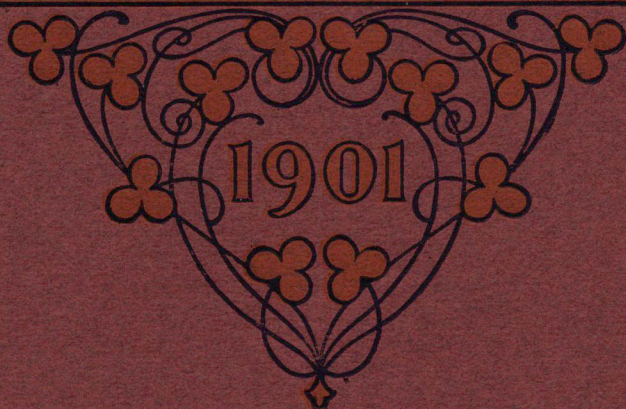


PHOTOGRAPHIC APPARATUS



ROCHESTER OPTICAL & CAMERA CO.
ROCHESTER, N. Y.
U. S. A.

CATALOGUE
AND
PRICE LIST



VIEW CAMERAS
AND
PHOTOGRAPHIC
APPARATUS.



MANUFACTURED BY
Rochester Optical & Camera Co.,
ROCHESTER, N. Y.

1901.

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Prices listed in this Catalogue are net. All goods are boxed and delivered to express or freight company at Rochester, free.

We guarantee safe arrival of goods at destination when shipped by express or freight. When shipped by mail they are at risk of purchaser.

In ordering goods always give shipping directions—whether by freight, express, or otherwise. If not so stated, we will use our discretion.

All orders for goods by express C. O. D. must in *every instance* be accompanied by double the amount of transportation charges.

All orders for shipment by freight or mail must be accompanied by *full amount of purchase*. If by mail, *include postage*, or they will be sent by express.

Remit by draft on New York, post-office order, express money order, or registered letter. Personal checks from parties unknown to us, unless certified, will be collected through our bank before goods will be shipped. In sending checks add ten cents for exchange.

Parties unknown to us and desiring to establish a line of credit, will save delay by giving approved references.

Write name very plain to avoid mistakes in shipping.

We improve our goods when found practicable and the improvement will be supplied without extra cost to our customers.

Prices as listed are subject to change without notice.

INTRODUCTION.

FRIENDS :—

It is with extreme pleasure that we appear before you this first year of the Twentieth Century with a new Catalogue describing all of our make of View Cameras. The first change that will meet your eye will probably be the substantial reduction in prices, and when we assure you that this does not at the same time mean a reduction in quality, we know that you cannot help but appreciate our efforts to place before the photographic trade, goods of the highest class and at a popular price. Our facilities and the concentration of effort, together with the vast experience gained by nearly a quarter of a century of successful Camera building have enabled us to better the quality of our goods and reduce the cost of construction to such a point that we can truthfully say our product leads the world. It has been our earnest endeavor to make the line of Cameras presented for your inspection in this Catalogue as nearly perfect as it was possible for us to do, and for that reason we have discontinued the manufacture of all styles that would not appeal to all as the best for the purpose, and we can safely say we believe we have succeeded. Should experience or suggestions indicate a necessity for any changes in the styles herewith presented, you may rest assured that such changes will only be made after mature deliberation has decided that they are best, and will only be in the way of improvement.

Thanking you for your loyal support in the past, and hoping to continue to merit it in the future, we leave this Catalogue in your hands with full confidence that our efforts will be appreciated.

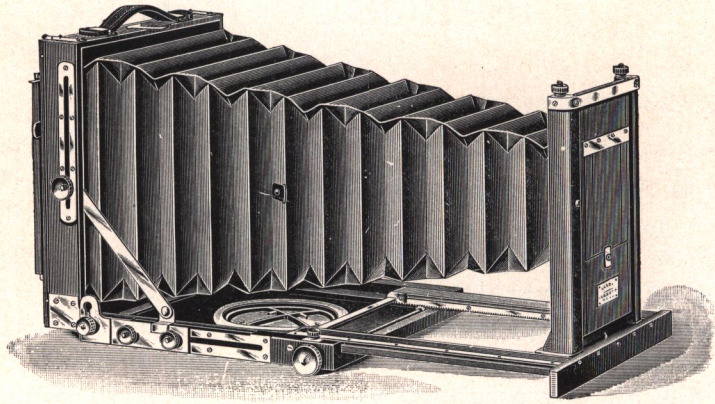
Yours very respectfully,

ROCHESTER OPTICAL & CAMERA CO.,

H. B. CARLTON,

Pres. & Gen'l Manager.

The Carlton Camera.



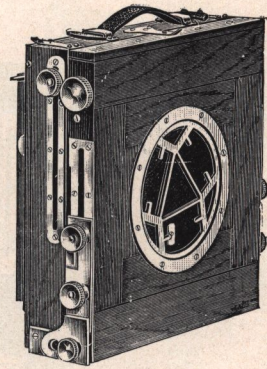
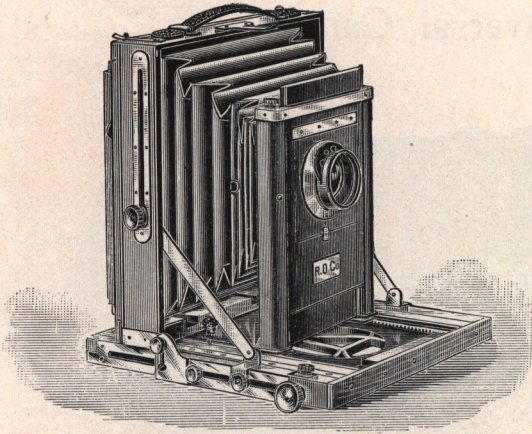
THE CARLTON CAMERA is, without question, the finest Camera ever placed on the American market. The great popularity achieved by it, demonstrates that it is not only one of greatest utility, but superior in workmanship, construction and modern ideas. Every known device of practical worth is embodied in its manufacture. Its beauty of proportion, compactness of form and simplicity of manipulation, appeals directly to the professional and amateur alike.

All wood parts are made of the finest selected mahogany, hand polished and superbly finished. All brass parts are of polished and lacquered brass, and the long Bellows is made cone-shape, of the best Bellows material.

For the enthusiastic amateur and professional photographer who believes in having the very best of everything, the CARLTON, with its manifold features, adapting it to an almost infinite variety of work, will be found to fully meet their views as the Camera *par excellence*.

The CARLTON is equipped with the reversible back, so that vertical as well as horizontal views may be taken at will without disturbing the instrument after the focus is once obtained. It is also fitted with spring actuated ground glass screen for the reception of the Holder.

The bed of the CARLTON carries its own Tripod top, adapted to the Combination Tripod. The top, made of metal, is neatly fitted in the bed and revolves with ease and smoothness, permitting the operator to adjust the Camera in any direction. A small milled head secures it firmly in position.



When Lenses of extreme width of angle are employed, the back may be racked forward, allowing the focus to be obtained with the Lens entirely out of range of the bed. A Lens of two inch focus may be used; still the extreme range is available. The movement is quickly made by the use of two milled heads, which, when loosened permit the back to be placed above the bed, in which position it can be moved forward.

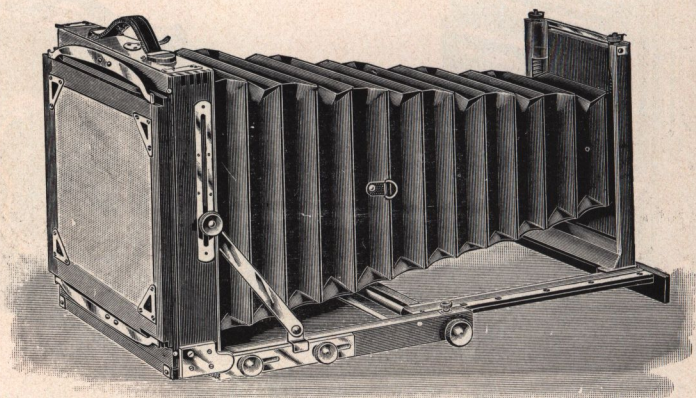
With the extreme length of draw, all regular Lenses now on the market can be used, with double and triple focus, enabling the operator to more than double the size of the image on the ground-glass, when it is deemed desirable.

The price includes one Perfection Holder, with rubber slides; Combination Tripod and Canvas Case.

The CARLTON Cameras, in sizes 8 x 10 inclusive, are furnished with either a short or long canvas case. The former carries the Camera and three Holders only; the latter will hold the Camera, six Holders, Combination Tripod, and in sizes to 6½ x 8½ inclusive, there is a compartment for Lenses. In ordering, specify style of case desired.

Size of View.	Focal Capacity.	Weight of Camera.	Price.
5 x 7,	17 inches,	4⅞ lbs.	\$32.00
5 x 8,	19 "	5¾ "	32.00
6½ x 8½,	20½ "	7 "	34.00
8 x 10,	24 "	9¼ "	38.00
10 x 12,	26¾ "	12¾ "	46.00
11 x 14,	30¾ "	15¼ "	50.00

The Universal Camera.



THE UNIVERSAL CAMERA is a modified English pattern and is the most compact camera in the market, the $6\frac{1}{2} \times 8\frac{1}{2}$ being but $2\frac{7}{8}$ inches thick when folded and weighs but $5\frac{1}{4}$ pounds.

It has an extra long leather bellows, the $6\frac{1}{2} \times 8\frac{1}{2}$ having a focal capacity of $20\frac{1}{4}$ inches, and other sizes in proportion; this allows the use of lenses of extreme length of focus, while wide angle lenses can also be used. Owing to the extra length of bellows the camera can be used for copying and enlarging, if desired, and in fact is as near a UNIVERSAL camera as can well be made.

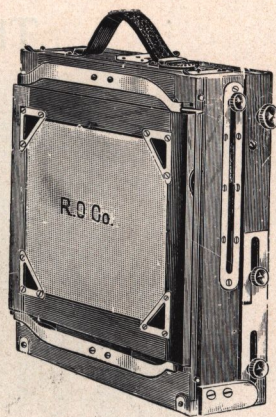
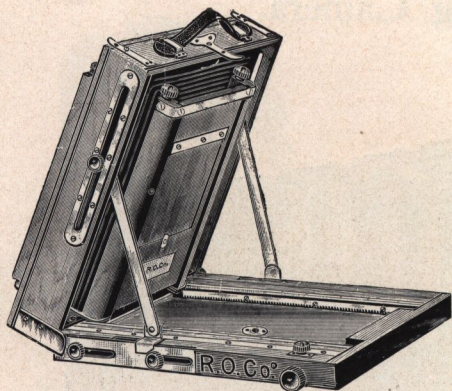
The Universal is made from selected mahogany, finished in the best possible style, and has all the latest improvements. We have spared no pains to make every working point as near perfection as possible.

The camera-box is square, the back being reversible, so that when a view is wanted either horizontally or vertically on the plate, the change can be effected in *five-seconds* by simply reversing the back instead of the entire camera-box.

The ground glass frame is held to the camera back by two springs which allow it to recede so as to insert the holder between the ground glass and camera back.

By this method the ground glass is not liable to breakage, besides being a most convenient method of applying the plate holder to the camera.

While very compact the Universal is simple of manipulation, there being no loose screws or parts. It is set up by tightening four milled heads and is folded again by loosening the same number.



THE UNIVERSAL is made with double swing, has swinging front and rising and falling front controlled by a spring acting in a ratchet, doing away with milled heads. The forward end of bellows is attached to the movable front and slides with it, thus avoiding a possibility of cutting off the rays of light.

It has fine rack and pinion, the movements being perfectly smooth. All metal work is of brass, polished and lacquered.

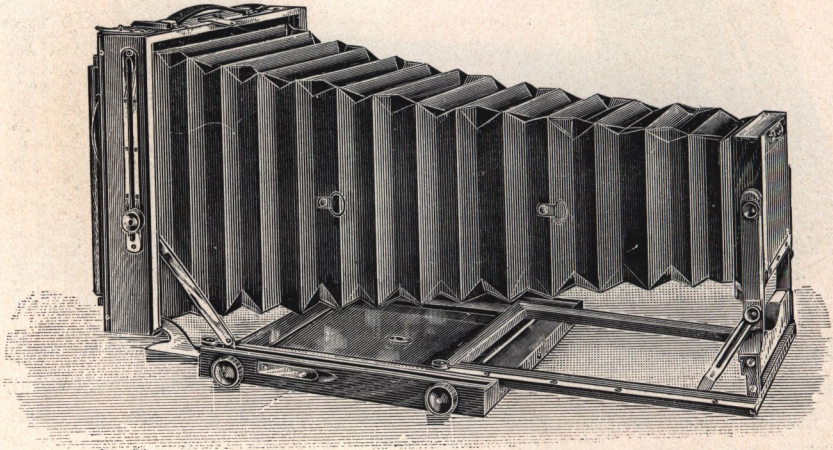
The Universal is provided with a leather handle, so that it may be carried without the case if desired, as one holder can be carried between the ground glass and camera back.

Price includes Canvas Carrying Case, one Perfection holder and Combination tripod. (With sizes above 11 x 14 we send English Book Holder.)

Universal Cameras, up to and including 8 x 10, are supplied with either a short or long Canvas Case. The former carries the camera and three holders. The latter holds camera, six holders and Combination Tripod, and in sizes up to 6½ x 8½ inclusive, there is a space for lenses. In ordering, specify style of case desired.

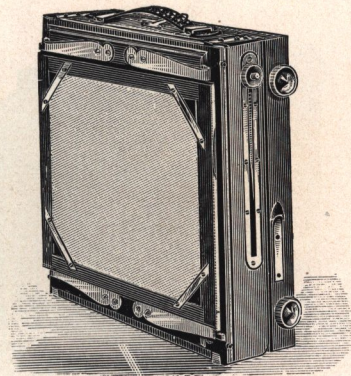
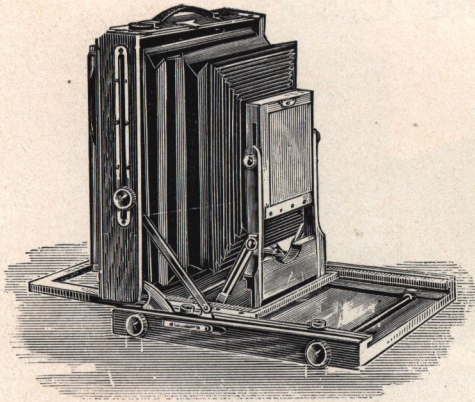
Size of View.	Focal Capacity.	Weight of Camera.	Price.
5 x 7	17 inches.	3⅞ lbs.	\$27.00
5 x 8	19 "	4¾ "	28.00
6½ x 8½	20¼ "	5¼ "	30.00
8 x 10	24 "	7½ "	33.00
10 x 12	26½ "	10¾ "	40.00
11 x 14	30¾ "	13¼ "	42.00
14 x 17	36 "	21½ "	55.00
17 x 20	43 "	34 "	68.00

The King Camera.



THE best camera known to the photographic art. The principal points aimed at in designing the camera were to produce an instrument that would combine every modern improvement of practical utility; compact and portable as possible, consistent with strength and rigidity; that should be simple in its parts, so as to avoid difficulties in use and liability to easily get out of order. It has rising and falling front, with very great range in either direction. It has swinging motion both in back and front. The back may be swung in either a horizontal or vertical direction; the front in a vertical plane, the advantage being when the camera is used for photographing objects either above or below its level, the camera may be tilted and the front and back swung parallel to each other and exactly vertical, giving the advantage of a great rise or fall without distortion. The back of the camera is arranged to slide up close to the front for use with wide-angle lenses. A lens of two-inch focus can be used without the bed obstructing the view, yet the extreme range of focus is available. Compactness is obtained by removing as far as possible all projections; when closed, no working parts except the focusing screws project on the outside.

The camera box is square, the back being reversible, so that when the view is wanted either horizontally or vertically on the plate, the change can be

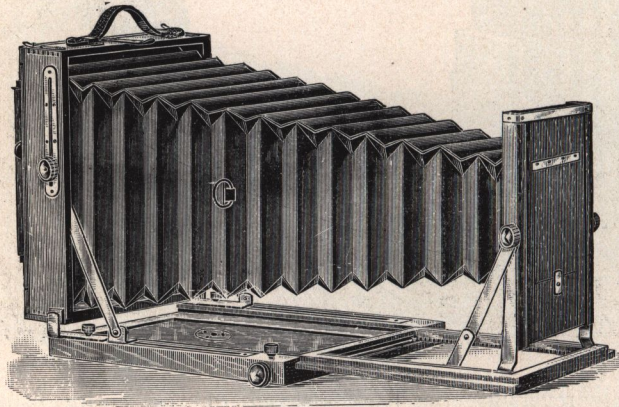


effected by simply reversing the back instead of the entire camera; without effecting the focus when once obtained. The slides may be drawn from top, bottom, or either side. The ground glass screen is spring-actuated, which holds it in position and allows it to recede so as to insert the holder between the ground glass and camera back, returning to its original position when holder is withdrawn.

The camera has no loose parts and is very easy and simple of manipulation. It has two fine rack-and-pinion focusing movements, one at the front and the other at the rear, they operate with smoothness and precision, insuring convenience and a delicacy in focusing not obtainable otherwise. A leather handle is provided so that it can be carried without the case if desired. All the wood parts are selected mahogany, highly polished, and all metal parts are made of brass, polished and lacquered. The bellows is made of the best Russia leather. The price of the King includes one holder and canvas case. When desired, cases will be furnished to hold camera and six holders; or camera, six holders, tripod, and pocket for lenses.

Size of View.	Focal Capacity.	Weight of Camera.	Price.
5 x 7,	17 inches,	4 lbs.	\$26.00
5 x 8,	19½ " "	4¼ " "	26.00
6½ x 8½,	21 " "	5 " "	28.00
8 x 10,	24¾ " "	5¾ " "	30.00
11 x 14,	33¼ " "	11¼ " "	40.00

The Monitor Camera.



THE MONITOR CAMERA is a new form of the compact style of View Camera, and is similar in general appearance to the Carlton, Universal and King.

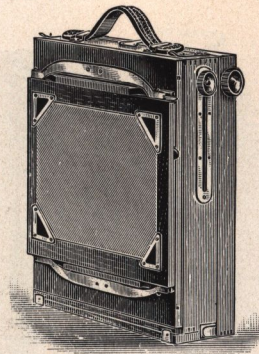
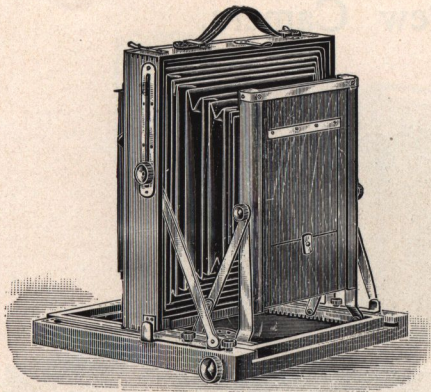
The Monitor has been especially designed with a view of making a strictly high grade compact camera, possessing all the latest improvements, and at a lower price than the Universal.

The Monitor is made with the same care as the other styles, and is in every respect equally well made. It is constructed of the best mahogany, highly polished, and the brass work is polished and lacquered. The bellows is of finest leather, so that the camera presents an exceedingly handsome appearance.

It has extra long draw, allowing the use of lenses of extreme length of focus, while the back will slide forward by loosening two milled heads, so that extreme wide angle lenses can be used.

The Monitor has double swing back, rising and falling front, and is fitted with rack and pinion, the movement being perfectly smooth. The rising and falling front is controlled by a spring working in a ratchet, doing away with milled heads.

The back of the Monitor is square, and may be quickly reversed for either vertical or horizontal pictures. The ground glass is spring actuated, and recedes for the insertion of the plate holder, which slides between the ground glass frame and the back of the camera.



THE MONITOR is exceedingly compact, light in weight, and very simple of manipulation. But two milled heads are tightened in setting up, as the front of the camera is locked automatically in position when raised.

The Perfection Plate Holder is used with the Monitor being a feature of the outfit. It is conceded to be the best holder in the market and is the most compact.

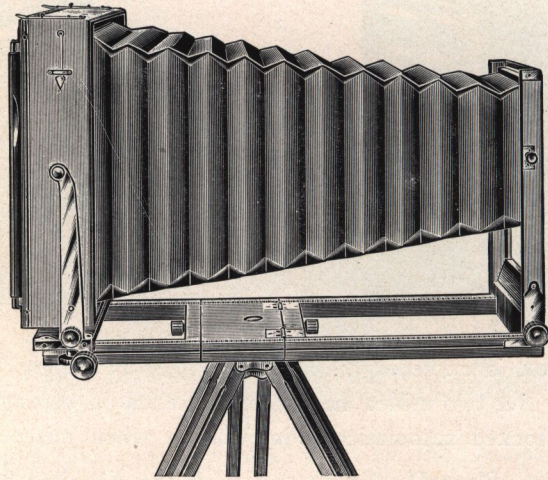
The Monitor is provided with a leather handle, so that it may be carried without the case if desired, as one holder can be placed between the ground glass and camera back.

Price includes Canvas Carrying Case, one Perfection Holder and Combination Tripod.

Monitor Cameras, up to and including 8 x 10, are supplied with either a short or long Canvas Case. The former carries the camera and three holders. The latter holds camera, six holders and combination Tripod, and in sizes up to 6½ x 8½ inclusive, there is a space for lenses. In ordering, specify style of case desired.

Size of View.	Focal Capacity.	Weight of Camera.	Price.
5 x 7	15½ inches.	3½ lbs.	\$22.00
5 x 8	17¼ "	4¼ "	22.00
6½ x 8½	18¾ "	4⅝ "	25.00
8 x 10	21⅞ "	6¾ "	28.00
10 x 12	26 "	9½ "	36.00
11 x 14	29¼ "	12 "	38.00

Rochester View Camera.

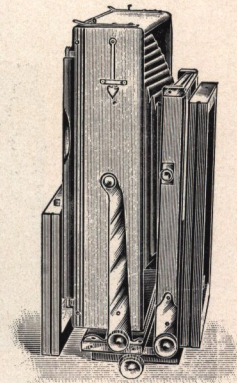
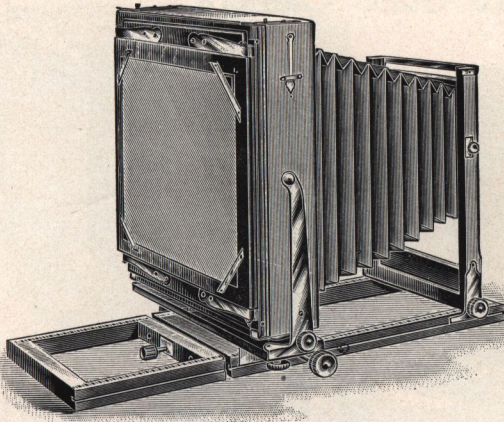


THIS Camera is one of the best and most serviceable of all instruments of this character. It is a thorough and practical business camera, and can be recommended to both the professional and amateur photographer. Simplicity and compactness are the principal features embodied in its make-up. Strength has not been sacrificed on account of its simple construction, no pains having been spared in making it strong and rigid in every particular. It is, in fact, a model of lightness and strength.

The Rochester View Camera is made of the finest selected mahogany, very highly polished. All metal parts are made of the best brass, polished and lacquered. It is fitted with the reversible back, allowing views to be taken in either a horizontal or vertical position, by simply reversing the back instead of the camera.

The back is also fitted with our adjustable spring-actuated ground glass screen, which allows the ground glass to recede when inserting the plate holder, also holding it in position securely while being used and returning to its natural position on withdrawing the holder.

The camera is made with both vertical and horizontal swings, each swinging at the center. The center of the back always operates parallel with the front of the camera or lens.



It is fitted with a fine rack and pinion focusing movement, both at the front and rear, this being a feature obtained only in the better grade of view Cameras. An additional base is supplied, which can readily be attached to the rear for the back containing the ground glass to slide upon, when focusing from this position, or when using the full extension.

It has rising and falling front, and a neat plumb or leveling device is attached to the side of the instrument, insuring perfect alignment and correct position of the Camera when in use.

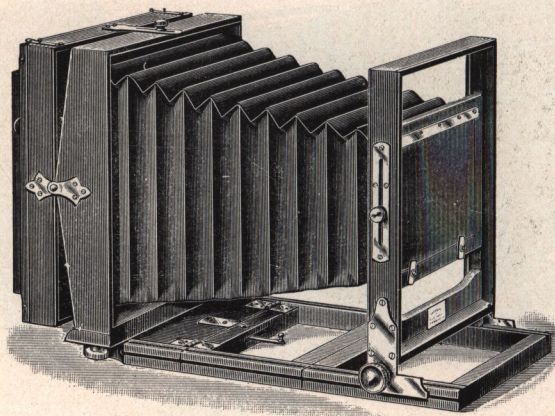
The bellows is made in the best possible manner of selected bellows material.

Wide front for stereo work can be adapted and will be supplied when so ordered; a partition also being adjusted to the camera.

Price includes canvas carrying case and one dry plate holder. Other sizes to order. Stereo partition with lens board, 75 cents extra.

Size of View.	Focal Capacity.	Weight of Camera.	Price.
5 x 7	16½ inches.	4½ lbs.	\$15.00
5 x 8	17 "	5 "	15.00
6½ x 8½	17¼ "	5½ "	15.00
8 x 10	20 "	7 "	17.00
10 x 12	21¾ "	9 "	25.00
11 x 14	22½ "	10 "	25.00
14 x 17	28¼ "	21 "	40.00

The Empire State Camera.



To meet a constantly growing demand, especially among our professional friends, for a well made and thoroughly serviceable camera, possessing all the adjustments requisite for general work, and at a moderate price, we have introduced the "EMPIRE STATE."

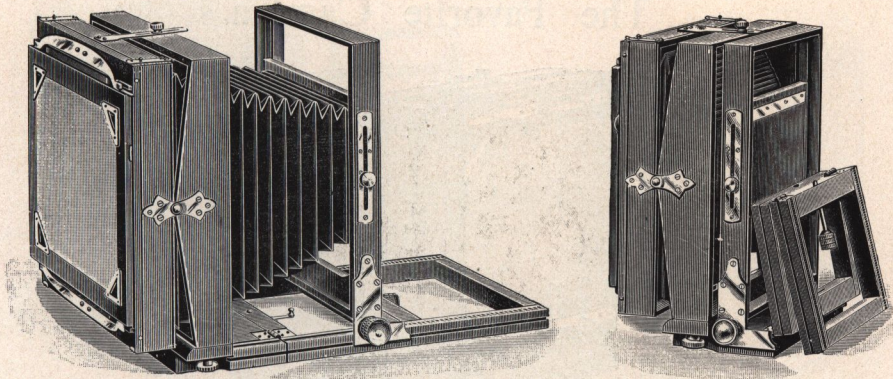
This camera is constructed to combine in a complete and practical manner, all the movements necessary in a camera for both in-door and out-door photography.

The Empire State is made of selected mahogany, and its trimmings are of polished brass. It has forward focus with fine rack and pinion adjustment, the front being held perfectly rigid by turning a milled head placed inside of the one turning the pinion.

The bed is made to hinge, and folds completely under the camera, allowing lenses of extremely short focus to be used. Ample rise and fall is given to the front, a desirable feature for work in confined situations. The front board is made wide enough for stereo lenses.

The Empire State is made with double swing. Unlike most of the moderate priced cameras, swing is from the center, a feature that every professional will quickly recognize and appreciate.

The swing is attached in a very simple manner, occupying no additional room.



The back is reversible, and has our spring actuated ground glass frame. The holder is inserted between the ground glass and camera back. When in position, the slide may be drawn from the top, bottom, or either side as desired.

In recommending the EMPIRE STATE as a thoroughly practical camera in every particular, we feel that our claims will be even more than justified by an examination of the instrument itself, the price in no way conveying an idea of its merits.

We make 14 x 17, and larger, with back focus and with focusing handle, instead of rack and pinion.

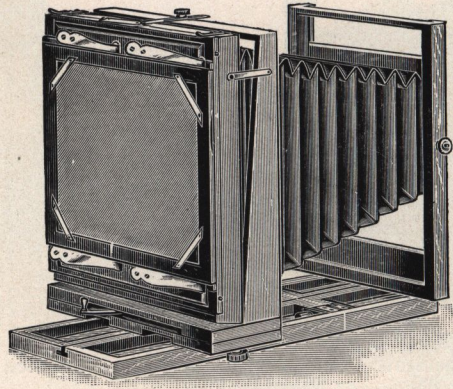
Price includes Canvas Carrying Case and one Perfection Holder.

With sizes above 11 x 14 English Book Holders are supplied.

The Carrying Case will contain two extra plate holders.

Size of View	Focal Capacity.	Weight of Camera.	Price.
5 x 7	15 $\frac{1}{4}$ inches.	5 lbs.	\$16.00
5 x 8	16 "	5 $\frac{1}{2}$ "	16.00
6 $\frac{1}{2}$ x 8 $\frac{1}{2}$	16 $\frac{1}{4}$ "	5 $\frac{3}{4}$ "	16.00
8 x 10	19 "	7 $\frac{3}{4}$ "	18.00
10 x 12	21 "	8 $\frac{3}{4}$ "	26.00
11 x 14	23 $\frac{1}{2}$ "	11 $\frac{1}{2}$ "	26.00
14 x 17	29 "	23 $\frac{3}{4}$ "	40.00
17 x 20	37 "	30 "	45.00
18 x 22	39 "	38 "	50.00
20 x 24	41 "	46 "	60.00

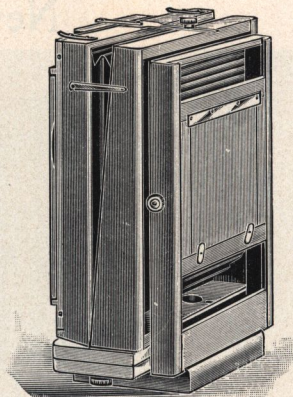
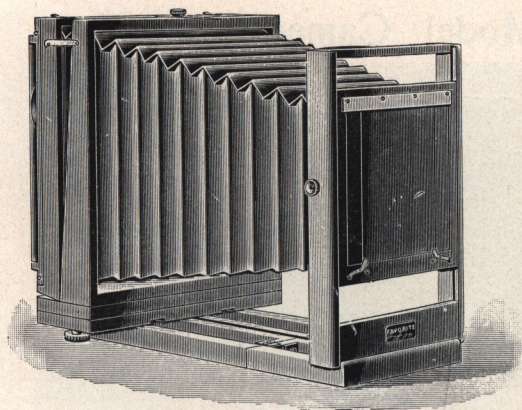
The Favorite Camera.



A FAVORITE with all classes of photographers, both amateur and professional, but especially with the outdoor professional, for whom it was originally designed. All wood parts are of finest selected mahogany, highly polished; mountings of polished and lacquered brass. Although listed at a popular price, the same general care is used in its manufacture as the costlier instruments, all work being done by fine mechanics under our personal supervision.

It is very strong and rigid, light in weight, with the least possibility of getting out of order; in fact, it is made to cover the field of usefulness of all cameras at a price within the reach of all. It is fitted with reversible back, allowing the view to be taken in either a vertical or horizontal position, without reversing the camera. The change can be effected in an instant without interfering with the position of the camera or altering the focus. With the spring actuated ground glass screen, with which it is equipped, the plate holder is easily placed in position, the ground glass receding, securing the holder while the view is being made, and returning to its normal place when the holder is withdrawn. The slide can be withdrawn from the top, bottom, or either side.

The back focus allows any length or angle of lens to be used without the front obstructing the view. It is operated by a quick-acting lever so placed that the focus can be instantly changed. Two tripod plates are fitted to the base, one toward the front and the other at the rear, which insures the balance of the camera on the tripod when the camera is fully extended or with lenses of any length of focus.



The adjustments also include the rising and falling front for regulating sky and foreground in the view, and double swing back, thereby obtaining the required position when photographing objects at a higher or lower level than the camera. The front is made wide enough so that stereoscopic lenses can be used if desired which is a very desirable feature with many. A neat plumb or leveling device is attached to the side of the Favorite, insuring perfect pictures, as the Camera can be leveled in an instant.

The $6\frac{1}{2} \times 8\frac{1}{2}$ and 8×10 sizes have a cut-off division in order that two pictures may be taken on one plate.

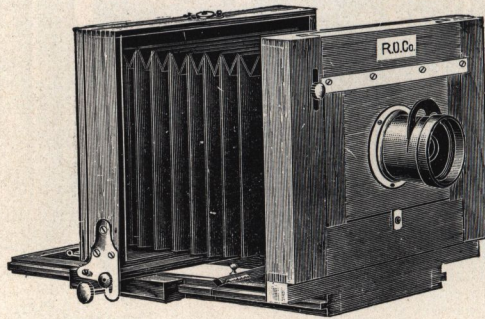
The lens board is made sufficiently large so that an ordinary sized shutter can be placed back of the lens. The bellows is cone-shaped and is made in the best possible manner of selected bellows material, and will not crinkle or get out of shape when folded.

The weight of the $6\frac{1}{2} \times 8\frac{1}{2}$ size is only 5 pounds, measuring 10 x 5 x 12 inches. Other sizes in same proportion.

Price includes camera, carrying case, and one double dry plate holder.

Size of View.	Focal Capacity.	Weight of Camera.	Price.
5 x 7	$13\frac{3}{4}$ inches.	4 lbs.	\$14.00
5 x 8	$15\frac{5}{8}$ "	$4\frac{1}{2}$ "	14.00
$6\frac{1}{2} \times 8\frac{1}{2}$	$15\frac{5}{8}$ "	5 "	14.00
8 x 10	$18\frac{1}{4}$ "	$6\frac{1}{4}$ "	15.50
11 x 14	$23\frac{3}{4}$ "	10 "	24.00
14 x 17	$28\frac{1}{2}$ "	17 "	35.00

New Model Camera.



THE NEW MODEL CAMERA is well known, it having been on the market for sixteen years, and its popularity attests its merits. This camera has the reputation of being the most popular tripod camera for amateurs' use.

It is very light and compact, making a desirable instrument for the amateur who desires a good but cheap outfit.

The New Model is made of selected cherry, well finished, with brass trimmings. It is provided with sliding front, folding bed, and is easily reversed for upright pictures with our new adjustable reversing clamp, by means of which the strain is entirely on the bed where it belongs.

The folding part of the bed is held rigid by our new clamp-hook, the quickest, easiest, and most effective device yet used for the purpose.

Price includes Single Achromatic Lens, Carlton Sliding Tripod, Carrying Case and one Perfection Plate Holder (except 8 x 10, where neither lens nor tripod are included).

The Carrying Case will hold two extra plate holders.

Size of View.	Focal Capacity.	Weight of Camera.	Price.
4 x 5	9 inches.	1 $\frac{5}{8}$ lbs.	\$ 8.00
5 x 7	11 $\frac{3}{4}$ "	2 $\frac{1}{4}$ "	10.00
5 x 8	12 $\frac{1}{2}$ "	2 $\frac{1}{2}$ "	10.00
6 $\frac{1}{2}$ x 8 $\frac{1}{2}$	14 "	2 $\frac{3}{4}$ "	12.00
8 x 10	16 "	5 "	12.00



PINE TREES.

Made with Ray Filter.

The Perfection Holder.

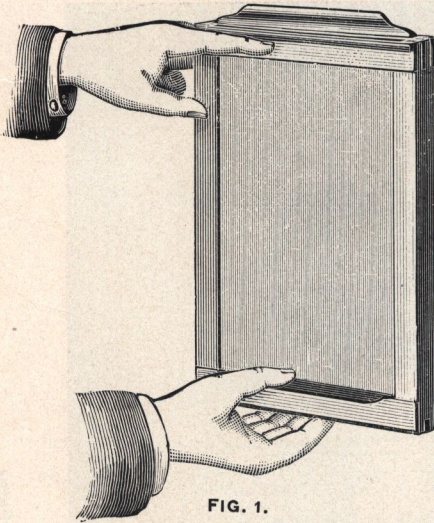


FIG. 1.

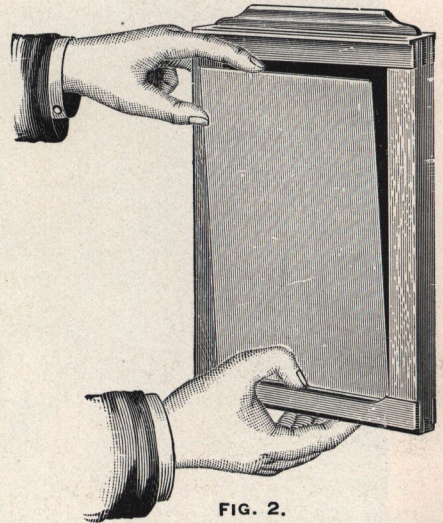


FIG. 2.

THE PERFECTION DOUBLE PLATE HOLDER is the simplest and best plate holder ever placed on the market.

To load the Perfection Holder, rest the end of plate against the spring-bar at the end; then by simply pressing bar with the thumb the plate falls into place.

To unload the Perfection Holder, hold it as illustrated in Figure 1, and by pressing on the spring-bar the plate will fall forward, the edge resting against the fingers, as illustrated in Figure 2.

As the plate is held in place by the ends only, the *full width* is exposed and but $\frac{1}{16}$ inch is cut off from either end.

In ordering Holders, always give name of camera they are to fit.

PRICE RUBBER SLIDES.				PRICE PRESS BOARD SLIDES.			
4 x 5,	\$0.60	8 x 10,	\$1.50	4 x 5,	\$0.50	8 x 10,	\$1.25
5 x 7,	.80	10 x 12,	2.00	5 x 7,	.60	10 x 12,	1.75
5 x 8,	1.00	11 x 14,	3.00	5 x 8,	.80	11 x 14,	2.50
6½ x 8½,	1.25			6½ x 8½,	1.00		

Holder Slides.

Both in hard rubber and black press board, fitting any style of our regular dry-plate holders.

Size,	. . . . .	5 x 7	.5 x 8	6½ x 8½	8 x 10	10 x 12	11 x 14
Hard Rubber,	. . . . .	each,	\$0.20	\$0.25	\$0.35	\$0.50	\$0.60
Press Board,	. . . . .	"		.15	.20	.25	.35

In ordering Slides specify if for Rochester, POCO or Premo holders.



Poco Plate Holder.



POCO PLATE HOLDER is patented, and is the most perfect device yet made for holding dry-plates for camera use. It is simplicity itself, as there are no springs or other devices for holding the plate in position. Simply lay the plate in the holder and insert the slide. To remove, draw the slide and pick out the plate. They are made of selected cherry, are small, light, and neat, and perfect in every detail.

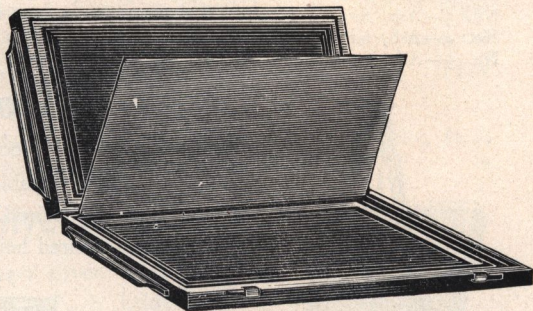
Size, $6\frac{1}{2} \times 8\frac{1}{2}$, with Press Board Slides,	\$1.00
" 8 x 10 " " " "	1.25
" 10 x 12 " " " "	2.00
" 11 x 14 " " " "	2.50
" 14 x 17 " " " "	3.50
" 17 x 20 " " " "	4.50

Size, 5 x 7, with Hard Rubber Slides,	\$0.80
" 5 x 8, " " " "	1.00
" $6\frac{1}{2} \times 8\frac{1}{2}$, " " " "	1.25
" 8 x 10, " " " "	1.50

English Book Holder.

EXTRA THIN.

This is the regular English form of holder, and it has many advantages; the two sides are hinged, and open like a book when placing or displacing the plates; the septum, for division between the two sides of holder, is also hinged, and no trouble to put in place in the dark room.

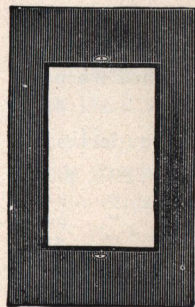


Size 11 x 14, with Rubber Slides,	Price, \$ 5.00
" 14 x 17, " " " "	6.50
" 17 x 20, " " " "	8.00
" 18 x 22, " " " "	10.00
" 20 x 24, " " " "	12.00

Size 11 x 14, with Press Board Slides,	Price, \$4.00
" 14 x 17, " " " "	5.00
" 17 x 20, " " " "	6.00
" 18 x 22, " " " "	7.00
" 20 x 24, " " " "	8.50

Holder Kits.

Kits are made for holding small plates in large plate holders. They fit in the holder the same as an ordinary plate; the opening in the center holding the smaller plate by means of a small button.



SIZE OUTSIDE.	SIZE OF OPENING FOR PLATE.	PRICE.
4 x 5,	$3\frac{1}{4} \times 4\frac{1}{4}$ or $3\frac{1}{4} \times 4$,	each, \$0.15
5 x 7,	$3\frac{1}{4} \times 4\frac{1}{4}$ or 4 x 5,	" .15
5 x 8,	$3\frac{1}{4} \times 4\frac{1}{4}$ or 4 x 5 or $4\frac{1}{4} \times 6\frac{1}{2}$,	" .15
$6\frac{1}{2} \times 8\frac{1}{2}$,	$3\frac{1}{4} \times 4\frac{1}{4}$ or 4 x 5 or 5 x 7 or 5 x 8,	" .20
8 x 10,	5 x 7 or 5 x 8 or $6\frac{1}{2} \times 8\frac{1}{2}$,	" .25
10 x 12,	$6\frac{1}{2} \times 8\frac{1}{2}$ or 8 x 10,	" .30
11 x 14,	8 x 10 or 10 x 12,	" .40

The Carlton Sliding Tripod.

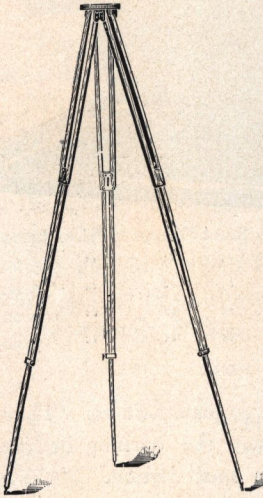
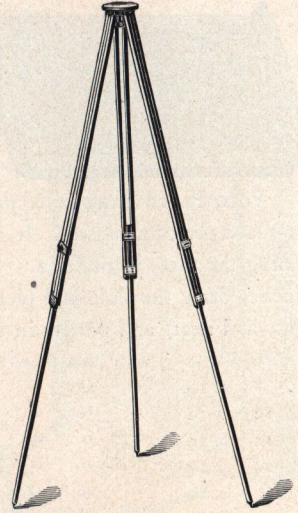
This is one of the simplest and best forms of Sliding Tripods. The legs are made in three pieces, same as the folding, which renders the tripod firmer when set up than



where made of two pieces, which is the ordinary form. The tripod top is of wood, with cloth cover.

The brass clamps each side of the leg have the ends turned toward each other, and when clamped the pressure is exerted from all sides, rendering it the most rigid tripod in the market.

- No. 1—Spruce, for Cameras up to 5 x 7, weight 1 lb., 15 oz., \$1.25
- No. 2—Spruce, for 5 x 8 and 6½ x 8½, weight 2 lbs., 12 oz., 1.50
- No. 3—Ash, for 8 x 10 and 10 x 12, weight 4 lbs., 15 oz., 2.00
- No. 4—Ash, for 11 x 14 and 14 x 17, weight 7 lbs., 3 oz., 2.50
- No. 5—Ash, for 17 x 20 to 20 x 24, weight 11 lbs., 3.00



Combination Tripod.

COMBINED SLIDING AND FOLDING.

The Combination Tripod is one of the most convenient forms yet devised. It is quickly set up for use, readily adjusted at any desired height and perfectly rigid.



It is made in three sections; the lower section slides into the second, while the upper section folds back upon it.

Combination tripods are made of selected spruce and ash, with brass trimmings.

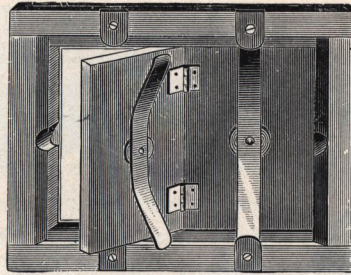
The top is provided with an ingenious device, which prevents the legs from becoming accidentally detached when in position for use.

Extended length, 56 inches; length closed, 22 inches.

- | | |
|---------------------------------------------------------------|---------------|
| No. 1—Spruce, for Cameras up to 5 x 7, weight 1 lb., 6 oz., | Price, \$1.75 |
| No. 1—Ash, for Cameras up to 5 x 7, weight 2 lbs., | " 1.75 |
| No. 2—Spruce, for Cameras up to 6½ x 8½, weight 1 lb., 9 oz., | " 2.00 |
| No. 2—Ash, for Cameras up to 6½ x 8½, weight 2 lbs., 3 oz., | " 2.00 |
| No. 3—Ash, for Cameras up to 10 x 12, weight 4 lbs., 6 oz., | " 2.50 |
| No. 4—Ash, for Cameras up to 14 x 17, weight 7 lbs., 1 oz., | " 3.50 |
| No. 5—Ash, for Cameras up to 20 x 24, weight 8 lbs., 8 oz., | " 4.50 |

Rochester Printing Frames.

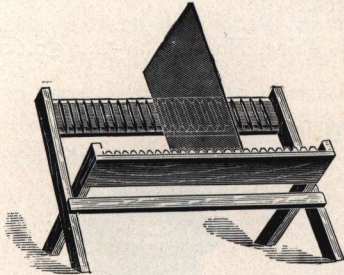
Our Printing Frames are constructed on an improved plan. The springs are fastened by rivets instead of screws, and have a washer placed under them to prevent wear on the wood work. The catch buttons are set into the wood flush with the frame, so that they pile up readily.



4	x	5	.	.	\$0.34
4 1/4	x	6 1/2	.	.	.36
5	x	7	.	.	.38
5	x	8	.	.	.40
6 1/2	x	8 1/2	.	.	.45
8	x	10	.	.	.50
10	x	12	.	.	.60
11	x	14	.	.	.75
14	x	17	.	.	1.75
16	x	20	.	.	2.25
17	x	20	.	.	2.50

Rochester Negative Racks.

These racks are made in a substantial manner of best seasoned cherry, and will hold any size of negative. They are very convenient, as they keep the negatives from becoming scratched while drying. They fold up flat when not in use.

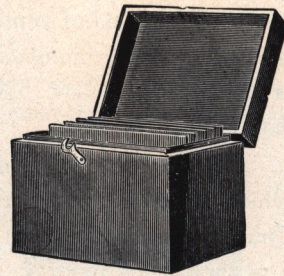


- No. 1. For holding 12 Small Negatives, . . . Price, \$0.10
 No. 2. For holding 24 Medium Size Negatives, "12

Negative Boxes.

Made from selected whitewood, with hinged cover. Are exceedingly convenient for storing negatives. Each holds 24 plates.

3 1/4 x 4 1/4	.	.	\$0.60	5 x 8	.	.	\$0.70
4 x 5	.	.	.60	6 1/2 x 8 1/2	.	.	.85
4 1/4 x 6 1/2	.	.	.65	8 x 10	.	.	1.00
5 x 7	.	.	.70	10 x 12	.	.	1.50



Dry Plate Safety Boxes.

These are made similar to the Negative Box, but with all joints broken, and are lined with black velvet, preventing reflection.

They are useful in the dark room, as the box of plates may be put in the safety box, saving wrapping and unwrapping when filling the holders in a hurry. Lock and key fitted for 60 cents extra.

3 1/4 x 4 1/4	.	.	\$0.75	5 x 8	.	.	\$1.00
4 x 5	.	.	.75	6 1/2 x 8 1/2	.	.	1.20
4 1/4 x 6 1/2	.	.	.90	8 x 10	.	.	1.40
5 x 7	.	.	1.00	10 x 12	.	.	2.00

The Universal Lantern.



THE UNIVERSAL LANTERN is made upon an improved plan, giving an abundant draft, and complete ventilation, hence no smoke, no fume, but a steady, safe light, *and plenty of it.*

The front is fitted with both Orange and Ruby glass. The body is hinged at the back, giving easy access to the interior. The flame is regulated entirely from the outside. The back of the lamp serves as a reflector, and aids in producing a volume of light sufficient for work in any dark room. Made in two sizes.

Price, No. 1, - \$0.50 | Price, No. 2, - \$0.60

The Ideal Lantern.

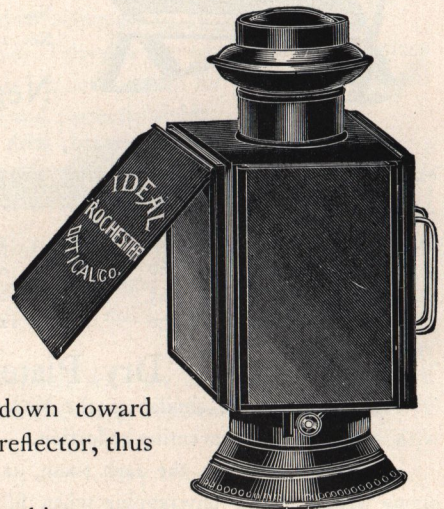
We claim this is the best lantern for the dark room yet placed on the market. Improved method of ventilation. A superior burner. Perfect combustion, whether wick is turned high or low. No smoke, no smell, safe and steady light.

There are three sides for light, all of which have double glass, one sheet each Orange and Ruby, which combination makes a perfectly safe light.

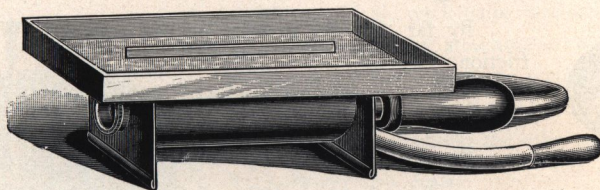
The front is provided with a shield to protect the eyes, and also to reflect the light down toward the developing tray. It also has a silvered reflector, thus increasing the volume of light.

If desired, one side may be used for making transparencies, or for printing with bromide paper, by using a sheet of ground glass in place of the Orange, and a tin slide or shield in place of the Ruby.

Price, - - - - - \$2.50



Magazine Flash Lamp.



PATENTED.

For certain branches of photographic work a Flash Lamp is practically indispensable. The Poco Magazine Lamp, for Pure Magnesium, is constructed on an entirely new plan, by which an immense volume of light is procured at a minimum cost. A series of jets is arranged on an inner tube running the entire length of the magazine, and upon applying air pressure, the powder is kept in a constant "whirl," insuring perfect combustion and an even light. The duration of exposure can be varied at will.

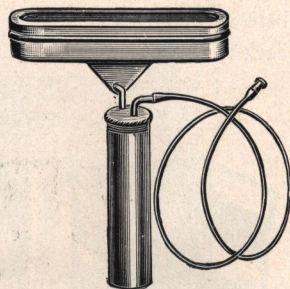
An important feature of the Poco lamp is the fact that it gives a *solid sheet* of flame instead of a narrow streak. Its illuminating power is, therefore, necessarily far greater than can be obtained from lamps of the latter type. Each Lamp is furnished with a tin cover or lid, which also serves as an extinguisher.

Neatly Boxed,	Price, \$1.00
Pure Magnesium, fine ground, per ounce,	" .40

The Ray Flash Lamp.

Flash-light Photography is now attracting widespread attention among the amateurs, and the Ray Flash Lamp fills a long felt want. With it, interiors, groups, dinner and card parties may be taken as clear and sharp as if they were in bright sunlight.

The lamp is constructed on strictly scientific principles, enough air being mingled with the powder to produce perfect combustion, giving a large, wide flash that can be looked at without closing or blurring the eyes. The flash can also be made instantaneous or steady for any length of time desired. Pure magnesium powder only is used, being considered by all to be the best artificial light, as well as the only safe one to use. Other so-called flash-light powders are explosive, and are therefore dangerous. Pure magnesium is not. Twenty-five to thirty ordinary exposures can be made with this lamp without reloading. It is small, compact, and can be easily carried in the pocket. It is the most economical, because it burns all the powder.



Price,	\$1.25.
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Sunlight Flash Powder.



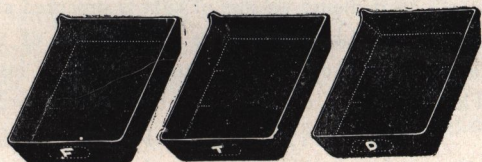
By far the best powder on the market. Will not ignite by friction.

This powder is prepared with the greatest care, and can be used with safety in a parlor or any furnished apartment without danger. Put up as follows, in packages containing six cartridges each.

"A"—6 Cartridges, $\frac{1}{24}$ oz.,	Price, \$0.25	"C"—6 Cartridges, $\frac{1}{8}$ oz.,	Price, \$0.60
"B"—6 Cartridges, $\frac{1}{12}$ oz.,	" .40	$\frac{1}{2}$ oz. boxes,	" .30

Developing Trays.

The Electrose Fibre Trays are acknowledged to be the best developing trays ever put on the market. They are black in color, very smooth, handsome and strong. Guaranteed to be proof against acid and alkali. They are made in the shallow and deep shapes, the deep trays having a lip to facilitate emptying. Both have knobs on the bottom to stand on.



Size 4 x 5, price \$0.12.	|	Size 5 x 7, price \$0.25.	|	Size 5 x 8, price \$0.28.
Size 6 $\frac{1}{2}$ x 8 $\frac{1}{2}$, price \$0.45	|	Size 8 x 10, price \$0.60.		



Agate Ware Pans

FOR TONING PRINTS.

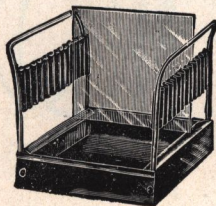
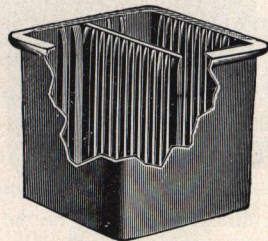
Stronger and lighter than porcelain and not liable to breakage.

Size 7 x 9, price \$0.60. | Size 8 x 10, price \$0.75. | Size 9 x 12, price \$1.10. | Size 11 x 15, price \$1.50.

Compressed Fibre Fixing Bath.

Guaranteed to be proof against acid and alkali and will conveniently hold any size plate or cut film up to size listed. The bath will hold 24 plates, by placing two negatives in each groove, back to back.

4 x 5, each,	Price, \$1.25
5 x 8, "	" 2.00
8 x 10, "	" 3.00



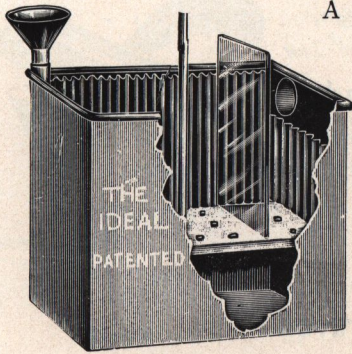
Combined Washing and Drying Rack.

Plates can be washed in this rack and set aside to dry without removing. Sides of rack collapse into compact space when not in use. Each rack holds twelve plates; made in three sizes.

No. 1 for plates $3\frac{1}{2}$ x $3\frac{1}{2}$; No. 2 for plates $3\frac{1}{4}$ x $4\frac{1}{4}$ and $4\frac{1}{4}$ x $4\frac{1}{4}$; No. 3 for plates 4 x 5, 5 x 7 and 5 x 8.

Price, any size, each, \$0.60.

Zinc Washing Box.



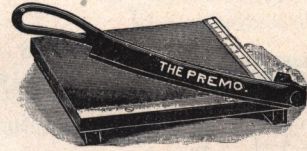
A thoroughly practical, well-made washer at a low price.

The water enters by attaching a rubber hose 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.

No. 1, for plates $3\frac{1}{4} \times 4\frac{1}{4}$, Price, \$1.15
 No. 2, for plates 4×5 and 5×7 , " 1.25

Premo Trimming Board.

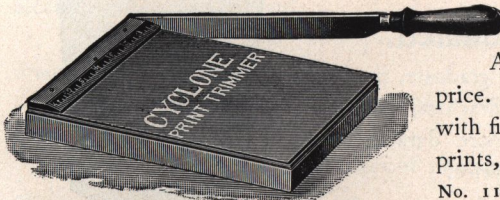
Believing there is a demand for first-class high grade Trimming



Boards, we offer the Premo, which leaves nothing to be desired. The movable blade is curved, giving a drawing cut, so important for smooth work. The efficiency of the machine is increased by the combination of the curved movable blade and the peculiar construction of its pivotal spring joint, which allows the blade a slight lateral motion and secures perfect contact of the two blades at every point.

No. 1, will cut up to 6 inches in width, Price, \$1.50
 No. 2, will cut up to 8 inches in width, " 2.25
 No. 3, will cut up to 10 inches in width. " 3.00

Cyclone Trimming Board.



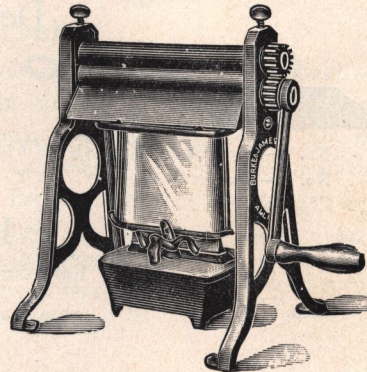
A first-class print trimmer at a reasonable price. This trimmer has a tempered steel knife, with finely ground edge, and will cut tissue paper, prints, cardboard and tin. It will last a lifetime.

No. 11, will cut up to 7 inches in width, price \$1.25
 No. 12, will cut up to $8\frac{1}{2}$ inches in width, " 1.50
 No. 13, will cut up to 10 inches in width, " 1.75

Alladin Rotary Burnisher.

The latest, cheapest and best burnisher for the money ever placed on the market. There is no complicated mechanism to get out of order, and all adjustments are simplicity itself. It is geared for the most brilliant effects. We are able to make the price within the reach of every amateur as well as professional photographer. Supplied with either oil or gas heater. In ordering please specify which is desired, otherwise the oil heater will be furnished.

6 inches,	price \$5.00	10 inches,	price \$ 8.00
8 " "	" 6.00	12 " "	" 10.00





Glass Funnels.

½ Pint,	.\$0.12	1 Quart,	.\$0.20
1 " "	.15	2 " "	.30

Fluted Glass Funnel and Filter.

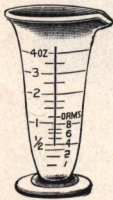
The Fluted Funnel is the best glass funnel made, being very strong. It has glass ribs on the inside, forming passages through which the solution passes quickly while filtering.



½ Pint,	.\$0.15	1 Quart,	.\$0.25
1 " "	.20	2 " "	.35

Glass Graduates, Engraved.

This Graduate is neatly engraved all around and is guaranteed accurate. It is graduated in accordance with the requirements of the United States Pharmacopoeia.

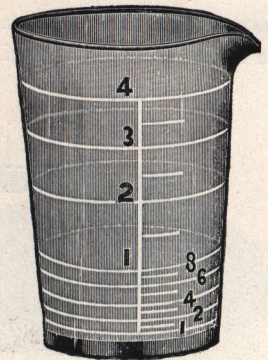


Minim,	.\$0.20
1 ounce, each,	.16
2 " " "	.18
4 " " "	.20
8 " " "	.30
12 " " "	.40

Measuring Glasses, Graduated.

These answer every purpose as a regular graduate, the two and four-ounce sizes being graduated into drachms, and the eight-ounce into ounces only. They are more durable than graduates, and are very popular on account of price.

2 ounce,	.\$0.10	4 ounce,	.\$0.15	8 ounce,	.\$0.20
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Developing Tong.



A very convenient article for development, avoiding the necessity of handling the plate with the fingers.

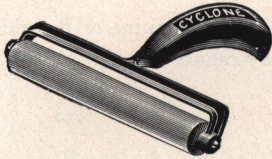
No. 1—For Plates $3\frac{1}{4} \times 4\frac{1}{4}$ to $6\frac{1}{2} \times 8\frac{1}{2}$,	.\$0.40
No. 2—For Plates 5×7 to 8×10 ,	.50

Hydrometers.

For testing strength of Solutions.

Each,	.\$0.50
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Print Roller.

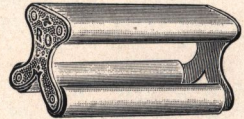


For mounting photographs. Indispensable to the amateur, well made of japanned iron with rubber rollers.

4 inch, each, \$0.15
6 " "25

Squeegee and Print Roller.

For pressing prints on cards when mounting. A very convenient tool.

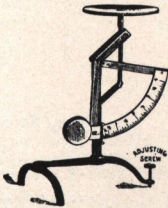


6 inch Double Roller, \$0.40
9 " " "60

Photo Scales.

The best scale for the money yet offered ; no springs to get out of order ; very reliable and convenient ; weighs up to twelve drahms ; glass tray ; easily cleaned.

Price, each, \$0.60



Poco Scales.

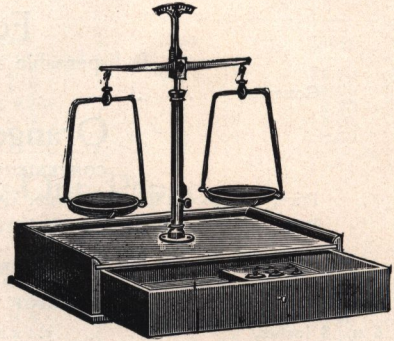
The box is polished walnut, all metal parts nicked and highly polished.

The scales take apart and pack away in the drawer fitted to the box.

The scale is absolutely reliable and is made on scientific principles.

Adapted for weighing all classes of photographic chemicals.

Price, 6 inch beam, \$2.75



Negative Preservers.

They are made of strong, heavy manila paper the proper size for the negative, are shaped like an ordinary envelope, but open on the end for the insertion of the plates, a space being cut for the thumb and finger for convenience in removing them. On the face are printed lines for name, number, description, and remarks. They are invaluable for preserving the negative from dust, scratches, etc. Put up in packages of fifty each.

Size $3\frac{1}{4} \times 4\frac{1}{4}$, per package, price, \$0.10	Size, 5 x 8, per package, price, . . . \$0.20
" 4 x 5, " " "12	" $6\frac{1}{2} \times 8\frac{1}{2}$, " " "25
" $4\frac{1}{4} \times 6\frac{1}{2}$, " " "15	" 8 x 10, " " "35
" 5 x 7, " " "18	" 10 x 12, " " "50

Ferrotypes Plates.

These plates have a highly polished surface. Are used for drying Gelatine or Bromide papers, when a glossy finish is desired without burnishing. They cannot be sent by mail.

10 x 14 inches, light, each,	\$0.20
10 x 14 inches, heavy, each,	.30

Brushes.

BRISTLE—For mounting photographs.

Size	inch wide,	Price, \$
1	inch wide,	.15
" 1 1/2	" "	.20
" 2	" "	.25
" 2 1/2	" "	.30
" 3	" "	.40



CAMEL'S HAIR—For dusting off plates and negatives.

Size	inch wide,	Price, \$
1	inch wide,	.20
" 1 1/2	" "	.30
" 2	" "	.40
" 2 1/2	" "	.50
" 3	" "	.70

Ground Glass.

	Price, \$		Price, \$
4 x 5,	.10	8 x 10,	.20
5 x 7,	.12	10 x 12,	.30
5 x 8,	.12	11 x 14,	.45
6 1/2 x 8 1/2,	.15	14 x 17,	.70

Focusing Cloth.

Indispensable for focusing on the ground glass.

Gossamer,	\$0.50		Velvet,	\$1.00
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Orange or Ruby Fabric.

CONVENIENT FOR LIGHTING DARK ROOMS.

Price, per piece, 18 inches square, either shade,	\$0.20
Price, per square yard, either shade,	.60

Orange or Ruby Glass.

CORRECT TINTS FOR THE DARK ROOM.

6 x 8 inches,	\$0.20	10 x 12 inches,	\$0.50
7 x 9 "	.25	11 x 14 "	.60
8 x 10 "	.30	12 x 15 "	.75

Orange or Post Paper.

FOR DARK ROOM USE.

20 x 24, per sheet,	\$0.05	20 x 24, per dozen sheets,	\$0.25
20 x 24, per quire,			\$0.40

Absorbent Cotton.

FOR FILTERING PURPOSES OR ABSORBING MOISTURE.

2 oz. Parcel,	\$0.20	8 oz. Parcel,	\$0.50
4 oz. "	.30	1 lb. "	.75

Blotting Paper.

FOR DRYING PRINTS OR ABSORBING MOISTURE.

9 x 12 inches, per dozen sheets, . . . \$0.20 12 x 19 inches, per dozen sheets, . . . \$0.40
 19 x 24 inches, per dozen sheets, . . . \$0.75

Dry Plates.

We handle all the leading brands of Dry-plates, among which are Seed, Cramer and Stanley.

Our developers are universal, and will work equally as well on any of the above named plates.

3¼ x 4¼, per dozen,	\$0.45	6½ x 8½, per dozen,	\$1.65	16 x 20, per dozen,	\$13.25
4 x 5, " "	.65	8 x 10, " "	2.40	17 x 20, " "	14.00
4¼ x 6½, " "	.90	10 x 12, " "	4.20	18 x 22, " "	16.50
5 x 7, " "	1.10	11 x 14, " "	6.00	20 x 24, " "	20.00
5 x 8, " "	1.25	14 x 17, " "	9.00		

Aristo Printing-Out Paper.

A reliable photographic printing-out paper. This paper will print with brilliant high lights, giving silky half tones, and rich, transparent shadows, can be used with combined or separate toning baths, and is suitable for strong or soft negatives.

Size.	Dozen.	Gross.	Size.	Dozen.	Gross.
2½ x 2½	2 Doz., \$.20	\$1.00	5 x 8	1 Doz., \$.30	\$3.00
3¼ x 4¼	2 " .20	1.15	6 x 8	1 " .40	4.00
3½ x 3½	2 " .20	1.15	6½ x 8½	1 " .45	4.25
4 x 5	2 " .25	1.25	7 x 9	1 " .50	5.00
5 x 7	1 " .30	2.65	8 x 10	1 " .60	6.50

Matte Surface Printing-Out Paper.

FOR BLACK AND WHITE EFFECTS.

Size.	Dozen.	Gross.	Size.	Dozen.	Gross.
2½ x 2½	2 Doz., \$.30	\$1.20	5 x 8	1 Doz., \$.40	\$3.60
3½ x 3½	2 " .30	1.50	6 x 8	1 " .50	4.80
3¾ x 4¼	2 " .30	1.50	6½ x 8½	1 " .55	5.10
4 x 5	1 " .20	1.65	7 x 9	1 " .60	6.00
5 x 7	1 " .35	3.20	8 x 10	1 " .75	7.80

Developing Paper.

This paper can be both printed and developed by gas or lamp light, and a beautiful effect of both platinum and carbon is obtained. The whole process requires but a few seconds and the results are very pleasing.

Size.	Dozen.	Gross.	Size.	Dozen.	Gross.
2½ x 2½	1 Doz., \$.15	\$1.00	5 x 7	1 Doz., \$.35	\$3.50
3½ x 3½	1 " .15	1.50	5 x 8	1 " .40	4.00
3¾ x 4¼	1 " .15	1.50	6½ x 8½	1 " .60	6.00
4 x 5	1 " .25	2.00	8 x 10	1 " .80	9.00

Card Mounts.

We have recently equipped a factory with the latest improved machinery for the manufacture of photographic card mounts, and are in a position to supply amateur card mounts of strictly new and up-to-date designs at lowest market price.

Medium weight, embossed mounts; white enameled, queen's gray, tea, and sage green, with wide embossed border of an attractive design.

No.	Size	Per Doz.	Per 100	Per 1,000
100	for Pictures $1\frac{1}{2} \times 2$,	\$.10	\$.30	\$ 2.25
101	" " 2 x 2,	.10	.30	2.50
102	" " $2\frac{1}{2} \times 2\frac{1}{2}$,	.10	.35	2.75
104	" " $3\frac{1}{2} \times 3\frac{1}{2}$,	.12	.60	4.75
105	" " $3\frac{1}{4} \times 4\frac{1}{4}$,	.12	.65	5.25
106	" " $4\frac{1}{4} \times 4\frac{1}{4}$,	.15	.80	6.00
107	" " 4 x 5,	.15	.90	7.50
108	" " 5 x 7,	.20	1.25	10.25

Extra heavy, white enameled, queen's gray, tea, and sage green, with wide embossed border of attractive design.

No.	Size	Per Doz.	Per 100	Per 1,000
200	for Pictures $1\frac{1}{2} \times 2$,	\$.10	\$.35	\$ 2.50
201	" " 2 x 2,	.10	.35	2.75
202	" " $2\frac{1}{2} \times 2\frac{1}{2}$,	.10	.40	2.75
204	" " $3\frac{1}{2} \times 3\frac{1}{2}$,	.12	.70	5.50
205	" " $3\frac{1}{4} \times 4\frac{1}{4}$,	.12	.70	5.50
206	" " $4\frac{1}{4} \times 4\frac{1}{4}$,	.15	1.00	8.25
207	" " 4 x 5,	.15	1.00	8.25
208	" " 5 x 7,	.25	1.60	12.50

White enameled center, tinted gray and sage green embossed border; design same as No. 200, extra heavy stock.

No.	Size	Per Doz.	Per 100	Per 1,000
300	for Pictures $1\frac{1}{2} \times 2$,	\$.12	\$.45	\$ 3.00
301	" " 2 x 2,	.12	.45	3.00
302	" " $2\frac{1}{2} \times 2\frac{1}{2}$,	.12	.55	3.50
304	" " $3\frac{1}{2} \times 3\frac{1}{2}$,	.15	.80	6.50
305	" " $3\frac{1}{4} \times 4\frac{1}{4}$,	.15	.90	7.25
306	" " $4\frac{1}{4} \times 4\frac{1}{4}$,	.20	1.20	9.25
307	" " 4 x 5,	.20	1.25	9.50
308	" " 5 x 7,	.35	2.00	16.00

Plain mounts, of good quality, in white enameled, gray, tea, and sage green.

No.	Size	For Pictures	Per Doz.	Per 100	Per 1,000
500	$2\frac{3}{4} \times 2\frac{3}{4}$,	$2\frac{1}{2} \times 2\frac{1}{2}$,	\$.05	\$.20	\$ 1.25
501	$3\frac{3}{4} \times 3\frac{3}{4}$,	$3\frac{1}{2} \times 3\frac{1}{2}$,	.06	.35	2.75
502	$3\frac{1}{2} \times 4\frac{1}{2}$,	$3\frac{1}{4} \times 4\frac{1}{4}$,	.06	.35	2.75
503	$4\frac{1}{4} \times 5\frac{1}{4}$,	4 x 5,	.10	.60	4.50
504	$5\frac{1}{4} \times 7\frac{1}{4}$,	5 x 7,	.15	1.00	7.25

When less than 100 card mounts are ordered the dozen price will be charged; 100 to 500 will be billed at the hundred price; 500 or over at the thousand price. These mounts are too heavy to be sent by mail.

Photographic Blue Print Paper.



Premo Blue Print is prepared on the very best grade of paper and is free from defects common to this class of photographic paper. It is adapted for all grades of work and will produce brilliant prints on either landscape, architectural or portrait negatives.

Each package contains full directions for printing. Put up only in sealed and air tight tin tubes in packages of 24 sheets in the following sizes :

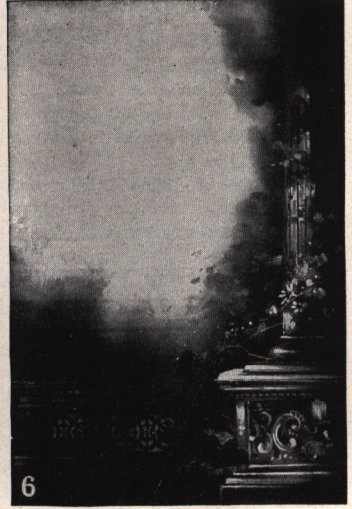
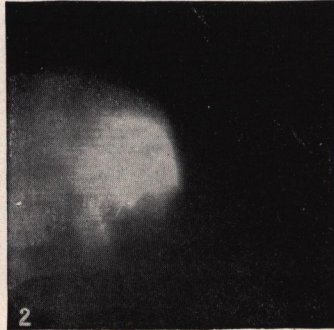
3½ x 3½, per package,	\$0.16	5 x 7, per package,	\$0.35
3¼ x 4¼, " " . . . . .	.16	5 x 8, " " . . . . .	.40
4 x 5, " " . . . . .	.20	6½ x 8½, " " . . . . .	.50
4¼ x 6½, " " . . . . .	.30	8 x 10, " " . . . . .	.75

Photographic Chemicals.

Our Chemicals are guaranteed Pure, and of full weight and measurement.

	Price, \$0.10
Acetate of Soda, two-ounce bottle, each,	" .10
Acetate of Lead, 2 oz. bottle, each,	" .20
Alum, Chrome, per pound,	" .15
Alum, Powdered, per pound,	" .15
Bi Carbonate of Soda, per pound,	" .25
Borax, per pound,	" .20
Bromide of Ammonium, per 2 oz. bottle,	" .20
Bromide of Potassium, per 2 oz. bottle,	" .20
Carbonate of Potash, per pound,	" .15
Carbonate of Soda, per pound,	" .75
Chloride of Gold, Pure, fifteen-grain bottle, each,	" .15
Chloride of Lime, per pound,	" .20
Citric Acid, per 2 oz. bottle,	" .80
Eikonogen, per 2 oz. bottle,	" .25
Ferri-cyanide of Potassium, per 2 oz. bottle,	" .15
Ferro-cyanide of Potassium, per 2 oz. bottle,	" .15
Glycerine, per 2 oz. bottle,	" .50
Hydrochinon, per 2 oz. bottle,	" .10
Hypo-sulphite of Soda, one-pound box, each,	" .40
Hypo-sulphite of Soda, five-pound box, each,	" .10
Iron, Proto-sulphate, per pound,	" .05
Litmus Paper, Red or Blue, per sheet,	" .80
Magnesium Powder, Pure, per 2 oz. bottle,	" .25
Meta Bi-sulphite of Potash, per 2 oz. bottle,	" .35
Oxalate of Potash, Neutral, per pound,	" .10
Oxalic Acid, per 2 oz. bottle,	" .10
Phosphate of Soda, per 2 oz. bottle,	" .40
Pyrogallic Acid, per ounce,	" .15
Sulphite of Soda, Crystals, per pound,	" .25
Sulphite of Soda, Granular, per pound,	" .20
Sulpho-cyanide of Ammonia, per ounce,	" .20
Tungstate of Soda, per 2 oz. bottle,	" .20

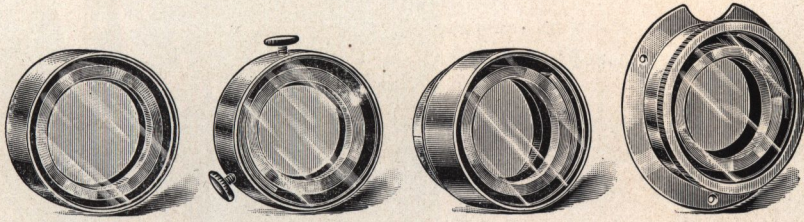
Cyclone Backgrounds.



These are special designs made and adapted for home use. They are attached to a roller and can be easily hung upon the wall, giving Professional Rembrandt effect to the portraits, thereby increasing the artistic quality of the work. Painted on heavy canvas, making them durable and artistic.

Nos. 2 and 3, Head grounds, size 4 x 4 feet, each,	\$1.50
No. 4, Scenic ground, size 4 x 6 feet, each,	2.00

Ray Filters.



By means of a Ray Filter the relative color values can be obtained, thus adding largely to the artistic appearance of a picture, and giving it an atmospheric effect, lacking as a rule in ordinary photographs.

Perhaps the most pleasing feature is the reproduction of the natural tone of the sky against which any clouds that may be present appear in relief, all the delicate detail being perfectly preserved, the intensity of the sky being such as to print with the foreground. This is possible from the fact that the foreground reflects a relatively larger per cent. of the darker rays than the sky.

Marine views are similarly well rendered. For the same reasons, snow scenes are particularly within the scope of Ray Filter work, every detail in the snow itself, as well as in the darker objects, being reproduced and of correct printing intensity.

The Ray Filter is also invaluable for copying paintings and for photographing colored interiors.

Ray Filters are made in four styles as shown in the illustration :

Style A has a cork-lined mounting of proper size to slip over the hood of lens. When ordering give exact diameter of hood or send a slip of paper just reaching around the hood.

Style B has three milled heads or binding screws, for attaching to lens hood. It can be adjusted to Lenses having hoods varying in size from those given in the table to one half inch smaller in diameter.

Style 1 P, is for regular Lenses with Shutter.

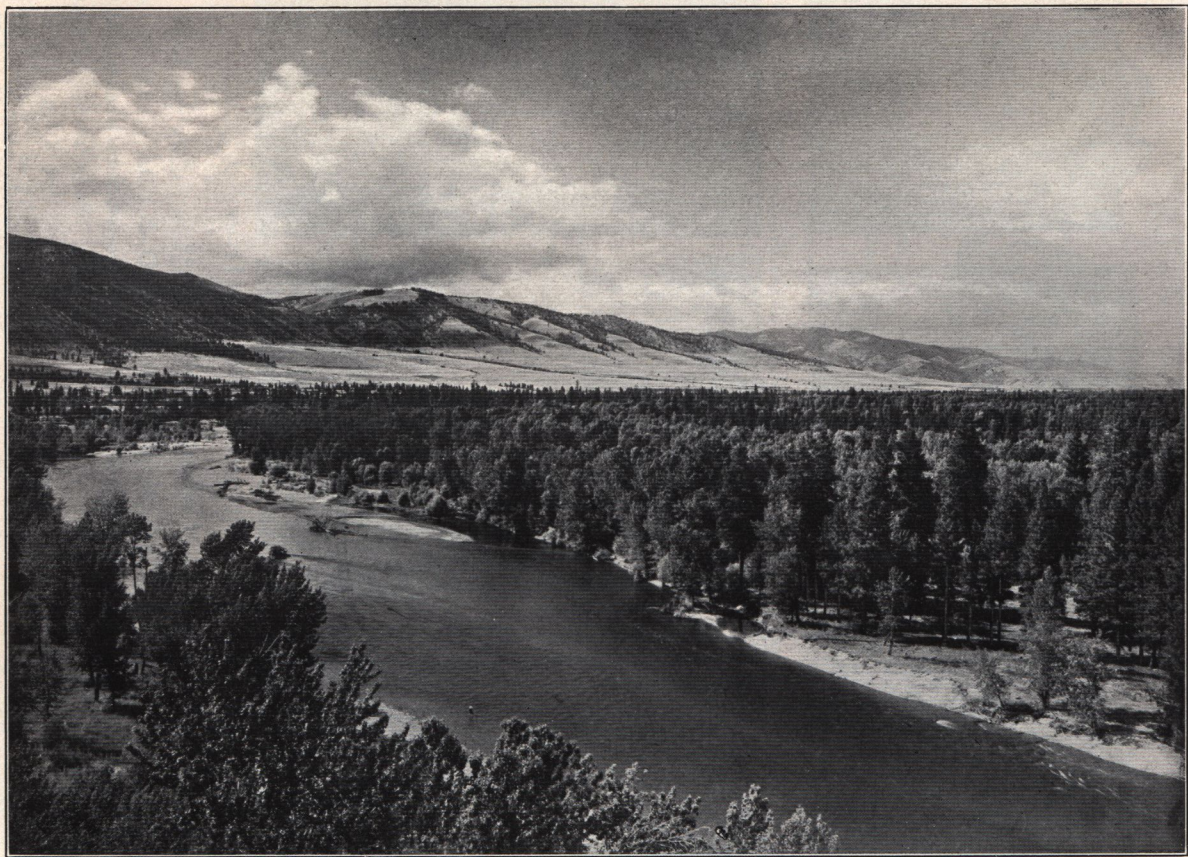
Style F F has a flange for cameras with Fixed Focus Lenses.

Price of Styles 1 P and F F, \$3.25.

PRICES OF STYLES A AND B.

The inside dimensions quoted are the largest diameters of hoods to which each cell can be fitted.

Number,	1	2	3	4	5	6	7	8
Inside Diam. in inches,	1 $\frac{3}{8}$	1 $\frac{3}{4}$	2 $\frac{3}{8}$	2 $\frac{1}{8}$	2 $\frac{1}{2}$	3 $\frac{3}{8}$	3 $\frac{3}{4}$	4 $\frac{1}{8}$
Price,	3.25	3.50	3.50	4.00	4.50	5.00	5.50	6.00
Morocco Cap, extra,	.70	.70	.75	.80	.90	1.00	1.10	1.20



Made with Rochester View Camera fitted with Rochester Symmetrical Lens.

The Iconoscope Finder.

FOR HAND AND VIEW CAMERAS.

This Finder is constructed on entirely new principles, by means of which an exceedingly brilliant and non-reversed image is reflected even in the brightest sunlight.

The image is, in reality, more brilliant than the actual objects appear to the eye, being formed by a concave lens which projects the picture through a solid glass prism direct to the eye. One sees with the Iconoscope all that is visible to the eye alone.

The image is as sharp and clear as that formed by a good photographic lens and is perfectly rectilinear, so that not only the objects as a whole may be clearly seen, but every detail, position or expression as well. As the image is not reversed or inverted, the objects appear in their natural position.

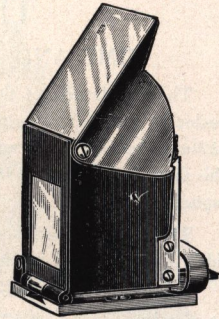
The adjustable hood prevents all reflections and permits the image to be viewed without shading the instrument, being held in the proper position by a spring click. The image is projected at a convenient angle so that the photographer stands in a natural position and easily glances from the image to the object without moving the head.

The mounting of the Iconoscope is extremely ingenious and being of metal throughout, forms a perfect protection for the glass part without undue weight.

The mounting proper is attached to a small metal slide by a spring hinge, so that whether the camera is used for vertical or horizontal pictures, the Iconoscope may always be in the same position. The slide works in a metal bed-plate which is attached by screws to the bed of the camera.

The Iconoscope may thus be instantly detached if desired, or by having several bed-plates, may be used on any number of cameras with equal facility. Made in three sizes.

No. 1, Small,	.....	\$5.00
No. 2, Medium,	.....	5.50
No. 3, Large,	.....	6.00



The Weller Wing Shutter.

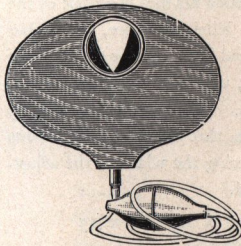
FOR TIME AND INSTANTANEOUS WORK.

This is one of the best shutters in market for either the amateur or professional photographer.

The Weller Shutter is very simple in its construction and cannot well get out of order. It works with a minimum jar and is nearly noiseless.

The Weller Shutter is made to fit on end of lens.

Price,	\$3.50
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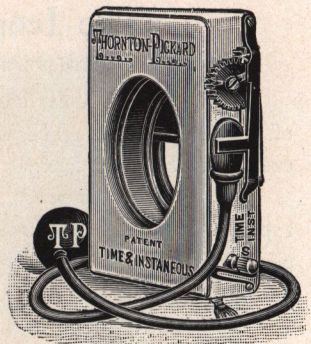
Thornton-Pickard

TIME AND INSTANTANEOUS SHUTTER.

The introduction of the Patent Time and Instantaneous Shutter make it possible to give *any* exposure, from fractions of a second up to minutes or hours, *without vibration*, and therefore to dispense with the use of the lens cap entirely. This shutter is used for *all kinds of work*, both by professional and amateur photographers.

The merits of the Thornton-Pickard Time and Instantaneous Shutter are so widely known that it is unnecessary to dwell upon them here.

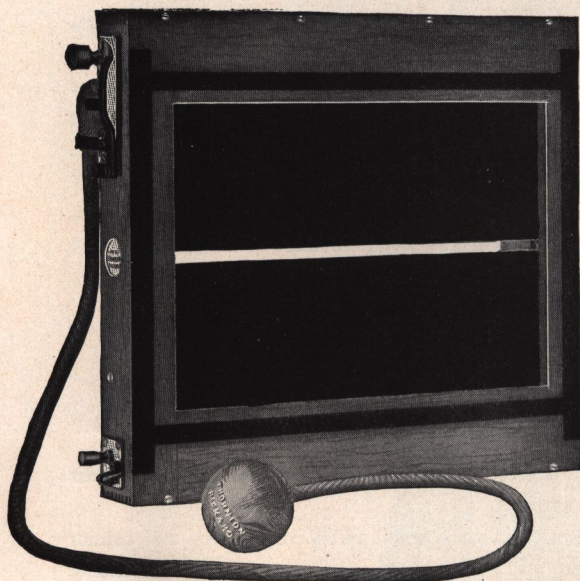
The shutter is simplicity itself. There is no complicated mechanism to get out of order. It is a perfect substitute for the lens cap, and much more handy and reliable.



MAHOGANY SHUTTER.—Speed, up to $\frac{1}{90}$ of a second. Dimensions, $3\frac{3}{8} \times 2\frac{3}{4} \times \frac{7}{8}$ inches. Weight, $4\frac{1}{2}$ oz. The same shutter may be used with any number of lenses, of different sizes, by the use of our Patent Adapters.

Size, inches,	$1\frac{1}{2}$	$1\frac{5}{8}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	$4\frac{1}{2}$	5
Mahogany, Price,	\$9.00	\$9.00	\$9.75	\$11.00	\$12.75	\$14.75	\$16.75	\$18.75	\$20.75
Aluminum, “	6.50	7.00	8.25	9.50					

Fitted with time exposure valve, extra, \$1.25.



Focal Plane Shutter.

WITH PATENT ADJUSTABLE SLIT.

Particulars of the smallest size:—Speed (all sizes), $\frac{1}{200}$ up to $\frac{1}{10000}$ of a second. Dimensions, $5\frac{1}{8} \times 6\frac{1}{4} \times 1\frac{1}{4}$ inches (not including adapters.) Weight 10 ounces.

For those who desire to obtain instantaneous photographs of subjects having an extremely rapid movement, such as flying birds, animals, and men leaping, jumping, etc., this is the best shutter. It gives a shorter exposure and passes a larger percentage of light than any other form.

The Focal Plane Shutter is made upon the roller blind principle. It fits at the back of the camera, and the dark slide fits into the back of the shutter. The shutter blind, therefore, works just in front of the plate, and has a narrow slit in it the full width of the plate, which gives the exposure as it passes rapidly across. The speed is regulated by means of a small knob that winds up the driving spring, and also by altering the width of the adjustable slit.

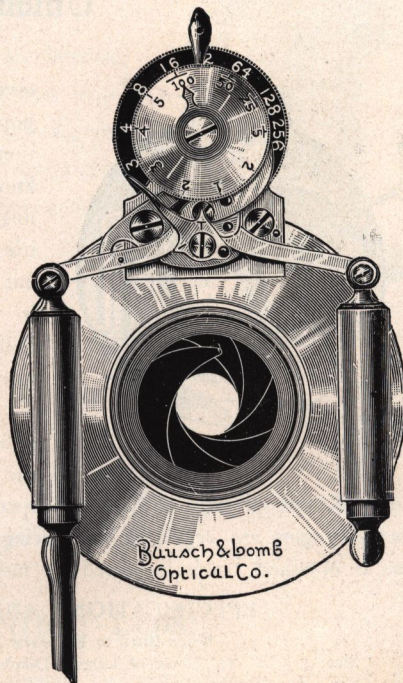
The speed indicator is always fitted to this shutter unless otherwise ordered.

Size, inches,	$3\frac{1}{4} \times 4\frac{1}{4}$	4×5	5×7	5×8	$6\frac{1}{2} \times 8\frac{1}{2}$	8×10	10×12	12×15
Price,	\$15.75	\$18.00	\$22.00	\$25.00	\$26.00	\$30.00	\$38.00	\$46.50

Diaphragm Shutter.

The Diaphragm Shutter was designed for those amateur and professional photographers who desire a strictly first-class, high grade shutter, for both in-door and out-door work. It is constructed on the most scientific principles, the leaves of the diaphragm not only regulating the size of the aperture, but serving as the shutter, the diaphragm opening to the required aperture and closing automatically. It therefore equalizes the distribution of light over the entire plate more perfectly than is possible by any other construction. The variation in the size of opening is made by turning the black disc at the top of shutter, and is marked for both the symmetrical and wide-angle lens.

The front dial is for regulating exposures, the shutter working automatically and making an exposure of from three seconds to one one-hundredth part of a second, and by simply moving a small lever, it may be set for time exposures of any desired duration, the lever being marked **I** for instantaneous and **T** for time. It is provided with safety device, so that no exposure can be made while setting the shutter. The shutter is set by turning the small lever at the top to the left. The manipulation is perfect and very simple.



SPECIFICATIONS AND PRICE OF SHUTTER ONLY.

When fitted to Rochester Symmetrical or Zeiss Anastigmat Lenses.

Size, 4 x 5,	Opening of Largest Stop, $\frac{7}{8}$ inches,	Price,	\$14.00
“ 5 x 8,	“ “ “ “ $1\frac{1}{8}$ “	“ “	15.00
“ $6\frac{1}{2}$ x $8\frac{1}{2}$,	“ “ “ “ $1\frac{3}{8}$ “	“ “	16.00
“ 8 x 10,	“ “ “ “ $1\frac{3}{4}$ “	“ “	17.50

When fitted to Lenses of Other Manufacture.

Size, 4 x 5,	Price,	\$14.50	Size, $6\frac{1}{2}$ x $8\frac{1}{2}$,	Price,	\$16.50
“ 5 x 8,	“	15.50	“ 8 x 10,	“	18.00

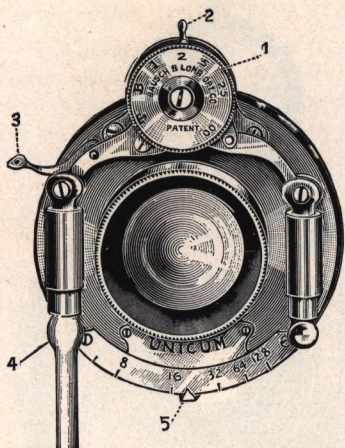
LENS FLANGES.

Number,	1	2	3	4	5	6	7	8	9	10	11
Diameter, in.,	$1\frac{1}{2}$	$1\frac{3}{4}$	2	$2\frac{1}{4}$	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	5	$5\frac{1}{2}$	6
Price, each,	\$.50	.50	.75	1.00	1.00	1.25	1.50	1.75	2.00	2.50	3.00

LENS CAPS.

Number,	1	2	3	4	5	6	7	8	9	10	11	12
Diameter, in.,	$1\frac{1}{2}$	$1\frac{3}{4}$	$1\frac{7}{8}$	$2\frac{1}{8}$	$2\frac{3}{8}$	$2\frac{1}{2}$	$2\frac{3}{4}$	$3\frac{1}{8}$	$3\frac{3}{8}$	$4\frac{1}{8}$	$4\frac{3}{8}$	$5\frac{1}{8}$
Price, each,	\$.60	.60	.65	.70	.70	.75	.80	.90	1.00	1.10	1.20	1.25

Unicum Shutter.



The Unicum Shutter embodies principles of its own in construction, and is without doubt the most popular with all classes of photographers. Its manipulation is very simple, equipped as it is with every device known that can be used to advantage. It has both finger and pneumatic release, together with dial indicating instantaneous, bulb, or time exposures, also the different speeds at which the shutter is desired to operate, it works automatically from one second to one-hundredth part of a second, or any fraction between by simply revolving disc No. 1 to the desired speed.

Time exposures are made by placing letter **T** at indicator; one pressure of bulb will open the shutter, the second pressure closes it. When letter **B** is at indicator, one pressure of bulb will open it; when pressure is released, it will close. The iris diaphragms are regulated by moving lever **5** to the right or left until the desired aperture is obtained, as is indicated by numbers on the scale.

SPECIFICATIONS AND PRICE OF SHUTTER ONLY.

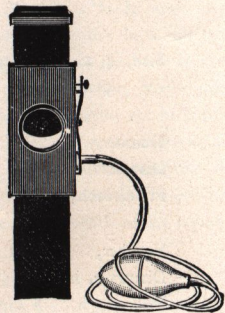
When fitted to Rochester Symmetrical Zeiss or Plastigmat Lenses.				
Size, 4	x	5,	Size of Largest Diaphragm, $\frac{3}{4}$ inches,	Price, \$ 8.00
" 5	x	7,	" " " 1 " " " 9.00	
" $6\frac{1}{2}$	x	$8\frac{1}{2}$,	" " " $1\frac{5}{8}$ " " " 10.00	
" 8	x	10,	" " " $1\frac{3}{4}$ " " " 12.00	
When fitted to Lenses of Other Manufacture Leaving Barrel Intact.				
Size, 4	x	5,	Size of Largest Diaphragm, $\frac{3}{4}$ inches,	Price, \$10.00
" 5	x	7,	" " " 1 " " " 11.00	
" $6\frac{1}{2}$	x	$8\frac{1}{2}$,	" " " $1\frac{5}{8}$ " " " 13.00	
" 8	x	10,	" " " $1\frac{3}{4}$ " " " 15.00	

Drop Shutter.

The Drop Shutter is made of mahogany with cherry slide, the opening being made on scientific principles, the slide working by the aid of a rubber band. It is padded on top by a thin sheet of rubber, lessening the concussion when an exposure is made.

Made in three sizes with $1\frac{3}{4}$,, $2\frac{1}{2}$, and $3\frac{1}{4}$ inch openings.

Price, \$.75.



Rochester Symmetrical Lens.

This lens was designed for portraits, groups, architecture, landscape and instantaneous work. It is one of the best lenses constructed for general work, being perfectly rectilinear, free from distortion, and all objectionable features. It has a great depth of focus and perfectly flat field. We invite comparison with any lens of its class now on the market.



SPECIFICATIONS AND PRICES.

4	x	5	size,	1	in. diam. lens,	6 1/4	in. equiv. focus,	5 3/4	in. back focus.	\$10.00
5	x	7	"	1 1/8	" "	8	" "	7 1/4	" "	12.00
5	x	8	"	1 1/4	" "	9	" "	8 1/4	" "	14.00
6 1/2	x	8 1/2	"	1 1/2	" "	11	" "	9 3/4	" "	16.00
8	x	10	"	1 3/4	" "	13	" "	11 1/2	" "	20.00
10	x	12	"	2	" "	16	" "	14 1/4	" "	37.00
11	x	14	"	2 1/4	" "	18 1/2	" "	16 1/2	" "	45.00
14	x	17	"	2 3/4	" "	22	" "	19 1/2	" "	55.00
17	x	20	"	3 1/4	" "	26	" "	23	" "	65.00

Wide-Angle Symmetrical Lens.

These wide-angle lenses will be found as valuable for the character of work for which they are designed as our well known and popular symmetrical series. They are adapted for interiors, buildings, landscapes, and all work in confined situations where lenses of longer focus cannot well be used. They have an angle of from 80 to 90 degrees.

SPECIFICATIONS AND PRICES.

No. 1,	4	x	5	size,	3 1/2	inch focus,	Price	. . . . .	\$ 8.00
No. 2,	5	x	8	"	5	" "	"	. . . . .	10.00
No. 3,	6 1/2	x	8 1/2	"	6 1/2	" "	"	. . . . .	12.00
No. 4,	8	x	10	"	8	" "	"	. . . . .	15.00

Stereoscopic Exposure.



This device is made of mahogany, and is designed for time exposures with stereoscopic cameras, the object being to expose both lenses simultaneously, although it can be operated very rapidly.

Price. \$1.25.

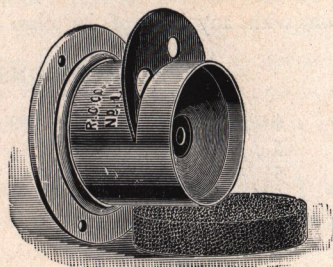
Single Achromatic Lens.

These Lenses are conceded to be the best of the low-priced Lenses, giving a wonderful definition, with great depth of focus and flatness of field, especially when using the smaller diaphragms. They are perfectly achromatic, and are as near rectilinear as possible in a Single Combination Lens, and are quick working.

These Lenses are furnished with *Rotating Diaphragms*, having four apertures, and are very convenient to use; the largest opening is of sufficient size for instantaneous pictures. Though designed for landscape work they will make excellent groups, and even portraits.

No.	Length of Focus.	Size.	Price.
1	6 inch.	4 x 5,	\$3.00
1 1/2	8 "	4 1/4 x 6 1/2,	3.50
2	10 "	5 x 8,	4.00
3	11 "	6 1/2 x 8 1/2,	5.00
4	13 "	8 x 10,	7.00

No. 1 furnished in matched pairs, for Stereoscopic work,
at \$6.00.



Zeiss Anastigmat Lens.

Series IV.—1:12.5.

AN INSTANTANEOUS WIDE ANGLE LENS, FOR LANDSCAPE, INTERIORS,
ARCHITECTURE AND COPYING.

The Lenses of this series have an angle of 100° and are therefore wide angle, and as such may be used for all out-door work with full aperture, which has unusual value in a large variety of work.

No.	Size of Plate covered with Stop <i>f</i> 18.	Diameter of Image Circle at 96°.	Free Diameter of Largest Lens.	Equivalent Focus.	Price.
1	3 1/4 x 4 1/4 in.	5 1/4 in.	1/4 in.	2 7/8	\$17.50
2	4 x 5 "	8 1/8 "	3/8 "	3 3/8	17.50
3	4 1/4 x 6 1/2 "	10 3/8 "	1/2 "	4 1/8	21.00
4	5 x 8 "	13 3/8 "	5/8 "	6 1/8	24.50
5	8 x 10 "	17 5/8 "	1 1/8 "	7 1/8	31.50
6	10 x 12 "	22 1/8 "	1 "	10 1/4	47.00

Series V.—1:18.

WIDE ANGLE LENS PAR EXCELLENCE, FOR INTERIORS, ARCHITECTURE,
COPYING AND LANDSCAPES.

This series is a Wide Angle Lens proper, having an angle of 108°, notwithstanding which it is available for instantaneous work with sunlight illumination,

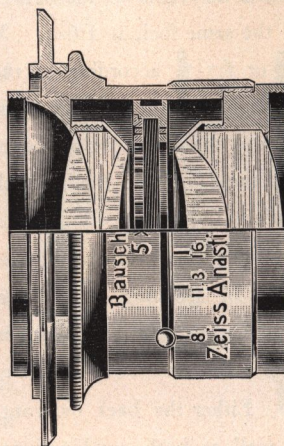
No.	Size of Plate covered with Stop <i>f</i> 36.	Diam. of Largest Pla. cov. with Sm. Stop 104° 110°.	Free Diameter of Largest Lens.	Equivalent Focus.	Price.
1	4 1/4 x 6 1/4 in.	8 1/8 in.	9/32 in.	3 3/8 in.	\$22.50
2	5 x 7 "	11 "	5/8 "	4 3/8 "	22.50
3	6 1/2 x 8 1/2 "	14 3/8 "	1/2 "	5 9/16 "	28.00
4	8 x 10 "	15 3/4 "	9/16 "	7 1/8 "	35.00
5	10 x 12 "	21 1/4 "	1 1/8 "	8 3/8 "	44.00
6	11 x 14 "	26 3/4 "	1 1/8 "	10 7/16 "	54.50

Bausch & Lomb-Zeiss Anastigmat, f:8.

Series IIa.

This lens is adapted for portraits, groups, instantaneous out-door work and copying. These lenses of this series are composed of five lenses and have an angle of eighty degrees. Being of relatively slower speed, it has been possible to compute them for an absolutely flat image, free from all astigmatism, and for extremely sharp definition. It is the most desirable out-door lens made. The speed will be found ample for all ordinary instantaneous exposures, giving an unusual evenness of illumination, flatness, and depth. In the studio they are well adapted for large heads, figures, and groups. These lenses are also particularly adapted to copying and half-tone work, giving the minutest detail with extreme flatness to the edges.

They are supplied with our improved iris diaphragm. Waterhouse stops in place of iris at same price.



SPECIFICATIONS AND PRICES.

No.	Size of Plate covered with Stop f-8.	Diagonal of Largest Plate covered with Small Stop 72°.	Free Diameter of Largest Lens.	Equivalent Focus.	Brass Mounting Price.
1	4 x 5 in.	6 $\frac{5}{8}$ in.	$\frac{5}{8}$ in.	4 $\frac{3}{8}$ in.	\$30.00
2	4 $\frac{1}{4}$ x 6 $\frac{1}{2}$ "	8 $\frac{1}{4}$ "	$\frac{3}{4}$ "	5 $\frac{3}{8}$ "	33.50
3	5 x 8 "	10 $\frac{1}{8}$ "	1 "	6 $\frac{1}{2}$ "	44.00
4	6 $\frac{1}{2}$ x 8 $\frac{1}{2}$ "	12 $\frac{3}{8}$ "	1 $\frac{3}{16}$ "	8 "	54.50
5	8 x 10 "	14 $\frac{3}{4}$ "	1 $\frac{7}{16}$ "	9 $\frac{5}{8}$ "	64.50
6	10 x 12 "		1 $\frac{5}{8}$ "	11 $\frac{5}{8}$ "	85.50
7	11 x 14 "		2 "	13 $\frac{3}{4}$ "	125.50
8	14 x 17 "		2 $\frac{3}{8}$ "	17 "	160.50

NOTE.—As it becomes practically impossible to regularly produce pieces of optical glass which are free from isolated small air bubbles we must point out that the existence of such small air bubbles, even in the most unfavorable case, hardly reaches a loss of light amounting to one-fiftieth per cent., and therefore is entirely without influence on the optical result of the lens system.—Schott & Gen, Manufacturers of Photographic Objective Glass, Germany.

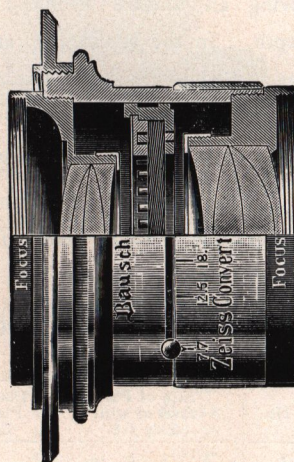
Bausch & Lomb-Zeiss Convertible Anastigmat Lens.

Series VIIa.

The Convertible Anastigmats are doublet lenses. They contain eight elementary lenses arranged in pairs, two pairs in each system. Such a lens is convertible into three lenses of different foci and angle where the two single anastigmats are of different foci, or into two where they are of the same foci. The speed, when composed of two single anastigmats of the same foci, is f:6-3. When the single anastigmats are of different foci, the speed is f:7 or f:7-7, according to the relative foci employed. The anastigmat flatness of the field is of the highest degree of perfection, the plates being covered sharply to the edges. The full angle of the image circle is eighty degrees, and astigmatism is entirely eliminated.

For view cameras these lenses stand at the head of the list. In selecting the lens see that the back focus of no combination selected is longer than the greatest extension of which the bellows is capable.

Either the back or front combination can be used alone, as well as both combinations together, thereby giving three distinct foci; *i. e.*, Nos. 8, 7 inches, and 11½ inches, and 14 inches, making an ideal lens for long distance or general work,



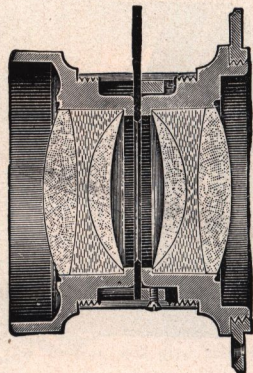
SPECIFICATIONS AND PRICES.

No.	Size of Plate covered with full Aperture.	Focus of Front Lens.	Focus of Back Lens.	Combined Focus.	Speed.	Price.
3	4 x 5 in.	11½ in.	7¼ in.	5 in.	F:7-7	\$ 59.50
5	4¼ x 6½ "	11½ "	9 "	5¾ "	F-7	63.00
8	5 x 7½ "	14 "	11½ "	7 "	F-7	75.00
9	5 x 8½ "	16½ "	11½ "	7½ "	F:7-7	87.50
11	6½ x 8½ "	16½ "	14 "	8½ "	F-7	94.50
12	6½ x 8½ "	19¼ "	14 "	9¼ "	F:7-7	115.50
17	8 x 10 "	23½ "	19¼ "	12 "	F-7	167.50
20	10 x 12 "	27½ "	23½ "	14½ "	F-7	218.00

Goerz's Double Anastigmat F: 6-8.

Series III.

This is a Universal Extra-Rapid Lens suitable for portraits, groups, instantaneous photography, landscapes, architecture, interiors, and enlargements. The lenses of this series are universal in character in the full sense of the word. At full aperture they admit of instantaneous photographs embracing an angle of seventy degrees being taken, even on dull days. By the use of small stops the photograph may be made to include an angle of ninety degrees. The Double Anastigmats of Series III satisfy, therefore, the highest requirements, and are eminently adapted for all general purposes, in and out of doors. As the image is perfectly sharp, even with large apertures, the definition, brilliancy, and depth of every point of the field is absolutely uniform. Hence perfectly sharp wide-angle instantaneous photographs may be taken. The back lens, the focus of which is about the double of that of the entire objective may, by itself be used as a landscape lens.



These lenses are particularly adapted for view cameras, as both combinations can be used for general work, while one combination alone together with the long draw bellows can be used on distant objects. The size of plate indicated F:6-8 represents the area which is sharply covered up to the edge. This lens is also par-excellence with both combinations and the extreme long draw of our instrument in portrait work.

SPECIFICATIONS AND PRICES.

No.	Equivalent Focus. In.	Free Aperture. In.	Size of Plate Sharply Covered at			Price with Iris Diaphragm.
			F:6-8 In.	F:15-5. In.	F:62. In.	
1	6	$\frac{7}{8}$	4 x 5	$4\frac{3}{4}$ x $6\frac{1}{2}$	5 x 8	\$45.00
2	7	1	$4\frac{3}{4}$ x $6\frac{1}{2}$	5 x 8	7 x 9	51.50
3	$8\frac{1}{4}$	$1\frac{1}{4}$	5 x 8	$6\frac{1}{2}$ x $8\frac{1}{2}$	8 x 10	62.50
4	$9\frac{1}{2}$	$1\frac{5}{16}$	$6\frac{1}{2}$ x $8\frac{1}{2}$	7 x 9	10 x 12	75.50
6	12	$1\frac{3}{8}$	8 x 10	10 x 12	16 x 18	107.00
7	14	2	10 x 12	12 x 15	18 x 22	140.00
7A	$16\frac{1}{2}$	$2\frac{3}{8}$	11 x 14	13 x 17	21 x 25	182.00

Collinear Double Anastigmat Lens.

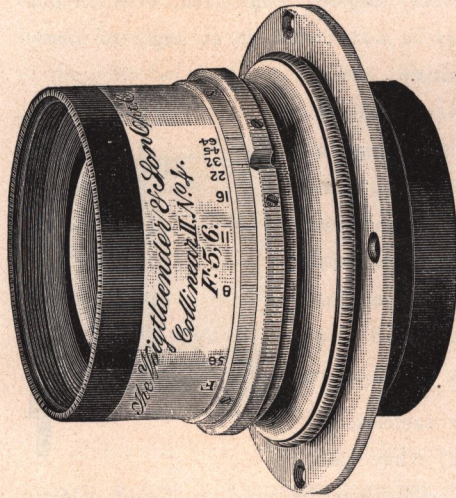
Series II.

The Collinear Lens unquestionably ranks among the highest types of modern symmetrical Double Anastigmats. It is a new form of Lens, made of Jena glass, and consists of two symmetrical anastigmatic combinations, each of which is made up of three Lenses, the contiguous surfaces being permanently cemented together.

Astigmatism—which is that peculiarity in a Lens, in consequence of which the focal distances vary for vertical and horizontal lines immediately adjacent to one another—it has been impossible to overcome, until late years, when the discovery of the new “Jena” glass enabled opticians to produce a Lens free from this error, and which has been appropriately styled the “Anastigmat.”

The sharpness of the image yielded by Collinear Lenses is remarkable. The finest definition is easily obtained over the entire plate, even when the Lens is used with full aperture. The covering power, in relation to its focus, is surprisingly large. The sizes given in the list are by no means the largest plate covered, but are chosen with regard to the proportions and appearance of the photograph.

In all Collinear Lenses, Series II, the back combination may be used separately, forming an Anastigmat Lens with largest aperture F. 11, and possessing double the focal length of the Lens when used as a compound. The smaller size Lenses are particularly well adapted for Hand Camera work, while the larger sizes meet all the demands of the studio for portraits and groups.



FULL APERTURE, F. 5.6.

Number.	Equivalent Focus. Inches.	Size of Plate Sharply Covered.			Price with Iris Diaphragm.
		F. 5.6. Inches.	F. 8. Inches.	F. 32 Inches.	
2	4¾	3¼ x 4¼	4¼ x 6½	5 x 7	40.00
3	5⅞	4¼ x 6½	5 x 7	6½ x 8½	45.00
4	7⅞	5 x 7	6½ x 8½	8 x 10	60.00

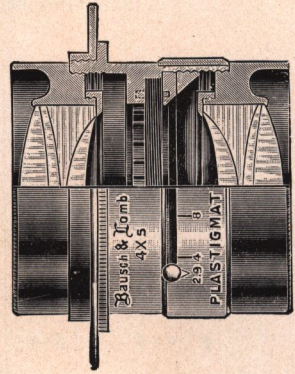
FULL APERTURE OF FOLLOWING SIZES, F. 6.3.

5	9⅞	6 x 8	6½ x 8½	9 x 11	77.50
6	11⅞	6½ x 8½	8 x 10	10 x 12	105.00
7	14½	8 x 10	10 x 12	12 x 15	140.00
8	17	11 x 14	12 x 15	16 x 20	187.50

Bausch & Lomb Plastigmat Lens.

F. 6.8.

The Plastigmat is an entirely new lens (so recognized by the U. S. Patent Office. Letters Patent No. 660,747 having been granted.) The experience gained in the construction of the most improved types of lenses and familiarity with the large variety of glasses now at the disposal of opticians has made it possible to construct an objective possessing many advantages not found in the various anastigmat lenses heretofore produced. The objects attained are: highest optical correction, simplicity of construction, permanence of material, great rapidity, compactness, portability and adaptability to the various shutters used between lens combinations.



The front and back combinations of the Plastigmat are similar and composed of four lenses each. The glass employed is of the famous Jena manufacture, extremely transparent and absolutely permanent. The heavy flint glass used in most lenses has been avoided and thus speed is increased to an appreciable amount and the tendency to deterioration removed.

Optically the Plastigmat is a decided step in advance. The anastigmatic corrections are absolutely perfect. The field is flat and without a trace of spherical distortion.

The foci chosen for the various sizes of the series, are longer than has been customary heretofore, in order to obviate the exaggerated perspective always obtained with short focus lenses. The plate for which the various foci are rated is perfectly covered with the full opening of the lense, a working speed of F. 6.8.

The separate systems possess anastigmatic and spherical corrections of the highest order. The rear system may be used separately as an objective, and, having twice the focal length of the doublet will give images twice as large at the same distance from the object and with a speed of F. 13.5 sufficient for instantaneous exposures under normal conditions.

A new form of mounting has been designed, securing absolute accuracy in the separation and centering of the systems and greater compactness with less weight than has heretofore been attained.

For view camera work this lens can be recommended in every respect. Its speed is sufficient for extremely rapid snap shots, its focal length gives proper perspective even in smaller sizes, its covering power is unequalled and its perfect anastigmatic correction gives the utmost brilliancy and control of focus. The possibility of using the rear system separately is also of great advantage in landscape, portrait and group work.

For general photography the Plastigmat will give satisfaction where a lense of the highest optical excellence is required.

SPECIFICATIONS AND PRICES.

No.	Size of Plate.	Equiv. Focus.	Diameter.	Price.
1	3¼ x 4¼	5¼ in.	1⅜ in.	\$34.00
2	4 x 5	6¼ "	7⁄8 "	40.00
3	5 x 7	7½ "	1 "	48.00
4	5 x 8	9¼ "	1⅜ "	55.00
5	6½ x 8½	11 "	1⅝ "	75.00
6	8 x 10	13 "	1⅞ "	90.00

Extra Parts of Apparatus.

INCLUDING FRONT BOARDS, TRIPOD SCREWS, BELLOWS, REVERSIBLE BACKS,
CARRYING CASES, ETC.

SIZE.	Front Boards for Model Cameras.	Front Boards for Carlton, Universal and King.	Front Boards and Division for Stereo Work	Tripod Screws.	Reversible Backs for View Cameras.	Square Bellows for Model.	Cone Bellows for Reversible Back View Cameras.	Long Cone Leather Bellows for Carlton, Universal and King.	Canvas Case for Camera and two Holders.	Long Canvas Case for King, Carlton and Universal. Six Holders and Tripod.
4 x 5	\$0.25	\$0.00	\$0.00	\$0.15	\$0.00	\$2.00	\$0.00	\$0.00	\$2.25	\$3.00
5 x 7	.25	.25	.50	.15	4.00	2.00	3.00	4.00	2.50	3.50
5 x 8	.25	.35	.50	.15	4.00	2.00	3.00	4.00	2.75	3.50
6½ x 8½	.25	.35	.75	.15	5.00	2.25	4.00	5.00	3.00	3.75
8 x 10	.25	.40	.75	.15	5.00	2.50	4.00	5.00	3.25	4.00
10 x 12		.40		.20	6.00		5.00	6.00		
11 x 14		.40		.20	6.00		5.00	6.00		
14 x 17		.50		.30	7.00		6.00			
17 x 20		.50		.30	8.00		6.00			

Miscellaneous.

Spring-catch for holding Holder on New Model, each,	\$0.25
Head for Standard, Facile or Combination Tripods, . . . . .	.30
Reversing attachment for New Model, . . . . .	.25
Clamp Hooks, for holding Folding Bed rigid, . . . . .	.15
Clamp and Screw, for leg of Sliding Tripod, . . . . .	.50
Milled Heads, with Screw, for various uses, . . . . .	.15
Milled Heads, without Screw, for various uses, . . . . .	.10
Small Bed Plates for Hand Cameras, . . . . .	.15
Bed Plate for View Cameras, . . . . .	.20
Ruby or Orange Glass, for Universal Lanterns, Nos. 1 and 2, . . . . .	.10
Ruby or Orange Glass, for Universal No. 3 or Ideal Lanterns, . . . . .	.15
Corner Plates, for Ground Glass, each, . . . . .	.10