

CATALOGUE

1893

OF

PHOTOGRAPHIC

APPARATUS

FOR SALE BY

FRED'K KEER'S SONS,

874 Broad Street,

NEWARK, N. J.

TO OUR CUSTOMERS.

We invite a careful and critical examination of this our Annual Catalogue of Photographic Apparatus and Materials, which we have the pleasure to offer.

Our goods are guaranteed to be, in every particular, exactly as represented.

Our prices will always be found as low as possible for the class of goods.

We employ only skilled workmen, the most of whom have been with us for several years; we use nothing but selected materials, and as all our apparatus is made under our personal supervision, we can say without hesitation that our goods are unequalled for durability, workmanship, accuracy and excellence of finish.

We are progressive, and improve our apparatus when found practicable, as we avail ourselves of every desirable modification of apparatus. Should these changes cause a slight departure from the printed description, it will be for the better, thus adding to the cost of production, which we voluntarily assume for the benefit of our customers.

.. TERMS. ..

Prices given are net, no charge for boxing or cartage.

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

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

We pack all goods with the utmost care, and will guarantee the safe arrival of all goods sent by freight or express.

Small parcels, which do not contain glass, can be sent by mail if desired, but *must be sent at risk of purchaser*. In ordering goods sent by mail, postage *must be enclosed*; otherwise goods will be sent by express.

In ordering goods, please state how to ship. Should this be omitted we will use our own discretion.

Descriptive Catalogue

AND

• Price List •

OF THE

Photographic Apparatus,

MANUFACTURED BY

Rochester Optical Company,

W. F. CARLTON;

PROPRIETOR AND MANAGER.



. . . SPECIALTY: . . .

View Cameras for Amateurs and Professionals.



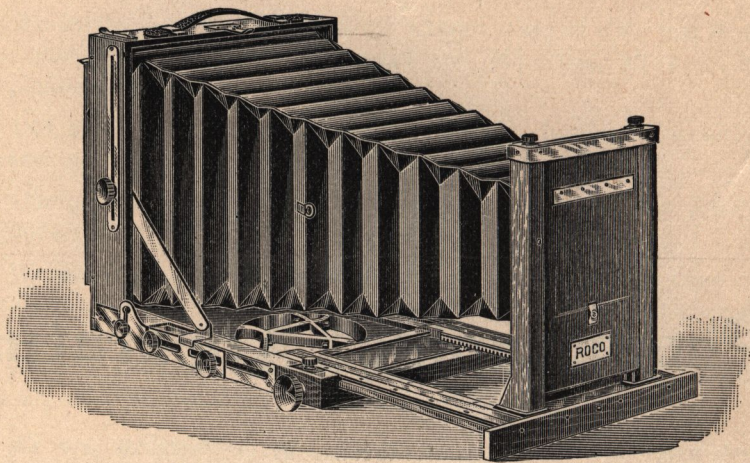
ROCHESTER, N. Y.

ROCHESTER OPTICAL COMPANY,

5 TO 11 SOUTH WATER STREET.

MAY, 1893.

The Carlton Camera.



The CARLTON CAMERA, the latest production of the Rochester Optical Co., is, without question, the finest camera yet placed on the American market.

The great popularity achieved by the Universal Camera throughout the United States and Canada, leads us to believe that the Carlton, with its additional features, will meet with a reception even more cordial than that given the Universal.

When the Universal Camera was introduced, improvement seemed almost impossible. We are progressive, however. Experience suggests new ideas and methods, and we believe in embodying them in our apparatus.

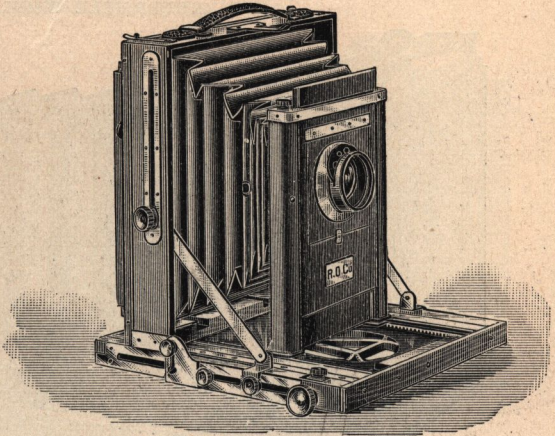
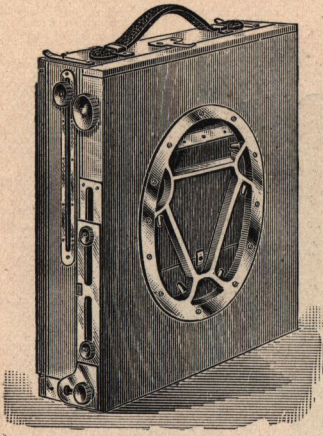
For the enthusiastic amateur and professional photographer who believes in having the very best of everything, the Carlton, with its manifold features, adapting it to an almost infinite variety of work, will be found to fully meet their views as the camera *par excellence*.

The Carlton is made on the same pattern as the Universal, and the description of the latter will apply equally well to the former. In addition to the advantages of the Universal, the Carlton has several new and important features peculiarly its own.

Forward Movement of Camera-Back.—When lenses of extreme width of angle are employed on the compact form of camera, it sometimes happens that a portion of the bed is included in the picture. To prevent this, the back of the Carlton can be moved forward, thus allowing the focus to be obtained with the lens entirely out of range of the bed. This 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 as shown in the illustration.

Of course this improvement is only required with lenses of shortest focus, or "extreme angle," as the ordinary wide angle lens can be used without it.

The Carlton Camera.



No Loose Top for Tripod.—The bed of the Carlton carries its own tripod top, adapted to the Rochester Optical Co.'s Combination Tripod. The top, made of metal, is neatly fitted in the bed and revolves easily and with great smoothness, permitting the operator to adjust the camera in any direction. A small milled head secures it firmly in position.

When the camera is closed for carrying, the lens may remain on the front, as the tripod top permits it to project through the opening in the bed. A glance at the illustration will convey the idea.

All Carlton Cameras have double swing back. The dimensions and weight are the same as given for the Universal.

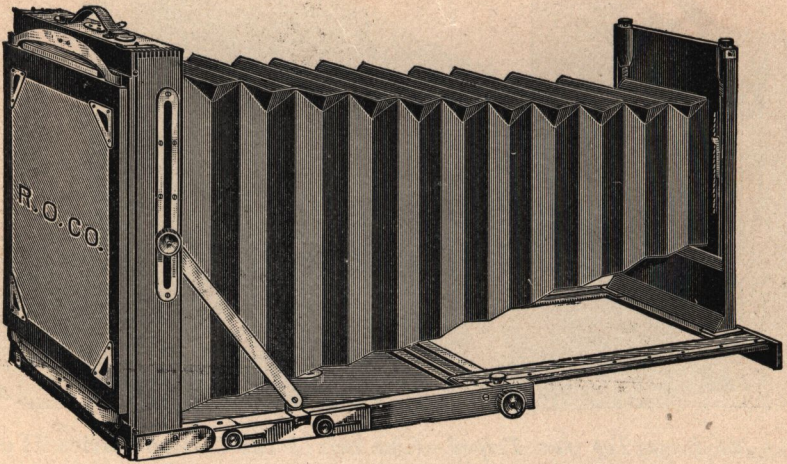
The price includes one Mahogany Perfection Holder, with rubber slides; Mahogany Combination Tripod and Canvas Case, but no lens.

The Carlton Cameras, in sizes to 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.	DOUBLE SWING.
3¼ x 4¼	\$33 00
4 x 5	36 00
4¼ x 6½	38 00
5 x 7	42 00
5 x 8	45 00
6½ x 8½	50 00
8 x 10	52 00
10 x 12	60 00
11 x 14	70 00

The Universal Camera.

REVERSIBLE BACK.



DOUBLE SWING UNIVERSAL, FULLY EXTENDED.

The UNIVERSAL CAMERA is a modified English pattern and is the most compact camera in market, the 5 x 8 being but $2\frac{3}{4}$ inches thick when folded and weighs but 5 pounds.

It has extra long bellows, the 5 x 8 having a focal capacity of 19 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.

It is made from selected mahogany, finished in the best possible style, and has all 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 be 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.

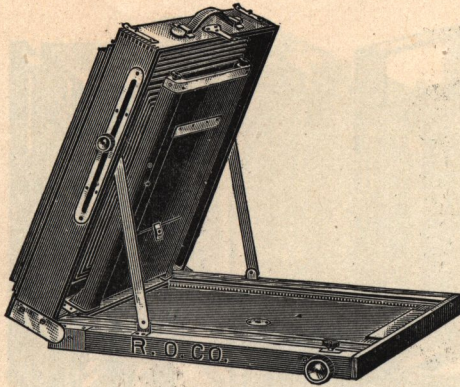
The ground-glass frame is held to the camera-back by two springs which allow it to recede so as to insert the holder between the ground glass and camera-back.

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

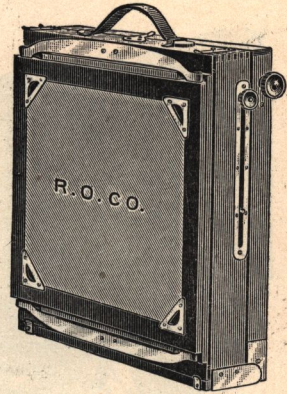
While very compact the Universal is very simple of manipulation, there being no loose screws or parts, and is set up by tightening four milled heads and is folded again by loosening the same number.

The Universal Camera.

REVERSIBLE BACK.



PARTIALLY FOLDED.



FOLDED.

The Universal is made with both single and 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.

It 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, but no lens. (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.	SINGLE SWING.	DOUBLE SWING.
3¼ x 4¼	\$27 00	\$29 00
4 x 5	28 00	30 00
4¼ x 6½	30 00	32 00
5 x 7	33 00	35 00
5 x 8	36 00	38 00
6½ x 8½	40 00	43 00
8 x 10	45 00	48 00
10 x 12	52 00	56 00
11 x 14	60 00	65 00
14 x 17	72 00	80 00
17 x 20	90 00	100 00

The Ideal Camera.

REVERSIBLE BACK.

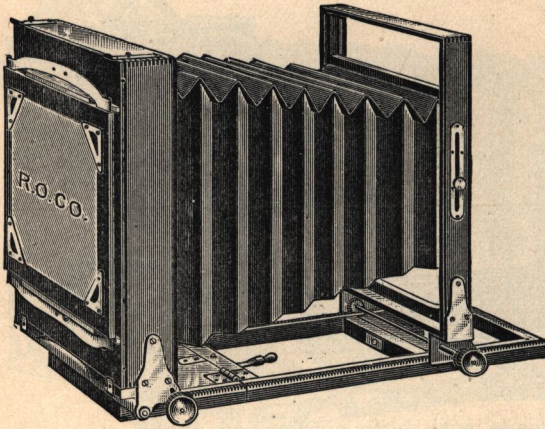


FIG. 1.

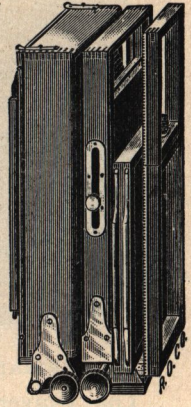


FIG. 2.

The IDEAL CAMERA is pronounced by all to be one of the best view cameras ever placed on the market. It is the result of much study and many experiments, made with a view of producing an instrument combining all the qualities required in a View Camera for the professional or amateur photographer.

It is made of selected mahogany, finished in the best possible style, every part being as near perfect as possible. All metal parts are made of brass, polished and lacquered.

It has reversible back, same as the Universal, with our spring-acting ground-glass frame by which the plate-holder is inserted between the ground-glass and camera-back.

It has fine rack and pinion focusing movement, the front moving forward leaving the back always stationary. When the focus has been obtained, the front is clamped by turning an independent milled head placed inside the one which turns the pinion.

As shown in the cut, the bellows are cone shape, though 5 x 7 and above are made with front wide enough for stereoscopic work.

Our method of applying the horizontal swing is very simple, and it takes no additional room, so that the double swing Ideal is no less compact than the single swing.

The bed is in two sections, as, with a lens of short focus, the extra length is not required and can be removed.

The Ideal Camera.

REVERSIBLE BACK.

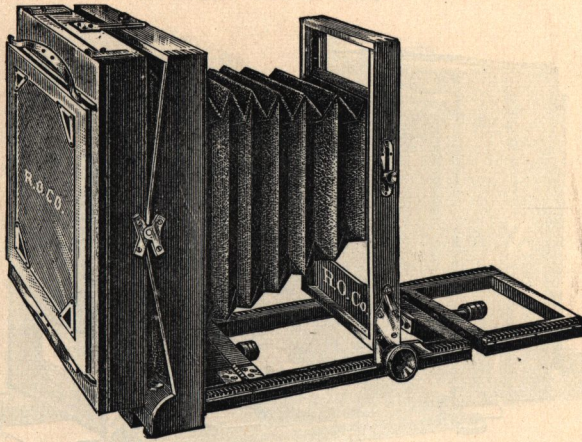


FIG. 3. (8 x 10.)

Taken in its entirety we can recommend the Ideal to both the professional and amateur photographer.

Sizes up to and including $6\frac{1}{2} \times 8\frac{1}{2}$ are made same as Fig. 1, while 8×10 to 11×14 , inclusive, are made same as Fig. 3.

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

Price includes one Perfection Plate-holder and Canvas Carrying Case, but no lens or tripod.

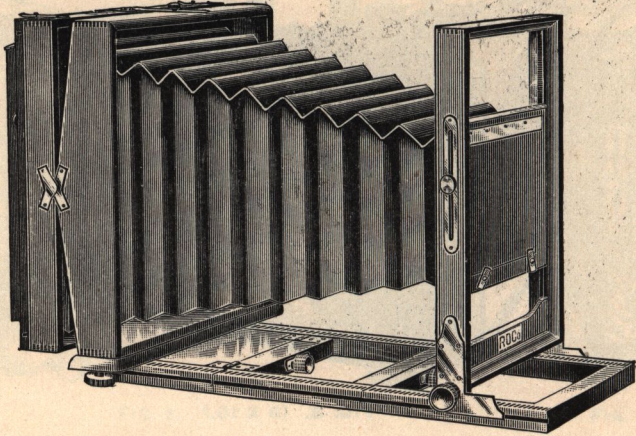
The Carrying Case will hold two extra plate-holders.

With sizes above 11×14 we send English Book-Holders.

SIZE OF VIEW.	SINGLE SWING.	DOUBLE SWING.
$3\frac{1}{4} \times 4\frac{1}{4}$	\$17 00	\$19 00
4 x 5	18 00	20 00
$4\frac{1}{4} \times 6\frac{1}{2}$	20 00	22 00
5 x 7	22 00	24 00
5 x 8	25 00	27 00
$6\frac{1}{2} \times 8\frac{1}{2}$	28 00	30 00
8 x 10	33 00	36 00
10 x 12	36 00	40 00
11 x 14	42 00	48 00
14 x 17	56 00	64 00
17 x 20	70 00	80 00
18 x 22	90 00	100 00

The Empire State Camera.

REVERSIBLE BACK.



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 yet at a moderate price, we have introduced the "EMPIRE STATE."

This camera is constructed, not so much with the idea of beauty and fine finish in mind, but rather to combine in a complete and practical manner, all the movements necessary in a camera for both in-door and out-door photography.

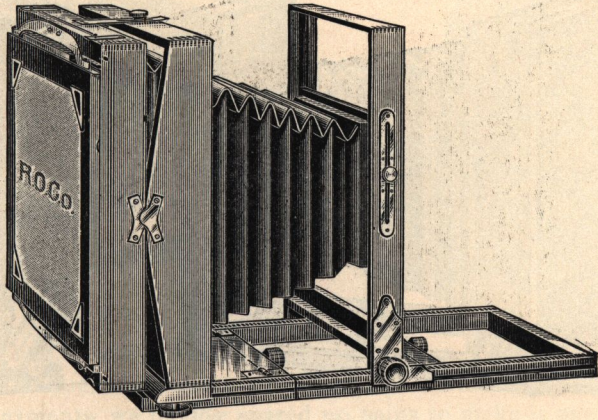
The Empire State is made of selected mahogany, and its trimmings are of polished brass. It has forward focus with fine rack and pinion adjustment, the front being held perfectly rigid by turning a milled head placed inside of the one turning the pinion.

The bed is made to hinge, and fold completely under the camera, thus 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 both single and double swing. Unlike most of the moderate priced cameras, the vertical swing is from the center, a feature that every professional will quickly recognize and appreciate.

The Empire State Camera.

REVERSIBLE BACK.



The horizontal swing is attached in a very simple manner, occupying no additional room, hence the double swing is no less compact than the single swing camera.

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.

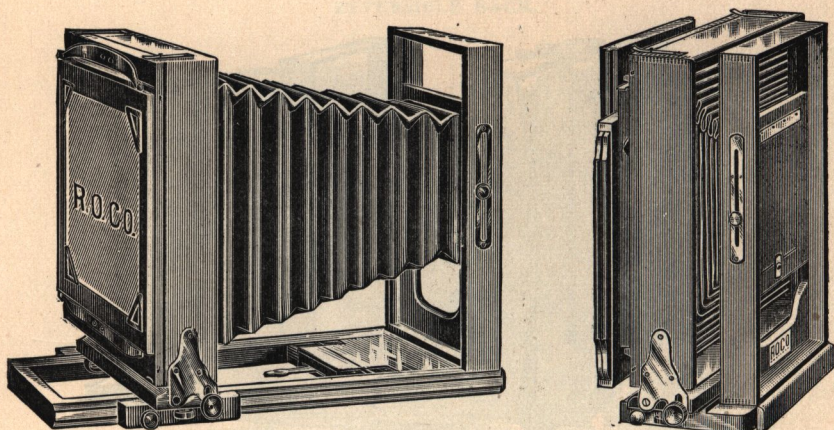
Furnished with Canvas Carrying Case and one Perfection Holder.

The Carrying Case will hold two extra plate-holders.

SIZE OF VIEW.	SINGLE SWING.	DOUBLE SWING.
5 x 7	\$18 00	\$20 00
5 x 8	20 00	22 00
6½ x 8½	22 00	24 00
8 x 10	25 00	28 00
10 x 12	32 00	35 00
11 x 14	37 00	42 00
14 x 17	50 00	55 00

The Standard Camera.

REVERSIBLE BACK.



The STANDARD is made on the same general style as the Ideal, though with back focus and without rack and pinion.

It is the lowest priced reversible back camera in market, and is made for those who desire a good, serviceable, reversible back camera, yet at a low price, and do not care for so finely finished an instrument as the Ideal or Universal.

The Standard is made of mahogany, well finished in shellac; the metal parts are of polished and lacquered brass, and as much pains are taken with the working parts as with any of the higher priced cameras.

The reversible back is provided with spring-acting ground-glass frame same as Ideal and Universal.

For a serviceable camera, at a moderate price, we can commend the Standard.

Price includes Carrying Case and one Perfection Holder, but no lens or tripod.

The Carrying Case will hold two extra plate-holders.

SIZE OF VIEW.	SINGLE SWING.	DOUBLE SWING.
$3\frac{1}{4}$ x $4\frac{1}{4}$	\$12 00	\$14 00
4 x 5	12 00	14 00
$4\frac{1}{4}$ x $6\frac{1}{2}$	14 00	16 00
5 x 7	15 00	17 00
5 x 8	16 00	18 00
$6\frac{1}{2}$ x $8\frac{1}{2}$	18 00	20 00
8 x 10	20 00	22 00

The Peerless Camera.

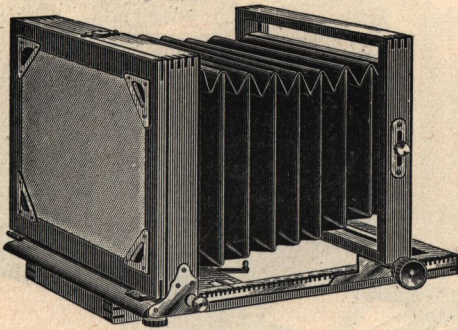


FIG. 1.

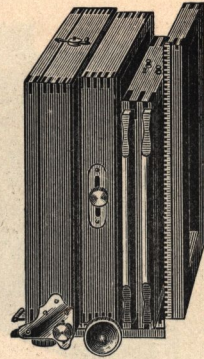


FIG. 2.

The PEERLESS CAMERA is a very popular camera ; it is made in the same excellent manner that characterizes all our work and is first-class in all its appointments, we having spared no pains to make it one of the most desirable cameras in market.

It is made with forward focus, the guide brackets working in the groove in the side of the metal rack. The bellows are slightly coned, leaving the front wide enough for stereoscopic work.

The same method of applying the horizontal swing is used as on Ideal, adding no bulk or weight.

It is made of Honduras mahogany, highly polished, with nickel trimmings ; it has sliding front, folding bed, rack and pinion, and is easily reversed by means of our new adjustable reversing clamp ; the same device for holding folding part of bed rigid is used as on the New Model.

Price includes R. O. Co.'s Single View Lens, Carlton Sliding Tripod, Canvas 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.	SINGLE SWING.	DOUBLE SWING.
3¼ x 4¼	\$16 00	\$18 00
4 x 5	17 00	19 00
4¼ x 6½	18 00	20 00
5 x 7	20 00	22 00
5 x 8	22 00	24 00
6½ x 8½	25 00	27 00
8 x 10	*18 00	*20 00

*Not including lens or tripod.

New Model Improved Camera.

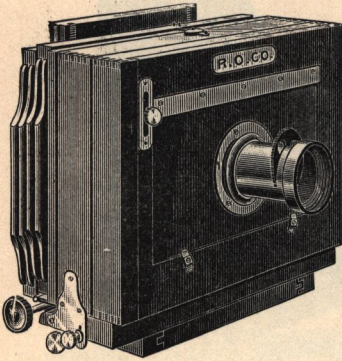


FIG. 1.

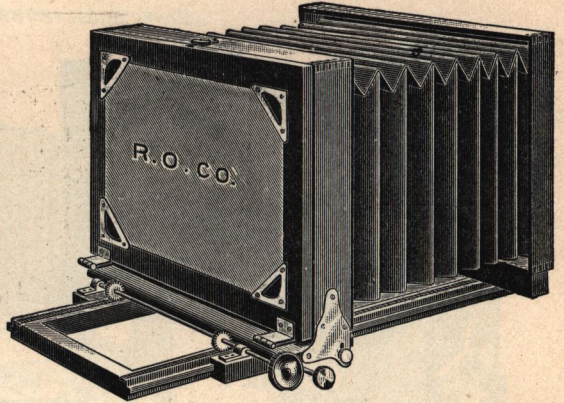


FIG. 2.

The NEW MODEL IMPROVED is made after the general style of the New Model. It has enjoyed the reputation for the past five years of being the most popular camera in market, and deservedly so, it being the only strictly first-class camera made at a price within the reach of the ordinary amateur, and is conceded to be the best camera for the price to be found in market.

It is very light and compact, which, together with its handsome appearance, makes it a very desirable camera for those who desire a good camera but do not care to invest in a high priced outfit.

It is made of the best Honduras mahogany, highly polished, with nickel trimmings; it has sliding front, folding bed, and is reversible by means of our new adjustable reversing clamp.

It has rack and pinion focusing movement; the folding part of bed is held rigid by our new clamp hook, the quickest, easiest and best device yet used for the purpose.

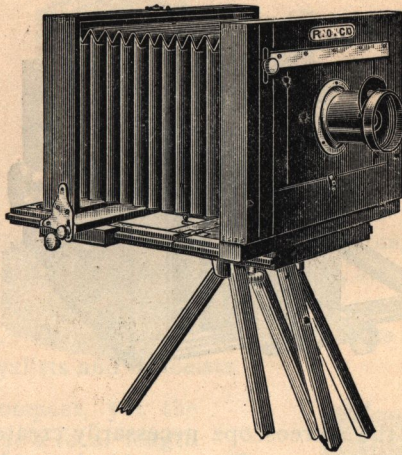
Price includes R. O. Co.'s Single View Lens, Carlton Sliding Tripod, Carrying Case and one Perfection Plate-holder (except 8 x 10, where neither lens nor tripod are included).

The Carrying Case will hold two extra plate-holders.

SIZE OF VIEW.	SINGLE SWING.	DOUBLE SWING.
3¼ x 4¼	\$13 00	\$15 00
4 x 5	14 00	16 00
4¼ x 6½	16 00	18 00
5 x 7	18 00	20 00
5 x 8	18 00	20 00
6½ x 8½	22 00	24 00
8 x 10	*17 00	*19 00

*Not including lens or tripod.

New Model Camera.



The NEW MODEL CAMERA is well known, it having been on the market for nine years, and its popularity attests its merits. This camera shares with the New Model Improved the reputation of being the most popular camera in market for amateurs' use.

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

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

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

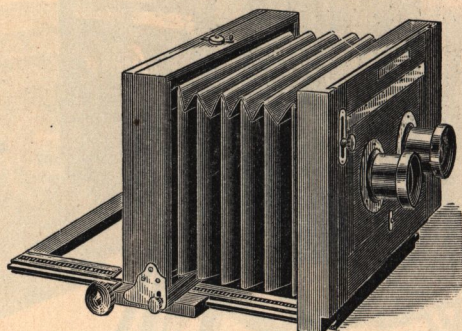
Price includes R. O. Co.'s Single View Lens, Standard Folding Tripod, Carrying Case, and one Perfection Plate-holder (except 8 x 10, where neither lens nor tripod are included).

The Carrying Case will hold two extra plate-holders.

SIZE OF VIEW.	WITHOUT SWING.	SINGLE SWING.
3¼ x 4¼	\$ 9 00	\$10 00
4 x 5	9 00	10 00
4¼ x 6½	10 00	11 00
5 x 7	11 00	12 00
5 x 8	11 00	12 00
6½ x 8½	13 00	15 00
8 x 10	*13 00	*15 00

*Not including lens or tripod.

New Model Stereoscopic Camera.



The revival of the stereoscope necessarily creates a demand for a first-class Stereoscopic Camera. To meet this demand, we have devised the NEW MODEL STEREOGRAPHIC CAMERA, believing it will find favor with all who are interested in this most fascinating branch of photography.

This camera is the lightest, most compact and simplest instrument yet placed on the market, combining the many desirable features needed in a Stereo Camera. It is made from the best Honduras mahogany, highly polished, with nickel trimmings.

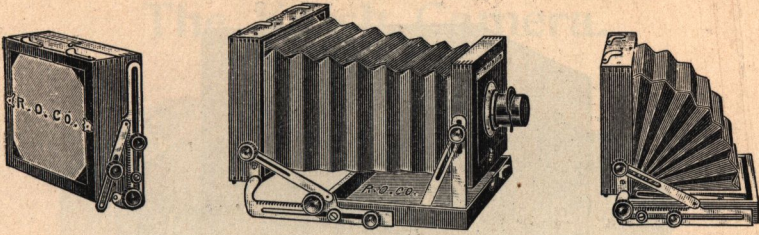
The New Model Stereoscopic Camera is patterned closely after the New Model Improved, having rack and pinion for focusing, sliding front, folding bed, and is reversible by means of our new adjustable reversing clamp. The folding bed is held rigid by our new clamp hook, which is the quickest, easiest and best device yet produced for the purpose.

The partition and front board are removable so that the camera may be used, if desired for other than stereoscopic pictures, by the addition of a lens of sufficient size to cover the full plate.

Each camera is enclosed in a neat canvas case, with room for two extra Perfection Holders.

Price for 5 x 8, including pair of No. 1 R. O. Co. View Lenses, matched,		
Carlton Sliding Tripod and one Perfection Holder,	-	\$25 00
Complete without Lenses,	- - - - -	18 00
“ “ “ or Tripod,	- - - - -	15 00

Midget Pocket Camera.



The MIDGET POCKET CAMERA is the most compact camera ever made, it being but $1\frac{1}{2}$ inches thick when folded, and the $3\frac{1}{4} \times 4\frac{1}{4}$ can be carried in an ordinary coat pocket, while the 4×5 can be carried in an overcoat pocket. On account of its compactness it is invaluable for ladies, tourists, bicyclists and canoeists.

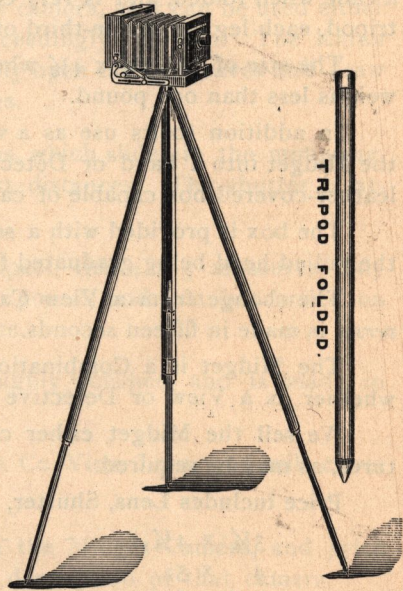
While so very compact, yet the $3\frac{1}{4} \times 4\frac{1}{4}$ camera has a focal length of $6\frac{1}{2}$ inches, while the 4×5 has $7\frac{1}{2}$ inches, so that any lens can be used if desired.

The Midget Pocket Camera is made in the best possible manner, being made of selected mahogany, highly polished, with metal work of polished and lacquered brass.

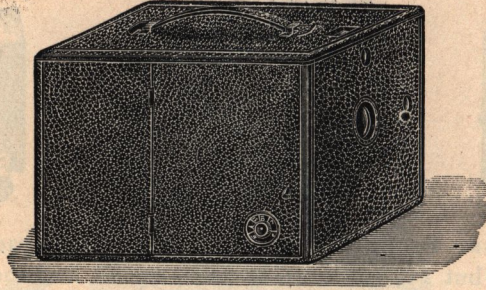
It has rising front, vertical swing and has fine rack and pinion focusing movement; the ground glass is spring-acting, the holder sliding between it and the camera box.

The Lens is a Rapid Rectilinear Lens of great depth of focus and flatness of field, giving brilliant definition, and will cover the plate to the extreme corners, even with the shutter; the lens is made compact enough to remain attached to the lens board and be reversed in the camera when the camera is folded.

The lens is provided with rotating diaphragms and Rotating Diaphragm Shutter for instantaneous views; this shutter is a novel device and very simple, and at the same time is very compact, as it occupies no more room than the rotating diaphragm.



Midget Pocket Camera.



AS A DETECTIVE CAMERA.

The Tripod is an ingenious invention, it having the appearance of a cane when folded, and is very convenient, being simply an extension tripod, each leg being one-third of a circle outside.

The size of the $3\frac{1}{4} \times 4\frac{1}{4}$ when folded is $4 \times 5 \times 1\frac{1}{2}$ inches, and weighs less than one pound.

In addition to its use as a very compact View Camera, we make the Midget into a hand or Detective Camera by enclosing it in a neat leather-covered box capable of carrying six holders with the camera.

The box is provided with a separate rack and pinion for focusing, the milled head being graduated for distances.

The change from a View Camera to a Detective Camera, or *vice versa*, is made in fifteen seconds.

The Midget is a Combination Camera of the highest order, and whether as a View or Detective Camera, it is not excelled.

We sell the Midget either complete or without the Detective features, as may be required.

Price includes Lens, Shutter, Tripod and *three* Holders.

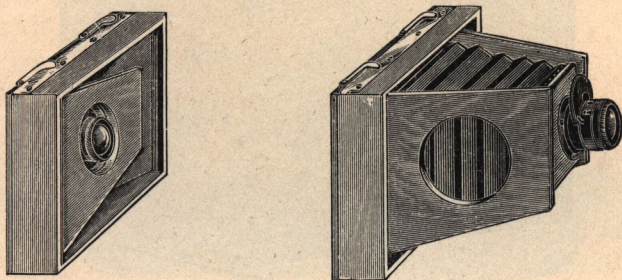
$3\frac{1}{4} \times 4\frac{1}{4}$,	- - - - -	\$38 00
4 x 5,	- - - - -	40 00
$4\frac{1}{4} \times 6\frac{1}{2}$,	- - - - -	45 00
5 x 7,	- - - - -	50 00

If the Detective Camera feature is not desired, deduct \$10 00.

HOLDERS for Midget.

$3\frac{1}{4} \times 4\frac{1}{4}$	- - -	\$1 25	$4\frac{1}{4} \times 6\frac{1}{2}$	- - -	\$1 50
4 x 5	- - -	1 25	5 x 7	- - -	1 50
Cane Tripod for Midget,	- - -	- - -	- - -	- - -	4 50

The Katch Camera.



The KATCH is an ideal bicyclist's camera, as it can be used either as a hand or view camera, and is exceedingly compact. The Katch can be instantly set up for use ; merely open the two leaves and draw the lens front forward until it catches.

The focusing is done with the lens, which slides in the mounting, and is accurately marked for different distances. The shutter is attached to the lens.

The Katch Camera is very compact, the 4 x 5 measures only 5 x 6 x 1½, and weighs only one-half pound, and can be carried on a trip with the slightest inconvenience.

The Katch is made of cherry, highly polished, and is made in a thorough manner.

The lens is our well-known R. O. Co. View Lens, and will cover the plate to the extreme corners.

The same holder is used as with the Midget Camera, and price of extra holders can be found under description of that camera.

Price includes lens, with shutter, one holder and case, but no tripod.

SIZE OF VIEW.	PRICE.
3¼ x 4¼ - - - - -	\$10 00
4 x 5 - - - - -	12 00
4¼ x 6½ - - - - -	15 00
5 x 7 - - - - -	18 00

The Premier Camera.

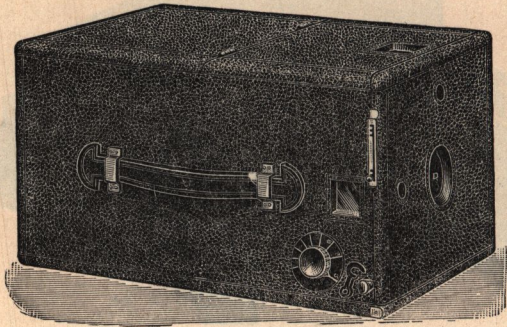


FIG. 1.

The PREMIER is conceded to be the best Hand Camera in the market for anywhere near the price, and possesses some advantages over all others.

The new Silent Shutter is a novel device. Its construction is such that it works without jar or noise. The speed may be regulated at the will of the operator from a slow instantaneous movement to one of great rapidity, depending upon the tension exerted on the spring lever at the right hand side of camera.

Time exposures are made by simply extending the time stop, located above the spring lever. Press the press button to open shutter; close by pressing time stop. If preferred the front of camera may be lowered, and the exposure made with the lens cap.

The letters U and D are plainly marked on the rubber leaves of the shutter, and indicate the position to be occupied by the spring lever when set for use, U signifying *up* and D *down*. In this manner the shutter always speaks for itself, and enables the operator to see at a glance whether it has been re-set after the last exposure. Another noticeable feature in the Premier Silent Shutter is the fact that in setting the shutter the leaves are not opened, an especial advantage when using a Roll Holder.

Two view finders and two tripod plates are supplied, for both vertical and horizontal pictures.

A ground glass screen, the full size of the plate, is also provided, permitting the operator to use the Premier as a regular view camera after dropping the hinged panel in the back.

The focusing scale at the side is accurately marked with white figures on a black dial.

The Premier Camera.

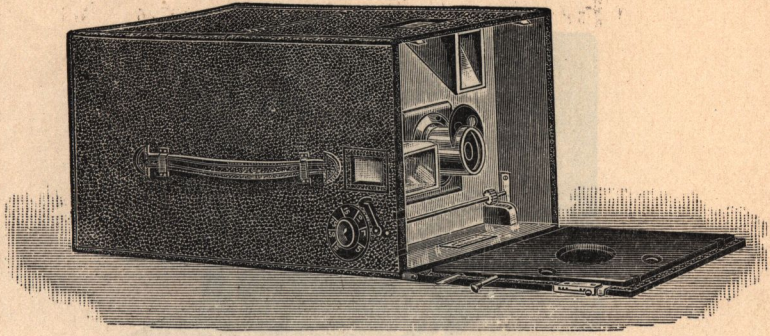


FIG. 2.

The PREMIER ground glass screen is attached permanently to the camera back, and *slides* easily on two brass supports into any desired position, thus obviating the annoyance caused by a removable screen, as supplied with most Hand Cameras.

The Single Lens furnished with the Premier is the well known R. O. Co.'s View Lens. The Rapid Rectilinear Lens is made especially for this camera, and will be found excellent for general work, though at a very moderate price. Both lenses have rotating diaphragms. The Premier is so constructed that any other lens may be substituted if desired.

Glass Plates, Cut or Roll Films may all be used, as the Plate, Film and Roll Holders are interchangeable.

The Premier is made to hold either four or six plate holders, the difference in length being $1\frac{1}{2}$ inches. Price is the same for either size. The camera for four holders measures only $6\frac{1}{4} \times 6\frac{3}{4} \times 11$ inches and weighs but four pounds.

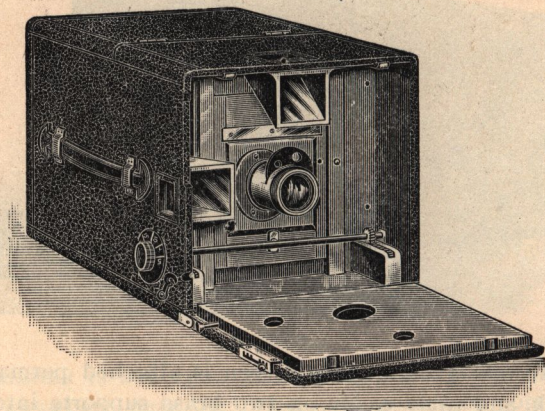
Black seal grain leather is used in covering all Premiers, and a leather handle is attached for carrying, the camera presenting a very handsome appearance.

PRICE.

	4 x 5	5 x 7
Premier, with one Plate Holder, - - - -	\$16 00	\$22 00
With Rapid Rectilinear Lens, - - - -	22 00	32 00
Extra Premier Plate Holders, - - - -	1 00	1 25
Facile Film Holder (for cut films), - - - -	1 25	1 50
Roll Holder, empty, - - - -	8 00	10 00
Roll of Films, 24 exposures - - - -	1 50	3 00
Roll of Films, 48 exposures, - - - -	3 00	6 00
Canvas Covered Case for Premier, with Shoulder Strap,	2 50	3 00
Leather " " " " " " " "	3 00	3 50

The Premier Camera No. 2.

WITH SWING BACK, RISING AND FALLING FRONT.



The PREMIER No. 2 is simply the regular Premier with Swing Back and Rising and Falling Front added. In all except these two features the description of the Premier on pages 18 and 19 applies to Premier No. 2, as does also price of holders and other accessories.

In adding the Swing Back and Rising and Falling Front, we have not increased the size nor added to the weight of the Premier, and we desire to emphasize the fact that the outward appearance is identical with the regular Premier; not until the lid is raised is any difference noted, and then only a small milled head is shown, which controls the swing. As the back swings from the *center*, the focus as indicated by the focusing dial, is not disturbed.

When the swing is not in use, the back is clamped in an upright position, as indicated by an automatic spring catch.

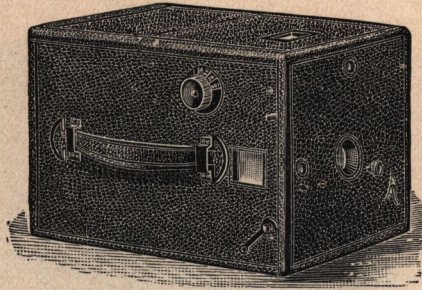
The Rising and Falling Front is regulated by a small press button placed at the side of the lens.

The Swing Back and Rising and Falling Front are used principally when using the camera on a tripod, and are of especial advantage in taking architectural subjects, and more especially tall buildings. A hand camera with these improvements possesses all the advantages of a regular tripod camera.

PRICE.

	4 x 5	5 x 7
Complete, with one Premier Plate Holder, - - -	\$20 00	\$26 00
With Rapid Rectilinear Lens, - - -	26 00	36 00

The Handy Camera.



The HANDY is a well made and serviceable camera, capable of doing excellent work, either in the hand or on a tripod.

The shutter is set by turning a small milled head on the front of camera. The speed is regulated by moving a small brass lever on the front. Time exposures are made by simply moving the time lever downward. Press the button to open shutter, and an upward movement of time lever will close it.

The Handy has two view finders and two tripod plates, so that the camera can be used either horizontally or vertically on a tripod or in the hand.

A ground glass screen, the full size of the plate, is also provided, permitting the operator to use the Handy as a regular view camera after dropping the hinged panel in the back.

The focusing scale at the side is accurately marked with white figures on a black dial.

The Lens is our well known R. O. Co.'s Single View, though the mounting is different. No other lens can be fitted to the Handy.

The Handy is neatly covered with black leather, and has a leather handle for carrying, presenting an exceedingly handsome appearance.

The price of this camera in no way conveys an idea of its real merits or value. It is, without question, the best Hand Camera that has ever been offered at so low a price.

The size of Handy is $6\frac{1}{4} \times 6\frac{1}{2} \times 10$ inches, and will hold three holders. The same holder is used as with the Premier.

Made only in 4 x 5 size. One Perfection Holder is included in the price. A Roll Holder cannot be used in the Handy.

Price, with one Holder,	-	-	-	-	\$10 00
Extra Plate Holders, each,	-	-	-	-	1 00
Facile Film Holders (for cut films),	-	-	-	-	1 25

The Folding Premier Camera.

WITH SWING BACK AND SLIDING FRONT.

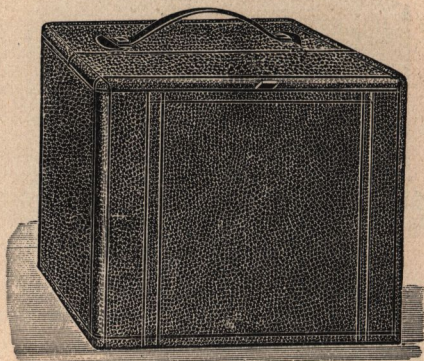


FIG. 1.

The FOLDING PREMIER combines the numerous advantages possessed by the regular style, and secures in addition greater compactness. With the folding pattern, as with the regular model, our aim has been to preserve simplicity and ease of manipulation.

To operate the Folding Premier, merely lower the front, thus forming a bed upon which the camera front with lens moves forward on two brass guides; clamp in the desired position, by turning a milled head, as shown in the illustration; the camera is then ready for work.

The shutter works between the lenses and is an extremely neat device, and works without jar or noise. It is of the safety pattern, and does not expose the plate when setting. Great latitude of exposure may be obtained, varying from a slow instantaneous motion to a speed fully equal to all the requirements of the operator. Time exposures may be made with the shutter or lens cap, as preferred. The shutter is the same as furnished with the Folding Premo, and is more fully described under that camera.

Ample rise and fall of the front is provided, the lens board moving easily within the upright guides, and a milled head on either side clamps it firmly in position.

The Folding Premier has our new Swing Back, the latest and best yet placed upon any hand camera. As the swing works from the center of the plate, the focus as indicated by the focusing dial is not disturbed. When not in use, the swing may be instantly clamped in place, the upright position being designated by a spring catch.

Our improved sliding ground-glass screen is fitted to all Folding Premiers, being easily and quickly adjusted. There are three notches for holding the screen; one against the rigid frame for focusing, another a short distance back for plate holder, and a third further back for roll holder. By pressing on two buttons, shown when cover is raised, the ground-glass screen will *slide*, catching in the notch desired.

The Folding Premier Camera.

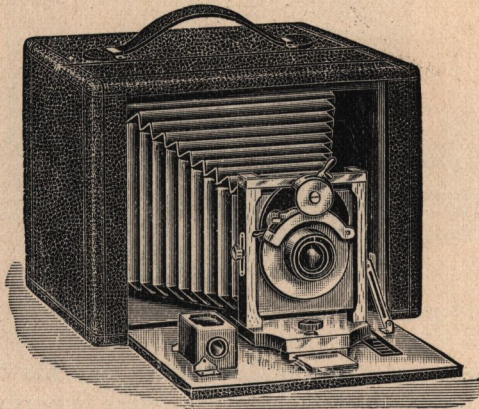


FIG. 2.

Two tripod plates, for upright or horizontal views, are provided. A hinged panel in the back allows the full sized image to be seen while focusing.

The View Finder is attached to the bed, and is reversible for horizontal or upright views.

Both the Single and Rapid Rectilinear Lenses are the same as fitted to the regular Premier. In the Folding, however, the shutter works between the lenses.

Either Glass Plates, Cut Films, or a Roll of Films, may be used, as the different holders are interchangeable. The change from plates to films can be made in the field in five seconds.

The Folding Premier is made to carry four or six holders, the difference in length being $1\frac{1}{2}$ inches. Price is the same for either size.

The appearance of the camera when open is extremely handsome, the entire bed and front being of polished mahogany, and in perfect contrast with the black leather covering.

When closed, the 4 x 5 size measures only $6\frac{1}{4}$ x $6\frac{3}{4}$ x $7\frac{1}{2}$ inches.

PRICE.

	4 x 5	5 x 7	$6\frac{1}{2}$ x $8\frac{1}{2}$
Complete, with one Premier Plate Holder,	\$22 00	\$28 00	\$40 00
With Rapid Rectilinear Lens, - - -	27 00	37 00	50 00
Extra Premier Plate Holders, each, - - -	1 00	1 25	1 60
Facile Film Holders, (for cut films), - - -	1 25	1 50	1 85
Roll Holder, empty, - - - -	8 00	10 00	16 00
Roll of Films, 24 exposures, - - -	1 50	3 00	4 00
Roll of Films, 48 exposures, - - -	3 00	6 00	8 00
Canvas Covered Case, for Folding Premier,			
with Shoulder Strap, - - -	2 50	3 00	3 50
Leather Covered Case, for Folding Premier,			
with Shoulder Strap, - - -	3 00	3 50	4 00

The Premo Camera.

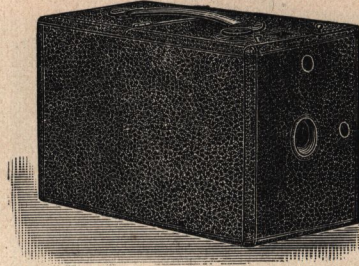


FIG. 1.

In constructing the PREMIO Camera, our aim has been to produce an instrument which shall include the latest improvements in Hand Cameras, and also possess the advantageous features of the regular View Camera; yet, withal, to preserve compactness.

Having accomplished these desirable points, and combined them in the Premo, which measures but $5\frac{1}{2} \times 6\frac{1}{2} \times 10$ inches outside, we feel confident that the result will be appreciated by the expert photographer, as well as the amateur, for the professional is beginning to realize that the Hand Camera is now to form an important part of his equipment.

We have spared no pains to make this instrument the best Hand Camera in the market, in detail as well as in entirety. The camera box is made of mahogany, covered with grained leather, the inside being finished in shellac.

The Premo is provided with Swing Back and Rising and Falling Front, the working parts of which are *entirely inside* the camera. The swing back is regulated by a milled head, seen on opening the door at the side (see Fig. 2). The axis of the swing is at the center, which is optically correct, and the focus as indicated by the focusing dial is not disturbed.

The ground-glass screen is spring acting. It does not close after withdrawing the holder, but remains open, ready for its re-insertion. A touch on the brass projection will close the screen for focusing.

The Rising and Falling Front is adjusted by means of a press-button at the side of lens, and locks itself in place when the desired position is obtained.

The Premo Camera.

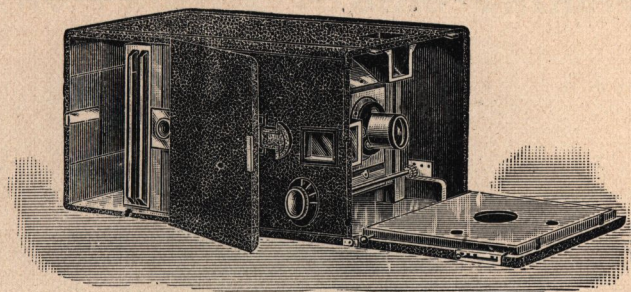


FIG. 2.

The Lens supplied with the PREMIO is made especially for use on this camera. Other lenses of similar focus ($5\frac{1}{2}$ to 6 inch) can be adapted to the Premo, at an additional cost for fitting.

The Shutter furnished with the Premo is the same as the Premier, and is operated in precisely the same manner. (See description, page 18.) Two finders are provided, for upright and horizontal pictures.

For time exposures the camera may be placed on a tripod (two plates are fitted to receive the tripod screw) or any convenient resting place, and the image focused upon the screen, after dropping the hinged panel in the back.

Glass Plates and Cut Films may both be used. The camera is made to carry three double holders. The holder is of a special design, working on the principle of the Perfection holder, and is the lightest, most compact and easiest to work of any now in the market. An additional half dozen holders can be carried in the coat pocket.

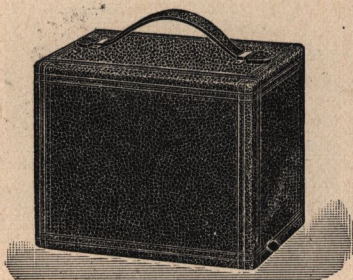
A Roll Holder cannot be used in the Premo.

Taken in its entirety, we can recommend the Premo as being a thoroughly complete and practical instrument, adapted for use either by the advanced worker or the novice in the art.

PRICE.

Premo, with one Premo Holder, - - - - -	4 x 5	\$24 00
With Rapid Rectilinear Lens, - - - - -		30 00
Extra Plate Holders, each, - - - - -		1 25
Facile Film Holders (for cut films), - - - - -		1 35
Leather Covered Case for Premo, with Shoulder Strap, -		3 00

The Folding Premo Camera.



The FOLDING PREMO is the most complete and practical hand camera ever placed on the market, possessing all latest improvements and yet is the most compact camera ever made, the 4 x 5 measuring, when closed, but $5\frac{1}{2}$ x $6\frac{1}{2}$ x $4\frac{3}{4}$ inches and weighs but two pounds.

The Folding Premo has Swing Back and Rising and Falling Front, the working parts of which are entirely within the camera. In fact, there are absolutely none of the working parts of the camera shown when the instrument is closed; merely a plain box covered with leather. The Swing Back is regulated by a milled head, seen on opening the door at the side. The axis of the swing is at the *center* of the plate.

The Folding Premo is provided with two tripod plates, and has a panel at the back for focusing.

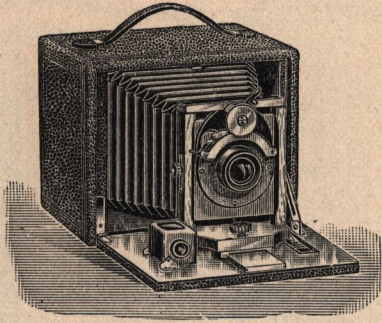
The View Finder is attached to the bed and is reversible, for taking either horizontal or vertical views.

As will be seen by the experienced amateur, the above improvements make the Folding Premo a perfect tripod camera as well as a hand camera, possessing all the features of a first-class view camera.

The ground-glass screen on the Folding Premo is spring-acting. The screen does not close after withdrawing the holder, but remains open for its re-insertion. A touch on a spring-button closes the screen for focusing, or to exert a pressure on the holder when in place.

The lens is a Rapid Rectilinear Lens of great power, made for use on this camera.

The Folding Premo Camera.



The shutter works between the lenses, and is one of the features of the outfit, being a strictly first-class shutter in every detail. The shutter is set by moving the upright lever to the left, the leaves remaining stationary while shutter is being set.

The release is by a slight downward pressure on the release lever. Time exposures are made by moving the bent lever to the right, and while in this position one pressure on the release lever will open the shutter; a second pressure will close it. The speed of the shutter is regulated by moving to the right or left a small projection (the end of a coiled spring with a small knob on end) found near the lever for setting shutter.

The Folding Premo is made in the best possible manner, of the best materials; the box is made of mahogany, polished inside, and covered with handsome leather outside.

The holder is the Midget Double Holder, the smallest double holder made, and works on the principle of the Perfection Holder. The holders are furnished with rubber slides.

The camera will hold three holders.

PRICE.

	4 x 5	5 x 7	6½ x 8½
Premo, with one Holder, - - -	\$30 00	\$38 00	\$50 00
Extra Plate Holders, - - - -	1 25	1 50	1 75
Film Holders, - - - -	1 35	1 60	1 85
Leather Covered Case, - - - -	2 50	3 00	3 50

The Perfection Holder.

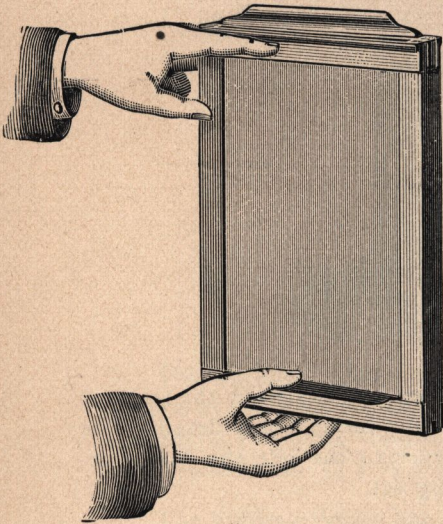


FIG. 1.

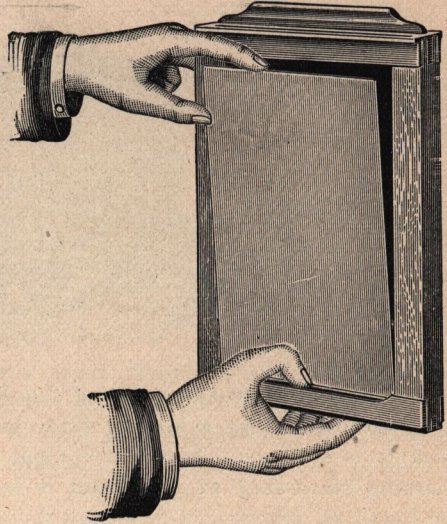


FIG. 2.

The PERFECTION DOUBLE PLATE HOLDER is the simplest and best plate holder ever placed on the market; it is simply *perfection*.

To load the Perfection Holder, the end of the plate is rested against the spring-bar at the end of the holder, then by simply pressing the spring-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.

On account of its simplicity the Perfection Holder can be loaded and unloaded with the greatest of ease, even in absolute darkness.

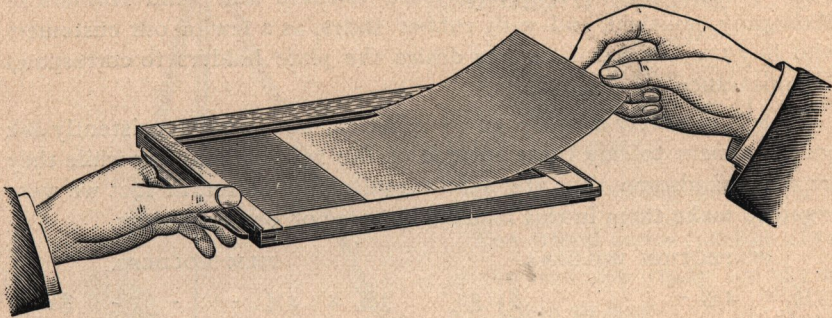
As the plate is held in place by the ends only, the *full width* of the plate is exposed and but one-sixteenth inch is cut off from each end.

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

$3\frac{1}{4}$ x $4\frac{1}{4}$	-	\$1 00		$6\frac{1}{2}$ x $8\frac{1}{2}$	-	\$1 60
4 x 5	-	1 00		8 x 10	-	1 85
$4\frac{1}{4}$ x $6\frac{1}{2}$	-	1 25		10 x 12	-	3 00
5 x 7	-	1 25		11 x 14	-	4 50
5 x 8	-	1 35				

The Facile Film Holder.

FOR CUT FILMS.

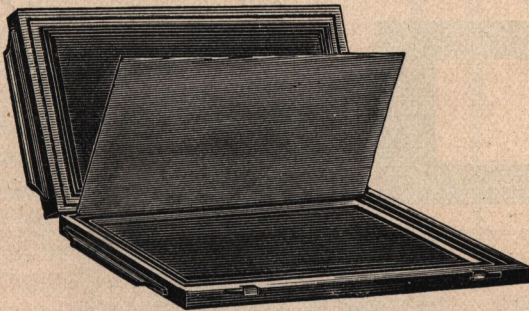


The Facile Film Holder is made interchangeable with the Perfection Plate Holder, so either may be used on the same camera.

The Facile Film Holder is very simple to load and unload, and we believe it to be the best film holder in the market.

3¼ x 4¼	\$1 25	5 x 8	\$1 60
4 x 5	1 25	6½ x 8½	1 85
4¼ x 6½	1 40	8 x 10	2 20
5 x 7	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.

3¼ x 4¼	\$1 60	5 x 8	\$2 00	11 x 14	\$ 6 00
4 x 5	1 60	6½ x 8½	2 25	14 x 17	7 50
4¼ x 6½	1 75	8 x 10	3 00	17 x 20	10 00
5 x 7	1 85	10 x 12	4 50	18 x 22	15 00

Mahogany Holders.

We make both Perfection Plate Holders and Film Holders of Mahogany, polished, and with rubber slides, as a few of our customers who buy the Universal Camera desire the plate holders to correspond in appearance to the camera.

As it is purely a matter of satisfaction, we cannot consistently ask our customers to buy these instead of the regular kind, for while they are very handsome, they are not in quality any better, in fact we were urged to make them in this manner by some of our customers.

PERFECTION HOLDERS.				FILM HOLDERS.			
3¼	x	4¼	- - - \$1 50	3¼	x	4¼	- - - \$1 75
4	x	5	- - - 1 50	4	x	5	- - - 1 75
4¼	x	6½	- - - 1 90	4¼	x	6½	- - - 2 00
5	x	7	- - - 2 00	5	x	7	- - - 2 15
5	x	8	- - - 2 00	5	x	8	- - - 2 25
6½	x	8½	- - - 2 40	6½	x	8½	- - - 2 75
8	x	10	- - - 2 85	8	x	10	- - - 3 25
10	x	12	- - - 4 50				
11	x	14	- - - 6 00				

Inside Kits.



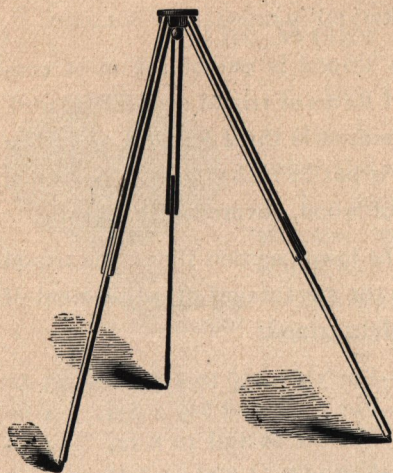
Consist of thin wooden frames, made to fit in the Dry Plate Holder, and with rabbets for holding smaller plates.

Our Kits have buttons at each end of aperture for holding plate in place.

4	x	5	to hold 3¼ x 4¼ plates, each,	- - - -	\$0 25
4¼	x	6½	" 3¼ x 4¼ plates, each,	- - - -	25
5	x	7	" 3¼ x 4¼ or 4 x 5 plates, each,	- - - -	30
5	x	8	" 3¼ x 4¼, 4 x 5 or 4¼ x 6½ plates, each,	- - - -	35
6½	x	8½	" 4 x 5, 4¼ x 6½, 5 x 7 or 5 x 8 plates, each,	- - - -	40
8	x	10	" 4¼ x 6½, 5 x 7, 5 x 8, or 6½ x 8½ plates, each,	- - - -	50
10	x	12	" 5 x 7, 5 x 8, 6½ x 8½ or 8 x 10 plates, each,	- - - -	60
11	x	14	" 8 x 10 or 10 x 12 plates, each,	- - - -	75
14	x	17	" 8 x 10, 10 x 12 or 11 x 14 plates, each,	- - - -	1 00
17	x	20	" 11 x 14 or 14 x 17 plates, each,	- - - -	1 50
18	x	22	" 14 x 17 or 17 x 20 plates, each,	- - - -	2 00

Tripods.

Standard Folding Tripod.



This is our original style of tripod, an extended description of which is hardly necessary.

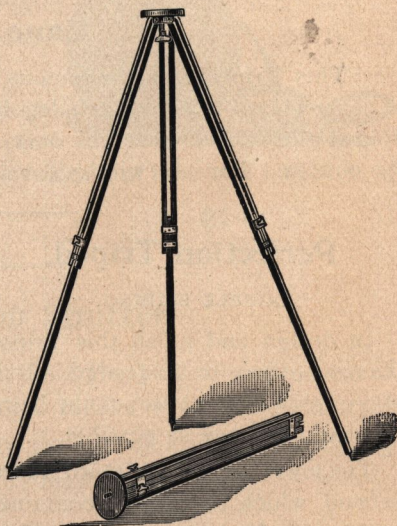
It is light, strong and rigid.

The tripod screw remains always in the iron top ready for use and not liable to loss.

Price, for cameras from 4 x 5
to 6½ x 8½, - - - \$2 00

Carlton's Sliding Tripod.

This is the simplest and best form of Sliding Tripod yet made. 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 market. The special advantages of a sliding tripod over a folding one are ease of leveling the camera in rough places by adjusting the length of tripod legs, and the quickness with which it is set up or taken down.



No. 1—For 3¼ x 4¼ to 4½ x 6½ camera,	- - -	\$2 50
No. 2—For 5 x 8 and 6½ x 8½ cameras,	- - -	3 00
No. 3—For 8 x 10 and 10 x 12 cameras,	- - -	3 50
No. 4—For 11 x 14 and 14 x 17 cameras,	- - -	4 50
No. 5—For 17 x 20 and 20 x 24 cameras,	- - -	5 50

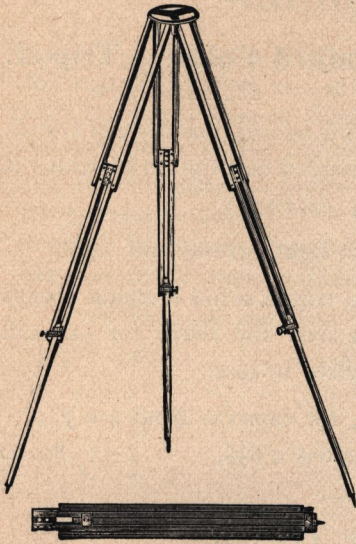
Combination Tripod.

COMBINED SLIDING AND FOLDING.

This Tripod is one of the most convenient forms of tripod ever introduced. It is jointed in three lengths, and when closed is but 22 inches long. The tripod top is of wood, covered with cloth.

As the lower section slides, the tripod has all the advantages of adjustment of the sliding tripod.

- | | |
|--|--------|
| No. 1—For $3\frac{1}{4} \times 4\frac{1}{4}$ to $4\frac{1}{4} \times 6\frac{1}{2}$, | \$3 50 |
| No. 2—For 5×8 and $6\frac{1}{2} \times 8\frac{1}{2}$, | 4 00 |
| No. 3—For 8×10 and 10×12 , | 4 50 |
| No. 4—For 11×14 and 14×17 , | 5 50 |
| No. 5—For 17×20 to 20×24 , | 6 50 |



Cane Tripod.

This Tripod is an ingenious invention, having the appearance of a cane when closed. Each leg is one-third of a circle outside; when folded the tripod measures only $1\frac{1}{2}$ inches diameter and weighs but 32 ounces. For use with $3\frac{1}{4} \times 4\frac{1}{4}$ cameras only. Price, \$4 50.

Perfection Tripod.

DOUBLE SLIDING.

In design and finish this Tripod leaves nothing to be desired. It is thoroughly made, every point being as near *perfection* as possible.

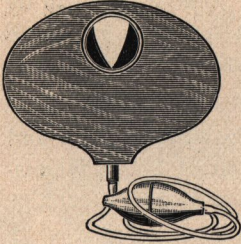
The lower section slides within the second, which in turn is contained within the third, thus rendering the tripod quite compact when closed.

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

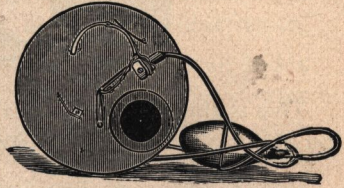
The Weller Shutter is very simple in its construction and cannot well get out of order, and works with a minimum jar and is nearly noiseless.

The Weller Shutter is made to fit on end of lens, and also to fit inside of camera box.

Price, - - - - - \$4 00

Rotary Shutter.

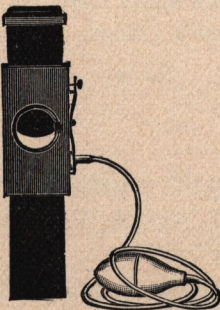
This is a most excellent shutter for amateurs. A circular plate of hard rubber revolves within a rim on the wooden body of the shutter.



It can be operated for both time and instantaneous, at any distance from the shutter. With Britton's pneumatic release rubber tube and bulb.

Price, - - - - - \$3 00

Universal Drop Shutter.



This is a very simple, yet effective form of shutter. The slide falls of its own weight when released, and by the use of a rubber band, any degree of rapidity may be obtained.

The body of the shutter being of mahogany it has a very handsome appearance. A thin strip of rubber is placed in the top of the shutter to lessen the concussion caused by the falling slide.

Price, with spring release, - - - - - \$1 00

With Britton's pneumatic release, bulb and tube, 1 50

R. O. Co.'s Drop Shutter.

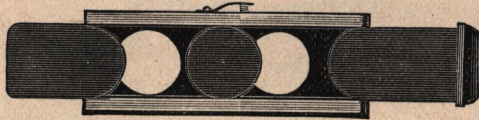


This is one of the neatest and best shutters in market, being simple, durable and convenient. The action can be hastened from the gravity drop to as quick an exposure as desired, by the use of a rubber band. It is made of brass, full nickeled.

It is made to fit all sizes of R. O. Co.'s Single View and Excelsior Lenses; also Nos. 1 and 2 Darlot Rapid Hemispherical, and will be made to fit any size up to $2\frac{1}{4}$ inch.

Price, for any of the above sizes, - - - \$2 00

Universal Shutter, for Stereoscopic Lenses.



This is similar to the Universal Drop Shutter, except for two lenses, and as the slide moves horizontally, it is moved by a rubber band.

Price, - - - - - \$1 50

Carlton's Stereoscopic Exposer.



The CARLTON STEREOGRAPHIC EXPOSER is not designed for instantaneous work, but rather is a device for exposing the two lenses simultaneously, though it can be done very rapidly indeed.

Price, - - - - - \$2 00

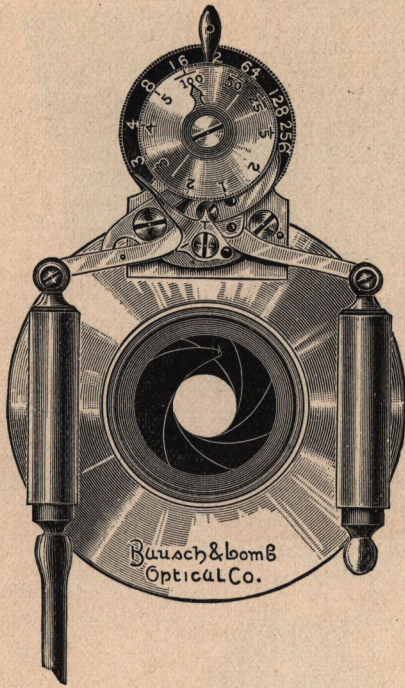
View Finder.

The View Finder is in reality a miniature camera, and is attached to the top of a view camera in taking instantaneous pictures.

The same view is seen on the screen of the finder as is reflected in the camera, and by observing the screen of the finder, the exact moment for exposure can be told.

Price, - - - - - \$1 25

Diaphragm Shutter.



The DIAPHRAGM SHUTTER will be found to meet every requirement of the amateur or professional photographer desiring a strictly first-class shutter for in-door or out-door work.

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

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

The pointer on the small index indicates the speed. The shutter will work automatically from three seconds to one one-hundredth part of a second, and by simply moving

a small lever, it may be set for time exposure of any desired duration. In the latter case a pressure on the bulb closes the shutter.

PRICE.

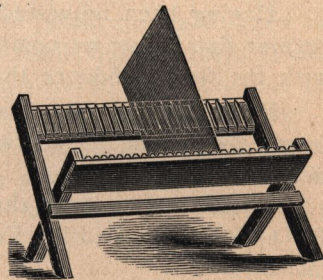
When fitted to Rapid Universal or A. G. Clark Lenses.		When fitted to Lenses of other Manufacture.	
3¼ x 4¼	\$12 50	3¼ x 4¼	\$14 50
4 x 5	12 50	4 x 5	14 50
5 x 8	13 50	5 x 8	15 50
6½ x 8½	14 50	6½ x 8½	16 50
8 x 10	16 00	8 x 10	18 00

Folding Negative Rack.

An inexpensive and very convenient accessory for the dark room, preventing the negatives from becoming scratched while drying. Holds 24 negatives.

Price, for plates up to 6½ x 8½, \$0 40

Price, for plates 8 x 10 to 14 x 17, 70

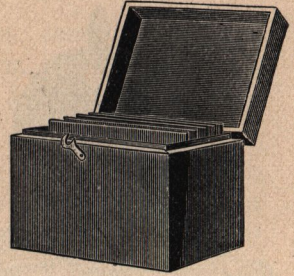


Negative Boxes.

Made from selected whitewood, with hinged cover. Are exceedingly convenient for storing negatives.

Each holds 24 plates.

3¼ x 4¼	\$0 60	5 x 8	\$0 70
4 x 5	60	6½ x 8½	85
4¼ x 6½	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 thoroughly broken, and are lined with black velvet, which prevents reflection.

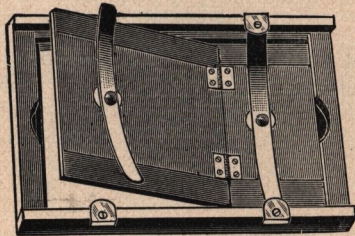
They are useful in the dark room, as the box of plates may be put in the safety box, saving wrapping and unwrapping them when filling the holders when in a hurry.

A lock and key can be furnished with each at 60 cents extra.

3¼ x 4¼	- - -	\$0 75	5 x 8	- - -	\$1 00
4 x 5	- - -	75	6½ x 8½	- - -	1 20
4¼ x 6½	- - -	90	8 x 10	- - -	1 40
5 x 7	- - -	1 00	10 x 12	- - -	2 00

Favorite Printing Frames.

3¼ x 4¼	\$0 40	5 x 8	\$0 55
4 x 5	40	6½ x 8½	60
4¼ x 6½	45	8 x 10	75
5 x 7	50		



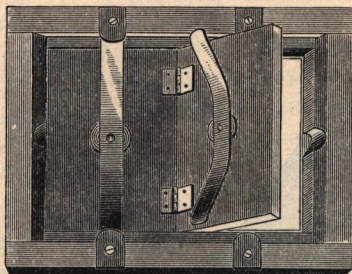
Having been requested to make a lighter Printing Frame than our regular flat frame, we comply, and place the Favorite on the market with the full confidence that it will prove all that the name implies.

While the Favorite is much lighter than the ordinary flat printing frame, they are equal in strength and durability, making them especially desirable for amateurs.

These frames have the same style of catch, spring, etc., as the R. O. Co.'s Flat Printing Frame; the backs also being cut in the same manner.

R. O. Co.'s Flat Printing Frames.

3¼ x 4¼	\$0 40
4 x 5	40
4¼ x 6½	45
5 x 7	50
5 x 8	55
6½ x 8½	60



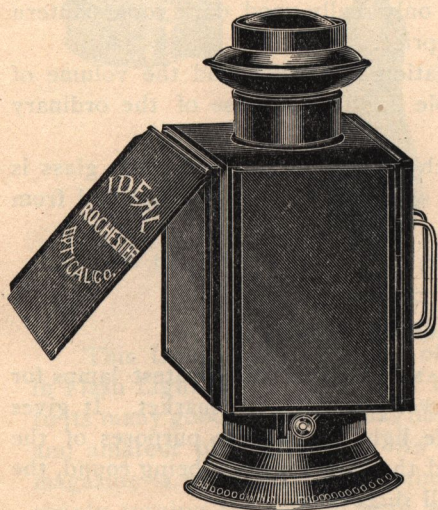
8 x 10	\$0 75
10 x 12	1 00
11 x 14	1 75
14 x 17	2 25
16 x 20	2 75
17 x 20	3 00

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.

The back is made to open at the center, or two-thirds, whichever style be wanted, though we find best sale for the latter, as it allows more of the print to be seen during printing.

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; steady light; safe light.

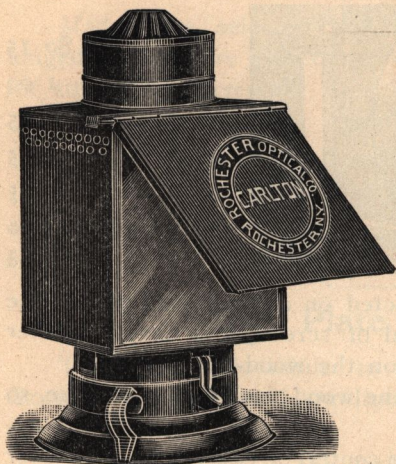
There are three sides for light, each of which has a double glass, one sheet each Orange and Ruby, which combination makes a perfectly safe light.

The front side 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, - - - - - \$3 00

The Carlton Lantern.

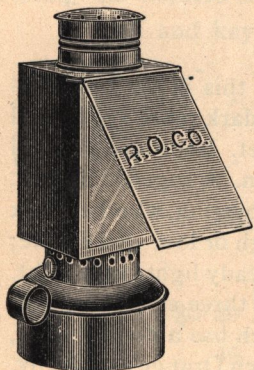


The CARLTON is made on an entirely new principle. The body of the lantern is *double*; the air for ventilation is taken in near the top and passes down to the burner, thus avoiding the necessity of having holes at the bottom; hence no white light can escape.

The Carlton will be a leader. The ventilation is perfect; no smoke; no fume; steady light, and *plenty of it*.

The front is provided with orange and ruby glass, insuring a safe light for the development of the most sensitive plates. Price, \$1 75

The Universal Ruby Lantern.



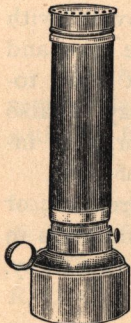
The UNIVERSAL RUBY LANTERN is indeed the best dry plate lantern for the price in the market, it being the only really good dark room lantern at so low a price.

The ventilation is perfect, and the volume of light is ample for the purpose of the ordinary amateur.

To light the Universal Lantern, the glass is raised in the slide. The light is controlled from the outside.

Price, - - - \$0 80

The Gem Ruby Lamp.

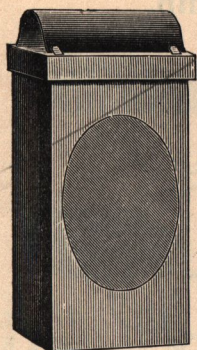


The GEM RUBY LAMP is one of the neatest lamps for dark room purposes ever placed on the market. It gives an abundance of safe light for all the purposes of the ordinary amateur, and the ruby chimney being round, the light is emitted in all directions.

The Gem is the most compact lamp in market, and can be carried on a trip with no inconvenience.

To light the Gem Lamp the ruby chimney is removed, same as on an ordinary house lamp.

Price, - - - \$1 00



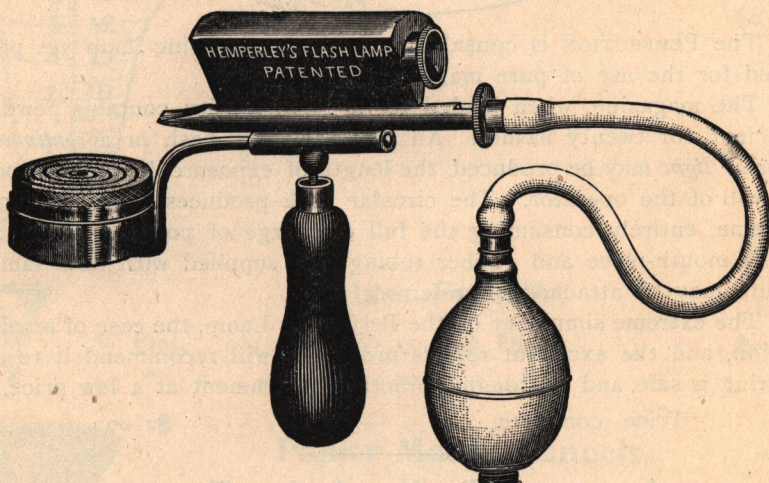
Folding Candle Lantern.

This is the best lantern ever made for traveling, folding into very small space. The top and bottom both are removed and the body of the lantern folds perfectly flat, and all packs into a box which is but one inch deep.

The lantern contains no glass, Ruby Fabric being used instead.

Price, - - - - \$0 75

Hemperley Magazine Flash Lamp.



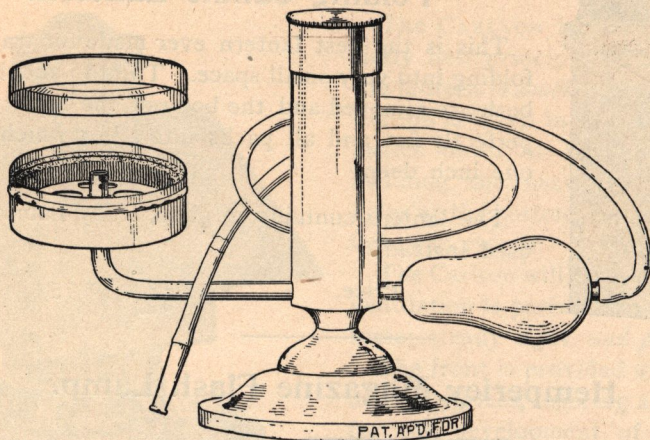
(PATENTED.)

This Lamp is the invention of one of the most successful workers in Flash Light Photography, and is well and favorably known. Owing to its many good features it has had large sales among both professional and amateur photographers. As will be seen from the illustration, a magazine is provided for containing the supply of magnesium. By simply turning the milled head at the end of barrel the lamp is instantly loaded, and ready for use. The magazine will hold an ounce of powder, sufficient for a number of exposures.

Price, - - - - - \$2 75

Pure Magnesium, fine ground, per ounce, 50

Perfection Magazine Flash Lamp.



The PERFECTION is considered the best magazine lamp yet produced for the use of pure magnesium.

The magazine, when loaded to its full capacity, contains powder sufficient for twenty flashes. An instantaneous flash or a *continuous flame of light* may be produced, the length of exposure depending upon the will of the operator. The circular wick produces a large volume of flame, entirely consuming the full discharge of powder.

A mouth-piece and rubber tubing are supplied with each lamp; a bulb may be attached if preferred.

The extreme simplicity of the Perfection Lamp, the ease of manipulation, and the excellent results produced, will recommend it to all desiring a safe and thoroughly practical instrument at a low price.

Price, complete, - - - - - \$2 00

Japaned Tin Developing Trays.



4 x 5	-	\$0 20	6½ x 8½	-	\$0 30
5 x 8	-	25	8 x 10	-	40

Vulcanized Rubber Trays.



The neatest Developing Tray yet introduced is that made from vulcanized rubber. It has a polished surface, thus it is readily kept clean.

	SHALLOW.	DEEP.		SHALLOW.	DEEP.
4 x 5	\$0 30	\$0 60	6½ x 8½	\$0 75	\$0 90
5 x 8	60	80	8 x 10	1 10	1 25

Papier Mache Trays.

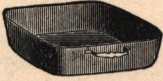
FOR DEVELOPING.



4 x 5	-	\$0 35	6½ x 8½	-	\$0 75
5 x 8	-	60	8 x 10	-	1 10

Agate-Ware Pans.

FOR TONING PRINTS.

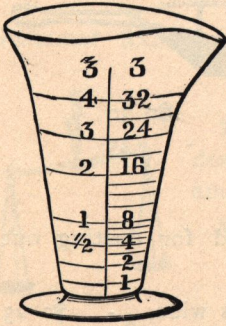


Stronger and lighter than porcelain and not liable to breakage.

7 x 9	-	\$1 00	10 x 12	-	\$1 50
8 x 10	-	1 25	12 x 14	-	1 80

Graduated Glasses.

FOR MEASURING LIQUIDS.



Minim,	-	-	-	-	\$0 25
1 ounce,	-	-	-	-	20
2 "	-	-	-	-	25
4 "	-	-	-	-	30
8 "	-	-	-	-	40
12 "	-	-	-	-	55
16 "	-	-	-	-	70

Glass Funnels.



½ Pint,	-	\$0 15	1 Quart,	-	\$0 25
1 "	-	20	2 "	-	30

Papier Mache Funnels.



½ Pint,	-	\$0 30	1 Quart,	-	\$0 50
¾ "	-	35	1½ "	-	70
1½ "	-	40	2 "	-	90

Fluted Glass Funnels.



The FLUTED FUNNEL is the best glass funnel made, being very strong. The outside of the neck being fluted allows air to pass through, and prevents choking up the neck of the bottle.

½ Pint,	-	\$0 20	1 Quart,	-	\$0 30
1 "	-	25	2 "	-	45

Glass Forms.

Stereoscopic, Arched Top, \$0 50	5 x 7, Square Corners, \$0 60
3¼ x 4¼, Square Corners, 40	5 x 8, " " 70
4 x 5, " " 45	6½ x 8½, " " 80
Cabinet, " " 50	8 x 10, " " 1 00
4¼ x 6½, " " 55	

Absorbent Cotton.

2 oz. Parcel, - - \$0 20	8 oz. Parcel, - - \$0 50
4 oz. " - - - 30	1 lb. " - - - 80

Developing Tong.

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



No. 1—For Plates 3¼ x 4¼ to 6½ x 8½,	\$0 30
No. 2—For Plates 5 x 7 to 8 x 10,	35

Bristle Brushes.

For mounting photographs, also good for dusting out plate holders.



1 inch wide, - - \$0 10	2½ inches wide, - \$0 25
1½ " " - - 15	3 " " 30
2 " " - - 20	

Siberian Brushes.

For dusting plates or holders.



1 inch wide, - - \$0 20	2½ inches wide, - \$0 50
1½ " " - - 30	3 " " 60
2 " " - - 40	

Camel's Hair Brushes.

Very soft, for dusting off plates.



1 inch wide, - - \$0 25	2½ inches wide, - \$0 60
1½ " " - - 40	3 " " 80
2 " " - - 50	

Blotting Paper.

9 x 12 inches, per dozen sheets, - - - - \$0 30
12 x 19 " " " " - - - - 60
19 x 24 " " " " - - - - 1 20

Negative Preservers.

These are envelopes made of strong manilla paper, the proper size for the negative; they are open at the end for inserting the negative, and have space cut for admitting the thumb and finger in removing it.

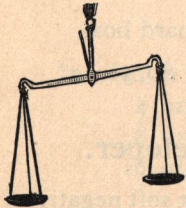
On the face are printed lines for name, number, description and remarks. They are invaluable for preserving the negative from dust, scratches, etc. Put up in packages of fifty each.

3¼ x 4¼, per package,	\$o 2o	5 x 8, per package,	\$o 3o
4 x 5, " "	2o	6½ x 8½, " "	35
4¼ x 6½, " "	25	8 x 1o, " "	45
5 x 7, " "	3o	1o x 12, " "	75

Focusing Cloths.

Gossamer Rubber,	- \$o 6o	Velvet,	- - - \$1 oo
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Pocket Scales.

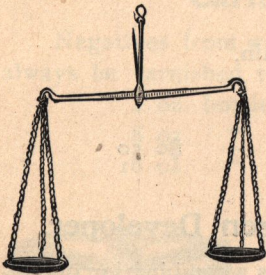


For weighing small quantities this scale is especially designed and well adapted to the use of the ordinary amateur, and is excellent for traveling.

Weighs grains and drams.

5-inch beam, 2-inch brass pans,	\$o 6o
6-inch beam, 2-inch brass pans,	75

Hand Scales.

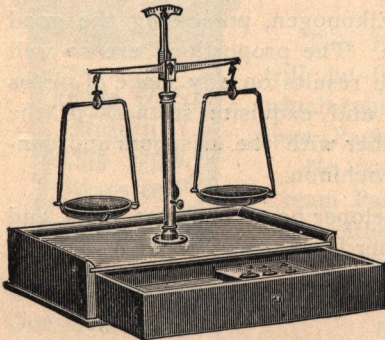


Somewhat larger than the Pocket Scale, and with larger pans, so that it is adapted to weighing a greater quantity.

Weighs grains, scruples and drams.

6-inch beam, 2½-inch pans,	\$2 oo
9-inch beam, 4½-inch pans,	2 5o

Standard Scales.



This is the best scale for the varied wants of both professional and amateur photographers.

The entire scale is taken apart and packs in the drawer of the walnut stand.

Price,	- - - \$4 oo
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Carlton's Pyro=Potash Developer.

CONCENTRATED.



We claim for this developer that more can be done with a plate than almost any developer in the market; the operator has almost perfect control over the plate, and brilliant negatives is the rule.

Put up in two 8 oz. bottles, in card-board box.

Per box, - - - - \$0 60

Carlton's Hydrochinon Developer.

CONCENTRATED.



Will not stain the fingers or plate; gives clear shadows; especially desirable for transparencies.

Can be used over and over again.

Put up in two 8 oz. bottles, in card-board box.

Per box, - - - - \$0 50

Carlton's Eikonogen Developer.



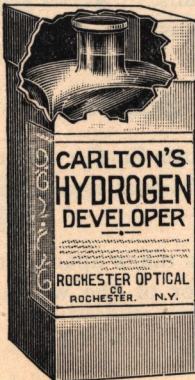
Easy of manipulation, giving brilliant yet soft negatives; especially adapted for portraiture.

Can be used over and over again.

Put up in one 16 oz. bottle.

Price, - - - - \$0 50

Carlton's Hydrogen Developer.



HYDROGEN DEVELOPER is a combination of Hydrochinon and Eikonogen, possessing the good qualities of both. The proportions are so well balanced that the results on any make of plates show the detail and exquisite softness of the Eikonogen, together with the crispness and density of the Hydrochinon.

Hydrogen Developer never becomes thick, and will not stain either the plate or fingers.

Price, 8 oz. bottle, - - \$0 30

" 16 " " - - - 50



Carlton's Toning Solution.

CONCENTRATED.

For Toning Albumen Paper.

This Toning Solution will be found to give even and pure tones of a purple or brown color.

4 oz. bottle,	-	-	-	-	\$0 30
8 oz. "	-	-	-	-	50
16 oz. "	-	-	-	-	75

Toning Solution.

FOR TONING ARISTOTYPE PAPER.

Can be used continually until completely used up.

8 oz. bottle,	-	-	\$0 40	16 oz. bottle,	-	-	\$0 75
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Carlton's Intensifier.

CONCENTRATED.

Invaluable for strengthening weak negatives.

4 oz. bottle,	-	-	-	-	\$0 25
8 oz. "	-	-	-	-	40
16 oz. "	-	-	-	-	75

Carlton's Negative Varnish.

Negatives from which a quantity of prints are to be made should always be varnished to prevent injury to the film.

4 oz. bottle,	-	-	-	-	\$0 30
8 oz. "	-	-	-	-	50
16 oz. "	-	-	-	-	75



Cream Paste.

FOR MOUNTING ARISTOTYPE, ALBUMEN OR OTHER PRINTS.

This Paste has strong adhesive qualities, and will be found excellent for Aristotype Paper, which requires a more adhesive paste than Albumen Paper.

No curling of edges when using this paste. Cream Paste will keep almost indefinitely, and will neither sour nor mould.

Put up in neat glass jars.

One-quarter Pint Jar,	-	\$0 20	One Pint Jar,	-	-	\$0 35
One-half-Pint Jar,	-	25	One Quart Jar,	-	-	50

Orange or Ruby Fabric.

Convenient for lighting dark rooms.

Price per piece, 18 inches square, either shade, - - - \$0 25

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 10

Ferrotypes Plates.

For drying Aristotype or Bromide Prints.

10 x 14 inches, each, - - - - - \$0 15

Hard Rubber Plates.

4 x 5	-	\$0 12	8 x 10	-	\$0 45
5 x 8	-	25	10 x 12	-	70
6½ x 8½	-	35			

Burnishers.

We can supply any style or size Burnisher in the market, but list the following from the best now manufactured.

In ordering, state whether oil or gas is to be used for heating.

Improved Eureka, 8 inch Roll,	-	-	-	-	\$10 00
Rival, 10 inch Roll,	-	-	-	-	12 00
Eureka, 10 inch Roll,	-	-	-	-	15 00
Improved Rotary, 8 inch Roll,	-	-	-	-	15 00
Improved Rotary, 10 inch Roll,	-	-	-	-	17 50

Dry Plates.

We sell several makes of Dry Plates, among them being Forbes', Cramer's, Seed's, Carbutt's and Stanley's.

3¼ x 4¼, per doz., - \$0 45	8 x 10, per doz., - \$2 40
4 x 5, " - - 65	10 x 12, " - - 3 80
4¼ x 6½, " - - 90	11 x 14, " - - 5 00
5 x 7, " - - 1 10	14 x 17, " double thick, 9 00
5 x 8, " - - 1 25	16 x 20, " - - 12 50
6½ x 8½, " - - 1 65	18 x 22, " - - 15 50
3¼ x 4¼, Transparency Plates, for Lantern Slides, per doz., 65	

Celluloid Films.

FOR USE IN THE FACILE FILM HOLDERS.

The ease with which the Cut Celluloid Films may be used, the saving in weight, their great compactness and freedom from imperfections, are a few of the advantages claimed for them.

3¼ x 4¼, per doz., - \$0 55	5 x 8, per doz., - \$1 55
4 x 5, " - - 80	6½ x 8½, " - - 2 10
4¼ x 6½, " - - 1 10	8 x 10, " - - 3 00
5 x 7, " - - 1 40	

Chemicals.

Hypo-Sulphite Soda (1 lb. box), - - -		each, \$0	
" " " (5 lb. box), - - -		"	40
Pyrogallic Acid, - - -	per ounce,		50
Hydrochinon, - - -	" "		50
Eikonogen, - - -	" "		50
Meta Bisulphite of Potash, - - -	" "		40
Carbonate of Soda, - - -	per pound,		15
Carbonate of Potash, - - -	" "		25
Sulphite of Soda, - - -	" "		25
Chloride of Gold (15 grain bottle), - - -	each,		75
Acetate of Soda (2 oz. bottle), - - -	"		10
Bromide Ammonia, - - -	per ounce,		5
Bi Carbonate of Soda, - - -	" "		5
Borax, - - -	" "		5
Tungstate of Soda, - - -	" "		15
Chloride of Lime, - - -	" "		5
Magnesium Powder, - - -	" "		50

Ready Sensitized Albumen Paper.

This paper will be found to be of the finest quality and of uniform sensitiveness, and will tone rapidly and evenly.

Put up in light tight packages of two dozen sheets, except 18 x 22, which are in rolls of one dozen sheets.

3¼ x 4¼, per package, \$0 35	5 x 8, per package, \$0 85
4 x 5, " " 45	6½ x 8½, " " 1 10
4¼ x 6½, " " 60	8 x 10, " " 1 65
5 x 7, " " 80	18 x 22, per roll, 3 25

Ferro-Prussiate or Blue Paper.

FOR MAKING BLUE OR WHITE PICTURES.

This paper is prepared after an improved formula, and the chemical qualities are perfect.

This paper is coated on Rives' Photographic Paper, same as is used with the best Albumen Paper. Most Ferro-Prussiate Paper is coated on a domestic paper, which is not so fine and smooth.

Put up in light-tight packages of two dozen sheets.

3¼ x 4¼, per package, \$0 20	5 x 8, per package, \$0 40
4 x 5, " " 20	6½ x 8½, " " 50
4¼ x 6½, " " 30	8 x 10, " " 75
5 x 7, " " 35	

Bromide Paper.

"A"—Smooth surface, thin, for proofs and positive printing.

"B"—Smooth surface, heavy, for positive printing and enlarging.

"C"—Rough surface, heavy, for enlarging and working in crayon.

Price List, "A," "B" or "C."

3¼ x 4¼, per dozen, \$0 25	5 x 8, per dozen, \$0 75
4 x 5, " " 40	6½ x 8½, " " 1 10
4¼ x 6½, " " 55	8 x 10, " " 1 50
5 x 7, " " 65	10 x 12, " " 2 25

Aristotype Paper.

This paper gives superior results and is largely taking the place of Albumen Paper for professional and amateur use. Aristotype Paper is exceedingly simple in manipulation, which is much in its favor.

PRICE LIST.

	PER DOZ.	PER GROSS.		PER DOZ.	PER GROSS.
3¼ x 4¼,	\$0 20	\$1 80	5 x 7,	\$0 40	\$3 50
4 x 5,	25	2 00	5 x 8,	45	4 00
Cabinets,	25	2 00	6½ x 8½,	70	7 20
4 x 6,	30	2 00	8 x 10,	90	8 00
4¼ x 6½,	35	3 00	18 x 22,	3 50	

Card Mounts.

Card Mounts are cards on which to place the finished print.

The sizes given are the size of the print, the actual size of the card mount being larger, to allow a margin.

Put up in packages of two dozen each.

When mounts are ordered sent by mail, postage must accompany the order. The postage *per package*, on sizes $3\frac{1}{4} \times 4\frac{1}{4}$ to 5×8 inclusive, is $2\frac{1}{2}$ cents PER INCH, measured the longest way of card. Sizes $6\frac{1}{2} \times 8\frac{1}{2}$ and 8×10 require $3\frac{1}{4}$ cents per inch, measured in the same manner.

No. 1—Plain, assorted colors.

$3\frac{1}{4} \times 4\frac{1}{4}$, per pkg.,	\$0	20
4 x 5, " "	"	20
Cabinet, " "	"	25
$4\frac{1}{4} \times 6\frac{1}{2}$, " "	"	30
Stereoscopic, " "	"	30
5 x 7, " "	"	35
5 x 8, " "	"	40
$6\frac{1}{2} \times 8\frac{1}{2}$, " "	"	60
8 x 10, " "	"	80

No. 2—Unenameled back and face, assorted colors.

4 x 5, per pkg.,	\$0	25
Cabinet, " "	"	30
$4\frac{1}{4} \times 6\frac{1}{2}$, " "	"	35
5 x 7, " "	"	45
5 x 8, " "	"	50
$6\frac{1}{2} \times 8\frac{1}{2}$, " "	"	75
8 x 10, " "	"	1 00

No. 3—Rose tint, with gold beveled edge.

$3\frac{1}{4} \times 4\frac{1}{4}$, per pkg.,	\$0	30
4 x 5, " "	"	30
Cabinet, " "	"	35
$4\frac{1}{4} \times 6\frac{1}{2}$, " "	"	40
Stereoscopic, " "	"	40
5 x 7, " "	"	55
5 x 8, " "	"	60
$6\frac{1}{2} \times 8\frac{1}{2}$, " "	"	80
8 x 10, " "	"	1 00

No. 4—Gray, with wide border, for framing.

4 x 5, per pkg.,	\$0	45
$4\frac{1}{4} \times 6\frac{1}{2}$, " "	"	50
5 x 8, " "	"	65
$6\frac{1}{2} \times 8\frac{1}{2}$, " "	"	80
8 x 10, " "	"	1 00

No. 5—Amber, unenameled, with gold beveled edge.

$3\frac{1}{4} \times 4\frac{1}{4}$, per pkg.,	\$0	40
4 x 5, " "	"	40
Cabinet, " "	"	45
$4\frac{1}{4} \times 6\frac{1}{2}$, " "	"	50
Stereoscopic, " "	"	50
5 x 7, " "	"	60
5 x 8, " "	"	65
$6\frac{1}{2} \times 8\frac{1}{2}$, " "	"	1 00
8 x 10, " "	"	1 40

No. 6—Bottle Green, with gold beveled edge.

4 x 5, per pkg.,	\$0	50
Cabinet, " "	"	60
$4\frac{1}{4} \times 6\frac{1}{2}$, " "	"	70
5 x 7, " "	"	85
5 x 8, " "	"	90
$6\frac{1}{2} \times 8\frac{1}{2}$, " "	"	1 20
8 x 10, " "	"	1 75

No. 7—Maroon face, gray back, with gold beveled edge.

4 x 5, per pkg.,	\$0	50
Cabinet, " "	"	60
$4\frac{1}{4} \times 6\frac{1}{2}$, " "	"	70
5 x 7, " "	"	85
5 x 8, " "	"	90
$6\frac{1}{2} \times 8\frac{1}{2}$, " "	"	1 20
8 x 10, " "	"	1 75

No. 8—Chocolate, with wide border for framing.

4 x 5, per pkg.,	\$0	50
$4\frac{1}{4} \times 6\frac{1}{2}$, " "	"	60
5 x 8, " "	"	80
$6\frac{1}{2} \times 8\frac{1}{2}$, " "	"	1 00
8 x 10, " "	"	1 20

Extra Parts of Apparatus.

Including Holder Slides, Front Boards, Ground Glass, Tripod Screws,
Bellows, Carrying Cases, &c.

SIZE.	Regular Holder Slides.	Hard Rubber Holder Slides.	Front Boards, for Model Cameras.	Front Boards, for Imp. Model, Peerless and Standard.	Front Boards, for Universal and Ideal.	Front Board and Division, for Stereo. Work.	Ground Glass, for Focusing Screen.	Tripod Screws.	Bed Plates, for Cameras.	Square Bellows, for Model and Imp. Model.	Cone Bellows, for Ideal and Standard.	Long Cone Bellows, for Universal.	Canvas Cases, for Camera and Two Holders.	Long Canvas Case, for Universal, Six Holders and Tripod.
3¼ x 4¼	\$0 15	\$0 25	\$0 25	\$0 40	\$0 50	\$0 50	\$0 12	\$0 30	\$0 50	\$2 00	\$3 50	\$4 00	\$2 25	\$3 00
4 x 5	15	25	25	40	50	50	12	30	50	2 00	3 50	4 00	2 25	3 00
4¼ x 6½	20	30	25	40	50	50	15	30	50	2 00	3 75	4 25	2 50	3 25
5 x 7	20	35	25	40	50	50	18	30	50	2 00	4 00	4 50	2 50	3 50
5 x 8	20	35	25	40	50	50	18	30	50	2 00	4 00	4 50	2 75	3 50
6½ x 8½	25	45	25	40	50	75	20	30	50	2 25	4 50	5 00	3 00	3 75
8 x 10	30	50	25	40	50	75	25	30	50	2 50	5 00	5 50	3 25	4 00
10 x 12	45	80			60		35	40	50					
11 x 14		1 25			60		65	50	50					
14 x 17		2 00			75		80	55	50					

Caps for R. O. Co.'s Single View Lenses, each,	\$0 25
“ “ “ Excelsior “ “ - - -	40
Diaphragms, for Excelsior Lenses, per set, - - -	75
Morocco Case, for Diaphragms for Excelsior Lens, - - -	50
Flanges, for R. O. Co.'s Single View Lens, - - -	50
“ “ “ Excelsior Lens, - - -	75
Spring-catch, for holding Holder on New Model, each, - - -	25
Tripod Head, for Standard Tripod, - - -	50
Wood Head, for Combination Tripod, - - -	50
Reversing Attachment, for New Model, - - -	50
Clamp-Hooks, for holding Folding Bed rigid, - - -	25
Clamp and Screw, for leg of Sliding Tripod, - - -	50
Milled Heads, with Screw, for various uses, - - -	25
“ “ without “ “ “ “ - - -	20
Ruby Glass, for Universal Lantern, - - -	10
Ruby or Orange Glass, for Ideal Lantern, - - -	15
Ruby or Orange Glass, for Carlton Lantern, - - -	15
Ruby Chimney, for Gem Lantern, - - -	25
Corner Plates, for Ground Glass, each, - - -	10

Chemical Outfit.

FOR PRODUCING THE NEGATIVE.

The chemicals and articles which should accompany any of our cameras, and with which the picture is made, consist of the following articles, arranged in sizes according to the size of camera used: Two Japanned Tin Developing Trays; one dozen Dry Plates; one 4-ounce Graduated Glass; one box Carlton's Hydrogen Developer; one 1-pound box Hypo-Soda; one Universal Ruby Lantern; one copy *Amateur Photographer*; one Gossamer Focusing Cloth.

Above arranged for

3¼ x 4¼ camera,	-	\$3 40	5 x 8 camera,	-	\$4 25
4 x 5 "	-	3 50	6½ x 8½ "	-	4 75
4¼ x 6½ "	-	3 90	8 x 10 "	-	5 75
5 x 7 "	-	4 20			

Printing Outfit.

FOR PRINTING, TONING AND FINISHING THE PICTURE.

One Printing Frame; one dozen Aristotype Paper; one bottle Carlton's Aristo Toning Solution; one package Card Mounts; one quarter pint jar Cream Paste.

Above arranged for

3¼ x 4¼ camera,	-	\$1 25	5 x 8 camera,	-	\$2 00
4 x 5 "	-	1 25	6½ x 8½ "	-	2 50
4¼ x 6½ "	-	1 50	8 x 10 "	-	3 50
5 x 7 "	-	1 75			

To Amateurs.

We omit the usual "Outfit Department," which we deem unnecessary, as our cameras are complete with the exception of the Carlton, Ideal, Empire State, Standard, Universal, and 8 x 10 New Model, New Model Improved and Peerless, which we list in this way for the reason that most people who buy the best class of camera, and especially the larger sizes, prefer one of the higher grade of lenses, and many people, especially professionals, have one or more lenses or tripods, and wish only the camera, without these articles.

Should you select one of these cameras, you have only to add price of lens and tripod selected, which makes the camera complete.

To the price of the complete camera add the price of the Chemical and Printing Outfits, corresponding to the size of camera selected, which will be *everything necessary* to take pictures.

R. O. Co.'s Single View Lens.

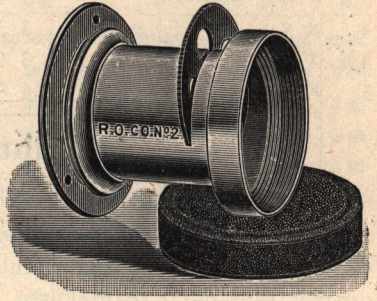
These Lenses are conceded to be the best of the low priced lenses, giving a wonderful definition, with great depth of focus and flatness of field, especially when using the smaller diaphragms. They are perfectly achromatic, and are as near rectilinear as is possible in a Single Combination Lens, and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

These Lenses are furnished with *Rotating Diaphragms*, having four apertures, and are very convenient to use; the largest aperture is large enough for instantaneous views.

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
1½	8 "	4¼ x 6½,	3 50
2	10 "	5 x 8,	4 00
3	11 "	6½ x 8½,	5 00
4	13 "	8 x 10,	7 00

No. 1, furnished in matched pairs for stereoscopic work, at \$6 00.



R. O. Co.'s Excelsior Lens.

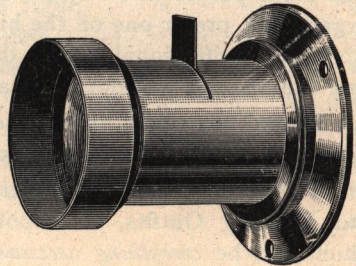
RAPID RECTILINEAR.

The EXCELSIOR LENS was made to meet the wants of the amateur who desires a better lens than our Single View Lens, and yet at a moderate outlay, and it has acquired a popularity quite beyond our expectations. We confidently think they are the best value of any lens, and are equal to many lenses at a much higher price.

They are perfectly rectilinear, have great depth of focus and flatness of field, giving brilliant definition; they will be found excellent for landscapes, architectural subjects and instantaneous work, as well as groups and portraits.

NO.	LENGTH OF FOCUS.	SIZE.	PRICE.
1	7 inch,	4 x 5,	\$10 00
2	9 "	5 x 8,	12 00
3	11 "	6½ x 8½,	15 00
4	13 "	8 x 10,	20 00

Furnished with full set of diaphragms in morocco case.



Rapid Rectilinear Lenses.

The class of Lens best suited to the varied wants of the amateur, is what is called the Rapid Rectilinear series. They embrace an angle of from 60 to 75 degrees, and are well adapted for portraiture, groups, architectural subjects, instantaneous work and general landscapes.

The following are among the best known Lenses of the Rapid Rectilinear series:

The Zeiss-Anastigmat Lenses.

Among the advantages claimed for these Lenses are extreme flatness of field, absolute uniformity of illumination, unusual depth of focus and freedom from astigmatism.

SERIES III.

FOR INSTANTANEOUS WORK, STUDIO WORK ON GROUPS AND LARGE HEADS, OUT-DOOR WORK OF ALL KINDS AND COPYING.

The Lenses of this Series have an angular aperture from 85° to 90° and can therefore be used as wide angle lenses if desired. The relative diameter of lenses is about 1 to 6. The largest stop, however, is *f.* 7.2.

No.	Size of Plate covered with Stop F. 12.5.	Diameter of Image Circle at 80°.	Free Diameter of Largest Lens.	Equivalent Focus.	Price.
1	3¼ x 4¼	6 ⁵ / ₁₆ in.	5/8 in.	3 ¹ / ₈ in.	\$29 00
2	4 x 5	7 ¹ / ₂ "	¾ "	4 ¹ / ₂ "	33 00
3	4½ x 6½	9 ¹ / ₈ "	1 "	5 ¹ / ₈ "	37 00
4	5 x 7	13 "	1¼ "	7 ¹ / ₈ "	50 00
5	5 x 8	14 ⁵ / ₁₆ "	1 ⁷ / ₈ "	8 ¹ / ₈ "	62 00
6	6½ x 8½	16 ⁹ / ₁₆ "	1 ⁷ / ₈ "	9 ¹ / ₈ "	75 00
7	8 x 10	20 ⁷ / ₈ "	2 "	12 ⁵ / ₈ "	100 00
8	10 x 12	29 ¹ / ₈ "	2 ¹ / ₈ "	17 ³ / ₈ "	157 00
9	12 x 15	38 ⁹ / ₁₆ "	3 ¹ / ₈ "	23 ¹ / ₈ "	223 00

SERIES IV.

THE LENSES OF SERIES IV. HAVE AN ANGLE OF 100°.

This Series is 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. It is of course understood that they may be used on smaller plates with correspondingly reduced angle.

No.	Size of Plate covered with Stop F. 18.	Diameter of Image Circle at 96°.	Free Diameter of Largest Lens.	Equivalent Focus.	Price.
1	3¼ x 4¼	5½ in.	¼ in.	2 ⁷ / ₈ in.	\$27 00
2	4 x 5	8 ¹ / ₈ "	⅜ "	3 ⁷ / ₈ "	27 00
3	4½ x 6½	10 ³ / ₈ "	½ "	4 ¹ / ₈ "	27 00
4	5 x 8	13 ³ / ₈ "	⅝ "	6 ¹ / ₈ "	33 00
5	8 x 10	17 ⁵ / ₈ "	1 ¹ / ₈ "	7 ¹ / ₈ "	42 00
6	10 x 12	22 ¹ / ₈ "	1 "	10 ¹ / ₄ "	62 00

Darlot Rapid Hemispherical Lens.

No.	LENGTH FOCUS.	SIZE VIEW.	PRICE.
1	5½ inches,	4 X 5	\$15 00
2	9 "	5 X 8	25 00
3	10½ "	8 X 10	35 00
4	14 "	11 X 14	50 00

Beck's "Autograph" Rapid Rectilinear Lens.

No.	LENGTH FOCUS.	SIZE VIEW.	PRICE.
2	7 inches,	4 X 5	\$30 00
3	9 "	5 X 8	35 00
4	11 "	6½ X 8½	50 00
5	13 "	8 X 10	60 00
6	16 "	10 X 12	75 00

Beck's "Autograph" Rapid Rectilinear Lens.

SERIES "B."

No.	LENGTH FOCUS.	SIZE VIEW.	PRICE.
1	5 inches,	3¼ X 4¼	\$18 00
2	7 "	4 X 5	18 75
3	8¾ "	5 X 8	22 50
4	11 "	6½ X 8½	34 00
5	13 "	8 X 10	44 00

Bausch & Lomb Optical Co.'s "Universal."

No.	LENGTH FOCUS.	SIZE VIEW.	PRICE.
1	5¼ inches,	4 X 5	\$20 00
2	7¼ "	5 X 8	24 00
3	10⅝ "	6½ X 8½	32 00
4	12¼ "	8 X 10	44 00
5	15 "	10 X 12	56 00

Alvin G. Clark Lenses.

No.	LENGTH FOCUS.	SIZE VIEW.	PRICE.
1	5¼ inches,	4 X 5	\$22 00
2	7¼ "	5 X 8	28 00
3	10⅝ "	6½ X 8½	36 00
4	12¼ "	8 X 10	48 00
5	15 "	10 X 12	60 00

Gundlach's Rapid Rectigraphic Lens.

No.	LENGTH FOCUS.	SIZE VIEW.	PRICE.
1	6¼ inches,	4 x 5	\$20 00
2	8½ "	5 x 8	30 00
3	11 "	6½ x 8½	38 00
4	13 "	8 x 10	50 00
5	16 "	10 x 12	64 00
6	18½ "	11 x 14	76 00

Voigtländer's Euryscope.

No.	LENGTH FOCUS.	SIZE VIEW.	PRICE.
0	4½ inches,	4 x 5	\$27 00
1	8 "	5 x 8	45 00
2	10 "	6½ x 8½	52 00
3	11½ "	8 x 10	65 00
5	14 "	11 x 14	87 00

The Suter Aplanatic Lens.

No.	LENGTH FOCUS.	SIZE VIEW.	PRICE.
2	6¾ inches,	4 x 5	\$28 00
3	8¾ "	5 x 8	30 00
4	10¼ "	6½ x 8½	40 00
5	14¼ "	8 x 10	50 00

Ross' Rapid Symmetrical Lens.

No.	LENGTH FOCUS.	SIZE VIEW.	PRICE.
1	6 inches,	4 x 5	\$34 00
2	9 "	5 x 8	46 00
3	11 "	6½ x 8½	52 00
4	14 "	8 x 10	68 00
5	16 "	10 x 12	84 00

Ross' Portable Symmetrical Lens.

No.	LENGTH FOCUS.	SIZE VIEW.	PRICE.
3	5 inches,	4 x 5	\$28 00
4	6 "	5 x 8	32 00
6	8 "	6½ x 8½	48 00
8	10 "	8 x 10	64 00

Wide Angle Lenses.

Wide Angle Lenses are used mostly for street views, architectural effects in confined situations and interiors, embracing as they do an angle of from 90 to 100 degrees, they admit of being much nearer to the object photographed. They are not so quick working as those of ordinary angles. The principal objection to their more general use is that, on account of the great width of angle, the perspective is exaggerated, objects in the foreground being unduly magnified.

Excelsior Wide Angle Lens.

No.	LENGTH FOCUS.	SIZE VIEW.	PRICE.
1	3½ inches,	4 x 5	\$10 00
2	5 "	5 x 8	15 00
3	6½ "	6½ x 8½	18 00
4	8 "	8 x 10	22 00

Darlot's Wide Angle Hemispherical.

No.	LENGTH FOCUS.	SIZE VIEW.	PRICE.
2	3 inches,	4 x 5	\$15 00
3	5 "	5 x 8	20 00
4	8 "	8 x 10	25 00

Beck's "Autograph" Wide Angle.

No.	LENGTH FOCUS.	SIZE VIEW.	PRICE.
1	3 inches,	4 x 5	\$25 00
2	4 "	5 x 8	30 00
3	5 "	6½ x 8½	37 50
4	7 "	8 x 10	50 00

Wide Angle Euryscope.

No.	LENGTH FOCUS.	SIZE VIEW.	PRICE.
0	4½ inches,	4 x 5	\$27 00
1	5½ "	5 x 8	29 00
3	6½ "	6½ x 8½	34 00
4	7½ "	8 x 10	39 00

Zeiss-Anastigmat Wide Angle.

ANGLE, 108 DEGREES.

No.	Size of Plate covered with Stop F. 36.	Diameter of Image Circle at 104°.	Free Diameter of Largest Lens.	Equivalent Focus.	Price.
1	4¼ x 6½	8½ in.	¾ in.	3½ in.	\$27 00
2	5 x 7	11 "	¾ "	4½ "	27 00
3	6½ x 8½	14¾ "	¾ "	5½ "	33 00
4	8 x 10	15¾ "	¾ "	7½ "	42 00
5	10 x 12	21¼ "	¾ "	8½ "	50 00

NOTICE!



WHEN ORDERING

Cameras—Give size, style, and if a regular tripod Camera, state whether single or double swing is desired.

Plate Holders—Give size, and name the Camera they are to fit. The same Holder will fit New Model, New Model Improved, and Peerless Cameras. The Holder for these Cameras has rabbet, and holes at bottom and pin at top.

The same Holder will fit the Carlton, Universal, Ideal, Empire State and Standard. These Holders are without rabbet; merely a cleat at shutter end.

The same Holder fits Premier, Folding Premier and Handy. These Holders are without rabbet; the slide draws from the *side* of Holder. The same Holder fits the Premo, Folding Premo, Midget and Katch Cameras.

Drop Shutters.—If the opening for lens is to be cut, the best method of securing the proper size of hood, is to make an impression of the same on paper. This is readily accomplished by placing the sheet of paper on the end of the lens and press on same with the palm of the hand; this will leave an impression of the lens. We can insure a closer fit by this simple method than is possible to obtain when the diameter of hood only is given.

Fitting Special Lenses to Hand Cameras.

An especial advantage possessed by our Hand Cameras, is the fact that almost any lens in the market can be adapted to them. Many amateur and professional photographers have preference for some particular make or style of lens, and while it is not imperative that the camera be sent to the factory for the purpose of fitting such lenses, yet whenever possible we would advise our friends to return the instrument to us. We can then re-mark the focusing dial, and have every detail absolutely correct.

ROCHESTER OPTICAL CO.

THE
Amateur Photographer,

A COMPLETE GUIDE FOR BEGINNERS

IN THE ART-SCIENCE OF

PHOTOGRAPHY,

BY

W. F. CARLTON.

PRICE, 25 CENTS.

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