Printing Weak Negatives. A Few More Remarks about Printing—Treatment of Broken Negatives. Cutting the Prints. Washing the Prints. Toning Baths. Artistic Toning. Fixing Baths and Fixing Prints. Washing the Prints. Mounting the Prints. Finishing the Prints.

PART II.-PLAIN PAPER PRINTING.

Salting the Paper. Positive Baths for Plain Salted Paper. Silvering Plain Salted Paper. Drying, Fuming, and Cutting the Paper. Treatment of the Negatives before Printing. Printing-in False Backgrounds. General Plain Paper Printing. Further Treatment of the Prints after Printing. Causes of Failures in Albumen and Plain Paper Printing.

PART III .- PORCELAIN PRINTING.

Selection of the Porcelain Plates. Cleaning of the Porcelain Plates. Alhumenizing the Porcelain Plates. Making the Porcelain Collodion. Coating, Fuming, and Drying the Plates. Porcelain Printing Boards. Placing the Sensitive Plate on the Board for Printing. Printing Vignette Porcelains. Printing Medallion Pcreclains. Washing the Porcelains. Toning the Porcelain. Fixing the Porcelain. Final Washing of the Porcelain. Drying and Tinting of the Porcelain. Varnishing the Porcelain. Causes of Failures in Porcelain Printing.

Together with over 50 Wood Cuts, and an elegant Cabinet Portrait, from negatives by Mr. F. Gutekunst, printed by the author, Mr. Chas. W. Hearn.

A THOUSAND COPIES ALREADY GONE.

Mailed Post-paid on Receipt of \$2.50, by any dealer, or

BENERMAN & WILSON, Photo. Publishers, 116 North Seventh Street, Philadelphia.

ROBINSON'S METALLIC Guides,

FOR USE WITH THE ROBINSON PRINT-TRIMMER.

(See advertisement of Trimmer opposite.)

These Guides are made of Stout Iron and are turned in a Lathe, so that they are Mathematically True.

OVAL, ROUND, ELLIPTIC, and SQUARE, of all sizes; various shapes for Stereoscopic work, Drug Labels, etc., etc.

We have the following regular sizes always on hand at 10 cents per inch the longest way of the aperture, the fractions counting as one inch.

Special sizes made to order at 15 cents per inch the longest way of the aperture.

REGULAR SIZES:

	OVALS.		SQUARE	OR ROUND-COL	RNERED.
$2 \times 2\frac{7}{8}$	$3\frac{1}{2} \times 4\frac{7}{8}$	$5\frac{3}{4} \times 7\frac{3}{4}$	$2\frac{1}{16} \times 3\frac{3}{4}$	$2\frac{5}{16} \times 3\frac{7}{8}$	$3\frac{7}{8} \times 5\frac{1}{4}$
$2\frac{1}{8} \times 3\frac{1}{8}$	$3\frac{5}{8} \times 5\frac{1}{8}$	6 x 8	$^{\cdot}$ $2\frac{1}{8}$ x $3\frac{3}{4}$	$2\frac{3}{4} \times 4\frac{1}{4}$	$4 \times 5\frac{5}{8}$
$2\frac{1}{8} \times 3\frac{1}{4}$	$4 \times 5\frac{3}{8}$	$6\frac{1}{4} \times 8\frac{1}{4}$	$2\frac{1}{8} \times 3\frac{1}{8}$	$2\frac{3}{4} \times 4\frac{1}{2}$	$4\frac{1}{8} \times 5\frac{7}{8}$
$2\frac{3}{8} \times 3\frac{3}{8}$	$4\frac{3}{8} \times 6\frac{3}{8}$	$6\frac{1}{2} \times 8\frac{1}{2}$	$2\frac{5}{16} \times 3\frac{15}{16}$	$2\frac{7}{8} \times 4\frac{5}{8}$	$3\frac{7}{8} \times 6$
$2\frac{5}{8} \times 3\frac{5}{8}$	5 x 7	7 x 9	$2\frac{5}{16} \times 3\frac{3}{4}$		$4 \times 6\frac{1}{8}$
$2\frac{7}{8} \times 4\frac{1}{4}$	$5\frac{1}{4} \times 7\frac{1}{4}$	7½ x 9½	FOR	STEREOGRA	PHS.
		• •	Arch Tops.	Round Cornered.	Round.
$3\frac{3}{8} \times 4\frac{3}{8}$	$5\frac{1}{2} \times 7\frac{1}{2}$	$7\frac{1}{2} \times 9\frac{1}{2}$	$3\frac{1}{16} \times 3\frac{3}{4}$	$3\frac{1}{16} \times 3\frac{3}{4}$	3 x 3
$3\frac{3}{8} \times 4\frac{5}{8}$	$5\frac{5}{8} \times 7\frac{5}{8}$	$7\frac{3}{4} \times 9\frac{3}{4}$	3 x 3	3 x 3	

The above sizes suit the Collins Card Mounts, and photographers knowing that they can be always had at the low price of ten cents per inch, would do well to make their sizes accord, as orders can also be filled more quickly. Ten days is required to make special sizes.

An allowance of ten inches (\$1 worth) of regular sizes of guides will be given with every Trimmer purchased. (See opposite page).

FOR SALE BY ALL DEALERS.

BENERMAN & WILSON, Manufacturer's Agents

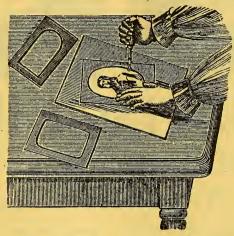
PHILADELPHIA, PA.

ROBINSON'S PHOTOGRAPH TRIMMER

IS A SUBSTITUTE FOR A KNIFE

FOR TRIMMING PHOTOGRAPHS, AND DOES THE WORK MUCH MORE EXPEDITIOUSLY AND ELEGANTLY THAN A KNIFE.

IT SAVES TIME, SAVES PRINTS, AND SAVES MONEY.



The accompanying cut represents the instrument in the act of trimming a photograph. It does not cut, but pinches off the waste paper, and leaves the print with a neatly beveled edge which facilitates the adherence of the print to the mount. Try one, and you will discard the knife and punch at once. For ovals and rounded corners it is worth its weight in gold.

A Trimmer and Ten Inches of Guides Mailed for \$3.50.

Oil the wheel bearings with Sewing Machine Oil.

Given Away!

WITH EACH ROBINSON PHOTOGRAPH TRIMMER

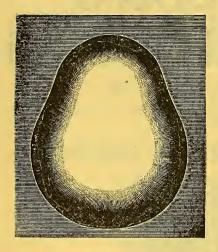
WILL HEREAFTER BE GIVEN Ten Inches of Metallic Guides, your choice from the regular sizes named on the opposite page. The manufacturers and agents finding that they can save money by manufacturing in large quantities, make this liberal offer to the trade, as they want everybody to have these capital inventions in use. They are no humbug and are not glass cutters or anything like them.

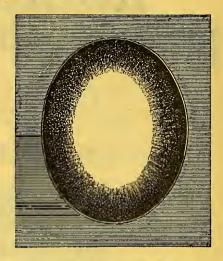
BENERMAN & WILSON, Manufacturer's Agents,

FOR SALE BY ALL DEALERS.

PHILADELPHIA, PA.

WAYMOUTH'S





VIGNETTING PAPERS

ARE NOW MADE OF TWO SHAPES, as shown in the drawings above. They consist of finely gradated, lithographed designs, mounted on protecting sheets of non-actinic paper, and are the lightest, neatest, and best means of producing vignette pictures ever offered.

RECENTLY IMPROVED.

The quality of the "papers" has just been much improved by the substitution of a peculiar French, fibrous, hard calendered paper, which is not only less opaque but has other qualities which produce quickly the most lovely and soft vignettes possible. We consider this a great improvement, as do others to whom we have sent samples. Below we give a letter from one of them, Mr. Ormsby, who has sent us also some exquisite vignettes:

The package of Vignette Papers has been received and tried; they are just the thing. They are a great improvement over the others; they will print in a little more than half the time required for the others, and the results are everything that can be desired, as you can see by samples inclosed. Please fill my order and send bill. I like the pear-shape best. Send them all that shape.

E. D. ORMSBY, Chicago.

FROM PROFESSIONAL AND AMATEUR PHOTOGRAPHERS.

"First-class."—"The sample sent answers perfectly."—"I consider them first-rate articles."—
"They answer the purpose admirably."—"They are the best vignettes I have ever had, and as you can print in full sunlight, they are a great saving of time."—"They could not be better, oblige me with another packet."—"I find them excellent, giving much softer pictures than the old way."—"I have tried one of the Vignette Papers, and like it much; send me packets two and three."—"I am much pleased with them, and shall thank you to send me another packet."—"I did not need any copies of testimonials, having well-known by experience that your Vignette Papers were superior to anything I have ever used."—"I found those you sent before excellent."—"Vignetting Papers received and tested; can't be beat. I use by cutting an opening in a piece of cardboard and tacking to the printing-frame, when I am ready for printing vignettes in the very best manner."—"Waymouth's Vignette Papers I have tried, and they are just what I have been wanting for years."

Any number sent on receipt of price, by any stockdealer, or by

BENERMAN & WILSON, Manufacturers,

(See opposite page.)

PHILADELPHIA.

DO YOU USE

WAYMOUTH'S VIGNETTE PAPERS.

(DESIGNS COPYRIGHTED.)

OF ALL PICTURES, THE TIME THE MOST ARTISTIC.

When properly printed. But the clumsy devices generally in use for printing them, or rather-for blending the shading about the figure, produce but very few really artistic vignette pictures. Either the shading is too intensely dark, not gradated in tint at all, or it shows an ugly direct, decided line, which is very repulsive. The shading should blend gradually from the dark tint nearest to the figure, off into the white background. The results are then soft, artistic, and beautiful. The easiest and best way to secure them is by the use of

WAYMOUTH'S VICNETTE PAPERS.

THEY ARE NOT CLUMSY; DO NOT BREAK; ARE ALWAYS READY; COST BUT LITTLE, AND ARE EASY OF APPLICATION TO ANY NEGATIVE.

THEY NEED BUT ONE ADJUSTMENT TO PRINT ANY QUANTITY.

They entirely do away with all the old and troublesome methods, either wood, metal, or cotton.

Eighteen sizes are now made, suiting all dimensions of pictures from a small carte figure to Whole-size, Victorias, Cabinets, &c. They are printed in black for ordinary negatives, yellow bronze for thin negatives, and red bronze for still weaker ones. Directions for use accompany each parcel.

PRICES:

In parcels containing of	ne of	each size.	Nos. 1	1 to 15, assorted colors	\$1 00
Assorted sizes and colo	rs. by	number, p	er pa	ackage of fifteen	1 00
Nos. 1, 2, 3, 4, and 5, ass	ortec	sizes and	colors	s, for Cartes, by number, per dozen	50
" 6, 7, 11, 12, and 13	"	"	**	Large Cartes and Victorias, by number, per doz	75
" 8, 9, 10, 14, and 15		"	"	Cabinets and Whole-size, " "	1 00
" 16 17 and 18	44	44	"	Half " " " " "	1 25

(SEE OPPOSITE PAGE.)

When ordering, state the number and color you want.

BENERMAN & WILSON, Manufacturers, 116 N. 7th Street, Philada.

FOR SALE BY ALL DEALERS.

DR. VOGEL'S HANDBOOK.

SECOND EDITION.

THE HANDBOOK OF THE PRACTICE AND ART OF PHOTOGRAPHY,

By Prof. H. VOGEL, Ph.D., Berlin, Prussia.

IS NOW READY.

ALTHOUGH IT IS MUCH ENLARGED WE OFFER IT AT THE OLD PRICE, \$3.50.

It is Elegantly Illustrated, with Photographs and Engravings. Cloth Bound.

The reputation Dr. Vogel enjoys in this country as a practical photographic writer, is first-class, and insures a book of the best quality. That his *Hand*book is *eminently* so, we guarantee. It has been re-arranged and revised specially for the American photographer, giving the best German formulæ, &c., and is, in every sense of the word, a *Hand*book of the *practical* and *artistic* departments of Photography. Over fifteen hundred of the first edition were sold, and the demand continues.

IT ILLUSTRATES AND TELLS

How the Ateliers are built and used in Berlin and elsewhere;

How to make the best Photographs;

How to select and use your Lenses;

How to manage your Apparatus;

How to compose the Picture;

How to choose Accessories;

How Berlin Cards are Made;

How to do everything in the Art.

How to pose the Sitter;

TEACHES HOW TO BECOME A PERFECT PHOTOGRAPHER.

The whole includes, under one cover, everything needed for the practice of photography by the beginner, the amateur, and the professional—a complete Handbook. See contents of Book.

The engravings are numerous, elaborate, and expensive. Four photographs, illustrating the lighting of the subject, accompany the work. Please read future advertisements

ASK YOUR DEALER FOR IT.

BENERMAN & WILSON, Photo. Publishers,

116 North Seventh Street, Philada.

тнЕ PHILADELPHIA

PHOTOGRA

THE LIVEST and BEST

Photographic Magazine Published.

ANNOUNCEMENT FOR 1876!

The publishers have a great many good things in anticipation for the year 1876, which they think will render their magazine more beautiful and more useful than ever before; and while they maintain that the beautiful example of photography, which accompanies each issue, is alone worth the subscription price, still more and more effort will be made to make the reading matter everything that it Our correspondents from all the leading centres abroad will keep our readers posted on all matters of interest in their several sections, while our unrivalled staff at home will look diligently after your interests here. To make the PHILADELPHIA PHOTOGRAPHER the best PRACTICAL HELPER which can possibly be obtained, is the aim and earnest desire of its publishers.

We ask your co-operation in extending its usefulness, and offer to all PRESENT subscribers, who secure us NEW ones, the following

For every new subscriber, for one year, \$1, payable in any of our publications, books, or, if preferred, \$1

PREMIUMS

worth of any of our prize pictures, or any other article for which we are agents, advertised in this magazine.

Operators, printers, etc., can secure all their necessary photographic literature in this way, by a little earnest effort.

EACH MONTHLY ISSUE IS A PHOTOGRAPHIC WORK IN ITSELF. NOTICE TO SUBSCRIBERS.

Subscription price, \$5 a year, \$2.50 for six months, 50 cents per copy, postpaid. positively in advance.

In remitting by mail a post-office order, or draft payable to the order of Benerman & Wilson, is preferable to Office, County, and State.

Canada subscribers must remit 24 cents extra, to prepay postage.

Foreign subscriptions must be accompanied by the postage in addition.

ADVERTISING sheets are bound with each number of the Magazine. Advertisements are inserted at the following

1 Month. 6 Months. 1 Year. bank-notes. Clearly give your Post- One Page, \$20 00 \$110 00 \$200 00 12 00 Half " 66 00 120 00 Quarter Page,.. 700 Eighth "... 400 38 50 70 00 22 00 40.00 Cards, 6 lines, or less, 2 00 11 00

The attention of advertisers, and those having galleries, &c., for sale, is called to our Specialties pages. Terms, \$2 for six lines, and 25 cents for each additional line, seven words to a line, always in advance. Duplicate insertions, 50 cents less, each.

SURE TO PAY!

Operators desiring situations, no

BENERMAN & WILSON, Publishers,

OFFICE, 116 NORTH SEVENTH STREET, PHILADELPHIA.

CENTENNIAL LANTERN JOURNEY.

DESCRIPTIVE OF

100 Scenes and Objects in the Great Exhibition.

JUST ISSUED!

IN A SECOND EDITION OF "WILSON'S LANTERN JOURNEYS."

This meets a want that has been felt more than any other by exhibitors of Centennial slides.

We give below a list of the subjects, photographed by the Centennial Photographic Co., which,
as will be seen, constitutes a complete Journey through the Exhibition.

LIST OF SLIDES.

Independence Hall.
Independence Hall, interior.
Independence Hall, interior.
Yankee Doodle.
\$16—Centennial Grounds, bird's-eye view.
\$102—Main Building, cast end.
\$26—Main Building, North entrance.
\$778—American Soldier, granite statue.
\$66—Main Building, perspective.
\$107—Main Building, perspective.
\$107—Main Building, interior.
\$356—Opening Ceremonies, grand stand, orators.
\$355—Opening Ceremonies, choristers.
\$15—Main Building, interior, transept from S. gal.
\$156—Main Building, interior, transept from S. W. tow.
\$305—Main Build, interior, transept from S. W. tow.
\$305—Main Build, interior, from nave looking S. W.
\$1264—Italian Section.
\$177—Netherlands Exhibit.
\$250—Netherlands Section—Kiosk exhibit.
\$250—Netherlands Section—China and porcelain.
\$1496—Swedish Peasants.
\$1497—The New Baby—Swedish Section.
\$1495—The Baby's Death—Swedish Section.
\$1495—The Baby's Death—Swedish Section.
\$1495—The Baby's Death—Swedish Section.
\$1495—The Baby's Death—Swedish Section.
\$1496—Carved Bedstead—Chinese Section.
\$1498—Belmont Avenue and Fountain.
\$1898—Belmont Avenue and Fountain.
\$1898—Belmont Avenue and Fountain.
\$2898—Belmont Avenue and Fountain.
\$2898—Belmont Avenue and Fountain.
\$2808—Machinery Hall, interior, north avenue.
\$2808—Machinery Hall, interior, porth avenue.
\$2808—Machinery Hall, interior, porth avenue.
\$2808—Avaid Group.
\$2809—Art Gallery, sestibule.
\$2808—Avaid Group.
\$2808—Avaid Group.
\$2808—Avaid Group.
\$2808—Avaid Group.
\$2808—Avaid Group.
\$2809—Art Gallery, Amer. Depart.—The First Step.
\$2808—Art Gallery, Amer. Depart.—The First Step.
\$2808—Art Gallery, Amer. Depart.—The First Step.
\$2808—Art Gallery, Amer.

746—Agricultural Hall, interior, nave looking N.
1005—Agricultural Hall, interior, looking west.
898—Agricultural Hall, interior, Brazilian cotton ex.
1181—Agricultural Hall, interior, Grazilian cotton ex.
1181—Agricultural Hall, interior Cal., grape-vine.
1014—Agri. Hall, interior, "skelcton of Negathurium
462—Horticultural Building, promenade.
829—Horticultural Building, promenade.
829—Horticultural Building, from gallery.
239—Horticultural Building, from gallery.
239—Horticultural Building, growing banana.
276—Horticultural Building, growing banana.
276—Horticultural Building, growing banana.
286—Horticultural Building, floral hall.
66—Horticultural Building, floral hall.
66—Horticultural Building, forcing-room.
603—Horticultural Grounds, rhododendrons.
318—Horticultural Grounds, rustic house,
222—Women's Pavilion, interior.
222—Women's Pavilion, interior.
221—United States Government Building.
651—Rodman Gun
732—Monitor Turret.
929—U. S. Gov't. Building, sloop-of-war Antietam.
931—U. S. Govern't. Building, floral minerals.
909—U. S. Govern't. Building, fur seals.
933—U. S. Govern't. Building, fur seals.
932—U. S. Govern't. Building, group American deer
229—U. S. Gov. Building, sgeneral view.
703—Pennsylvania Building (or any other State B'g.)
769—"Locomotive" of 1835.
770—"Locomotive" of 1875.
96—Japanese Bazaar.
818—From Centennial Photo. Co.'s Studio.
544—Italian Department, Art Annex.
1362—Italian Department, Art Annex.
1363—Italian Statuary, Soap Bubbles.
1121—Italian Statuary, Love's Messenger.
1263—Italian Statuary, Love's Messenger.
1278—Italian Statuary, Love's Messenger.
1279—Italian Statuary, Love's Messenger.

The numbers, in the above list, refer to the Centennial Photographic Co.'s Catalogue.

We are now prepared to furnish the above in Slides or Stereos., as the readings are equally interesting with either.

Slides, \$9 per dozen; or, \$70 per hundred. Stereos., \$3 per dozen. Wilson's Lantern Journeys, including Centennial Journey, \$2.

FOR SALE BY

BENERMAN & WILSON, 116 N. 7th St., Philada.

TRY HERMACIS' "PROMENADE" LENSES.

Number 155.

50 Cents.

THE

PHILADELPHIA

Photographer.

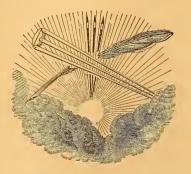
AN ILLUSTRATED MONTHLY JOURNAL,

DEVOTED TO PHOTOGRAPHY.

THE OFFICIAL ORGAN OF THE NATIONAL PHOTOGRAPHIO ASSOCIATION OF THE UNITED STATES.

EDITED BY EDWARD L. WILSON.

November, 1876.



PHILADELPHIA:
BENERMAN & WILSON.

PUBLISHERS.

116 NORTH SEVENTH STREET.

Subscriptions received by all News and Stock-Dealers.

FIVE DOLLARS PER ANNUM, IN ADVANCE.

Sherman & Co., Printers, Philadelphia.

SUMMARY OF CONTENTS.

. Р.	AGE	· P	AGI
The Centennial Awards	321	How I Rectified a Bath without Sunning. By L. W.	
Photography and Truth		THORNTON	348
Photo-Engraving	323	The SphyDx	344
Proceedings of the Seventh Annual Convention of		A Copying Attachment. By W. H. BIGALOW	345
the National Photographic Association	325	To Prepare Negative Glass. By J. H. Whiting	345
On Various Distortions in Photography. By WIL-		German Correspondence. By Dr. H. Vogel	346
LIAM CURTIS TAYLOR	328	Some Rambling Thoughts on Lighting. By F. M.	
Co-operative Photography. By E. K. Hough	331	SPENCER	348
Photography from a Monetary Standpoint. By		Our Premiums for 1877	349
H. B. HILLYER	332	Articles for Mosaics	349
A Plea for Photographic Patentecs. By A. St.		Our Picture.	349
CLAIR	337	Table Talk	350
Milwaukee Correspondence. By SIGMUND SINGER,	339	EDITOR'S TABLE	351
The Centennial—More Scattered Photography			

EMBELLISHMENT .- Birds-eye View of Centennial Exhibition, from George's Hill. Negatives by BENERMAN & WILSON.

ADVERTISEMENTS.

ARTISTIC PHOTOGRAPHY.

ARTISTIC STUDIES.

BENERMAN & WILSON. Magic Lanterns and Slides. BULLOCK & CRENSHAW. Photographic Chemicals.

CAMEO PRESS, THE UNIVERSAL.

CENTENNIAL EXHIBITION VIEWS.

CENTENNIAL MEDALS.

CENTENNIAL PHOTOGRAPHIC Co. Lenses and Boxes.

COLLINS, SON & Co., A. M. Photograph Cards.

CENTENNIAL LANTERN SLIDES.

CENTENNIAL PHOTOGRAPHIC DIARY.

COOPER, CHAS. & Co. Dresden Albumen Papers, etc.

DEAN, JOHN & Co. Ferrotype Plates.

DEBANES, J., Glace Work.

FRENCH, B. & Co. Voigtlander Lenses, &c.

GENNERT, G. Albumen Papers.

GIHON, JOHN L. Opaque and Cut-Outs.

HANCE'S PHOTO. SPECIALTIES.

HEARN'S PRACTICAL PRINTER.

HEARN'S PHOTOGRAPHIC PRINTING INSTITUTE.

HERMAGIS' PORTRAIT LENSES.

HOWSONS' PATENT OFFICES.

IMPROVED PHOTOGRAPH COVERS.

MAGEE, JAMES F. & Co. Photographic Chemicals.

Mosaics for 1877.

PATTBERG, LEWIS & BRO. Passepartouts, &c.

PHOTOGRAPHER'S POCKET REFERENCE-BOOK.

PHOTOGRAPHIC PURLICATIONS

PHOTOGRAPHER TO HIS PATRONS.

PROMENADE PRIZE PICTURES.

ROBINSON'S PHOTO, TRIMMER AND METALLIC GUIDES.

Ross' Portrait and View Lenses.

SAUTER, G. Passepartouts.

SHAKSPEARE'S SEVEN AGES OF MAN.

Somerville, J. C. Photographic Stock Depot.

TABER, I. W. & Co. Background and Plate Holder.

VOGEL'S HAND-BOOK OF PHOTOGRAPHY.

WALLACH, WILLY. Trapp & Munch's Albumen Paper

WAYMOUTH'S VIGNETTING PAPERS.

WILSON'S LANTERN JOURNEYS.

WILSON, HOOD & Co. Revolving Photo. Cabinet, Heating Stove, etc.

WOODWARD, D. A. Solar Cameras.

YANKEE DOODLE.

BULLOCK & CRENSHAW,

No. 528 Arch Street, Philadelphia,

MANUFACTURERS AND IMPORTERS OF PURE CHEMICALS FOR PHOTOGRAPHY. IMPORTERS OF GLASS AND PORCELAIN, APPARATUS, ETC.

119 South Fourth St.

PHILADELPHIA.

Branch Office. 605 Seventh Street, WASHINGTON, D. C.



H. HOWSON.

Engineer and Solicitor of Patents.

C. HOWSON.

Attorney at Law, and Counsel in Patent Cases.

HANCE'S PHOTOGRAPHIC SPECIALTIES



AHEAD!



HICHEST PREMIUM AWARDED

AT THE CENTENNIAL EXPOSITION.

Having received the Highest Award for Photographic Specialties, I feel more confidence than ever in offering my manufactures to the Photographic fraternity. My exhibit was an extremely modest one, being taken from stock, put up in original packages without any attempt at display, and carried off the prize over all the exhibits put up in cut glass decanters with ribbon tied stoppers, proving that the medal was awarded for MERIT ALONE!

To my many patrons, who have for years used my goods, it is only necessary to remind them that in future the same careful personal attention will continue to be paid to the manufacture of my specialties that in the past has gained for them such a world-wide reputation. To those who have not yet tried them, I respectfully request a full and fair trial, being satisfied that they will save money, trials and vexations, by casting aside unreliable articles and taking hold of mine, which are being used in many of the best galleries in the United States and Canadas.

Some of the best work shown at the exhibitions at Vienna and Philadelphia was made with my collodions, and to them some of the awards for photographs were due.

FOR SALE BY ALL STOCK-DEALERS.

ALFRED L. HANCE, 116 North Seventh St., Philada.

(READ SUCCEEDING PAGES.)

HANCE'S PHOTOGRAPHIC SPECIALTIES

WARRANTED FULL MEASURE, AND CHEMICALLY PURE,

ARE SOLD BY ALL DEALERS, AS FOLLOWS:

HANCE'S BATH PRESERVA-

TIVE. A sure preventive of pinholes, stains, &c. It preserves the bath in good working condition, and will be found worth its weight in gold. See special advertisement. \$1.00 per bottle.

HANCE'S DOUBLE IODIZED

collobion. This is made by compounding the different iodides according to their equivalents, and producing a new salt. It is being used by some of the best photographers, but its general use is retarded, no doubt, by the extra trouble in making it. The peculiarities of this Collodion are good keeping qualities, its improvement by age, and the richness of effect produced in the negative, the film being perfectly structureless. As it requires time to ripen, I have the advantage of making a quantity and keeping it always ready to supply any demand. \$1.50 per 1b.; 80 cts. per ½ ib.

ELBERT ANDERSON'S PORTRAIT COLLODION is made according to the formula used by Mr. Anderson in Mr. Kurtz's gallery in New York. It is especially adapted to portrait work. \$1.75 per lb.; 90 cts. per ½ lb.

HANCE'S WHITE MOUNTAIN COLLODION is adapted more especially to outdoor work, and for quick working, delineating foliage, frost-work, or sky, it stands unrivalled. It is made after the formula used by that celebrated mountain artist, B. W. Kilburn, of Littleton, N. H., whose work is too well known to need any comments. \$1.50 per fb.; 80 cts. per ½ fb.

CURTIS' NIAGARA FALLS COLLODION is another used for landscapes. The wonderfully beautiful views made by Mr. Curtis, of the great cataract, with this collodion, have a world-wide reputation, and are an indisputable evidence that he could have nothing better to produce such magnificent work. \$1.50 per 1b; 80 cts. per $\frac{1}{2}$ ib.

TRASK'S FERROTYPE COL-LODION is made especially for positive pictures. Mr. Trask has no superior in this class of work, and this collodion is the result of his practice and experience for years in proving what was BEST. It is made after his formula and ferrotypers will find it all that can be desired. \$1.50 per ib.; 80 cts. per ½ ib. HANCE'S PECULIAR PORTRAIT COLLODION is peculiar in that it is prepared without bromides, and is adapted for use with Black's acid bath. To those using the acid bath this collodion is indispensable. Formula on the bottle. \$1.50 per ib.; 80 cts. per ½ ib.

CUMMINGS' GRIT VARNISH

gives a very fine surface for retouching. Those that use a varnish of this kind will find that this has no superior. By it the retouching is greatly facilitated and the same amount of work on a negative may be done with it in half the time that would be required without it. 40 cts. per 6 oz. bot.

HANCE'S SILVER SPRAY GUN COTTON is now being used by many of the best photographers, and the testimonials I am receiving are sufficient evidence of its excellence. I prepare it with great care, and warrant it free from acid, very soluble, gives good intensity so that no redevelopment is necessary, gives perfect detail, and a film pure and structureless. 50 cts. per oz.

HANCE'S DELICATE CREAM GUN COTTON is adapted to those who like a very delicate, soft-working collodion, giving all the modelling especially in the Rembrandt style, and with light drapery. Its sensitiveness renders it particularly adapted for children, or any work that requires short exposure. 80 cts. per oz.

GILL'S CONCENTRATED CHROMO INTENSIFIER is intended to strengthen the negative. It imparts a beautiful tone and gives excellent printing qualities. 50 cts. per bottle.

HANCE'S GROUND-GLASS SUBSTITUTE is simply what its name implies, a substitute for ground-glass for any purpose that it is used for in the gallery. To the landscape photographer a bottle of it is indispensable. If he breaks his ground-glass, he has only to coat a plate, such as he is sure to have with him for negatives, with the substitute, and in a few moments his ground-glass is replaced and his work goes on. It is equally useful in the printing room, and any photographer who has once used it will never again be without it. 50 cts. per bottle.

HEARN'S COLLODIO-CHLO-

RIDE.—The best for Porcelain pictures. \$2.25 per ½ lb. bottle, and \$4.00 per lb. bottle. Try it, and get good porcelains.

HANCE'S GROUND GLASS SUBSTITUTE

Is an indispensable article in the photographic gallery. There are so many uses to which it can be applied that a photographer having once given it a trial, will never be without it, as there is nothing known that will take its place. There are a few base imitations in the market, but they are not used a second time, and will soon die a natural death.

The Substitute is in the form of a varnish, is flowed and dried the same as varnish, but dries with a granulated or ground-glass surface. Wherever ground glass is required, Hance's Substitute answers every purpose.

FOR VIGNETTE GLASSES.

- A RETOUCHING VARNISH.
- SOFTENING STRONG NEGATIVES.
- THE CELEBRATED BERLIN PROCESS.
- GROUND GLASS FOR CAMERAS.
- GLAZING SKY AND SIDE LIGHTS.
- OBSCURING STUDIO & OFFICE DOORS.
- PRINTING WEAK NEGATIVES.

For skylights it must be flowed before glazing. The Substitute being very thin it will cover a large space. It is economical, and makes a surface equal to the finest ground glass. It can be easily removed by rubbing it with cotton wet with alcohol. GIVE IT A TRIAL.

PRICE, 50 CENTS PER BOTTLE,

Large quantities, for Studio Lights, etc., supplied low.

HANCE'S DELICATE CREAM GUN COTTON

IS THE KING COTTON, AND HAS NO PEER.

Prepared with particular care, warranted free from acid, and very soluble. I take particular pride in this cotton. It has made its way steadily and surely into most of the principal galleries in the country, where parties prefer to make their own collodion, and its superior qualities are shown in the medals awarded at the Vienna Exhibition, for photographs made with collodion in which it was used.

It is especially adapted to the Rembrandt style, and light drapery. Its sensitiveness renders it particularly adapted for children or any work that requires short exposure.

PRICE, 80 CENTS PER OUNCE.

Read next page.

COMMENDATORY LETTERS

Testifying to the superior qualities of

HANCE'S SPECIALTIES

WE HAVE ROOM ONLY FOR THE FOLLOWING:

"I consider the Cotton the best we have ever used as yet."-R. Poole, Nashville, Tenn.

"The film of the Cotton you sent me was unusually smooth and firm, being entirely free from glutinosity, and setting like India-rubber. It was quite powdery and crumbled to pieces in my fingers, 'as if rotten.' It dissolved almost instantaneously, and it was 'by far' the very best material I have ever used. I sincerely trust that you will send me the same kind again."—Elbert Anderson, Kurtz Gallery, New York.

"I received your Double-Iodized Collodion all right, and in good shape. Have tried it pretty well. It gives very fine negatives and good detail."—W. E. HART, Watertown, N. Y.

"We take pleasure in recommending Hance's Double-Iodized Collodion as a first-class article, in fact it is the best manufactured Collodion we have tried."—SCHREIBER & SONS, No. 818 Arch Street, Philadelphia.

"The goods by Express came safe to hand. I have tried a part of them and am greatly pleased. Will likely want more goods in your line."—R. POOLE, Nashville, Tenn.

"Your Ground Glass Substitute is the best I have ever tried, and I have tried nearly every kind advertised, as the long row of nearly full bottles will testify. It works like a charm."—J. N. Webster, Barton, Vt.

"I take pleasure in recommending your Cottons and Collodions, before all others I have used. It is a blessing to know where you can get good Cotton."—B. W. KILBURN, Littleton, N. H.

"The last lot of Cotton you sent is the very best I have ever used. Please send me another pound at once."—ELBERT ANDERSON, Kurtz Gallery, New York.

"Have used some twenty-five pounds of your Collodion the past year with unvarying success."—G. W. Hope, Middletown, New York.

"Your Double-Iodized Collodion is the most perfect working Collodion I have used in fifteen years. Every picture I make with it is a success."—R. L. Dale, Boston, Mass.



Has now become the standard Collodion in all first-class galleries. Although but a short time in the market it is rapidly superseding all other makes, and the quantity that has been sold is simply astonishing.

Give it but a single trial and you will be convinced. Can be used as soon as made, but improves with age, and will keep indefinitely.

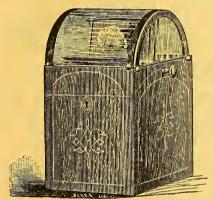
Price, \$1.50 per pound.

A liberal discount to parties ordering by the gallon. READ ADVERTISEMENTS ON PRE-CEDING PAGES.



We have been appointed Agents for the sale of the

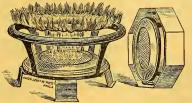
REVOLVING PHOTO. CABINET.



PRICES AS FOLLOWS:

No. 1-Velvet, ornamented (holds 48 cards,)	\$5	50
" 2-Velvet, ornamented, mirrors in sides,		
(holds 48 cards)	7	00
No. 3-Engraved walnut, gilt lined (holds 48		
cards)	6	00
No. 4-Engraved walnut, mirrors in sides	7	50

THE GORMAN HEATING STOVE.



Price, \$1.00 each, by mail, post-paid.

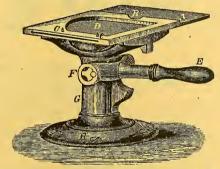
ALSO, AGENTS FOR THE

PUBLICATIONS

CENTENNIAL PHOTOGRAPHIC COMPANY.

Catalogues and prices on application.

BERGNER'S PATENT PRINT-CUTTERS.



Card size	\$30	00	Cabinet	\$35	00
Small stereo	30	00	4 x 4 size	30	00
Artistic stereo	33	00	4 x 7 ''	50	00

THE ENTREKIN PLANISHER.

Size	6 in.	10 in.	14 in.	18 in.	30 in.
Price	\$20	. \$30	\$40	\$50	\$300

THE AMERICAN OPTICAL CO.

Have reduced prices of many of their goods. Send for their new Price List, also for our "New Illustrated Price List of May, 1876."

WILSON, HOOD & CO., PHILADELPHIA.

HON'S

Are the very best that are made, and are now without a rival in the market. They are clean cut, most desirable shapes and sizes, and made of non-actinic paper, manufactured specially for the purpose. Each package contains 30 Cut-Outs, or Masks, with corresponding Insides, assorted for five differently sized ovals and one arch-top.

PRICE. \$1.00 PER PACKAGE. Sent by mail on receipt of price.

Parties wishing special sizes, or large lots of a few sizes, may have them cut to order promptly, by addressing the manufacturer. No lot costing less than \$1.00 made at a time.

No printer should attempt to make medallion pictures without them.

THEY HAVE NO EQUAL FOR QUALITY.

Beware of spurious imitations made of common paper, full of holes, badly cut, and odd shapes and sizes. Ask your stockdealer for GIHON'S CUT-OUTS, and see that they are in his envelopes with instruction circular included.

PROMENADE SIZE NOW READY! SOLD SEPARATELY AT 50 cts. per dozen.

CHONS

IS DESIGNED FOR

COMPLETELY OBSCURING THE IMPERFECT BACKGROUNDS OF COPIES, RETOUCHING NEGATIVES,
FAULTY SKIES IN LANDSCAPES,
COATING THE INSIDE OF LENSES OR CAMERA BOXES,

BACKING SOLAR NEGATIVES,

COVERING VIGNETTING BOARDS,

AND FOR ANSWERING

ALL THE REQUIREMENTS OF THE INTELLIGENT PHOTOGRAPHER IN THE PRODUCTION OF ARTISTIC RESULTS IN PRINTING.

WHEREVER YOU WANT TO KEEP OUT LIGHT. USE OPAQUE.

It is applied with a brush, dries quickly and sticks.

CUT-OUTS (thirty), \$1.00.

OPAQUE, 50 CENTS.

FOR SALE BY ALL DEALERS.

Address all orders to

JOHN L. CIHON, Inventor,

128 N. Seventh St., Philadelphia, Pa.

OUR NOVEMBER, 1875



RICTURES

Our second PROMENADE PICTURE competition has just been closed, and we are in possession of some of the finest Photographic work ever done in the world!

We offer prints from the competing negatives, for sale at the prices below. They are most useful to every photographer as examples of good negative work, artistic composition and lighting, and superior printing and finishing. We have done our part to make them models in every respect.





Was awarded for the best six negatives to

Mr. LYMAN G. BIGELOW, Detroit, Michigan,

Whose elegant work is familiar to many of our patrons.

THE SETS INCLUDE:

Nos. 1 to 8—Studies by L. G. Bigelow, Detroit, Michigan.
Nos. 9 to 20—Studies by F. B. Clench. Lockport, N. Y.
Nos. 21 to 28—Studies by G. M. Elton, Palmyra, N. Y.
Nos. 29 to 34—Studies by O. P. Scott, Abingdon, Ill.

Nos. 35 to 40—Studies by E. M. Collins, Oswego, N. Y.
Nos. 41 to 46—Studies by E. H. Alley, Toledo, Ohio.

See review in December number Philadelphia Photographer.

The whole set of 46, .													\$10	00
In two Photo. Covers													11	50
Selections, per dozen,												•`	4	00
" per two do:														
The 28 of Messrs. Cle	nch,	В	ige	lov	v,	and	E	ltoi	٦,				6	00
Book Cover and Bindi	ng,										4			75

Address all orders to

BENERMAN & WILSON, Publishers, 116 NORTH SEVENTH ST., PHILAD'A, PA.









CENTENNIAL LANTERN SLIDES.

WE ARE NOW PREPARED TO FURNISH THE FOLLOWING SUBJECTS:

NISH THE FOLLOWING SUBJECTS:

395—Main Building, from Nave, showing S. W. Tower.
397—Judges' Pavilion.
398—Machinery Hall.
400—Memorial Hall, Main Entrance.
401—Memorial Hall, Main Entrance.
401—Memorial Hall, Main Entrance.
412—Hawaitan Islands' Exhibit, Main Building.
444—Main Building—Transept, from S. Gallery.
446—Model of Calumet & Hecla Copper Co.'s Stamp Mill.
454—Main Building—Main Avenue, from N. E. Tower.
458—Main Building—Main Avenue, from Transept.
460—Main Building—Main Avenue, from Transept.
461—Horticultural Hall, from Grounds.
471—Sandwich Bessemer Steel Exhibit, Main Building.
491—Women's Pavilion, from Gallery.
500—Memorial Hall.
534—Lansdowne Valley.
535—Centennial Grounds, from Judges' Pavilion.
537—Horticultural Building, South Entrance.
541—Art Annex, Italian Department.
543—Art Annex, Italian Department.
544—Art Annex, Italian Department.
545—Art Annex, Italian Department.
550—Connecticut State Building.
599—South Avenue, from West end—Machinery Hall.
601—The Dairy. 40—Board of Finance Building, South Front.
60—Machinery Hall, from Finance Building.
64—Machinery Hall, South Avenue.
65—Horticultural Building, S. E. Forcing Room.
86—Art Gallery and Memorial Hall.
93—Horticultural Building,
102—Main Exhibition Building, East end.
104—Main Building, Nave.
107—Main Building, Transept.
115—Main Building, Transept.
115—Main Building—N. Ave., from Transept looking East.
117—Main Building—N. Ave., from Transept looking E.
120—Horticultural Building, S. E. Forcing Room.
122—Horticultural Building,
123—Machinery Hall.
124—Machinery Hall, East end.
131—Machinery Hall, Corliss Engine.
139—Main Building, Transept looking N. W.
150—Machinery Hall, South Avenue.
151—Agricultural Building, North Avenue.
153—Horticultural Building, Floral Hall.
155—Main Building, Swedish Section.
158—Main Building, Transept looking S. W.
161—Corliss Engine. 40-Board of Finance Building, South Front. 161—Corliss Engine. 161—Corliss Engine.
162—Rodman Gun, 20-inch bore.
164—Falstrom and Tornqvist's Exhibit.
171—Memorial Hall, Cornice of Vestibule.
173—Staffordshire Ceramic Ware.
176—Lambeth Pottery Exhibit.
177—Netherlands Section.
218—Horticultural Building, South side.
229—Women's Payllian 599—South Avenue, from West end—Machinery Hall. 601—The Dairy. 603—Agricultural Hall. 601—Ine Dairy.
603—Agricultural Hall.
604—Swedish School-House.
650—New Jersey State Building, rear view.
651—The 20-inch Rodman Gun.
652—Main Building, West end.
656—Main Building, West side.
665—The Dying Lioness.
666—Navy Group for Lincoln Monument.
678—The American Volunteer (Granite Statue).
692—Memorial Hall, Italian Section.
693—Horticultural Grounds.
700—Agricultural Hall, S. E. view.
703—Pennsylvania State Building.
704—New Hampshire State Building.
705—Queensland Court, Main Building.
721—New York State Building.
722—Wisconsin State Building. 176—Lambeth Pottery Exhibit.
177—Netherhands Section.
218—Horticultural Building, South side.
222—Women's Pavilion.
222—Women's Pavilion.
223—Agricultural Building—Main Avenue, looking East.
226—Agricultural Building—Main Avenue, from Centre.
227—Agricultural Building—Main Avenue, from Centre.
230—English Government Buildings.
531—Japanese Commissioners' Dwelling.
232—Japanese Commissioners' Dwelling, Piazza.
233—New York State Buildings.
249—Norwegain 15th Century Furniture.
250—Netherlands Section, Kiosk.
251—Gustafsberg China and Porcelain, Swedish Section.
254—Anthurum Scherzonanum, Horticultural Hall.
260—Kingsford Starch Exhibit.
261—Cercus Monstrosa Opuntia Peruvianus.
264—Dicksonia Antistica, Floral Hall.
265—Ceroxylon Nevium, Floral Hall.
265—Ceroxylon Nevium, Floral Hall.
268—Lemon Tree, Floral Hall.
279—Banana, Floral Hall.
279—Banana, Floral Hall.
279—Banana, Floral Hall.
285—Floral Hall, Horticultural Building.
287—Floral Hall, Horticultural Building.
287—Floral Hall, Horticultural Building.
290—Floral Hall, Horticultural Building.
293—Floral Hall, Horticultural Building.
294—Floral Hall, Horticultural Building.
294—Floral Hall, Horticultural Building.
294—Floral Hall, West End.
314—Floral Hall, West End.
314—Floral Hall, West End.
315—Letania Verbonicas.
325—Horticultural Building, Promenade. 702—New York State Building.
722—Wisconsin State Building.
723—Illinois State Building.
723—Illinois State Building.
723—Illinois State Building.
723—Illinois State Building.
723—Monitor Turret.
737—Rhododendrons, Horticultural Grounds.
743—Memorial Hall, American Department.
745—Agricultural Hall, Annerican Department.
745—Agricultural Hall, Interior.
784—King & Brown Manufacturing Co.'s Exhibit.
805—Interior of Agricultural Hall, looking Westward.
807—Centennial Water-Works.
808—Machinery Hall—North Avenue, looking East.
815—Main Building, General View from Northern end.
816—Birds-eye View of Grounds, from Main Building.
818—Front of Centennial Photographic Co.'s Studio.
819—Machinery Hall, from Main Building.
819—Horticultural Grounds, from Horticultural Building.
829—Horticultural Grounds, from Horticultural Building.
881—Birds-eye View from Machinery Hall, looking W.
883—Transept, Machinery Hall.
898—Brazilian Cotton Exhibit, Agricultural Building.
900—Steam Fire Engine Exhibit, Machinery Hall.
909—Fur Seals, Government Building.
911—Horticultural Hall, from Gallery.
920—Belmont Avenue, Looking North.
922—American Steamship Co.'s Exhibit, Machinery Hall.
926—Main Building, North Entrauce.
930—War Canoe and Models, U. S. Government Building.
946—Main Building, Western Entrance.
947—The Lake, from Machinery Hall.
949—Memorial Hall, American Department.
961—Japanese Bazaar.
962—The Hunter's Camp. 319—Letania Verbonicas.
323—Horticultural Building, Promenade.
324—Horticultural Building, Promenade.
325—Horticultural Building, Protico.
325—Horticultural Building, Portico.
326—Horticultural Building, West Front.
327—Lansdowne Bridge.
329—Agricultural Building, from Horticultural Building
349—Torso Washington, Art Gallery.
351—Group, America—Art Gallery.
352—Group, America—Art Gallery.
353—Group, America—Art Gallery.
355—Group, America—Art Gallery.
355—Centennial Opening, the Choristers.
371—Main Building, from Machinery Hall.
375—Washington Glass Works Exhibit, Main Building.
380—Art Gallery, Main Entrance.
[Grand St., N. Y. 593—Main Building, Transept from S. Gallery.
394—Main Building, Transept from S. E. Tower. 961—Japanese Bazaar. 962—The Hunter's Camp. 964—Indiana State Building. 966—Machinery Hall—South Avenue, from East end.

New ones are being con- PRICE, \$1 EACH. With liberal discounts on stantly added. By BENERMAN & WILSON, II6 North Seventh St., Philada.

THE PHOTOGRAPHER TO HIS PATRONS.

WHAT IS IT?

HE PHOTOGRAPHER TO HIS PATRONS is a little book or pamphlet of twelve pages, the intention of which is: 1st. To enable the photographer to say a few words in a kindly way to those who have photographs taken, in order that the intercourse between them and their photographer may be pleasant and result in the most successful pictures. Every photographer knows that he is constantly beset with a lot of questions, as to the proper way to dress, the best time to come, and so on, which take a great deal of his time to answer. This little book answers them all, and the mere handing of a copy to the questioner, which he or she can carry away and study at leisure, serves as admirably as a half-hour's conversation.

2d. It is a cheap mode of advertising What could you want better than to have your business card so attractive that people will come and ask for it, hand it around from one to another, discuss it, and then keep it for reference? This is what they do with this little "tract." Witness what those who have tried it say below.

have tried it say below.

3d. It is also intended to convey to the public at large the fact that photography is not a branch of mechanics, nor photographers a sort of mechanic themselves, but that both are entitled to respect, the same as the family physician or the minister; that the photographer has rights as well as the public; that he must be trusted, and that he alone is responsible for his results. Moreover, that he must make the picture and not they.

How far the work serves these three ends the reader must judge from the testimonials below, of a few of those who have been using our little publication in their business.

few of those who have been using our little publication in their business.

We believe it will pay you to use it, and that you will assist just that much in elevating your art and your craft, an object which we are all working for.

We get "The Photographer to his Patrons" up in neat style, on the best letter cap paper, assorted tints, green, pink, and buff. Eight pages are devoted to the body of the work, which contains paragraphs or chapters—1, on the object of the work; 2, on photography; 3, when to come; 4, how to come; 5, how to dress; 6, how to "behave; 7, the children; 8, general remarks on coloring, copy-

all this is inclosed in a cover of the same kind of paper, the pages of which are at the service of the photographer who orders them to have printed thereon anything he may please, which printing we do without extra charge. We publish this leaflet in English, German, and Spanish.

Cuts for the covers we supply free.

1000 copies, cover included, . . \$20 00 2000 " " " . . . 35 00 Over 500,000 have been sold.

TESTIMONIALS.

"I sent one out West to a friend, and she wrote that she was now posted, and when she came here to have a picture made, she would come 'according to directions.'"—A. Bogar-DUS, New York.

"It assists me greatly."-JAMES MULLEN, Lexington, Ky.

- "A grand idea."-ELBERT ANDERSON.
- "You have conferred a great favor on the fraternity in supplying it."—A. C. McIntyre & Co., Ogdensburg.
- "It is the best advertising medium I have ever found."—H. M. SEDGEWICK, Granville, O.

We send samples to any who may desire.

BENERMAN & WILSON, PHOTO. PUBLISHERS. 116 North Seventh Street, Philadelphia.

THE BONANZA PLATE HOLDER.

Patented January 19, 1875.

This is one of the most useful appliances yet introduced in the Photographic business, and

one much needed for economy and neatness in every gallery.

The "Bonanza" Plate Holder has been in constant use in G. D. Morse's Gallery, in San Francisco, for over one year, and a test made from month to month of the savings. In the busy season it reached over \$12 per month in pure silver solution. The drippings from the plates do not come in contact with the wood frame, slide or door of the Holder, thereby saving it from destruction. Besides, it protects the camera-box, clothing of the operator, carpets, etc., from silver stains. Another great advantage of this Holder: The inside kit of frames which are in general use for accommodating the different size plates are dispensed with. The fittings are so adjusted that they take every size plate from a card to 8×10 size, uprights or crosswise, as may be desired, by simply moving the receptacle that holds the plate to the position required for any particular size. Every photographer will see at a glance the value of this invention.

"We have had your "Bonanza" Plate Holder in use in our establishment for about eight months. We take pleasure in testifying to their great superiority over all others we bave employed or seen, not only as a silver-saving appliance, but also in promoting cleanliness in work and protection of carpets and drapery from silver contamination. The very moderate price charged for these Holders will be returned to the purchaser, in the saving made, in a very short time."—W. H. RULOFSON, San Francisco, February 10, 1876.

"The constant use of a couple of your 'Bonanza' Plate Holders during the past year warrants me in saying they are unexcelled. The silver all being saved to a liquid state can be used again, and there is no soiling of clothes. carpets, or the floor of the studio. The silver not coming in contact with the camera, the focus is not disturbed by the eating away of the wood work. The saving in silver, clothing, and carpets, is astonishing, and I would not be without them on any consideration. I cordially recommend them to the craft."—G. D. Morse, San Francisco, February 20, 1876.

"The past eight months I have used the "Bonanza" Plate Holder at Bradley & Rulofson's. It has been a great source of pleasure to work with a Holder free from drippings of silver solution. Every photographer will appreciate the cleanliness of this invention, as well as the dollars he will save by its use. I am starting in business at 415 Montgomery Street, and wish you to send me two "Bonanza" Plate Holders."—D. B. TAYLOR,

"I believe it to be the best Photographic Plate Holder ever used in the art."—SILAS SELLECK, San Francisco, March 4, 1876.

The "BONANZA" PLATE HOLDER is manufactured of the very best material, and is now ready for the market. The retail price is \$20. They are made to fit and are in focus with the American Optical Co.'s 8 x 10 boxes. Will forward a holder by mail to any address on the receipt of \$20 currency, or will send by express, C. O. D. It is much cheaper to send by mail, as we can forward them to any part of the United States for fifty cents. All orders should be addressed to

I. W. TABER C O.,

YOSEMITE ART GALLERY,

26 Montgomery St., San Francisco, Cal.

BACKGROUND. THE "ATMOSPHERIC

Patented November 23, 1875.

This Background which is made of wire cloth, is remarkable for its atmospheric effect.

This Background which is made of wire cloth, is remarkable for its atmospheric effect. The wire cloth is of such a texture that the eye or lens cannot focus upon it, which has the effect of producing a sharper outline to the figure. This result makes it valuable for plain Backgrounds, as it produces negatives free from any blemish, as a dent or scratch on the wire cannot be photographed, owing to the open meshes of the cloth.

The durability of the Wire-Cloth Background cannot be questioned. One of them will last a lifetime. We have had them in constant use for over two years. They have been hit by head-rests, and every accessory used in a gallery have have had their accidental contact, but they are as perfect to-day as when new. They are used in all the first-class galleries in San Francisco. We have manufactured them for this market, but as freights are high to ship them East, we have determined to offer gallery rights for sale at \$25 currency, with full instructions for making them. It is economy for photographers to purchase the with full instructions for making them. It is economy for photographers to purchase the right, for they can be made at a small expense.

W. TABER &

BENERMAN & WILSON, Trade Agents, 116 NORTH SEVENTH STREET, PHILADELPHIA.



GLACÉ! GLACÉ!

J. DE BANES, 872 Broadway, N. Y., finishes Photographs of all sizes, for the trade, in the newest styles. Send in your orders early.

G. SAUTER.

No. 138 South Eighth Street, Philadelphia,
MANUFACTURER AND WHOLESALE DEALER IN

PASSEPARTOUTS.

The attention of the trade is particularly called to the superior quality of our Glass and materials and neatness of finish. A large assortment constantly on hand.

CENTENNIAL WEWS EXHIBITION

By arrangement with the CENTENNIAL PHOTOGRAPHIC CO., who have the exclusive right to photograph within the INTERNATIONAL EXHIBITION of 1876, we are enabled to offer our patrons a splendid line of

INTERIOR & EXTERIOR VIEWS of the BUILDINGS & GROUNDS.

Including charming interiors, rich exhibits, wonderful flora, beautiful panoramas, and lovely scenes, which meet the eye in all directions, comprising now some

TWENTY-FIVE HUNDRED SUBJECTS.

Stereos, \$3 per dozen; 5×8 at 50 cents each; 8×10 , \$1; 13×16 , \$2 50; and 17×21 , \$5. These views are all gotten up in the highest style of the art, can be sold by any photographer, and will bring a crowd to any gallery to see them.

CATALOGUES FREE. SAMPLE DOZEN STEREOS BY MAIL, \$3.
LIBERAL DISCOUNT BY THE GROSS.

Also, the **CENTENNIAL SOUVENIR**—16 Views of the Centennial Buildings and Philadelphia. Cloth bound, 50 cents, post-free. Trade supplied. Money in it!

BENERMAN & WILSON, Photo. Publishers, 116 North Seventh Street, Philadelphia.

PROMENADE ALL!

HERMAGIS'

Celebrated French

PORTRAIT LENSES.

CABINET SIZE, ARE JUST THE LENS FOR THE NEW

PROMENADE PICTURE.

MR. HENRY ROCHER, the renowned Chicago photographer, says of them: "In my opinion they are truly lenses of great capacity, and must surely satisfy every purchaser." Mr. Rocher has purchased two Hermagis lenses of card size and one Salomon style. See further splendid testimonial from Mr. Rocher in Specialties.

MR. F. GUTEKUNST, the celebrated Philadelphia photographer, was sent a Salomon Lens to try for us, and wont part with it. It cuts sharp a 9 inch standing figure, and beats a lens that has been his favorite many years, and where many makes of lenses have failed, on trial, to equal it.

The HERMACIS IS THEREFORE AHEAD

TRY THEM!

These celebrated lenses, are used by MONS. ADAM SALOMON, of Paris, exclusively for making his WORLD-RENOWNED PORTRAITS, and by the most famed photographers of Europe, from whom Mons. Hermagis has the Highest Testimonials.

We now have a FULL STOCK on band.

The Salomon Style, 8 x 10 size, \$160. For Cabinet Size, extra quick, \$100.

For Cabinet Size, quick, \$90.

For Carte Size, extra quick, \$50. For Carte Size, quick, \$40.

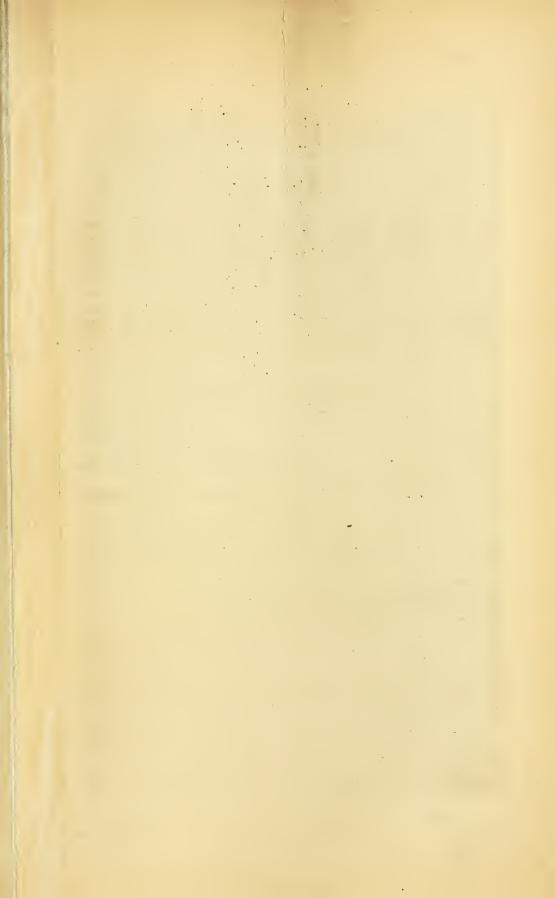
They are being introduced in America steadily, and are liked wherever they go.

They will be sent on trial to responsible parties C. O. D., and instructions to Express Company to hold money one week for trial. If parties prefer to see the work of a lens before purchasing, we will make a negative and send with details of exposure, etc., and reserve the lens until answer is received (if the time is reasonable), on receipt of \$1 to pay cost. Having a skylight of our own we are enabled to do this.

Not a single person to whom we have sent these Lenses on trial, as above, has returned them.

BENERMAN & WILSON.

116 North Seventh Street, Philadelphia, Pa.





INTERNATIONAL EXHIBITION BUILDINGS,
FROM GEORGE DHEL 18/6.

Philadelphia Photographer.

Vol. XIII.

NOVEMBER, 1876.

No. 155.

Entered according to Act of Congress, in the year 1876,
BY BENERMAN & WILSON,
In the office of the Librarian of Congress, at Washington, D. C.

THE CENTENNIAL AWARDS.

AGREEABLY to promise, we publish herewith a full revised list of the names, as far as we have been able to obtain them, of those connected with photography who received awards. This list, we presume, will not be materially changed. In the main, we have no doubt the awards will be accepted as fair and impartial, as far as they go; and yet there are names there representing work of questionable merit, while others are absent whose productions were the theme of universal praise.

A classification of the six principal countries represented will show the number of exhibitors and awards:

United States,	exhibitors,	135;	awards,	27;
Germany,	44	24;	44	17;
Great Britain,	**	26;	"	11;
Austria,	46	11;	44	5;
France,	"	10;	66	6;
Russia,	"	6;	"	6.

The balance of the foreign awards are in about the same ratio, the whole number of foreign exhibitors being about 150, and the awards 79, while the whole number of American exhibitors is, as we have shown, about 185, and the awards 27.

We congratulate our foreign brethren on their success, and trust they may feel repaid for coming so far to exhibit their work. We confess, however, in common with many of the fraternity in America, to a feeling of disappointment, that some of our artists, whose names will not be found below, were not deemed worthy of an award by the work they exhibited. We have in mind particularly some of the portraitists of our own city of Philadelphia, such as Gutekunst, Taylor, and others, and Mr. Landy, of Cincinnati.

But we presume the judges saw differently, perhaps more impartially than we Americans can, and the awards were made upon what they considered the merits of the work.

LIST OF AMERICAN, EXHIBITORS IN PHOTOGRA:
PHY RECEIVING AWARDS.

Bigelow, L. G., Detroit, Mich., Photographs.
Sarony, N., New York City, Photographs.
Centennial Photographic Company, Philadelphia, Pa., Photography.

Reid, John, Paterson, N. J., Photographs. American Photo-Lithograph Co., New York, Heliographs.

Mosher, C. D., Chicago, Ill., Photographs.
Kent, J. H., Rochester, N. Y., Photographs.
Seiler, Carl, Philadelphia, Pa., Photographs.
Ryder, J. F., Cleveland, Ohio, Photographs.
Kurtz, W., New York City, Photographs.
Carbutt, John, Philadelphia, Pa., Heliographs.
Bradley & Rulofson, San Francisco, Cal., Photographs.

Rocher, Henry, Chicago. Ill., Photographs. Houseworth, Thomas & Co., San Francisco, Cal., Photographs. Bierstadt, Charles, Niagara Fails, N. Y., Photographs.

Anderson, D. H., Richmond, Va., Photographs.
Watkins, C. E., San Francisco, Cal., Photographs.
Woodward, J. J., Washington, D. C., Photographs.

FOREIGN EXHIBITORS RECEIVING AWARDS.

Henderson A., London, England, Photo-Enamels.
Bedford, W., London, England, Photographs.
Heath, Vernon, London, England, Photographs.
Wortley, Colonel Stuart, London, England, Photographs.

Cameron, J. M., London, England, Photographs. Robinson, H. P., Leamington, England, Photographs.

Yerk, Frederick, London, England, Photographs. Norman, Carl, Tunbridge Wells, England, Photographs.

London Stereoscopic Company, London, England, Photographs.

Jennings, Payne, Dablin, Ireland, Photographs. Rocchini, F., Lisbon, Portugal, Photographs. Pacheco, Insley, Rio Janeiro, Brazil, Photographs.

Hartl, Carl F., Photographs.

Karelin, Andrew, Nijini Novgorod, Russia, Photographs.

Notman, W., Montreal, Canada, Photographs. Jaworsky, B., Russia, Photographs.

Eli W., Warsaw, Russia, Photographs.

Levy, J. & Co., Paris, France, Transparencies. Kostki & Mulerta, Warsaw, Russia, Photographs. Bergamasco, C. Ch., St. Petersburg, Russia, Photographs.

Meiczkowski, J., Warsaw, Russia, Photographs. Hudson, F., Ventnor, England, Photographs. Jacobi, C. H., Coblentz, Germany, Heliographs. Schulz & Suck, Carlsruhe, Germany, Photographs.

Heiler, F. Mosbach, Baden, Germany, Photographs.

Mischewsky, B., Dantzig, Germany, Photographs.

Schnärwächter, J. C., Berlin, Germany, Photographs.

Albert, J., Munich, Germany, Heliography. Scholz, Robert, Goerlitz, Germany, Photographs. Loescher & Petsch, Berlin, Germany, Photographs.

Obernetter, J. B., Munich, Germany, Heliography.

Brauneck & Maier, Mayence, Germany, Heliography.

Rükwardt, H., Berlin, Germany, Photographs. Kiewning, E., Stettin, Germany, Photographs. Koesler, J., Bad Landeck, Germany, Photographs. Strumper & Co., Hamburg, Germany, Heliotypes.

Roemler & Jonas, Dresden, Germany, Heliotypes.

Laurent, J. & Co., Madrid, Spain, Photographs.
Otero, Diaz Edward, Madrid, Spain, Photographs.

Arce, D. Inocencio, Barcelona, Spain, Photo-Lithographs.

Correa, Antonio da Fouseca, Oporto, Portugal, Photography.

Biel, Emilio, Oporto, Portugal, Photography. Fernandez, Lusa, Oporto, Portugal, Photography. Relevas, Carlos. Lisbon, Portugal, Photography. Beato, Egypt, Photography.

Scheefft, O., Cairo, Egypt, Photography.

Kolkow, F. J. Von, Groningen, Holland, Photography.

Kundson, C., Bergen, Norway, Photography.
Aubert, E. E., Christiana, Norway, Photography.
Szaciusky, L., Christiana, Norway, Photography.

Christiana, Jr., Buenos Ayres. Argentine Republic. Photography.

Cruces & Campa, Mexico, Photography.
Stillfried, Baron Von, Yokohama, Japan, Photography.

Osti, H., Upsala, Sweden, Photography. Carleman, C. G. V., Stockholm, Sweden, Heliographs.

Jaeger, I., Heliographs.

Walery, Paris, France, Photographs.

Bray, I. de. Nice, France, Photographs.

Liebert, Paris, France, Photographs.

Vidal, Leon, Paris, France, Photographs. Gillot & Sons, Paris, France, Heliography.

Bognes, Miss A., Vienna, Austria, Photographs.
Angerer, V., Vienna, Austria, Photographs.

Schodisch, L., Vienna, Austria, Photographs.

Luckhardt, F., Vienna, Austria, Photographs. Lurgajoli, Merdu, Austria, Photographs.

Newman, J. H., New South Wales, Photographs. Holterman, B. O., Sydney, New South Wales, Photographs.

Suidt, N. T., Sidney, New South Wales, Photographs.

Daintree, R., Queensland, Photographs.

Beernaret Bros., Ghent, Belgium, Photographs. Taeschler Bros., St. Feden, Switzerland, Photographs.

Reichard & Linderer, Berlin, Germany, Photographs.

EXHIBITS OF CHEMICALS AND APPARATUS PER-TAINING TO PHOTOGRAPHY RECEIVING AWARDS.

Clemons, J. R., Philadelphia, Pa., Albumen and Matt Paper. Hance, A. L., Philadelphia, Pa., Photographic Products.

Follett, O. S., New York, Photographic Chemicals.

Peck, Samuel & Co., New York, Photographic Apparatus.

Scovill Manufacturing Co., New York, Photographic Apparatus.

Sibley, L. D. & Co., New York, Stereoscopic Album.

Stock, John & Co., New York, Photographic Apparatus.

Woodward, D. A., Baltimore, Md., Solar Cameras.

Wilson, Hood & Co., Philadelphia, Pa., Photographic Apparatus.

Wilson, J. J., New York, Stereopticon.

Voigtlander & Son, Brunswick, Germany, Photographic Lenses.

Dallmeyer, J. H., London, England, Photographic Lenses.

Ross & . Co., London, England, Photographic Lenses.

Rathenow, Berlin, Germany, Photographic Lenses.

Beckers, Alexander, New York, Revolving Stereoscopes.

Cremer, James, Philadelphia, Pa., Graphoscopes. Marcy, L. J., Philadelphia, Pa., Sciopticons. Anthony, E. & H. T., New York, Lanterns and

Anthony, E. & H. T., New York, Lanterns and Graphoscopes.

McAllister, Thomas, New York, Microscopes. Darlot, Paris, France, Photographic Lenses. Derogy, Paris, France, Photographic Lenses.

PHOTOGRAPHY AND TRUTH.

What a wonderful reputation for veracity photography has acquired. From its earliest days it has been looked upon as strictly truthful by all classes of people, with perhaps an occasional exception, as in the case of dissatisfied sitters when criticizing their own pictures, when one who has a horror of shadows will say, "I know my face is black, but it is not as black as that;" another, "I had on a black coat, and here it has taken brown;" again, "Why this is perfectly frightful! I know I never looked as old as that!" and so on with a great number of faults with which every professional photographer is familiar. And yet these same people after all believe in their hearts that the photograph is mainly true. The great majority of people believe what the actor in some play is made to say, viz., that "the camera won't lie." Almost every day we hear from the pulpit, the rostrum, or the press, comparisons made which indicate the firm confidence felt in the unquestionable truthfulness of our beautiful art.

A rather peculiar comparison is before us embodied in a circular from a "short-hand writer and law reporter," in which he endeavors to inspire confidence in his abilities by claiming that his report furnishes "a picture of the testimony—every light and shade of expression being reproduced with the faithfulness of a photograph."

In courts of law it is a witness that is seldom or never impeached. A photographic copy of a will, deed, contract, bill of sale, note, or other document, is always considered as good as the original, and evidence that cannot be gainsayed.

Although it is sometimes used by evil-disposed persons for the purpose of counterfeiting, yet it is often used for the detection of counterfeits, forgeries, and other dishonest transactions. At the Buffalo convention three years ago, Mr. A. S. Southworth, of Boston, gave to some of the members there, one day between the sessions, a very interesting description of the methods he employed in verifying documents, detecting forgery, and proving counterfeits; his long practice in this direction in executing the principal part of the work required by the Boston courts having rendered him very skilful in applying the unswerving test of photography to such work.

Thus we see what a high position our art holds in the public mind; and although it may be degraded in the hands of some who drag it down upon a level with their own base purposes, yet it has that in it which constitutes one of the highest and noblest virtues, and will elevate any man who will profit by the lessons it teaches and practice it conscientiously, truthfully, and, as far as he can, artistically.

PHOTO-ENGRAVING.

Of the great variety of applications of photography to the various methods of mechanical printing, engraving, etc., there seems to be none that promises to find a

wider field than that of photo-engraving. This is mainly a new application of photography, which has been developed within the past two or three years, and is now being extensively worked in New York and Chicago, each city having a photo-engraving company, from whom we have recently received specimen sheets in the form of neat pamphlets, containing numerous examples of their work. These are from photographs, pen drawings, copper-plate prints, woodcuts, and steel engravings. The reproductions from the three latter are admirably executed, while the pen drawings have the effect and appearance of the finest woodcuts. The pen drawings are a peculiarity of this process, and calls for the exercise of the same skill in this new direction that has usually been employed to prepare pencil drawings for the wood engraver. These pen drawings are made as originals, or after photographs. One of the methods of operating with the latter is to make a copy of the original about double the size of the engraving required. A print is made on arrowroot paper, which is fixed but not toned. Then with india-ink a pen drawing is made on this photograph so as to secure every line and shade. The print is then submitted to the action of a solution of corrosive sublimate in alcohol, which dissolves away the reduced chloride of silver which formed the print and leaves the lines in ink entirely unaffected. The drawing then receives such touches as are necessary to complete it, when it is ready for the further processes of reducing and engraving. A number of the Chicago company's plates are from photographs, and are remarkably effective and truthful. In the New York company's circular is a portrait of William Cullen Bryant, which is admirably executed, as is also a reproduction of a steel engraving, entitled "The Fair Sleeper."

The following brief statement of the methods of working this process as far as they are publicly known, we copy from *The Iron Age*:

"As some of the most important parts of the process are kept secret, we cannot give a full description of the methods employed in making the photo-engravings. It differs from most other methods in that there is no

etching or 'biting in' of the lines by the action of acid. In brief, the history of a plate may be stated thus: the subject, properly prepared, goes to the photograph gallery, where a negative is made in the usual way, except that it is required to be more perfect in detail than any other known to the photographic art. The negative goes to the secret department, whence comes a plaster of Paris mould, which is sent to the stereotype foundry. The substance in which it is cast is ordinary stereotype metal, with some modifications, the constituents being mixed in the company's own works. Coming out of the cast, the rough plate goes to the printer to be tested. When 'passed' it is forwarded to the 'finishers,' who are, for the most part, regular wood engravers, who deepen the wider spaces, and 'touch up' any portions which may not have come out sufficiently perfect. Then 'clean' and 'file' proofs are taken, the former to be sent to the customer, and the latter, properly numbered, to be pasted in a scrap book for reference, and the plate is delivered to the blocker' to be mounted type high, when it is ready for use. It may be printed from direct, or, if desired, electrotypes or duplicate stereotypes may be made from it in the usual way. The operations above described require for their execution only a few hours, producing results which might occupy as many days of a skilful engraver's time."

The process opens up another method for the cheap and rapid production of illustrations, which tend to educate and elevate the people at large, in a love for and a knowledge of art. In the success of all such we heartily rejoice. The illustrations in Mr. Seavey's excellent paper, in last month's part of the N. P. A. report, were by the photo-engraving process, and one of the larger plates by ordinary wood engraving would have cost more than the whole fourteen he used there. It promises to do for art what the sewing machine has done for the needle, and the railroad locomotive for travel. Success to it.

Good negatives, good prints, together with neat mounting and finishing, are all worth striving for, and will insure success and a reputation anywhere. Try it.

PROCEEDINGS

OF THE

Seventh Annual Convention

OF THE

NATIONAL PHOTOGRAPHIC ASSOCIATION.

(Continued from page 315.)

THIRD DAY.

MET Thursday morning at 10 A.M., President Rulofson in the chair.

The election of officers being declared in order, on motion it was postponed, and the report of the Committee on Revision of the Constitution called for.

Mr. Sewell, in behalf of the committee, submitted the following amendments, which were acted upon separately and adopted:

ART. III, Sec. 1. To provide definitely for five Vice-Presidents instead of two or more.

Sec. 2. The Permanent Secretary, for his services, shall receive the sum of one hundred dollars per annum. Dispensing with an assistant at five hundred dollars.

Sec. 6. That the Local Secretary be appointed by the Executive Committee.

The words "annual" and "annually" were stricken from Sections 1, 3, 5, 6, and 7 of Article III, and 1, 2, and 3 in Article IV.

BY-LAWS.—ART. I, SEC. 1. The meetings shall be held at such time and place as the Executive Committee may determine; provided the time between the meetings shall not exceed three years.

Mr. Sewell. The matter of the Life Insurance League was given to the committee for consideration, and now it will be for the consideration of the Convention. I will read it, together with the amendments as we have them now.

Mr. A. S. Southworth. I move the whole subject go over until our next meeting. I do this in compliment to the lady who has presented the matter to us.

MR. SAYLOR. I second the motion.

THE PRESIDENT. I am very glad indeed to hear that motion; I think it in accordance with our duty in view of the slim attendance to-day. I appreciate Mrs. Lockwood and her efforts for the Association, nevertheless I do not think we are ready yet to go into insurance. You have heard

the motion that this whole matter be laid over until the next meeting; are you ready for the question? The question being on the motion to lay over, it was agreed to.

MR HOUGH made a motion that all dues shall be paid one year in advance; that no payment of money shall be voted, or money obligations incurred for more than the actual funds in the treasurer's hands.

After some discussion, the subject of Mr. Hough's motion was laid on the table.

THE PRESIDENT. Is there any further business? If not, I have received a communication this morning—It is very brief. I will read it to you. It does not present any new features, but is in exact accordance with that which I have taught; it is touching the organization of State and local societies. I have always believed in local societies.

"Suggestions for the N. P. A.

"Let me suggest that the Photographic Convention be divided into State Conventions, in connection with the general National Photographic Convention, to be held every third year, while State Conventions are held each and every year wherever designated. I believe that a greater interest will be manifested therein. I think that this Convention should pass a resolution to that effect, and to suggest that the members in each State form themselves into conventions, to be governed by the grand National Photographic Association.

"C. A. GLENN."

THE PRESIDENT. That embodies I think some very good ideas. I do not believe it is cool enough for us to carry out that plan at this session.

Mr. Hough. Would it not be in order to let the President and the committee attend to this matter.

THE PRESIDENT. A resolution of instruction would be in order.

Mr. Hough. I offer such a resolution, that the President be authorized to designate persons in each State for such purpose.

THE PRESIDENT. I think it would be better to make that the business of the Executive Committee.

Mr. Hough. Well, then, refer it to the Executive Committee.

MR. SAYLOR. I second that motion.

THE PRESIDENT. It has been moved and

seconded that it be the sense of this meeting that the Executive Committee name persons in each of the large cities of the United States, accompanied by a recommendation that they organize local societies for the advancement of photography. You have heard the motion.

Mr. Saylor. Everybody is aware in some localities such organizations would be very desirable indeed, but they are everywhere more or less impracticable. Everymember of the organization will not do his duty.

Mr. A. S. Southworth. I am very sorry that I feel I ought to take up a minute of your time, but this matter hinges on the very foundation of this society, which, in the first place, must rest upon local societies. If there are no local societies in the country we shall have no general society. In a few sections of the country we have already good local societies which are permanent. It does look to me as though it would be the height of folly for a few of us who come together to dictate to societies twice as large as the number here present, which are now doing as much as they can. There are societies formed in New England and in New York and Brooklyn, a society is formed in San Francisco, and one in Chicago. I have spoken of the meeting previous to this, and of those societies having been the support of this society, and when those societies go down, this society goes down entirely. Now, we are not able, either in Boston, New York, or Philadelphia, to make it appear that this society is in a prosperous condition. The reason of this is that we are in debt, and where is the money to pay it? Now, gentlemen, I had hoped there would have been enough here so that we could have taken hold and paid it off. I thought last year we would be out of debt, but we are not. We must pay our debts as a society, and if each member will pay his dues, all the debt will be paid off. I have been here for the past four weeks, and have seen members about the grounds and in Photographic Hall, who have not come to this room, and the reason is very evident; they do not want to pay their dues that they owe to this society. If we resolve we will not pay our debts, we might as well say so, and let us repudiate and become bankrupt. Now, I tell you one thing; I have had experience,-if we do not pay our debts, we go to smash; if we have not got money, we cannot do anything; we cannot employ others to work for us. We have not got a dollar in the treasury to help ourselves with, and are thirteen hundred dollars in debt, and now we are going to recommend the formation of State conventions. Why, gentlemen, the society in Boston, and I only speak of that because I know of it, that society can come together next year with three hundred members all from New England. Now, perhaps it would be well for some society to do that, and then invite the National Photographic Association to come and join them. I should think so from the looks of the number of members here. I say, gentlemen, we ought to devise some plan to pay this debt. I do not like to make a promise and then repudiate it. We should certainly devise some means to pay up, and then retire modestly.

THE PRESIDENT. I merely want to say that I approve of some of brother Southworth's remarks, and some I do not approve of. He knows I claim the privilege of disagreeing with him. I think we should go to work and liquidate the debt. To do that I will give one-fourth as much as can be collected here towards doing it; I will give one-fourth as much as all the rest. If you will pay \$1000 I will give \$250, and Mr. Wilson will give \$251; he has to give one dollar more than I do.

The members then subscribed to the fund for the liquidation of the debt as follows:

A. S. Southworth, \$10; H. D. Marks, \$10; W. I. Adams, \$25; W. R. Powell, \$10; John Carbutt, \$10; Albert Moore, \$5; A. McCormick, \$5; B. F. Saylor, \$5; A. N. Hardy, \$10; Robert J. Chute, \$5; A. K. P. Trask, \$5; A. B. Stebbins, \$3; E. T. Whitney, \$5; A. W. Phipps, \$10; Daniel Sewell, \$2; W. H. Rulofson, \$25; E. L. Wilson, \$50.

The Secretary and Treasurer were instructed to solicit subscriptions for the removal of the debt of the Association, and to collect the dues.

The following resolution was offered and passed:

Resolved, That all those who are found in arrears, after due notice, on the first day of January of each year, be considered as having forfeited their membership.

The next business in order being the election of officers, the members proceeded to ballot, with the following result:

For President, W. H. Rulofson, of San Francisco.

Vice-Presidents, A. S. Southworth, of Boston; I. B. Webster, Louisville, Ky.; Alfred Hall, Chicago; Robert J. Chute, Philadelphia; J. F. Ryder, - Cleveland, Ohio.

Permanent Secretary, J. H. Fitzgibbon, St. Louis, Mo.

Treasurer, Albert Moore, Philadelphia.

Executive Committee, W. Irving Adams, Abram Bogardus, J. W. Black, Benjamin French, I. B. Webster, V. M. Wilcox, Edward L. Wilson.

On the announcement of their election, the President and Treasurer returned thanks as follows:

Mr. W. H. Rulofson. I am very much obliged to you, ladies and gentlemen. I am not in the humor for delivering a parting address this morning, but I can only say that the historian looks into the future and draws his conclusions from what has passed before, and if I have been enabled to do anything as I ought to do it in the past, I shall endeavor to do it better for the time to come.

Mr. Albert Moore. I only wish to say I thank you for your confidence. I will endeavor to do the duties of the office to the best of my ability, and as to the money that may be intrusted to my keeping, I would say it shall be well taken care of. I would say further that when there is money enough to pay off this old indebtedness, there will be no trouble in the future. There has been a marked economy in the management of the Executive Committee for the last two years, and if we had anywhere near the amount of dues that are still unpaid, we would be sailing in clear water.

THE PRESIDENT. Ladies and gentlemen, I shall not be with you to the end of your deliberations. There are some papers to read and some very interesting exercises.

I am very much gratified at the results which have been accomplished. You will have a really able chairman in brother Southworth to take my place. I will now consider that I have said good-by, and all that you can look at of your President will be nothing but a pair of coat-tails; all the rest will be going forward to the great West.

Mr. A. S. Southworth. Permit me, ladies and gentlemen of the Association, to say that we can hardly realize ourselves how much of a sacrifice our President has made, to come from California at great expense to attend our meetings here, and then to feel obliged to go away without looking at this great and grand display of works of art, especially the works which we are interested in; a man obliged to leave his business, pay enormous fares, and leave his family under circumstances which require him to go immediately back again, has sacrificed as much as any six of us put together. (Applause.)

President Rulofson then took leave of the members, and first Vice-President Southworth occupied the chair.

On motion, it was voted to extend the morning session thirty minutes and finish up the business.

Mr. Adams. Do I understand that when we adjourn now we adjourn for good?

THE CHAIRMAN. Yes, sir; but I know there are those present who desire to talk a little photography; this room is at our service this afternoon as it has been at any time; if we choose we can come in here and have a photographic discussion.

Mr. Adams. Would you be willing to stand up and be questioned on photography?

THE CHAIRMAN. I know but very little, but all I know of photography and all the efforts I can make for it, are at anybody's service at any time they will apply.

Mr. Adams. I would like to say to this Convention that for the last seven years I have taken great pains to get Mr. Southworth in among the pictures and ask him some questions concerning them, and ask him to criticize the pictures, and in every instance I could get more information in five minutes than from any books that I have ever seen. I believe that if the pho-

tographers present will avail themselves of an opportunity to talk to him it will pay them well. I think it will repay you all to be present and talk with him this afternoon.

Mr. Southworth. I will just remark that Mr. Adams means very well, but if you go into the picture gallery and select some of those fine pictures, and see how they are shaded, you will learn more in one hour than I could tell you in half a day.

Mr. French having been informed of his election as one of the Executive Committee, expressed a disposition to decline; but upon being urged to serve, spoke as follows:

MR. FRENCH. If I can do any good I will serve. I have always taken a great interest in this Association, and everything that I can do to raise it up I will do I will stand by the photographers. I wish to see it prosper. I hope the Association will live when I am gone. I have heard some say, "It is going to die out;" I do not believe it, there are men here of too much intelligence, and ladies, too, and when they are interested you may say the thing never dies.

Mr. Wilson extended an invitation to the members to take seats on the porch of the Centennial Photographic Company's studio that evening, and witness a lantern exhibition, which he saw was announced by the papers to come off at 8 o'clock.

The invitation was accepted, with thanks. Mr. Wilson said the Convention was about to adjourn, and there were a number of valuable papers that had not been read.

This gave rise to a discussion as to what should be done with them, and it was unanimously agreed that they should be published with the report of the proceedings.

This in turn brought out an additional lengthy discussion as to the method of publishing the report. The action of the Association in the past was referred to, whereby it took the publication of its proceedings into its own hands, appropriating money for the purpose, as at Buffalo, and from which resulted a part of the debt which now burdens the Association. The claim of the Association upon its official organ was discussed pro and con, till finally the editor of the Philadelphia Photographer was called upon to define his position. Mr. Wilson said that for the first two or three

years after the organization of the Association he had published the proceedings, and was the only one who did; but a feeling of jealousy seemed to have arisen, and the Association took it upon itself to publish the report, and the result was as has been stated. Now he was ready to renew the offer he had made before, viz., to publish the minutes, provided he be given the sole privilege of doing so.

After considerable further discussion, Mr. Sewell offered the following resolution, which was adopted:

Resolved, That the copyright of the proceedings of the National Photographic Association, for 1876 be given to Mr. Edward L. Wilson, provided he publish the same in his magazine.

After voting to hold an afternoon session for the reading of papers, discussions, etc., the Convention adjourned.

THIRD DAY.

AFTERNOON SESSION.

The Convention met at 2 o'clock, first Vice-President A. S. Southworth, of Boston, in the chair.

The session was devoted exclusively to the reading of papers and discussions. The latter we have no report of, the former are given below.

On Various Distortions in Photography.

As fellow-members of an arduous profession, having aims and trials in common, it is fitting that we should seek a mutual understanding on such of our affairs as are most exposed to public criticism. I have selected one of these to which reference is often made, and in treating it shall leave the fabric of my remarks so open at all sides that you may add to it or take from it, or even pull it to pieces, to suit yourselves; my object being to elicit discussion and to secure a reasonably harmonious attitude in the presence of our critics.

In dealing with so-called distortions in photography we are compelled, at the outset, to divide them into two classes, the real and the imaginary. Let us give the latter our first attention.

Every one is familiar with the fact that a marked peculiarity of feature is apt to be

more conspicuous in an unfinished photograph than in nature. Not one face in a thousand, to speak critically, is in perfect drawing, and by so much as it fails of this does the untouched photograph seem to make the worst of it. When this is the case with a subject that has been well posed, it is due, I think, to our habit of comparing all portraits with ideals rather than with the realities of the human face. The origin of these ideas is very mixed. Some persons have no aptitude for comparison, and are not good judges of likeness at all; again, we are all blinded more or less by the partialities of friendship and affection, and in regard to his own likeness every person is notoriously at fault. Lastly, artistic ideals insensibly tinge our perceptions of the true drawing of features. I am disposed to think that many ill-founded charges of error come from the last source.

The first duty of imitative art, we would naturally think, is to represent nature truthfully, then agreeably. But the exactions of taste, not to say the demands of trade, have somewhat disturbed this order, and the artist is often induced to be exact only so far as exactness may be pleasing. In other words, portraiture, in order to be popular, must represent its subjects not altogether as they are but as they want to be. Now, except as we call in the pencil's cheek, it happens that we are bound to more unyielding results than the painter experi-In drawing a nose or an ear, a hand or a foot, the painter may if he choose make it two-thirds its natural size (and he often does), and his subjects will usually shout "Bravo!" over his "keen perception of the beautiful." But if a luckless photographer plant the precious first baby in a chair with its foot not artfully placed, the camera will not lie to please anybody; and our miserable friend will be told in the presence of his best customers that he has made a disgusting failure. That baby, above all others ever born, has a little foot, and he has made it look like a bake-iron or a grain-shovel! Moreover, Mr. Rodomontado painted baby's little cousin, who has an enormous foot, and he made it "as small as your two fingers." All which is likely enough.

Although such an extreme case is not of daily occurrence, it is real enough to point my meaning; and since the hard facts of proportion will not vanish at the bidding of the dear public, concerning the dealing with the whole class of such complaints, we can only commend each photographer to the guidance of his own experience. Perhaps. we ought oftener to exhibit the candor of a friend of mine, to whom a lady complained that he had made her mouth and eyes all aslant. He promptly marched her to a mirror, and with rule and compass showed her that his camera had told the truth. Under the momentary conviction she exclaimed, "Bless my soul; I never knew I was so erooked!" But doubtless she afterwards justified the couplet of Hudibras:

"A man convinced against his will Is of the same opinion still."

I have already hinted at the distortion that takes place when the extremities of the body are placed relatively too near the camera; but just here I want to drop an earnest word. Too much is not to be yielded to the popular idea of defectiveness from this source. With reasonable care in posing, an instrument at a proper working distance from the sitter will not sensibly violate the real demands of perspective, which every artist, mark you, ought to observe. I have made this a matter of experiment, and I hope all practical workers in our profession will satisfy themselves to the same effect, so that they may have reason for opposing the idea named, being sure that variations in proportion, due to perspective, are not among our peculiar difficulties.

We come now to another class of defects, which are not veritable distortions, though they are sometimes so accounted; I speak of those that arise from injudicious lighting.

It would carry us into an interminable range of topic if we were to consider the whole artistic bearing of light and shade as it enters into expression, and I must pause to remind myself as well as you that we now confine the idea of "distortion" to the real or apparent change of the absolute proportions of face and figure.

From the familiar experience that white

or light colored objects contrasted with dark ones of the same size are not only more obtrusive but actually appear larger to the eye, it is reasonable that lights falling upon the various parts of the face have an effect additional to the giving of height or prominence to those parts, and must make them look intrinsically larger by mere virtue of their light tint. How deftly then must the eareful photographer humor the nature of his subject in lighting them up! It would damage his reputation to let the light play recklessly on those staring high cheekbones: on this nose flattened at the bridge or with a ball at the end; or on these hard lantern jaws.

Reverse what has been said about injudicious lighting and apply it to shading, and by the counteraction of the same law we have sunken eyes, hollow cheeks, scowling forehead, pouting lips, double chin, etc., all asking to be treated as if they had no existence in actual life.

So far as we have now gone there are almost no distortions of actual drawing in either of the cases named; the ill effects, practically speaking, are those which would be presented to the eye in the given situations were there no such thing as photography.

I am thus earnest in urging the disallowance of indiscriminate charges of distortion, because that term carries with it an idea of unavoidable error, in a mechanical sense, which I insist does not belong to any of the difficulties we have been considering.

We have now to refer to a complaint which is hard to classify, unless we put it under the head of pure imagination.

Probably all photographers have had very good pictures objected to because they were thought to represent the person larger or smaller than natural size, usually larger. This puzzling objection is oftenest made with children's heads. When I was new to the business no criticism so completely dumfounded me as this. Here is a child with a head as big as a cantaloupe, and here is a vignetted head the size of a cherry, and to the parent the vignette looks bigger than the child. If it were a figure picture you might account for such judgment by the relative sizes of the accessories, but why

the head, and that with a good large margin, and yet it is insisted that it looks too large. Well, I am puzzled, but not my objector. He or she knows all about it. "Photographs, you know, exaggerate so." "But this is just the size you selected for the head." "True, but somehow this makes the child look twice as large as he is. I have a brother who is quite an artist, and he says that photographs always exaggerate the features."

Unanticipated and unreasonable as all such criticism is, we will pardon it if only it will not attack the accuracy of our art so unjustifiably.

The last on our list, unlike the foregoing, is a veritable and confessed distortion; but it is simple truth to say that it is not chargeable to photography but to papermaking. The unequal stretching of paper, though, as a rule, but little observable, sometimes becomes a genuine difficulty. As our photographic paper is usually furnished, it will be found when mounted to show an excess of stretching, widthwise of the sheet, equal to one-fortieth on any given length. As we usually cut for printing, this shows itself lengthwise in the card, 4-4 and 8-4, and widthwise on the Cabinet and Promenade, as in the full sheet. It is probably within the truth to say that the majority of 8-4, 4-4, and eard heads, as given to the public, are too long by as much as the width of their respective eyebrows.

To make this effect more obvious to our manufacturers, on whose shoulders we roll this difficulty, I have prepared two enlarged heads of our admired friend Dom Pedro from the one negative I was able to get from life. These are enlarged by two processes, each enhancing in opposite directions the effect spoken of, so that the inaccuracy from unequal shrinkage of paper is here shown with fourfold power, to exhibit how it works. The degree of the effect is this divided by four. Will our manufacturers please see if they cannot run the fibres of their paper in a non-uniform direction, and thus relieve us as well as lithographers and engravers.

It is well to reflect, however, that this evil is not without its compensation, in giving us the opportunity to change the effect of a negative in latitude and longitude.

Strange to say, while there are so many suspicions of photographic distortion, this one has escaped a general recognition among the public. Let it be a secret between the manufacturers of paper and their customers in the arts.

And so concludes an imperfect enumeration of certain effects which have to be avoided by refined photography. That they are so well and so generally avoided testifies to the untiring skill and care of large numbers in our profession. Now, if you will let me reverse the usual order, I will name my text at the end of the discourse, and it is the same as that which I had the honor to enlarge upon in *Photographic Mosaics* for this year, viz.:

Photography, like the other imitative arts, while it employs mechanism is not in bondage to it.

After dwelling as we have on the perversions, real and imaginary, whose effects have to be subdued, we may assert before the world that all these and worse would mark your work if you were not sincere co-laborers with art. And by all that your pictures are above what simply mechanical pictures would be, do you emphasize your triumphs in yonder hall.

So far from being bound, Ixion-like, to the wheel of unsympathetic machinery, you have in a worthy degree directed to your purposes the forces of both nature and art, and a noble commission in this world's jubilee recognizes your achievements in devoting to you an ample edifice and a distinguished place among the highest refinements of taste and skill. What more can you ask? Or, asking more, what better incitement to continued progress can you possibly have?

WILLIAM CURTIS TAYLOR.

Co-operative Photography.

BY E. K. HOUGH.

For more than twenty years in this country photography has been so prosperous that workmen everywhere, with any respectable degree of skill, have been sure of remunerative employment.

But during the present continuing hard times there has been a tendency to close up the ranks, and force out those who have not

developed a large degree of special skill in some department.

Galleries narrow down their working force to a small complement of picked men, and then cannot always keep them busily employed.

Proprietors themselves often have to struggle with desperate energy to keep their foothold; and, if not compelled to close their doors, have much sacrifice and humiliation forced upon them.

Now, although we must admit that in the end photography, as an art, will be benefited through this severe process of "natural selection" by the "survival of the fittest," yet I think it no less true that by a little judicious management, many who would otherwise be submerged and lost, could save themselves from a prolonged and desperate struggle with great mutual advantage, and therefore any sensible suggestion to that end may be called practical.

If I am right, the means of rescue may be expressed in two words, co-operative consolidation.

The great mistake, especially in all large towns, would seem to be the endeavor to keep in existence too many small galleries; none of them large enough to afford or contain all the superior modern conveniences and improvements, yet all too large to be profitably conducted without them.

The co-operative method of encouragement, by participation of profits, has been so rare that most of the ambitious and progressive young men who have developed any important degree of skill, by working in large galleries, have felt compelled to commence business for themselves instead of working on for wages.

And although starting in small ways, with imperfect experience and facilities, they have generally been satisfied, because more prosperous and independent than when on salary.

But now the hard times squeezes them. We all know that the expense of keeping a gallery open and ready for business, in dull times, very nearly equals the expense of busy times; that after these first necessary expenses are paid the excess of business is very largely profit; that to keep three or

four small and poorly-furnished galleries running costs twice as much as for one large and well-furnished gallery, wherein the best workmen from the four could do twice more work than in all of them combined, and twice as good work as in either of them singly, with more satisfaction to themselves and customers, and far more money profit.

More than this, the most of these small galleries are run upon the strength of one qualification. The proprietor is either a pushing business man, a good skylight worker, or a good chemical manipulator; and with this one chief qualification he starts a gallery. And thus hundreds have succeeded, too; so sure is it that even one thoroughly good quality will always secure appreciation.

But as photography is now conducted, it requires such diversified talent that the work of every important gallery might be divided into four departments, each of which should have for its head a man not only well trained and experienced, but with something of peculiar taste and genius for his especial work.

First in order is the business department, which should include the entire financial management of the concern, the purchase and sale of everything used or produced, the reception and delivery of all orders, the only authority to make promises, and when made the entire responsibility to the public for their fulfilment; in short, being the responsible managing medium between the interior artistic producers and the outside paying customers.

Second in order, but first in importance, comes the positionist—the skylight man—the artistic soul of the establishment, wherein the financial manager represents the brains; the spiritual, in contrast and conjunction with the intellectual. While financial success depends most on the business management, all the pride and glory of the establishment depends on the spirit and power manifested in this artistic department. If the spirit ruling here is tame and commonplace there can be no large business and no great fame.

Third in order, but of great importance, comes the chemical management and manipulations, dealing with material forces of the most delicate and variable character, requiring most careful control to maintain that trembling balance of conditions most favorable to fine results.

Lastly comes the printing and finishing, which requires a high degree of mechanical skill and artistic taste, to attain the best effects with uniform excellence.

The chemical and printing departments are only subordinate to the business and artistic, because they deal with fixed material elements instead of intelligent living forces.

The diverse talent required for excellence in each of these departments will rarely or never be found combined in one person.

A man of superior business qualities will rarely be above average in artistic, as also a man with great artistic ability will never excel in business talent, nor often be superior in chemical skill.

Also each of these departments in a large gallery requires sufficient care and ability to occupy the entire time and thought of any one man.

Therefore in seeking to combine all these diverse but necessary qualities under one business management, I believe some system of co-operation would be better than partnership, and more reliable than wages. It would give scope for all the enthusiasm of the young and enterprising, would enable those of small means to combine far greater business facilities under less running expense, and would be largely free from hampering complications.

This paper is, of course, intended as merely suggestive in calling attention to possible co-operative advantages, and offers no ready-made method of procedure.

And finally, although co-operation in photography may never be generally practiced, I believe it is decidedly *practical*.

NEW YORK, Aug. 9th, 1876.

Photography from a Monetary Standpoint.

Why are photographers less successful, financially, than other men of similar capacity, in kindred callings and professions? That such is the case none will deny; the reason why is a question full of interest to

the fraternity, and may well claim our serious attention at present.

At the first dawn of photography, cheapness and ease of production were the two principal claims made for this discovery. Almost the first announcement made, at least upon this side of the water was, "one hundred dollar outfit, and two or three weeks instruction, costing twenty-five to fifty dollars," was the full sum of the requirements for turning out a "full-fledged artist." Cheapness was the great desideratum, and while these considerations aided greatly in popularizing the art, and paved the way for its rapid extension and growth, they did incalculable evil by lowering the standard of the new art, and destracting from its merits in the estimation of the people; it also lured into its ranks thousands of worthless men, who were too lazy to work in mechanical pursuits, or who had proved failures in the profession, or else had failed to find anything that they were fit for, and whose total lack of talent, taste or business capacity wholly unfitted them for developing this beautiful art, or making it respectable in the eyes of the world. The world has not outgrown these prejudices, and I opine the present generation must all pass away ere our beautiful art will recover from the shock and take the position among the arts, sciences, and professions to which in its triune character it is justly entitled.

We are still suffering sorely from those early errors. You would be astonished at the number of ex-artists in the land, men who at one time or another have followed photography, but who found it would not pay and went back to their original state, or being shrewd men, found, after acquiring a few hundred dollars, that they were in the "wrong pew," "learned some young chap and sold out to him." In my past career as an artist I have met with hundreds of such men, and believe they outnumber the professionals fully ten to one.

Thirty-one years ago, my father, a school teacher and preacher, purchased a C. C. Harrison lens, and made about the first pictures taken in Georgia; from that day to the present I have watched with much interest the progress of the art. I made daguerrotypes myself in 1857, and ambro-

types in 1858 to 1861, and photographs since the war. The war, with its separations and the uncertainty of life, created a great demand for cheap pictures, that could be finished up in a few minutes, and anything that was a picture would sell, the cheaper the Millions of pictures were ground better. as out of a mill. Artists multiplied and prospered; the scrapings of the earth rushed into the "trade;" competition increased, prices went down, art suffered violence at the hands of tyros, and was rebaptized to shame; "Artists busted," and not a village in the Union but had one or more outfits "in soak for board," until in many parts of the country the very name of artist became a synonym of obloquy and contempt.

But thanks to God there were a few men scattered here and there of nobler characters and higher aspirations, who knowing the capabilities of our art, could see in the near future its redemption and elevation, and with Spartan courage and fidelity labored for its attainment.

The next calamity that befell the art was in the shape of a set of greedy cormorants; Yankee sharpers and process mongers flooded the land from Maine to Texas. I dare say not a man in this assembly but has been "taken in" by them, but thanks to a kind providence their day is gone.

The great drawback to the progress of the art during its infancy was the want of knowledge. A new departure had been made in chemistry and philosophy, and the then written books were of but little use to us. The low position into which our art had fallen had deterred scientific men from taking up its cause. When the ambrotype process first came out with a grand flourish, proclaiming a "new era in art," "pictures taken in any kind of weather" by the wet collodion process, I paid a man five dollars to let me copy a letter of four pages claiming to contain the entire process, together with a list of all chemicals and apparatus used in it. I sent one hundred dollars to the firm of Anderson & Blessing, New Orleans, for material and a manual of the art, and was among the first to make this style of picture in the interior of Texas. This was in 1857.

It was not until after the war that pho-

tography began to raise its head and claim its rights. The ambrotype soon introduced the negative and the paper process. The introduction of the carte de visite gave a powerful impetus to the profession. The new style required more care and a higher order of talent to produce, hence fewer succeeded in it, and hundreds quit in disgust. Photographic literature began to be promulgated, chemicals prepared specially for the business, and apparatus improved, a new and brighter day began to dawn; this soon gave birth to the Philadelphia Photographer, with Edward L. Wilson at its head, to whose enterprise and genius American photography owes more than to any living or dead man. He has with indefatigable energy ransacked the whole earth to bring together all available knowledge, and sown it broadcast over the land with a cheapness and liberality almost prodigal. The introduction of the cabinet picture and accessories, and large pictures, at once began to attract the attention of the elite and cultivated, and did more to elevate our art and show its capabilities than any one event I know of. He has developed latent talent all over the land, brought men together to talk over their trials and successes, boiled down their experiences and served it as a savory dish to the rising men. He has broken up secret and process selling, published their formulæ, or revealed their trickery. His publications have given us the science, chemistry, and art principles of our art, until the merest tyro of to-day knows more of photography than did the "best artist" ten years ago, and last but not least, he has developed and cultivated a feeling of fraternity and friendship among the brotherhood that has had untold influence in our advancement, and is beginning to place us in the list with doctors, lawyers, and dentists, as an integral and necessary part of every community, and is making our influence felt, appreciated, and fully acknowledged. The National Photographic Association, and its present proud position in our great Centennial Exhibition, is but the natural outgrowth of these efforts; and here let us give three cheers for Edward L. Wilson, our Permanent Secretary.

Having taken a cursory view of the rise

and progress of photography in America, with some of its worst errors and misfortunes, it may be well to ask a few questions and try to answer them. It is a fact that human nature of nearly all ages and conditions is and has been about the same, and is likely to remain so. So long as vanity, pride, and ostentation, together with love and friendship, remain ruling passions in the human heart, the portrait picture will be sought after, and will continue as much a necessity as any of the other luxuries of life. But we must not lose sight of the fact that pictures are luxuries.

In a nation where almost universal prosperity and plenty reign, where almost every man, woman, and child is able to have some pictures taken, why is it that so few photographers are financially successful? Come, let us reason together.

The number of photographs wanted by any community are limited; being luxuries, they fluctuate with the times. A long experience and close observation have taught me that no effort of the photographer, by advertising, introducing new styles, or reducing prices, can stimulate this want much beyond its normal state. This being true, and I firmly believe it, it is clear to my mind we have two answers to our question clearly indicated.

First, there are too many artists; second, and prices of work are too low; but as we cannot kill off the artist, and find it "mighty hard" to get more for our work, what shall we do about it? Ah! there's the rub. Multiplicity of artists produce strong competition; this begets, naturally enough, illfeeling and cutting down of prices, very much to the amusement of the good people, but to the sorrow of the poor artist. Large cities are exempt of necessity from these difficulties, for in them are plenty of all classes, some to be satisfied with poor pictures at low rates, and some to be willing to pay fair prices for good work; nor can competition ever be so close in large cities as small ones. In my own little city of less than fifteen thousand inhabitants there are four photographers. A few years ago a small city in this State, with a population of less than eight thousand, contained three galleries. These men eked out a mere

living, "taking in boarders," or otherwise supplementing their small incomes. sharp Western man came in, surveyed the scene, and with a heart but little better than a highway robber, said to himself, "I am a better artist than these men and can root them out." He settled down, puffed and blowed, put down prices a dollar below the other galleries, hence a struggle ensued. It was plain to the most casual observer that there was not enough work for all of them. This new man could only hope to live by starving out the others. With them it was a fight for bread and meat, for wife and little ones. Pictures were lowered until thirteen photographs were made for one dollar. The "longest pole must take the persimmon" in such a contest; the new man, having some money and but little incumbrance, sustained himself, while the two old ones were driven from the city, broken up and ruined. Can you expect fraternity and good feeling under such circumstances? This case has been enacted hundreds of times in different places, and I dare say every one present has seen just such cases, but I do hope not one member of this Association has acted the part of aggressor in them. Where is the remedy? Echo answers where? The enemy when seen is least to be dreaded. I will say negatively that the remedy is not in building up grand colleges for turning out artists by the score. I am bitterly opposed to any scheme, educational or other, that will tend to add a single man to the list. Let each photographer take in and train his own help. As soon as these become useful they generally leave and set up for themselves, and this will swell our ranks with sufficient rapidity. But our manufacturers, becoming tired of seeing apparatus lay on the shelves until the old ones wear out, raise a general howl; a shout is heard in the camp; this grand National Photographic Association must do something worthy of itself, must start a grand college and turn out a thousand artists yearly to swell our ranks. This is to lure into the fold the sons of wealth who are able to buy splendid outfits. For God's sake let the learned professions have all such quackery and pettifogging; if it don't pay it is still respectable. My dear working brother, let me persuade you; "listen not to the song of the siren;" don't walk into that "little parlor."

How can prices be raised? This is a problem of no easy solution, and may well engage our earnest attention. It can only be done by combination, and then only by degrees, for the public have become so accustomed to certain standard prices, that they will look upon any increase in price as an imposition; yet they are willing to pay for what pleases them. I am now charging one dollar per dozen more than one of my neighbors, and two dollars per dozen more than another, and cannot see any loss of custom from it. A few years ago three dollars per dozen was the ruling price, now five dollars per dozen is just as common, and the public is becoming used to it; and in a few years they will stand six, eight, and ten dollars, just as a doctor will charge one dollar for pulling a tooth, and men will pay it. I had rather pull ten teeth than make one picture. I have tried both.

From the earliest days of the art we have taught the world that but little capital, talents, or education were necessary to produce good pictures, and the money cost was merely nominal, and it is but natural that their estimates of the art, as well as artists and their productions, should be measured by this their own standard. These statements are not true, and it will cost years of effort to disabuse the public mind of them. We, too, deceive ourselves as to the cost of producing pictures. Who that would estimate the cost of making a yard of muslin would say, half a pound of cotton worth five cents is the cost, and when sold at twenty-five cents per yard, would say it was five hundred per cent. profit; and yet we reason in this manner about the cost of making pictures, seeming wholly unable to realize the fact that the entire expense of the establishment, together with the pay for labor and board (even for yourself), must be taken into the account, for if we work at a trade or profession, we must live thereof. Suppose, for instance, an artist makes in a month twenty-five dozen of pictures, and gets four dollars per dozen for them, equal to one hundred dollars. I have

heard artists say the cost of producing pictures was just about fifty cents per dozen, equal to twelve dollars and fifty cents for the month's work, hence he has made eight hundred per cent. profit; is this correct? Upon a careful summing up of accounts, he finds the economical expense of running his establishment this month has been just one hundred dollars; this includes house rent and his own board; the whole income of the month has been spent in producing it; the pictures have cost him four dollars per dozen,-just what he got for them; he has worked for a month for his board. Now had he been a capitalist and paid a man fifty dollars per month with board, he would find himself in debt at the end of the month the fifty dollars. No company ever declares a dividend as profit until the entire expense is first paid. If men looked upon this question rightly, they would rarely be induced to reduce the prices of pictures. This system of false reasoning has largely induced too low prices. Let us review carefully all such mistakes and learn wisdom.

Is it true that reducing prices will add proportionally to a man's profits? I think not. I have carefully watched the workings of this thing on several occasions. During the past year a friend, living in an adjoining city, asked my advice in regard to reducing his prices as a remedy for hard times. I advised him against it. He disregarded my monitions, put down prices from five dollars per dozen to three dollars for cards, and about the same ratio for other work, and advertised it thoroughly both in the papers and by handbills. After a few months he footed up accounts, found he had made more pictures yet had taken in but little more money, while his expense and labor had been nearly doubled, and he was actually a loser by it. Half a dozen such cases have fallen under my personal observation. In cities we frequently see two men of similar ability, one charging five dollars, the other four dollars or three dollars per dozen for cards. Is it true that the cheap man does the most or makes the most money? I think not. In my own city I am charging five dollars per dozen; my neighbor is charging four dollars, and still another three dollars, and I believe I

do as much work as both of them together, and I claim superiority over only one of them; the other has a finer and more attractive gallery than mine.

Again, economy is the great touchstone to success in any department of life. It is very difficult to economize with money in the pocket. This is the great shoal upon which most men wreck their fortunes. Photographers handle their income daily, while it is not unusual for other professionals to go for weeks without a dollar, although they may have double the annual income; this conduces to economy. Photographers get their pay in "dribbles," a few dollars each day; others get theirs only semi-occasionally and in large amounts, hence the latter are forced to economize, and then strongly induced to make investments. No man calls a doctor or lawyer unless compelled to, hence they are not affected by hard times (only in collections). Ours being a luxury, men can and will do without pictures in dull times; in the meantime we have had our flush times; spent the money like a gambler, "come easy go easy," and have not laid by a cent for the sure to come hard times. The plodding ant and busy bee show more good sense than that, and lay by in summer their stores for winter.

Photographers are most unmercifully fleeced by manufacturers. Through the patent laws, so soon as a useful invention comes out, it is at once bought by some Shylock, who, holding an exclusive monopoly, is prepared to dictate terms. Patent rights have done good in the past, but I verily believe they have fulfilled the days of their usefulness and should be abolished. A cabinet dealer will sell you a beautiful, carved, polished, and upholstered chair for ten to fifteen dollars. A photographic posing-chair, hewn out with a broad axe, with some little attachment convenient to artists, covered by letters-patent, from twenty to forty dollars must be paid for it. I can buy a nice marble-top bureau, highly finished, with looking-glass and drawers, for twenty-five dollars. An 8 x 10 camera-box costs forty to fifty dollars, while a burnishing machine at forty dollars, that ought to be sold at fifteen dollars, and so on to the

ANOTHER NEW BOOK.

SHAKSPEARE'S

AGES
OF MAN.

OF MAN.

ILLUSTRATED BY JAMES LANDY.

This book is beautifully gotten up, and contains cabinet size duplicates of Mr. Landy's wonderful pictures, which are attracting so much attention in Photographic Hall.

As studies, they are full of artistic merit. The work will make a valuable addition to any photographic library.

Price, \$5.00.

NL,

FOR SALE BY

BENERMAN & WILSON, Photo. Publishers,

116 North Seventh Street, Philadelphia.



A NEW WORK ON

PHOTOGRAPHY AND ART.

ILLUSTRATED with 12 BEAUTIFUL Promenade Photographs.

BY

LYMAN G. BIGELOW,

Author of "Bigelow's Albam of Lighting and Posing."

This is a beautifully gotten up work, and contains full instructions in every department of Photography.

Mr. Bigelow is well known as an accomplished artist and excellent teacher, and we are sure his new work will be welcomed by all who are aiming for improvement in the higher technical elements of photography.

Price, \$5.00.

FOR SALE BY

BENERMAN & WILSON,

Photo. Publishers,

116 NORTH SEVENTH ST., PHILADELPHIA.

end of the chapter. These are the men who make the money, while the working photographer must be and remain "a hewer of wood and drawer of water," unless he gradually work himself into the "stock business."

Another fruitful source of loss to the artist is the constant bringing forward of new dodges, apparatus, lenses, etc., too numerous to mention, but of wonderful utility, puffed in whole-page advertisements. The greater the humbug, the more the puffing, and highly recommended by leading city artists (be it said to their shame if with their consent), we poor innocent backwoodsmen, ignorant of the depravity of poor human nature, feeling our inferiority to the city artists, ambitious to improve, "bite at the tempting bait," to find ourselves, when it is too late, "badly bitten." Alas, for poor credulous humanity! A few months ago a professional gambler, and quite a nice-looking man too, was telling me how much money he made and spent, and among his expenses, very innocently put down fifty dollars, spring and fall terms of court, for fines, equal to one hundred dollars. We might also set down from fifty to one hundred dollars to the score of gambling in buying new things, of which we know nothing except from flaming advertisements and high recommendations.

How many of us save our waste? I dare say this leakage will alone average one hundred dollars per gallery in this country, and so I might go on to the end of the chapter, but have already detained you too long. Let each man study up his own case. Let us cultivate more fraternal feeling, do better work, get better prices for it, and so conduct our affairs as to bring a larger amount of financial success, remembering always that while in poetry the artist may wander in Elysian fields, or sail amid the stars, yet in reality the world weighs every man in the dollar and cent scales.

Regretting the circumstances that have prevented me from meeting with you, wishing you all a good time here and much prosperity hereafter, I remain yours very truly,

H. B. HILLYER,

Artist.

AUSTIN, TEXAS.

A Plea for Photographic Patentees.

BY A. ST. CLAIR.

MUCH has been written and more said in condemnation of patents and patentees in the photographic business. Many harassing and expensive suits have been instituted. A few carried on until a decision has been had, and a vast amount of ill feeling has been engendered, as very few take time to inquire into the merits of the case; it is enough to know that a photographer has been sued by a patentee; the plaintiff is at once set down as a swindler, and the defendant elevated to the position of a martyr. At present, the photographer who has invented something in connection with his business which the patent office examiners pronounce "new and useful," and worthy of a patent, requires a degree of moral courage that few men possess. No matter what his previous reputation, he is at once anything and everything but a gentleman, and he and his invention must be tabooed. not on their merits, but simply because he has had the temerity to ask for and obtain a patent. Patent-hating is almost the religion of some of our second and third class photographers. I have one in my mind who persistently keeps out every patent article he can possibly do without. Some time ago he wanted a 10 x 12 box, but no swindling patent affair should come into his gallery; he is by trade a cabinetmaker and still keeps a few tools. He went to work at his box; the material including metal and metal working cost him almost half the price of a box complete, but he went ahead infringing half a dozen patents, and spending all his leisure time for nearly half a year. When at last it was triumphantly placed on the stand it had cost him in time and money three times as much as an A. O. Co.'s D. S. B. box, nickel plated, and the first photographer who saw it, exclaimed, "Hello Kil! where did you get that thing?" But we have not done with our friend yet. He wanted a stand for an old-fashioned French 11 x 14 reversible box, which weighs something less than half a ton; he and his operator planned a new style of stand. A friend flattered their vanity by asserting that it was the best thing out; our patent-hating friend claimed

it as his own invention, employed a patent solicitor, and for about a hundred dollars got his name in the patent office report as an inventor. Verily it makes a great difference who owns the ox that is gored. is responsible for this terrible hatred toward photographic patentees? That it is unjust, a few minutes' consideration would show plainly to any ordinary intellect, but consideration is just what the average photographer of to-day will not give; for him it is sufficient to know that a thing is patented: he is "on his ear" at once, and consideration is out of the question. Again I ask who is responsible, and reply, not the inventor, who is usually a poor operator in some richer man's gallery, but the manufacturing princes; they advertise "all the latest improvements" in apparatus, but when an inventor comes with a patented improvement it is their plan to throw cold water on it, and instead of making a reasonable arrangement with him, they at once go to manufacturing and selling the article in defiance of the patent, relying on their wealth and the inventor's poverty; knowing also that as the law provides that selling and using are as much violations of the law as manufacturing, the patentee can do better to "come down" on the user, who is generally a poor man who cannot spend the time and money necessary to a defence, and is therefore obliged to come to terms. Witness the sliding plate-holder patent; Mr. Southworth told the writer that he tried to get his boxes on the market without charging a license for their use, but the best he could do was to allow the sellers sixty-six per cent, of the selling price. The Shaw patent excepted, this sliding plate-holder has been perhaps the most annoying thing the craft has had to contend with, and it might all have been avoided if the manufacturers had been reasonable in their demands. The writer is cognizant of a patent issued recently. The inventor was poor, so he offered his invention to a New York manufacturing house. The model cost him \$2.50, and the maker offered to get them up for \$1.25, provided he got an order for ten gross to start with, as the profits on that number would pay for the special machinery necessary for their production. The New York

house replied that they liked the invention, had no doubt it would become popular, and would manufacture them for the inventor at \$3.00 each, and would try to sell them for him at \$5.00, which would allow him one dollar profit on each, as they would charge fifty per cent. for introducing. Not thinking himself an idiot he declined the proposal, and now this honest establishment is manufacturing and selling an infringement. Secure in the knowledge that the inventor's poverty protects them from a suit, they are reaping the profits of an invention approved by every artist who has seen it in use, and the inventor gets nothing unless he enters suit against the users and blackmails them.

Why are American artists so much better fitted with apparatus than their European brethren? Simply because our patent laws are more liberal, and the irrepressible Yankee will invent. You can't hold him back; to improve on what he sees is as natural to him as eating. Why do we point with so much national pride to the vast strides we. have taken in advance of mother England? Do we not boast that the ancient dame is obliged to her saucy boy, who set up for himself a hundred years ago, for the press she prints her news on, for the telegraph she gets her news by, aye, and for the machinery she manufactured the guns and pistols our Southern sisters peppered us so unmercifully with not long ago. If our inventions are so valuable in other branches of science and art, why not in ours? The average photographer is a jovial soul, a genuine good fellow; he gets his money easily and spends it freely; when his day's work is done, he "goes in" for enjoyment. Still there are some exceptions. Occasionally you find one who spends his leisure time studying out some mechanical improvement, and another who spends his midnight hours in his laboratory, amid noxious gases and unhealthy vapors; by and by the idea is elaborated, a new machine or a new process is brought forth; is it fair that he who spent his evenings in pleasure, and his nights in his comfortable bed, shall reap the benefits of his neighbor's brain-work without remunerating him for the time, money, thought, and application he expended on his brain child? Nay, verily, the American people pride themselves on giving every man his due; let us hope the photographic fraternity will prove no exception, but cheerfully "divide" with every one who enables his fellow to produce better work, or to do it as well, at less cost of money or labor or both.

P. S .- Question. Has Mr. Clemons found out what the substance is which explodes "when the spark of a burning-glass is brought across the dish in which his glyeerin silver bath has been evaporated?" You will remember I asked him what it was that exploded. He replied, "That would be hard to tell, as there is nothing there." I showed that a mixture of glycerin and nitrate of silver was highly explosive, and claimed that nitroglycerin was formed by the mixture. Mr. Southworth and others promised to experiment and report at the next convention. I consider this a very important inquiry; please put them in mind of it. This glycerin bath cannot be evaporated in the usual way without danger.

I never mix glycerin and silver except to flow a plate I want to keep half an hour or longer. I have gone out this summer with a 16 x 20 plate, thermometer 125° in the sun, driven a mile and a half, built a temporary platform in a wagon, and got a clean negative without spot or streak. Exposure, forty minutes after the plate was put into the shield; development, twenty-five minutes after exposure. Flowing solution, one part glycerin to four parts negative bath; flow several times after the oily streaks have disappeared. For small plates, less glycerin; I generally use eight to ten parts negative solution to one of glycerin.

At the conclusion of the reading of the papers, and the discussions which followed, short congratulatory addresses were made by Vice-President Southworth and others, and the Convention adjourned sine die.

MILWAUKEE CORRESPONDENCE.

BY SIGMUND SINGER.

Suum cuique! Preparation and Rectification of Emulsions—A Simple Test to Prove Excess of Silver in Emulsions.

Mr. Editor: The high considerations which the details of my process, as described

in the September, 1875, number of your valuable journal, received, more especially by Dr. Vogel, who highly recommends in his journal what he calls the Singer process, emboldens me to offer you this new contribution in the emulsion way. Since the origin of the emulsion process the main effort of the various processes was to have the silver and bromide in the emulsion evenly balanced, or to have only a trace of soluble bromide left. Lately two plans for this purpose attracted the principal attention of emulsion workers. First, the pellicle process, which attains this end through an expensive and laborious process, and which, at least in my hands, never equals the undoctored emulsion as far as sensitiveness or intensity is concerned. Besides these, it requires any amount of doctoring, commencing with the cotton, and after the emulsion has gone through the hydropathic treatment it is drugged again ad infinitum. In the second plan, which is becoming popularized by our eminent Mr. Newton, the emulsion is prepared with an excess of silver, which is turned into a chloride by the addition of a chloride salt. A controversy has lately sprung up between Mr. Lea and Mr. Newton about the priority of the use of a chloride in the emulsion as means to prevent fog. There is no doubt that Mr. Lea first found that the chloride possessed this virtue, and used the chloride of copper in connection with his emulsions, all containing great excess of silver, as a restrainer. But somehow he discarded it again, and introduced his aqua regia. But principally I find that Mr. Lea's highest aim was to find some substance restraining enough so as to enable him to work with an emulsion containing a large excess of nitrate of silver. For this purpose he adopted the chloride of copper, and later the aqua regia. I quote from the British Journal Almanac for 1872 from the contribution of the eminent Mr. H. Cooper:

"I am glad that Col. Stuart Wortley has discarded the use of aqua regia and substituted a simple chloride. The introduction of a chloride into a simply bromized collodion, and also with a bromo-iodized collodion, has been a subject of interest to mesince the spring of 1869. Nine months

before Mr. Carey Lea published his mode of using a chloride in his collodio-bromide process, I had found it of great benefit in a modification of Mr. Gordon's process, using a chloro-bromized collodion. I have also used it with collodio-bromide emulsion, but only in the endeavor to gain increased sensitiveness. Mr. Lea is undoubtedly entitled to the credit of having first pointed out its value in preventing fog when excess of nitrate of silver was used. I am convinced that the introduction of aqua regia in the collodion was a grand mistake. All the benefit to be derived from it may be obtained by using a simple chloride," etc., etc.

In the same place, and also a year previous, we find, by Mr. Henry Cooper's plain and simple directions, how to prepare an emulsion by letting it ripen with an excess of silver for a few hours, and then adding enough bromized collodion to have a trace of soluble bromide left.

We see from the above quotation that Mr. Lea used a chloride in his emulsion as restrainer for the excess of silver introduced, as his greatest aim seemed to be to prepare an emulsion capable of containing the largest-excess of silver.

To Mr. Newton certainly belongs the merit of having brought the use of a chloride to a perfect system. First, of using the chloride to take up the excess of silver, and so in a simple way produce a sensitive permanent emulsion containing neither free bromide nor silver; secondly, by showing that plates prepared with an emulsion of such a nature need no extra washing; thirdly, by finding that the simple addition of a chloride would restore foggy emulsions.

What is the cause of this rejuvenating power of the chloride? Probably the addition of a chloride introduces a molecular change by liberating bromine or hydrobromic acid, which latter works in a similar way. But the remedy is a specific cure for the disease, and all credit should be given to the discoverer.

This, Mr. Newton's method, is no doubt superior to any other for preparing an emulsion, and in connection with the alcoholic preservative as introduced by me is simplicity itself.

But it occurred to me already some time

before Mr. Newton introduced his chloride, that we could be able to eliminate this excess of silver by introducing into the emulsion insoluble salts, which having a strong affinity for the silver would eliminate it, and thus produce by a simple operation an emulsion containing bromide of silver, and nothing else. I have tried several substances with great success.

MY METHODS DETAILED.

First Plan.—The first substance I tried for this purpose was the cyanide of potassium. To use it proceed as follows: To a given quantity of hromized collodion made by any of the numerous existing formulæ (but if any acid is given in the formulæ it should be omitted) add enough of an alcoholic solution of pure nitrate of silver, until it is indicated by my silver test that all the bromides are converted and a silver excess shown.

MY SILVER TEST

Is simply a solution of bichromate of potash in water. The use of it is as follows: Drop a little of the emulsion on a glass plate; let it congeal a little, then pour some of the bichromate solution on it. An excess of silver is immediately indicated by a deep blood-red stain, while if there is only a little trace the stain will be deep orange; and if the emulsion does not contain any, the solution will be repelled from the greasy film, or by moving it up and down only stain it a pale lemon-yellow; moreover, the stain of the excess of silver, being insoluble chrom-silver, cannot be washed off; the other can. The alcoholic solution of silver should be added until by the blood-red stain of the test an excess of silver is manifested and no more. Now drop into the emulsion a dry lump of cyanide of potassium. Without shaking set the emulsion aside. The evanide will dispose of the silver in a very short time, and the emulsion will be cleared, according to the temperature, in from six to twenty-four hours. The emulsion should be tried with the test from time to time, and if no silver is indicated by my test a trial-plate should be taken, and if the pictures are too thin or foggy, should be left in contact with the cyanide some time longer, until a clear, vigorous image is obtained. The emulsion should be then decanted from the cyanide. The cyanide will eradicate any fog. Almost any kind of pyroxylin will be ripened by the cyanide and give good results. The only drawback is its energetic caustic action on the ether and cotton. I only had a chance to use the commercial cyanide, which contains a surplus of carbonate, but I think the use of the pure crystallized would not offer this objection, or the emulsion might be left in contact with the cyanide only a few hours, and then finished by the second method.

Second Method.-The second method is still more simple, and gives excellent results. and will work well alone or in conjunction with the first method. To the emulsion, prepared as in the first method, is added a quantity-an excess does no harm-of perfeetly dry (anhydrous) chloride of sodium in coarse grains; leave quiet at the bottom of the vial, and set aside. The chloride of sodium will dispose of the silver in about twelve hours or more, and the emulsion will be at the same time ripened to the creamy state. If a trial-plate is not satisfactory, leave it longer in contact with the salt, or shake it up with it. The whole process of conversion of the silver can be done in a few minutes by shaking vigorously; but I advise to let those substances work quietly through the length of time at the bottom of the vial; because, first, by the slow action of the silver the necessary molecular change in the emulsion is produced; secondly, the product of decomposition of the cyanide, chloride, etc., remain at the bottom, and will little, if any at all, contaminate the emulsion.

The third method is similar to the second; it consists in the use of a carbonate. Its use is similar to the chloride of sodium described in the second method. Pure carbonate of lime in excess is added in coarse grains to the emulsion, and proceeded with exactly as in the first and second methods. Probably other carbonates could be used, also other chlorides, and other salts, insoluble in alcohol and ether, and having an affinity for silver. I think the chloride of sodium will, on account of its simplicity and the peculiar generic action of the chloride for producing

clear pictures, become immensely popular, while many will succeed with the cyanide who cannot obtain suitable cotton.

Emulsions prepared in this way will hardly contain anything else but pure bromosilver. They will be very sensitive and work clear; but if wanted as further security, a trace of a bromide, or, after Newton's plan, a chloride can be added to them. They can be used without any preservative, more especially if to the bromized collodion a little nitroglucose be added before sensitizing: but at any rate I recommend the application of my alcoholic organifier, which will be an improvement under all circumstances. With a peculiar alcoholic preservative I have had plates by this emulsion which in five seconds' exposure showed a full detailed clear picture before development, with a rather dense sky, and only needed a little alkali to give the sufficient density.

After having given suum cuique, I think I can, without being immodest, claim as my own:

- I. The introduction of an alcoholic preservative.
- II. The rectification of the emulsion by the introduction of salts, insoluble in alcohol and ether, but having an affinity for silver.
- III. The indication of a simple test to prove the presence of nitrate of silver in an emulsion.

THE CENTENNIAL.

MORE SCATTERED PHOTOGRAPHY.

SINCE our last, we have visited the Spanish Government Building, where we find the photographic exhibits from that country. Photography in Spain has room for a great deal of improvement yet, and the artists there may learn some good lessons from their more advanced brethren in the neighboring kingdom of Portugal. But as the practice of art in any form is essentially a vocation of peace, and thrives best where the higher qualities of mind and heart are cultivated, we must be charitable when we consider the fratricidal strife to which Spain for several years has been subjected. But that has now passed, and under a more liberal government we shall hope to

see advances in all that pertains to the domain of art.

E. Julia, Madrid, exhibits cards and cabinets, which would have been quite attractive several years ago, but now present rather sharp contrasts of light and shade, with black tones.

Leopold Casinol has some colored portraits, by a process which he calls "Heliochromic." We are not familiar with the method of their production, nor are they possessed of sufficient merit to induce an inquiry. Some very successful landscapes in carbon are exhibited by H. Mariezcurrena, Barcelona Cards and cabinets, by Raphael Gauthier, Porto Rico, W. I.; very fair plain work. J. Laurent, Madrid, a large collection of architectural views, a few framed, but the most of them in three or four large albums. His constitutes some of the best work in the building. Taller, of Seville, has a frame of cabinets, quite ordinary. Narcisco Nobas, Barcelona, a collection of fine cabinet portraits, well posed and lighted, and showing skilful work in every department. D. Edwardo Diaz Otoro, Madrid, shows some very pretty effects in cabinet portraits, but his life sizes in cravon do not excel. Rafael Gustavius, Barcelona, architectural views; rather inferior. M. Alviach & Co., Madrid, a large frame of very effective portraits in cabinet and larger sizes. The attractiveness of this exhibit is much enhanced by the characteristic beauty of the Spanish ladies, by which we are reminded of the tribute paid by Byron to the girl of Cadiz, in which he says:

"Through many a clime 'tis mine to roam,
Where many a soft and melting maid is,
But none abroad, and few at home,
May match the dark-eyed girl of Cadiz."

The beauty of some of these is impaired, however, by excessive contrasts of light and shade. M. Herbert exhibits an album of full-length portraits, size 13 x 16, of army officers. They are very successful for work of that size, and indicate the skilful artist.

From the Spanish Building we return and notice a new exhibit and an item of apparatus, to which our attention has been called in Photographic Hall.

One of the latest photographic exhibits

to be put in place is that of Mr. Frank F. Currier, Omaha, Neb. His work is very suggestive of the "Western wilds," and brings forcibly to mind some of the recent tragic events, when we contemplate the group of ugly-looking redskins, in which are the portraits of the noted Chiefs, Sitting Bull, Swift Bear, Spotted Tail, and Red Cloud. Another is a group of scouts, among whom we notice the celebrated Buffalo Bill and Texas Jack. These groups, especially the Indians, were made under difficulties. for which it is proper to make due allowance. Mr. Currier's efforts with children have demonstrated a good degree of skill in catching these difficult subjects, while his cabinet and 8 x 10 portraits possess some good points in lighting and posing.

In alcove No. 5, Mr. S. R. Seibert exhibits a camera-box, which he has made with double swing-back, of entirely new construction, in which the amount of materials heretofore used in other constructions has been greatly reduced and a greater scope given to the swings.

The construction of the adjustable fronts of this box, upon which the lens or lenses are fixed, are also new and original with the maker, and furnishes a complete solution of a want long known to have existed by every working photographer. By it the lens can be placed at any desired spot to bring the picture on any part of the glass when making a single negative. Another and greater advantage which the originator claims over other constructions of boxes (and to which he desires the investigation of all photographers to be directed), is the fact that, in this construction of box, two stereoscopic negatives can be made upon one glass as small as 62x 62 inches, if desired. After printing two stereoscopic pictures from a negative of the above size, no argument is required to convince the photographer that the amount of waste is reduced to a small compass, especially when each picture is cut out about 31 inches square. It will not be supposed that the size above described would be the size of glass which a practical worker would prefer. 61 x 81 inches, or 8 x 10 inches, or still larger, would be used; but upon it the negatives can be made as close together in the centre of the glass as desired by the pe-

culiar construction of plateholder and adjustable front. After a print has been completed from a negative made as above, cut out one picture from the right-hand side of the upper stereo print, and one picture from the left hand side of the lower stereo print, then mount the two reversed on the card. and the combination will be found, I think, greatly superior to any now made. Use the other part of the print in the same way and then measure the waste. The worker will find a great advantage by allowing a short space of time to elapse between the two exposures of his negative plate. The change of the angle of light during that time illuminates parts of his subject which were in shadow in the first exposure, and gives, when combined, greater detail in deep shadows without overexposing other parts.

Mr. Seibert has no intention of patenting any of the new ideas furnished in his box, and only asks that photographers will study the advantage of it and make further improvements on them, whereby the art will be advanced, and stereoscopic work made better and more globular.

The above points have been furnished us by Mr. Seibert, and parties interested in this new style of camera can confer directly with him. He is employed in the Treasury Department at Washington, where he may be addressed.

How I Rectified a Bath without Sunning.

MR. EDITOR: I am and have been for years a subscriber for your valuable journal; also a reader of the Mosaics; am an admirer of both; have learned many good and valuable ideas in them; hence appreciate some of their good qualities, and consider them almost indispensable to every well-regulated gallery; yet I can but feel that there are some things printed in them that might better have been left out, from the fact that they leave a false impression upon the mind of the amateur photographer, and do no one else any good. One of these articles I wish to refer to in particular, which is found in the Mosaics for 1876, on page 50, headed, "How I Sunned a Bath under Difficulties," written by J. M.

Dunn. In the first place he goes on to tell how he left an eggshell plate in his bath. and that his bath was spoiled; so that there was no alternative for him but to mount his horse and ride a distance of one hundred miles, keeping his customers waiting from Thursday until Saturday. Now if . Mr. Dunn's good health actually required that amount of exercise on horseback, all right; or if he had a lady friend in the city he wished to visit, then all right. But to say there was but one alternative, and that to ride a distance of fifty miles and back on horseback, for the purpose of getting new chemicals with which to make up a new bath, so that he might be able to turn out good work to his customers; to say this was absolutely necessary, even in his case, was, in my opinion, very far from the truth; it leaves a false impression on the minds of all such as do not know better already; hence it is not only of no value, but actually a damage to the reader. I take the liberty to say I think there was at least another and a better alternative than that to which he resorted. To explain my position I wish to give a brief history of my treatment of a bath in a similar fix to that of his. On Tuesday, the 4th day of July, I was very busy tintyping all the day long; my bath worked splendidly; but after that day I had but little to do in the way of ferrotyping until Saturday, when I found that my bath wanted renovating; but by being careful made pretty good work with it until night. After the day's work was done I thought I would pour it into a bottle, sun it over Sunday, filter it, and perhaps that would be all-sufficient; but on turning up the bath-holder to empty it of its contents, to my great surprise out rolled a 5 x 7 ferrotype plate, badly eaten by the chemicals, and the solution surcharged with iron; it being about as red as my collodion. The plate was undoubtedly lost off the dipper on Tuesday, and remained in the bath all this time unnoticed. Well, you may imagine I was somewhat vexed and perplexed at my carelessness; but I had no thought of giving up in despair, or taking a horseback ride in consequence of my mishap. I was not long in determining the best course to pursue. I decided that aqua

ammonia would precipitate the iron, and at the same time hold the nitrate of silver in solution; so I proceeded to give it a dose of ammonia; shook it well; and set it in the sun to remain over Sunday. On Monday morning found very little, if any, change in my bath; it had become very apparent by this time that I had got to make thorough work of it, so I rolled up my sleeves and went at it with a will. Added water sufficient to weaken it about one-third; then gave it another dose of ammonia sufficient to throw down all the iron; after which it filtered out perfectly clear and bright. placed it in a porcelain kettle, boiled it for about fifteen or twenty minutes until it was reduced to about its original bulk, then set it on one side in a cool place; when perfectly cool filtered it again, and added C. P. nitric acid carefully until blue litmus-paper turned slightly red; all this occupied about four or six hours, when I had as perfect a working bath as I could wish, and that without sunning at all. He speaks of sunning a bath as though it was indispensable to good work. To this I would say, it is well known that sunning is good, but boiling is infinitely better.

Now I do not claim that I have said anything new or original, but it may help some inexperienced photographer out of a similar difficulty.

Yours respectfully,

L. W. THORNTON.

ST. JOHNS, MICH.



CONNERSVILLE, IND.

DEAR SIR: Would you, through the columns of the *Photographer*, give us some good, easy process for making transparencies, etc. Is there a process patented called

"Photographic Oil Painting?" We have had a gentleman travelling through this way selling rights. The old *Photographer* is still a welcome visitor, and is always full of "good things."

COOLEY & TATUM.

LOCKPORT, N. Y., August 7th, 1876.

EDITOR PHOTOGRAPHER: Would like to inquire, through the *Photographer*, for best process for printing on canvas.

F. B. CLENCH.

For easy method of making transparencies, see *Mosaics*, 1871, page 97.

How to print on painter's canvas, see Mosaics, 1871, page 114.—(Ed. Sphynx.)

In answer to an inquiry in August Sphynx, as to how he kept in order a quickworking bath which he recommended, Mr. E. P. Libby communicates the following:

Put the bath in a dish and heat to nearly boiling-point, then add liquid ammonia, drop by drop (stirring the bath constantly), until it is neutral, then boil two-thirds away; fill up with pure ice-water, and let cool, then filter, and make acid with C. P. nitric acid. It can be sunned if you like, but I never have, and I always find the bath to work from the word go, first plate being perfectly clear.

Hoping this may benefit some inquirer, I remain, Very truly yours,

E. P. LIBBY.

DEAR SIR: About a year ago my printing bath turned of a light gold color, i. e, of a one-grain gold solution. I did not notice any difference in its working. I tried permanganate, kaolin, and boiling neutral, but the color remained unchanged. Finally I added about one ounce nitric acid to a gallon, and that had the desired effect. Suspecting that it contained considerable albumen, I tried Clemons's method, burning with alcohol (on a small quantity), which threw down a heavy precipitate, cream-colored, and there was a loss of ten grains to the ounce by hydrometer test. I have put in considerable quantities of ammonia, liquid and nitrate, nitric acid, alcohol, glycerin, and camphor, at various times. I inclose a print showing how it works now.

Queries.

1. Was the precipitate albumen?

- 2. Is burning as good a method as any [to get rid of albumen?
- 3. Is there any danger, in view of the various articles added, of forming explosive compounds?
- 4. In short, what would you do with the bath?
 - 5. What causes the gold color?

Since clearing with the acid, if I attempt to neutralize with ammonia, it turns golden again. IRA T. COLLINS.

ANSWER.

Nitrate of ammonia put in the printingbath will make the bath yellow, and permanganate of potash will also in a very slight degree.

- 1st The precipitate was albumen.
- 2d. Burning is a fair way of getting rid of albumen. Chloride of sodium is a better way to get rid of all impurities.
- 3d. There is danger in boiling the bath, but not otherwise.
- 4th. Follow directions in "Printer's Corner," in Philadelphia Photographer for 1875. HEARN.

A COPYING ATTACHMENT.

PORT HENRY, July 3d, 1876.

DEAR SIRS: Having derived much pleasure and profit from the perusal of your excellent magazine, and noticing that in nearly every book you give us something in the way of improvements, I venture to send you a photograph of my copying apjusted to any camera-stand. Should you think it worthy of mention you can do so.

W. H. BIGALOW.

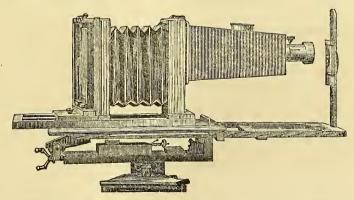
To Prepare Negative Glass.

BY T. H. WHITING.

HAVING seen several articles written upon this subject, of preparing glass, in time past, I thought I would give to the journal my formula, and the fraternity can do as they please in using it; but to all those who do not use it, I can say it is the finest I have ever used in my twelve years' experience:

Cut your glass the proper size, immerse it into 4 gallons of water, into which previously has been dissolved 1 package of Babbitt's concentrated lye. In twenty-four hours your glass will be perfectly clear; take the glass out and wash it thoroughly, and immerse in 4 gallons of water and 16 ounces of nitric acid. Let it remain twentyfour hours; take out and wash thoroughly. I prepare my glass every morning; I think it better, as it don't have a chance to collect dust. I have tried eggs for making albumen for glass, and have had a great deal of trouble with it. (You all know how it is yourself.)

But I have now the finest process, which I have worked for over a year. It needs but little work to make it, and it will be good for years. Soak 1 ounce of Cox's English gelatin in 8 ounces of water; heat



paratus. It may be an improvement on | over a spirit-lamp until dissolved; stir with some, and I find it works very nicely. The cost is but slight, and can be readily ad- of this solution and 70 ounces of water; fil-

a glass rod; when dissolved, take 1 ounce

ter but once; flow the glass same as albumen. This is always free from spots and specks, and works fine.

CHICAGO, ILL.

GERMAN CORRESPONDENCE.

Carbon Process under Difficulties—Lichtdruck—Remarks on Iodizers and New Formulæ of Messrs. Eder & Toth.

It is only a few weeks since I came from America, and I have had hardly time to unpack all the presents which I received while there from American photographers, and to put them in order, and paste them up. Only a little has as yet been presented to the Photographic Society; but this little has tended to increase the respect for American photography. The latest report of the Society in the September number of the Mittheilungen will give you information relative to it. Perhaps you will make some extracts from it for your readers. Those pictures revive in me many reminiscences of happy hours and pleasant impressions which I had during the time of my travels from the Atlantic to the Pacific coast. In no country, after Europe, do I feel so at home as in America.

But I have no time to indulge in reminiscences. The third edition of my Handbook of Photography and the second edition of my Carbon Book are waiting for me; also the Instructor of Spectral Analysis, which is in press now. There is a great deal for me to do, and if I had four hands none could rest.

The carbon process is yet the topic that keeps all photographers in excitement, and although we have here no Philadelphia summer, there is nevertheless enough diffi-Those who do not occupy a cool culties. locality, will hardly succeed with the process in the warm summer-time; but after all these troubles can be overcome. Some time ago I continued work, in a cool cellar, through the whole summer; but generally there are several mistakes made in carbon printing by beginners. Many printers cannot become accustomed to the circumstance that the carbon paper sensitized is a good deal more sensitive than silvered albumen paper; they are accustomed to work the latter by half daylight, and do the same with the carbon paper. The consequence of it is that it becomes entirely unsolvable, or delivers gray pictures. Dry sensitized carbon papers are best managed by lamplight. In developing there are also many mistakes made. The printers never think that carbon prints ought to be treated more tenderly than silver pictures. They should never act sparingly with bowls, but have one for insuccation, one for developing, one for rinsing, and one for burnishing; yet I have seen beginners in pigment printing do all these operations in one bowl, and then uncleanliness cannot be avoided. No matter how many difficulties the pigment process presents, it will introduce itself The easy, simple way in the production of window pictures, reproduction of negatives, and making enlarged negatives, will secure a place for it in every atelier, though the silver print will also be executed. Very queer it is that in America at present so many so-called inventors of the carbon process make their appearance, though it has been known for some time; and also that they try to dispose of the old thing under new names. There I heard mention of lambertypy, chromotypy, and other things, and it was nothing more than the carbon process after the latest improvements by Sawyer and Johnson, whose method was described in books two years ago. Therefore we need not be frightened by a new patent on the old process.

The Lichtdruck (collotype process) is continually making progress in Germany. At present we have two Lichtdruck establishments in Berlin. The process is seldom used for portraits, but booksellers are making much use of it. The new art industry literature is using it very extensively for their illustrations.

Obernetter has taken photographs of the art treasures of the Bavarian National Museum; Römler & Jonas of those in the renowned green arch at Dresden; and the best pieces at the new art-historical exhibition at Munich are also multiplied by means of the collotype process. Besides that we have already many landscapes in Lichtdruck. Trumper & Co., of Hamburg, have issued in collotype print views of Berlin

and Hamburg, which do not differ in appearance from the common silver pictures. The process is making progress, but for common portrait photography it is of minor importance. With the colletype process it is the same as with the carbon, -- its execution in summer-time is difficult, on account of the hygroscopic nature of the gelatin surface, and in the varying climate of America those difficulties are greater than here, especially in the damp eastern part. The climate of California is wonderfully adapted for the execution of the colletype as well as the pigment process; the land of everlasting spring, where I took, under the roof of my hospitable friend Rulofson, my recreation from the toils of the World's Exhibition.

It has often been noticed that the number of physicians and chemists engaged in photography is proportionally very small, and that they are not at all active in promoting the progress of photography to such a degree as they might. Therefore it is very pleasing to hear that two chemists, Eder and Toth, at Vienna, have devoted themselves to the investigation of the chemical part of photography. We are already indebted to them for an excellent work on lead-strengthening, about which I have formerly reported. Recently they have published a superior work on iodizers, in which they have proved that there are existing certain double salts, such as iodide cadmium and iodide calium, iodide cadmium and iodide ammonium, etc., etc., which, on account of their solubility, stability, and easy preparation, are especially suitable for the iodizing of collodion. They recommend as being preferable the double ammonium cadmium iodide and the single ammonium cadmium bromide. The formula of the first is: $2NH_4I + CdI + 2H_2O$. Of the second: 2NH₄Br + 2CdBr₂ + H₂O. Collodion, iodized with both of these salts, shows besides the utmost possible sensibility a great durability, which can be increased by adding more cadmium salt. Although this reduces the sensibility, yet we may increase it again by adding more ammoniac salt, which lessens, of course, the durability.

For the most sensitive collodion, Eder

and Toth recommend bromide ammonium, together with their double ammonium cadmium iodide. By their formula the following would be the best for portraits: 3 grammes bromide ammonium; 28 grammes double ammonium cadmium iodide; dissolved in 500 cubic centimetres of alcohol, filtered and mixed with 1500 cubic centimetres of plain collodion, which, in 100 parts, contains 2 parts cotton.

For normal collodion, which is not quite as sensitive, but more durable, they recommend the following: 7 grammes double ammonium cadmium iodide, 1 gramme single ammonium cadmium bromide; dissolved in 120 cubic centimetres of alcohol, and, after filtering, mixed with 360 cubic centimetres of plain collodion and 2 per cent. of cotton. This can be especially recommended for landscapes.

Eder's double salts have already appeared in trade; A. Moll. of Vienna, is preparing them, and I can but recommend their application. But if they cannot be obtained there, any photographer can prepare a similar collodion by means of salts easily purchased. For portrait collodion take: 3.6 grammes iodide ammonium (fresh and dry); 4.5 grammes iodide cadmium; 1 gramme bromide ammonium; dissolve in 140 cubic centimetres of alcohol, filter, and add 420 cubic centimetres of plain collodion.

There is no difficulty in preparing the double salts. To produce double ammonium cadmium iodide, dissolve 145 parts iodide ammonium and 183 parts iodide cadmium in water, and evaporate till it crystallizes. It crystallizes quite easily in slightly distorted cubes, and can be freed from the yellow mother lye by pressing. If you wish very clean salt, you will have to crystallize it again.

The single ammonium cadmium bromide is prepared by dissolving 344 parts of crystallized bromide cadmium and 98 parts bromide ammonium in water, evaporating till crystallization; the latter may also be repeated.

Eder and Toth have rendered good service in other works besides the above, and photographers may well be proud of having now these two men, who evidently have an

earnest desire to assist in the furtherance of our art.

DR H. VOGEL.

BERLIN, September 28th, 1876.

Some Rambling Thoughts on Lighting. BY F. M. SPENCER.

It is not my purpose to lay down any fixed rules for lighting the sitter, for I think there are none that will be applicable, since every light differs materially from every other, and each subject requires some modification of light. Also the manner of treatment of the sitter differs under the same light by reason of the variety of ways different artists will treat the same subject, giving a personality to the picture peculiarly his own; but there are some points having a common bearing that might be well to observe. In a general sense the lighting ought to be the same as it is desired to appear in the picture, but the shortcomings of chemical action make certain modifications necessary owing to the photometry of colors, as, for instance, some light shades of hair photograph too, dark, and an allowance of light, and, after a judicious use of powder, may be necessary to give the proper chemical balance. The same may be said in regard to draperies (except the powder). For white or very light draperies the light should be so subdued that the shadow lines may be retained in development; a shadow so strongly lighted as to come up stronger than the high-lights of the face will be sure to flatten and spoil the picture. The direction of light should be such as to give well-defined lines of light and shadow, say top-light at an angle of about 45 degrees, and side-light ata somewhat lower angle, so as to break up abruptness, but not so as to destroy solidity. Direction of light should be not only apparent but well-defined in every picture. Never let the light flow directly over the camera to the sitter. Suppose the downward flow of light to be at an angle of 45 degrees, it should cross the line from the camera at a considerable angle, say 20 to 70 degrees.

Except for full-length figures, the lower half of the side-light should be very sparingly used; or, in other words, the side-

light and top-light should join so as to produce one solid light, one general direction of light, and to soften the shadow side, a folding-screen of about 18-inch panels or sections, painted in some light neutral tint, will be found very useful. Avoid too broad high-lights; in fact they should be used sparingly, middle tints freely, and every high-light should be balanced by a corresponding shadow, with the understanding that the shadows admit much greater breadth than the lights, and intervening middle tones should so melt into both lights and shadows as to destroy all abruptness of either, and produce a harmonious whole. A broad light, and a broad, solid shadow, are alike distasteful, and a blank space in the picture; the high-lights should be round. and shadows transparent. Should you experience trouble in getting a sharp, clear focus, be sure there is some offensive " cross" light that needs cutting off; for a welllighted subject will give a clear, sharp image on the screen, one that can be readily and quickly focussed. A head-screen will be found to be frequently serviceable.

It is not necessary to sacrifice any good quality of a picture in order to secure another, as sharpness to secure softness. Such things are only tricks, contemptible in their meanness.

The external lines can only be spoiled by bad posing and bungling management of the background; but in the internal lines all the modulation should be preserved in the lighting and faithfully brought out in the negative. The reputation of the artist and pocket of the proprietor demand that as little "modelling" be left to the retoucher Except for very small chilas possible. dren, let the question of time of exposure be of minor moment; that of effect the supreme object to be attained. Always determine just how you want the finished picture to look before you begin, and work faithfully to that end, and the result will be equal to your powers of conception, or at least only curtailed by the faults of chemical action and optical imperfections. Let your light so shine that the camera, seeing your good works, shall let others know the mind of the master.

PHILADELPHIA, October 17th, 1876.

OUR PREMIUMS FOR 1877.

As our Centennial year draws towards the close, and the Philadelphia Photographer still holds its unrivalled position as a photographic magazine, we desire to call the attention of our readers to the fact that the time for the renewal of subscriptions, and the gathering in of new subscribers, will soon be here. Now, while we hope that every one who has taken this journal will continue to do so, we want to offer them inducements to try and secure us additional subscribers. To this end we renew the offer we have heretofore made, to give one dollar's worth of our publications, or any articles in which we deal, to any of our present subscribers, for every new one year's subscription.

By reference to our advertising department selections may be made from our publications, or from our Lantern Slides, Centennial views, Centennial Lantern Slides, Improved Photograph Covers, Promenade prize pictures, Weymouth's Vignette Papers, etc. Thus while we claim to give the value of the subscription price in the embellishments alone, and consider that no words of ours are necessary to recommend our magazine to those to whom it is known, yet we are willing to make some sacrifice to place it in the hands of those who are not familiar with it. In this we ask the co-operation of all those who desire that others should have the benefit of it as well as themselves, and are willing to make the effort for the reward we offer. This will help you; it will help us, and you will all get a better publication, as the more subscribers we have the more we can do for you all. See third page of cover.

ARTICLES FOR MOSAICS.

The responses to our invitation for contributions to Mosaics for 1877 have already been quite generous, but we still have room for a few more, and we hope those who desire to contribute will not put it off till it is so late that they are crowded out. We want especially to make Mosaics a book from the fraternity. We want it to treat on every department of the work by giving some one in every department a hearing. The pro-

prietor is supposed to be familiar with all parts of the work, but we should expect him to be the best qualified to tell us how to conduct the business. The poser, or positionist, is most familiar with the æsthetics of photography; he can discourse upon lighting, the best arrangement of screens, reflectors, etc., the management of sitters, and the care of the apartments and apparatus under his charge. The dark-room operator can tell us all about the making and management of chemicals, which include the collodion, silver-bath, developer, and fixing solution; he is also supposed to be most familiar with the best methods of cleaning or preparing glass for use. The retoucher can treat upon retouching, the printer upon printing, and the finisher upon mounting and finishing. Thus every part of the work can be discussed by those best qualified, and the results of long experience, together with the most approved methods, be reciprocally contributed, and each be quite sure of receiving much more than he gives. This will insure one of the most valuable photographic books published to each contributor free of charge, while we expect the fraternity at large will buy as largely as ever. Our edition of Mosaics for 1876 was exhausted early in the year, and we have been unable to fill many orders we have since received. In view, therefore, of the great popularity of this annual, and the probable active demand for our 1877 edition, we would suggest that dealers send us their orders early, so that we may print enough to supply all demands.

OUR PICTURE.

ANOTHER Centennial view, and then we forbear. We are well aware that there are many, especially of those who have not been able to come, who fail to appreciate anything relating to our great Centennial Exhibition. We feel some charity for them, for we know they cannot comprehend it, and possibly may think that those who come are not of the strongest-minded people. But it is only just to say that of the millions who have visited the great Fair, we have heard of very few who have gone away dissatisfied, except as they were

obliged to leave sooner than they wished. Thousands have been disappointed by coming to stay three or four days, concluding that no exhibition could be gotten up that they could not see in that time, but have found that at the end of that time they were just beginning to place it in order in their minds, and becoming capable of studying it in detail. Then there have been other thousands who have believed the reports of its immensity, and came prepared to spend weeks instead of days. These have clung to the grounds fascinated, as it were, and dreading the time that should take them away. With all this enjoyment there has grown a deep and widespread popular interest, which, together with the feeling of pride that we as Americans feel in the fact that this promises to prove the most successful, both financially and in point of numbers, of any World's Fair that has ever been held, will give a popularity to anything connected with it for years to come. In view of this we have not hesitated to present these Centennial pictures, believing that ere long they will be prized as souvenirs, that those who possess them would not part with under any consideration.

Our Picture is exceedingly well chosen, and gives a most excellent grouping of the buildings included in the view. It was taken from George's Hill, just north of the grounds, which affords sufficient elevation to overlook the scene to the best advantage. In the immediate foreground are several of the State buildings, all of which were invested with peculiar attractions, and possessed a good deal of local interest. Near the centre of the picture is the beautiful lake, with its cheerful fountain in the centre, while a little beyond stretch away the Machinery Hall and Main Building, and in the distance are seen portions of West Philadelphia and the city proper.

The negatives were made for us by Mr. John L. Gihon, and the prints by Mr. Charles W. Hearn, at his printing institute.

THE CENTENNIAL.—Remember, it closes on the 10th of November, and those who have not seen it, have not much time to spare if they wish to do so. No photographer can visit it without being benefited.

TABLE TALK.

TASTES vary as much in reference to the contents of a photographic magazine as they do when discussing the contents of a well-provided table.

Seated at the latter we find that one wants his steak rare and another well done; one wants his roast beef lean, another wants it fat; highly seasoned food, gotten up according to the most approved science of cookery, is desired by one, while another calls for the plainest fare, such as baked beans and brown bread.

Now, to draw a simile, an editor must be a sort of literary cook, and endeavor to serve up his various dishes of hard and soft, coarse and fine, rare and well done, to suit the many tastes of those who gather around his literary board. Sometimes he is complimented, sometimes he is criticized, and in this way he learns in some degree what will best please the palate of each.

In the following communication the writer speaks frankly, and we see plainly that his love of the beautiful takes a very natural turn, for which he is excusable:

GOLD HILL, NEVADA, October 13th, 1876.

DEAR SIR: Photographic journal came to hand this day; have looked for it for several days; am always glad to receive it, for I, as a matter of course, expect to see something new. Am very sorry to say I cannot see one thing new, but the article about glass and actinism, which certainly is worth something. We will hope your next will give us something new and something beautiful in the photographic line. Views do not amount to much in my opinion. Give us a beautiful bust portrait of some beautiful lady, and then tell us how to make such beautiful photographs; any one can make a view. We want to see fine work of the face, and learn how to make fine work, etc. Now don't get mad, for I would tell you, my dear sir, the same if I was to meet you. Those long articles of so much science when you give too much of it hurts your journal. Give us new and not such high-toned articles.

A. J. BEALS,

Only thirty-two or more years in the business.

This correspondent, who has been in the business thirty-two years or more, thinks

"views do not amount to much," while another will write us that we do not give enough landscape work.

Now, if some of our readers who are fond of fine scenery will make us some negatives of that class, and others, who take more pleasure in "a beautiful bust portrait of some beautiful lady," will rally their fair friends as subjects for fine work, and send us the negatives, then we may be able to offer better examples and help some to do better work.

As for the new matter in our last issue, we leave that to the investigation of our readers to see how much that is old or copied they can find.

There is always a large number of readers who take what is given them, and seldom make any comments except to praise. Criticism is often suggestive and serves a good purpose, while commendation encourages and cheers. One serves to balance the other, as do lines or lights and shadows in a picture, thus preserving a harmony that might be broken by excess in either direction.

The following extract on the complimentary side is one of the great number we receive, and which we give here as a balance to the other:

OMAHA, October 16th, 1876.

DEAR SIR: You have been the best friend "we poor photographers" ever had. Many I know would long since have "kicked the bucket" if it had not been for the rays of sunshine which emanate from your valuable journal, and illuminate our often "dark" and trying exertions in behalf of photography and the wishes of the people.

The first year of the *Philadelphia Photographer* I received it in Montpelier, the capital of Vermont, and have continued ever since to devour the contents as soon as possible, although sometimes would be without it for months on account of finances, but would eventually get the back numbers and have a feast.

FRANK F. CURRIER.

We thank both of our correspondents, one for his suggestions and the other for his kind words, and assure them that it shall be our aim in the future as it has ever been, to furnish a journal which shall contain something adapted to all classes and all wants; and though we may not always succeed as well as we may wish, yet our purpose remains the same, with the firm faith that honest effort well directed will triumph in the end.

Editor's Table.

The beautiful studies by Mr. Henry Rocher, of Chicago, in boudoir and imperial sizes, are the finest pictures we have ever had the pleasure of offering to photographers who desire improvement. They are gems of art that every one should try to possess. See advertisement.

Mr. J. W. WILLARD, 746 Broadway, N. Y., has sent us his catalogue and price list in new form. It is a neat little pamphlet of forty pages, and includes every kind of goods used by the photographer. We congratulate him on its neat appearance, and commend it to the attention of photographers who desire to keep posted on the prices of their supplies.

PRINTERS' INK tells sometimes, and we presume Messrs. Hastings, White & Fisher, Davenport, Iowa, believe in it. They issue a little monthly sheet called *The Sunbeam*, which

serves to advertise their business as well as the business of many others. The September number is before us and has a sprightly business appearance. As photographers this firm have an excellent local reputation, as is indicated by a highly complimentary article in a recent issue of the Davenport Gazette. May success attend them.

Messrs. George P. Rowell & Co., who have a newspaper exhibition at the Centennial, have issued a catalogue of over 300 pages, which contains a complete list of American newspapers, a statement of the industries, characteristics, population, and location of towns in which they are published; also, a descriptive account of some of the great newspapers of the day. To newspaper men and advertising agents it must be of great service.

PICTURES RECEIVED .- Promenades from Mr. A. B. Comstock, Waverly, N. J., a little miss, dressed in the American colors, with flag, has a patriotic air, but we hardly think the Promenade shape adapted to vignettes. Cards and cabinets from Mr. Harry S. Sutter, Milwaukee, Wis. There are some quite successful efforts here, but we much prefer those without the mezzotint effect. Cards and cabinet from Mr. O. P. Frees, Tiffin, Ohio. Mr. Frees's work evinces careful treatment and neatness in every department. We notice, as a fault, a want of detail on the shadow side, especially in the hair. This may be remedied by the judicious use of a little powder, or else discard these broad shadows and light the other way. The brown mounts give the cards a sombre appearance, from which the eye seems to seek in vain for relief. These cards would be made prettier with a white face, which would leave a narrow white margin around the print. Cards from Mr. W. Brown, Modesto, Cal. Mr. Brown's work would be improved by making his prints a little larger. The mount has too much margin. The following letter from Mr. Brown will show how he has progressed, and is a good example for others:

Modesto, August 16th, 1876.

DEAR SIR: This being my first to you, I will attempt to write but a few lines, and will send a package of cards as specimens of my work, from the first up to the present time; not quite four years' practice in all, from my first commencement, which you may judge whether I am making any progress or not. I will just here state that I have visited but few galleries, and have no instructor except the different works on photography, which I devour as fast as I can get them; the first and best of which, in my judgment, is the Philadelphia Photographer and Mosaics, for any new beginner. It it had not been for these, which I have taken ever since I commenced the practice of photography, my little gallery would have died long since, but as it is, my business is increasing all the time.

I do all my own work, from the cleaning of glass up to the finished picture, except on printing days, when my wife assists me.

You can count on me as a subscriber to the *Photographer* as long as I practice photography, and I do not expect to quit until I rise *higher*. I thought I was right before I commenced, and now am going ahead, and calculate to get just as far up as I possibly can.

Wishing you success and prosperity, I remain,
Truly and fraternally.

W. Brown.

Cards from Mr. William Aitkin, 7 South Sixteenth Street, Philadelphia, samples of retouching, well executed. Mr. Aitkin is open for a situation, as will be seen by his advertisement. 5 x 7 views from Mr. W. G. Smith, Cooperstown, N. J. There are pretty effects among these, but some of them have the appearance of having been made on plates that gave no margin beyond the print, or else with a lens of insufficient capacity. Mr. H. Butler, Vermilion, Dakota, sends a fine 8 x 10 landscape print, which he says was made by formula in August number of Photographer. This indicates two or three things, viz.: 1st, that the formula was a good one; 2d, that Mr. Butler is ready to try anything new, and so catch all the improvements; and 3d, that he possesses skill and intelligence enough to work the formula successfully.

Cards from Mr. M. H. Barnes, Bethany, Mo., and Mr. Currier, Omaha, Neb. Cards and stereos from Messrs. Fosnot & Hunter, Keosauqua, Iowa. These artists are pushing things, and though some of them labor under difficulties, they are working out a good degree of success, with encouraging promises for the future.

THE ILLUSTRATED QUARTERLY CIRCULAR OF THE PHOTO-ENGRAVING COMPANY, 67 Park Place, New York, has been received. The numerous examples of work which it contains are certainly the best of evidence as to the excellence of their process. A reproduction from a steel engraving, entitled "The Fair Sleeper," is admirably executed. The illustrations in Mr. Seavey's paper, which will be found in the report of the N. P. A. Convention, are by a similar process. We rejoice at these useful applications of our art, and believe there is still a wide field for its future development.

THE PIGMENT PRINT, by Dr. Paul E. Liesgang. A fourth edition of this work has been issued, which contains an historical sketch of the different methods of pigment printing, together with full instructions for working in this direction. To those engaged in pigment printing this must prove a useful work. It is printed in German.

Messes. Bradley & Rulofson, San Francisco, send us a cabinet group of the officers of the United States Flag-ship Pensacola, which is very neatly gotten up and furnishes a good example for others in photographing and grouping a number of subjects of that kind. Also a view of their exhibit in the Mechanics' Fair, in that city. It is imposing, and would largely overrun the space assigned them in Photographic Hall.

Specialties.

ADVERTISING RATES FOR SPECIALTIES.—It will be understood that matter under this head is not to be considered as always having editorial sanction, though we shall endeavor to clear it of anything tending to deceive or mislead. Stock-deaders will find this a beneficial mode of advertising, and sure to pay largely. Six lines, one insertion, \$2.00, and 25 cents for each additional line, seven words to a line—in advance. Operators desiring situations, no charge. Matter must be received by the 23d to secure insertion. Advertisers will please not ask us for recommendations. So We cannot undertake to mail answers to parties who advertise. Please always add your address to the advertisement.

A PERMANENT SITUATION WANTED. by an experienced artist in large and small color work; also in color, ink, or crayon. Is able to take charge of the business in all its branches.

Address

E. BEYERLEIN,

700 Broadway, San Francisco, Cal.

FOR SALE.—The Lake Shore Studio, situated in the beautiful village and summer resort of Skaneateles, New York; population 2500; fine surrounding farming country; only gallery in town; business good; rent low; good prices. Poor health main reason for selling. Call on or address

O. H. WILDEY,

P. O. Box 43, Skaneuteles, Onon. Co., N. Y.

For Sale.—A first-class gallery in Springfield, Illinois, for one third of its value. Good north, top, and side light. Price, \$4.00 per dozen. Easy terms. For further particulars, address A. T., Springfield, Ills.

For Sale.—Gay's Gallery of Art, Fall River, Mass. The largest and best patronized photograph gallery in Southern Mass. Population 50,000. Large frame trade. Sales, reception, and operating rooms on same floor. One flight. Established 1863. Will sell on very favorable terms. Good prices and little opposition. Going to retire.

E. F. Gay, Fall River, Mass.

Wanted.—A strictly first-class artist in every respect, who understands negative retouching, water colors, and crayon. Must be a man of industry, and strictly temperate in his habits. To the right man a permanent situation can be given. Please do not apply unless you can fill the bill. Send specimen of work, picture of self, reference, and salary expected. Address

C. W. Motes, Atlanta, Ga.

Wanted.—A permanent situation in some good gallery, by a man whose work is his reference, at a salary of \$1200 a year, or to rent a paying room for cost or per cent.

O. N. W. BALDWIN, Knoxville, Iowa.

For Sale.—Only gallery in city of South Norwalk, Conn. Five large rooms, up one flight of stairs. North light of 200 square feet. Gas and water. Will sell less than cost. Going out of business. No answer to postal cards.

G. S. North,

South Norwalk, Conn.

For Sale.—A first-class gallery in the city of Waterbury, Conn.; one of the best in the State. New last May, with splendid north light, and furnished with everything necessary for the production of first-class work. Population 16,000. The proprietor has been established here twenty-seven years, and wishes to retire from the business. Address

G. N. Granniss.

Waterbury, Conn.

CAUTION.

SEAVEY'S SCENIC STUDIO, 8 Lafayette Place, New York, November 1, 1876.

Photographers are cautioned against itinerant background painters, who exhibit photographic samples dishonorably obtained from my office, and representing the same as of their own work; also, against any person who claims to have been in my employ, as Mr. A. B. Lansom is the only person not now in my employ who ever painted for me other than plain backgrounds, the close of his last engagement being over four years ago.

I am not acquainted with, nor have ever corresponded or conversed with, Mr. Bird; neither has a Mr. Reynolds ever been in my employ.

I would also warn, particularly, the public against a stock-house which has descended to sending out photographs of my backgrounds, and representing them as the work of their own artist.

My new designs are being copyrighted.

LATEST PRODUCTIONS.

Papier-Mache Fire-Place and Cabinet combined. A new, elaborate, and superior accessory. Price.......\$40 00 Papier-Mache Antique Venetian Chair, at

For Sale.—Ormsby's Gallery, in the city of Chicago; splendid location, first-class run of custom, ground-floor studio, doing a fine trade, will be sold low for cash. Those meaning business, please investigate. Address

E. D. Ormsby, 309 W. Madison St., Chicago.

By a capable man of fifteen years' experience in the leading stock-houses of New York and Boston. Can command a good trade. Well posted in buying and solling. Address TAFT,

Care of Philadelphia Photographer.

USE WAYMOUTH'S VIGNETTE PAPERS.

MR. John L. Gihon is ready to enter into an engagement with any leading photographer. He has had over twenty years of practical experience. He was an artist by profession before adopting photography, and can, therefore, fill the position of either colorist, poser, or operator. Specimens of his work have appeared in this Magazine, and his writings have rendered his name familiar to most of its readers. Address John L. Gihon,

Office of Philadelphia Photographer,

116 North Seventh St., Philadelphia.

PIANOS AND ORGANS —Photographers wishing to buy a Beatty Piano or Organ, can get extra inducements through photographing. Address DANIEL F. BEATTY, Manufacturer,

Washington, N. J.

EDINBURGH PHOTOGRAPHIC SOCIETY.—The council respectfully intimate that they have made arrangements for holding in Edinburgh an exhibition of photographs; photographic apparatus, and material, on a very extensive seale, in December and January, next, at which a number of medals in gold, silver, and bronze will be awarded; and they invite the American photographers to send pictures for competition. Full particulars will be forwarded on application to

JOHN NICOL, Ph D., Exhibition Secretary 16 Warreston Crescent, Edinburgh.

WAYMOUTH'S VIGNETTE PAPERS.

For Sale.—A new and handsomely fitted gallery, in a new building erected especially for the purpose, with every facility for making first-class work, in a Southern city of 40,000 inhabitants. Doing a prosperous business of several years' standing; being the only first-class gallery in the place. Terms moderate. Address, for further information, A, care Philada. Photographer.

Burrel's Chart and Hints to Patrons.—Your gallery is not complete without them. For particulars, see advertisement in January, February, and March issues of this Journal. Price, \$1.25, unmounted, by mail, or by express mounted.

For Sale.—Reilly's fine negatives of the Yosemite, California, Sierra Nevadas, Niagara, etc.

Apply to Benerman & Wilson,

Publishers Philada. Photographer.

THE GORHAM STOVE.—No photographer can get more for his dollar than by investing in a "Gorham Stove." It is tiny in size but a giant in usefulness. See advertisement.

Wilson, Hood & Co., 822 Arch Street, Philadelphia.

HERMACIS LENS TESTIMONIAL.

Philadelphia, March 21, 1876. Messrs. WILSON, HOOD & CO.

I take pleasure in testifying to the perfect working of the "Hermagis" just purchased from you. We have tested it particularly as to its depth of focus, and find it to combine with this a rapidity of working which makes it doubly esteemed. Very respectfully,

> WM. CURTIS TAYLOR, 914 Chestnut Street.



PHOTOGRAPHIC HALL.—Electrotypes of Photographic Hall, four sizes, from the above up to the size in February number of this magazine. For prices apply to CROSSCUP & WEST,

Seventh and Chestnut Sts.

Or, BENERMAN & WILSON, Philadelphia.

WAYMOUTH'S VIGNETTE PAPERS.

THE ROBINSON TRIMMER.

RICHMOND, IND., August 11, 1875.

MR. EDW. L. WILSON.

DEAR SIR: I feel as though I should say a few words in praise of the Robinson Trimmer and Guides I received from you. The trimmer does its work admirably, do not know how I should do without it; and the round-cornered guides, for cards, is something new, and makes the picture look much neater when compared with the old square cut kind, from a glass pattern.

The guides, all sizes, are the nearest perfect of any I ever used. But what I wish to request of you in particular is, to publish in your Journal the right way for sharpening the trimmer, I am certain this will be looked for by a great many with interest. I have used mine now constantly for some time, and it does not need it yet; but, in case it does, would not like to spoil it with any experimenting. Yours respectfully,

M. WOLFE.

USE WAYMOUTH'S VIGNETTE PAPERS.

Mr. Charles Waldack, who is known to many of our readers, writes in the Photographic Times as follows: As Robinson's trimmer is getting to be used universally, I think I will do a good turn to photographers in telling them how to sharpen the little wheel when it gets dulled by use. I owe it to a photographic friend here, and although some may know it, I am sure many do not. Make a groove in a piece of lead by means of the trimmer, put in it a little fine emery and a drop of oil, and run the trimmer forward and back in the groove until it is sufficiently sharp. There is something else about the trimmer; ascertain by trial which side of the wheel should be on the inside of the zine or iron mat to cut best, and mark it."

Photographic Hall.—The four sizes of electrotypes of Photographic Hall, are as follows: $1\frac{1}{4} \times 2$ in., $2 \times 3\frac{1}{4}$ in., 4×6 in., $4\frac{1}{2} \times 7\frac{1}{4}$ in. See cut on preceding page. For sale by

CROSSCUP & WEST, 702 Chestnut Street, Philadelphia.

LUCKHARDT'S ELEGANT STUDIES.—We have just received an invoice of splendid studies of the female figure, by Fritz Luckhardt, Vienna. The size, 8 x 10; the price, \$3.50. Order quick!

Wilson, Hood & Co., 822 Arch Street, Philadelphia.

SITUATIONS WANTED.

No charge for advertisements under this head: limited to four lines. Inserted once only, unless by request.)

A lady would be obliged for an opportunity to take charge of reception room, or to finish negatives or cards in water colors. Would accept small salary, with the promise of having what could be made from colored cards. Samples or references given if desired. Address C. A. H., General Delivery, Boston.

By a good operator, used to large view work, is a good poser and retoucher; can print in carbon, and would be generally useful; ten years experience; quick, steady, and industrious. Would join as working partner, or work a gallery or view business. Has own Dallmeyer lens. Address 301 East 33d St. and 2d Ave., N. Y.

A lady of ample experience in negative retouching, and printing and toning, desires a permanent situation in a reliable gallery. Can assist in operating a little. Terms moderate. Reference good. Address C., No. 2 Raynor Block, corner N. Clinton and Nixon Streets, Syracuse, N. Y.

By a young lady of 4½ years' experience, as printer, toner, retoucher, or general assistant, a permanent situation. Best of references given. Salary, \$8 per week, until times are better. Address Miss R. W. A., Hygienic Institute, Geneva, N. Y.

A photographer of experience, who thoroughly understands his business in all branches, would like to make an engagement with a first-class gallery in the east or west. Address Photographer, care of P. O. Box 792, Middletown, N. Y.

By an experienced hand as retoucher or operator, or would take full charge of a good gallery. Have just closed a long engagement in a large establishment in an eastern city. The best recommendations shown. Address Thomas, office "Philadelphia Photographer."

A skilful negative retoucher and artist in water colors and India ink on albumen paper, etc. (ten years' experience in leading New York galleries), desires to engage with a responsible photographer. Further particulars by letter. Address Henry L. Venton, New York P. O., New York.

As finisher of solar prints, in pastel, crayon, or oil, or to retouch negatives and tint in albumen. Address Box 220, Penn Yan, N. Y.

By a young man who is willing to make himself generally useful, as assistant printer or general assistant in a first-class gallery. Has had over three years' experience. Address Alex F. Horton, Box 242, Skaneateles, Onondaga Co., New York.

By a young man, as printer and toner, in some first-class gallery. Can assist in operating or make himself generally useful. Five years' experience in the leading establishment in Syracuse Best of reference. Address C. W. Austin, 58 South Sulinee St., Syracuse, N. Y.

As operator in some good gallery, or would not object to taking charge of a gallery. Well posted in retouching and printing. Address Photographer, Box 1099, Dallas, Texas.

Now open for engagement, a good retoucher and general assistant. Salary moderate. Address B. Miller, 1304 Olive St., Philadelphia.

In a first-class gallery. Have been operating in a traveling gallery about four years. Sample of work sent if desired. Best of references will be given. T. T. Phlieger, Newport, Giles Co., Virginia.

As printer, toner, or ferrotyper, in a first-class gallery, by a young man of steady habits, who has had some experience in the business. Please address, stating amount of salary, terms, etc. J. J., Providence, P. O., Rhode Island.

A good operator desires a permanent situation on the first of January; fair retoucher; not afraid to work; prefer all negative work; can do all kinds. Terms, \$18 per week. Address Operator, 309 Ninth St., N. W., Washington, District of Columbia.

By a thorough, competent operator and retoucher. Fve years' experience. Salary moderate. Address W. S. Lowe, Blandinsville, McDonough Co., Ills.

By a young man of ten years' experience in all branches of the business, except retouching. Has worked in some of the largest galleries in Chicago, Milwaukee, and Cleveland, as darkroom manipulator. Is desirous of a situation immediately. Salary expected, \$10 per week till spring. Address X. Y. Z., care of Mr. Geo. Butts, Norwalk, Ohio.

USE WAYMOUTH'S VIGNETTE PAPERS.

In a first-class gallery, with a view of learning the business thoroughly. J. C. Fickes, Box 183, Steubenville, Ohio.

Those desiring the services of a first-class practical photographer, well up in all the branches of the art, and with a long and active experience, may find such by addressing William Jones, care of Walter Lawton, 111 Broadway, New York.

By a young man of experience as printer and toner; desires steady employment in a first-class gallery. Please state salary. C. E. Douglas, Syracuse, N. Y.

By a practical photographer, either in darkroom, printing-room, or as retoucher. Firstclass references can be given as to ability and character. Address J. Leon Pease, Adams, Jefferson Co., New York.

By a first-class operator; can retouch nicely, and work in colors. Would rent or run a room on shares. Address Operator, Box 234, Tyrone, Pa.

By a young lady, a situation as retoucher in some first-class-gallery in Boston or vicinity. Address Lock Box 25, Marlboro, Mass.

By a first-class operator, printer, toner, and retoucher. Lighting and posing strictly first-class. Address W. R. Tobices, 323 Euclid Ave., Cleveland, Ohio.

As operator, printer, and retoucher; or would hire, or work on shares, a well-furnished gallery, with a view of buying. Address, with full particulars, Photographer, P. O. Box 813, Augusta, Maine.

An operator with seven years' experience, desires a situation. Has been in business for himself, and would take entire charge of a room if desired. Speaks German and English. Address Photo. Gallery, 408 E. Fifth St., Dayton, Ohio.

A first-class retoucher, who has many years experience, is willing to take a situation in any of its branches. Wanted a steady job, with good reference of sobriety and other good characters. Address A. Schmidt, in care of F. Culba, Scranton, Pa.

By a young man, as printer, can also do retouching, and has done some negative work. Address E. H. Colson, 32 Hampden St., Springfield, Mass.

As operator in a first-class gallery. Understands every branch thoroughly. Address Operator, 271 Broadway, Chelsea, Mass.

In a photograph gallery, by a young lady; can retouch. Address M. A., Box 1174, Spring field, Mass.

In a photograph stock-house, by a young man of experience. For particulars, address D. Holmes, Brigham House, Syracuse, N. Y.

MOSAICS —FOR 1877—

WILL BE READY IN A FEW WEEKS.

It promises to be full of good things and more popular than ever.

Dealers are especially requested to give us their orders early, so that we may print enough to supply all demands.

PUBLISHED BY

BENERMAN & WILSON,

116 North Seventh Street, Philadelphia.

A. M. COLLINS, SON & CO.,

MANUFACTURERS OF

PHOTOGRAPHIC CARDS AND CARD BOARDS,

OF EVERY DESCRIPTION.

Warehouse:

No. 18 S. Sixth St., and No. 9 Decatur St.,

IMPERIAL CARDS.

Size, 67 x 97.

BOUDOIR CARDS.

Size, $5\frac{1}{4} \times 8\frac{1}{2}$.

White, Gray, Granite-Blue, Pearl, Amber, Tea.

Plain; also, with Gilt Borders, and with Gilt or Red Beveled Edges.

See detailed advertisement in this number of the "Photographic Times."

PRICE LISTS FURNISHED ON APPLICATION.

TRAPP & MUNCH'S

Albumen Paper

Introduced into this country since 1868 has become the leading paper, and is now better known and more appreciated than any other brand.

That this great success is well deserved and due to its excellent qualities may be judged from the fact, that of all the competitors of the Vienna Exhibition, Messrs. Trapp & Munch alone received the

MEDAL OF MERIT

for Albumenized Paper. For Sale at all the Stockhouses.

WILLY WALLACH,

GENERAL AGENT FOR THE UNITED STATES,

No. 4 Beekman St., and 36 Park Row, New York SPECIAL ACENTS:

SCOVILL MANUFG. Co., New York. E. & H. T. ANTHONY, ""G. GENNERT, New York.

WILSON, HOOD & Co., Philadelphia. H. W. Bradley, San Francisco. G. S. Bryant & Co., Boston.

DR. VOGEL'S PHOTOGRAPHER'S

POCKET

REFERENCE BOOK.

An Alphabetically arranged collection of practically important hints on the construction of the Gallery; selection and trial of lenses and chemicals; approved formulæ for the different photographic processes; tables of weights and measures; rules for avoiding failure, etc.

IT IS A BOOK EVERY PHOTOGRAPHER SHOULD HAVE,

Because it is a ready helper under all difficult circumstances.

For sale by all dealers. Price, \$1.50, post-paid.

BENERMAN & WILSON, Photo. Publishers,

PHILADELPHIA, PA:

Over 1000 Sold.

A COMPLETE MANUAL OF

PHOTOGRAPHIC PRINTING

ON PLAIN AND ALBUMEN PAPER, AND ON PORCELAIN.

Too little attention has heretofore been given to Photo-

graphic Printing, which is indeed quite as important a branch of the art as negative making.

It is the hope of both author and publishers to create **REFORM** in this matter, by the issue of this work, and as it is to put money in the pockets of all who read it, the hope is that it will be generally read.

CONTENTS.

INTRODUCTION.

The Printing Room, with a Plan. The Silvering and Toning Room, with a Plan. The Drying Room, with a Plan.

PART I.-ALBUMEN PAPER PRINTING.

The Positive Bath for Albumen Paper. Silvering the Albumen Paper. Drying the Paper. Fuming the Paper. Preservation of Sensitive Albumenized Paper—Washed Sensitive Paper. Cutting the Paper. The Printing Boards. Keeping Tally. Vignette Printing Blocks. ment of the Negatives before Printing. Filling of the Boards. Fitting Vignette Boards to the Negatives for Printing. Medallion and Archtop Printing. Fancy Printing. Vignette Cameo and Medallion Vignette Cameo Printing. Printing the Bendann Backgrounds. Printing Intense The Positive Bath for Albumen Paper. Siland Medallion Vignette Cameo Printing. Printing the Bendann Backgrounds. Printing Intense Negatives. Printing Weak Negatives. A Few More Remarks about Printing—Treatment of Broken Negatives. Cutting the Prints. Washing the Prints. Acidifying the Prints. Toning Baths. Artistic Toning. Fixing Baths and Fixing Prints. Washing the Prints. Mounting the Prints. Finishing the Prints.

PART II.-PLAIN PAPER PRINTING.

Salting the Paper. Positive Baths for Plain Salted Paper. Silvering Plain Salted Paper. Drying, Fuming, and Cutting the Paper. Treat-ment of the Negatives before Printing. Printing-in False Backgrounds. General Plain Paper Printing. Further Treatment of the Prints after Printing. Causes of Failures in Albumen and Plain Paper Printing.

PART III.-PORCELAIN PRINTING.

Selection of the Porcelain Plates. Cleaning of the Porcelain Plates. Albumenizing the Porcelain Plates. Making the Porcelain Collodion. Coating, Fuming, and Drying the Plates. Porcelain Printing Boards. Placing the Sensitive Plate on the Board for Printing. Printing Vignette Porcelains. Printing Medallion Pcrcelains. Washing the Porcelains. Toning the Porcelain. Fixing the Porcelain. Final Washing of the Porcelain. Drying and Tinting of the Porcelain. Varnishing the Porcelain. Causes of Failures in Porcelain Printing. Selection of the Porcelain Plates. Cleaning

Together with over 50 Wood Cuts, and an elegant Cabinet Portrait, from negatives by Mr. F. Gutekunst, printed by the author, Mr. Chas. W. Hearn.

A THOUSAND COPIES ALREADY GONE.

Mailed Post-paid on Receipt of \$2.50, by any dealer, or

BENERMAN & WILSON, Photo, Publishers, 116 North Seventh Street, Philadelphia.

ROBINSON'S METALLIC Guides,

FOR USE WITH THE ROBINSON PRINT-TRIMMER.

(See advertisement of Trimmer opposite.)

These Guides are made of Stout Iron and are turned in a Lathe, so that they are Mathematically True.

OVAL, ROUND, ELLIPTIC, and SQUARE, of all sizes; various shapes for Stereoscopic work, Drug Labels, etc., etc.

We have the following regular sizes always on hand at 10 cents per inch the longest way of the aperture, the fractions counting as one inch.

Special sizes made to order at 15 cents per inch the longest way of the aperture.

REGULAR SIZES:

	OVALS.		SQUARE	OR ROUND-CO	RNERED.
$2 \times 2\frac{7}{8}$	$3\frac{1}{2} \times 4\frac{7}{8}$	$5\frac{3}{4} \times 7\frac{3}{4}$	$2\frac{1}{16} \times 3\frac{3}{4}$	$2\frac{5}{16} \times 3\frac{7}{8}$	$3\frac{7}{8} \times 5\frac{1}{4}$
$2\frac{1}{8} \times 3\frac{1}{8}$	$3\frac{5}{8} \times 5\frac{1}{8}$	6 x 8	$2\frac{1}{8} \times 3\frac{3}{4}$	$2\frac{3}{4} \times 4\frac{1}{4}$	4 x 55/8
$2\frac{1}{8} \times 3\frac{1}{4}$	$4 \times 5\frac{3}{8}$	6¼ x 8¼	$2\frac{1}{8} \times 3\frac{1}{8}$	$2\frac{3}{4} \times 4\frac{1}{2}$	$4\frac{1}{8} \times 5\frac{7}{8}$
$2\frac{3}{8} \times 3\frac{3}{8}$	43 x 63	$6\frac{1}{2} \times 8\frac{1}{2}$	$\begin{array}{c c} 2\frac{5}{16} \times 3\frac{15}{16} \\ 2\frac{5}{16} \times 3\frac{3}{4} \end{array}$	$2\frac{7}{8} \times 4\frac{5}{8}$	$3\frac{7}{8} \times 6$ $4 \times 6\frac{1}{8}$
$2\frac{5}{8} \times 3\frac{5}{8}$	5 x 7	7 x 9	10 -		· ·
$2\frac{7}{8} \times 4\frac{1}{4}$	5½ x 7½	$7\frac{1}{4} \times 9\frac{1}{4}$		STEREOGRA	
$3\frac{3}{8} \times 4\frac{3}{8}$	$5\frac{1}{2} \times 7\frac{1}{2}$	$7\frac{1}{2} \times 9\frac{1}{2}$	Arch Tops. $3\frac{1}{16} \times 3\frac{3}{4}$	Round Cornered. $3\frac{1}{16} \times 3\frac{3}{4}$	Round. 3 x 3
$3\frac{3}{8} \times 4\frac{5}{8}$	5§ x 7§	$7\frac{3}{4} \times 9\frac{3}{4}$	3 x 3	3 x 3	

The above sizes suit the Collins Card Mounts, and photographers knowing that they can be always had at the low price of ten cents per inch, would do well to make their sizes accord, as orders can also be filled more quickly. Ten days is required to make special sizes.

An allowance of ten inches (\$1 worth) of regular sizes of guides will be given with every Trimmer purchased. (See opposite page).

FOR SALE BY ALL DEALERS.

BENERMAN & WILSON, Manufacturer's Agents

PHILADELPHIA, PA.

ROBINSON'S PHOTOGRAPH TRIMMER

IS A SUBSTITUTE FOR A KNIFE

FOR TRIMMING PHOTOGRAPHS, AND DOES THE WORK MUCH MORE EXPEDITIOUSLY AND ELEGANTLY THAN A KNIFE.

IT SAVES TIME, SAVES PRINTS, AND SAVES MONEY.

It does not cut, but pinches off the waste paper, and leaves the print with a neatly beveled edge which facilitates the adherence of the print to the mount. Try one, and you will discard the knife and punch at once. For ovals and rounded corners it is worth its weight in gold.

A Trimmer and Ten Inches of Guides Mailed for \$3.50.

Oil the wheel bearings with Sewing Machine Oil.

Given Away!

WITH EACH ROBINSON PHOTOGRAPH TRIMMER

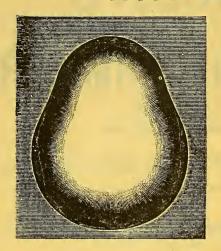
WILL HEREAFTER BE GIVEN Ten Inches of Metallic Guides, your choice from the regular sizes named on the opposite page. The manufacturers and agents finding that they can save money by manufacturing in large quantities, make this liberal offer to the trade, as they want everybody to have these capital inventions in use. They are no humbug and are not glass cutters or anything like them.

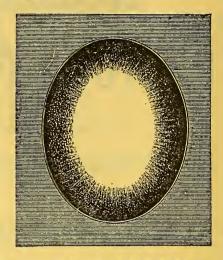
BENERMAN & WILSON, Manufacturer's Agents,

FOR SALE BY ALL DEALERS.

PHILADELPHIA, PA.

WAYMOUTH'S





VIGNETTING PAPERS

ARE NOW MADE OF TWO SHAPES, as shown in the drawings above. They consist of finely gradated, lithographed designs, mounted on protecting sheets of non-actinic paper, and are the lightest, neatest, and best means of producing vignette pictures ever offered.

RECENTLY IMPROVED.

The quality of the "papers" has just been much improved by the substitution of a peculiar French, fibrous, hard calendered paper, which is not only less opaque but has other qualities which produce quickly the most lovely and soft vignettes possible. We consider this a great improvement, as do others to whom we have sent samples. Below we give a letter from one of them, Mr. Ormsby, who has sent us also some exquisite vignettes:

The package of Vignette Papers has been received and tried; they are just the thing. They are a great improvement over the others; they will print in a little more than half the time required for the others, and the results are everything that can be desired, as you can see by samples inclosed. Please fill my order and send bill. I like the pear-shape best. Send them all that shape.

E. D. ORMSBY, Chicago.

FROM PROFESSIONAL AND AMATEUR PHOTOGRAPHERS.

"First-class."—"The sample sent answers perfectly."—"I consider them first-rate articles."—
"They answer the purpose admirably."—"They are the best vignettes I have ever had, and as you can print in full sunlight, they are a great saving of time."—"They could not be better, oblige me with another packet."—"I find them excellent, giving much softer pictures than the old way."—"I have tried one of the Vignette Papers, and like it much; send me packets two and three."—"I am much pleased with them, and shall thank you to send me another packet."—"I did not need any copies of testimonials, having well-known by experience that your Vignette Papers were superior to anything I have ever used."—"I found those you sent before excellent."—"Vignetting Papers received and tested; can't be beat. I use by cutting an opening in a piece of cardboard and tacking to the printing-frame, when I am ready for printing vignettes in the very best manner."—"Waymouth's Vignette Papers I have tried, and they are just what I have been wanting for years."

Any number sent on receipt of price, by any stockdealer, or by

BENERMAN & WILSON, Manufacturers,

(See opposite page.)

PHILADELPHIA.

DO YOU USE

WAYMOUTH'S VIGNETTE PAPERS.

(DESIGNS COPYRIGHTED.)

OF ALL PICTURES, THE WITH IS THE MOST ARTISTIC.

When properly printed. But the clumsy devices generally in use for printing them, or rather for blending the shading about the figure, produce but very few really artistic vignette pictures. Either the shading is too intensely dark, not gradated in tint at all, or it shows an ugly direct, decided line, which is very repulsive. The shading should blend gradually from the dark tint nearest to the figure, off into the white background. The results are then soft, artistic, and beautiful. The easiest and best way to secure them is by the use of

WAYMOUTH'S VICNETTE PAPERS.

THEY ARE NOT CLUMSY; DO NOT BREAK; ARE ALWAYS READY; COST BUT LITTLE, AND ARE EASY OF APPLICATION TO ANY NEGATIVE.

THEY NEED BUT ONE ADJUSTMENT TO PRINT ANY QUANTITY.

They entirely do away with all the old and troublesome methods, either wood, metal, or cotton.

Eighteen sizes are now made, suiting all dimensions of pictures from a small carte figure to Whole-size, Victorias, Cabinets, &c. They are printed in black for ordinary negatives, yellow bronze for thin negatives, and red bronze for still weaker ones. Directions for use accompany each parcel.

PRICES:

In parcels containing	one or	each size.	Nos. 1	to 15, assorted colors			\$1	00
Assorted sizes and col	ors, b	number. p	er pa	ckage of fifteen			1 (00
Nos. 1, 2, 3, 4, and 5, as	ssorte	d sizes and	colors	, for Cartes, by number, per	dozen			50
" 6, 7, 11, 12, and 13	3 "	44	46	Large Cartes and Victorias	by number,	per do	Z '	75
" 8, 9, 10, 14, and 1	5 "	66	66	Cabinets and Whole-size.	" "		1 (
" 16, 17, and 18.	66	66	66	Half " "	46	66	1.5	25

(SEE OPPOSITE PAGE.)

When ordering, state the number and color you want.

BENERMAN & WILSON, Manufacturers, 116 N. 7th Street, Philada.

FOR SALE BY ALL DEALERS.

DR. VOGEL'S HANDBOOK.

SECOND EDITION.

THE HANDBOOK OF THE PRACTICE AND ART OF PHOTOGRAPHY,

By Prof. H. VOGEL, Ph.D., Berlin, Prussia.

IS NOW READY.

ALTHOUGH IT IS MUCH ENLARGED WE OFFER IT AT THE OLD PRICE. \$3.50.

It is Elegantly Illustrated, with Photographs and Engravings. Cloth Bound.

The reputation Dr. Vogel enjoys in this country as a practical photographic writer, is first-class, and insures a book of the best quality. That his Handbook is eminently so, we guarantee. It has been re-arranged and revised specially for the American photographer, giving the best German formulæ, &c., and is, in every sense of the word, a Handbook of the practical and artistic departments of Photography. Over fifteen hundred of the first edition were sold, and the demand continues.

IT ILLUSTRATES AND TELLS

How the Ateliers are built and used in Berlin and elsewhere; How to make the best Photographs;

How to select and use your Lenses;

How to manage your Apparatus;

How to compose the Picture;

How to pose the Sitter;

How to choose Accessories;

How Berlin Cards are Made;

How to do everything in the Art.

TEACHES HOW TO BECOME A PERFECT PHOTOGRAPHER.

The whole includes, under one cover, everything needed for the practice of photography by the beginner, the amateur, and the professional—a complete Handbook. See contents of Book. The engravings are numerous, elaborate, and expensive. Four photographs, illustrating the lighting of the subject, accompany the work. Please read future advertisements

ASK YOUR DEALER FOR IT.

BENERMAN & WILSON, Photo. Publishers,

116 North Seventh Street, Philada.

Artistic Studies,

ВY

HENRY ROCHER,

OF CHICAGO.

THE IMPERIAL AND BOUDOIR PORTRAITS.

The former, $6\frac{3}{5} \times 8\frac{3}{5}$ print, and $6\frac{7}{5} \times 9\frac{7}{5}$ mount. The latter, $4\frac{5}{5} \times 7\frac{5}{5}$ print, and $5\frac{1}{5} \times 8\frac{1}{5}$ mount.

The most charming Photographs ever published.

We take pleasure in offering these beautiful pictures to photographers, believing they will instruct and elevate all who study them. They are some of Mr. Rocher's best efforts, and as artistic photographs we have never seen them excelled.

No words of ours can do justice to these elegant examples, and we can only say, send for a sample and be satisfied.

PRICES:

IMPERIALS, Each, \$2 50 BOUDOIRS, 2 00

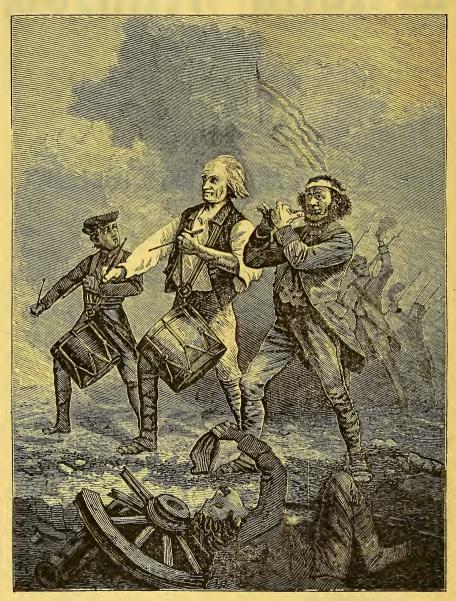
For Sale by

BENERMAN & WILSON,

116 North Seventh St., Philadelphia.

YANKEE DOODLE.

IN CHROMO.



[COPYRIGHTED.]

Having secured the agency for this fine picture, which is 18×24 inches in size, we are prepared to offer it at the low price of **TWO DOLLARS**. Large discounts made to photographers and dealers. For sale by

BENERMAN & WILSON, 116 North 7th St., Philadelphia.



We have a surplus of instruments that were used in photographing at the CENTENNIAL EXPOSITION, which we offer at a great sacrifice, viz.:

Fifty pairs Morrison's Wide-Angle Stereo. Lenses.

Fifteen single Morrison's Wide-Angle View Lenses, of various focal lengths from $2\frac{1}{2}$ inch to 22 inch.

Three Morrison's Rapid Group Lenses, each D, E, and F.

Two pairs each 1-4 and 1-2 "Peerless" Portrait Lenses.

Three single 1-4 and 1-2 "Peerless" Portrait Lenses.

Two 4-4 and Ex. 4-4 "Peerless" Portrait Leuses.

One 8-4 "Peerless" Portrait Lens.

AMERICAN OPTICAL CO.'S CAMERA BOXES,

AS FOLLOWS, VIZ.:

Six 8-10 Imperial Boxes, double swing back.

One 10-12 Portrait Box, " " "

One 18-22 Portrait Box, " "

Ten 8-10 Venus View Boxes, " "

Twenty-five 5-8 Stereo. View Boxes, single swing back.

Three 10-12 View Boxes, double swing back.

One 18-22 " " " "

One 20-24 " " " "

The Lenses were made ESPECIALLY for us, and we will GUARANTEE every one of them.

The apparatus is all in good working order, some of the boxes are but slightly stained and bear no other evidence of having been used.

All these instruments and apparatus for sale at 25 per cent. discount from manufacturers' regular prices.

CASH TO ACCOMPANY ORDER. Address

CENTENNIAL PHOTOGRAPHIC CO.,

Belmont Avenue, International Exhibition, Philadelphia, Pa

CENTENNIAL AWARDS!

WE ARE NOW PREPARED TO FURNISH

ELECTROTYPES

OF THE

CENTENNIAL MEDALS

IN THREE SIZES.



THIS CUT REPRESENTS THE MEDIUM SIZE.

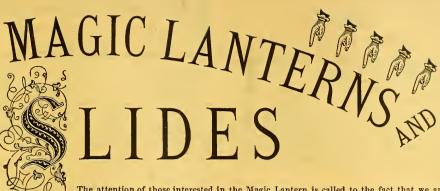
THE PRICES ARE AS FOLLOWS:

				EACH SID	·LAPPED.			
Large Siz	e,			\$1 75		\$3	00	
Medium,				1 25		2	00	
Small, .				75		1	25	

SEND ORDERS TO BENERMAN

BENERMAN & WILSON,

116 North Seventh Street, Philadelphia, Pa.



The attention of those interested in the Magic Lantern is called to the fact that we are MORE EXTENSIVELY ENGAGED in the sale of

LANTERN SLIDES AS A SPECIALTY,

Than any other house in America. Our continuous contact with photographic men gives us special advantages in this line, and as MANUFACTURERS AND DEALERS we offer the very best opportunities to secure

MUCH FOR YOUR MONEY,

AS WELL AS SUCH GOODS AS WILL PUT MONEY IN YOUR PURSE. NAMELY:

A GOOD LANTERN, THE BEST of SLIDES.

FOUR CATALOGUES MAILED ON RECEIPT OF 25 CTS.

DO NOT BUY UNTIL YOU HAVE CONSULTED HEAD-QUARTERS!
SUPPLEMENTARY CATALOGUE (March 1) READY!

USE WILSON'S

Bantern Journeys,

A Lecture Book describing graphically, as an eyewitness, 600 beautiful places and things in all parts of the world. SUBSCRIBE FOR THE

Magic Cantern.

A Monthly Journal, devoted to the interests of lantern lovers.

\$1 per year, post-paid.

Special estimates and other information given gladly. No substituting of Slides. Prices very low.

PROMPTNESS OUR RULE.

BENERMAN & WILSON, Photo. Publishers, 116 NORTH SEVENTH ST., PHILADELPHIA.

WHAT follows is a Catalogue of the best Photographic Publications, sent to remind all live photographers of the fact that good practical information is as essential to them as good lenses and pure chemicals. There are some "artists" who "get along" without any of these, but they do not progress, neither do they succeed. Do not be of their number. There is too much going on in photography in these "quick acting" times to enable any photographer to afford to do without reading and being posted. In anything you undertake you should take every precaution to be as bright as your neighbor, or he will get ahead. Keep alongside, any way. We will mall you any of the works named below, post-pald, on receipt of price. Order now.

1876

WILL BE A YEAR OF JUBILEE FOR PHOTOGRAPHERS THAT SHOULD NOT BE NEGLECTED.

THE CENTENNIAL EXHIBITION

Will present opportunities for study and improvement which should not be overlooked, and the study of the best books will not only do you good before, but after the inspection of Photographic Hall. READ! READ!! READ!!!

BENERMAN & WILSON,

Photographic Publishers.

Philadelphia, Pa.

hiladelphia Photographer. THE BEST PHOTOGRAPHIC MAGAZINE

IN THE WORLD.

EACH NUMBER EMBELLISHED BY PHOTOGRAPHY.

THE THIRTEENTH VOLUME of our Magazine promises to be the most popular and brilliant of any that has preceded it. We have manly good things in store for it. It shall be our endeavor to make it all the richer and more interesting on account of the Centennial. We expect to embellish it with some of the choicest gems the Exhibition can produce and addineters to its pages from month to month, by giving a sort of compendium of all that relates to Art or Photography. Among other attractions, we expect to have our old friend Dr. Voeel here during six months of next year, at least, and our readers may expect some of the fruits of his genius and talents to add to its interest and usefulness.

But while we intend to provide all these home attractions, we do not propose to neglect whatever may transpire abroad, but shall present as usual correspondence from such well-known writers as Prof. Strebbing, Mr. W. J. STILLMAN, Mr. CHAS. WHADACK, and others. With all these good things in prospect for the year 1876, we hope to render our magazine more beautiful and more useful than ever before; and while we maintain that the beautiful example of photography, which accompanies each issue, is alone worth the subscription price, still more and more effort will be made to make the reading matter everything that it ought to be. Our correspondents from all the leading centres abroad will keep our readers posted on all matters of interest in their several sections, while our unrivalled staffat home will look diligently after your interests here. To make THE PHILADELPHIA PHOTOGRAPHER the best PRACTICAL HELPER which can possibly be obtained, is the aim and earnest desire of its publishers. We ask your co-operation in extending its usefulness, and offer to all present subscribers, who secure us new ones, the following

PREMIUMS.

For every new subscriber, for one year, \$1.00, payable in any of our publications, books, or, if preferred, one dollar's worth of any of our prize pictures, or any other article for which we are agents, advertised in this Magazine.

The subscription price of the Philadelphia Photographer is \$5 a year, \$2.50 for six months, 50 cents per month.

Each number, remember, contains a handsome photograph.

Photographic Mosaics.

THE Centennial anniversary year of American Independence finds our little Annual in its eleventh year. It is developing rapidly for its age and size, and this year takes quite an interest in the Centennial. It is full and running over with fresh contributions from the most wide-awake members of the fraternity in all parts of the country. We here give a list of the

bers of the fraternity in all parts of the country. We here give a list of the GONTENTS.—Review; Eighteen Hundred and Seventy-six; Discoveries, Inventions, and Improvements; Work in the Studio; The Dark Room; The Printing Department; Landscape Photography; Dry-plate Work; Apparatus; Art Advances; The National Photographic Association; Our Publications; Our Prize Offer; Items of Interest; Obituary; The Art Progress; Pog; Come, Let us Reason Together; Experience; Provoking; A Suggestion Anent the Great Exhibition; Centennial Album of Photographic Studies; The Eliminating of Hyposulphite from Prints; A Treatise on Photography; Why not make Solars instead of Contact, etc.; Systematic Preservation of Negatives; Want of Enterprise; Lighting the Sitter; Theory and Practice; Be Punctual; Formulis for Photographs and Perrotypes, which give Lights and Half-tones not surpassed; Exposure and Development of a Negative; A Cause for Faded Prints; How I Sunned a Bath under Difficulties; A Good Collodion; A Word to the Weak; How to Clean New and Old Glass Plates; Long's Bath Warmer; Albumen, its Preparation and Use in Photography; An Item of Real Value; The Negative Bath; How to Lubricate Prints for Burnishing; Then and Now; A Pair of Suggestions; How to Obtain Bolling Water in Winter; An Excellent Ware for Photographic Water in Winter; An Excellent Ware for Photographic Water from Winter; An Excellent Ware for Photographic Purposes; Hints on Composition; The Causes and Cure for some of the Difficulties pertaining to Photography; At and Mechanism; Breakfast for Dinner; Field Work; Marble Negatives—Stains From the Hands, etc.; Pyroxylin—Gun-Cotton; The Old Bath; The Upper Floor; Dry-Plates; The Art Privileges of our Great Centennial; Curtains as a Meansof Adjusting Light; An Exposing Shutter; How to Touch out Pinholes; Photography; The Touing Solution; A Chapter of Practical Matters; Climbing; Foor Negatives, their Cause and Cure; On Landscape Photography; A Cheap and Good Plateholder; The Way It is Done; To Correspondents; The

Price, bound in Cloth, \$1. Paper Cover, 50 Cts. 144 pages.

OUR BOOKS.

THE PRACTICAL PRINTER. By Chas. W. Hearn.

This very useful book is indispensable in the printing department. No one who wishes to be up with the times in printing, can afford to be without it. Its rapid sale and the favor with which it has been received, are the best recommendations we can give. Price, \$2.50.

BIGELOW'S ALBUM OF LIGHTING AND POSING.

This excellent work still maintains its popularity. It contains 24 beautiful photographs from life in different lights and positions, with an explanatory key, which makes it the most practical helper the Photographer can have. Price, \$6.00.

DR. VOGEL'S HANDBOOK OF PHOTOGRAPHY. Second Edition.

This is a really standard work, and the most complete hand-book ever-published. The new edition has been thoroughly revised, and much additional matter introduced, together with new illustrations, new photographs, and a new arrangement all through. Now is the time to study up, and this book is ap-plicable to any department. Price, \$3.50.

DR. VOGEL'S PHOTOGRAPHERS' POCKET REFERENCE-BOOK.

This is in every sense a reference book. It is alphabetically arranged, and any process or formulæ in photography may be found at a moment's notice. All is arranged in a concise and practical form. It is particularly useful in the chemical department. Price, \$1.50.

THE FERROTYPERS' GUIDE.

This little work is by a practical ferrotyper, and gives just the instruction necessary to those who wish to do good work in this branch of our Art. Price, 75 cents.

LINN'S LANDSCAPE PHOTOGRAPHY

Is an excellent companion in the field, and may help you over many difficulties; can be carried in the pocket. Price, 75 cts.

GLIMPSES AT PHOTOGRAPHY. By Prof. Himes.

This work treats of some of the peculiar styles of printing, such as leaf-printing, etc., etc. Price, \$1 25.

WILSON'S LANTERN JOUENEYS.

To those who use the lantern this book is indispensable. It contains just the information required about six hundred different views, and enables any exhibitor to make his entertainments enjoyable and instructive. Price, \$2.00.

BURNET'S HINTS ON COMPOSITION.

We have reproduced this work by photo-lithography, and sell it at the low price named, while a copy of the original work could not be bought for five times that amount. It is fully illustrated, and supplies in a very attractive form, the art knowledge, in reference to composition, that so many pho-tographers are seeking after. Price, \$3.50.

OHN EAN & CO. Worcester, Mass.,

Manufacturers of the

NONPAREIL PLATE,

A substitute for porcelain. The new NONPAREIL PICTURES have elicited the most general expressions of approval and admiration. The latest improvement simplifies the formula and insures success. Our plates are stamped. Patented July 29, 1873, and June 16, 1874. All others are spurious.

FERROTYPE ADAMANTEAN

BLACK, AND PATENT CHOCOLATE-TINTED. EGG-SHELL, AND GLOSSY.

The experience and extensive facilities of JOHN DEAN & CO., enable them to produce the most desirable FERROTYPE PLATES in the market.

> E. & H. T. ANTHONY & CO., Trade Agents, 591 Broadway, New York.

MEW STOCK HOUSE.

Somerville's St. Louis Photographic Stock Depot,

No. 8 South Fifth Street.

AMERICAN OPTICAL CO.'S CELEBRATED APPARATUS,
POWERS & WEIGHTMAN'S SILVER, GOLD, IODIDES AND BROMIDES,
VOIGTLANDER & SON AND DARLOT LENSES,
TILFORD'S CELEBRATED IODIZED AND NEGATIVE COLLODION,
AND EVERY WANT FOR THE TRADE.

FRAMES IN EVERY VARIETY.

J. C. SOMERVILLE, No. 8 S. Fifth St., Saint Louis, Mo.

HEADQUARTERS FOR THE TRADE.

Show Displayers, Velvet Stands,
Velvet Passepartouts, Velvet Cases,
Beveled Matts, Double Matts,
Fancy Metal Frames, Standard Matts,
Fancy Paper Passepartouts.

These goods are entirely of our own manufacturing. A large assortment constantly on hand; odd sizes and styles made to order.

LEWIS PATTBERG & BRO., 709 (Formerly) Broadway, New York.

THE CENTENNIAL

PHOTOGRAPHIC DIARY

NOW READY.

CONTENTS.—Rates of Postage—Places of Interest in Philadelphia—Railroad Depots and Ticket Offices—Calendar, with Photographic Hints—Local Photographic Societies—Items of photographic History—Photographic Processes—The Negative Bath—The Developer—Collodion—Varnishes—Retouching Varnish—Printing and Toning—Mr. Marston's Process—Mr. Hearn's Process—Collodio-Chloride for Porcelain Printing. By Charles Evans—Emulsion Process—Photographic Hints—Executive Officers of the United States Centennial Commission—The Centennial Buildings—Photographic Hall—Directions for Exhibitors, Important to Visitors—Regulations for Admission to the Centennial Ground—Admission Tickets for Exhibitors and Employees—Admission Tickets for the Public—Hotel Charges—N. P. A. Convention—Map of Philadelphia.

PRICE, ONLY 75 CENTS.

For sale by BENERMAN & WILSON, Photographic Publishers, 116 North Seventh Street, Philadelphia, Pa.

PROMENADE PRIZE PICTURES.

JULY COMPETITION.

To enable all photographers to study these

GEMS OF ART,

We offer prints from the competing negatives, for sale at the prices below

They are the most exquisite things we ever offered, and will teach any one, be he a good or poor operator.

THE GOLD MEDAL

Was awarded for the best six negatives to Mr. Henry Rocher, Chicago, Ill., whose pictures are marvels of beautiful photography. The studies are all mounted in tasteful style, on Collins' Mounts, and printed at our own rooms by Mr. Chas. W. Hearn, and are fine studies in posing, lighting, printing, and toning.

THE SETS INCLUDE:

Nos		1	to	7,						Studies b	y H. Rocher, Chicago.
**		8	to	16,						**	L. G. Bigelow, Detroit, Mich.
46	1	7	to	22,						**	I. W. Taber, San Francisco, Cal.
"	2	3	to	27,						16	C. M. French, Youngstown, O.
46	2	8	to	31,						16	Core & Frees, Tiffin, O.
"	3	2	to	37,						**	E. M. Collins, Oswego, N. Y.
"	3	8	to	42,						16	J. H. Folsom, Danbury, Conn.
44	4	3	to	48,						**	E. H. Alley, Toledo, O.
S	ee	R	ev	iew	in	Δ١	ugi	ıst	n	umber Ph	iladelphia Photographer, page 242.

The whole set of 48,	00										
In two Photo. Covers,	50										
Selections, per dozen, 4	00										
" per two dozen,	00										
The 21 of Messrs. Rocher, Bigelow, and Taber,											
Book Covers and Binding,	75										

Address all orders to

BENERMAN & WILSON, Publishers, 116 North Seventh Street, Philadelphia.









ROSS' PORTRAIT VIEW LENSES.

We have now successfully introduced to the American Photographers the Ross Lens, and by our increased sales we know they are appreciated. At the convention held at Buffalo, July 15, many fine photographs were exhibited by photographers, and ourselves, made with the Ross Lens, which attracted great attention.

While Ross & Co. are the oldest manufacturers of Photographic Lenses in existence, they also keep up with the requirements of the fraternity, by constantly manufacturing new combinations and improving on those already in existence. They have lately perfected, and will soon furnish us stock of, a new series of Card Lenses, extra rapid, peculiarly adapted for babies, and people who will not be quiet. We will give notice of their arrival.

WE HAVE NOW IN STOCK

Portrait Lenses, from 1-4 to 15 x 18. Instantaneous Doublets, all sizes.
Cabinet Lenses, Nos. 1, 2, and 3. Medium Angle Doublets, all sizes.
Card Lenses, Nos. 1, 2, and 3. Large Angle Doublets, all sizes.
Triplets, Nos. 1, 2, 3, 4, 5, 6, and 7. Stereographic Lenses, all sizes.
Symmetricals. Rapid Symmetricals. New Universal Lens.

Numerous testimonials pronounce them to be the best, as well as the cheapest Foreign Lens ever offered to the American Photographer. We will mail price-list on application, and promptly fill all orders.

STEINHEIL'S SONS' NEW APLANATIC LENSES.

We now have a full stock of these Celebrated Lenses, at the following prices:

	1, 1-4																
6.	2, 1-2	66	51	6.6	66		30	00		6,	13-16	6.6	164	4.6	6.6	110	00
6.6	3,4-4	6.6	7	66	6.6		45	00	6.6	7,	18-22	66				200	00
6.6	4, 8-10) "	104	"	6.6		60	00	**	8,	20-24	6.6				350	00
	Nos. 1 & 2 are in matched pairs for Stereoscopic Work.																

We feel sure that at least one of these lenses is needful for the successful prosecution of your business, and so solicit your orders.

WILSON, HOOD & CO., THE UNITED STATES, 822 Arch St., Philadelphia, Pa.

The only genuine brand of DRESDEN ALBU-MEN PAPER is the CROSS-SWORD BRAND, all others are superannuated. We keep a full assortment of Single and Extra Brilliant always on hand.

CHAS. F. USENER'S Celebrated PORTRAIT LENSES are unexcelled. Before purchasing be sure and try a Usener.

CHARLES COOPER & CO., Wholesale Agents,

Manufacturing Chemists and Importers,

191 Worth Street, New York.

The Universal



EMBOSSING PATENTED JANUARY 9th, 1872.

This Press will cameo all sizes, from cards to cabinets, and is sold lower than any other that will do the same work. It has been greatly improved and made very complete in all its parts.

We furnish a card, victoria, and cabinet size.

PRICE, \$20.00.

MANUFACTURED AND SOLD WHOLESALE AND RETAIL BY

WILSON, HOOD & CO., 822 Arch St., Philadelphia.

CAUTION.—Photographers are cautioned against buying other presses that may use an elastic embossing substance, as they are an infringement on the above.

R. J. Chute, Patentee.



38 Maiden Lane, New York,

IMPORTER OF THE CELEBRATED

S. & M. DRESDEN ALBUMEN PAPERS

SINGLE OR EXTRA BRILLIANT.

This paper has been imported by me to the great satisfaction of Photographers for the last eight years, and has not been surpassed by the many different brands sprung up since.

Hyposulphite of Soda,

Sulphate of Iron,

Solid German Glass Baths,
Saxe Evaporating Dishes,
French Filter Paper,
Porcelain Trays.

FERROTYPE PLATES.

I ALSO IMPORT EXTRA BRILLIANT

CROSS-SWORD PAPER,

Second Chaice

WHICH I OFFER AS FOLLOWS:

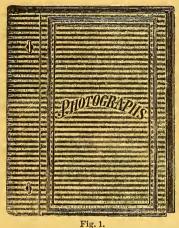
One ream. Half ream. Quarter ream.

10 Ko Rives, pink or white, . . . \$24 00 . . . \$12 50 \$6 75

SAMPLES CIVEN ON APPLICATION.

IMPROVED

PHOTOGRAPH COVERS.



The Outside Appearance,

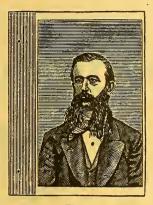


Fig. 2.

A Leaf Showing the Guard.

Frequent inquiries for something at a much lower price than an album, for the holding together and preservation of photographs, has induced us to manufacture an article which we think will meet the want.

IT SERVES ALL THE PURPOSES OF AN ALBUM, FOR

A Series or a Set of Portraits, A Series or a Set of Landscapes, A Series or a Set of Photographs of any kind,

MAY BE NEATLY AND CHEAPLY BOUND IN THESE COVERS.

They are made with expanding backs, so that from six to twenty-four pictures may be inserted in one cover. The pictures are mounted in the usual way, and then strips of linen, or strong paper, of the proper width, are pasted on one edge, by which the picture is inserted and held in place in the cover by a paper fastener. Fig. 1 represents the cover, with the perforations in the back, through which the spreading clasps of the paper fastener bind the whole together. These are so easily inserted or removed, that pictures are readily put in or taken out at any time. Fig. 2 represents the picture, with the guard pasted on ready for insertion. The arrangement is simple, and we are sure will be readily comprehended. For binding together views of your town or city, or portraits of celebrities, they are very neat

0							
For Photograph.			Per dozen.]	Per hundred.
Card Size, .			. \$1.50			. (\$10.00
Cabinet Size,							
EXTRA HEAVY COVER	s.						
5-8 Size,			. 4.50				33.00
4-4 "							
8-10 "							
11 11 66							

The following is a list of sizes and prices, without cards:

Larger or special sizes made to order. Furnished with card board at best rates. Samples mailed at dozen price. Send for some.

BENERMAN & WILSON, Photo. Publishers, 116 North Seventh Street, Philadelphia.

JAMES F. MAGEE & CO.

MANUFACTURERS OF

PURE

PHOTOGRAPHIC CHEMICALS,

No. 108 North Fifth Street,

PHILADELPHIA.

Stock Dealers only Supplied.

PHOTOGRAPHIC PRINTING INSTITUTE.

PRINTING FOR THE TRADE.

Instructions Given in Artistic Printing.

SEND FOR NEW PRICE LIST.

All communications should be addressed to the proprietor, at the Institute,

24 Winfield Place, Philadelphia.

C. W. HEARN, Proprietor.

BENJ. FRENCH & CO.,

319 Washington St., Boston,

IMPORTERS AND SOLE AGENTS FOR THE CELEBRATED

Voigtlander & Son And Parlot LEWSLES.

NEW STEREOSCOPIC LENSES.

New Stereoscopic Tube and Lens, made expressly for us, marked with our name (imitation Dallmeyer), with rack and pinion, central stops, for portraits or views. Will work in or out of doors. Also, for instantaneous pictures. Four inch focus, **price per pair**, \$21.00. By taking out back lens, and using only front lens in place of back, you get six inch focus. The great and increasing demand for all these lenses, is sure guarantee that they are the best. Read the following

Testimonials.

"I have tried the Mammoth Voigtlander you sent me, and I consider it the best large instrument I have ever seen, and I have tried those made by other makers, Dallmeyer's included, and they do not compare with the Voigtlander. All my baby pictures were made with half-size Voigtlander lenses."—J. LANDY, 208 W. Fourth St., Cincinnatt, Feb. 25, 1874.

"The Voigtlander lenses have always been favorites with me. My first experience, in the days of daguerrectype, was with one, since which I have owned and tried many of the different sizes and never saw one but was an excellent instrument. Lately again trying some for my own use and for a friend, I found them to be superior to other eminent makers, particularly in the large sizes."—W. J. Baker, Buffalo, N. Y.

"Twenty-four years ago I bought and commenced using my first Voigtlander lens. It was a good one. Since then I have owned and used a good many of the same brand, of various sizes. They were all and always good. Some of the larger sizes that I have recently bought seem to me better than any I have ever had or seen before."—J. F. RYDER, Cleveland, Ohio, Dec. 18, 1872.

"About a year ago I bought a Voigtlander & Son No. 34-4 size lens. Said instrument gives me great satisfaction, being very quick, at the same time has great depth of focus."—E. G. MAINE, Columbus, Miss.

"Have never seen anything equal to the Voigtlander & Son Lens. The No. 5, Ex. 4-4 is the best instrument I ever used. I cannot keep house without it."—D. B. VICKERY, Haver-hill, Mass.

"The pair of imitation Dallmeyer Stereoscopic Lenses you sent we are very much pleased with; they work finely."—GOODRIDGE BROS., East Saginaw, Mich.

"After a trial of your imitation Dallmeyer in the field with those of the Dallmeyer Rapid Rectilinear, side by side, I can say that for general views I like yours as well, for some objects far better, on account of their short focal length."—D. H. Cross, Mosher's Gal., Chicago.

New Catalogue of Prices Just Issued, to be had on Application.

WILSON'S

Lantern Journeys

By EDWARD L. WILSON,

Editor of the "Philadelphia Photographer."

This work will be found entertaining by all who like to read about the beautiful places and things of this world.

The contents are divided into six "Journeys," each one including a visit to 100 places, making 600 in all, as follows:

- JOURNEY A-Havre, Paris, Versailles, Rouen, Fontainebleau, and Switzerland.
- JOURNEY B—Compiegne, Brussels, Aix la Chapelle, Cologne, Up and Down the Rhine, Potsdam, Berlin, Dresden, Vienna, the Vienna Exposition, the Semmering Pass, Saxony, Munich, and Southwest Germany.
- JOURNEY C—Italy—Lake Maggiore and Como, Milan, Verona, Venice, Florence, Pisa, Rome, Naples, Pompeii, the Ascent of Vesuvius, Puteoli, and the Italian Art Galleries.
- JOURNEY D-Holland, Denmark, Norway, Sweden, Russia, and Spain.
- JOURNEY E-Egypt, Palestine, Syria, Turkey, Greece, and India.
- JOURNEY F-England, Scotland, and the United States of America.
- JOURNEY G-The Centennial Exhibition at Philadelphia.

It has been carefully prepared, and will be found amusing, very entertaining and instructive.

It contains 218 pages, Cloth bound, Gilt. Price, \$2.

BENERMAN & WILSON,

Photo. Publishers, Philadelphia. Penna.

PHILADELPHIA

PHOTOGRAPHER

THE LIVEST and BEST

Photographic Magazine Published.

ANNOUNCEMENT FOR 1877!

The publishers have a great many good things in anticipation for the year 1877, which they think will render their magazine more beautiful and more useful than ever before; and while they maintain that the beautiful example of photography, which accompanies each issue, is alone worth the subscription price, still more and more effort will be made to make the reading matter everything that it ought to be. Our correspondents from all the leading centres abroad will keep our readers posted on all matters of interest in their several sections, while our unrivalled staff at home will look diligently after your interests here. To make the Philadelphia Photographer the best practical helper which can possibly be obtained, is the aim and earnest desire of its publishers.

We ask your co-operation in extending its usefulness, and offer to all present subscribers, who secure us new ones, the following

For every new subscriber, for one year, \$1, payable in any of our publications, books, or, if preferred, \$1

PREMIUMS

worth of any of our prize pictures, or any other article for which we are agents, advertised in this magazine.

Operators, printers, etc., can secure all their necessary photographic literature in this way, by a little earnest effort.

EACH MONTHLY ISSUE IS A PHOTOGRAPHIC WORK IN ITSELF. NOTICE TO SUBSCRIBERS.

Subscription price, \$5 a year, \$2.50 for six months, 50 cents per copy, postpaid. positively in advance.

In remitting by mail a post-office order, or draft payable to the order of Benerman & Wilson, is preferable to bank-notes. Clearly give your Post-Office, County, and State.

Canada subscribers must remit 24 cents extra, to prepay postage.

Foreign subscriptions must be accompanied by the postage in addition.

ADVERTISING sheets are bound with each number of the Magazine. Advertisements are inserted at the following

1 Month. 6 Months. 1 Year.
One Page, . . . \$20 00 \$110 00 \$200 00
Half " . . . 12 00 66 00 120 00
Quarter Page, . . 7 00 33 50 70 00
Eighth " . . 4 00 22 00 40 00
Cards, 6 lines, or less, 2 00 11 00 20 00

The attention of advertisers, and those having galleries, &c., for sale, is called to our Specialties pages. Terms, \$2 for six lines, and 25 cents for each additional line, seven words to a line, always in advance. Duplicate insertions, 50 cents less, each.

SURE TO PAY!

Operators desiring situations, no charge.

BENERMAN & WILSON, Publishers,

OFFICE, 116 NORTH SEVENTH STREET, PHILADELPHIA.

CENTENNIAL LANTERN V JOURNEY.

100 Scenes and Objects in the Great Exhibition.

JUST ISSUED!

IN A SECOND EDITION OF "WILSON'S LANTERN JOURNEYS."

This meets a want that has been felt more than any other by exhibitors of Centennial slides. We give below a list of the subjects, photographed by the Centennial Photographic Co.—Ed. L. Wilson and W. Irving Adams, Proprietors, which, as will be seen, constitutes a complete Journey through the Exhibition.

LIST OF SLIDES.

55. 746—Agricultural Hall, interior, nave looking N.
56. 1005—Agricultural Hall, interior, looking west.
57. 898—Agricultural Hall, interior, Brazilian cotton ex.
58. 1181—Agricultural Hall, interior Cal., grape-vine.
59. 462—Horticultural Building.
60. 324—Horticultural Building, promenade.
61. 829—Horticultural Building, interior, architectural.
62. 312—Horticultural Building, from gall-ry.
64. 279—Horticultural Building, growing banana.
65. 276—Horticultural Building, genetury plant.
66. 1177—Horticultural Building, Miss Foleys' fountain.
67. 286—Horticultural Building, foral hall.
68. 66—Horticultural Building, foreing-room.
69. 693—Horticultural Grounds, rhododendrons.
70. 318—Horticultural Grounds, rustic house.
71. 222—Women's Pavilion,
72. 491—Women's Pavilion, interior.
73. 921—United States Government Building.
74. 655—Rodman Gun
 1. Independence Hall.
 3. The old Liberty Bell.
 55.

 2. Independence Hall, interior.
 4. Yankee Doodle.
 56.

 5. 881—Centennial Grounds, bird's-eye view.
 57.

 6. 102—Main Building, North entrance.
 59.

 7. 926—Main Building, North entrance.
 60.

 8. 678—American Soldier, granite statue.
 60.

 9. 656—Main Building, perspective.
 61.

 10. 107—Main Building, interior.
 62.

 11. 356—Opening Ceremonies, grand stand, orators.
 63.

 12. 355—Opening Ceremonies, choristers.
 64.

 13. 815—Main Building, interior.
 65.

 14. 1480—Carved Bedstead—Chinese Section.
 66.

 15. 1264—Italian Section.
 67.

 16. 251—M. B. Swedish Section—China and porcelain.
 68.
 14. 450—Carved redstead—Chines Section.
15. 1264—Italian Section.
16. 231—M. B. Swedish Section—China and porcelain.
17. 1496—Swedish Peasants.
18. 1497—The New Baby—Swedish Section.
19. 1495—The Baby's Death—Swedish Section.
20. 177—Netherlands Exhibit.
21. 250—Netherlands Section—Kiosk exhibit.
22. 705—Queensland Court.
23. 454—Main Building, interior, transept from S. gal.
24. 456—Main Build, interior, transept from S. W. tow.
25. 395—Main Build, interior, transept from S. W. tow.
26. 376—New England Glers Co.'s Exhibit, M. B.
276—Paramal Grouter, from man Building.
28. 920—Belmont Avenue and Fountain.
29. 398—Machinery Hall, from Finance Building.
30. 817—Machinery Hall, from Finance Building.
31. 161—The Corliss Engine.
32. 960—Machinery Hall, interior, s. avenue from E. end.
33. 966—Machinery Hall, interior, north avenue.
34. 883—Machinery Hall, interior, transept.
35. 880—Republic Avenue, from Machinery Hall.
36. 566—Memorial Hall, or Art Gallery.
37. 666—Naval Group.
38. 665—Dying Lioness.
39. 400—Art Gallery, vestibule.
40. 1488—Art Gallery, vestibule.
41. 1354—Art Gallery, American Department.
43. 1434—Art Gallery, American Department.
44. 1467—Art Gallery, Amer. Depart.—Ophelia statuary.
45. 889—Art Gallery, Amer. Depart.—Ophelia statuary.
46. 52. Portrait: Chinese—Japanese—Algerian—Tunisian—Persian—Persian—Turk—Egyptian.
53. 700—Agricultural Hall, interior, north avenue. 251-M. B. Swedish Section-China and porcelain. 73. 921—United States Government Building.
74. 651—Rodman Gun
75. 732—Monitor Turret.
76. 929—U. S. Gov't. Building, sloop-of-war Antietam.
77. 931—U. S. Govern't. Building, interior, lighthouse.
78. 1243—U. States Government Building, main avenue, looking east.
79. 932 U. S. Government Building, Navada minorals. looking east.

933—U. S. Government Building, Nevada minerals.

909—U. S. Government Building, fur seals.

932—U. S. Govern't. Building, group American deer

920—U. S. Gov. Building, war canoe and models.

763—State Buildings, general view.

703—Pennsylvania Building (or any other State B'g.)

769—"Locomotive" of 1835.

770—"Locomotive" of 1875. 80. 81. 84. 85, 86. 770—"Locomotive" of 1875.
87. 96—Japanese Bazaar.
88. 818—From Centennial Photo. Co.'s Studio.
89. 544—Italian Department, Art Annex.
90. 1362—Italian Department, Art Annex.
91. 1223—Italian Statuary, Soap Bubbles.
92. 1121—Italian Statuary, Flying Time.
93. 1151—Italian Statuary, Flying Time.
94. 1123—Italian Statuary, Vanity.
95. 1114—Italian Statuary, Love's Messenger.
96. 1268—Italian Statuary, Cupid.
97. 1110—Italian Statuary, Forced Prayer.
98. 1270—Italian Statuary, Grief.
100. 1284—Italian Statuary, Grief. 53 700—Agricultural Hall. 54. 151—Agricultural Hall, interior, north avenue.

Ar The numbers, in the second column of the above list, refer to the Centennial Photographic Co.'s Catalogue.

We are now prepared to furnish the above in Slides or Stereos., as the readings are equally interesting with either.

Slides, \$9 per dozen; or, \$70 per hundred. Stereos., \$3 per dozen. Wilson's Lantern Journeys, including Centennial Journey, \$2.

FOR SALE BY BENERMAN & WILSON, 116 N. 7th St., Philada. Number 156.

THE

50 Cents.

7972 1

PHILADELPHIA

Photographer.

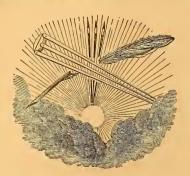
AN ILLUSTRATED MONTHLY JOURNAL,

DEVOTED TO PHOTOGRAPHY.

THE OFFICIAL ORGAN OF THE NATIONAL PHOTOGRAPHIO ASSOCIATION OF THE UNITED STATES.

EDITED BY EDWARD L. WILSON.

December, 1876.



PHILADELPHIA:

BENERMAN & WILSON,

PUBLISHERS,

116 NORTH SEVENTH STREET.

Subscriptions received by all News and Stock-Dealers.

FIVE DOLLARS PER ANNUM, IN ADVANCE.

Sherman & Co., Printers, Philadelphia.

SUMMARY OF CONTENTS.

Next Year 353 French Correspondence. Prof. E. Stebbing 366 Retrospective 354 Society Gossip 368 Mosaics for 1877 357 German Correspondence. By Dr. H. Vogel 369 Another Secret of Success 360 Centennial Awards 371 A National Training School of Photography. By Our Picture 372 Geo. Cecil Hance 362 Table Talk 374 Glass for Skylights. By Thomas Gaffield 364 Mr. Lambert's Processes 375 The Morrison View Lenses * 365 Editor's Table 384		PAGE]	PAGE
Mosaics for 1877	Next Year	353	French Correspondence. Prof. E. Stebbing	366
Another Secret of Success	Retrospective	354	Society Gossip	368
A National Training School of Photography. By Our Picture. 372 GEO. CECIL HANCE. 362 Table Talk. 374 Glass for Skylights. By Thomas Gaffield. 364 Mr. Lambert's Processes. 375	Mosaics for 1877	357	German Correspondence. By Dr. H. Vogel	369
GEO. CECIL HANCE	Another Secret of Success	360	Centennial Awards	371
Glass for Skylights. By Thomas Gaffield 364 Mr. Lambert's Processes	A National Training School of Photography. By		Our Picture.	372
	GEO, CECIL HANCE	362	Table Talk	374
The Morrison View Lenses	Glass for Skylights. By THOMAS GAFFIELD	364	Mr. Lambert's Processes	375
	The Morrison View Lenses	365	EDITOR'S TABLE	384

EMBELLISHMENT.—Selection from Bigelow's Artistic Photography. Negatives by L. G. Bigelow, Detroit, Mich.

ADVERTISEMENTS.

ARTISTIC STUDIES. BENERMAN & WILSON. Magic Lanterns and Slides. BULLOCK & CRENSHAW. Photographic Chemicals. CAMEO PRESS, THE UNIVERSAL. CAUTION AGAINST COPYING VIEWS OF THE CENTENNIAL PHOTOGRAPHIC CO. CENTENNIAL EXHIBITION VIEWS. CENTENNIAL LANTERN JOURNEY. CENTENNIAL MEDALS, CENTENNIAL LANTERN SLIDES, CATALOGUE OF. CENTENNIAL PHOTOGRAPHIC Co. Lenses and Boxes. COLLINS, SON & Co., A. M. Photograph Cards. CENTENNIAL PHOTOGRAPHIC DIARY. COOPER, CHAS. & Co. Dresden Albumen Papers, etc. DEAN, JOHN & Co. Ferrotype Plates. DEBANES, J., Glace Work. FRENCH, B. & Co. Voigtlander Lenses, &c. GENNERT, G. Albumen Papers. GIHON, JOHN L. Opaque and Cut-Outs. HANCE'S PHOTO. SPECIALTIES. HEARN'S PRACTICAL PRINTER. HEARN'S PHOTOGRAPHIC PRINTING INSTITUTE. HERMAGIS' PORTRAIT LENSES.

ARTISTIC PHOTOGRAPHY.

HOWSONS' PATENT OFFICES.

IMPROVED PHOTOGRAPH COVERS. MAGEE, JAMES F. & Co. Photographic Chemicals. MAGIC LANTERNS AND SLIDES. Mosaics for 1877. PATTBERG, LEWIS & BRO. Passepartouts, &c. PHOTOGRAPHER'S POCKET REFERENCE-BOOK. PHOTOGRAPHIC PUBLICATIONS FOR 1876. PHOTOGRAPHER TO HIS PATRONS. PRIZE PICTURES PROMENADE PRIZE PICTURES. ROBINSON'S PHOTO. TRIMMER AND METALLIC GUIDES. Ross' Portrait and View Lenses. SAUTER, G. Passepartouts. SHAKSPEARE'S SEVEN AGES OF MAN. Somerville, J. C. Photographic Stock Depot. TABER, I. W. & Co. Background and Plate Holder. VOGEL'S HAND-BOOK OF PHOTOGRAPHY. WALLACH, WILLY. Trapp & Munch's Albumen Paper WAYMOUTH'S VIGNETTING PAPERS. WILSON'S LANTERN JOURNEYS. WILSON, HOOD & Co. Revolving Photo. Cabinet, Heating Stove, etc. WOODWARD, D. A. Solar Cameras.

BULLOCK & CRENSHAW,

No. 528 Arch Street, Philadelphia,

YANKEE DOODLE.

MANUFACTURERS AND IMPORTERS OF PURE CHEMICALS FOR PHOTOGRAPHY.
IMPORTERS OF GLASS AND PORCELAIN, APPARATUS, ETC.

119 South Fourth St. PHILADELPHIA.

Branch Office, 605 Seventh Street, WASHINGTON, D. C.



H. HOWSON,

Engineer and Solicitor of Patents.

C. HOWSON,

Attorney at Law, and Counsel in Patent Cases.

HANCE'S PHOTOGRAPHIC SPECIALTIES



AHEAD!



HICHEST PREMIUM AWARDED

AT THE CENTENNIAL EXPOSITION.

Having received the Highest Award for Photographic Specialties, I feel more confidence than ever in offering my manufactures to the Photographic fraternity. My exhibit was an extremely modest one, being taken from stock, put up in original packages without any attempt at display, and carried off the prize over all the exhibits put up in cut glass decanters with ribbon tied stoppers, proving that the medal was awarded for MERIT ALONE!

To my many patrons, who have for years used my goods, it is only necessary to remind them that in future the same careful personal attention will continue to be paid to the manufacture of my specialties that in the past has gained for them such a world-wide reputation. To those who have not yet tried them, I respectfully request a full and fair trial, being satisfied that they will save money, trials and vexations, by casting aside unreliable articles and taking hold of mine, which are being used in many of the best galleries in the United States and Canadas.

Some of the best work shown at the exhibitions at Vienna and Philadelphia was made with my collodions, and to them some of the awards for photographs were due.

FOR SALE BY ALL STOCK-DEALERS.

ALFRED L. HANCE, 116 North Seventh St., Philada.

(READ SUCCEEDING PAGES.)

HANCE'S PHOTOGRAPHIC SPECIALTIES

WARRANTED FULL MEASURE, AND CHEMICALLY PURE,

ARE SOLD BY ALL DEALERS, AS FOLLOWS:

HANCE'S BATH PRESERVA-

TIVE. A sure preventive of pinholes, stains, &c. It preserves the bath in good working condition, and will be found worth its weight in gold. See special advertisement. \$1.00 per bottle.

HANCE'S DOUBLE IODIZED

collobion. This is made by compounding the different iodides according to their equivalents, and producing a new salt. It is being used by some of the best photographers, but its general use is retarded, no doubt, by the extra trouble in making it. The peculiarities of this Collodion are good keeping qualities, its improvement by age, and the richness of effect produced in the negative, the film being perfectly structureless. As it requires time to ripen, I have the advantage of making a quantity and keeping it always ready to supply any demand. \$1.50 per 1b.; 80 cts. per ½ lb.

ELBERT ANDERSON'S PORTRAIT COLLODION is made according to the formula used by Mr. Anderson in Mr. Kurtz's gallery in New York. It is especially adapted to portrait work. \$1.75 per ib.; 90 cts. per ½ ib.

HANCE'S WHITE MOUNTAIN COLLODION is adapted more especially to outdoor work, and for quick working, delineating foliage, frost-work, or sky, it stands unrivalled. It is made after the formula used by that celebrated mountain artist, B. W. Kilburn, of Littleton, N. H., whose work is too well known to need any comments. \$1.50 per fb.; 80 cts. per ½ fb.

CURTIS' NIAGARA FALLS COLLODION is another used for land-scapes. The wonderfully beautiful views made by Mr. Curtis, of the great cataract, with this collodion, have a world-wide reputation, and are an indisputable evidence that he could have nothing better to produce such magnificent work. \$1.50 per ib; 80 cts. per ½ ib.

TRASK'S FERROTYPE COL-LODION is made especially for positive pictures. Mr. Trask has no superior in this class of work, and this collodion is the result of his practice and experience for years in proving what was BEST. It is made after his formula and ferrotypers will find it all that can be desired. \$1.50 per lb.; 80 cts. per ½ lb. HANCE'S PECULIAR PORTRAIT COLLODION is peculiar in that it is prepared without bromides, and is adapted for use with Black's acid bath. To those using the acid bath this collodion is indispensable. Formula on the bottle. \$1.50 per ib.; 80 cts. per ½ lb.

CUMMINGS' GRIT VARNISH

gives a very fine surface for retouching. Those that use a varnish of this kind will find that this has no superior. By it the retouching is greatly facilitated and the same amount of work on a negative may be done with it in half the time that would be required without it. 40 cts. per 6 oz. bot.

HANCE'S SILVER SPRAY GUN COTTON is now being used by many of the best photographers, and the testimonials I am receiving are sufficient evidence of its excellence. I prepare it with great care, and warrant it free from acid, very soluble, gives good intensity so that no redevelopment is necessary, gives perfect detail, and a film pure and structureless. 50 cts. per oz.

HANCE'S DELICATE CREAM

GUN COTTON is adapted to those who like a very delicate, soft-working collodion, giving all the modelling especially in the Rembrandt style, and with light drapery. Its sensitiveness renders it particularly adapted for children, or any work that requires short exposure. 80 cts. per oz.

CHROMO INTENSIFIER is intended to strengthen the negative. It imparts a beautiful tone and gives excellent printing qualities. 50 cts. per bottle.

HANCE'S GROUND-GLASS SUBSTITUTE is simply what its name implies, a substitute for ground-glass for any purpose that it is used for in the gallery. To the landscape photographer a bottle of it is indispensable. If he breaks his ground-glass, he has only to cout a plate, such as he is sure to have with him for negatives, with the substitute, and in a few moments his ground-glass is replaced and his work goes on. It is equally useful in the printing room, and any photographer who has once used it will never again be without it. 50 cts. per bottle.

HEARN'S COLLODIO-CHLO-

RIDE.—The best for Porcelain pictures. \$2.25 per ½ lb. bottle, and \$4.00 per lb. bottle
Try it, and get good porcelains.

HANCE'S GROUND GLASS SUBSTITUTE

Is an indispensable article in the photographic gallery. There are so many uses to which it can be applied that a photographer having once given it a trial, will never be without it, as there is nothing known that will take its place. There are a few base imitations in the market, but they are not used a second time, and will soon die a natural death.

The Substitute is in the form of a varnish, is flowed and dried the same as varnish, but dries with a granulated or ground-glass surface. Wherever ground glass is required, Hance's Substitute answers every purpose.

FOR VIGNETTE GLASSES.

- " A RETOUCHING VARNISH.
- " SOFTENING STRONG NEGATIVES.
- " THE CELEBRATED BERLIN PROCESS.
- " GROUND GLASS FOR CAMERAS.
- " GLAZING SKY AND SIDE LIGHTS.
- " OBSCURING STUDIO & OFFICE DOORS,
- PRINTING WEAK NEGATIVES,

For skylights it must be flowed before glazing. The Substitute being very thin it will cover a large space. It is economical, and makes a surface equal to the finest ground glass. It can be easily removed by rubbing it with cotton wet with alcohol. GIVE IT A TRIAL.

PRICE, 50 CENTS PER BOTTLE,

Large quantities, for Studio Lights, etc., supplied low.

HANCE'S DELICATE CREAM GUN COTTON

IS THE KING COTTON, AND HAS NO PEER.

Prepared with particular care, warranted free from acid, and very soluble. I take particular pride in this cotton. It has made its way steadily and surely into most of the principal galleries in the country, where parties prefer to make their own collodion, and its superior qualities are shown in the medals awarded at the Vienna Exhibition, for photographs made with collodion in which it was used.

It is especially adapted to the Rembrandt style, and light drapery. Its sensitiveness renders it particularly adapted for children or any work that requires short exposure.

PRICE, 80 CENTS PER OUNCE.

Read next page.

COMMENDATORY LETTERS

Testifying to the superior qualities of

HANCE'S SPECIALTIES

WE HAVE ROOM ONLY FOR THE FOLLOWING:

"I consider the Cotton the best we have ever used as yet."-R. POOLE, Nashville, Tenn.

"The film of the Cotton you sent me was unusually smooth and firm, being entirely free from glutinosity, and setting like India-rubber. It was quite powdery and crumbled to pieces in my fingers, 'as if rotten.' It dissolved almost instantaneously, and it was 'by far' the very best material I have ever used. I sincercly trust that you will send me the same kind again."—ELBERT ANDERSON, Kurtz Gallery, New York.

"I received your Double-Iodized Collodion all right, and in good shape. Have tried it pretty well. It gives very fine negatives and good detail."—W. E. HART, Watertown, N. Y.

"We take pleasure in recommending Hance's Double-Iodized Collodion as a first-class article, in fact it is the best manufactured Collodion we have tried."—SCHREIBER & SONS, No. 818 Arch Street, Philadelphia.

"The goods by Express came safe to hand. I have tried a part of them and am greatly pleased. Will likely want more goods in your line."—R. POOLE, Nashville, Tenn.

"Your Ground Glass Substitute is the best I have ever tried, and I have tried nearly every kind advertised, as the long row of nearly full bottles will testify. It works like a charm."—J. N. Webster, Barton, Vt.

"I take pleasure in recommending your Cottons and Collodions, before all others I have used. It is a blessing to know where you can get good Cotton."—B. W. KILBURN, Littleton, N. H.

"The last lot of Cotton you sent is the very best I have ever used. Please send me another pound at once."—ELBERT ANDERSON, Kurtz Gallery, New York.

"Have used some twenty-five pounds of your Collodion the past year with unvarying success."—G. W. Hope, Middletown, New York.

"Your Double-Iodized Collodion is the most perfect working Collodion I have used in fifteen years. Every picture I make with it is a success."—R. L. Dale, Boston, Mass.

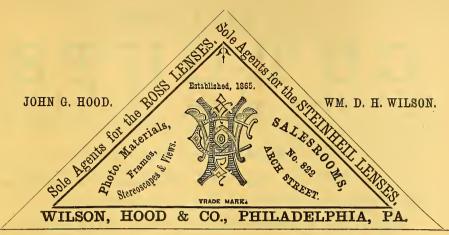


Has now become the standard Collodion in all first-class galleries. Although but a short time in the market it is rapidly superseding all other makes, and the quantity that has been sold is simply astonishing.

Give it but a single trial and you will be convinced. Can be used as soon as made, but improves with age, and will keep indefinitely.

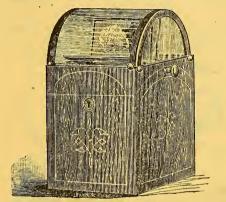
Price, \$1.50 per pound.

A liberal discount to parties ordering by the gallon. READ ADVERTISEMENTS ON PRE-CEDING PAGES.



We have been appointed Agents for the sale of the

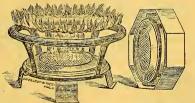
REVOLVING PHOTO. CABINET.



PRICES AS FOLLOWS:

No.	1-Velvet, ornamented (hold: 48 cards;)	\$5	50
4.6	2-Velvet, ornamented, mirrors in sides,		
	(holds 48 cards)	7	00
No.	3-Engraved walnut, gilt lined (holds 48		
	cards)	6	00
No.	4-Engraved walnut, mirrors in sides	7	50

THE GORMAN HEATING STOVE.



Price, \$1.00 each, by mail, post-paid.

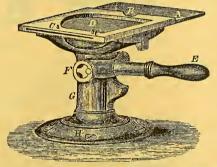
ALSO, AGENTS FOR THE

PUBLICATIONS

CENTENNIAL PHOTOGRAPHIC COMPANY.

Catalogues and prices on application.

BERGNER'S PATENT PRINT-CUTTERS.



Card size	\$30	00	Cabinet	\$35	00
Small stereo	30	00	4 x 4 size	30	00
Artistic stereo	33	00	4 x 7 ''	50	00

THE ENTREKIN PLANISHER.

Size	6 in.	10 in.	14 in.	18 in.	30 in.
Price	\$20	\$30	. \$40	\$50	\$300

THE AMERICAN OPTICAL CO.

Have reduced prices of many of their goods. Send for their new Price List, also for our "New Illustrated Price List of May, 1876."

WILSON, HOOD & CO., PHILADELPHIA.

PROMENADE ALL! HERMAGIS

Celebrated French

PORTRAIT LENSES.

CABINET SIZE, ARE JUST THE LENS FOR THE NEW

PROMENADE PICTURE.

MR. HENRY ROCHER, the renowned Chicago photographer, says of them: "In my opinion they are truly lenses of great capacity, and must surely satisfy every purchaser." Mr. Rocher has purchased two Hermagis lenses of card size and one Salomon style. See further splendid testimonial from Mr. Rocher in Specialties.

MR. F. GÜTEKUNST, the celebrated Philadelphia photographer, was sent a Salomon Lens to try for us, and wont part with it. It cuts sharp a 9 inch standing figure, and beats a lens that has been his favorite many years, and where many makes of lenses have failed, on trial, to equal it.

The HERMACIS IS THEREFORE AHEAD

TRY THEM!

These celebrated lenses, are used by MONS. ADAM SALOMON, of Paris, exclusively for making his **WORLD-RENOWNED PORTRAITS**, and by the most famed photographers of Europe, from whom Mons. Hermagis has the Highest Testimonials.

We now have a FULL STOCK on hand.

The Salomon Style, 8 x 10 size, \$160.

For Cabinet Size, extra quick, \$100.

For Cabinet Size, quick, \$90.

For Carte Size, extra quick, \$50. For Carte Size, quick, \$40.

They are being introduced in America steadily, and are liked wherever they go.

They will be sent on trial to responsible parties C. O. D., and instructions to Express Company to hold money one week for trial. If parties prefer to see the work of a lens before purchasing, we will make a negative and send with details of exposure, etc., and reserve the lens until answer is received (if the time is reasonable), on receipt of \$1 to pay cost. Having a skylight of our own we are enabled to do this.

Not a single person to whom we have sent these Lenses on trial, as above, has returned them.

BENERMAN & WILSON,

116 North Seventh Street, Philadelphia, Pa.





Philadelphia Photographer.

Vol. XIII.

DECEMBER, 1876.

No. 156.

Entered according to Act of Congress, in the year 1876, By BENERMAN & WILSON, • In the office of the Librarian of Congress, at Washington, D. C.

NEXT YEAR.

With the clouds of uncertainty hanging over our nation, and also over business affairs generally, the time for the next issue of our magazine compels us to make haste and set before our readers our policy for the coming year.

We do not feel like settling down, as a large majority of our fraternity seem to have done, to the idea that photography is at a standstill, that further experimenting is unnecessary, that there is no room for the exercise of further enterprise in pushing forward and onward in our art, that there are no new reaches to be made in it, and that it has seen its best days; but are rather disposed to look cheerfully into the future, and to be so brave as to arrange for a continuance of this humble publication, if possible, with more vigor, and more vim, and more enterprise than has characterized it heretofore. We would not be egotistical, but we do think that we can fairly say that we have maintained our position as head thus far, though many assertions have been made to the contrary, and we now reiterate our intention of keeping ahead if it within us lies; and to this end we desire to lay before our readers a brief of what we propose to do for their benefit, and, as we trust, for ours, during the new year which is so near at hand.

In the first place we hope to retain the

good-will and friendly communications of our thousands of correspondents who, from time to time, send us from the treasuries of their practice such hints, and wrinkles, and dodges as the spirit moves them to give, for, the benefit of their co-workers. Secondly, our good friend, Dr. Vogel, will continue his monthly letter, and we have promises of contributions from some of the best of our colleagues abroad, from the various countries, the acquaintance of whom we have made during the Centennial summer, not forgetting the far-off land of Egypt, where there are many good photographers.

Moreover, we shall endeavor, during the year, to present to our readers pictures from the negatives of the most celebrated landscape and portrait photographers, who were successful in obtaining awards at the Centennial. Among these, our readers will be glad to know, is Mr. Payne Jennings, whose pictures of Ireland were admitted by many to be the best landscape views which were displayed in Photographic Hall. The Centennial Photographic Company also promise us some very exquisite portrait compositions, which will exceed anything of the kind that has ever been produced in any country, since they have taken the opportunity presented to them to make these things for our advantage. This company, it will probably not be known to most of

our readers, has been working during the summer the largest force of operators, and conducting the largest photographic establishment that the world probably ever knew, and we propose, during the coming year, to take our readers on a visit through their establishment, and to follow them over the grounds with their cameras, and by illustration and description to make known all of their ways and means as fully as it is possible to do so.

Making such quantities of work as they did, oftentimes ten thousand prints per day or more, they have had to resort to ways and means for facilitating their work, which are unusual and novel, and may be valuable to many, who will find them practical in even a much smaller business. It has been a portion of our duty during the past year to conduct this establishment, and if we in our description are not explicit enough, we shall be glad to be quizzed and questioned until our readers know all it is possible to tell.

As the establishment has been divided into departments, and each department with a head, under the general head, it is more than probable that many of these foremen in the establishment will be heard from. Certainly one of these will in the person of our old contributor, Mr. John L. Gihon, who promises us a series of articles entitled "R. R. R.," which we are sure will be exceedingly interesting and valuable, as well as amusing. Mr. Gihon desires us to say, however, that these articles have no connection with Radway's Ready Relief, but are his "Rambling Remarks Resumed" on a new subject.

Furthermore we dare not promise now, though both in pictures, illustrations, and matter we desire to say that no expense will be spared which will enable us to produce a better magazine than we have ever done before for the use of our readers.

Now a word as to your own interest next year. Do you not feel that you can do something for us? We do earnestly believe that a larger circulation of our magazine would tend greatly to the benefit of every subscriber. Will you not therefore, as in the good old time, strive to take advantage of our very liberal premium offer, and each

send us during the coming year a new subscriber, with your own renewal?

We of course feel much anxiety at this season of the year lest we shall be left minus a subscription list, although for the last thirteen years we have received such flattering letters from our old friends, many of whom have never left us, that we ought not to fear; still we do.

If the season is a dull one, improve your time by working up new enterprises and get ready for business when it comes. Do not sit down and wait, but push forward and onward, and strive continually, and a good result is sure to come.

We are heartily interested in your welfare, and we hold ourselves ready to defend you against anything that would injure you. To do this fully we not only need your moneyed support, but your moral support, in the way of cheerful encouragement and continued interest.

Let us take you by the hand, and for another year pull together for the interests of beautiful, blessed Photography.

We wish you all a happy and a prosperous "New Year."

RETROSPECTIVE.

As we come to the close of our Centennial year, we cannot but take a backward glance. The past twelve months have been full of stirring events, though happily of a peaceful and elevating character. It has been a year of triumphs, and our country commences the second century of its national life under such auspices as may well make every son of hers feel proud of the glorious inheritance under which we have achieved such national greatness.

The great event of the year has been the magnificent World's Fair, which has just closed its six months of brilliant and successful international life. For it was, indeed, a cosmopolitan city with its daily average of about sixty thousand inhabitants, and those composed of people from nearly all the States and nations under the sun.

It has formed a grand and gorgeous panorama, and would that we could have preserved it all by photography in its life and

beauty as it daily passed before us. But this we must defer to the larger and broader capabilities of our next Centennial. Then what will not photography do? We dare not predict. We can only think, in the light of the present and the past, how insignificant and crude our efforts of to-day will seem.

Photographically, the year now closing has been one full of interest, hope, and great promise for the future. One year ago every effort was being made to raise sufficient subscriptions to build Photographic Encouraging reports came from various sections, as from California with the promise of at least one thousand dollars, New York one thousand, or more, while Philadelphia footed up some three thousand, and in the December number of this journal a list of subscribers was published, which presented a very creditable showing, and gave encouragement for the pushing forward of the work which had already been begun.

Photographers, however, were too poor; the stringency of the times was being severely felt, and soon the full extent of their means to help the work along seemed to have been reached. When about \$11,000 had been raised, subscriptions ceased. The Board of Finance then appropriated the balance required to complete the building, and Photographic Hall became a reality. Applications for space came in rapidly from foreign as well as American photographers, and on the 10th of May, when the great Exhibition was opened, the photographic department, though like many others not complete, gave promise of the fulness and beauty which it soon after presented. The rest is well known to most of our readers, as through the early months of the Exposition we gave full, detailed reviews of all the exhibits in Photographic Hall; besides, thousands of photographers have visited it, and seen for themselves more than could be told Now it is all past; it becomes or written a matter of history, but one that will stand out as the brightest period in the annals of photography till some other similar enterprise shall in the fast-coming events of progress eclipse it with the grand achievements that await our art in the future.

As to the work of the past year, we refer our readers to the monthly issues of this magazine, a complete index to which may be found with this present number.

From our correspondents abroad, Professor H. Vogel and Professor E. Stebbing, the former our German, and the latter our French contributor, we have been kept informed of the doings of the progressive men in Europe. There has been a great deal of activity in seeking out new processes and new applications for photography, the principal of which have been in the direction of permanent printing. Printing in carbon by various processes, printing in fatty inks, mechanical printing, and printing in colors by the photochromic process, have all been practiced and discussed, and no doubt some substantial progress made.

Near the close of last year, the French Photographic Society offered a prize of 500 francs, to which was afterwards added 500 franes more from the minister of public instruction, for the best and easiest process for the preparation of dry plates; and Mons. Leibert offered a prize, also of 500 francs, for a more energetic developing solution for wet plates than the one now employed, his object being to shorten the exposure in portraiture. We have yet to learn that the object of either offer has been realized or the prizes awarded.

Early in the year some successful experiments were made by Professor Stebbing with a process for printing with platinum, the invention of Mr. Wm. Willis, Jr. He practiced it very successfully before the French Photographic Society, and demonstrated its advantages over the salts of silver in its extreme rapidity. The inventor has also recently exhibited some successful examples by his process.

Emulsion processes for either wet or dry plates are being rapidly developed, and promise soon to supersede all others for outdoor work. A method of double or combination printing has been made public by Mr. Leon Warnerke, which promises to be very useful. It is an application of his sensitive tissue, which he prepares with several alternate coatings of collodion and indiarubber, and finally with emulsion. When

two or more negatives have parts that it is desired to combine in one, such as a landscape in one and clouds in another, a print is made of each, masking out the parts not wanted, and then combining the transparencies thus produced, to print a new negative which shall possess all the points it was desired to combine from the several negatives. He claims that the absence of glass, in using his tissue, enables him to reproduce negatives fully equal to the originals, as the great drawback heretofore has been what he called the diffusion of light in the thickness of the glass. If this theory proves correct, it will mark an important step in the matter of reproducing negatives. Mr. Warnerke's paper on this subject will appear in a future number.

In our own country the progress of the year has been rather in producing a higher standard of work by known processes, than in anything new or novel. This was shown in the improved excellence of the work in Photographic Hall over any other exhibition we have ever had. The most striking improvement, or departure from recognized practice, was the exhibit of Mr. J. H. Kent, of Rochester, N. Y., in which were portraits from life on negatives three feet or more in size, made "direct" and printed by "contact." Mr. Kent has not yet condescended to tell us how this was done. We are hopeful, however, that it will come ere long.

Among the portrait photographers whose work has been conspicuous for excellence, are Kurtz, Sarony, Mora, Alman & Co., and Howell of New York, Allen & Rowell and Hardy of Boston, Kent of Rochester, Ryder of Cleveland, Rocher and Mosher of Chicago, Bradley & Rulofson and I. W. Faber of San Francisco, Landy and Van Loo of Cincinnati, Anderson of Richmond, Holyland of Baltimore, and Gutekunst, Taylor, Wenderoth, Broadbent & Phillips, and Gilbert & Bacon of Philadelphia. In landscape work are Bierstadt and Curtis, Niagara Falls; Stoddard, Glens Falls; Watkins and Reilly, of California; Savage, of Salt Lake City; Kilburn, Littleton, N. H.; Jackson, Washington, and Wilson & Adams, Centennial photographers, Philadelphia. All these were not exhibitors in

the Exhibition, but they are, all the same, the representatives of good work. They are the men who are bringing photography up higher every year, and in our Centennial year have placed it before the world in a better position than ever before.

Our photographic literature, as represented by the Philadelphia Photographer, has been highly practical and instructive. Volume XIII presents a great number of valuable contributions, among which are articles from William H. Rulofson on Retouching; Charles W. Hearn on Printing; L. G. Bigelow, Photographic Formulæ; E. K. Hough en various subjects; A. N. Hardy, How Young Photographers may Succeed; Robert J. Chute, Photographic Accidents; W. W. Seeler, Acid v. Alkali; Allen & Rowell on Carbon Printing; W. H. Sherman, Eliminating Hyposulphite Prints; A. F. Chase on Emulsion Process Improved; Carl Myers, Distortion in Photographic Prints; L. F. Wilt, Hints to Beginners; J. Cadwallader, Photographic Rights; Joseph Zentmayer, Lecture on Lenses; G. W. Hewitt, Gelatino-Bromide Process; J. C. Browne, Waterfalls of Pike County; S. Root, Baths for Cleaning Plates; J. H. Fitzgibbon, on How to Climb the Ladder; * E. T. Whitney, Photographic Rights; * J. P. Spooner, on The Very Best Photographs; * Mrs. E. N. Lockwood, on Insurance; * Thomas Gaffield, Glass for the Studio and Dark-room, a very valuable paper; L. W. Seavey, on Backgrounds* (this excellent paper was read before the N. P. A. Convention, and is fully illustrated); William Curtis Taylor, on Various Distortions in Photography; * E. K. Hough, Co-operative Photography; * H. B. Hillyer, Photography from a Monetary Standpoint; * A. St. Clair, a Plea for Photographic Patentees; * Sigmund Singer, on Emulsions; L. W. Thornton, How I Rectified a Bath without Sunning; W. H. Bigalow, a Copying Attachment; J. H. Whiting, on Preparing Negative Glass; F. M. Spencer, on Lighting. With the contributions of all this array of talent, and much besides, we send forth our Centennial volume, believing it will help all who read it

for the purpose of being benefited thereby. Our embellishments have been of a highly interesting character. The January number contains Mr. L. G. Bigelow's competitive contribution for our first Promenade prize last year, a portrait of a lady. February, a fine portrait of a lady, by Mr. F. B. Clench; this was one of the second Promenade prize series. The March number contains an excellent landscape by Mr. S. R. Stoddard. April gives us another of the second prize set, a well-executed portrait of a lady, by Mr. G. M. Elton, Palmyra, N. Y. The May number has the beautiful prize picture, by Mr. L. G. Bigelow, for which he was awarded the gold medal in the second Promenade prize. It is a picture well worth studying, as it possesses many points of artistic excellence. In June, a Promenade portrait of a lady, by Mr. J. H. Kent, of Rochester; this is also a very successful work. In July, a cabinet portrait of a lady, by Messrs. Gilbert & Bacon, Philadelphia. This is a charming picture, and highly creditable to these young artists, and we hope it may stimulate others to like efforts. August has a pieture of the Main Exhibition Building, by the Centennial Photographic Company. September, a fine view in Photographie Hall, also by the Centennial Photographic Company. October, an exterior view of Photographic Hall, negatives by Mr. John L. Gihon. November, a panoramie view of the Centennial Grounds, also by Mr. John L. Gihon. We close the year with examples of the illustrations in Bigelow's Artistic Photography in the present number. These are intended to illustrate definite artistic effects, and every photographer should have the work, and study them all together, with the details of Mr. Bigelow's process which the book contains.

We have published but one new book during the year, and that is the one just referred to. It is intended to take the place of Mr. Bigelow's Album of Lighting and Posing, and is a very handsome work. It has twenty pages of instructions on art and photographic formulæ, and twelve beautiful photographs in Cabinet Promenade, of which Our Picture this month is an example.

A beautiful album has been published by Mr. James Landy, of Cincinnati, containing his series in cabinet size of the "Seven Ages of Man." This might be accepted as a souvenir of the Exhibition, as it was there that these admirable photographs drew the attention of the thousands of visitors, and gained a world-wide reputation. We have the work for sale, and photographers will find the pictures excellent studies.

MOSAICS FOR 1877.

OUR popular annual is unusually fresh and inviting this year. The articles are pointed, instructive, and some of them really inspiriting with good examples. We print one here from a lady in the far West, which is so bracing with the air of the Sierra Nevadas, as to make one's blood move faster as he reads it. Here is what a woman can do.

How a Woman makes Landscape Photographs.

BY MRS. E. W. WITHINGTON.

FRIEND Mosaics: I have read friend Wilson's invitation "that we write thee a short letter." What can I write about? Others so much better informed scientifically, and more experienced practically, have and will write in those departments of photography in which it would be absurd for me to say aught. When the savants and producers in photography talk, I can but listen. Yet, I would pay thee my respects. Suppose that I tell thee how a woman makes landscape photographs?

Here in the valley, for four months, the temperature is very high, too high for comfort or good photographie work, for several of the midday hours of those months the thermometer coquets with the Centennial number, often getting the better of it from ten to twenty degrees in the shade. When those days come I begin to finish up and dismiss local work, clean 5 x 8 plates, select and arrange my chemicals in compact little packages or small bottles (as the exigency of the case requires), and put by in some convenient place ready for packing when the time draws nigh, in which I may hie me to the mountains.

We have some of the prettiest little lakes, the loveliest valleys, the most picturesque and stupendous mountains, peaks, etc., of the Sierra Nevada range in our county, and what was a few years ago, but was divided off, and now is named Alpine County.

In these counties is the old Emigrant or Carson road, and the people have gratefully immortalized the old pioneer, Kit Carson, by giving his cognomen to some of the grandest, wildest, most peculiar peaks, spurs, etc. Here we have Carson River, Carson Creek, Carson Cañon, Carson Spur, Carson Peak, Carson Valley, Carson City, and Carson Road, and the richest gold and silver mines in the world, excepting, perhaps, one or two, until ours are more fully developed. Now I think of it, I never have heard of a Carson Mine; that must be looked to, and have that so no more.

Well, friend Mosaics Wilson will say, "This is not photography!" Perhaps not; but it is in the suburbs, and, in future years, must be densely photographic.

This year when I started there was a family party of six of us. We camped out just where night overtook us, or the fishing was good. After passing Pine Grove, Antelope Springs, Ham's Station, Tradged Springs, Silver Lake, Carson Spur, First Summit, Kirkwood's, Twin Lakes, Second Summit, Red Lake into Hope Valley (all familiar landmarks to pioneers and overland emigrants), I said good-by to my friends, and travelled as I could, by stage, private conveyance, or fruit-wagons.

On such trips I take enough negative bath to fill the tub twice, or more, a pound and a half of collodion, and about eighty plates.

I have a box just long enough to let my Newell bath-tub fit in one side by having notches cut in the ends to let the ears of the Newell bath-tub rest on, the tub then reaches within half an inch of the bottom of the box, in the bottom of which is a thick layer of cotton-batting to absorb any leakages and break the jolts on contents of box, and some awful ones they get; but I never have had a bottle broken when travelling, but it is death to porcelain dishes. After two trials, I use only iron and wooden developing and fixing trays. My box is about three times as wide as the bath-tub; in the two-thirds space I pack a two-quart bottle of negative bath, a pound bottle of collodion, a

pound bottle of developer (double strength), a pound bottle of fixing bath, a collodion pouring bottle, one of negative varnish, a small vial each of ammonia, nitric and acetic acid, alcoholic pyrogallic intensifier, bichloride of mercury and alcohol, a small package each of iron and hyposulphite of soda, a small fluid or Lucene oil-lamp, and a box of parlor matches. After all are packed, I turn over the top two rubber funnels, one for filtering the silver-bath, the other for filtering more developer, and all is incased in a strong cloth sack with a carpet bottom and a shirrstring in the top; when drawn close around the inverted funnels and tied, all is snug and secure. The box has wooden slats on the sides to lift by, by taking hold of sack and all.

My negative box holds thirty-two 5 x 8 plates, which are albumenized. I prepare about fifty more, and pack by laying out a thick, large sheet of white wrapping-paper. First lay on it a plate incased in a thin blotting-paper twice its size, so there is no danger of its getting misplaced by slipping out, or otherwise, having written on the underside "albumen side," and continue to lay plates albumen side down, and tissue or blotting-paper between. When the number wished is completed they are rolled snugly in the wrapping-paper, and a towel around the whole, then the package fits nicely into my little wooden tray, 6 x 9 inside, for hypo-bath, which again is placed in a common sheet-iron baking-pan of small size, which is used, if necessary, to develop over, and when thoroughly washed out, the negative, after fixing, can be placed in it in an inch or so of water, to let the animated subjects "see how" I and Jane, and Jack, Susan, Katie, and Bob do look. "Ah, how black I am!" "Why, I thought that we would be ever so much larger than that!" not one out of twenty ever looking at the beautiful scenery.

Where were we? The plates are in the tray, the tray in the iron pan, and now the whole are placed on top of the negative box, which, too, has a strong cloth casing, same as the chemical box. The plateholder, with a piece of red blotting-paper in it for back of sensitized plates, is wrapped in the focusing cloth, and my handtowel around

that, and placed at the side of the negative box. If the box is full of plates, and not room for the camel's-hair duster and dipper, they are rolled in tissue paper (of which there is always a supply among the plates in the box), and tucked under the cord that fastens the plate wrappings. When all are in place draw the shirrstring, and tie snug.

The sacks are never removed from the boxes during a trip, being wide enough, that when the shirr is straightened out, the top of sack can be turned down when unpacking and working, and all ready when the boxes are repacked to draw up and tie, and there is plenty of room at the side to tuck in useful things, as this, for instance: there are times when it is too cumbersome to get out the tent and pitch it, etc., and I improvised one by taking a dark, thick dress skirt, that was well fringed by bushes and rocks, sewing two thicknesses of black calico of its width to the bottom, then, when I knew of a view that we were to pass, I would sensitize a plate and by wrapping a wet towel around the plateholder, and over that the focussing cloth, I have carried it three hours. When the exposure has been made, I throw the skirt over the camera, and pin the band close to the camera box. If the sun is bright, and too much light enters, I throw over all a heavy travelling shawl, and with water, lamp, and developer, I slip under cover, develop the view, wash and replace in plateholder until a more convenient time for fixing and varnishing. Even the stage will sometimes stop so long. The water vessel is a common six-quart watering-pot, the sprinkler removed, and the spout supplied with a cork.

I have a good tent (own invention), more properly, dark closet, for landscape work when necessary, but I do not often need it; a bed-room or clothes closet can so easily be converted into a dark closet, and are safer from accidents from wind or dust. I do wish to, but will defer for the present inflicting on you a description of it, as my letter is growing too lengthy. My patrons always know when I am coming, and often take me in their own conveyance to their residences, or where views are to be photographed. At such times I never carry a dark closet, as they always think no place

too good, and against all protestations and fears on my part of accidents from spilled water or chemicals, I have several times been forced to use a parlor, Brussels carpet and all, for chemical room.

The camera, the pet, consists of a pair of Morrison lenses, a Philadelphia box and tripod; on short distances I usually carry these, having the legs doubled up and tied, but, if riding far, and I do not want to use it, I take out the screw, invert the lenses, i. e., turn them into the box, turn up the bed-frame, and wrap up in the skirt-tent and pack away.

Last but not least in usefulness is a strong black-linen cane-handled parasol. If not absolutely necessary for a cane, and more necessary for a shade, I so use it; and then it is at hand if a view must be taken when the sun is too far in front, to shade the lenses with, or to break the wind from the camera; and for climbing mountains or sliding into ravines a true and safe alpenstock.

With this kit I travelled some hundreds of miles last summer, seeking health and negatives of our mountain scenery, mines, quartz mills, etc. For four months before starting I had scarcely spoken above a whisper; after eight weeks, I returned home, speaking as well as ever. See what we can do if we try! Would that more valetudinarians could thus find health and recreation.

My Formulæ—For Collodion.

Ether,					8	ounces.
Alcohol,					8	66
Iodide of	f Amı	moniu	m, Bi	rown,	32	grains.
Iodide o	f Cad	lmium	١, .		32	"
Bromide	of C	admiu	m,		32	6.6
Pyroxyli	n,				80	6.6

For Developer.

To 16 ounces of filtered solution of protosulphate of iron, about 24 grains strong, I add from one-quarter to 1 ounce of alcohol, according to condition of negative bath, and from 1 to 2 ounces of acetic acid, according to temperature. Intensify with pyrogallic and citric acid and silver, if necessary, or with mercury.

The spirit hath moved me to write this, I know not why. It is my earnest wish that it may help some beginner situated as I commenced landscaping, without one of the

craft to speak with, and had to look alone to books for suggestions, in which *Mosaics* and the *Philadelphia Photographer* were my best counsellors.

ANOTHER SECRET OF SUCCESS.

In our August number we made some observations on the importance of care being exercised in every part of the work, and cited the example of a well-known English landscape photographer, who gives his personal attention, as far as possible, to every detail, and, as he says, makes his work a part and parcel of himself. This self-application, this personal oversight of all that is done, we alluded to as "one of the secrets of success." We now have another, and that is Education—Knowledge.

Several years ago there was considerable discussion and some action taken on the question of apprenticeship, but it was one that was difficult to resolve into any practical shape, and for some time past no movement whatever has been made in this direction in this country.

That trained artists are necessary, to give photography a universally high standard, is satisfactorily demonstrated by the fact that the few skilled artists we already have so far excel those who are not trained. But just how they shall be educated is a question which will no doubt be solved by the necessities of the case in due time. Mr. George Cecil Hance writes to one of our English contemporaries an article which we print on another page, entitled "A National Training School of Photography," in which he advocates the establishing of a school which shall be governed by a council of twelve, representing chemistry, art, science, and photography, who shall grant certificates to students and degrees to qualified operators. We have no doubt that such a school, in either England or America or both, would be of immense educational value, and soon raise photography to the same professional standing as painting or sculpture. And there is certainly no enterprise to which government could more consistently lend its aid than this; for to the government skilled photographers are really more of a necessity than to private

individuals, as its increasing demands constantly call for operators, not only in the various departments at the seat of government, but for geological surveys, astronomical expeditions, etc.; and we believe it is only a question of time when such schools will be established and receive the support and patronage of the government. until that time those who desire to become professionals in the art must depend upon their own resources. That many are doing this and rising to honorable positions in the art is most gratifying to notice. "A selfmade man" in any position of eminence is always held in high esteem, and pointed to as an example worthy of imitation. That such men rise is a natural consequence, for it is usually the result of a native talent, or an indomitable will that cannot be kept down. So we say to young men who have a taste for art and desire to become proficient in photography, educate yourselves as far as it is in your power to do so. To those who have a thirst for knowledge there are now ways enough open to enable them to gratify all their studious inclinations. Evening schools are accessible almost everywhere, and books are to be had without limit, except it be in the purse; and any young man who desires to improve himself in general knowledge, or study any particular branch or profession, can accomplish a great deal by simply making good use of his leisure hours. In our country especially, no man is debarred from any position for which he may qualify himself. Qualification is the all-important point, and is sure to secure a good certificate of public opinion, and gain the degree of H. C. (honored citizen), and be accorded a liberal patronage.

In photography we want such men as these; men of talent, men of education; we will not ask how they got it, and men of principle, who make good citizens. Photography is what the men make it who practice it as a profession, and, unfortunately, it has in times past, and is still, in the hands of many who have no ambition to rise or capacity for improvement, and within their circle photography is judged by their level or measured by their standard; while the man who is progressive, educated, and seeks

a high position, usually elevates himself and his profession together. Now this last is what we want to encourage, as in it lies one of the secrets of success. And here we are glad in having an example to which to point young men, and urge them to "go and do likewise.".

The article below is a contribution to Mosaics, and in order to give an illustration of some of the lessons our little annual contains, and serve as a text for these remarks, we copy it here.

We have not the pleasure of a personal acquaintance with Mr. French, nor did we know he was so *infantile* as he professes, but we hope his class will give heed to what he says, and profit, if possible, by the good example he sets them.

TO THE INFANT CLASS. BY C. M. FRENCH.

As I have received a great deal of information and benefit from the Mesaics, I feel called upon to contribute my mite to its pages, however with no small apprehension as to the result. Being young and inexperienced, I naturally turn my attention to those of my class, and if my young readers should feel a slight twinge of mortification at the appellation I have given them, they must remember that I place myself in the same boat with them, and as we all have to start in life as infants, so do we in our chosen profession of photographic art, with the least possible knowledge of the requirements to be exacted from us, and as the photographic art may be considered but in its infancy, we are not only to attain the highest pinnacle of art knowledge before us to-day, but we are to open a new era in our generation that will place our art where none but cultured minds will be capable of handling it with success. We want to see the time when poor pictures will be rejected by the public as unworthy of their attention. Now what must we do to accomplish this? We must study the principles of high art, and every time we make a picture we should endeavor to portray to the best of our ability the amount of art knowledge we possess; and let me say here, possess all you can, study all the art journals you can get, and particularly study good pictures. I never received so much

instruction and benefit from that one source as while at the Centennial. I had never attended a photographic convention, and had no idea of the good they can do. Although I was unable to attend at the time of the meeting, I was greatly benefited by studying the works of our eminent city artists in Photographic Hall; and now I wish to recount a few incidents that may be of benefit to the young and ambitious. I must have commenced very young in my fondness for art, as I can recall to memory the little crowds of children that would collect around me in my school days, and request me to draw a horse or some other quadruped upon their slates, or at intermission, as I would draw upon the blackboard; and later in life I took a few lessons in pencilling, and still later in painting, while at school, but the latter was sadly deficient in art, being confined principally to form and color, light and shade being most indiscriminately jumbled up together.

I commenced my career in the photographic profession by learning the retouching process. After working at it four and a half years I found that my health would no longer endure employment so sedentary, consequently I took to operating, and with only six weeks of practical knowledge, I bought out my employer, and started on my own hook, and in four months from that time I entered the contest for the Promenade prize, of July, 1875, but, of course, with only the expectation of receiving a few pictures to study; but what was my surprise at seeing the December issue of the Philadelphia Photographer illustrated with a specimen of my humble labors. Now, why should I deserve this? I will tell you. All through those four and a half years, while confined practically to retouching, I studied other branches of the art. I procured several back numbers of the Mosaics, and studied them. I also took the Photographer a year before I commenced to operate; so you will see, my young friends, it pays to study, and, with a thorough understanding to begin with in theory, it takes but little practical knowledge to set you a going. Of course there is a great deal in becoming familiar with the varied effects of chemicals, but with a thorough understanding of their

uses, the knack of handling them will soon come to you. I commenced with simple but good formulæ, and have made but little change in them, preferring to work that with which I am familiar until I find something that I think is decidedly better.

I do not write this experience ostentationsly, but in a view of inducing the younger portion of our profession to study as well as work. I once worked for a man who took the *Philadelphia Photographer* regularly every year, but in looking over the back numbers I found many of the books uncut. I don't think that man studied art very much, further than to examine the illustrations.

At some future time I hope to present something more practical and useful.

A NATIONAL TRAINING SCHOOL OF PHOTOGRAPHY.*

I HAVE long been of opinion that photography can neither be looked upon or, rather, recognized in the same way as painting and the fine arts, nor that photographers themselves can hold an even rank in society, in common with painters and sculptors, until such time as there shall be a national training school of photography which will grant certificates to students, and also degrees to qualified operators. I was talking to a photographer some few days ago on the above subject, and while he acknowledged the desirability of such an institution being founded, yet he wished to know who were to constitute the governing body, as it would require men of practical as well as theoretical knowledge to be able to grant degrees and certificates. Now I think that, if all classes of photographers would combine, a council or governing body pro tem. might be easily formed of the following materials; for, as there are many component parts in photography, so ought the council of the school to be formed. I would propose, therefore, twelve gentlemen of the following qualifications: Three wellknown chemists, who, having passed the Apothecaries' Hall, ought to be a sufficient qualification for photographers that they

understand their business: three artists. either painters or sculptors, Royal Academicians; three well-known professors of science, or examiners therein; and three military photographers, officers of the Royal Engineers, etc. (I specially mention the latter, because we believe that, as they have been appointed to such posts by the war office and military authorities, they must know something about photography, and because it would be most desirable that a photographer of some sort or another should be on the council, although it would be best if it were not an ordinary professional photographer, so as to prevent any thoughts of favoritism in granting degrees and certificates).

The school should be founded on a similar plan to the national training schools of art. and a certain fee should be paid by the students, with two yearly sessions, operating, printing, and other rooms, together with all the necessary apparatus, being the property of the school. Chemicals and materials to be used by the student should be paid for, on exactly the same principle that now exists in art schools, where easts, models, easels, and general furniture are supplied, and are the property of the school. Colors, chalks, brushes, pencils, etc., are provided by the students themselves. By this rule being strictly enforced it would prevent at any time commercial business being transacted by the school, for whatever the students spoiled or wasted would be their own property and not that of the council. In a school of art, if a student spoil fifty sheets of drawing-paper or a dozen canvases he is paying for the same, and he is much more likely to use every piece of paper to its best advantage in order to save his own pocket.

Of course there would have to be a head master chosen by the council, with undermasters, to instruct separate divisions, viz., operating, posing and grouping, printing, retouching, etc., and with eminent gentlemen either in the arts and sciences to give lectures on all subjects likely to be of use in connection with photography; there would, of course, be daily lectures by the masters and others for the benefit of the students.

I have no doubt that in course of time

^{*} British Journal of Photography.

government would be induced to look with favor on the school, and a national grant would be yearly given in aid of its funds. With regard to a degree, I would recommend the institution of one such as this-"Fellow of the National School of Photography;" and in order to obtain such a degree a similar ordeal as that passed by the associates and the royal academicians themselves would have to be undergone, so that a photographer, before he could put "F.N.S.P." after his name, must necessarily understand, both practically and theoretically, everything that it is possible at the present time for any one to know in connection with photography. Degrees and certificates would, of course, be entirely distinct, because certificates would only indicate that a young man had passed through the school according to its regulations and to what success he had attained; but degrees would be an after honor and prize.

Depend upon it, this country would never have boasted of so many honored names in art if there had not been such things as A. R.A. and R.A.; and although there is A. R.H.A. and R.H.A. in Ireland, A.R.S.A. and R.S.A. in Scotland, it is the R.A. of old England that is most highly prized. And it is the winning of that that has cheered on so many students, to whom, though unsuccessful one time, it has given renewed courage for a second attempt. And as it is so in painting, etc., why should it not be so in photography? And, again, there might be a yearly exhibition of the works of the students of the school, showing to whom medals and certificates had been awarded.

Having thus endeavored to show how a training school for young photographers might be formed, I will now try to point out the advantages such an institution would produce, and the great disadvantages we are at present under from not being possessed of one:

1. How many photographers are there at the present time that have any knowledge at all of the anatomy of the human form? I believe very few; yet, if the art-education of a painter or a sculptor be not considered efficient unless he can pass a certain rather stiff examination in anatomy, I can

scarcely see why a photographic operator's education should be entirely devoid of it. "But," says some one, "a photographer does not draw in the figure like a painter does; the camera and lens do all that." Very true, my friend; but how is it possible for a photographer to correct any distortion and unseemly wrinkles in a face by the means of retouching when he knows absolutely nothing about the conformation of the face? and if he employ a professional retoucher to do the work how can he know if it be rightly done or not? Again, another says: "But a photographer never makes nude studies like a painter or a sculptor, so that I can see but little benefit arising from being acquainted with anatomy." Stop, my good sir, are you aware that the fashionable portrait painter of the day, if he have been (and he is almost sure to have been) a student of the Royal Academy, has to pass the same examination as the figure painter does? and as a photographer is continually engaged in producing portraits he ought to know something of facial anatomy at the very least, and in a training school this would undoubtedly be taught.

2. "Honor to whom honor is due." My reason for quoting this motto is-that at the present time it frequently happens that a man devoid of any education-either general, photographic, or art, but yet possessed of some money-opens a photographic gallery. The work is executed by persons in his employment, and the proprietor, while reaping all the credit for the excellence of the work produced, styles himself "artist" -" Heaven save the mark!" How can he possibly be one, when he knows but a little, if anything at all, about the business. Such a man's real position, commercially, is about the same as a picture dealer's, but with this distinction, that the latter never arrogates to himself the credit of having produced the different pictures he has for sale, whereas the photographer always, or nearly so, does.

I can cite numerous instances where such a state of things exists, and the sooner they are done away with the better for photography. We must remember that every gentleman who has a photographic studio calls himself an artist and a professional

man; therefore, such being the case, let them conduct themselves as real bona fide ones, and let those who execute the work be rewarded with the honor due unto them. With a national training school we should see an important revolution in this; for, depend upon it, that if there were medals—gold, silver, and bronze—given away yearly to the most successful students belonging to the training school, the photographer who was so fortunate as to become the employer of the gold medallist of the year would not long allow either his brethren or the public to remain in utter ignorance of that fact.

I greatly desire the time to arrive when we should possess a training school for photographers, and I am perfectly certain that there is not a single gentlemen connected with the profession who would ever regret having been one to come forward to assist in a project that would undoubtedly tend to the elevation and advancement of the photographic art, and, as far as my own abilities are concerned, I would gladly volunteer them to aid in the formation of "A National Training School of Photography."

GEORGE CECIL HANCE.

GLASS FOR SKYLIGHTS.

BY THOMAS GAFFIELD.

Mr. Editor: In your kind notice of my article on "Glass for the Studio and Darkroom," you express a desire that I should "elucidate still further the question of glass for skylights."

I should have done this in my late article, but for the reason that my chief object was to correct the erroneous ideas which have so long prevailed in reference to the power of yellow glass to exclude the chemical rays, and which have led to much trouble in the fogging of plates in the dark room.

In procuring glass for skylights, the photographer who would provide against hailstones and accidents should purchase glass of double thickness, or about one-eighth of an inch thick; although the single, of about one-twelfth, will stand all ordinary usage very well.

The second or third quality will answer

as well as the first, as the slight imperfections which they contain will not interfere with the passage of the rays of light. In very bright days, I notice that our artists have sometimes an excess of light, which they shut off by means of curtains or screens. But in a very dark day, when they need all the light they can obtain, it is highly necessary that the glass should not be of a dark color.

When we speak of the color of colorless glass, we mean that which is perceived in looking at a piece through its edge. The color should be of a light green or bluishgreen, and it should be of a quality which shall not be deteriorated in the lapse of years by the moisture of the atmosphere, which sometimes produces rust or stain, and sometimes a disintegration of the surface, which gives all the appearance of ground-glass. This defect is occasioned by the use of an excess of alkali in the composition of the glass, and a hurried and insufficient melting of the materials.

Another defect, occasioned by impurity of materials or an excess of manganese in the composition of the glass, is the liability to change by sunlight exposure to a yellowish or purplish color, thus diminishing its power to transmit the chemical rays.

We are most happy to record that so much has been written concerning these two great defects in glass-making, that they have been almost entirely remedied by glassmakers at home and abroad, who now use little or no manganese in their batch or mixture, and are more careful in the whole detail of composition, melting, flattening, and annealing of sheet glass. Little fear need be felt in purchasing good English or Belgian sheet (known in New York as French, and in Boston as German sheet), from any of our reliable photographic stockdealers, or dealers in glass in New York, Boston, or Philadelphia. As formerly made, the Belgian sheet was of a brownish-yellow color, which the writer's experiments proved to change rapidly under the action of sunlight to a purplish color. That now made is of a light green, or bluish-green color, and I have some specimens exposed to sunlight for several years, which show no change of color, and only a very slight and almost imperceptible darkening of the shade.

I am happy to say that our American manufacturers are striving to reach the standard of foreign makers in the strength and clearness of the glass, and I know it has been nearly or quite equalled by the Berkshire crystal sheet, which is of a light bluish-white, or light greenish color. It was under this glass, as you observed in one of my illustrative prints at Photographic Hall, that the sensitive paper was darkened as much as under the French plate.

I have not spoken of the use of plate or crown glass, as they are never used for skylights. Only in rare instances are they used for negatives, as the plate is very expensive, and the crown is not perfectly flat.

In conclusion, I can say to my photographic friends, that while the foreign makers, and some American ones, furnish glass of as good a quality as at present, you can rely on the statements of stockdealers of whom you purchase your supplies.

I have no doubt that a great source of trouble with some skylights has been, that through a want of cleanliness, the coating of dirt and moisture on the glass has presented as effectual a barrier to the sun's rays as the stain occasioned by rust or the change of color by sunlight.

As blue glass and ground-glass cut off a much larger proportion of the chemical rays than colorless glass, it is not advisable to use them, unless the photographer has so light an apartment that it is necessary to exclude some of these rays, or to soften and diffuse the light because of its discomfort to the eyes of the sitters. But it would be much better to accomplish these objects by means of curtains in bright weather, rather than lose the advantage of colorless glass on a very dark day.

THE MORRISON VIEW LENSES.

WE believe it to be our duty to speak to our readers in the most unqualified terms of the excellency of Mr. Morrison's lenses. During the past year we have had unusual opportunity for watching their work, and for practically understanding their qualifications, in the discharge of a duty which

compelled us to use from fifty to seventy-five pairs of them in our business almost constantly during the time named in the work of the Centennial Photographic Company. Our own testimony in their behalf is supported by the multitude of operators who have helped us in our extensive work with these lenses, who have used them on all sorts of subjects, outdoors and indoors, for plates from 20 x 24 inches, to stereoscopic size.

Not only have these many sizes been used, but lenses of various foci (from the shortest to the longest, needed for the work named) have been tested side by side with the most reputable lenses of foreign manufacture, and in almost every instance, by far the largest majority of instances, the preference has been given to our own American lenses, and to them we cheerfully accredit the highest praise. No doubt our readers are many of them familiar with the work of the Centennial Photographic Company, for it is scattered all over the world by this time, and they can refer to it in support of what we say, and at the same time remember that the "Jury of Award" did not forget to give their testimony, not only to the lenses themselves, by granting for them their highest award, but for the work of the Centennial Photographic Company, which was made entirely with them, and which was given the highest award.

Landscape photographers in search of the very best lenses for their work, would do well to examine into the qualities of the Morrison lenses before they purchase.

Do not understand us to say that Mr. Morrison has struck upon a system in optics which will enable him to meet all the requirements of photography. We believe that there are some problems in lens making which have not yet been solved, but we do not know of any lenses, as a class, that cover more good qualities than those made by Mr. Morrison, and we give to their maker, and to the agents for them, the Scovill Manufacturing Company, this gratuitous offering of praise unsolicited and unexpected by them.

Good materials always pay their cost, while cheap goods are dear at any price.

FRENCH CORRESPONDENCE.

Fhotography a Dangerous Profession—November Meeting of the Photographic Society of France—Lecture by Mons. Janssen—Mons. Davanne on the progress made by Photography in Science and Art—Photomicrographical Proofs by Dr. Fayer—Fatty Ink Proof by Mons Thiel—A Prize of 2000 Francs offered—Violet-colored Glass proposed for the Studio—Novel mode to Clarify a Nitrate of Silver Bath—A Card of Invitation—New Manner to convert Chloride of Silver to the Metallic State—Ammonia a Cure for Corns.

In the last communication that I had the honor to address to the readers of the *Philadelphia Photographer*, I deplored that illhealth prevented me from writing so often as I should wish in that interesting journal. I shall begin to-day by giving a cry of alarm to the profession, and declare that photography is a dangerous trade unless great precautions are taken.

Photography being a new art, those who begun if not ignorant of its dangers were at least indifferent. But at present a cry of alarm must be raised; we have had to mourn the loss of too many who would have rendered great service to our art had they not been cut off in the prime of their lives. Many of the pioneers of photography have passed away too suddenly; the many deaths among the profession, the great number of operators who are suffering from a slow but sure disease, brought on by their trade, make it a duty to inquire into the principal reasons for such a state of things, and call upon the profession to beware, and warn them at the same time of the precipice to which they are approaching ere it be too

The business of the photographer presents many dangers, the more to be feared because they are invisible; the air of the dark-room is too often contaminated with ether, alcohol, acids, bromine and iodine vapors, not to speak of the noxious vapors from the cyanide of potassium, which mixing with the different gases and vapors form dangerous combinations which poison slowly but surely the unhappy being exposed to their influence. The photographer lives in this

poisoned atmosphere without its appearing to have any effect upon his health. I say appearing, but which declares itself after many months, sometimes after many years, by a stomach disease, too happy if a chest disease does not complicate the damage already done.

As I am a sufferer from want of former precautions, I advise all photographers,

1st. Never to put any chemicals in the dark-room that are not absolutely necessary.

2d. Never employ eyanide of potassium. 3d. Spare no expense to ventilate the dark-room and the laboratory.

4th. Never undertake to make nitrate of silver and other chemicals without being completely organized, and the laboratory separated from the other parts of the building.

5th. Never drink spirituous liquors, for too much alcohol has been absorbed during the day's work.

In following these simple rules health and happiness will be secured.

The Photographic Society of France held its monthly meeting on Friday evening last. Mons. Janssen, the celebrated astronomer, gave a very interesting lecture on the value of photography for astronomical observations. He dwelt upon the success which hourly observations of the sun photographically written (at different stations on the earth's surface) would have in the discovery of the small planet which is supposed to revolve between Mercury and the sun. He proposed that many small observatories should be established, in which such observations should take place in a regular, mathematical manner without the need of an astronomer. The photographic revolver could be so established as to give a portrait every hour; to accomplish this dry plates prepared in the same manner should be sent to every station. The person in charge of the instrument would only have to put a dry plate into the photographic revolver every morning, wind up the instrument, and set it going. When all the dry plates have been exposed, they are sent to headquarters to be developed, anything new on the face of the sun would be immediately discovered, and its eclipses, by a planet however small, could hardly escape observation. The position of the planets, so ably described in theory by Mons. Deverrier, would be found sooner or later. "When we consider," said he, "that Venus crosses the sun's disk but twice in a century, it can be seen that it is not an easy task to find the exact moment of the passage of such a small body but by the system I have described. Photography will register in an undeniable manner every change which takes place in the heavenly bodies."

Mons. Davanne called the attention of the members to the forward march of photography in scientific observations. He was so much the more happy to speak of this for a little of the honor which the savants drew upon photography fell upon the Society, who had been for many years unceasing in their exertions to call the attention of those learned bodies to the value of photography for their scientific observations.

Mons. le Docteur Fayer presented some very fine photomicrographical proofs of some of the vital parts of the human body.

Mons. Thiel presented the Society with a collection of fatty ink proofs. It was said that upwards of a thousand proofs would be printed from the same film.

Mons. Davanne informed the members that a prize of 2000 francs was offered by the Société d'Encouragement to any one who could invent a process by which a photographic negative (landscapes, etc.) could be converted into a printing block, to be used with type in ordinary printing, this prize to be awarded in 1880.

A gentleman, whose name slips my memory, informed the Society that the best glass for the photographic studio was not white, but violet. A piece of glass of the last-mentioned color was passed round, together with a specimen of the violet blinds, shades, and hangings employed in his studio. "By the use of violet glass," said he, "I shorten the time of exposure, and my sitter is not inconvenienced in the least. When I employed white glass I discovered that the loss of light from reflection was enormous, not to speak of the loss by absorption; the least tinge of yellow would also cut off a very heavy per cent. of the actinic rays. By employing violet-colored glass these inconveniences are in a great measure diminished."

A few years ago I had the pleasure to receive the visit of Mr. Thomas Gaffield, of Boston, and if I remember rightly, his experiments were directly opposed to the results stated last Friday evening, therefore, if any of the readers of the Philadelphia Photographer desire to make a trial, let them do so with circumspection. I have just found a picture left me by Mr. Gaffield, by which I find that the red cuts off the greatest amount of actinic rays, then follow the orange, green, yellow, violet, and blue, in the order named. For many years photographers have employed blue glass for their studios, hoping thus to obtain more of the chemical rays than with colorless glass, Mr Gaffield was of opinion that this was an error, "that colorless glass was superior, if it could be obtained, for it transmitted easily all the light, heat, and actinic rays, a very small percentage being absorbed or reflected; whereas the blue cuts off a large amount of light and heat, as well as a very sensible proportion of the chemical rays." Now if the blue acts in the manner stated, (taking it for granted that the scale of Mr. Gaffield is correct), then the violet would cut off still more. Mr. Gaffield told me that a newly glazed studio would give rapid results, but that light acted upon some kinds of glass, and gave it a colored tinge, which tinge would be destroyed by rebaking it in the glass furnace; he drew my attention, moreover, to many old windows in Paris, in which the glass had a metallic appearance and a violet tinge, as a proof of his assertions.*

Now, I cannot believe that a gentleman would come before a photographic society, and state that violet glass is better than colorless or blue glass for the sitting-room, if there were not a little truth in the assertion. Whether this gentleman had the misfortune to fall upon white glass having a yellow tint so that 25 per cent. of the chemical rays were cut off, and so when he experimented upon the violet he found a great difference, I am unable to say. The fact is, an error is committed by him, or that iodide and bromide

^{*} See Mr. Gaffield's article on page 364.-ED.

salts are more sensible to violet rays than chloride of silver, with which the experiments of Mr. Gaffield were made. I think it would be well for some competent person to seek the truth, for it interests the whole photographic community.

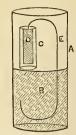
The most rapid manner to clarify a negative bath is as follows:

Place the bath in a porcelain pan and evaporate to dryness, without any crystallization, and then fuse it pretty strongly. Put the quantity of distilled water required into a bottle with a large neck, and pour the silver salt in a fused state slowly into the cold water; a noise will be heard like that of a hot iron which is plunged into water, but no danger need be feared, providing the molten salt is not allowed to run down the sides of the bottle, for in that case the bottle might crack. I find the best way is to give a circular movement to the liquid in the bottle before pouring the fused silver into it. The solution on being filtered will give a perfectly limpid transparent liquid, which can be crystallized nearly to the very last grain.

On arriving in Paris I found a very novel invitation for madame and myself, for a soirée dansant, given by Mons. and Madame Liebert, in honor of the baptism of their son George. The portrait of the fat healthy child was on one side, and the invitation on the other. If the American photographer could introduce that intelligent dodge among the public, it would create very much work for the profession.

To convert chloride of silver into a metallic state, procure a porous earthenware tube, such as is used in galvanic batteries; make a zinc cylinder to enter it, leaving a small space around it; to the zinc cylinder must be soldered a piece of silver wire; the chloride to be converted, is introduced into a large jar, the porous vase is made to stand upon the surface of the chloride, and the silver wire is bent in such a manner that it lies at the bottom of the jar in the middle of the chloride. The jar is then filled with acidulated water, which passing through the pores of the tube attacks the zinc and creates an electrical current; the silver in a pure metallic state deposits itself round the silver wire.

The jar must be kept in a warm place, and not touched until every atom of chloride is



- A. Jar.
- B. Chloride of Silver.
- C. Porous Vase.
- D. Zinc Cylinder.
- E. Silver Wire.

converted. When terminated it is not even necessary to melt the product in a crucible; it can be dissolved in nitric acid and crystallized.

A good receipt is always welcome, especially when it is to give ease and comfort to the afflicted. Those of the profession who suffer from corns will, I have no doubt, be happy to learn that they can easily be destroyed by dipping the wood of a match into liquid ammonia, and touching the eye or centre of the corn two or three times a day. The corn will sooner or later fade away and be gone, to the great satisfaction of the owner.

E. STEBBING, Prof. 3 PLACE BREDA, PARIS,
November 6th, 1876.

SOCIETY GOSSIP.

THE regular meeting of the Boston Photographic Association met at the studio of J. W. Black, Friday evening, November 3d, 1876, at $7\frac{1}{2}$ o'clock, President French in the chair.

In the call for the meeting, it was announced that the Messrs. Lambert (who were in Boston) would be present, and exhibit samples of carbon work made by their processes.

The occasion brought out the photographers of Boston and vicinity to the number of forty. After the opening exercises, a recess was declared in order to give the members present a chance to examine informally the samples brought by Messrs. Lambert, and to hear an explanation of their processes. The photographers were then interested for nearly an hour in examination of the carbon work, and in listening to the explanation by Mr. Lam-



A NEW WORK ON PHOTOGRAPHY AND ART.

ILLUSTRATED with 12 BEAUTIFUL Promenade Photographs.

BY

LYMAN G. BIGELOW,

Author of "Bigelow's Album of Lighting and Posing."

This is a beautifully gotten up work,
and contains full instructions
in every department of
Photography.

Mr. Bigelow is well known as an accomplished artist and excellent teacher, and we are sure his new work will be welcomed by all who are aiming for improvement in the higher technical elements of photography.

Price, \$5.00.

FOR SALE BY

BENERMAN & WILSON,

Photo. Publishers.

116 NORTH SEVENTH ST., PHILADELPHIA.

ANOTHER NEW BOOK.



ILLUSTRATED BY JAMES LANDY.

This book is beautifully gotten up, and contains cabinet size duplicates of Mr. Landy's wonderful pictures, which are attracting so much attention in Photographic Hall.

As studies, they are full of artistic merit. The work will make a valuable addition to any photo-

graphic library.

Price, \$5.00.

FOR SALE BY

BENERMAN & WILSON, Photo. Publishers,
116 North Seventh Street, Philadelphia.

bert of the novel and interesting methods by which it was produced.

To judge by the interest and remarks of those present, it would seem to be the sense of the members that the processes were practical.

The meeting was again called to order at 9 r.m., when Mr. T. R. Burnham wanted to know, if the processes upon further trial should prove both practical and desirable, a right to use them could be bought at any time? to which Mr. Lambert replied, that he should sell to ten photographers in Boston, and to only that number.

The ten to whom he sold could sell as many more licenses in Boston as they choose to, and could charge such prices for it as they saw fit.

It was a cheering sign to note the presence of some of our older members, whom we have missed from our meetings of late, and among them Messrs. Southworth and Loomis, who always help create an interest in the cause of photography wherever they are.

The meeting adjourned at 9.45 P.M.

A. N. HARDY, Secretary.

GERMAN CORRESPONDENCE.

International Exhibition at Paris, 1878—
About Faults in the Carbon Process, and
Prevention of the Same—Collodion Paper
of Obernetter for Lantern Slides and
Transparencies—Photography in Munich
—Is Photography an Art?

THE Philadelphia International Exhibition is scarcely over, and already there are some preparations being made for a new one at Paris in 1878. I can say of it the same that Horatio in "Hamlet" said about the wedding of the queen: " Indeed, my lord, it followed hard upon." We can hardly comprehend what will happen, when International Exhibitions follow so quickly one after another. Progress in such a short period is hardly possible. Honestly speaking, in Philadelphia, for example, I have seen much that is beautiful, very beautiful, but nothing essentially new since the Exhibition at Vienna. Many well-known persons have spoken against sending exhibits

to the Paris International Exhibition; but what does it avail? The medal-thirsty majority is in favor of it. The Frenchmen need only to blow on the decoy-whistle, and all the sparrows in the whole world will flock together and spend millions, in order that Paris may have a fine exhibition. Dr. Lessing has figured out that the Paris Exhibition would cost the German exhibitors twenty millions of dollars. With twenty millions something better could certainly be done. But not considering these questions, the war, perhaps, will spoil the affair, for the same cannot be much longer postponed.

But meanwhile, thank God, we can work ahead in the arts of peace, though the business is dull. Everywhere money is scarce, and even the robbing and killing business, called war, has not yet succeeded, because they have not the means.

In photography the carbon process is monopolizing increased attention, and, as I hear, you are also taking a lively interest in the matter. In hot summer weather there occurred a very disturbing fault in the carbon process, namely, a forming of a granulous or netlike structure in the carbon layer. I observed this fault also in New York at my trials in Kurtz's atelier; it occurs only in very warm weather, and we have searched in vain so far for a radical remedy. But recently it appears the remedy has been discovered. Mr. Riewel, at Vienna, asserts that the fault never occurred when the water, in which the carbon prints before the transfer process had been softened, was mixed with sulphuric acid, one drop per ounce. Unfortunately this is not the season to try it, as in winter the fault does not occur. But I cannot overcome the apprehension that the acid will affect the color. The brown papers mostly contain Vandyck brown in which there is iron and copper oxide that will be easily affected by acid. But the black papers contain pure China ink, on which the acid will have no bad effect.

Sawyer gives another remedy to avoid this fault, at the production of single transfers on glass, by using a gelatin layer in place of the collodion coating to cover the glass. Sawyer describes this interesting process in one of his letters to me as fol-

lows: "At first we have to prepare the following solution: 30 grains of gelatin, soaked some time in 500 cubic centimetres of water (cold), and then dissolved under slight warming. To this solution (continually stirring it) is to be added as much of a solution, composed of 2 grains chrom-alum in 30 cubic centimetres of water, as is necessary to keep the gelatin mixture thick and doughlike. Then we have also to add, with continual stirring, as much iced vinegar, by drops, until the mixture becomes liquid again; it must be kept moderately warm. With this gelatin liquid, using a camel's-hair brush, we then proceed to brush a carefully cleaned glass plate, on which the pigment picture shall be put, all around the margin about one centimetre broad, and let it dry. After that the plate is to be slightly warmed, laid horizontal, and the gelatin solution poured entirely over it, in which case a brush may also be used, when necessary, to divide it regularly. This must be dried again, which will have to be done with the utmost possible care to keep the dust off; also during the further preserving of it. In this manner we may prepare a large number of plates, and keep them ready, for their durability is of an unlimited extent.

"After the sensitized paper is taken out of the copying-frame, the margins of the same are to be bent up a little, so that it forms a kind of bowl or saucer, in which is to be poured thin normal collodion, in the same manner as in pouring over a plate. This paper, which was previously toned, and then collodionized, is to be hung up in a dark place for drying. As soon as this takes place, it is necessary to soften, in the usual manner, this copy in water, and bring it together under water, laver on laver, in the closest contact possible, with a gelatinized glass plate which also has been in water some time, carefully avoiding air-bubbles, dust, etc.

"After that we have to take the plate out of the water, and give both the layers a still better connection, by means of the squegee, and then let it all rest from about five to ten minutes; after that time we may develop in the manner already known by means of warm water, and the result, after a careful observation of these directions, will be an excellent one."

Recently I have been in Munich, and visited my old friend, Obernetter, with whom we can always see something interesting. It is astonishing what he produces in the process of the reproduction of negatives. I have seen plates, 20 inches large, splendidly reproduced by means of that dusting process published by him, which, indeed, under his hands shows astonishing results. Why is it that we so seldom hear from other parties anything about it? Photographers should direct their attention to just such processes. I will admit the dusting process is not a clean one, but the results are fine. Of course, it requires practice; 'we must not despair when we do not succeed right away. Mr. Obernetter showed me also a new kind of collodion paper, the results of which are excellent. It is designed for the production of positive pictures We have to copy the picture, on glass. tone it in a sulphocyanide bath, and fix it in natron; * after which it is to be dipped in hot water. Herein the picture is loosening itself, and now we may put the coating on glass, porcelain, or other plates. Pour over it alcohol of 90 degrees, and it becomes pliable, so that it can be put evenly on bended plates. But in order to make the skin stick on the plate, it is necessary to give the glass a coat of quince-slime beforehand, and let it dry, which produces a layer on which the skin sticks extraordinarily. We must, of course, be careful to avoid air-bubbles, and it will therefore be best to use thoroughly boiled water. Mr. Obernetter is making before my eyes just such positive pictures on glass in a quarter of an hour.

By means of the same process we can again copy a negative from this positive, and that would be another way to reproduce negatives, which could be recommended on bended plates where the dusting process is not applicable, because glass must be pressed on glass, and the plates must, of course, be even.

Obernetter's mind is of a varied and interesting nature, and from him we can al-

^{*} Potassa or native carbonate of soda .- ED.

ways learn something. During the summer he has delivered a series of "Lichtdruck" on objects in the Art Exhibition at Munich, wonderful in itself. Here, perhaps, thousands of plates were made by him, and all multiplied by means of the "Lichtdruck." There is hardly an art periodical or art store in which we do not find "Lichtdruck."

Bruckmann, the well-known proprietor of an extensive reproduction establishment at Munich, has recently enlarged it. He now manufactures pigment prints from oil paintings, and transfers the same on glass by means of the single transfer process. These pictures are sold here in large lots as window pictures. Bruckmann is well established for this purpose, having large cellar rooms, always cool localities, in which the Woodbury and carbon print is executed. We see, although the business is dull, there is always some advancement.

Recently I was importuned by a society of artists about the question if photography is an art or not. The artistic gentlemen, of course, asserted that photography is not an art. Similar assertions were made by the artists in group 29 of the Philadelphia jury, and also by the photographers in America. I was asked for my opinion on this point. I have not answered this question publicly yet; but will do it now, so that it may not look as if I am afraid to give my opinion in this case, which is the following:

If we understand under photography nothing else than the production of sensitive plates, the treatment of the optical apparatus, and after toning, the treatment of the chemicals, then photography is not an art.

But if we understand under the head of photography all the work necessary to produce a beautiful picture, which satisfies artistic demands, then photography is partly an art, so far as we have a right to call the artistical activity of position, lighting, and negative retouch an art. But some artists will now make the objection that the abovementioned artistical activity is executed by many photographers very unartistically; but to those we have to point to the circumstance that there are too many artists who handle the crayon and painter's pencil in a most unartistic manner, and deliver

miserable dauby work of less artistical worth than a (stone) photographer.

Indeed, this definition of photography as an art is only to be applied especially to the photography of portraits and landscapes, and eventually to the artistical reproduction of oil paintings.

In other photographical works the quantum of the required artistical activity either is a trifling one, or so nearly akin to nothing, that they, themselves, make no claim to artistical work, for which reason under this class belong photographs of articles of industry, microscopical prepara-The progress tions, and similar objects. which portrait photography has made during the last ten years depended essentially on the artistic manner of the subject. The technical process remained generally the same; but it must be mentioned, that the artistical activity of the photographer necessary for the production of a beautiful portrait picture, requires more time and trouble than the technic-chemical process.

H. VOGEL.

BERLIN, October 30th, 1876.

CENTENNIAL AWARDS.

THE following awards by the judges have received supplemental approval of the Centennial Commission:

Broadbent & Phillips, Philadelphia, Pa., Photographs; G. W. Pach, New York, N. Y., Photographs; Thomas Gaffield, Boston, Mass., Photographs; C. Paxson & Son, New York, N. Y., Photographs; F. A. Wenderoth, Philadelphia, Pa., Zineographs; C. A. Zimmerman, St. Paul, Minn., Photographs; A. Hesler, Evanston, Ill., Photographs; Allen & Rowell, Boston, Mass., Carbon Photographs; J. R. Osgood & Co., Boston, Mass., Heliotypes; Schreiber & Son, Philadelphia, Pa., Photographs; J. W. Black, Boston, Mass., Photographs; J. Landy, Cincinnati, Ohio, Photographs; American Photo-relief Co., Philadelphia, Pa., Photo-relief Prints; A. Marshall, Boston, Mass., Vitrified Enamel Photographs; W. I. Marshall, Fitchburg, Mass., Photographs; Alman Co., New York, N. Y., Photographs; Josef Ungar, Austria, Vienna, Photographs; John Sharkey, Sydney, New South Wales, Photographs; John Chambers, New Zealand, Photographs; F. Charnaux, Switzerland, Geneva, Photographs; J. Ganz, Zurich, Switzerland, Photographs.

OUR PICTURE.

Something beautiful, practical, and instructive we know our readers want to see in the embellishments of each number of the Philadelphia Photographer. The first we try to secure in all cases, but on the question of beauty there is a great diversity of opinion, which is usually the result of how far a person has learned to see beauty. The second, the practical, is a more general characteristic of all photographs, but depends mainly for this quality upon how much there is in them of the third, viz., instruction. think we have seldom offered a picture that has not had some good lessons in it, and have tried to direct the student to them; but we know there are many who have yet to acquire the faculty of seeing where the points of merit or demerit are.

We take pleasure in presenting our readers this month with a picture that has been executed especially for their instruction; and if they do not find in it the captivating beauty of subject which they anticipate, we trust they may look for the other two qualities we have named.

The edition of "Our Picture" this month comprises seven of the studies in Bigelow's new book, entitled Artistic Photography. They include the cabinet sizes, and are titled as follows:

Plate 1. Cloud Portrait of Lady.

- " 2. Medallion of Lady.
- " 3. Plain-Boy on Velocipede.
- " 6. Gentleman (bust).
- " 7. Lady (three-quarter length).
- " 8. Lady (bust).
- " 9. Lady (three-quarter length).

The negatives of the above seven were printed from for this closing number of our thirteenth volume, and each reader may readily designate which plate he has. Of the two three-quarter lengths of ladies, Plate 9 has a fancy costume with powdered hair.

In getting up these pictures, Mr. Bigelow has not aimed so much at dashing style or stunning effects, which it might be difficult for the average photographer to approach to, but has given us simple unaffected compositions which all may comprehend, and which lead the student on to the more elaborate effects of the Promenades, which comprise the other five plates, some of which have already been published in Mr. Bigelow's prize set.

The lessons intended to be inculcated by this work are fully set forth in the several chapters from which we shall here make a few extracts.

As to the purpose of the book Mr. Bigelow says, in his introductory chapter: "The work is intended to explain, on general principles and by the shortest methods, how the rules of art are applied to photography, and why? It has not been my aim to write a large volume, and thus confuse, but by keeping out everything not of a thoroughly practical character, and strictly pertaining to the subject under consideration, to make its pages as few as possible. And thus, by conciseness and brevity, I hope to reach and benefit the greatest number."

In chapter second he treats of "Artistic Sight" as follows: "It is true that some persons seem to possess naturally the full power to at once select the beautiful and harmonious in nature and art, but such persons will not be able to tell you why this or that line, shade, or curve, is used to make a beautiful whole. Hence I define artistic sight to mean the power a person possesses to point out the beautiful in nature and art, and according to accepted art rules tell why the point of view selected is best, and why the composition in a certain group is pleasing; and so also of all the component parts of pictures, to be able to see in them the meaning and full intention of the artist. There are general and specific principles in art, and the better we comprehend them the more readily do we see the intention of the artist in his picture. Hence, it is like learning a strange language; we must first begin with the sounds of the letters and words before we can communicate in sentences; even the grammatical construction of sentences must be mastered before the delicate shades of

expression and sentiment can be correctly and fully conveyed to others. Thus in art, if we understand and have acquired the faculty of artistic sight, our gratification is immeasurably increased by being able to appreciate what we see, not only as a whole and in general, but by this knowledge read the shades of expression and sentiment we see in works of art."

Chapter third treats of the "Balance of Lines," in which the author gives some excellent instructions on producing lines, and giving a proper support to the figure, and designates it as the "keynote to all artistic work." This chapter is so connected as to render it difficult to extract from it; it must be read as a whole. It is really the most practical chapter in the art department of the work, as it takes the student before an imaginary faulty picture, and points out to him how it may be corrected.

In chapter fourth, on "Chiaroscuro," he explains light and shade, and designates the part they play in composition. We quote:

"Shade must not be confounded with obscurity, which is an entire absence of light, while shade is merely its gradation, all details in shade being still visible by the general diffusion of light. From light to shade there should be a gradual transition. If the middle tints are wanting the lights appear rigid, the shades inky, and the whole effect lifeless and devoid of interest.

"For the gradation of light which produces middle tint there are two causes: first, the objects are more distant from the light; and secondly, also more distant from the spectator. The distribution of light and shade on all objects have two extremes of light, shade, and middle tint. Every object that receives the light reflects upon some near object, and hence the outline of the shadow side of objects is preserved, giving them fine relief, and preserving the harmony by which they relate to other objects in the composition. These reflexes or reflected lights, when judiciously obtained and kept in true relation, are wondrously beautiful in photography, but in the hands of a novice only give hideousness and distortion.

"Too much light destroys unity and simplicity. Where each object in a picture is in a glare of light the eye finds no restingplace, and consequently is soon tired and withdrawn. Place only the main figure in a strong light, and let each figure and object be retired as it were, and take the place only as a support to the central figure or group, preserving and repeating lights here and there as the subject seems to demand, to preserve the unity and harmony of the group as a whole."

Chapter fifth, on "Backgrounds and Accessories," treats of a part of the work in which Mr. Bigelow is a master, as he prepares all his own grounds, and is the inventor of the celebrated revolving graduated background, which has been mainly instrumental in bringing about such a change in the character of that class of pictures known as "bust" and "medallion." In reference to these backgrounds, he says;

" Many artists of repute still hold to the old plain grounds, and too often in such cases use the same one for all sittings in bust portraits, not considering seemingly that every change of light, or in the color of the drapery of the subject, may require a corresponding change in the background to attain the best effect. Besides this, a visitor looking at your specimens perceives a sameness which amounts to insipidity, on account of the want of variety and character in the backgrounds. It is true that many may not know why your pictures are not as attractive as your neighbor's, but rest assured the fact is known, and your trade will suffer accordingly. They are not able to criticize your splendid work, which, though faultless in the way of chemical effect and position, must still, for the reason shown, be wanting in artistic sentiment and fine relief, and consequently inferior as specimens of the photographic art."

On the use of accessories he gives some capital instruction as follows:

"In the use of accessories, aside from backgrounds, use as much as possible the real furniture, for nothing so quickly destroys an artistic picture, at least in sentiment, as to see the conventional posing chairs displayed in it. If they are to be used, keep them covered by the figure or draperies. It is a good plan, when buying furniture for the reception-room, to bear in mind the colors best suited photographically,

that when desired they may be used in either place, studio or reception parlor. The modern position-chairs are constructed more on the plan of the furniture in common use and used judiciously are all right, but, although a photograph is what you make, don't let the mechanical contrivance be seen through it, for if there is any art in your production, people of taste will not stop to find it, but pass by disgusted. The argument generally which leads to the purchase of a position-chair is, that it is susceptible of so many changes; but if you consider the price paid, you will generally find that as many different chairs may be purchased, each complete in itself, as there are changes, and all for the price of the single chair; and these separate styles will generally be found to answer the purpose much better, and you still have the others not at the time in use by the sitter for general purposes. Have enough of different styles and varieties to meet every requirement, even though the reception-room may be short of furniture; remember, the pictures come from the operating-room."

Under composition, chapter sixth, we find these excellent suggestions:

"It is a safe rule, 'never crowd your pictures with accessories,' but see with how few you may complete it, and yet fill all the requirements demanded by the composition you have attempted.

"Still another rule, 'simplicity is the perfection of all compositions.' By this we mean perfect naturalness and unstudied grace. In the effort to obtain this, it is sufficient for our purpose if we attain to the We know how impossible appearance. it is almost, for any person to pose themselves before the camera gracefully and unaffectedly, hence the importance of understanding wherein these elements of beauty exist, and that we should possess the faculty of moulding and directing our sitters to the extent of imitation at least, and contributing by the accessories to still nearer approximating the ideal."

In chapter seventh Mr. Bigelow describes his "studio," and gives a cut of the one he now occupies in Detroit, in which "Our Picture" was made. Following this are chapters eight and nine, which contain his

formulæ complete. These are so similar to those he has given us before that we will not reproduce them here, but refer the reader to the book, where they are so placed in order as to be comprehended at a glance, and will be found perfectly reliable, if the instructions are followed, and good materials used.

Thus we believe we have given a good illustration of this new work, both in its photography and in its letter-press, which have been so combined by one of our best teachers in the art as to be of great help to every student who desires improvement. The extracts we have made touch some of the leading points, in order to show the character of the instruction; but the work should be studied as a whole, pictures and all, in order to receive the full benefit designed by the author.

For further particulars in reference to it, see the colored-leaf advertisement in this and previous numbers.

The prints were made as usual by Mr. Charles W. Hearn at his printing institute.

TABLE TALK.

As we gather around our table this month to chat with our readers about things photographic, some one asks, "How is business?" to which a Chicago photographer answers, "Very dull times in the West; but I think the photographers in Philadelphia must have had a fine harvest during the past six months. I am heartily glad of it; I wish it was double what it was. I am not so selfish but that I like to see others prosper if I do not."

This is a good spirit, but we are not aware that our Philadelphia artists have had an unusually active season. Some of them we believe have been quite busy, but nothing unusual on account of the Centennial. Visitors came here to see the Exhibition, not to get their photographs taken; and if any photographer has had sufficient extra business to pay the additional expenses of entertaining Centennial visitors, and other incidental demands upon his pocket, he has been fortunate.

A GENTLEMAN from Omaha on this question of business, and how to help it along,

says: "To my Patrons is just the thing I have been wanting for a long time. Many of our customers here seem to have not the least thought of what is required to make pictures, or that it takes anything but a little muscle, the same as it would to turn the grindstone."

This matter of having a correct understanding between the photographer and his sitters is a very important one, and greatly facilitates business, and there is probably nothing that tends to this more than the little leaflet above referred to.

MR. LAMBERT'S PROCESSES.

WE have been informed of what we very sincerely believe to be the fact, that an honest journalist should acquaint his readers with all that is good for the prosecution of their vocation, and warn them against all that is bad; and we are quite as sure, without boasting, that if any impartial judge will examine the record of the *Philadelphia Photographer*, he will see that it has never stood neutral when it was sure of the right position to take.

Some time previous to the arrival of Mr. Lambert in this country, we not only received a letter from him announcing his coming, but read of his intention of eoming with a great flourish of trumpets, backed up by testimonials from abroad, with the determination probably to take this country by storm, and sweep thousands from the pockets of the photographers of America into his own pockets, and sail back to Europe, leaving his licensees behind to make out the best they could with what they purchased. In due season Mr. Lambert arrived. He called upon us several times, and was purposely avoided by us, for we well knew what his errand was. We knew that we could not conscientiously aceede to his requests, and we were too busy to discuss the matter with him.

We took this determined action because we had no faith in the claims made for any process, based upon the carbon process, for we sincerely believe that in this climate, during the great portion of the year, such processes cannot be practically, economically, or advantageously worked.

For this reason we believe it to be wrong for us to give him any support whatever, or assistance in bringing his inventions before the public.

During our absence from our office, and pending the arrangement which he hoped to make with us, and which he offered us in writing, namely, the agency for the sale of his materials and processes (which writing we can show to all who may feel anxious to see it), he called at our office of publication, and left an advertisement for our July number with one of our assistants, which was accepted and paid for, and which was printed without our knowledge. The only thing we could do then was to neutralize it as much as possible by the editorial announcement, which was made in the same number.

Finding, therefore, so far as we know, that we were impregnable, Mr. Lambert proceeded to New York, and made arrangements with Messrs. Anthony & Co. to take the agency offered us, and for any amount of advertising which he chose to have in the Bulletin, in witness of which please to examine the pages of the Bulletin and its advertising sheets, and see the extraordinary monopoly which Mr. Lambert seems to have over the whole publication.

Disappointed and chagrined, he proceeded to make his agencies over the country, and scatters large and flaming circulars, on which he exhibits a woodcut of the extensive buildings of the Autotype Company at Ealing Dean, England (which we have had the pleasure of visiting), which is called in this circular the "manufactory of special materials for the Lambert patent processes," and in one small portion of which the aforesaid special materials are actually made.

Among the agents which Mr. Lambert employs is one M. C. Dwight, of Milwaukee, Wisconsin, who announces himself as sole proprietor and agent for the patents for sundry States, and under date of September 12th, 1876, the aforesaid agent, Mr. Dwight, writes to one of our correspondents, whose name does not appear on his letter, but whose name we have, as follows:

"DEAR SIR: Your letter to Mr. Lambert was of course forwarded to me for answer, as he has nothing to say. You know that I

have purchased your State among others, and with me all bargains will have to be made. Your reference to Wilson is easily explained; he applied to Lambert for the agency for the United States to sell all material; I did not consider him as a financially responsible man and refused, giving it to Anthony. Wilson hates Anthony, and it enraged him; but a sufficient comment lies in the fact that Mr. Wilson's partner, Mr. Carbutt, has in the last month applied for the exclusive right for Philadelphia, not sale but use, and offered to pay whatever Lambert might ask. Our only terms are cash in advance, and there is no reason why we should make an exception in your case; we are in no hurry. The longer it is put off the more it will cost you. It is for every size; it is on paper; it is so simple that I can train any fifteenyear old boy of average intellect, within a week, to beat the best printer by the silver process. Mr. L. is in Chicago now, will be there for two weeks, then goes to Cincinnati, and will not be likely to go further West. If you wish to see specimens send the price for them; if you wish to see a sick lot of photographers, you will find them among those who were asleep until some wide-awake competitor bought the right over their heads.

"Yours truly,
"M. C. DWIGHT,"

Now, in reference to the above we have to state, that we never applied to Mr. Lambert by letter or otherwise for any agency; on the contrary, when he called at our office repeatedly, we were too busy to see him, and did not see him. As to Mr. Carbutt we have shown him this letter, and he emphatically denies the statement made as to him. Moreover, Mr. Carbutt is not our partner; and, again, we have too good an opinion of his good sense to believe that he would make any such wild offer, as stated here by Mr. Dwight.

In another letter, dated September 15th, Mr. Dwight recommends our correspondent to a more careful reading and digestion of the testimonials in Anthony's Bulletin. He then wishes our correspondent to say what his decision is, and expresses his indifference as to whether he purchases or not, no

doubt feeling already rich in possession of his agency. Our correspondent states that he sent money for a specimen, and in return received a small box containing nothing; he again sent money but has as yet received nothing.

Now, further, let us ask, or rather as Mr. Lambert seems to like the word, challenge any photographer who has purchased these processes, and who is willing to say that it is better than the silver process, to compete for a prize gold medal, worth \$100 in gold, which we offer for the best prints in sufficient number for the illustratration of our magazine, made by the Lambert process. In addition to this let us ask a few plain questions.

First. Will those who have bought the Lambert process give us their honest experience, good or bad, not evasively; but if they have made good prints, let us know how many failures were made before the said good prints were obtained?

Second. Is there a single photographer in America or Europe who has purchased the Lambert processes, who has abandoned silver printing because of the superior excellency of the said processes?

Third. Is it right for the publisher of a photographic magazine, or one that pretends to be such, to lock up a process which it claims to be so good and useful, and so advantageous to the photographic fraternity as the Lambert processes are said to be in its pages, and prevent its own subscribers from obtaining the advantages of said process, first by charging them a license fee to use it, and second, by preventing any one else but licensees from obtaining even enough of the special materials which are claimed to be necessary for the trial of the process?

Again, we ask the question, is this right; and can the magazine or the publisher of such expect patronage from the photographic fraternity under said circumstances?

Now, we may have erred in being so slow to say this much with reference to this matter. We have no desire to interfere with the private business or rights of anybody, and we disclaim any such purpose in the present writing, but as a journalist

we should not consider ourselves enterprising, unless we kept our readers posted on what is to their advantage, and it is better to go slow than to go recklessly. Hence our delay in bringing before them what has preceded and what follows. We do not claim that we are going to give our readers all that Mr. Lambert can give them by actual demonstration, but we have made up our mind to publish and give-them all that it is in our power to give them, and what is wanting they can by experiment and effort on their own behalf make up. This month we give, so far as we can now print, the details of the Lambert processes as supplied and sold to licensees, as follows:

"LAMBERT'S PROCESSES."

LAMBERTYPE,

Print by contact, from the negative you wish to enlarge, on the red Lambertype paper. The exposure will be about double that of chromotypes, and the developing longer.

When this red transparency is dry put it in the camera as explained, enlarging by the usual processes. Collodionize a large plate (ordinary glass), always on the convex side. Use your ordinary collodion, to which you have added half the quantity of very old powdery collodion (slow but good).

Sensitize in a silver bath, thirty-two grains to one ounce of water. Fix in hyposulphite of soda, one ounce to three ounces of water. Do not intensify your negatives—a weak one preferred.

To soften a portrait use a diaphragm during only half the exposure. Over-expose rather than under-expose.

Develop with

Amm. Sulph.	Iroı	n, .		$\frac{1}{2}$	ounce.
Pure Sulphate	of	Coppe	r, .	1/4	16
Water, .				15	6.6
Acetic Acid,				14	
Alcohol, .				$1\frac{1}{2}$	4.6

When this negative is dry, gum its edges, and stretch on each side of it a sheet of mineral paper previously placed between damp blotting-paper. Any crease in this paper will give marks in the print, and if wet it will get stained.

Intensify with leather stumps and powder No. 1, on the back of negative, and spot and make details on the front of negative with pencils or paper stumps, and the same powder.

To change backgrounds, do as explained.

Should you wish to have the same background without its defects, instead of placing the land-scape or interior negative between the negative and tissue, place a plain clean glass.

CHROMOTYPE.

Sensitize the purple chromotype tissue in a solution of bichromate of potash, half an ounce to fifteen ounces of water, with five drops of ammonia to the pint; but in hot weather use a weaker solution and less ammonia. In very hot days put ice in or under your bath, and dry the tissue in a cold draught; and as soon as dry enough not to be tacky, roll the tissue and put it in a tin box. Sensitize for two minutes in summer and three minutes in winter. Use the Lambert photometer to print portraits and transparencies, and the actinometer to print the borders.

We find, on visiting our licensees' studios, that there are here a great variety of bichromate of potash, all having different strength. With the majority of them $1\frac{1}{2}$ to 2 ounces B. P., to 100 ounces of water works the best. We advise you to try different baths of different strength with the bichromate of potash you use, and adopt the best adapted to your negatives. Too strong a bath will give you reticulations, whilst a bath too weak will give you no half tones. A strong bath is better adapted for strong negatives, and a weak bath is preferable to print from weak negatives.

If your tissue is too soluble, thus losing half tones in development, which is too rapid, sensitize a few days before using, keeping the tissue in tin box. The more ammonia you put in your sensitizing bath the quicker the printing, but slower the development. If the tissue is dried too quick, it is more soluble; if dried too slow, it is more insoluble. We advise you to heat your room where you dry the tissue, if it is either damp or cold; a current of air is very good to dry the tissue.

Prepare your opal or plain glass by rubbing on it a solution of five grains of wax to the ounce of benzole; then take off the excess by rubbing with flannel, and polish with a clean flannel. Collodionize with collodion (ether six ounces, alcohol six ounces, and one drachm of pyroxyline). As soon as evaporated immerse in water until the water runs evenly on it. These plates can be kept in water any length of time.

Place the pieces of tissue, after immersion in cold water, on the plates thus prepared; after throwing a little water on, cover with the Indiarubber cloth, squeegee, and put under pressure between blotting-paper for about ten minutes.

Squeegee smoothly at first, then heavily, taking care not to stop or begin on the print.

Develop in a flat dish. When you see the powder dissolving on the edges, pull the paper off, taking care not to tcuch the collodion; then put in a perpendicular grooved bath, at a temperature of from 85° to 100° Fahr. It is advisable, after development, to immerse in alum water (water two quarts, alum a handful) to render the gelatin insoluble.

Wash, dry, and then spread on the transfer paper previously soaked in warm water. While yet damp mount on eardboard with starch paste, and as soon as dry pull off from the glass and cut them ready to deliver. We do not recommend this method of mounting, unless a very bright gloss is required.

The best way to mount the prints is to lift them up from the glass, when dry, under water. Cut them, and mount with starch as for silver prints; then burnish. This is the easiest way, and gives a finer gloss.

Albumenize (as for negatives) instead of waxing your plates for transparencies, then collodionize; the prints will stick better to the glass.

The new chromotype tissue is now so perfected that you can use it for transparencies contretypes, so that any kind of tissue will do all kinds of work, thus making it more economical by \$1 a roll, and handier to work.

CONTRETYPE.

To make contretypes, reinforce the red transparency in a solution of permanganate of potash, after development, while the transparency is yet wet. If the transparency is either dry or greasy, immerse it in a solution of ammonia one drop, sugar twenty grains, and water one pint, before applying the permanganate solution, so as to swell the gelatin and take off the greasiness. Rub the permanganate solution well on the transparency with your fingers so as to make it flow evenly on the whole surface. To make small contretypes, expose the chromotype tissue under the reinforced transparency. The red Lambertype tissue being very thick would give prints out of focus in small negatives; but for large negatives the red Lambertype paper is preferable. The best way to make a contretype is to make the transparency by the silver process; then make from it the contretype with the chromotype or purple tissue.

SELF-REGISTRATION.

Take care that the pieces of tissue always touch the top and left side borders of presses and tinters, and mark the top of them. You may regulate the thickness of line or change its side by placing little pieces of cardboard in the tinters.

Make flexible negatives of marble, leather, paper or other designs to be put in the tinter to print from.

If you wish to make designs or print your own tinters, use a sheet of gelatin. Collodionize it on both sides, holding it on a glass. When dry, have any design lithographed to put on your tinting press.

A FEW HINTS.

You color the prints, if desired, while yet on glass, before the transfer paper has been applied, by making a simple wash with ALBUMEN COLORS. You can also intensify the shadows, etc., with stump and powder No. 2. The carmine must be always kept in solution; for if you apply it from the cardboard you receive it on, it will produce little red spots when you collodionize. The albumen colors are harmless.

The albumen colors must be employed very thin and sparingly. Never put one color near another one not yet dry, for the two will mix into one.

The purple tissue must be used for chromotypes and copied negatives. The red tissue may be used for transparencies and positives. Do not float, but immerse, the tissue in the sensitizing bath from two to three minutes. As soon as you see the edges of the tissue turn up, it is well sensitized.

Pass a very fine sponge on the face of the tissue so as to prevent air-bubbles, and rub off the whitish powder of paper, usually adhering to it.

When the paper is hard and rolled, roll it from one end to the other, under the solution, and vice versa, so that the solution touches every part of the tissue, until it gets flat. Never touch sensitized paper when dry, or it will produce stains; never touch, neither, the face of any unsensitized tissue when dry.

Never use the same sensitizing solution over two or three times. The TISSUE when wet is not sensitive, so fear no light. Dry your tissue, if possible, in a room not too warm and not too damp, as it must not be damp or horny when used. A room where there is no draught is the best adapted to dry the paper. The drier the paper, the less sensitive. The damper, the more sensitive; but when wet, it is not sensitive at all.

Only sensitize the paper a few days before used, as after a time sensitized paper is neither quite so soluble nor so sensitive, and requires a little longer exposure and development, in hot and dry days; but in winter and damp weather it is the contrary, the paper becoming more sensitive on

account of the dampness of the air, but in winter you can use paper one week to twelve days old.

Place a glass rod on the front edge of the sensitizing dish, over which draw the surface and back of the tissue upon removal from the liquid, to take off all excesses and have an evener surface.

Always use pure yellow beeswax, not the prepared white kind sold by chemists.

We advise you to buy the waxing solution already made from Messrs. Anthony, as it is sometimes difficult to get good wax and pure benzole.

After coating your plate, rub repeatedly, first on the length, then on the breadth of the glass, with a tuft of PAPIER JOSEPH (better from being used a few times; other substances, in absorbing the wax, will make the prints stick to the glass) until the benzole is completely evaporated, which you will perceive by feeling a resistance. No other pressure than the weight of the arm must be used with the PAPIER JOSEPH, which can be used indefinitely. Then take off the excess of wax by rubbing heavily with a piece of flannel (which you can use indefinitely), and then polish with a clean piece of flannel which you keep for that purpose. If the plate is properly waxed it will have, by reflection, a veiled appearance, and if rubbed with the finger will give a resistance and a grating noise. In very hot days do not rub too hard with flannel, as the wax, being soft, might come off.

Should the operation not be done properly you will meet with the following accidents:

The print will not adhere to the glass if the excess of wax has not properly been taken off with flannel; the print will stick to the glass, if not enough wax has been put on it, or if too much has been rubbed off.

After collodionizing the glasses (any good plain collodion will do), let them dry for about three minutes; then put them in cold water until there are no greasy lines seen on them. In cold weather, do not use the water too cold, as the film would have a tendency to peel off.

Always use faultless glass, and in preference pot-metal opal glass. Roughen the edges of these glasses or the collodion might slip off from them in the washing. If you use common glass instead of opal the collodion film might slip from the plate when placed in water, unless the edges have been well roughened.

In developing don't pull the tissue too hard, and not up, but down, or let it come off by itself in the vertical trough. A glass which has already been used once in the process, must not be washed or cleaned again; simply scrape the collodion from the edges, then wax, etc.

It is advisable to put the glass, after laying on it the pieces of tissue, under pressure for about a quarter of an hour previous to development. Should your prints when finished have little glossy spots, it is a proof you have put your transfer paper in water too hot or too cold, or have kept it for too short or too long a time in the warm water; you must use water just warm enough and leave the paper in just long enough to feel slimy. You can avoid all these glossy spots by immersing the transfer paper in a very warm weak solution of white gelatin filtered, previous to applying on the glass. All these glossy spots are caused by non-adherence of transfer paper on film.

If you wish a matt surface develop on the ground side of plate. If you wish the albumen paper gloss mount the prints as usual and roll them.

Always develop a little more than apparently required. Never develop too quickly, as if you use water too hot the film will take a wrinkled appearance, as of myriads of little broken lines.

After fixing with alum, to harden the film, wash well.

Never use a glass to develop on unless its edges have been well roughened on grindstone, or it will cut the collodion, which will run off in developing.

If you leave the pieces of tissue too long in the water before applying to the glass to develop, they will curl up and may not stick to the glass.

If you put the collodionized glass in the water before it is well set, the collodion might leave the plate after and form spots. Better leave your collodionized plate in the water too long than too short a time.

Nover hurry the drying of the prints after development, for the film will then break and fly off. Before placing the pieces of tissue on the glass for development place them in cold water until they get flat, and always throw a little water on the glass before applying them on it. Apply the pieces of tissue on the glass by placing, at first, the lower end on the glass and lowering the top end gradually so as to drive away all air-bubbles. If the tissue is properly placed it will move easily on the glass. If not properly placed you can repeat the operation.

Thin your collodion if too thick to collodionize your glasses, to develop on, with half ether and half alcohol.

As soon as the pieces of tissue touch the water they lose their sensitiveness, so you can develop in full light. Never use a jet of hot water to reduce a print, as often done, because you destroy half-tones (unless the print is too much exposed and you have not time to print another). It is advisable to use the water not too hot to begin with and to heat it gradually.

Never use zinc to develop on; ground-glass is preferable, as it gives more softness and halftones.

Never print in the sun; if so, print until the photometer shows a quarter more exposure than would be required in diffused light.

Always cut the pieces of tissue a little smaller than the negative you wish to print from.

Over-exposure gives pictures too dark; underexposure gives prints too light.

Should you not have light enough to quite finish the exposures, develop the next day, as there is continuation of insolubility even in darkness.

On small direct negatives put the mineral paper only on the back to reintensify, and produce effects with Powder 1, and do not use too thick glass.

Try one of your ordinary negatives to see at what number of the photometer it gives the best results; then use it to compare the relative density of your other negatives. It is advisable, before printing enlargements, to try some remnants of tissue on the face, so as to test the real value of the negative, which you can reintensify with stump and powder on reverse.

In damp weather the tissue is more sensitive, so expose less.

A vigorous negative will, with the same tissue, produce a warmer tone than a weak one.

Put the transfer paper in very clean water, warm enough to make it slimy and sticky, or there will be no adherence, which would produce innumerable very small air-bubbles. After the application of the transfer paper, you may dry by heat or by the sun. Never transfer before the prints are completely dried. The transfer paper must always be cut a little smaller than the glass it is to be applied to. If your water is either too hot or too cold, there will be glossy spots on your prints.

A few drops of ammonia in the warm vats in which to immerse your transfer paper, will prevent the glossy spots on prints, which are caused by non-adherence; the ammonia renders the gelatin more soluble.

After floating the transfer paper on the warm water, and rubbing the face of it with a fine sponge, to take off air-bubbles, dust, etc., apply it on the glass as explained for the pieces of tissue. Touch the water also with the glass (provisional support), face downwards, before applying the transfer paper on it.

If you do not mind a reversed picture, float some albumenized paper on a bath of methylated alcohol two ounces, water one ounce, avoiding air-bubbles. You can use that paper which can be prepared months in advance, to develop on, thus avoiding double transfer.

If the film has a tendency to peel off in drying, before transferring, you can avoid it by rubbing off the wax from the edges of the glass (before collodionizing) with a cloth and a little alcohol. When the transferred print is dry cut the edges off and pull it away.

For full enamelled prints which you wish to mount on cardboard, rub the wax off from the edges of the glass so that the cardboard sticks well on it. Use the cardboard a little damp by placing it between damp sheets of blotting-paper.

If you mount your prints, as you do your silver prints, you can get a beautiful enamel by burnishing the prints with a warm burnisher, rubbing them previously with soap and alcohol.

If prints get dirty you can repolish them by rubbing them well with the following solution: Essence of lavender one drachm, spirits of lavender five drachms, and wax from one to two drachms.

If you wish to mount your prints full gloss, this is the best way. When the transfer paper on prints is about half dry, apply with starch or paste, a thin cardboard, previously placed between damp blotting-paper; when very dry, pull it off from the glass, cut the prints, put glue on the four borders, and mount on your own cards, taking care not to wet the face of the prints. The longer the prints are left on the glass, the finer will be the gloss.

In commercial work, when the transfer paper put on prints is quite dry, put it in water for a few moments, pull off then from the glass, and mount the same as for silver prints.

If you wish to mount full gloss prints on VERY THICK cardboard, do as follows: Rub starch-paste on both the transfer paper and cardboard, and stick them together while yet on the glass; then put under pressure for half an hour and let dry.

Wax your ground-glass as follows: Coat with waxing solution, rub once or twice only with PAPIER JOSEPH, then polish well immediately with flannel. Mount them as you would an albumen print on your usual cards; spot, roll, and encausticate them.

Develop on ground-glass, waxed and collodionized. Mount, while yet on glass, as for full enamel prints.

Use the red Lambertype paper for transparen-

cies and positives. Print one-half more than for chromotypes, and develop on clean lightly-waxed glass, collodionizing not being absolutely necessary. The chromotype tissue does as well.

Use RED OCHRE dissolved in sweet olive oil, and thick enough to make opaque lines, and stop the light.

If you wish to have whites as pure as on porcelain, add a little blue anilin color (Judson's dyes) to your enamelling collodion. You may obtain rose tints by adding rose color, etc.

Always border your negatives or transparencies before printing from them; for if not bordered with black paper, as taught in demonstrations, the film printed from either of them might wash off during the development, or the edges or other parts of the film might curl, crack, or peel off.

You might lose half-tones in high-lights if you use old sensitized paper, or a sensitizing bath too old, or used to sensitize too much paper.

For transparencies to make contretypes, wax and collodionize; it makes it easier.

The gelatin of the tissue will melt and make streaks if your sensitizing bath be not cool enough, or if you touch it with warm hands.

One of our licensees says he prefers the BENZOLINE to the BENZOLE (it is very much cheaper) in the waxing solution; but we prefer benzole.

Always use CLEAN water to put your glasses in after collodionizing.

For prints developed on ground-glass, without collodion, you can obtain the double albumen paper gloss by rolling with a hot press and ENCAUSTICATING the prints while yet warm.

A full enamelled print will be about one-third stronger when dry than while yet on the glass.

Always use the coarser mineral paper on the back, and the finer one on the face, of the negative, if you have both, after placing them a few seconds between damped blotting-paper. Powder No. 1 is to be applied on the negatives only. Powder No. 2 is to be applied with stumps on the print, to produce more density, while yet on the glass before transferring.

If you wish to color a finished chromotype rub its surface with alcohol previously.

If you have to retouch a white spot on the light parts of the print when yet on the glass, do so with India-ink, to which add other colors to get the tone desired, and spot as you would an albumen print, then take a little collodion on your brush and let a drop fall over the retouching to imprison it, and when dry, transfer.

Do not forget to breathe on film before applying Powder No. 2 to strengthen the shadows, or

the powder will go off in transferring. You must never touch a print on glass unless perfectly dry.

Breathe on the print, when on the glass, before applying Powder No. 2. It will take better on it to retouch or give intensity, and will not then wash off when applying the transfer paper.

To retouch on tissue while yet on glass use a very soft pencil, wetting the point of it often. It will stand water.

If there is any wrinkling or reticulation on the prints or transparencies it is caused by the paper being dried in a room which is too hot.

If you wish more contrast in a negative only intensify the opaque parts. If you wish less contrast only intensify the transparent parts of the negative, always with Powder No. 1, and stumps.

Should the print stick to the glass, by bad waxing, you may save the print or clean your glass by putting it to soak in water. If the print comes out entire you can mount it like an albumen print.

Develop chromotypes or transparencies on collodionized sheets of mica, placing them on a glass so that they may be easily manipulated. They are very nice for lamp shades, fire guards, etc.

Pass in a solution of water, ten pounds; gelatin, one pound; glycerin, five ounces; chrome alum, two and a half drachms; melt all these together by heat. For making transfer paper use the same, to which add white pigment two ounces, and give a bluish tint by adding a little anilin color.

Take a sheet of gelatin and apply to your negative under water; then let dry. When dry collodionize it and lift it up from the glass with the point of a penknife, which you insert between the glass and negative film.

Sensitize sheets of albumen paper in a solution of silver, one ounce; citric acid, eighty grains; water, nine ounces. Sensitize for two minutes; let dry and put in a dark place. It will keep.

If you wish to reintensify transparencies a black-blue tone, use:

Solution No. 1.—Warm Water, . . 4 picts. 'Gallie Acid, . . . 60 grammes.

Solution No. 2.—Sulphate of Iron, . . 40 "
Acetic Acid, . . . 40 "
Water, 2 pints.

Mix in small quantities and use to reinforce either negatives or positives.

In copies or enlargements use the mineral paper on both sides of the negative. For direct negatives, put the mineral paper on the reverse side only.

You can tone window transparencies any color with anilin colors. You can also color them with albumen colors.

All materials can be had of the Messrs. Anthony, 591 Broadway, New York. Letters of inquiry must be addressed M. Lambert, care Messrs. Anthony & Co.

The flexible supports sent you with materials are only used to develop on, the same as you do on glass, when you want to transfer on crooked or irregular surfaces like cups, lamps, shades, etc., or on porcelains. To get the print in its natural position, put the pieces of tissue on the flexible support, placed on a glass to keep it level, squeegee, press and develop, and when dry apply under water on surfaces previously passed in a solution of water, ten pounds; gelatin, one pound; glycerin, five ounces; and chrome alum two and a half drachms, all melted together by heat; when dry, rub the back of the flexible support with benzole, and pull it off carefully; it will leave the prints on the surface you applied on. If you wish to color a mounted print, you must rub a little alcohol on its face to take off the wax before, then you can use any kind of

With a solar camera you can enlarge from the red transparency on a large piece of tissue, which when developed produces a large negative; cover it with mineral paper to retouch on. For finding time of exposure, expose at first on a small piece, putting phonometer in same light, then develop and you can judge of the real time of exposure without solar camera; make a large negative from the small transparency by transmitted light, by the usual processes. Using a dark-room, as large camera, putting large sensitized glass on a chair, after taking focus on a glass, same size, covered with white paper.

To change backgrounds, remember that if you print the background first, you must cut the mask about one line inside of the pencil line on your negative, then put the red just inside of the pencil line so you can see it, then put the other glass over on which you put the red, so as to cover the mask and let the red line of the first glass be seen under. To print the portrait, do the reverse, recut the mask about one line outside pencil line, put the red outside of pencil line covering it, put mask and other glass, then put the red line to cover mask and to let the red line under it be seen. See that both the glasses, tissue, negative, and background negative always touch the top and left corner of printingframe; of course you must have seen the demonstration to understand this.

Should you wish a plain or other fancy back-

ground from a negative having already a fancy background, of course you could not leave the negative in the printing frame to print another background through. In this case take a glass the very same size as your negative, place a sheet of mineral paper on it and holding it on your negative (always top and left corner quite level), trace on the mineral paper or plain glass the outline of the portrait of negative.

To print the background take off the negative and place in its stead the glass covered with mineral paper having the outline of portrait, then do as explained above. Never forget to put a mark on top of tissue so as not to replace it upside down.

LAMBERT.

Of course the above will need explanation in some respects in another paper, and this we propose to give in our next number, with a synopsis of all the patents of Mr. Lambert, and such instructions as we think will be further necessary to an intelligent working of the process, so that our readers who desire to experiment can do so if they wish, and can also see wherein they infringe, if they do at all, upon Mr. Lambert's rights. This must be a matter upon which they must decide for themselves.

AGREEMENT.—LAMBERT'S PATENTED PROCESSES.

No. — \$—— day of —, one thousand eight hundred and seventy —, in — between Claude Leon Lambert and Theodore Sarony Lambert, and Mr. —, hereinafter called the said licensee,

Witnesseth, letters-patent of the United States of North America for photographic improvements were duly granted, the first being to Joseph Wilson Swan, No. 61,368, dated January 22d, 1867; the second granted to Claude L. Lambert, No. 153,577, dated July 28th, 1874; the third granted to said Lambert, No. 171,392, dated December 21st, 1875, and the fourth granted to said Lambert, No. 173,546, dated February 15th, 1876, and whereas the said Swan has appointed the said Lamberts his sole agents and representatives by legal contract witnessed and signed by the American consul of Newcastle-on-Tyne, England. All these patents have been granted for the term of seventeen years.

The said licensee, recognizing the novelties of the effects obtained by the Lambert patented processes and the numerous advantages offered by either of them, and wishing to secure the right to use them in his own establishment, the following conditions have been mutually agreed to:

Art. 1. The said Lamberts, in consideration of the sum of - dollars, by the said licensee paid previously to the execution hereof, and of the covenants and agreements on the part of the licensee hereafter contained, gives and grants unto the said licensee, his executors, administrators or assigns for the term of years of the patents unexpired, the --- right, power, and authority, either personally by --- partners, agents, servants, and workmen under --directions, from time to time and at all times during the continuance of the said patents, to use, exercise, and apply the patented inventions and improvements as specified in above recited letters-patent, and to publish and vend articles so produced in , but at no other place, without the license and consent in writing of the said Lamberts, their successors or assigns.

Art. 2. The said licensee shall not use the said invention for works or productions for photographers not having a license from the said Lamberts. The said licensee will never deliver any pictures made by the Lambert processes, unless bearing either on print or mount the words "Lambertype Patent" or "Chromotype Patent." The said licensee will neither give, sell or lend to non-licensees any of the special materials furnished him to work said inventions. The said licensee will not use the abovenamed patents in other localities than those specified in this license. If the said licensee should knowingly or wilfully make default in the performance and observance of any of the covenants hereinbefore contained on --- part, then and in such case the said license and the authority hereby granted, and all the privileges, powers, and rights of the said licensee under the same shall cease and determine, and be utterly void, and the money paid forfeited, without prejudice to any right of action which may have occurred to the said Lamberts, their successors

or assigns, by means of breach of any of the said covenants hereinbefore contained.

Art. 3. The said licensee has a right to full practical demonstrations, to all special materials; and the said Lamberts will keep a correspondence office to answer all inquiries from the said licensee regarding the working of the said patented processes.

Art. 4. The said licensee may transfer the present license by indorsing it, and notifying the said Lamberts of the name of the party it is transferred to; but it can only be transferred to be used in the locality it has originally been granted for.

Art. 5. The said licensee shall, during the term of the said letters-patent, protect and support the said patents and prevent infringements upon the same by giving written notice to the said Lamberts, their successors or assigns, of any infringement thereof by other persons, immediately on such infringement coming to — knowledge, so as to enable the said Lamberts to prosecute for all such infractions.

Having read, understood and approved one and all of the clauses herein contained, we append our signatures before a witness.

Licensee -

- Witness.

N. B. All letters must be addressed to Mr. Lambert, care of E. & H. T. Anthony & Co., 591 Broadway, New York.

AGREEMENT .- JOHNSON'S PATENT.

No. --- \$---

In consideration of the sum of — dollars, by the said licensee paid previously to the execution thereof, I hereby grant to M — of —, the right and authority to use "Solid Bodies as Provisional supports" protected by my patent granted under the No. 92,836, July 20th, A.D. 1869, by the Government of the United States of America, in the working of Mr. Lambert's patented chromotype process.

Patentee.
By — Agent.

Made in duplicate and in good faith this —— day of —— 187 —— at ——.

Witness.

Respectfully submitted. More anon.

Editor's Table.

PICTURES RECEIVED .- Promenade from Mr. E. D. Ormsby, Chicago, who says he is now making all Promenades instead of cabinets. His work is excellent. Messrs. Mosher & Co., Chicago, several fine cabinet groups of ladies. Cabinets and cards from Mr. Frank Jewell. These are beautiful pictures, and in keeping with Mr. Jewell's well-known skill as an artist. As examples of retouching they are exquisite. We have the promise from Mr. Jewell of an illustration for our magazine soon. Our readers may expect something good and instructive. Cards, cabinets, and stereos from Mr. Charles Knowlton, Kankakee, Ill. Mr. Knowlton has just been putting in a new light, and we shall expect to see an improvement in his portraits when he gets it to work. His stereos are excellent, with the exception of imperfect trimming across the top of one of the prints. Cards from Messrs. Louis de Planque, Corpus Christi, Texas, and R. R. Thompson, Goderich, Ont. Among the former are some successful efforts with children. Cards, Promenade, and stereos from Mr. W. M. Lockwood's gallery, Ripon, Wis. The Promenade of a little three-year-old in nightgown, and with arms full of clothes, and shoes and stockings, as if ready to be dressed, might be called "Morning." It is well done, and may be readily accepted as an example of "woman's work." Mr. W. J. Rood, Spencer, Iowa, sends us stereos illustrating the grasshopper raid in that section in August last.

ADDITIONAL AWARDS .- Just as we are going to press we have received the following additional awards, made on the application of Mr. John Carbutt, Superintendent of Photographic Hall: E. Bierstadt, New York, Albertypes; D. W. Butterfield, Boston, Photographs; Schwind & Kreuger, New York, Photographs; J. H. Folsom, Danbury, Conn., Solar Photographs; L. W. Seavey, New York, Backgrounds and Accessories; F. Gutekunst, Philadelphia, Photographs; W. C. Taylor, Philadelphia, Photographs; J. J. Woodward, Photo-micrographs; M. B. Brady, Washington, D. C., Photographs; Edward L. Wilson, Philadelphia, Photographs and Photographic Books; Marcus Ormsbe, Photograph Washer. Foreign: Frank M. Good, Views of Palestine.

WE expected to give the first article of Mr. Gihon's series this month, but it was unavoidably

crowded out. We will commence them next mouth, and they will then be all together in the same volume.

A PERMANENT EXHIBITION .- We are glad to be able to announce that permission has been granted for the retention of the Main Building of the Centennial Exhibition, and a company has been formed of some of Philadelphia's leading and most responsible men, which will organize a permanent exhibition, in which photography will be assigned a conspicuous place, as space has already been applied for. Applications by individual photographers should be made at once, as the demands for space are already becoming very pressing. Those who have Centennial stock in Photographic Hall, and wish to turn it over to the new enterprise, can do so. All who wish. either for space or transfer of stock, are requested to communicate with us at an early day.

Fire!—A note from Mr. E. M. Collins, Oswego, N. Y., under date of November 7th, reads as follows: "Had the gallery and house burned out last night." We were exceedingly sorry to hear this, and hope Mr. Collins may soon be able to locate again and continue his business.

Among the great number of photographers who visited us during the Centennial Exhibition, there came, among the last but not least. our old friend, A. Hesler, of Evanston, Ill. There are many of our veterans in the art who made beautiful daguerreotypes, and were the leading artists of their time, who seem not to have developed the genius of their younger days, or adapted it to the advanced requirements of photography, but not so with friend Hesler. He showed us some samples of his work which would shame many of the younger artists of to-day; they were perfect gems of photography, and his visit to the Exhibition shows that he is determined to study up with the times, and keep in the advance. He made good use of his time while here, and we have no doubt went home well stocked with new ideas for future use.

Mosaics for 1877 is now ready, and we venture to say it will be found to contain a greater variety, more practical and more instructive if possible than any of its predecessors. It is filled with original articles prepared expressly for it by practical men, who seldom write for anything else. See list of contents in the advertising department.

Specialties.

ADVERTISING RATES FOR SPECIALTIES.—It will be understood that matter under this head is not to be considered as always having editorial sanction, though we shall endeavor to clear it of anything tending to deceive or mislead. Stock-dealers will find this a beneficial mode of advertising, and sure to pay largely. Six lines, one insertion, \$2.00, and 25 cents for each additional line, seven words to a line—in advance. Operators desiring situations, no charge. Matter must be received by the 23d to secure insertion. Advertisers will please not ask us for recommendations. ** We cannot undertake to mail answers to parties who advertise. Please always add your address to the advertisement.

For SALE.—The finest gallery in Crawfordsville, Indiana; a rapidly growing town of 7000 inhabitants. County seat of one of the best farming counties in the State. Also, the seat of one of the finest colleges of the State. No strong opposition. Address

Box 10, Crawfordsville, Ind.

FOR SALE.—Photograph gallery. The finest and best located rooms in Los Angeles, fitted for every kind of work, large and small, and viewing. To a good man it is the best chance in California. Sold in whole or part. Address

FRANK PARKER, Los Angeles, Cal.

Mammoth Camera for Sale.—Holmes, Booth & Hayden tube of largest size, central stops, and first-class in every respect. Cost \$450. Box, one of Anthony's best, double swing-back, seven feet extension, carries plates from 8x10 to 18x22. Cost \$90. Is in excellent order. The whole will be sold for \$240 if applied for immediately. Worth double the amount.

J. H. KENT, 58 State St., Rochester, N. Y.

To Rent or for Sale.—The largest photograph gallery in Michigan. Randall's Ground-Floor Gallery, Detroit, Mich. Two skylights, stores, and offices on ground floor. Handsome front. All newly fitted up. Will rent or sell both together, or gallery and store separate. Good business and highest rates. Want to go East. Apply to C. C. Randall, Detroit, Mich.

WILL EXCHANGE.—One 4 x 4 Box and Holders, etc., complete, only used seven weeks, and one ten-inch Nickel-Plated Press, nearly new, or Gem Box, etc., 9 1-9 tubes, cost \$52, will make 2, 4, or 9, for a 5 x 7 Stereo Box and Tubes. Will guarantee our traps and expect the same. Reference, Anthony's, or Morrison's, Pitts. Address, E. A Lingo, Uniontown, Pa.

A RARE CHANCE for a No. 1 coloring artist to connect himself with one of the best galleries in the West. First premium and medals for 1876 at State Fair. Splendid location. Best rooms in the State. Prices and work first-class. No cheap work done here. Good coloring and frame trade. Lincoln, the Capitol of Nebraska. Population, 8,009. Will sell half-interest cheap to a suitable person, or the whole at low rates. Apply immediately. V. H. Young,

Box 757, Lincoln, Nebraska.

FOR SALE.—In the City of Syracuse, N. Y., a photograph gallery, up one flight of stairs, with good instruments and low rent. Will be sold at half its value. This is the best opportunity of buying a good gallery that has been offered in years. Address

Mrs. H. LAZIER, Syracuse, N. Y.

FOR SALE CHEAP.—A good gallery, well furnished, located in one of the best towns in central New York, on the line of the N. Y. C. R. R. Populatien, 5,000 and growing rapidly. Very low rent, and lease for four years. A splendid chance for a live wan. Address

W. M. SMITH, Ilion, N. Y.

EIGHT HUNDRED DOLLARS CASH will buy the only gallery in a city of 3,000 inhabitants. No other gallery within eighteen miles. Well settled country all round. Address G. P.,

Care of N. C. THAYER, Wabash Ave., Chicago, Ill.

FOR SALE.—A No. 1 gallery, doing a good business. Beautiful little city. 6,500 inhabitants. Water and gas. No competition within forty miles. Delightful climate and scenery. Society as good as anywhere in the U. S. Good reasons for selling. Price, \$1500. Only cash will take it. This is a rare chance for a good photographer. Address "DIXIE,"

Care Philadelphia Photographer.

FOR SALE.—At 25 per cent. less than cost, a full stock of cameras and photographic goods. Cameras as follows: one box with four 1-9 tubes for 1-4 plate, one box with four 1-4 tubes for 5 x 7 plate, one 1-2 box with 1-4 Voightlander Tube, one 8 x 10 box with 4-4 Darlot Tube, etc. For further particulars apply to

WM. H. MILLER, Bristol, Vermont.

For Sale.—Reilly's fine negatives of the Yosemite, California, Sierra Nevadas, Niagara, etc. Apply to Benerman & Wilson,

Publishers Philada. Photographer.

THE GORHAM STOVE.—No photographer can get more for his dollar than by investing in a "Gorham Stove." It is tiny in size but a giant in usefulness. See advertisement.

Wilson, Hood & Co., 822 Arch Street, Philadelphia.

USE WAYMOUTH'S VIGNETTE PAPERS.

CAUTION.

SEAVEY'S SCENIC STUDIO; 8 Lafayette Place, NEW YORK, November 1, 1876.

Photographers are cautioned against itinerant background painters, who exhibit photographic samples dishonorably obtained from my office, and representing the same as of their own work; also, against any person who claims to have been in my employ, as Mr. A. B. Lansom is the only person not now in my employ who ever painted for me other than plain backgrounds, the close of his last engagement being over four years ago.

I am not acquainted with, nor have ever corresponded or conversed with, Mr. Bird; neither has a Mr. Reynolds ever been in my employ.

I would also warn, particularly, the public against a stock-house which has descended to sending out photographs of my backgrounds, and representing them as the work of their own

My new designs are being copyrighted.

LATEST PRODUCTIONS.

Papier-Mache Fire-Place and Cabinet com-Papier-Mache Antique Venetian Chair, at Divan, profiled art piece..... Also, several new backgrounds, at from 25 cts. to 30 cts. per square foot.

By a capable man of fifteen years' experience in the leading stock-houses of New York and Boston. Can command a good trade. Well posted in buying and selling. Address TAFT,

Care of Philadelphia Photographer.

MR. JOHN L. GIHON is ready to enter into an engagement with any leading photographer. He has had over twenty years of practical experience. He was an artist by profession before adopting photography, and can, therefore, fill the position of either colorist, poser, or operator. Specimens of his work have appeared in this Magazine, and his writings have rendered his name familiar to most of its readers. Address John L. Gihon,

> Office of Philadelphia Photographer, 116 North Seventh St., Philadelphia.

WAYMOUTH'S VICNETTE PAPERS.

For SALE .- A new and handsomely fitted gallery, in a new building erected especially for the purpose, with every facility for making first-class work, in a Southern city of 40,000 inhabitants. Doing a prosperous business of several years' standing; being the only first-class gallery in the place. Terms moderate. Address, for further A, care Philada. Photographer.

PIANOS AND ORGANS .- Photographers wishing to buy a Beatty Piano or Organ, can get extra inducements through photographing. Address DANIEL F. BEATTY, Manufacturer,

Washington, N. J.

BURREL'S CHART AND HINTS TO PATRONS .--Your gallery is not complete without them. For particulars, see advertisement in January, February, and March issues of this Journal. Price, \$1.25, unmounted, by mail, or by express mounted.

HERMACIS LENS TESTIMONIAL.

Philadelphia, March 21, 1876.

Messrs. WILSON, HOOD & CO.

I take pleasure in testifying to the perfect working of the "Hermagis" just purchased from you. We have tested it particularly as to its depth of focus, and find it to combine with this a rapidity of working which makes it doubly esteemed. Very respectfully,

> WM. CURTIS TAYLOR. 914 Chestnut Street.

PHOTOGRAPHIC HALL .- The four sizes of electrotypes of Photographic Hall, are as follows: $1\frac{1}{4} \times 2$ in., $2 \times 3\frac{1}{4}$ in., 4×6 in., $4\frac{1}{2} \times 7\frac{1}{4}$ in. See cut on preceding page. For sale by

CROSSCUP & WEST,

702 Chestnut Street, Philadelphia.

THE ROBINSON TRIMMER.

RICHMOND, IND., August 11, 1875.

MR. EDW. L. WILSON.

DEAR SIR: I feel as though I should say a few words in praise of the Robinson Trimmer and Guides I received from you. The trimmer does its work admirably, do not know how I should do without it; and the round-cornered guides, for cards, is something new, and makes the picture look much neater when compared with the old square cut kind, from a glass pattern.

The guides, all sizes, are the nearest perfect of any I ever used. But what I wish to request of you in particular is, to publish in your Journal the right way for sharpening the trimmer, I am certain this will be looked for by a great many with interest. I have used mine now constantly for some time, and it does not need it yet; but, in case it does, would not like to spoil it with any experimenting. Yours respectfully,

M. WOLFE.

USE WAYMOUTH'S VIGNETTE PAPERS.

Mr. Charles Waldack, who is known to many of our readers, writes in the Photographic Times as follows: As Robinson's trimmer is getting to be used universally, I think I will do a good turn to photographers in telling them how to sharpen-the little wheel when it gets dulled by use. I owe it to a photographic friend here, and although some may know it, I am sure many do not. Make a groove in a piece of lead by means of the trimmer, put in it a little fine emery and a drop of oil, and run the trimmer forward and back in the groove until it is sufficiently sharp. There is something else about the trimmer; ascertain by trial which side of the wheel should he on the inside of the zinc or iron mat to cut best, and mark it."



PHOTOGRAPHIC HALL.—Electrotypes of Photographic Hull, four sizes, from the above up to the size in February number of this magazine. For prices apply to CROSSCUP & WEST,

Seventh and Chestnut Sts.

Or, BENERMAN & WILSON, Philadelphia.

WAYMOUTH'S VICNETTE PAPERS.

LUCKHARDT'S ELEGANT STUDIES.—We have just received an invoice of splendid studies of the female figure, by Fritz Luckhardt, Vienna. The size, 8 x 10; the price, \$3.50. Order quick!

Wilson, Hoon & Co., 822 Arch Street, Philadelphia.

SITUATIONS WANTED.

No charge for advertisements under this head: limited to four lines. Inserted once only, unless by request.)

As general assistant, understands dark-room work, operating, printing, toning, etc. Age 32. Address Box 11, Station C, New York City.

By a young lady of six months' experience in a first class gallery as retoucher, best of reference given and required. Address F., Lock Box 90, Monmouth, Ill. An operator of experience who understands Photo. Chemistry in all its branches, and has best of references, is open for an engagement. Address Photo. Chemist, care Walter Lawton, room 36, 111 Broadway, New York.

By a young man as printer and toner, will work cheap. Samples of work sent if desired. Address Charles M. Wells, Wheeling, W. Va.

As operator or printer, or will accept a partnership, furnishing skill and instruments against well furnished rooms in city or large town. Address care J. A. Benjamin, Box 54, Warrenton,

As printer and toner and general assistant in some good city gallery, would perform any work belonging to a gallery at very low wages. Best of reference given if desired. Address J. H. Sultzer, Uhrichville, Tuscarwas Co., Ohio.

By a young man of two years' experience in a first class gallery to do general work, or as printer and toner. Recommendation from late employer. Address Geo. M. Bolton, Rockville, Conn.

By a young man in a first class gallery, been over four years in business for himself. Western States or California preferred. Can work at any branch; willing to make himself generally useful; moderate wages. Address with terms, Box 116, Georgetown, Ont.

A lady would be obliged for an opportunity to take charge of reception room, finish negatives or cards in water colors. Would accept small salary with the promise of having what could be made from coloring cards. Samples or reference given if desired. Address C. A. H., 22 Tremont Street, Cambridgeport, Mass.

As operator, retoucher, or printer and toner, would take a gallery to run on shares, will furnish instruments if desired. C. H. K., Box 176, Milan, Ohio.

By a practical phhtographer in any branch of the business, reference can be given as to ability and character, samples shown if desired, salary expected from \$15 to \$18 per week, owing to amount of business. Address B. E. G., Lock Box 81, Ottumwa, Iowa.

A young man who has experience in out-door photography would like to have a place in some gallery in Philadelphia for the coming winter months, terms to suit, believes he can do almost anything of indoor work except retouching negatives. Address R. D., care Rev. H. W. Syle, U. S. Mint, Philada., Pa.

USE WAYMOUTH'S VIGNETTE PAPERS.

An operator having several years' experience, desires a situation; would run a room on shares or take the management of a room; speaks German and English, not afraid to work. Address Photo. Gallery, 408 E. Fifth street, Dayton, O.

As first class printer and toner, has had ten years' experience in first class studios. Address C., Box 43, Skaneateles, N. Y.

By a young man in a gallery, willing to do any part of work or all, wages no object. Address S. M. McCiellan, Constantine, St. Jo. Co., Mich.

In a first class gallery by a young man of five years' experience as printer and toner, will operate if necessary, can give best of reference. Address J. E. Tate, Box 81, Oneida, Ill.

By a good retoucher and printer, speaks German and English, high salary no object. Address G. Cars, 423 Brown Street, Philadelphia.

A young lady would like a situation as retoucher, and to take charge of reception room. Samples sent. Address P. O. Box 266, Waterbury, Conn.

As operator, or would take charge of a good gallery on shares. Address M. Argent, Lock Box 24, Gouverneur, St. Law. County, N. Y.

By a lady of long experience in negative retouching and printing and toning. Can assist in operating. Salary reasonable. Reference, former employers. Address at once, C., Box 60 Smithborough, Tioga Co., N. Y.

By a photographer of twenty years' experience, who thoroughly understands his business in all branches. Would like to make an engagement with a first-class gallery in New England. Address Box 706, Springfield, Mass.

By a steady young man as printer and finisher in some good gallery with plenty to do, or can assist at operating, or in dark room. Four years' experience, the best of reference. Terms, with board, \$6 per week. Address Wm. Bagley, 935 Penna. Ave., Washington, D. C.

By a lady of experience and good address, to retouch in first class gallery. Address, stating wages given, M. G., Box 864, Oshkosh, Wis.

Christmas Gifts

For our Centennial Christmas Holidays. There is no present can be made more interesting or appropriate than a choice selection of our beautiful

Centennial Views.

We make a liberal discount to photographers from the regular price, which is as follows:

Stereos, \$3.00 per dozen, 5 x 7, 50 cents each, or \$6.00 per dozen, 8 x 10, \$1.00 each, 13 x 16, \$2.50 each, 17 x 21, \$5.00 each.

Sent post paid on receipt of price. Special terms and catalogue sent on receipt of stamp.

Address.

BENERMAN & WILSON.

116 North Seventh St., Philadelphia, Pa.

CAUTION! AGAINST COPYING

The VIEWS of the

CENTENNIAL PHOTOGRAPHIC CO.

Whereas, there seems to be a disposition among certain photographers to copy and publish our Views, contrary to photographic courtesy and right, and contrary to law, we hereby caution all persons against such action, and notify them that we shall prosecute any whom we may find making or selling such copies to the full extent of the law.

Moreover we offer

\$100 REWARD

For the apprehension and conviction of any parties so engaged, and a liberal reward for any information against said parties.

THE CENTENNIAL PHOTOGRAPHIC Co.,

WILSON & ADAMS, PROPRIETORS,

Exhibition Grounds, Philadelphia.

THE PHOTOGRAPHER TO HIS PATRONS.

WHAT IS IT?

HE PHOTOGRAPHER TO HIS PATRONS is a little book or pamphlet of twelve pages, the intention of which is: 1st. To enable the photographer to say a few words in a kindly way to those who have photographs taken, in order that the intercourse between them and their photographer may be pleasant and result in the most successful pictures. Every photographer knows that he is constantly beset with a lot of questions, as to the proper way to dress, the best time to come, and so on, which take a great deal of his time to answer. This little book answers them all, and the mere handing of a copy to the questioner, which he or she can carry away and study at leisure, serves as admirably as a half-hour's conversation.

2d. It is a cheap mode of advertising What could you want better than to have your business card so attractive that people will come and ask for it, hand it around from one to another, discuss it, and then keep it for reference? This is what they do with this little "tract." Witness what those who have tried it say below.

have tried it say below.

3d. It is also intended to convey to the public at large the fact that photography is not a branch of mechanics, nor photographers a sort of mechanic themselves, but that both are entitled to respect, the same as the family physician or the minister; that the photographer has rights as well as the public; that he must be trusted, and that he alone is responsible for his results. Moreover, that he must make the picture and not they.

How far the work serves these three ends the reader must judge from the testimonials below, of a few of those who have been using our little publication in their business.

We believe it will pay you to use it, and that you will assist just that much in elevating your art and your craft, an object which we are all working for.

We get "The Photographer to his Patrons" up in neat style, on the best letter cap paper, assorted tints, green, pink, and buff. Eight pages are devoted to the body of the work, which contains paragraphs or chapters—I, on the object of the work; 2, on photography; 3, when to come; 4, how to come; 5, how to dress; 6, how to "behave; 7, the children; 8, general remarks on coloring, copying frames prices he

ing, frames, prices, &c.

All this is inclosed in a cover of the same kind of paper, the pages of which are at the service of the photographer who orders them to have printed thereon anything he may please, which printing we do without extra charge. We publish this leaflet in English, German, and Spanish.

Cuts for the covers we supply free.

	3000 copies, cover included,	
Over 500,000	have been sold.	

TESTIMONIALS.

"I sent one out West to a friend, and she wrote that she was now posted, and when she came here to have a picture rade, she would come 'according to directions.'"—A. Bogarpus, New York.

"It assists me greatly."-JAMES MULLEN, Lexington, Ky.

"A grand idea."-ELBERT ANDERSON.

"You have conferred a great favor on the fraternity in supplying it."-A. C. McIntyre & Co., Ogdensburg.

"It is the best advertising medium I have ever found."-H. M. SEDGEWICK, Granville, O.

We send samples to any who may desire.

BENERMAN & WILSON, PHOTO. PUBLISHERS, 116 North Seventh Street, Philadelphia.

THE BONANZA PLATE HOLDER.

Patented January 19, 1875.

This is one of the most useful appliances yet introduced in the Photographic business, and

one much needed for economy and neatness in every gallery.

The "Bonanza" Plate Holder has been in constant use in G. D. Morse's Gallery, in San Francisco, for over one year, and a test made from month to month of the savings. In the busy season it reached over \$12 per month in pure silver solution. The drippings from the plates do not come in contact with the wood frame, slide or door of the Holder, thereby saving it from destruction. Besides, it protects the camera-box, clothing of the operator, carpets, etc., from silver stains. Another great advantage of this Holder: The inside kit of frames which are in general use for accommodating the different size plates are dispensed with. The fittings are so adjusted that they take every size plate from a card to 8 x 10 size, uprights or crosswise, as may be desired, by simply moving the receptacle that holds the plate to the position required for any particular size. Every photographer will see at a glance the value of this invention.

"We have had your "Bonanza" Plate Holder in use in our establishment for about eight months. We take pleasure in testifying to their great superiority over all others we bave employed or seen, not only as a silversaving appliance, but also in promoting cleanliness in work and protection of carpets and drapery from silver contamination. The very moderate price charged for these Holders will be returned to the purchaser, in the saving made, in a very short time."—W. H. RULOFSON, San Francisco, February 10, 1876.

"The constant use of a couple of your 'Bonanza' Plate Holders during the past year warrants me in saying they are unexcelled. The silver all being saved in a liquid state can be used again, and there is no soiling of clothes. carpets, or the floor of the studio. The silver not coming in contact with the camera, the focus is not disturbed by the eating away of the wood work. The saving in silver, clothing, and carpets, is astonishing, and I would not be without them on any consideration. I cordially recommend them to the craft."—G. D. MORSE, San Francisco, February 20, 1876.

"The past eight months I have used the "Bonanza" Plate Holder at Bradley & Rulofson's. It has been a great source of pleasure to work with a Holder free from drippings of silver solution. Every photographer will appreciate the cleanliness of this invention, as well as the dollars he will save by its use. I am starting in business at 415 Montgomery Street, and wish you to send me two "Bonanza" Plate Holders."—D. B. TAYLOR,

"I believe it to be the best Photographic Plate Holder ever used in the art."—SILAS SELLECK, San Francisco, March 4, 1876.

The "BONANZA" PLATE HOLDER is manufactured of the very best material, and is now ready for the market. The retail price is \$20. They are made to fit and are in focus with the American Optical Co.'s 8 x 10 boxes. Will forward a holder by mail to any address on the receipt of \$20 currency, or will send by express, C. O. D. It is much cheaper to send by mail, as we can forward them to any part of the United States for fifty cents.

All orders should be addressed to

I. W. TABER C 0.,

YOSEMITE ART GALLERY.

26 Montgomery St., San Francisco, Cal.

THE "ATMOSPHERIC" BACKGROUND

Patented November 23, 1875.

This Background which is made of wire cloth, is remarkable for its atmospheric effect. The wire cloth is of such a texture that the eye or lens cannot focus upon it, which has the effect of producing a sharper outline to the figure. This result makes it valuable for plain Backgrounds, as it produces negatives free from any blemish, as a dent or scratch on the

Backgrounds, as it produces negatives free from any blemish, as a dent or scratch on the wire cannot be photographed, owing to the open meshes of the cloth.

The durability of the Wire-Cloth Background cannot be questioned. One of them will last a lifetime. We have had them in constant use for over two years. They have been hit by head-rests, and every accessory used in a gallery have have had their accidental contact, but they are as perfect to-day as when new. They are used in all the first-class galleries in San Francisco. We have manufactured them for this market, but as freights are high to ship them East, we have determined to offer gallery rights for sale at \$25 currency, with full instructions for making them. It is economy for photographers to purchase the right, for they can be made at a small expense.

I. W. TABER &

BENERMAN & WILSON, Trade Agents, 116 NORTH SEVENTH STREET, PHILADELPHIA.

CENTS FIFTY

Full of Readable, Practical, and Instructive Articles.

TABLE OF CONTENTS.

What of 1876? Discoveries and Improvements. Willis' New Platinum Process. Bovins' New Process. The Radiometer. Luminosity of the Atmosphere. Photochromy. Photo-engraving. In the Stunio, In the Dark-room. Silver and Carbon Printing. Dry Plates and Emulsions. Mechanical Printing. The National Photo. Association. Photographic Publications. The Great Centennial. Obituary.
Glass for Photographer's Use. Thos. On Cleaning Plates. H. J. Newton. Mounting Large Prints. Forrester Careful Posing. F. M. Wells.
Little Things. A. W. Kimball.
Photography at the County Fair.
J. Pitcher Spooner.
A Backward Glance. Brown. A Fault in Full-length Photographs. J. S. Hovey. Nothing but a Photographer. I. B. Webster. wenster.
Imitation of Retouching in Ferrotypes. E. M. Estabrooke.
Strengthening Negatives. J. Renvers
My Way. J. H. Fitzgibbon.
The Advantages of a Magnifying Glass in Retouching, and Hints How to Use it. E. K. Hough. Hints to Those who Need Them. F. M. Spencer. Glacé Photographs. Pyro.
Backgrounds for Bust Portraits. W.
H. Tipton. My Practice. Charles Evans.
Imitation. Wm. Heighway.
Enlarging from Small Negatives.
Neal P. Harrington. How to Make Backgrounds, and clean Ferrotype Plates. Geo. W. Coddington. Porcelains. E. D. Ormsby.

A Practical, Permanent Porcelain
Collodion. J. H. Lamson. How a Woman Makes Landscape Photographs. Mrs. E. W. With-

ington.

Tuttle.

Clemon's Formula for Working all

kinds of Paper. John R. Clemons. Antidote for Hard Times.

Photographic Wastes. E. P. Libby. A Paper Bath that will not Grow Red; and How to Sharpen the Retouching Pencil. Frank A. Morrill Albumenizing Glass. A. B. Craycroft. The Future of Photography. E. T.

Whitney.

The Movement Cure. J. G. Vail. The Need of Money. M. H. Albee. Items from My Experienco. W. B. Critchfield.

Savory Dishes, Digestable Especially to Beginners. R. R. Thompson. To the Infant Class. C. M. French. Hints on Photographic Processess. C. A. Zimmerman.

Dry vs. Wet. Prof. H. D. W. Moul-

Ammonia Nitrate of Silver Solution for Paper Positives. William W.

Here and There in the Printing Room. Leroy Parkinson.

Good Backgrounds. G. W. Wallace. Three Years' Old, Standing ("Av course.") Frank F. Courrier.
Solar Work. F. B. Clench.

On the Use of Hard Rubber Bath Holders. W. H. Sherman.

Some Observations on Backgrounds. James O. Merrill.

Working Notes for your Artist. Geo. B. Ayres.

Miscellany. Irving Saunders. Some Practical Hints. Garvey Don-

aldson How to Economize in Silvered Paper.

F. A. Souders.
Should Photography Furnished in
Hand Painting Excel Plain Photographs? C. D. Mosher.

How to Copy Photographs. Blessing Brothers.

Mounting Prints. E. Z. Webster. Rembrandt Effects. D. H. Anderson. Getting at the Difficulty. Moulton.

Compilations, Selections, and Translations. A Compiler.

The Centennial Photographic Exhibition. Robert J. Chute.

A Negative Bath that Would not Work; and a Polish for Camera Boxes. D. H. Ledbetter.

The Metric System Allotropy. Alfred Hall. Photographic Chowder. J. E. Small. Many Mites from Many Minds.

SEND ORDERS TO BENERMAN & WILSON.

PHOTOGRAPHIC PUBLISHERS,

116 North Seventh Street, Philadelphia. Pa.

A. M. COLLINS, SON & CO.,

MANUFACTURERS OF

PHOTOGRAPHIC CARDS AND CARD BOARDS,

OF EVERY DESCRIPTION.

Warehouse:

No. 18 S. Sixth St., and No. 9 Decatur St.,

IMPERIAL CARDS.

Size, 67 x 97.

BOUDOIR CARDS.

Size, $5\frac{1}{4} \times 8\frac{1}{2}$.

White, Gray, Granite-Blue, Pearl, Amber, Tea.

Plain; also, with Gilt Borders, and with Gilt or Red Beveled Edges.

See detailed advertisement in this number of the "Photographic Times."

PRICE LISTS FURNISHED ON APPLICATION.

TRAPP & MUNCH'S

umen

Introduced into this country since 1868 has become the leading paper, and is

now better known and more appreciated than any other brand.

That this great success is well deserved and due to its excellent qualities may be judged from the fact, that of all the competitors of the Vienna Exhibition, Messrs. Trapp & Munch alone received the

MEDAL OF MERIT

for Albumenized Paper. For SALE AT ALL THE STOCKHOUSES.

WILLY WALLACH,

GENERAL AGENT FOR THE UNITED STATES.

No. 4 Beekman St., and 36 Park Row, New York. SPECIAL ACENTS:

Scovill Manufg. Co., New York. E. & H. T. Anthony, "" G. GENNERT, New York

WILSON, HOOD & Co., Philadelphia. H. W. BRADLEY, San Francisco. G. S. BRYANT & Co., Boston.

DR. VOGEL'S PHOTOGRAPHER'S

POCKET

REFERENCE BOOK.

ONLY A FEW COPIES LEFT!

An Alphabetically arranged collection of practically important hints on the construction of the Gallery; selection and trial of lenses and chemicals; approved formulæ for the different photographic processes; tables of weights and measures; rules for avoiding failure, etc.

IT IS A BOOK EVERY PHOTOGRAPHER SHOULD HAVE.

Because it is a ready helper under all difficult circumstances.

For sale by all dealers. Price, \$1.50, post-paid.

BENERMAN & WILSON, Photo. Publishers,

PHILADELPHIA, PA.

FIRST EDITION ALMOST EXHAUSTED!

HEARN'S

PRACTICAL PRINTER

PHOTOGRAPHIC PRINTING

ON PLAIN AND ALBUMEN PAPER, AND ON PORCELAIN.

Too little attention has heretofore been given to Photographic Printing, which is indeed quite as important a branch of the art as negative making.

It is the hope of both author and publishers to create **REFORM** in this matter, by the issue of this work, and as it is to put money in the pockets of all who read it, the hope is that it will be generally read.

CONTENTS.

INTRODUCTION.

The Printing Room, with a Plan. The Silvering and Toning Room, with a Plan. The Drying Room, with a Plan.

PART I.-ALBUMEN PAPER PRINTING.

The Positive Bath for Albumen Paper. Silvering the Albumen Paper. Drying the Paper. Fuming the Paper. Preservation of Sensitive Albumenized Paper—Washed Sensitive Paper. Cutting the Paper. The Printing Boards. Keeping Tally. Vignette Printing Blocks. Treatment of the Negatives before Printing. Filling of the Boards. Fitting Vignette Boards to the Negatives for Printing. Medallion and Archtop Printing. Fancy Printing. Vignette Cameo and Medallion Vignette Cameo Printing. Printing the Bendann Backgrounds. Printing Intense Negatives. Printing Weak Negatives. A Few More Remarks about Printing—Treatment of Broken Negatives. Cutting the Prints. Toning Baths. Artistic Toning. Fixing Baths and Fixing Prints. Washing the Prints. Mounting the Prints. Finishing the Prints.

PART II.-PLAIN PAPER PRINTING.

Salting the Paper. Positive Baths for Plain Salted Paper. Silvering Plain Salted Paper. Drying, Fuming, and Cutting the Paper. Treatment of the Negatives before Printing. Printing-in False Backgrounds. General Plain Paper Printing. Further Treatment of the Printsafter Printing. Causes of Failures in Albumen and Plain Paper Printing.

PART III.—PORCELAIN PRINTING.

Selection of the Porcelain Plates. Cleaning of the Porcelain Plates. Albumenizing the Porcelain Plates. Making the Porcelain Collodion. Coating, Fuming, and Drying the Plates. Porcelain Printing Boards. Placing the Sensitive Plate on the Board for Printing. Printing Vignette Porcelains. Printing Medallion Pcrelains. Washing the Porcelain. Toning the Porcelain. Fixing the Porcelain. Final Washing of the Porcelain. Drying and Tinting of the Porcelain. Varnishing the Porcelain. Causes of Failures in Porcelain Printing.

Together with over 50 Wood Cuts, and an elegant Cabinet Portrait, from negatives by Mr. F. Gutekunst, printed by the author, Mr. Chas. W. Hearn.

SEND IN YOUR ORDER BEFORE THEY ARE ALL GONE!

Mailed Post-paid on Receipt of \$2.50, by any dealer, or

BENERMAN & WILSON, Photo. Publishers, 116 North Seventh Street, Philadelphia. Do not Waste Time with a Knife and Glass, but try Prof. Robinson's Invention

ROBINSON'S METALLIC Guides,

FOR USE WITH THE ROBINSON PRINT-TRIMMER.

(See advertisement of Trimmer opposite.)

These Guides are made of Stout Iron and are turned in a Lathe, so that they are Mathematically True.

OVAL, ROUND, ELLIPTIC, and SQUARE, of all sizes; various shapes for Stereoscopic work, Drug Labels, etc., etc.

We have the following regular sizes always on hand at 10 cents per inch the longest way of the aperture, the fractions counting as one inch.

Special sizes made to order at 15 cents per inch the longest way of the aperture.

REGULAR SIZES:

	OVALS.		SQUARE	OR ROUND-COI	RNERED.
$2 \times 2\frac{7}{8}$	$3\frac{1}{2} \times 4\frac{7}{8}$	$5\frac{3}{4} \times 7\frac{3}{4}$	$2\frac{1}{16} \times 3\frac{3}{4}$	$2\frac{5}{16} \times 3\frac{7}{8}$	$3\frac{7}{8} \times 5\frac{1}{4}$
$2\frac{1}{8} \times 3\frac{1}{8}$	$3\frac{5}{8} \times 5\frac{1}{8}$	6 x 8 »	$2\frac{1}{8} \times 3\frac{3}{4}$	$2\frac{3}{4} \times 4\frac{1}{4}$	$4 \times 5\frac{5}{8}$
$2\frac{1}{8} \times 3\frac{1}{4}$	$4 \times 5\frac{3}{8}$	6½ x 8½	$2\frac{1}{8} \times 3\frac{1}{8}$	$2\frac{3}{4} \times 4\frac{1}{2}$	$4\frac{1}{8} \times 5\frac{7}{8}$
$2\frac{3}{8} \times 3\frac{3}{8}$	$4\frac{3}{8} \times 6\frac{3}{8}$	$6\frac{1}{2} \times 8\frac{1}{2}$	$\begin{array}{c} 2\frac{5}{16} \times 3\frac{15}{16} \\ 2\frac{5}{16} \times 3\frac{3}{4} \end{array}$	$2\frac{7}{8} \times 4\frac{5}{8}$	$\frac{3\frac{7}{8} \times 6}{4 \times 6\frac{1}{8}}$
$2\frac{5}{8} \times 3\frac{5}{8}$	5 x 7	7 x 9	10 -		
$2\frac{7}{8} \times 4\frac{1}{4}$	$5\frac{1}{4} \times 7\frac{1}{4}$	7½ x 9½		STEREOGRA	
3\frac{3}{8} \times 4\frac{3}{8}	$5\frac{1}{2} \times 7\frac{1}{2}$	$7\frac{1}{2} \times 9\frac{1}{2}$	Arch Tops. $3\frac{1}{16} \times 3\frac{3}{4}$	Round Cornered. $3\frac{1}{16} \times 3\frac{3}{4}$	Round. 3 x 3
$3\frac{3}{8} \times 4\frac{5}{8}$	$5\frac{5}{8} \times 7\frac{5}{8}$	$7\frac{3}{4} \times 9\frac{3}{4}$	3 x 3	3 x 3	

The above sizes suit the Collins Card Mounts, and photographers knowing that they can be always had at the low price of ten cents per inch, would do well to make their sizes accord, as orders can also be filled more quickly. Ten days is required to make special sizes.

An allowance of ten inches (\$1 worth) of regular sizes of guides will be given with every Trimmer purchased. (See opposite page).

FOR SALE BY ALL DEALERS.

BENERMAN & WILSON, Manufacturer's Agents,

PHILADELPHIA, PA.

ROBINSON'S PHOTOGRAPH TRIMMER

IS A SUBSTITUTE FOR A KNIFE

FOR TRIMMING PHOTOGRAPHS, AND DOES THE WORK MUCH MORE EXPEDITIOUSLY AND

ELEGANTLY THAN A KNIFE.

IT SAVES TIME, SAVES PRINTS, AND SAVES MONEY,

It does not cut, but pinches off the waste paper, and leaves the print with a neatly beveled edge which facilitates the adherence of the print to the mount. Try one, and you will discard the knife and punch at once. For ovals and rounded corners it is worth its weight in gold.

A Trimmer and Ten Inches of Guides Mailed for \$3.50.

Oil the wheel bearings with Sewing Machine Oil.

Given Away!

WITH EACH ROBINSON PHOTOGRAPH TRIMMER

WILL HEREAFTER BE GIVEN Ten Inches of Metallic Guides, your choice from the regular sizes named on the opposite page. The manufacturers and agents finding that they can save money by manufacturing in large quantities, make this liberal offer to the trade, as they want everybody to have these capital inventions in use. They are no humbug and are not glass cutters or anything like them.

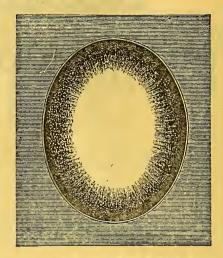
BENERMAN & WILSON, Manufacturer's Agents,

FOR SALE BY ALL DEALERS.

PHILADELPHIA, PA.

WAYMOUTH'S





VIGNETTING PAPERS

ARE NOW MADE OF TWO SHAPES, as shown in the drawings above. They consist of finely gradated, lithographed designs, mounted on protecting sheets of non-actinic paper, and are the lightest, neatest, and best means of producing vignette pictures ever offered.

RECENTLY IMPROVED.

The quality of the "papers" has just been much improved by the substitution of a peculiar French, fibrous, hard calendered paper, which is not only less opaque but has other qualities which produce quickly the most lovely and soft vignettes possible. We consider this a great improvement, as do others to whom we have sent samples. Below we give a letter from one of them, Mr. Ormsby, who has sent us also some exquisite vignettes:

The package of Vignette Papers has been received and tried; they are just the thing. They are a great improvement over the others; they will print in a little more than half the time required for the others, and the results are everything that can be desired, as you can see by samples inclosed. Please fill my order and send bill. I like the pear-shape best. Send them all that shape.

E. D. ORMSBY, Chicago.

FROM PROFESSIONAL AND AMATEUR PHOTOGRAPHERS.

"First-class."—"The sample sent answers perfectly."—"I consider them first-rate articles."—
"They answer the purpose admirably."—"They are the best vignettes I have ever had, and as you can print in full sunlight, they are a great saving of time."—"They could not be better, oblige me with another packet."—"I find them excellent, giving much softer pictures than the old way."—"I have tried one of the Vignette Papers, and like it much; send me packets two and three."—"I am much pleased with them, and shall thank you to send me another packet."—"I did not need any copies of testimonials, having well-known by experience that your Vignette Papers were superior to anything I have ever used."—"I found those you sent before excellent."—"Vignetting Papers received and tested; can't be beat. I use by cutting an opening in a piece of cardboard and tacking to the printing-frame, when I am ready for printing vignettes in the very best manner."—"Waymouth's Vignette Papers I have tried, and they are just what I have been wanting for years."

Any number sent on receipt of price, by any stockdealer, or by

BENERMAN & WILSON, Manufacturers,

(See opposite page.)

PHILADELPHIA.

THE LARGEST ORDERS we ever had for Waymouth's Vignette Papers were received in JANUARY and FEBRUARY, 1876.

DO YOU USE

WAYMOUTH'S VIGNETTE PAPERS.

(DESIGNS COPYRIGHTED.)

OF ALL PICTURES, THE HITTING IS THE MOST ARTISTIC.

When properly printed. But the clumsy devices generally in use for printing them, or rather for blending the shading about the figure, produce but very few really artistic vignette pictures. Either the shading is too intensely dark, not gradated in tint at all, or it shows an ugly direct, decided line, which is very repulsive. The shading should blend gradually from the dark tint nearest to the figure, off into the white background. The results are then soft, artistic, and beautiful. The easiest and best way to secure them is by the use of

WAYMOUTH'S VICNETTE PAPERS.

THEY ARE NOT CLUMSY; DO NOT BREAK; ARE ALWAYS READY; COST BUT LITTLE, AND ARE EASY OF APPLICATION TO ANY NEGATIVE.

THEY NEED BUT ONE ADJUSTMENT TO PRINT ANY QUANTITY.

They entirely do away with all the old and troublesome methods, either wood, metal, or cotton.

Eighteen sizes are now made, suiting all dimensions of pictures from a small carte figure to Whole-size, Victorias, Cabinets, &c. They are printed in black for ordinary negatives, yellow bronze for thin negatives, and red bronze for still weaker ones. Directions for use accompany each parcel.

PRICES:

In parcels containing of	ne of	each size,	Nos.	1 to 15, assorted colors
Assorted sizes and colo	rs. by	number n	er pa	ackage of fifteen 1 00
Nos. 1, 2, 3, 4, and 5, ass	orted	l sizes and	colors	s, for Cartes, by number, per dozen
" 6, 7, 11, 12, and 13	**	"		Large Cartes and Victorias, by number, per doz
" 8, 9, 10, 14, and 15	44	66	66	Cabinets and Whole-size, " " 1 00
" 16, 17, and 18.	66	"	46	Half " " " " " … 1 25

(SEE OPPOSITE PAGE.)

When ordering, state the number and color you want.

BENERMAN & WILSON, Manufacturers, 116 N. 7th Street, Philada.

MOST POPULAR BOOK PUBLISHED!

DR. VOGEL'S HANDBOOK.

SECOND EDITION.

THE HANDBOOK OF THE PRACTICE AND ART OF PHOTOGRAPHY.

By Prof. H. VOGEL, Ph.D., Berlin, Prussia.

IS NOW READY.

ALTHOUGH IT IS MUCH ENLARGED WE OFFER IT AT THE OLD PRICE. \$3.50.

It is Elegantly Illustrated, with Photographs and Engravings. Cloth Bound.

The reputation Dr. Vogel enjoys in this country as a practical photographic writer, is first-class, and insures a book of the best quality. That his Handbook is eminently so, we guarantee. It has been re-arranged and revised specially for the American photographer, giving the best German formulæ, &c., and is, in every sense of the word, a Handbook of the practical and artistic departments of Photography. Over fifteen hundred of the first edition were sold, and the demand continues.

IT ILLUSTRATES AND TELLS

How the Ateliers are built and used in Berlin and elsewhere;

How to make the best Photographs;

How to select and use your Lenses;

How to manage your Apparatus;

How to compose the Picture;

How to choose Accessories;

How Berlin Cards are Made:

How to do everything in the Art.

How to pose the Sitter;

TEACHES HOW TO BECOME A PERFECT PHOTOGRAPHER.

The whole includes, under one cover, everything needed for the practice of photography by the beginner, the amateur, and the professional—a complete Handbook. See contents of Book. The engravings are numerous, elaborate, and expensive. Four photographs, illustrating

the lighting of the subject, accompany the work. Please read future advertisements

ASK YOUR DEALER FOR IT.

BENERMAN & WILSON, Photo. Publishers, 116 North Seventh Street, Philada.



MORE EXTENSIVELY ENGAGED in the sale of

LANTERN SLIDES AS A SPECIALTY,

Than any other house in America. Our continuous contact with photographic men gives us special advantages in this line, and as MANUFACTURERS AND DEALERS we offer the very best opportunities to secure

MUCH FOR YOUR MONEY,

AS WELL AS SUCH GOODS AS WILL PUT MONEY IN YOUR PURSE, NAMELY:

A GOOD LANTERN. THE BEST of SLIDES.

FOUR CATALOGUES MAILED ON RECEIPT OF 25 CTS.

DO NOT BUY UNTIL YOU HAVE CONSULTED HEAD-QUARTERS! SUPPLEMENTARY CATALOGUE (March 1) READY!

USE WILSON'S

Lecture Book describing graphically, as an eyewitness. 700 beautiful places and things in all parts of the world, including Centennial Journey. SUBSCRIBE FOR THE

Monthly Journal, devoted to the interests of lantern lovers. \$1 per year, post-paid.

Special estimates and other information given gladly. No substituting of Slides. Prices very low. PROMPTNESS OUR RULE.

BENERMAN & WILSON, Photo. Publishers, 116 NORTH SEVENTH ST., PHILADELPHIA 1876

of price. Order now.

WILL BE A YEAR OF JUBILEE FOR PHOTOGRAPHERS THAT SHOULD NOT BE NEGLECTED.

THE CENTENNIAL EXHIBITION

Will present opportunitles for study and improvement which hould not be overlooked, and the study of the best books will not only do you good before, but after the inspection of Photoraphic Hall. READ! READ!! READ!!!

BENERMAN & WILSON,

Photographic Publishers,

Philadelphia, Pa.

hiladelphia Photographer.

THE BEST PHOTOGRAPHIC MAGAZINE IN THE WORLD.

EACH NUMBER EMBELLISHED BY PHOTOGRAPHY.

THE THIRTEENTH VOLUME of our Magazine promises to be the most popular and brilliant of any that has preceded it. We have many good things in store for it. It shall be our endeavor to make it all the richer and more interesting on account of the Centennial. We expect to embellish it with some of the choicest gems the Exhibition can produce and add interest to its pages from month to month, by giving a sort of compendium of all that relates to Art or Photography. Among other attractions, we expect to have our old friend Dr. Voerbere during six months of next year, at least, and our readers may expect some of the fruits of his genius and talents to add to its interest and usefulness.

But while we intend to provide all these home attractions, we do not propose to neglect whatever may transpire abroad, but shall present as usual correspondence from such well-known writers as Prof. Stebans, Mr. W. J. STILMAN, Mr. Chas. Waldack, and others. With all these good things in prospect for the year 1876, we hope to render our magazine more beautiful and more useful than ever before; and while we maintain that the beautiful example of photography, which accompanies each issue, is alone worth the subscription price, still more and more effort will be made to make the reading matter everything that it ought to be. Our correspondents from all the leading centres abroad will keep our readers posted on all matters of interest in their several sections, while our unrivalled staffath one will look diligently after your interests here. To make THE PHILADELPHIA PHOTOGRAPHER the best PRACTICAL HELPER which can possibly be obtained, is the aim and earnest desire of its publishers.

We ask your co-operation in extending its usefulness, and offer to all present subscribers, who secure us new ones, the following

PREMIUMS.

For every new subscriber, for one year, \$1.00, payable in any of our publications, books, or, if preferred, one dollar's worth of any of our prize pictures, or any other article for which we are agents, udvertised in this Magazine.

The subscription price of the Philadelphia Photographer is \$5 a year, \$2.50 for six months, 50 cents per month.

Each number, remember, contains a handsome photograph.

Photographic Mosnics.

THE Centennial anniversary year of American Independence finds our little Annual In its eleventh year. It is leveloping rapidly for its age and size, and this year takes juite an interest in the Centennial. It is full and running over with fresh contributions from the most wide-awake mempers of the fraternity in all parts of the country. We here give a list of the

pers of the fraternity in all parts of the country. We here give a list of the

CONTENTS.—Review; Eighteen Hundred and Seventy-six; Discoveries, Inventions, and Improvements; Work in the Studio; The Dark Room; The Printing Department; Landscape Photography; Dry-plate Work; Apparatus; Art Advances; Phe National Photographic Association; Our Publications; Our Prize Offer; Hems of Interest; Obituary; The Art Progress; Fog; Come, Let us Reason Together; Experience; Provoking; A Singestion Ament the Great Exhibition; Centennial Album of Photographic Studies; The Eliminating of Hyposulphite from Prints; A Treatise on Photography; Why not make Solars Instead of Contact, etc.; Systematic Preservation of Negatives; Want of Enterprise; Lighting the Sitter; Theory and Practice; Be Punctual; Formulæ for Photographs and Serrotypes, which give Lights and Half-tones not surpassed; Exposure and Development of a Negative; A Cause for Faded Prints; How I Sunned a Bath under Difficulties; A Good Colodion; A Word to the Week; How to Clean New and Old Ajlass Plates; Long's Bath Warmer; Albumen, its Freparation and Use in Photography; An Hem of Real Value; The Negative Bath; How to Lubricate Prints for Burnishing; Then and Now; A Pair of Suggestions; How to Obtain Boiling Water in Winter; An Excellent Ware for Photographic Purposes; Hints on Composition; The Causes and Cure for some of the Difficulties pertaining to Photography; Art and Mechanism; Breakfast for Dinner; Field Work; Marble Negatives—Stains From the Hands, etc.; Pyroxylin—Gun-Cotton; The Old Bath; The Upper Floor; Dry-Plates; The Art Privileges of our Great Centennial; Curtains as a Meansof Adjusting Light; An Exposing Shutter; How to Touch out Pinholes; Photographic Proor Negatives, their Cause and Cure; On Landscape Photography; At Cheap and Good Plateholder; The Way it is Done; To Gorrespondents; The Construction of Skylights; Blisters; At the Desk; On Photographic Lenses—How to Choose and Take Care of Them; The General and I have a Talk; Eyes Right; Many Mites from

Price, bound in Cloth, \$1. Paper Cover, 50 Cts.

OUR BOOKS.

THE PRACTICAL PRINTER. By Chas. W. Hearn.

This very useful book is indispensable in the printing department. No one who wishes to be up with the times in printing, can afford to be without it. Its rapid sale and the favor with which it has been received, are the best recommendations we can give. Price, \$2.50.

BIGELOW'S ALBUM OF LIGHTING AND POSING.

This excellent work still maintains its popularity. It contains 24 beautiful photographs from life in different lights and positions, with an explanatory key, which makes it the most practical helper the Photographer can have. Price, \$6.00.

DR. VOGEL'S HANDBOOK OF PHOTOGRAPHY. Second Edition.

This is a really standard work, and the most complete hand-book ever published. The new edition has been thoroughly revised, and much additional matter introduced, together with new illustrations, new photographs, and a new arrangement all through. Now is the time to study up, and this book is ap-plicable to any department. Price, \$3.50.

DR. VOGEL'S PHOTOGRAPHERS' POCKET REFERENCE-BOOK.

This is in every sense a reference book. It is alphabetically arranged, and any process or formulæ in photography may be found at a moment's notice. All is arranged in a concise and practical form. It is particularly useful in the chemical department. Price, \$1.50.

THE FERROTYPERS' GUIDE.

This little work is by a practical ferrotyper, and gives just the instruction necessary to those who wish to do good work in this branch of our Art. Price, 75 cents.

LINN'S LANDSCAPE PHOTOGRAPHY

Is an excellent companion in the field, and may help you over many difficulties; can be carried in the pocket. Price, 75 cts. GLIMPSES AT PHOTOGRAPHY. By Prof. Himes.

This work treats of some of the peculiar styles of printing, such as leaf-printing, etc., etc. Price, \$1.25.

WILSON'S LANTERN JOURNEYS.

To those who use the lantern this book is indispensable. It contains just the information required about six hundred different views, and enables any exhibitor to make his entertainments enjoyable and instructive. Price, \$2.00.

BURNET'S HINTS ON COMPOSITION,

We have reproduced this work by photo-lithography, and sell it at the fow price named, while a copy of the original work could not be bought for five times that amount. It is fully illustrated, and supplies in a very attractive form, the art knowledge, in reference to composition, that so many photographers are seeking after. Price, \$3.50.

OHN EAN & CO. Worcester, Mass.,

Manufacturers of the

NONPAREIL PLATE,

A substitute for porcelain. The new NONPAREIL PICTURES have elicited the most general expressions of approval and admiration. The latest improvement simplifies the formula and insures success. Our plates are stamped. Patented July 29, 1873, and June 16, 1874. All others are spurious.

ALSO, THE CELEBRATED

FERROTYP ADAMANTEAN

BLACK, AND PATENT CHOCOLATE-TINTED, EGG-SHELL, AND GLOSSY.

The experience and extensive facilities of JOHN DEAN & CO., enable them to produce the most desirable FERROTYPE PLATES in the market.

E. & H. T. ANTHONY & CO., Trade Agents,

591 Broadway, New York.

MEW STOCK HOUSE.

Somerville's St. Louis Photographic Stock Depot,

No. 8 South Fifth Street.

AMERICAN OPTICAL CO.'S CELEBRATED APPARATUS. POWERS & WEIGHTMAN'S SILVER, GOLD, IODIDES AND BROMIDES, VOIGTLANDER & SON AND DARLOT LENSES. TILFORD'S CELEBRATED IODIZED AND NEGATIVE COLLODION, AND EVERY WANT FOR THE TRADE.

FRAMES IN EVERY VARIETY.

J. C. SOMERVILLE. No. 8 S. Fifth St., Saint Louis, Mo.

HEADQUARTERS FOR THE TRADE.

Show Displayers. Velvet Passepartouts. Beveled Matts. Fancy Metal Frames,

Velvet Stands. Velvet Cases. Double Matts. Standard Matts. Fancy Paper Passepartouts.

These goods are entirely of our own manufacturing. A large assortment constantly on hand; odd sizes and styles made to order.

LEWIS PATTBERG & BRO., 709 (Formerly) Broadway, New York.

THE CENTENNIAL

PHOTOGRAPHIC DIARY.

A FEW STILL ON HAND!

CONTENTS.—Rates of Postage—Places of Interest in Philadelphia—Railroad Depots and Ticket Offices-Calendar, with Photographic Hints-Local Photographic Societies-Items of photographic History-Photographic Processes-The Negative Bath-The Developer - Collodion - Varnishes - Retouching Varnish - Printing and Toning - Mr. Marston's Process-Mr. Hearn's Process-Collodio-Chloride for Porcelain Printing. By Charles Evans-Emulsion Process-Photographic Hints-Executive Officers of the United States Centennial Commission-The Centennial Buildings-Photographic Hall-Directions for Exhibitors, Important to Visitors-Regulations for Admission to the Centennial Ground-Admission Tickets for Exhibitors and Employees-Admission Tickets for the Public-Hotel Charges-N. P. A. Convention-Map of Philadelphia.

PRICE, ONLY 78 CENTS.

For sale by BENERMAN & WILSON, Photographic Publishers, 116 North Seventh Street, Philadelphia, Pa.

Artistic Studies,

BY

HENRY ROCHER,

OF CHICAGO.

THE IMPERIAL AND BOUDOIR PORTRAITS.

The former, $6\frac{3}{5} \times 8\frac{3}{5}$ print, and $6\frac{7}{5} \times 9\frac{7}{5}$ mount. The latter, $4\frac{3}{5} \times 7\frac{5}{5}$ print, and $5\frac{1}{5} \times 8\frac{1}{5}$ mount.

The most charming Photographs ever published.

We take pleasure in offering these beautiful pictures to photographers, believing they will instruct and elevate all who study them. They are some of Mr. Rocher's best efforts, and as artistic photographs we have never seen them excelled.

No words of ours can do justice to these elegant examples, and we can only say, send for a sample and be satisfied.

PRICES:

IMPERIALS, Each, \$2 50 BOUDOIRS, 2 00

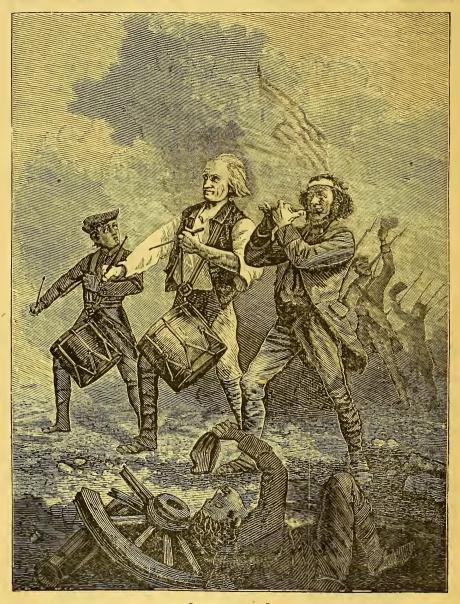
For Sale by

BENERMAN & WILSON,

116 North Seventh St., Philadelphia.

YANKEE DOODLE.

IN CHROMO.



[COPYRIGHTED.]

Having secured the agency for this fine picture, which is 18 x 24 inches in size, we are prepared to offer it at the low price of **TWO DOLLARS**. Large discounts made to photographers and dealers. For sale by

BENERMAN & WILSON, 116 North 7th St., Philadelphia.



We have a surplus of instruments that were used in photographing at the CENTENNIAL EXPOSITION, which we offer at a great sacrifice, viz.:

LENSES!

Forty pairs Morrison's Wide-Angle Stereo. Lenses.

Fifteen single Morrison's Wide-Angle View Lenses, of various focal lengths from $2\frac{1}{2}$ inch to 22 inch.

Three Morrison's Rapid Group Leuses, each D, E, and F.

Two pairs each 1-4 and 1-2 "Peerless" Portrait Lenses.

Three single 1-4 and 1-2 "Peerless" Portrait Lenses.

One 4-4 and Ex. 4-4 "Peerless" Portrait Lenses.

One 8-4 "Peerless" Portrait Lens.

AMERICAN OPTICAL CO.'S CAMERA BOXES!

AS FOLLOWS:

Six 8-10 Imperial Boxes, double swing back.

One 10-12 Portrait Box, " " "

One 18-22 Portrait Box, " " Seven 8-10 Venus View Boxes," " "

Twenty 5-8 Stereo. View Boxes, single swing back.

One 10-12 View Boxes, double swing back.

Three 11-14 " " " " "

One 20-24 " " " " " "

The Lenses were made ESPECIALLY for us, and we will GUARANTEE every one of them. Witness our own work done with them.

The apparatus is all in good working order, some of the boxes are but slightly stained and bear no other evidence of having been used.

All these instruments and apparatus for sale at 25 per cent. discount from manufacturers' regular prices.

Sent C. O. D., if partial remittance accompanies order, and chance given to examine.

CENTENNIAL PHOTOGRAPHIC CO.,

Belmont Avenue, International Exhibition, Philadelphia, Pa.

CENTENNIAL AWARDS!

WE ARE NOW PREPARED TO FURNISH

ELECTROTYPES

OF THE

CENTENNIAL MEDALS

IN THREE SIZES.



THIS CUT REPRESENTS THE MEDIUM SIZE.

THE PRICES ARE AS FOLLOWS:

			EACH SIDE.	LAP	PED.	
Large Size,			\$175.		\$3	00
Medium, .			1 25 .		2	00
Small,			75 .		1	25

SEND ORDERS TO BENERMAN & WILSON,

116 North Seventh Street, Philadelphia, Pa.

PROMENADE PRIZE PICTURES.

JULY COMPETITION.

To enable all photographers to study these

GEMS OF ART,

We offer prints from the competing negatives, for sale at the prices below

They are the most exquisite things we ever offered, and will teach any one, be he a good or poor operator.

THE GOLD MEDAL

Was awarded for the best six negatives to Mr. Henry Rocher, Chicago, Ill., whose pictures are marvels of beautiful photography. The studies are all mounted in tasteful style, on Collins' Mounts, and printed at our own rooms by Mr. Chas. W. Hearn, and are fine studies in posing, lighting, printing, and toning.

THE SETS INCLUDE:

Nos.	1	to	7,				Studies b	y H. Rocher, Chicago.
44	8	to	16,				**	L. G. Bigelow, Detroit, Mich.
44	17	to	22,				+4	I. W. Taber, San Francisco, Cal.
4.6	23	to	27,				**	C. M. French, Youngstown, O.
44	28	to	31,				**	Core & Frees, Tiffin, O.
+4	32	to	37,				44	E. M. Collins, Oswego, N. Y.
44	38	to	42,				4.6	J. H. Folsom, Danbury, Conn.
4.6	43	to	48,				44	E. II. Alley, Toledo, O.
Car	. т		1	1	۸.	 	1 197	2 1 2 1 2 00 / 1 0/0

The whole set o	f 48, .								٠ ٩	512	00	
In two Photo. C	overs,									13	50	
Selections, per d	ozen,.									4	00	
" per t	wo doz	en,								7	00	
The 21 of Messrs. Rocher, Bigelow, and Taber,												
Book Covers and	d Bindi	ng,									75	

Address all orders to

BENERMAN & WILSON, Publishers, 116 North Seventh Street, Philadelphia.



ROSS' PORTRAIT VIEW LENSES.

We have now successfully introduced to the American Photographers the Ross Lens, and by our increased sales we know they are appreciated. At the convention held at Buffalo, July 15, many fine photographs were exhibited by photographers, and ourselves, made with the Ross Lens, which attracted great attention.

While Ross & Co. are the oldest manufacturers of Photographic Lenses in existence, they also keep up with the requirements of the fraternity, by constantly manufacturing new combinations and improving on those already in existence. They have lately perfected, and will soon furnish us stock of, a new series of Card Lenses, extra rapid, peculiarly adapted for babies, and people who will not be quiet. We will give notice of their arrival.

WE HAVE NOW IN STOCK

Portrait Lenses, from 1-4 to 15 x 18.
Cabinet Lenses, Nos. 1, 2, and 3.
Card Lenses, Nos. 1, 2, and 3.
Triplets, Nos. 1, 2, 3, 4, 5, 6, and 7.
Symmetricals.

Instantaneous Doublets, all sizes.
Medium Angle Poublets, all sizes.
Stereographic Lenses, all sizes.
New Universal Lens.

Numerous testimonials pronounce them to be the best, as well as the cheapest Foreign Lens ever offered to the American Photographer. We will mail price-list on application, and promptly fill all orders.

STEINHEIL'S SONS' NEW APLANATIC LENSES.

We now have a full stock of these Celebrated Lenses, at the following prices:

No.	1,1-4	size,	$, \dots, 3\frac{1}{2}$	inch	focus	,	\$25	00	No.	. 5,	10-12	size	13 }	inch	focus,	\$70	00
4.	2,1-2	66	5 1/4		66		30	00		6,	13-16	6.6	16 }	. "	"	110	00
6.6	3,4-4	66	7	6.6	4.6		45	0.0	6.6	7,	18-22	4.6				200	00
	4,8-1										20-24					350	00

Nos. 1 & 2 are in matched pairs for Stereoscopic Work.

We feel sure that at least one of these lenses is needful for the successful prosecution of your business, and so solicit your orders.

WILSON, HOOD & CO., THE UNITED STATES, 822 Arch St., Philadelphia, Pa.

The only genuine brand of DRESDEN ALBU-MEN PAPER is the CROSS-SWORD BRAND, all others are superannuated. We keep a full assortment of Single and Extra Brilliant always on hand.

CHAS. F. USENER'S Celebrated PORTRAIT LENSES are unexcelled. Before purchasing be sure and try a Usener.

CHARLES COOPER & CO., Wholesale Agents,

Manufacturing Chemists and Importers,

191 Worth Street, New York.

he Universa



EMBOSSING PATENTED JANUARY 9th, 1872.

This Press will cameo all sizes, from cards to cabinets, and is sold lower than any other that will do the same work. It has been greatly improved and made very complete in all its parts. We furnish a card, victoria, and cabinet size.

PRICE, \$20.00. MANUFACTURED AND SOLD WHOLESALE AND RETAIL BY

WILSON, HOOD & CO., 822 Arch St., Philadelphia.

CAUTION .- Photographers are cautioned against buying other presses that may use an elastic R. J. CHUTE, Patentee. embossing substance, as they are an infringement on the above.

JAMES F. MAGEE & CO.

MANUFACTURERS OF

PURE

PHOTOGRAPHIC CHEMICALS,

No. 108 North Fifth Street,

PHILADELPHIA

Stock Dealers only Supplied.

PHOTOGRAPHIC PRINTING INSTITUTE.

PRINTING FOR THE TRADE.

Instructions Given in Artistic Printing.

SEND FOR NEW PRICE LIST.

All communications should be addressed to the proprietor, at the Institute,

24 Winfield Place, Philadelphia.

C. W. HEARN, Proprietor.

BENJ. FRENCH & CO.,

319 WASHINGTON ST., BOSTON,

IMPORTERS AND SOLE AGENTS FOR THE CELEBRATED

Voigtlander & Son Darlot LEWSES,

NEW STEREOSCOPIC LENSES.

New Stereoscopic Tube and Lens, made expressly for us, marked with our name (imitation Dallmeyer), with rack and pinion, central stops, for portraits or views. Will work in or out of doors. Also, for instantaneous pictures. Four inch focus, **price per pair**, \$21.00. By taking out back lens, and using only front lens in place of back, you get six inch focus. The great and increasing demand for all these lenses, is sure guarantee that they are the best. Read the following

Testimonials.

"I have tried the Mammoth Voigtlander you sent me, and I consider it the best large instrument I have ever seen, and I have tried those made by other makers, Dallmeyer's included, and they do not compare with the Voigtlander. All my baby pictures were made with half-size Voigtlander lenses."—J. Landy, 208 W. Fourth St., Cincinnati, Feb. 25, 1874.

"The Voigtlander lenses have always been favorites with me. My first experience, in the days of daguerrcotype, was with one, since which I have owned and tried many of the different sizes and never saw one but was an excellent instrument. Lately again trying some for my own use and for a friend, I found them to be superior to other eminent makers, particularly in the large sizes."—W. J. Baker, Buffalo, N. Y.

"Twenty-four years ago I bought and commenced using my first Voigtlander lens. It was a good one. Since then I have owned and used a good many of the same brand, of various sizes. They were all and always good. Some of the larger sizes that I have recently bought seem to me better than any I have ever had or seen before."—J. F. RYDER, Cleveland, Ohio, Dec. 18, 1872.

"About a year ago I bought a Voigtlander & Son No. 34-4 sizelens. Said instrument gives me great satisfaction, being very quick, at the same time has great depth of focus."—E. G. MAINE, Columbus, Miss.

"Have never seen anything equal to the Voigtlander & Son Lens. The No. 5, Ex. 4-4 is the best instrument I ever used. I cannot keep house without it."—D. B. VICKERY, Haverhill, Mass.

"The pair of imitation Dallmeyer Stereoscopic Lenses you sent we are very much pleased with; they work finely."—GOODRIDGE BROS., East Saginaw, Mich.

"After a trial of your imitation Dallmeyer in the field with those of the Dallmeyer Rapid Rectilinear, side by side, I can say that for general views I like yours as well, for some objects far better, on account of their short focal length."—D. H. Cross, Mosher's Gal., *Chicago*.

New Catalogue of Prices Just Issued, to be had on Application.

WILSON'S

Lantern Journeys

By EDWARD L. WILSON,

Editor of the "Philadelphia Photographer."

This work will be found entertaining by all who like to read about the beautiful places and things of this world.

The contents are divided into six "Journeys," each one including a visit to 100 places, making 700 in all, as follows:

- JOURNEY A-Havre, Paris, Versailles, Rouen, Fontainebleau, and Switzerland.
- JOURNEY B—Compiegne, Brussels, Aix la Chapelle, Cologne, Up and Down the Rhine, Potsdam, Berlin, Dresden, Vienna, the Vienna Exposition, the Semmering Pass, Saxony, Munich, and Southwest Germany.
- JOURNEY C-Italy-Lake Maggiore and Como, Milan, Verona, Venice, Florence, Pisa, Rome, Naples, Pompeii, the Ascent of Vesuvius, Puteoli, and the Italian Art Galleries.
- JOURNEY D-Holland, Denmark, Norway, Sweden, Russia, and Spain.
- JOURNEY E-Egypt, Palestine, Syria, Turkey, Greece, and India.
- JOURNEY F-England, Scotland, and the United States of America.
- JOURNEY G-The Centennial Exhibition at Philadelphia.

It has been carefully prepared, and will be found amusing, very entertaining and instructive.

It contains 218 pages, Cloth bound, Gilt. Price, \$2.

BENERMAN & WILSON,

Photo. Publishers, Philadelphia. Penna.



The publishers have a great many good things in anticipation for the year 1877, which they think will render their magazine more beautiful and more useful than ever before; and while they maintain that the beautiful example of photography, which accompanies each issue, is alone worth the subscription price, still more and more effort will be made to make the reading matter everything that it ought to be. Our correspondents from all the leading centres abroad will keep our readers posted on all matters of interest in their several sections, while our unrivalled staff at home will look diligently after your interests here. To make the Philadelphia Photographer the best practical helper which can possibly be obtained, is the aim and earnest desire of its publishers.

We ask your co-operation in extending its usefulness, and offer to all present subscribers, who secure us new ones, the following

For every new subscriber, for one year, \$1, payable in any of our publications, books, or, if preferred, \$1

PREMIUMS

worth of any of our prize pictures, or any other article for which we are agents, advertised in this magazine.

Operators, printers, etc., can secure all their necessary photographic literature in this way, by a little earnest effort.

EACH MONTHLY ISSUE IS A PHOTOGRAPHIC WORK IN ITSELF.

NOTICE TO SUBSCRIBERS.

Subscription price, \$5 a year, \$2.50 for six months, 50 cents per copy, postpaid. positively in advance.

In remitting by mail a post-office order, or draft payable to the order of Benerman & Wilson, is preferable to bank-notes. Clearly give your Post-Office, County, and State.

Canada subscribers must remit 24 cents extra, to prepay postage.

Foreign subscriptions must be accompanied by the postage in addition.

ADVERTISING sheets are bound with each number of the Magazine. Advertisements are inserted at the following rates:

1 Month. 6 Months. 1 Year.
One Page, ...\$20 00 \$110 00 \$200 00
Half " ... 12 00 66 00 120 00
Quarter Page, ... 7 00 33 50 70 00
Eighth " ... 4 00 22 00 40 00
Cards, 6 lines, or less, 2 00 11 00 20 00

The attention of advertisers, and those having galleries, &c., for sale, is called to our Specialties pages. Terms, \$2 for six lines, and 25 cents for each additional line, seven words to a line, always in advance. Duplicate insertions, 50 cents less, each.

SURE TO PAY!

Operators desiring situations, no charge.

BENERMAN & WILSON, Publishers,

OFFICE, 116 NORTH SEVENTH STREET, PHILADELPHIA.

CENTENNIAL LANTERN JOURNEY.

DESCRIPTIVE OF

100 Scenes and Objects in the Great Exhibition.

JUST ISSUED!

IN A SECOND EDITION OF "WILSON'S LANTERN JOURNEYS."

This meets a want that has been felt more than any other by exhibitors of Centennial slides. We give below a list of the subjects, photographed by the Centennial Photographic Co.—Ed. L. Wilson and W. Irving Adams, Proprietors, which, as will be seen, constitutes a complete Journey through the Exhibition.

LIST OF SLIDES.

1. Independence Hall.
2. Independence Hall.
3. The old Liberty Bell.
5. 881—Centennial Grounds, bird's-eye view.
6. 102—Main Building, east end.
7. 926—Main Building, Cast end.
7. 926—Main Building, perspective.
10. 107—Main Building, perspective.
10. 107—Main Building, perspective.
11. 356—Opening Ceremonies, grand stand, orators.
12. 355—Opening Ceremonies, choristers.
13. 815—Main Building, interior.
14. 1480—Carved Bedstead—Chinese Section.
15. 1264—Italian Section.
16. 251—M. B. Swedish Section—China and porcelain.
17. 1496—Swedish Peasants.
18. 1497—The New Baby—Swedish Section.
19. 1495—The Baby's Death—Swedish Section.
20. 177—Netherlands Section—Kiosk exhibit.
21. 250—Netherlands Section—Kiosk exhibit.
22. 705—Queensland Court.
23. 454—Main Building, interior, transept from S. W. tow.
25. 393—Main Build, interior, transept from S. W. tow.
26. 376—New England Glass Co's Exhibit, M. B.
27. 816—Centennial Grounds, from Main Building,
28. 920—Belmout Avenue and Fountain.
29. 920—Belmout Avenue and Fountain.
29. 938—Machinery Hall, from Finance Building,
30. 817—Machinery Hall, interior, savenue from E. end
33. 966—Machinery Hall, interior, north avenue.
34. 883—Machinery Hall, interior, north avenue.
38. 896—Machinery Hall, interior, north avenue.
39. 896—Machinery Hall, interior, porth avenue.
39. 896—Machinery Hall, interior, porth avenue.
39. 896—Machinery Hall, interior, porth avenue.
39. 896—Machinery Hall, interior, savenue from E. end
39. 966—Machinery Hall, interior, porth avenue.
39. 896—Machinery Hall, interior, savenue from E. end
39. 966—Machinery Hall, interior, savenue from E. end
39. 966—Mac

ian—Persian—Turk—Egyptian.
53. 700—Agricultural Hall.
54. 151—Agricultural Hall, interior, north avenue.

55. 746—Agricultural Hall, interior, nave looking N.
56. 1005—Agricultural Hall, interior, looking west.
57. 898—Agricultural Hall, interior, Brazilian cotton ex.
58. 1181—Agricultural Hall, interior Cal., grape-vine.
59. 462—Horticultural Building.
60. 324—Horticultural Building, promenade.
61. 829—Horticultural Building, interior, architectural.
62. 312—Horticultural Building, interior, architectural.
63. 287—Horticultural Building, growing banana.
63. 276—Horticultural Building, growing banana.
63. 276—Horticultural Building, Miss Foleys' fountain.
64. 1177—Horticultural Building, Miss Foleys' fountain.
66. 1177—Horticultural Building, forcing-room.
69. 693—Horticultural Building, forcing-room.
70. 318—Horticultural Grounds, rhododendrons.
70. 318—Horticultural Grounds, rhododendrons.
71. 222—Women's Pavilion,
72. 491—Women's Pavilion,
73. 291—United States Government Building.
74. 651—Rodman Gun
75. 732—Monitor Turret.
76. 929—U S Gov't, Building, sloop-of-war Antictam.
77. 931—U, S. Govern't, Building, interior, lighthouse.
78. 1243—U, S. Govern't, Building, neain avenue, looking east.
79. 933—U, S. Government Building, fur seals.
80. 909—U, S. Government Building, fur seals.
81. 932—U, S. Govern't, Building, group American deer
82. 920—U, S. Govern't, Building, group American deer
82. 920—U, S. Govern't, Building, war canoe and models.
83. 763—Pennsylvania Building (or any other State B'g.)
85. 769—"Locomotive" of 1875.
87. 96—Japanese Bazaar.
88. 188—From Centennial Photo. Co.'s Studio.
89. 544—Italian Statuary, Gried.
91. 1121—Italian Statuary, Hyring Time.
93. 1151—Italian Statuary, The First Step.
94. 1123—Italian Statuary, The First Step.
95. 1114—Italian Statuary, The First Step.
96. 1268—Italian Statuary, Flying Time.
98. 1279—Italian Statuary, Fored Prayer.
98. 1270—Italian Statuary, Cupid.
97. 1110—Italian Statuary, Flying Time.
98. 1278—Italian Statuary, Flying Time.

4. 151—Agricultural Hall, interior, north avenue. | 100. 1284—Italian Statuary, Evening.

The numbers, in the second column of the above list, refer to the Centennial Photographic Co.'s Catalogue.

We are now prepared to furnish the above in Slides or Stereos., as the readings are equally interesting with either.

Slides, \$9 per dozen; or, \$70 per hundred. Stereos., \$3 per dozen. Wilson's Lantern Journeys, including Centennial Journey, \$2.

FOR SALE BY

BENERMAN & WILSON, II6 N. 7th St., Philada.







