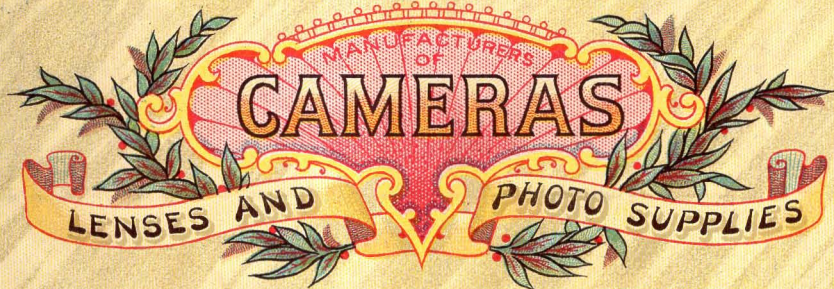


THE WIDE ANGLE WIZARD



MANHATTAN OPTICAL CO.

OF NEW YORK



WORKS AND EXECUTIVE OFFICES

CRESSKILL, N.J.

THE BABY WIZARD

TERMS



IN ordering goods, please state how to ship, or we will otherwise use our own judgment.

Prices given are all net ; boxes, packing and delivery to Express Office free.

All orders to be sent by mail must be accompanied by the full amount of invoice, and will be shipped only at the risk of purchaser.

Orders for shipment by freight must be accompanied by full amount of invoice.

Persons unknown to us, desiring goods sent C. O. D., must remit double the amount of Express charges. The goods will then be sent by express, with the privilege of inspection ; should they not be kept, we will return the amount of remittance, less express charges.



is fitted with an Iris Diaphragm, and works from $\frac{1}{100}$ part of a second up to $\frac{1}{2}$ part of a second on the instantaneous plan, and can always be used for bulb and time exposures. No Shutter has yet been offered the public, which can compare with our "Wee Wizard" in compactness, elegance and general serviceability.

We furnish one style of carrying case with this camera, viz: A leather covered oblong case, holding camera and three double plate holders.

The lens is our Manhattan Rapid Rectilinear, and will do first-class work. For focussing, the full sized image may be seen on the ground glass.

THE introduction of the "Wee Wizard" is the result of the steadily increasing demand for compact cameras, and we offer it as an instrument which is not excelled in any respect by anything yet devised.

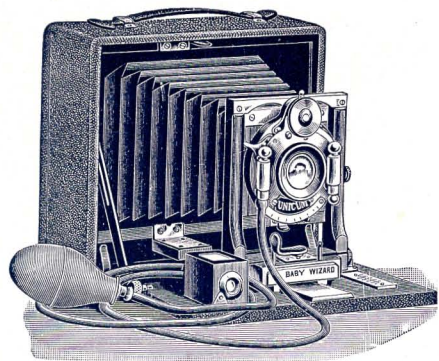
The size of picture is $3\frac{1}{2} \times 3\frac{1}{2}$ inches. The camera is made of well seasoned mahogany, has a rich red leather bellows, and is covered with the best grade of black leather.

All the wooden parts are highly finished and the front board can be readily clamped to the track for focussing.

The Shutter, which is made especially for this Camera,



The Baby Wizard.



SHOWING CAMERA OPEN.

THE BABY Wizard is intended especially for bicyclists and tourists. It is the smallest and most compact 4 x 5 Camera on the present market.

It is made throughout with seasoned mahogany, highly polished. The fittings are of lacquered brass, perfectly adjusted and working with exceptional smoothness. The camera is covered with highest grade black grain leather, and has a rich red leather bellows.

This Camera is equipped with our **Extra Rapid Rectilinear Lens**, the best adapted for universal work, mounted in a Bausch & Lomb Iris Diaphragm Shutter, especially made for us for use in THE BABY

WIZARD. The shutter has a time, instantaneous and a third entirely new speed—continuing the exposure while the pressure remains on the bulb. This last feature will appeal to all advanced amateurs who prefer to judge the exposure from experience.

The front board is beautifully finished, of the lightest possible construction consistent with perfect rigidity. It has a vertical as well as a horizontal movement, secured at any point, is readily clamped to the tracks by turning a lever, and is moved for focussing by a steel rack and pinion of greatest delicacy.

The back of Camera recedes when plate holder is inserted, and is removed entirely when roll holder is used. By opening a lid in back, a full sized picture can be obtained on the ground glass screen. The swing back is readily operated and is firmly held in any position required.



THE BABY WIZARD is furnished with a rich leather carrying case capable of holding the Camera and four featherweight plate holders—especially made for this Camera—or one plate holder and roll holder. The carrying case has a spring lock, a handle for carrying by hand, also a shoulder strap with which it may also be readily attached to a bicycle, or is also supplied with sole leather case, with two clamps, otherwise same as above.

The roll holder is of the largest pattern, carries film for 48 exposures, and can readily be attached to the Camera in daylight. The 5 x 7 roll holder carries film for either 32 or 54 exposures.

For Pictures 4 x 5 inches.

Size, $2\frac{3}{8} \times 5\frac{3}{8} \times 6\frac{3}{8}$.

Weight, under Two Pounds.



For Pictures 5 x 7 inches.

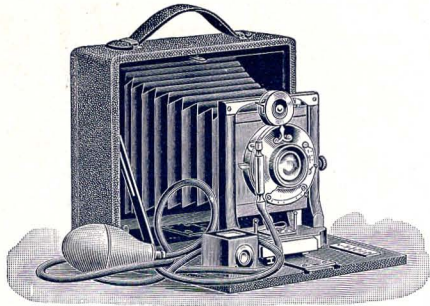
Size, $2\frac{7}{8} \times 6\frac{7}{8} \times 8\frac{5}{8}$.

Weight under Three Pounds.

Baby Wizard Camera, Single Swingback,	4 x 5,	\$22.50
“ “ Double Swingback,	4 x 5,	25.00
“ “ Single “	5 x 7,	32.50
“ “ Double “	5 x 7,	35.00
Featherweight Plate Holders, 4 x 5,.....		1.00
“ “ “ 5 x 7,.....		1.25
Roll Holder, empty, 4 x 5,.....		10.00
“ “ “ 5 x 7,.....		12.50
Roll Holder, empty (Daylight), 4 x 5,...		5.00



Baby Wizard, Jr.



AT the request of numerous Amateurs, we have made a Baby Wizard camera, equal in all respects to the original in finish, material and workmanship, but without swing back, movable front board, and rack and pinion for focussing. It has the same lens, and is equipped with our new Wizard Shutter shown on page 20.

The Baby Wizard, Jr., is furnished with two tripod sockets and with the regular Baby Wizard Carrying Case. The Finder is reversible, being adapted for both horizontal and vertical pictures.

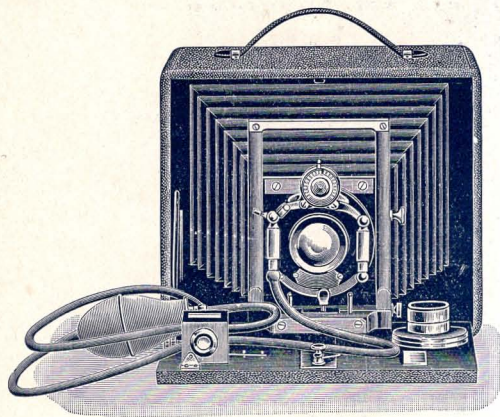
This is the lightest and most compact 4 x 5 Cycle Camera made.

Price complete, with Wizard Shutter,.....\$18.00

“ “ Single Valve Unicum Shutter,..... 20.00



TAKEN WITH BABY WIZARD.



The Wide Angle Wizard Camera.



INTRODUCING the desirable feature of a camera being fitted with both a Rapid Rectilinear and a Wide Angle Lens.

The Wide Angle Wizard is a complete, up-to-date folding camera, made of selected mahogany, highly polished, covered with best black grain leather.

The camera has rising and falling front, with lateral movement, rack and pinion, double swing back, changeable front board, dropping front for wide angle, new catching devices, etc., etc., together with many new movements which can be used with great advantage in many cases, and will be found very acceptable by the advanced amateur.

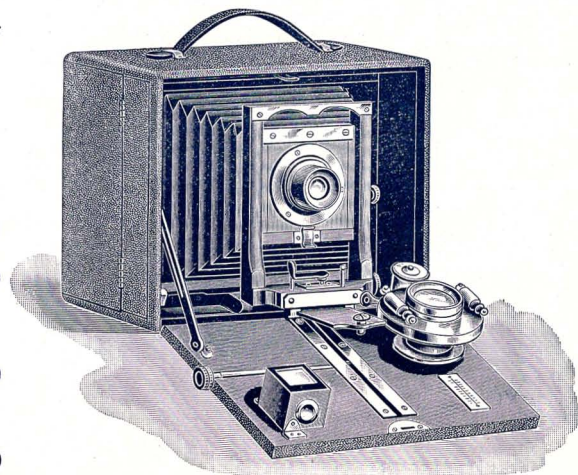
The lenses are our Extra Rapid Rectilinear, mounted in our Wizard Iris Diaphragm Shutter, working at a speed from one-hundredth part of a second to one second, and time and bulb movements; and our well-known "Emil" Wide Angle Symmetrical Lens, which, while not in use, is secured to front of camera.

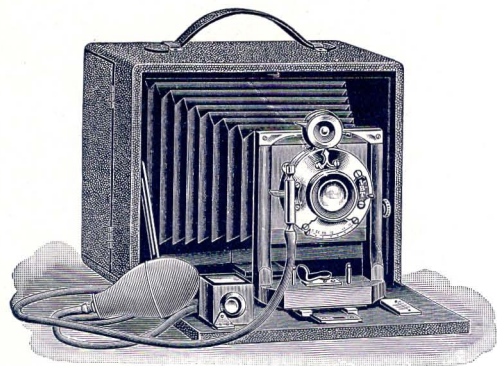
These lenses are the best of their kind and are readily interchangeable on the same flange.

The front lid of camera opens either to an angle of 90 degrees and is there secured when the Rapid Rectilinear Lens is to be used, or else is dropped lower, beyond the angle covered by the Wide Angle Lens when the latter is employed. In this case the brass tracks for front board can readily be extended for focussing.

The Wide Angle Wizard will be found to far surpass any other camera now on the market, and those desiring a thoroughly complete and up-to-date camera cannot do better than by obtaining one of these.

Wide Angle Wizard, complete with both lenses and 1 plate holder in 4 x 5 size	\$35.00
Same, but with double swing.....	40.00
Wide Angle Wizard, double swing, 5 x 7 size.....	50.00
Wide Angle Wizard, double swing, 6½ x 8½ size.....	60.00





Bo-Peep B Camera.



THIS camera has proved very successful in the past season. It covers the wants of the amateur photographer, and with the many improvements added, is indeed an excellent apparatus for the money.

The Bo-Peep B is fitted with our Wizard Shutter, Iris Diaphragm, with movements from one-hundredth part of a second up to one-fifth part of a second on the instantaneous plan, and has time and bulb movements.

The lens is our Manhattan Rapid Rectilinear, especially adapted for general work, and will always yield fine results.

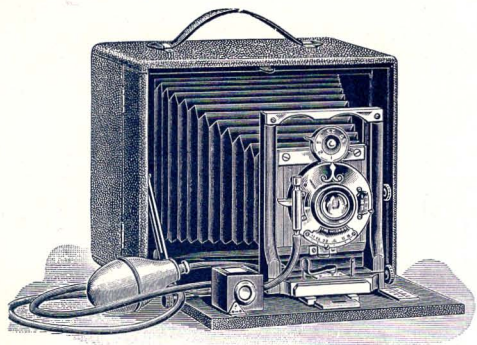
The Bo-Peep B carries three Double Plate Holders or Roll Holder, has a single Swing-back, and is equipped with two Tripod Sockets, being thus adapted for both hand and tripod use.

The Finder is reversible, and can be used for taking horizontal and vertical pictures.

The Camera is made of Mahogany and covered with best grade cowhide leather, and is nicely furnished throughout; has a rich red leather bellows, and when closed no metal parts are visible.

The price includes the camera, lens, shutter and one double plate holder.

4 x 5	-	-	-	\$15.00
5 x 7	-	-	-	25.00
6 1/2 x 8 1/2	-	-	-	35.00



Bo-Peep C Camera.

THE Bo-Peep C is certainly the best of its kind now made. The lens is the very best Rectilinear that can be produced from optical glass.

The Bo-Peep C is fitted with our Wizard Shutter, Iris Diaphragm, with movements from one-hundredth part of a second up to one-fifth part of a second on the instantaneous plan and time and bulb movements.

The Bo-Peep C is made of mahogany, highly finished, and is covered with the best grain of cowhide leather, has leather handle, and when closed no metal parts are visible.

The Camera has two Tripod Sockets, Double Swing-back, Rack and Pinion, Rising, Falling and Sliding Front, Spring-actuated Ground Glass, which can be easily removed or replaced when using a roll holder.

The Finder is reversible, and can be used for taking horizontal and vertical pictures.

The price includes the camera, lens, shutter, and one double plate holder.

		4 x 5	5 x 7	6½ x 8½
Bo-Peep C Camera,	-	\$20.00	\$30.00	\$40.00
Plate Holders,	-	1.00	1.25	1.50
Roll Holders, empty,	-	10.00	12.50	16.00
Roll of Films,	-	48 expos. \$3.00	32 expos. \$4.00	24 expos. \$4.00

The new Daylight Roll Holder, size 4 x 5 - \$5.00

The "Boss Dandy."



Size,
 $5\frac{1}{4} \times 6\frac{7}{8} \times 8$.



For Pictures
 4 x 5 inches.



"Boss Dandy" Camera, 4 x 5.....	\$5.00
Double Plate Holder, 4 x 5.....	1.00
Leather Carrying Case	2.00
Printing and Developing Outfit	1.50

The "Boss Dandy"

IS covered with black grain leather, has two view finders for horizontal and vertical pictures, and is furnished with a featherweight double plate-holder with rubber slides.

THE LENS



is our "Daisy" Rapid Achromatic (excellent for snap-shots, portraiture and all-around work), covering sharply to the edges of the plate. For time exposures, if the second stop is used, the lens will cover an angle of about 70° , a desirable feature for interiors.

THE SHUTTER



is manipulated by a button on top of the camera, and can be set for either time or instantaneous exposures. A speed arrangement is also attached to the shutter for snap-shot work.

THE CAMERA WILL CARRY THREE DOUBLE PLATE-HOLDERS.

The "Boss Dandy" is the first 4x5 hand camera, embodying all of the above features, ever offered at the price.



The Wizard View Camera.



FRONT FOCUS.



THESE VIEW CAMERAS are of the Front and Back Focus pattern, and have the great advantage of being absolutely strong and well made throughout, and are very compact and light in weight.

The Wizard View Camera has both horizontal and vertical swings, each swinging at center. They are equipped with a rising and falling front board, and a reversible back, which can be changed to take pictures either horizontally or vertically, without interfering with the position of the camera or altering the focus. They are so arranged that the Plate Holder slides can be drawn from the top, bottom, or either sides.

The Ground Glass Screen is spring actuated, which holds it in position, and allows it to recede so as to insert the holder between the Ground Glass and camera back.

All the wood parts are of selected Mahogany, highly polished, and all metal parts are made of brass, polished and lacquered.

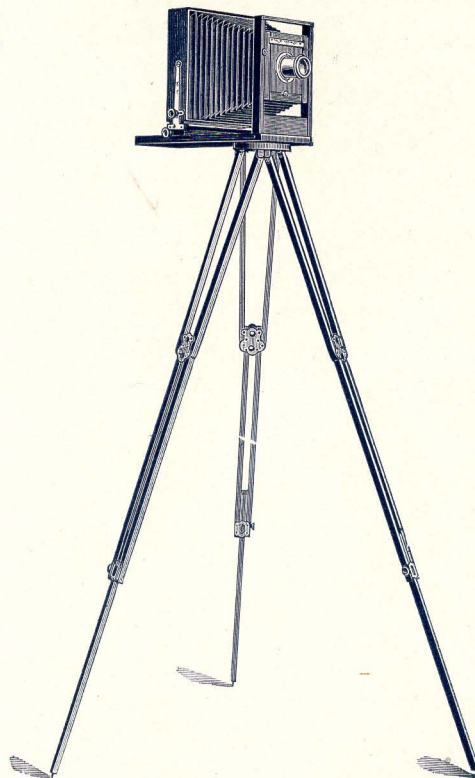
The Wizard View Camera.

BACK FOCUS.

Wizard View Camera, with one Double Plate
Holder, Canvas Carrying Case, Front Focus,
Size $6\frac{1}{2} \times 8\frac{1}{2}$, \$22.00
" 8×10 , 24.00

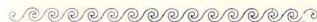
Wizard View Camera, with one Double Plate
Holder, Canvas Carrying Case, Back Focus,
Size $6\frac{1}{2} \times 8\frac{1}{2}$, 22.00
" 8×10 , 24.00

Plate Holders, $6\frac{1}{2} \times 8\frac{1}{2}$, each, 1.50
" " 8×10 , 1.75





The Plate Holder.



ALL OUR CAMERAS are furnished with our new M. O. Co. Feather-weight Double Plate Holder, which is easily manipulated. A brass spring in the bottom of holder, which readily recedes, permits of quick loading in the dark room, and holds the plate firmly in place. The M. O. Co. Holder is very light, weighing but two ounces. Kits may be used for smaller sized plates when desired. All sizes are fitted with a safety catch to prevent the accidental withdrawal of the slides.



4 x 5.....\$1.00

5 x 7..... 1.25



6½ x 8½.....\$1.50

8 x 10..... 1.75

Wizard Outfits.



No. 1.

1 Tin Candle Lamp	- - - -	\$.60
1 8 oz. Bottle Developer	- - - -	.45
1 8 oz. Bottle Toning and Fixing Solution	- - - -	.30
1 Printing Frame, 4 x 5	- - - -	.25
3 Metal Trays, 4 x 5	- - - -	.60
1 Measuring Glass	- - - -	.20
1 doz. Floragraph Printing Paper, 4 x 5	- - - -	.15
1 Bottle Hypo	- - - -	.10
1 doz. Card Mounts	- - - -	.20
Book of Instructions	- - - -	.10

\$2.75

PRICE, NEATLY BOXED.

4 x 5	- - - -	\$1.50
5 x 7	- - - -	3.00



No. 2.

1 Manhattan Ruby Lamp, No. 1	\$1.00
1 Paste Brush	.20
1 Camels' Hair Brush	.35
1 doz. Dry Plates, 4x5	.65
50 Negative Preservers	.25
1 8oz. Bottle Developer	.25

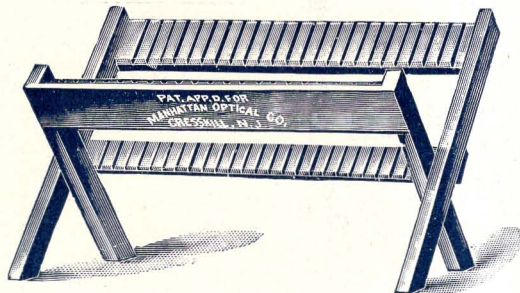
1 8 oz. Bottle Toning and Fixing Solution	.30
1 Printing Frame, 4 x 5	.38
3 Manhattan Trays, 4 x 5	.84
1 4 oz. Glass Graduate	.30
1 doz. Floragraph Printing Paper, 4 x 5	.15
1 lb. Hypo	.10
1 Jar Paste	.25
25 Card Mounts	.20
Book of Instructions	.10

\$5.32

PRICE, NEATLY BOXED.

4 x 5	- - - -	\$4.00
5 x 7	- - - -	4.75
6 1/2 x 8 1/2	- - - -	6.00

The Manhattan Negative Rack.



This unique rack, primarily constructed for negatives of 4 x 5 inches and upwards, has an additional set of grooves which readily hold smaller plates, such as lantern slides, $3\frac{1}{4} \times 4\frac{1}{4}$, $3\frac{1}{2} \times 3\frac{1}{2}$, 2 x 2, etc.

Price, 40 cents.



Squeegee Roller.

These Rollers have wood centers, rubber covered, one inch diameter and japanned iron frames.

6 inch,	-	-	-	-	-	50c.
8 "	-	-	-	-	-	60c.
10 "	-	-	-	-	-	75c.



Tripods.



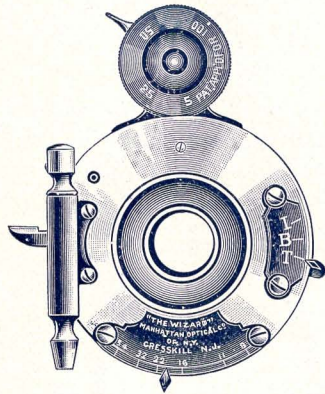
Manhattan Tripod,
No. 1,.....\$2.00
Very light and compact.
Will fold in two.

Manhattan Tripod,
No. 2,.....\$3.00
Will fold in three parts.

Manhattan Tripod,
No. 3,.....\$3.50
For Wizard . . .
. . . View Camera.
Will fold in three parts.



The Wizard Shutter.



IN the Wizard Shutter have been combined all the latest and best adjustments, making it perfect in every detail. It is constructed of highly finished brass and nickeled parts, and is equipped with an Iris Diaphragm, working between the lenses.

The manipulation of the Shutter is very simple.

To set the shutter, push the setting lever as far to the right as it will go.

Finger or bulb release can be used as desired.

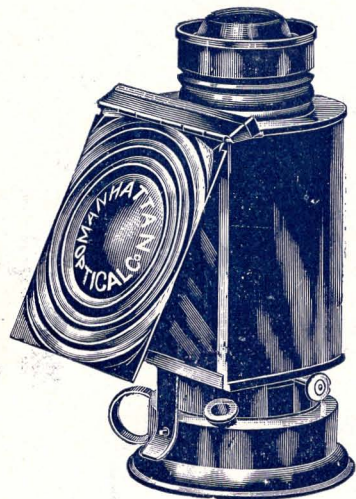
The small dial at right shows three different methods of operation, viz : I.—Instantaneous ; B.—Bulb release ; T.—Time exposure. When the indicator is set at I, the shutter will work for instantaneous exposure. One pressure of the bulb accomplishes the exposure. When indicator is set at B, the shutter will remain open while bulb is kept under pressure. When indicator is set at T, the shutter works for time exposure. The first pressure will open the shutter and the second pressure will close it.

The speed is governed by the indicator at top of the shutter.

To set speed indicator for any desired speed, turn the speed dial from right to left until the speed number required is directly under the pointer.

The figures on the name plate represent the various diaphragm openings.

When the shutter is used for time or bulb exposures it is necessary to set the speed at the lowest point, No. 1.



Manhattan Lamp.

This is an improvement over the regular dark room lamps. It has complete ventilation and thus gives a steady and safe light. The front is fitted with an orange and ruby glass; the back acts as a reflector and aids in producing a volume of light sufficient for work in the dark room.

Made in two sizes :

No. B.....\$1.00

No. A.....\$1.50

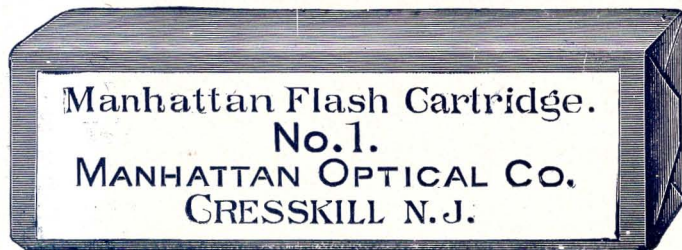


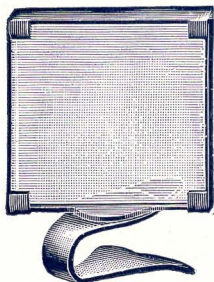
Manhattan Flash Cartridges.

This is a compound magnesium made especially for us, yielding the most excellent results in flash light work.

Made in two sizes, each package containing 6 cartridges.

No. I..25c. No. II..40c.





The Snap Shot Sighter.

Instantly and accurately locates the picture to be taken, on a bright lens, not a ground glass. Can readily be attached to any camera.

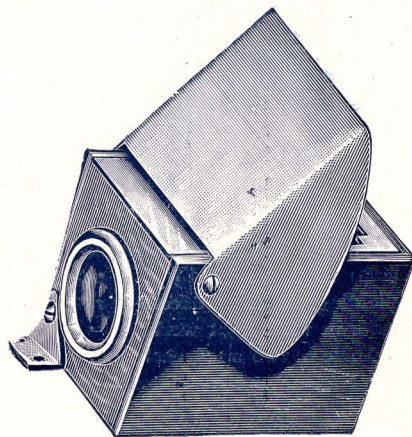
For $3\frac{1}{4} \times 4\frac{1}{4}$ and 4×5 camera,	-	-	-	each.	\$1.00
" 5×7 and 5×8 camera,	-	-	-	"	1.50
" $6\frac{1}{2} \times 8\frac{1}{2}$ and 8×10 camera,	-	-	-	"	2.00



Manhattan Brilliant View Finder.

Has a series of high grade lenses in place of the usual ground glass, and gives, therefore, a highly illuminated miniature of the image on the ground glass. Excels anything heretofore offered. The lenses are set in a polished mahogany box, which is readily attachable to the camera by a reversible brass catch, permitting of either vertical or horizontal views.

Complete, for 4×5 ,	-	-	-	\$1.00
" " 5×7 , $6\frac{1}{2} \times 8\frac{1}{2}$,	-	-	-	1.50





TAKEN WITH 80-PEEP B.

Card Mounts.

If mounts are to be sent by mail, postage must accompany the order. The amount to add for postage per package on the various sizes is as follows:

3 $\frac{1}{4}$ x 4 $\frac{1}{4}$	-	-	-	13c.	4 x 5	-	-	-	15c.
Cabinets	-	-	-	17c.	5 x 7	-	-	-	20c.
5 x 8	-	-	-	26c.	6 $\frac{1}{2}$ x 8 $\frac{1}{2}$	-	-	-	37c.

No. 1—White, Round Edge, Plain, Rose, Primrose.

		Per Package of 25		Per 100
3 $\frac{1}{4}$ x 4 $\frac{1}{4}$	-	\$.18	-	\$.65
4 x 5	-	.20	-	.70
Cabinets	-	.25	-	.80
5 x 7	-	.30	-	.95
5 x 8	-	.35	-	1.10
6 $\frac{1}{2}$ x 8 $\frac{1}{2}$	-	.50	-	1.50

No. 2—Amber, White or Rose, with Gilt Beveled Edge.

		Per Package of 25		Per 100
3 $\frac{1}{4}$ x 4 $\frac{1}{4}$	-	\$.25	-	\$.80
4 x 5	-	.30	-	.95
Cabinets	-	.30	-	1.00
5 x 7	-	.50	-	1.75
6 $\frac{1}{2}$ x 8 $\frac{1}{2}$	-	.80	-	2.75

No. 3—Unenameled, Narrow Embossed Border, Assorted Colors.

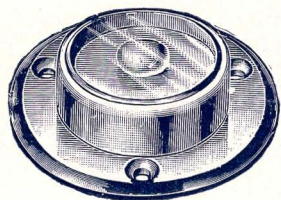
		Per Package of 25		Per 100
4 x 5	-	\$.35	-	\$1.20
5 x 7	-	.65	-	2.25

Dry Plates.

ALL BRANDS, SUCH AS CARBUTT, CRAMER, SEED, WUESTNER, STANLEY, ETC.

3½ x 3½	per dozen, \$	.45	5 x 8	per dozen, \$	1.25	11 x 14	per dozen, \$	5.00
3¼ x 4¼	"	.45	6½ x 8½	"	1.65	14 x 17	"	9.00
4 x 5	"	.65	8 x 10	"	2.40	16 x 20	"	12.50
5 x 7	"	1.10	10 x 12	"	3.80	20 x 24	"	18.50

Special prices quoted in case lots.



Spirit Levels

To attach
to camera beds.

Are of nicked
metal mounting.

Price, each, 75 cts.



Glass Trays.

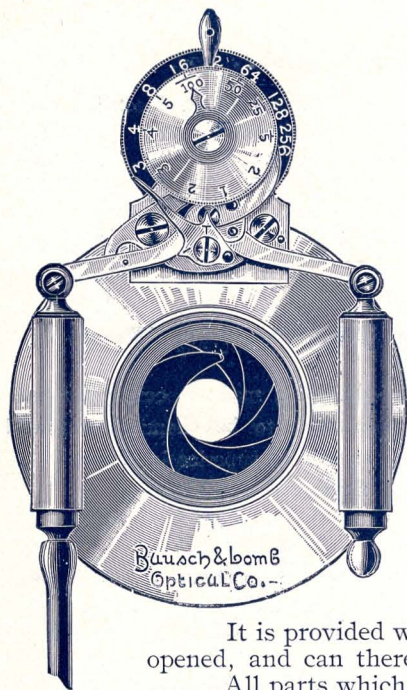
Superior quality, with raised knobs inside. We
supply either amber or white glass
at same price.

4½ x 5½	-	-	-	-	-	\$	.25
5½ x 8½	-	-	-	-	-		.35
8 x 10	-	-	-	-	-		.75

The Manhattan Tray.

Of Compressed Fibre, made especially for us.
They are guaranteed to be chemical and acid
proof, as well as superior in shape,
finish and durability
to all others.

			Shallow.			Deep.
3¼ x 4¼	-	-	\$.20	-	-	
4¼ x 5½	-	-	.28	-	-	\$.50
5½ x 8½	-	-	.56	-	-	.70
7 x 9	-	-	.72	-	-	.85
8½ x 10½	-	-	1.08	-	-	1.15
10½ x 12½	-	-	-	-	-	1.75
12 x 16	-	-	-	-	-	2.40



The Diaphragm Shutter.



THE Diaphragm Shutter will be found to meet every requirement of the amateur or professional photographer desiring a strictly first-class shutter for indoor or out-door work.

It is constructed in the best possible manner, operates without concussion even when set at the highest speed, and is almost noiseless in action.

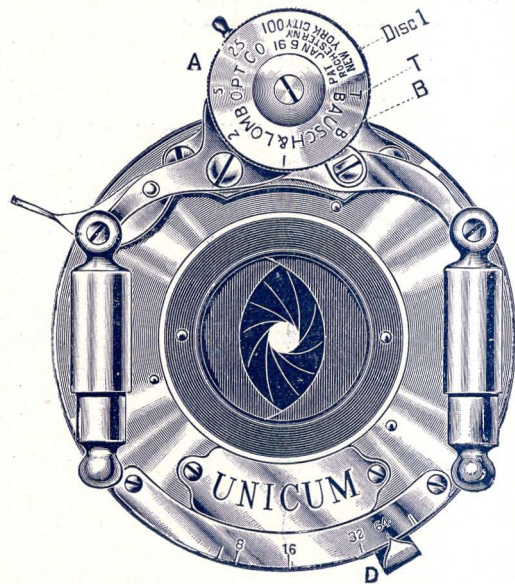
No loose diaphragms for the lens are necessary with this shutter, as the leaves serve the purpose of stops. The variation in size of the opening is made by turning the black discs with index shown in illustration.

The pointer on the small index indicates the speed. The shutter will work automatically from three seconds to the one-hundredth part of a second, and by simply moving a small lever, it may be set for time exposure of any desired duration. In the latter case a pressure of the bulb closes the shutter.

It is provided with safety device, so that in setting shutter the blades are not opened, and can therefore make no exposure.

All parts which must be manipulated, are placed at the front, easy of access.

Size.					Price.
4	x 5	-	-	-	\$14.00
5	x 8	-	-	-	15.00
6½	x 8½	-	-	-	16.00



The Unicum Shutter.

THE Unicum Shutter is the latest product of the Bausch & Lomb Optical Co., and is one of the best working shutters now on the market. It has both finger and pneumatic release.

It is fitted with Iris Diaphragm which is regulated by moving the lever D to the right or left. The openings are in accordance with the uniform system and are indicated on the scale.

It works automatically from $\frac{1}{100}$ of a second to 1 second, and any fraction between, by simply revolving the disc No. 1 to the desired speed, opposite letter A.

Long time exposures are given by placing letter T at indicator, one pressure of the bulb will open the shutter and the second pressure will close it.

When letter B is at indicator, one pressure of the bulb will open it, and when pressure is released it will close.

Any lens having $\frac{3}{16}$ of an inch space between the front and back lenses can be fitted to this shutter.

The Model Duplex Burnisher.



THIS is a new machine, built to meet the growing demand for a good Double Roll Burnisher in small sizes, at lower prices than those heretofore offered. It is thoroughly well made in every detail. The top roll is hinged, and the pressure can be quickly and perfectly adjusted. The roll is quickly heated with either oil or gas, and results produced are unsurpassed by any other burnisher made.

6 inch, with Oil or Gas Heater,.....	\$ 7.50
8 " " " " " "	10.00
10 " " " " " "	12.50
12 " " " " " "	15.00

Manhattan Negative Preservers.



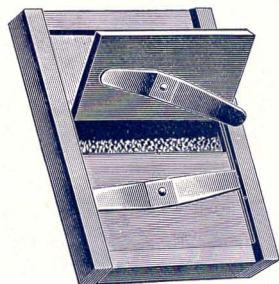
These Preservers are made of smooth Manilla paper, and protect negatives from dust, breakage or scratches. They facilitate accurate registering.

	Per 100.	Per 1000.			Per 100.	Per 1000.
For 3½ x 3½ Negatives,	\$.25	\$2.25	⋈	For 5 x 7 Negatives,	\$.35	\$3.00
" 4 x 5 "	.30	2.50	⋈	" 6½ x 8½ "	.40	3.50
" 4½ x 6½ "	.32	2.75	⋈	" 8 x 10 "	.50	4.50

Inside Dry Plate Kits.

For the use of smaller size dry plate in plate holders.

4 x 5, 3 1/4 x 4 1/4	\$.25
5 x 7, 4 x 5, 3 1/4 x 4 1/4 .....	.30
6 1/2 x 8 1/2, 5 x 7, 4 x 5, 3 1/4 x 4 1/4 .....	.35



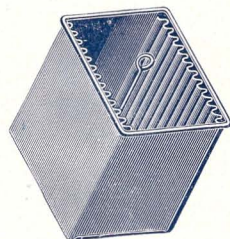
Printing Frames.

3 1/2 x 3 1/2	\$.20	4 1/4 x 6 1/2	\$.30
3 1/4 x 4 1/4 .....	.22	5 x 7 .....	.30
4 1/4 x 4 1/4 .....	.25	5 x 8 .....	.40
4 x 5 .....	.25	6 1/2 x 8 1/2 .....	.45
8 x 10	\$.60		

Manhattan Photo Paste

Is put up in air-tight porcelain jars, with self-sealing glass covers. Always ready for use, and is warranted chemically pure.

2 oz. Jar	\$.10	6 oz. Jar	\$.25
4 " " .....	.15	1/2 Gallon .....	.65
1 Gallon	\$1.10		



The Manhattan Hypo Fixing Box

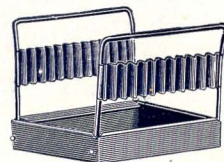
Will not rust; has a new plate lifter, and the plates can be taken out readily.

No.	Size of Plate.	Price.
1	$3\frac{1}{4} \times 4\frac{1}{4}$ or $3\frac{1}{4} \times 4$	\$.90
2	4 x 5	1.00
3	5 x 7 or 5 x 8	1.50
4	$6\frac{1}{2} \times 8\frac{1}{2}$	1.75



The "Wizard" Drying and Washing Rack

Will fold up to a thickness of about half an inch, and can therefore be recommended to the tourist. It is made of japanned metal. The tray at the bottom will receive all the drippings from the plates.



Price,50 cents.

No.	Inches Wide.	Size of Plate.
1	$3\frac{1}{2}$	$3\frac{1}{2} \times 3\frac{1}{2}$, $3\frac{1}{4} \times 3\frac{1}{2}$
2	$4\frac{1}{4}$	$3\frac{1}{2} \times 4\frac{1}{4}$, $4\frac{1}{4} \times 4\frac{1}{4}$, $4\frac{1}{4} \times 6\frac{1}{2}$
3	5	4 x 5, 5 x 7, 5 x 8

The Manhattan Candle Lamp

Is made of japanned metal, perfectly light-tight, and a general good dark room lamp at a moderate outlay.

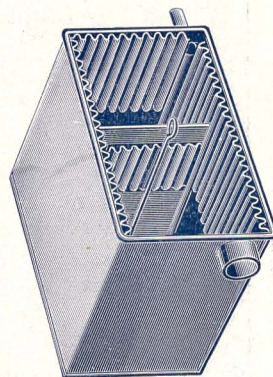
Price, including candle,50 cents.



The Wizard Washing Box.

THE water enters by a rubber hose attached to the small tube at the top, which extends to the bottom of the box. Here the water is distributed and goes up through the perforated bottom and flows out through the large tube at the other side.

To take negatives out, lift the rod in the center; this will raise the perforated bottom and will bring the negatives along with it so that they will project a little above the top, and can be held by the edge when taken out.



No.	Size of Plate.	Price.
1	$3\frac{1}{4} \times 4\frac{1}{4}$, $3\frac{1}{4} \times 4$, or $3\frac{1}{4} \times 3\frac{1}{4}$	\$1.15
2	4×5 and 5×7	1.25
3	$3\frac{1}{4} \times 4\frac{1}{4}$, $4\frac{1}{4} \times 4\frac{1}{4}$, or $4\frac{1}{4} \times 6\frac{1}{2}$	1.25
4	5×7 and $6\frac{1}{2} \times 8\frac{1}{2}$	1.75
5	$6\frac{1}{2} \times 8\frac{1}{2}$ and 8×10	2.00

The Celebrated "Wizard" Photo Preparations.

WIZARD
Gold Toning and Fading Powder
For Faded Prints.
This preparation is used for toning and fading of prints. It is used by dipping the prints in the solution for a few minutes, then washing in water and drying on a glass plate.
Price, 25 Cents.
Sole Agent,
Manhattan Optical Co., 111 E. 11th St., New York, N. Y.

WIZARD
HYDROQUINONE
For Faded Prints.
This preparation is used for toning and fading of prints. It is used by dipping the prints in the solution for a few minutes, then washing in water and drying on a glass plate.
Price, 25 Cents.
Sole Agent,
Manhattan Optical Co., 111 E. 11th St., New York, N. Y.

WIZARD
HARDENING
AND
Clearing Solution.
Will make clear, crisp
prints from fading or be-
coming out in the warmest
weather.
It will keep the paper
flat and hard throughout
the entire operation of
toning and will absolutely
prevent the paper from
swelling and sticking
to the warmest weather.
2 oz. Bottle, 30 cents.
Manufactured and sold by
Manhattan Optical Co.,
111 E. 11th St.,
New York, N. Y.

WIZARD
"REDUCER"
THIS SOLUTION IS TO REDUCE NEG-
ATIVES THAT HAVE BEEN DE-
VELOPED TOO FAR.
WIZARD Reducer is always ready for use and
reduces all negatives that are too thick. It will not
harm the plates and can be used any number of times
has been developed, while still wet or after several
days' exposure.
Two 8-oz. Bottles (Nos. 1 & 2). 50 Cents.
MANUFACTURED SOLELY BY
Manhattan Optical Co. of N. Y.
WHOLE AND RETAIL OFFICE, PRINCETON, N. J.

G
GELATINO
FOR DEVELOPING AND TONING
Prints as fast as in 10
minutes of Gelatin.
Price,
10 Cents.
Sole Agent,
Manhattan Optical Co.,
111 E. 11th St.,
New York, N. Y.

WIZARD
INTENSIFIER
This preparation is used for
intensifying prints. It is used
by dipping the prints in the
solution for a few minutes,
then washing in water and
drying on a glass plate.
Price, 25 Cents.
Sole Agent,
Manhattan Optical Co.,
111 E. 11th St.,
New York, N. Y.

“Wizard” Toning and Fixing Powders, For Gelatine Papers.

These powders have proved most successful. They are put up in mailable form and are convenient to carry. Specially suited to the needs of the tourist.

The solution is made by dissolving the contents in ten ounces of water; the bath is then ready for immediate use and can be used repeatedly. Will tone and fix any brand of Gelatine Paper.

Price, 30 cents. Postage, 3 cents.

“Wizard” Toning and Fixing Powders, For Collodion Paper.

These powders are a novelty and have proved an instantaneous success.

This is the only dry preparation for toning and fixing all brands of Collodion Papers.

Dissolve in ten ounces of water. Bath is then ready for immediate use. Can be used repeatedly.

Price, 30 cents. Postage, 3 cents.

“Wizard” Developing Powders.

These powders are prepared from the very best of chemicals, and when dissolved in water will give twenty-four ounces of good and strong developer, which can be used over and over again with the most satisfactory results.

“Wizard” Developing Powders are admirably adapted to general work, yielding the most brilliant negatives, transparencies, lantern slides, bromide prints, etc.

“Wizard” Developing Powders are put up in **Metol, Hydroquinone, Eikonogen, Hydro-Metol and Eiko-Hydro.**

Price, 25 cents. Postage, 3 cents.

“Wizard” Toning and Fixing Powders are the Best.

Ask your Dealer for them.

“WIZARD” PHOTO PREPARATIONS.—CONTINUED.

“Tono-Collodio” for all brands of Collodion Paper.

Tones and fixes in one bath. No limping nor curling. Give clear high-lights and extreme brilliancy.

8 oz. bottle, 30 cents. 16 oz. bottle, 50 cents.

“Gelatino,” for all brands of Gelatine Papers.

Tones and fixes in one bath. Equalled only by the professional's best baths.

8 oz. bottles, 30 cents. 16 oz. bottles, 50 cents.

“Wizard” Concentrated Developers.

These Developers are put up in solution form and are very strong, and will be found very desirable by those not desiring to mix their own chemicals.

“Wizard” Developers will develop a greater number of plates than any other known developer, as they must be diluted many times with water before using, and can then be used over and over again with the most satisfactory results, and will keep indefinitely.

“Wizard” Developer is adapted to all kinds of work, yielding the most brilliant negatives, positives, transparencies, lantern slides, bromide prints, etc., etc., and will bring out absolutely every trace of an image upon the plate.

PRICES.

“Wizard”	Metol	Developer,	8 oz. bottle....	30c.	“Wizard”	Hydro=Metol	Developer,	8 oz. bot.	25c.
“	Hydroquinone	“	“ “ ...	25c.	“	Eiko=Hydro	“ “ “	“ “	25c.
“	Eikonogen	“	“ “ ...	25c					

"WIZARD" PHOTO PREPARATIONS.—CONTINUED.

"Wizard" Reducing Solution.

This solution is to reduce negatives that have been developed too far.

"Wizard" Reducer is always ready for use, and reduces all negatives that are too dense; it will not stain the plates, and can be used any time after plate is developed, while still wet, or after negative has been dried.

Price, two 8 oz. bottles No 1 and 2, 50 cents.

"Wizard" Intensifier.

For re-developing plates that have been under-exposed or not carried far enough in development. No matter how long negative has been developed, if it is too thin and prints too quickly, it can be re-developed.

The "Wizard" Intensifier always ready for use.

8 oz. bottle, 35 cents.

"Wizard" Hardening and Clearing Solution for plates and papers.

The "Wizard" Hardening Solution will make clear, crisp negatives and will prevent them from frilling or becoming soft in the warmest weather.

The "Wizard" Hardening and Clearing Solution will be found a long felt want by those using gelatine paper, as it will keep the paper clear and hard right through the operation of toning and will absolutely prevent the paper from becoming soft and sticky in the warmest weather.

8 oz. bottle, 30 cents.

Chemicals.

Acetic Acid, per lb. bottle	-	-	-	\$.20
Acid, Citric, per oz.	-	-	-	.12
“ Muriatic, per lb.	-	-	-	.45
“ Nitric, per lb.	-	-	-	.30
“ Oxalic, per oz.	-	-	-	.10
“ Pyrogallie, per oz.	-	-	-	.35
“ Sulphuric, per oz.	-	-	-	.12
Alum, Powdered, per lb.	-	-	-	.10
“ Chrome, per lb.	-	-	-	.20
Ammonia, per ½ lb. bottle,	-	-	-	.25
Ammonium, Iodide, per oz.	-	-	-	.40
Borax, per lb.	-	-	-	.15
Eikonogen, per oz.	-	-	-	.37
Gold, Chloride, per 15 gr. bottle, liquid	-	-	-	.70
“ “ “ “ dry	-	-	-	.50
Hydrochinone, per oz.	-	-	-	.40

Iron Sulphate, per lb.	-	-	-	\$.06
Lead, Acetate, per oz.	-	-	-	.10
“ Nitrate, per oz.	-	-	-	.10
Metol (Hauff's), per oz.	-	-	-	.75
Mercury, Bichloride, per oz.	-	-	-	.12
Potassium, Bromide, per oz.	-	-	-	.12
“ Bicarbonate, per lb.	-	-	-	.30
“ Bichromate, per lb.	-	-	-	.50
“ Carbonate, per lb.	-	-	-	.25
Soda, Caustic, per oz.	-	-	-	.10
“ Sulphate, per oz.	-	-	-	.55
“ Sulphate, granular, per lb.	-	-	-	.35
“ “ crystals, per lb.	-	-	-	.25
Sodium, Acetate, per oz.	-	-	-	.10
“ Bicarbonate, per lb.	-	-	-	.25
Hyposulphite of Soda, per lb.	-	-	-	10

Sundries.

Bristle Paste Brushes, 1 inch wide, each	\$1.10
“ “ “ 1½ “ “ “	.20
“ “ “ 2 “ “ “	.25
Camel's Hair Brushes, 1 inch wide, each	.20
“ “ “ 1½ “ “ “	.30
“ “ “ 2 “ “ “	.46
Blue Print Paper, per pkge. of 25 sheets 3¼x4¼	.16
“ “ “ “ “ “ 4 x5	.20
“ “ “ “ “ “ 5 x7	.35
“ “ “ “ “ “ 5 x8	.40
“ “ “ “ “ “ 6½x8½	.56
“ “ “ “ “ “ 8 x10	.68
Developing Trays, Rubber, for 4 x5 each	.50
“ “ “ “ 5 x8 “	.72
“ “ “ “ 6½x8½ “	.85
“ “ “ “ 8 x10 “	1.16
Filtering Paper, 100 sheets, 7½ inch diameter	.40
“ “ “ “ 10 “ “	.45
Focussing Cloth, Rubber - - - -	.40
Glass Graduates, 4 oz. - - - -	.30
“ Funnels, 1 pint - - - -	.25
“ Cutter, for trimming Dry Plates -	.25
Hydrometer - - - - -	.50

Hard Rubber Fixing Baths, 4 x5	\$2.00
“ “ “ “ 5 x7	2.50
“ “ “ “ 6½x8½	3.00
Negative Boxes (24 plates), 3¼x3¼	.75
“ “ “ “ 4 x5	.80
“ “ “ “ 5 x7	1.00
“ “ “ “ 6½x8½	1.00
“ Preservers, 3 x4½ per 100	.25
“ “ 4 x5 “	.35
“ “ 5 x7 “	.40
“ “ 6½x8½ “	.50
Paste for mounting, per jar - - -	.20
Printing Frames, 3¼x4¼ - - -	.30
“ “ 4 x5 - - -	.38
“ “ 5 x7 - - -	.50
“ “ 6½x8½ - - -	.75
Rubber Finger Tips, per set of 3 - - -	.15
Ruby Lamp, Tin - - - -	.60
Rubber Glove, send size, from -	\$1.50 up
Scales and Weights, 5 inch beam - - -	.60
“ “ “ 6 “ “ - - -	.75
“ “ “ 8 “ “ - - -	1.50
Tripod Brass Plates - - - -	.25

Prices quoted upon application of all styles of Photographic Supplies.

Price List of Platinum Paper.

SIZE.	Smooth Black, Per dozen Sheets.	Rough Black and Rough or Smooth Sepia, Per dozen Sheets.
$3\frac{1}{4} \times 4\frac{1}{4}$	\$.30	\$.30
4 x 5	.45	.50
$3\frac{1}{8} \times 5\frac{1}{2}$ (Cabinets)	.50	.60
5 x 7	.70	.80
5 x 8	.85	.95
$6\frac{1}{2} \times 8\frac{1}{2}$	1.15	1.25
8 x 10	1.70	1.85
10 x 12	2.50	2.80
11 x 14	3.40	3.75
14 x 17	5.25	6.00
16 x 20	6.75	7.00
20 x 26	9.00	10.00


Developer (sufficient for 50 oz. solution), 35 cents.



TAKEN WITH "BOSS DANDY."

Manhattan Floragraph Paper.

The rapidly increased demand for this paper, and the consequently larger output, enables us to offer the same, guaranteeing usual good quality, at the following prices :

Size.	Per Doz.	Per Gross.		Size.	Per Doz.	Per Gross.
2½ x 2½	\$.10	\$.90		5½ x 7¾	\$.40	\$ 3.30
3½ x 3½	.15	1.00		6½ x 8½	.50	4.00
3¾ x 3½	.15	1.00		7 x 9	.60	5.25
3¾ x 4¼	.15	1.00		8 x 10	.70	6.00
4 x 5	.15	1.00		10 x 12	1.00	8.50
3⅞ x 5½ Cab.	.25	.75		11 x 14	1.25	11.25
4 x 6	.25	1.50		14 x 17	1.85	18.00
4¼ x 6½	.30	2.25		16 x 20	2.50	24.00
5 x 7	.30	2.65		18 x 22	3.00	30.00
5 x 8	.40	3.00		20 x 24	3.00	33.00

Cabinet seconds, 60 cts. per gross. 4x5 seconds (trimmed), 50 cts. per hundred. In limited quantity. Floragraph in rolls, any length, 24 inches wide, 12 cents per foot.

N. B.—Any good combined bath will tone and fix this paper, but the best results are obtained by using Manhattan Floragraph Toning and Fixing Solution. 8 oz. bottle, 30 cents. 16 oz. bottle, 50 cents.

Floragraph.—Combined Toning and Fixing Bath.

Having no equal for Floragraph and all Gelatine papers. Gives no muddy tones. No prints turning yellow nor becoming sticky.

8 oz. Bottle,	30 cents.
16 " "	50 "

A Word.... about Lenses.

TO the professional Photographer, we have but little to say. The flattering approbation of this class of workers has proven that our efforts to produce the best have not failed of gratifying results.

But to the Amateur, whose experience is necessarily more limited, we would say a few words which shall help him to make an intelligent selection in the buying of lenses.

There are certain qualities which every first-class lens must possess, and in proportion as it possesses them to a greater or less extent, is the lens a better or a poorer one. Briefly explained these requirements are:

1st : Definition. The beauty of the finished print is largely dependent on this quality in the lens. If the image is sharp in outline, if it is reproduced down to the finest detail, and if these qualities are exhibited over the entire field, then the worker may be assured that his lens is of the best.

In order to produce these results, a lens must combine achromatism with flatness of field and depth of focus.

By achromatism, is meant the concentration of the chemical rays which form the image on the dry plate to exactly the same focus as the visual rays, which form the image on the ground glass. Without this primary quality, a lens can never give good definition.

Flatness of field results from the correction for spherical aberration. This is one of the cardinal requirements of a good lens, and is evidenced when the image is sharply defined to the edge of the plate.

Depth of focus, or depth of definition is also a quality of great importance, and is exhibited when the image is equally sharp for objects lying at different distances from the instrument.

The Angle of View is dependent on the character of the lens, the purpose for which it is to be used. There are, in general, three types as determined by this condition : the Rectilinear, the Wide Angle, and the Extreme Wide Angle. The first includes an angle of from 50° to 70° ,—the second from 75° to 90° —and the last from 90° to 115° . In a given lens, the angle increases as the diaphragm aperture decreases in size.

Our lenses are constructed according to formulas which have been deduced only after extensive calculation. Every optical fault has been provided against, and as a result, our work is as near to optical perfection as it is possible to make it. We use the best of imported glass, and the mechanical part of the work is under constant and competent supervision. We feel confident of the truth of our assertion that there are no better lenses on the market than ours, and are certain that the verdict of the public will, in the future, as it has in the past, justify our claim.

CAMERA LENSES

of every description.

State size of plate, focal length required, and quotation will be sent you.

PROJECTION OBJECTIVES

For Continuous Film Pictures.

Prices quoted on all styles of Lens work.

Daisy Rapid Achromatic Lens.



FOR all ordinary work, especially the Amateur's, these lenses give universal satisfaction, showing very brilliant effects and fully covering the plates specified. The smaller sizes are highly recommended for instantaneous work and for use in hand cameras.

Each lens is mounted in brass, highly finished, and is furnished with rotary diaphragm, having five stops, and is fitted with a morocco cap.

	Back Focus.	Size of Plate with Stop F 16.	Diameter of Lens.	Price.
No. 1	4 inches	$3\frac{1}{4} \times 4\frac{1}{4}$	$\frac{5}{8}$ inch	\$2.50
2	$6\frac{1}{4}$ "	4 x 5	1 "	3.00
3	8 "	5 x 7	$1\frac{1}{8}$ "	3.75
4	11 "	5 x 8	$1\frac{3}{8}$ "	4.50
5	14 "	$6\frac{1}{2} \times 8\frac{1}{2}$	$1\frac{5}{8}$ "	6.00
6	17 "	8 x 10	$1\frac{7}{8}$ "	7.00

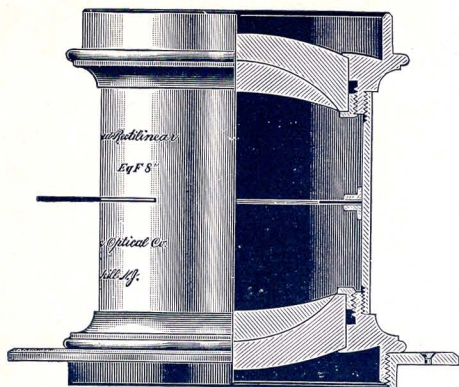
Manhattan Rapid Rectilinear Lens.



THIS series of lenses is of somewhat simpler construction than our Extra Rapid Rectilinear, and is especially for the Amateur's work. We have fortunately been able to produce an objective of first-class working qualities, at a price very favorable to the purchaser.

These lenses work at F10, and combine great rapidity and uniform illumination with flatness of field and excellent definition. They are suitable for every kind of rectilinear work, copying, groups, flash lights, architectural views, etc. With the larger stops, they will produce good portraits, and the back combination, used as a single view lens, will cover about twice the size plate with half the speed. Mounted in highly finished brass, with Waterhouse diaphragms, case for same and morocco cap.

No.	Equiv. Focus.	Diam.	Plate F8.	Price.
1	6½	7⁄8	4 x 5	\$ 9.00
2	8¼	1 1⁄8	5 x 7	12.00
3	9½	1 1⁄4	5 x 8	14.00
4	11	1 3⁄8	6½ x 8½	18.00
5	13	1 7⁄8	8 x 10	22.00
6	15	2¼	10 x 12	26.00
7	18	2¾	11 x 14	30.00



Extra Rapid Rectilinear Lens

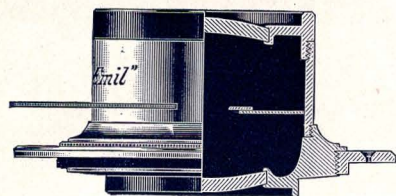
WE are pleased to be enabled to announce that we have found it possible to still further improve and correct this already excellent system. As now made, our "Extra Rapid" will stand the most severe tests that can be applied to a Rectilinear. We have no hesitation in pronouncing it the best Rectilinear on the market, knowing that a competitive test will prove the truth of our assertion.

These lenses are of the Rapid Symmetrical type, and are adapted for architectural subjects, copying and enlarging, where absolute freedom from distortion is required. It is possible to secure with these lenses the greatest rapidity obtainable, without the sacrifice of definition due to spherical aberration, and for this reason they are especially adapted for instantaneous work.

The larger lenses of this series are suitable for studio work, having unusually sharp definition uniform illumination and great depth, being qualities so much sought for in groups, figures, large heads, etc.

The back lenses may be used alone, covering about twice the size of plate with about one-half the speed. These lenses are furnished in superior brass mounting, with Waterhouse or Iris diaphragms and morocco cap.

	Equiv. Focus.	Diam.	Plate F8.	Price.		Equiv. Focus.	Diam.	Plate F8.	Price.
1	6½	1	4 x 5	\$18.00		7	18	2¾	\$66.00
2	8¼	1½	5 x 7	22.00		8	21	3¼	84.00
3	9½	1¾	5 x 8	24.00		9	23	3½	102.00
4	11	1⅝	6½ x 8½	28.75		10	26½	3¾	126.00
5	13	1⅞	8 x 10	33.50		11	30	4	180.00
6	15	2¼	10 x 12	48.00					



“Emil” Wide Angle Lens.



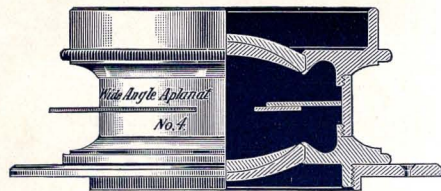
THESE lenses are highly recommended for those desiring a cheap lens for general use; such as high buildings, interiors and architectural work.

They have an angle of from 80 degrees to 90 degrees, depending upon the stop used.

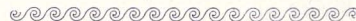
These lenses have rare covering capacity and equality of illumination, and where the larger stops are used, a speed suitable for instantaneous or flash light exposures can be obtained.

Each lens is mounted in highly finished brass and is provided with revolving diaphragm and morocco cap.

	Back Focus.	Diam.	Plate F16.	Price.
1	$3\frac{3}{8}$	$\frac{5}{8}$	4 x 5	\$ 6.00
2	$4\frac{7}{8}$	$1\frac{1}{16}$	5 x 7	7.50
3	$5\frac{3}{8}$	$\frac{3}{4}$	5 x 8	8.00
4	$6\frac{1}{4}$	$1\frac{3}{16}$	$6\frac{1}{2}$ x $8\frac{1}{2}$	10.00
5	$7\frac{1}{4}$	$\frac{7}{8}$	8 x 10	14.00



Extreme Wide Angle Aplanat.



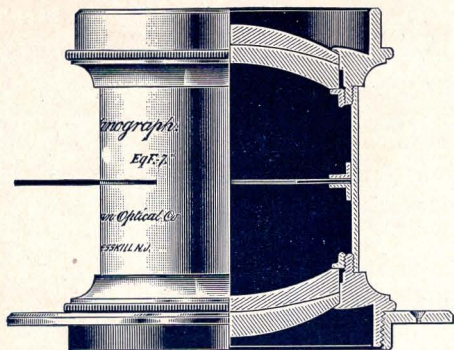
THIS objective is also the result of recent very exhaustive computations on the famous Jena glass, and is constructed for the most extreme angle work where a perfect panorama is desired.

The angular aperture runs up to 110° with entire freedom from distortion, and combines a flatness of field and minute defining power that surpasses anything heretofore offered.

Its admirable adaptability for all classes of interior and architectural work will no doubt secure for this lens a most enthusiastic reception by those who have been hampered by defective and worthless instruments, which are catalogued for angles which it would be impossible to cover with a pin-hole aperture.

With large stops over the plate named, flash lights and instantaneous views may be satisfactorily taken, as the marvelous flatness, perfection of definition, and equality of illumination embodied render the most gratifying results not only possible but extremely practicable. These lenses are absolutely free from all flare or foggy diffusions and are as near optical perfection in every particular as it is possible to construct them.

	Equiv. Focus.	Diam.	te F16.	Price.		Equiv. Focus.	Diam.	Plate F16.	Price.
1	$3\frac{1}{2}$	$\frac{5}{8}$	x 5	\$16.00	7	$10\frac{1}{4}$	$1\frac{3}{4}$	11 x 44	\$45.00
2	$4\frac{1}{2}$	$\frac{3}{4}$	x 7	20.00	8	$12\frac{3}{4}$	2	14 x 17	65.00
3	$5\frac{1}{4}$	$\frac{7}{8}$	5 x 8	22.50	9	15	$2\frac{1}{4}$	16 x 20	90.00
4	6	1	$6\frac{1}{2}$ x $8\frac{1}{2}$	25.00	10	$16\frac{1}{2}$	$2\frac{3}{8}$	18 x 22	125.00
5	$7\frac{1}{2}$	$1\frac{1}{8}$	8 x 10	30.00	11	$18\frac{1}{2}$	3	20 x 24	125.00
6	9	$1\frac{1}{2}$	10 x 12	36.00					



The Planograph.



THE Planograph, which we offer to the public for the first time with this issue of our catalogue, is a combination of the wide angle rectilinear variety, combining the qualities of both to a degree that render this lens a truly "all-round" instrument.

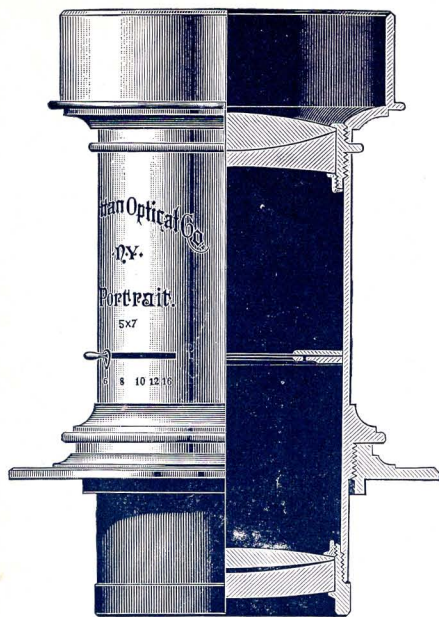
At F 14, which is the working aperture, the field is absolutely anastigmatic. Combined with this marvelous flatness, is a depth of focus that is found in no other type, and which is one of the most remarkable characteristics of this construction. The definition and uniformity of illumination are all that can be desired.

This objective is useful for most of the purposes for which wide angles and retinears are ordinarily used. It is adapted to copying, groups, flash-lights, landscapes, etc., and as it covers an angle of about 75°, it is equally suitable for interiors and architectural work.

From an optical standpoint, this objective is a perfect type, and no effort or expense is spared to make each instrument as nearly perfect as can be attained with the use of the best Jena glass, worked by the most improved and scientific methods.

Each lens is mounted in brass, and is provided with revolving, Waterhouse or Iris diaphragm, and cap, at following prices:

No.	Eq. Focus.	Diam.	Plate F14.	Price.		No.	Eq. Focus.	Plate F14.	Price.
1	6	1	4 x 5	\$15.00		7	16	11 x 14	\$55.00
2	7 3/4	1 3/8	5 x 7	18.50		8	19 3/4	14 x 17	70.00
3	8 3/8	1 1/2	5 x 8	20.00		9	23	16 x 20	85.00
4	9 1/2	1 3/4	6 1/2 x 8 1/2	24.00		10	25 1/2	18 x 22	105.00
5	11 1/2	2	8 x 10	28.00		11	28	20 x 24	150.00
6	14	2 1/2	10 x 12	40.00					



Manhattan Portrait Lens.



OUR portrait lenses have been constructed to compete with the best products of America and Europe. Consequently neither effort nor expense have been spared in perfecting this system so that it shall fulfill all the requirements of the highest grade of portrait objectives.

These lenses are a Petzval form, improved by the use of the Jena glass, with the curves so calculated as to compensate for every optical fault.

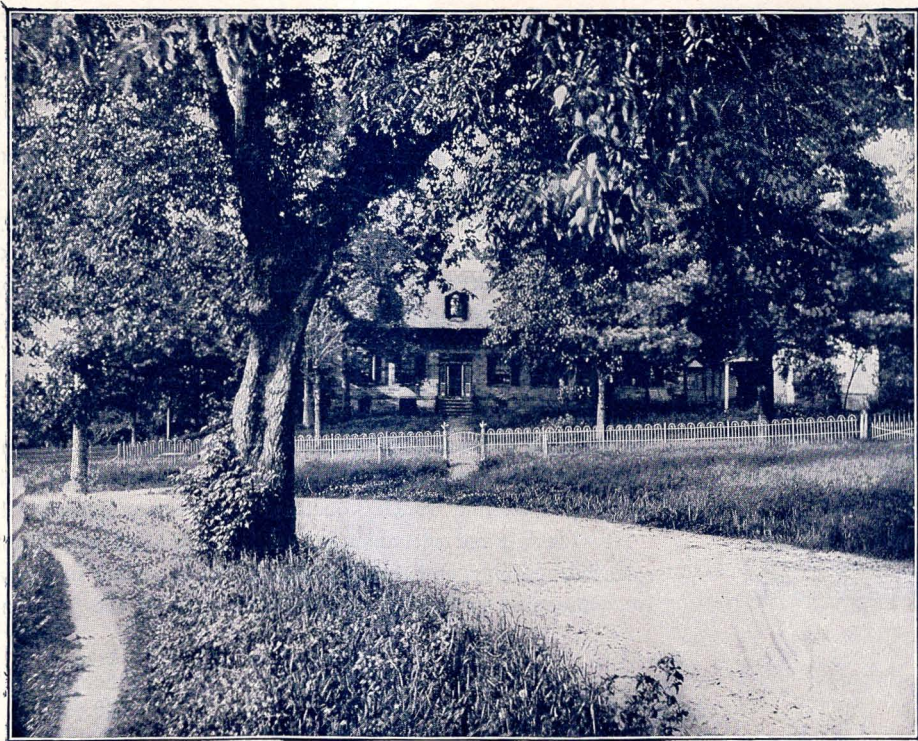
At full opening F4, they possess a remarkably flat field, very delicate definition, entire freedom from distortion, and uniform illumination, working at the same time with great rapidity.

The excellent qualities of these instruments have been attested to by the most eminent photographers, and we feel that our expectations of an enthusiastic reception of these lenses by the professional, will be fulfilled when their sterling working qualities have become generally known.

Optically and mechanically, each lens is finished to the finest detail with scientific accuracy, and each is guaranteed to be perfect in every particular.

Mounted in brass, with Iris Diaphragms, at the following prices:

No.	Size.	Diam.	Back Focus.	Price.
1	5 x 7	2 $\frac{3}{4}$	8 $\frac{1}{2}$	\$ 90.00
2	6 $\frac{1}{2}$ x 8 $\frac{1}{2}$	3 $\frac{1}{2}$	11	130.00
3	8 x 10	4 $\frac{1}{4}$	13 $\frac{1}{4}$	190.00



TAKEN WITH WIDE ANGLE WIZARD.
WIDE ANGLE LENS USED.

HOW TO TAKE A PHOTOGRAPH.

A Few Points which are well to be remembered in taking a picture.

First, before doing anything else, thoroughly examine your camera and make yourself familiar with the working of every part and everything that may accompany the camera.

Filling the Plate Holder.—This must always be done in a dark room by the aid of a ruby light. Place the dry plate in the plate holder, film coated side out. This side is readily found by wetting thumb and finger and taking hold of the corner of the plate, the sticky side of the plate being the film.

Any good brand of dry plates may be used, such as Seed's, Cramer's, Carbutt's, Stanley's, Wuestner's, etc.

The plate holder being filled with a dry plate in either side, the slides must be replaced in holder, and all light carefully excluded from the dry plate until it is exposed in the camera.

The plate holder is now ready to be inserted in camera, immediately in front of the ground glass in rear. Now remove the plate holder slide, the one nearest to lens. Carefully close rear of the camera to exclude all light while the picture is being taken. The directions for operating the camera will be found with each camera.

The picture having been taken, replace the slide in the plate holder. The plate holder can now be reversed and the same operation gone through, viz., two pictures are to be taken. The plate holder with the two exposed plates is then taken in a dark room—care being taken that no light in any way may reach the plate; it is advisable to keep the plate holders, when filled, in the camera or wrapped up in a piece of dark cloth.

The Developing of the Dry Plate.—By the aid of a ruby light, all other light being carefully excluded, withdraw the slide, remove the plate and place same in a developing tray, film side up, and pour over the plate, from glass graduate, enough Wizard Developer (properly reduced in strength as indicated on the bottle) to

completely cover the plate. Keep the tray constantly but gently rocking, so that the Developer gently flows over all parts of the plate. Continue this operation, frequently removing the plate and holding same up before the red light to watch the progress of the developing until the image appears plainly on the plate, and when it begins to disappear, the plate becoming nearly black, the developing is completed. Remove plate from the tray, wash two or three seconds in fresh, clean water. Then follows

The Fixing of the Image Permanently on the Plate.—Have in another tray a handful of Hyposulphite of Soda dissolved in a pint of water. Into this place the developed plate always film side up and leave there until all the milky substance has disappeared from the back of plate—the plate can be frequently removed and examined before the ruby light. This being done, wash the plate in clear running water, or at least in several changes of water for half an hour. The plate or negative, as it is now called, is no longer sensitive to light, and from now on can be exposed to any light.

The negative being washed as above, is now set up on edge to dry in the air or on a shelf—never in the sun or with strong artificial heat.

The Printing now follows.—Place the negative, when thoroughly dried, in the printing frame—film side up. Upon this place a sheet of Floragraph paper—glossy side toward negative. Lock the printing frame and expose negative to bright sunlight. Frequently examine paper while printing, unlocking only half the frame at a time, so that the paper will not be moved. Print one or two shades darker than final results desired.

Toning.—Immerse the print in Floragraph Combined Toning and Fixing Bath—see directions on bottle—until desired tone of the picture is reached.

Mounting.—The print, after toning, is now pasted upon a card; rub lightly over the entire surface, which carefully protect with clean blotting paper. The picture is now complete.