

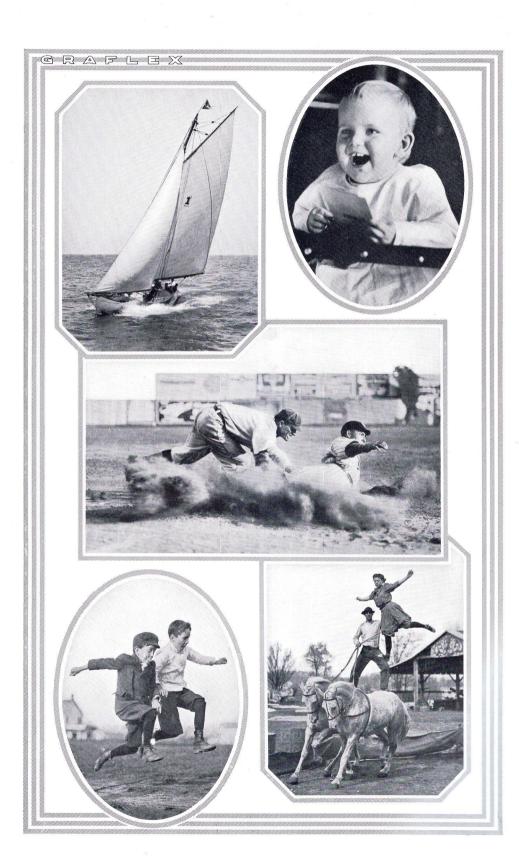
GRAFLEX AND GRAPHIC CAMERAS

1915

FOLMER & SCHWING DIVISION

EASTMAN KODAK COMPANY

ROCHESTER N.Y.





THE GRAFLEX



O thoroughly appreciate the pleasures of photography, it is essential to use a camera that will reduce the uncertainties to a minimum. The Graflex eliminates most of the familiar causes of failure, and at the same time will make pictures under conditions impossible with cameras of the usual construction. The business-like certainty of

operation, the precision of construction and the finished beauty of the instrument combine to make the Graflex preeminently the quality camera.

The purchase of a Graflex brings with it the pride of possession, the satisfaction of knowing you have the best, and—what is more important—the ability to do work impossible with cameras of the usual type. Before the introduction of the Graflex, extremely short exposures were possible only under the most favorable light conditions, and it was impossible to make satisfactory photographs of moving objects on dark or cloudy days. Without the elaborate preparation of focusing on the ground glass under the awkward focusing cloth, or accurately measuring the distance between the camera and subject, the photographer had no assurance that his picture was accurately focused.

Very often the pictures most desired are the ones that cameras of the usual type are unable to secure—snapshots of children playing indoors, pictures of moving objects taken in the soft light of a cloudy day; or, when the light is bright,—sharp, clear pictures of objects moving with the utmost rapidity. It is photography of this kind that has made the Graflex the first choice of photographers who wish a camera with the widest possible range of utility.



The Graflex, employing well known optical principles in a new way, completely eliminates uncertainty of focus and makes it possible to obtain fully timed negatives indoors, in the shade, or on cloudy days, with exposures of very short duration, while under favorable light conditions



Sectional Illustration, showing Graflex Principle

exposures as brief as one one-thousandth, or even one fifteen - hundredth, of a second may be made with full assurance of a fully timed negative.

The principle of construction and method of operating the Graflex are extremely simple. The Graflex shows the image right side up, the size it will appear in the negative up to the instant of exposure. This is accomplished by placing an optically perfect mirror in the body of the camera, at such an angle

that the image projected by the lens is reflected from the mirror to a fine ground glass screen in the top of the camera (see illustration). The operator, looking into the focusing hood, sees the picture exactly as it will be reproduced in the finished print. The distance between the subject and the camera is immaterial, as a slight turn of the focusing button instantly adjusts the focus as the subject approaches or recedes from the camera. This feature is of inestimable value to those who have been dependent upon the image as shown in the finder, on account of the finder image being so small that composition and arrangement of

the subject are next to impossible. Another feature that adds great uncertainty to the results obtained with cameras fitted with finders is the fact that no matter how badly out of focus the subject may be on the plate or film, the image in the finder is always sharp. This necessitates the use of a focusing scale, compelling the operator to estimate the distance between the camera and the subject. With the Graflex there is no guess work. A glance in the focusing hood shows instantly whether, or not, the subject is in focus. The Graflex operator knows to a certainty that, with proper exposure, the finished print will be an exact reproduction of the image as seen on the focusing screen.

No less important than the reflecting principle as applied to the Graflex is the fact that the most highly efficient shut-

ter ever designed is built into and part of every While the Graflex Focal Graflex Camera. Plane Shutter is so well known and extensively used that an extended description is unnecessary, there are still a few photographers who associate the term "Focal Plane" with exposures of extremely short duration,—overlooking the fact that the same optical principles that enable a shutter to secure a fully-timed negative in 1000 of a second, will also permit the making of perfect negatives under light conditions that with shutters of the usual type would result in badly underexposed negatives. For all kinds of photography indoors and out there is no shutter as efficient as the one supplied with the Graflex.

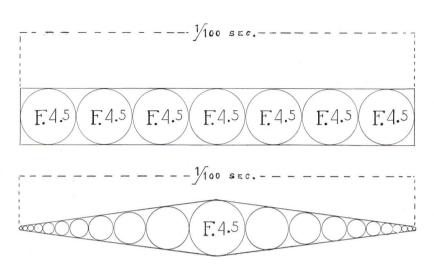
The Graflex Focal Plane Shutter consists of a long curtain with a number of fixed apertures varying from full size of negative to an eighth of an inch in width. These openings being fixed insure at all times an absolutely uniform rec-



Graflex Shutter Curtain







The diagram illustrates an exposure with the lens diaphragm set at f.4.5. The upper row of circles shows the exposure with a Focal Plane Shutter where the lens opening remains constant through the entire period of exposure. The Focal Plane Shutter allows the lens to work at its maximum efficiency during the entire exposure.

The lower row of circles illustrates an exposure with a shutter of the between lens type with the lens diaphragm set at f.4.5. A considerable portion of the period of exposure is consumed in the opening and closing of the shutter, allowing the lens to operate at the full diaphragm opening but a small portion of the total period of exposure.

An exposure of $\frac{1}{100}$ of a second is given as an example. The same principle applies to exposures of any duration.

tangular aperture. This curtain operates as closely as possible to the surface of the plate or film when in position for exposure, the duration of exposure being regulated by the size of the curtain aperture employed, and by the rapidity with which it moves across the focal plane. The great advantage that a focal plane shutter has over those of the usual type will be instantly appreciated when it is considered that the Focal Plane Shutter permits the lens to work at its entire efficiency during the whole period of exposure. With shutters of the between lens type the lens is working at its full diaphragm opening during only a small fraction of the exposure, the remaining portion of the exposure period being utilized by the opening and closing of the shutter. The principle is illustrated in the two diagrams shown above.



The shutter in every Graflex Camera is actuated to give automatic exposures from $\frac{1}{10}$ to $\frac{1}{1000}$ of a second, except in the Press Graflex where a speed of $\frac{1}{1500}$ of a second may be obtained, and the Home Portrait Graflex, which has a maximum shutter speed of $\frac{1}{500}$ of a second. A speed table shows instantly the speeds obtained with the different tensions on the curtain spring and various curtain apertures.

The operation of the Graflex is simple in the extreme. Focusing is done with a large milled head conveniently located at the right of the camera. Exposure is made by pressure on the lever at the left of the camera. This lever allows the mirror to swing up out of the cone of light, the mirror in turn tripping the shutter. As the mirror seats against an air cushion formed in the top of the camera, all vibration is effectually prevented. Another exclusive Graflex feature is the safety device which prevents the rewinding of the curtain when the mirror is up, thus preventing the fogging of the plate or film.

Every part of every Graflex is made and adjusted with

the utmost precision and every Graflex is subjected to a rigid inspection and test before being placed on the market, insuring to the purchaser the greatest possible camera value.

The Graflex is constructed of mahogany covered with the finest grade of Persian Morocco leather, which harmonizes perfectly with the rich appearance given by the oxidized metal work and ebonized finish of all visible wood parts. A piano hinge allows the front to be opened, rendering lens and front board readily accessible. For those who wish to give prolonged exposures the Graflex is provided with tripod plates.





Auto Graflex Shutter Control Mechanism







THE 1A GRAFLEX

autographic

SPECIFICATIONS

Outside dimensions, closed, $9\frac{1}{2} \times 3 \times 5\frac{1}{4}$; focal capacity, $6\frac{1}{2}$ in.; weight, 4 lbs.; size of lens board, $2\frac{1}{4} \times 2\frac{3}{8}$ in.; minimum focus of lenses accommodated, $4\frac{3}{4}$ in. For Film only.

THE PRICE				2½ x 4¼
1A Graflex without lens				\$60.00
With Zeiss Kodak Anastigmat Lens, $f.6.3$, No. 2	2			79.00
With B. & LZeiss Tessar Lens, Series Ic, $f.4.5$, No. 14				95.00
With Cooke Lens, Series II, $f.4.5$, No. $20\frac{1}{2}$				95.50
Leather Case for 1A Graflex, extra				5.00
Extra lens boards, each	÷	,		.40

To insure proper fitting we recommend that cameras be bought from us complete with lenses as listed. We will not hold ourselves responsible for results with any of our cameras when lenses are not fitted by us.



THE 1A GRAFLEX

Folmer's Patent, February 5, 1907, and April 21, 1908

HE 1A Graflex is an ideal camera for the automobilist, tourist, or anyone desiring a thoroughly efficient reflecting camera contained in the least possible space.

This camera takes regular 1A Kodak film and makes a picture of very pleasing proportions, $2\frac{1}{2} \times 4\frac{1}{4}$ inches. It is fitted with the new Autographic feature, which enables the operator to title or make a record on the negative when the picture is made. As in the other Graflex models, this camera is equipped with a focal plane shutter, giving exposures of any duration from time to $\frac{1}{1000}$ of a second and the image may be seen the size it will appear in the negative, up to the instant of exposure, right side up. In order to make the camera as compact as possible the focusing screen is made a trifle narrower than the full width of the negative; this does not interfere in the slightest degree with accurate focusing.

The 1A Graflex is fitted with the safety device, which prevents the winding of the curtain when the mirror is up; this insures the setting of the mirror, and prevents the fogging of the film. The focusing hood folds compactly in the top of the camera, and when extended is held rigidly in position. The spring actuated eye-shield effectually prevents the admission of extraneous light. The rack is milled from heavy brass, a stop being adjusted at a point indicating the "universal focus" of the lens, permitting the use of the camera for general fixed focus work, as well as photography in which focusing must be done with the utmost accuracy. When the camera is closed the lens, mirror and bellows all recede into the body of the camera, making it possible to reduce the size to an extent never before attempted in a reflecting camera.

Another improvement which adds much to the ease of operation is the method of adjusting the film spools, a self-centering device making it necessary to simply drop the film spool into position, when it finds its own center. The film winding key when drawn out and given a slight turn locks open; another turn allows it to snap back into position, holding the spool securely in place and creating sufficient pressure to prevent play. The film pockets are provided with tension springs which prevent the rolls from unwinding. Plate adapters can not be supplied for the 1A Graflex.



THE 3A GRAFLEX



SPECIFICATIONS

Dimensions, $10\frac{1}{4} \times 5 \times 7$; focal capacity, 10 in.; weight, 7 lbs.; size of lens board, $3\frac{1}{4} \times 3\frac{1}{4}$ in.; minimum focus of lenses accommodated, $6\frac{1}{4}$ in. For Film only.

THE PRICE

		$3\frac{1}{4} \times 5\frac{1}{2}$
3A Graflex without lens		\$ 75.00
With Zeiss Kodak Lens, f.6.3, No. 4		101.25
With B. & LZeiss Tessar Lens, Series Ic, $f.4.5$, No. 15a		125.00
With Cooke Lens, Series II, $f.4.5$, No. $21\frac{1}{2}$		125.00
Leather Case for 3A Graflex, extra		7.00
Extra lens boards, each		.50

To insure proper fitting we recommend that cameras be bought from us complete with lenses as listed. We will not hold ourselves responsible for results with any of our cameras when lenses are not fitted by us.

Where customers already own Anastigmat lenses and send them to us for fitting, a nominal charge will be made for the work.



THE 3A GRAFLEX

Folmer's Patent, February 5, 1907, and April 21, 1908

LL the advantages of a reflecting camera of the highest possible type, with film simplicity and convenience, combine to make the 3A the most popular of the Graflex models. The β A Graflex makes pictures of the most pleasing proportions, $3\frac{1}{4}x5\frac{1}{2}$, on regular 3A Kodak Film, which may be obtained wherever camera supplies are sold.

The 3A Graflex is fitted with the Autographic feature, which allows the operator to date and title the negatives permanently and almost instantly, at the time the picture is made.

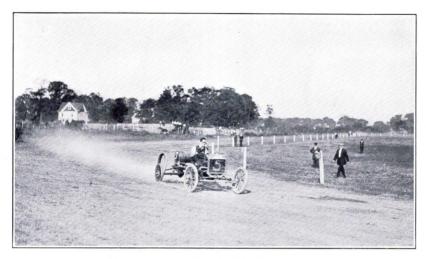
Built into, and part of the 3A Graflex, is the regular Graflex Focal Plane Shutter, giving instantaneous exposures from $\frac{1}{10}$ to $\frac{1}{1000}$ of a second, as well as time exposures of any duration. This shutter is fitted with the safety device which prevents winding the shutter until the mirror is set. The front is exceedingly rigid and large enough to accommodate Anastigmat lenses working at the highest speed; this front runs out on a platform fitted with a metal track running in guideways, which are accurately milled from heavy brass.

The focusing hood, which opens automatically when the cover of the camera is raised, is shaped to fit the contour of the face, effectually excluding extraneous light and enabling the operator to focus perfectly. The back of the camera is hinged, and when opened affords easy access to the film compartments. The lower spool center in each end of the camera is spring actuated, and when drawn out and given a slight turn, locks open, which greatly facilitates loading and unloading the camera.

While it is rarely necessary to use a tripod with the Graflex, it is occasionally desirable to give prolonged time exposures with the camera on a tripod. For this purpose two tripod sockets are provided,—one in the base of the camera for horizontal, and another in the side for vertical negatives.

The surplus space at each side of the camera is converted into film storage pockets, each carrying two rolls of film. This permits the operator to carry in the camera sufficient film for fifty exposures. The construction of the 3A Graflex is such that Plate Adapters cannot be fitted. The body of the camera is made from selected mahogany, thoroughly kiln dried, lock-jointed and covered with the finest grade of Persian Morocco leather. All exposed wood parts





Size of picture made with $2\frac{1}{2}x4\frac{1}{4}$ 1A Graflex



Size of picture made with $3\frac{1}{4}\,x\,5\frac{1}{2}\,3A$ Graflex

GRAFIEX

3A GRAFLEX-Continued

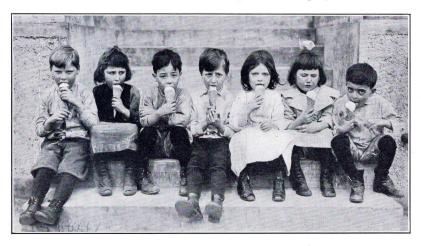


3A Graflex Closed, Showing Autographic Feature

are ebonized and harmonize perfectly with the brass parts, which are oxidized, giving a rich gun metal finish.

Any of the well known Anastigmat lenses may be fitted to the 3A Graflex, provided the lens is of suitable focal length. The fact that the 3A will accept lenses having a focus as short as $6\frac{1}{4}$ inches as well as those of greater length, the camera having a bellows capacity of 10 inches, allows the operator of a 3A Graflex to make photographs of subjects close to the camera. Our experience has proved that the best results will be obtained with the lenses listed with the camera.

We urgently recommend the purchase of the 3A Graflex fitted with a lens working at f.4.5, as the full value of the camera can not be obtained unless lenses of sufficient speed are employed.







THE AUTO GRAFLEX

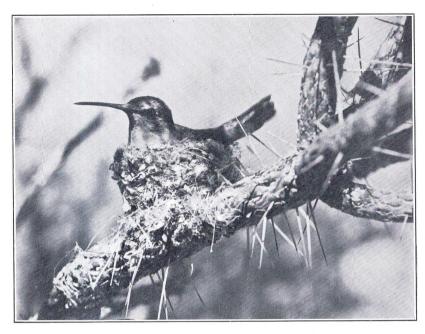
Folmer's Patent, February 5, 1907

HE Auto Graflex is offered in three sizes: $3\frac{1}{4}\times4\frac{1}{4}$, 4×5 , and 5×7 , each of the models embodying the exclusive Graflex features and conforming with the detail given on pages 5, 6, and 7. The reflecting mirror and Graflex Focal Plane Shutter are a part of this instrument, the shutter permitting speeds from time to $\frac{1}{1000}$ of a second. The new design of the focusing hood renders focusing particularly easy, and is readily detachable.

The Auto Graflex takes the regular Graflex plate holder, and is constructed to take the Graflex Roll Holder, the Graflex Magazine Plate Holder, which may be loaded with twelve glass plates, and the Film Pack Adapter which takes the Film Pack.

The Auto Graflex may be fitted with any of the well known Anastigmats, although our experience has proved that the most satisfactory results will be obtained with the lenses listed with each model.

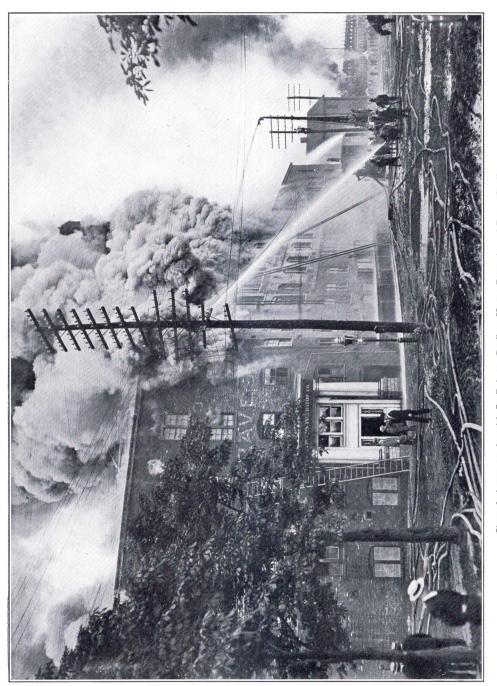




Size of picture made with 31/4 x 41/4 Auto Graflex



Size of picture made with $4\,\mathrm{x}\,5$ Auto Graflex



Size of picture made with 5 x 7 Auto Graflex, Home Portrait and Press Graflex

AUTO GRAFLEX-Continued

The 5x7 Auto Graflex differs slightly in construction from the $3\frac{1}{4}\times4\frac{1}{4}$ and 4×5 sizes. On the 5x7 camera the front, as well as the automatic lens cover, is hinged, and the mechanism for adjusting the shutter for time and instantaneous is operated by a disc instead of the sliding bar supplied on the smaller models. The side arm racks on the two smaller models are stamped from one piece of brass, and the focusing hood is slightly different in construction from that supplied on the 5x7 Auto Graflex.



5 x 7 Auto Graflex

SPECIFICATIONS

	$3\frac{1}{4} \times 4\frac{1}{4}$	4×5	5 x 7
Dimensions when closed .	$5\frac{3}{4} \times 5\frac{3}{8} \times 6\frac{1}{4}$	$6\frac{3}{4} \times 6\frac{1}{4} \times 7\frac{1}{4}$	$9\frac{1}{4} \times 8\frac{1}{4} \times 8\frac{3}{4}$
Focal capacity	. 7 in.	$8\frac{1}{2}$ in.	12 in.
Weight	. 3 lbs.10 ozs.	5 lbs.	$8\frac{1}{2}$ lbs.
Size of lens board	$2\frac{3}{4} \times 2\frac{3}{4}$ in.	3×3 in.	4×4 in.
Minimum focus of lenses ac		6 in.	7⅓ in.

Auto Graflex without lens, including one double holder.	3½ x 4½ \$50.00		5 x 7 \$ 75.00
With Zeiss Kodak Lens, f.6.3 .	No. 2 69.00	No. 3 83.25	No. 5 109.50
With B. & LZeiss Tessar, Series			
Ic, $f.4.5$	No. 14 85.00	No. 15 100.50	No. 16 137.00
With Cooke, Series II, f.4.5.	No. $20\frac{1}{2}$ 85.50	No. 21 101.00	No. 22 137.00
Graflex Roll Holder	7.00	8.00	9.00
Graflex Magazine Plate Holder, Model A, extra	12.50	13.50	15.00
Film Pack Adapter, leather covered, extra	4.50	5.00	7.50
Leather case for camera and Film Pack Adapter, with lock and key	6.00	7.00	9.00
Leather case for camera and magazine plate holder	7.00	8.00	10.50
Extra Graflex Plate Holders, each	2.50	2.50	3.50
Extra lens boards, each	.50	.60	.70
Ground glass panels to inter- change with plate holders	2.00	2.50	3.50



THE AUTO GRAFLEX JUNIOR

SPECIFICATIONS

Dimensions closed, $5 \times 4\frac{3}{8} \times 5$; focal capacity, $5\frac{1}{2}$ in.; weight, 39 ozs.; minimum focus of lens accommodated, 4 in.

Auto Graflex Junior, $2\frac{1}{4} \times 3\frac{1}{4}$, without lens, incluing one double plate holder	2½ x 3½ \$35.00
With Zeiss Kodak Anastigmat Lens No. 1	53.50
With B. & LZeiss Tessar, Series Ic, f.4.5, No. 13	66.00
With Cooke Lens, Series II, f.4.5, No. 20	66.00
Graflex Roll Holder	6.00
Graflex Magazine Plate Holder, Model A, extra	10.00
Graflex Film Pack Adapter, extra	3.00
Leather case for camera and double plate holder, with lock and key .	4.50
Leather case for six plate holders, with lock and key	2.50
Leather case for camera and magazine plate holder	6.00
Extra Graflex plate holders, each	1.50



THE AUTO GRAFLEX JUNIOR

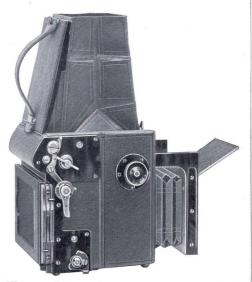
HIS little camera effectively supplies the growing demand for a small, compact camera of the reflecting type. Although it is small in size and light in weight, it embodies all of the exclusive Graflex features—the reflecting mir-

ror, Graflex Focal Plane Shutter with safety device, and, above all, Graflex quality and workman-

ship.

The shutter is the standard Auto Graflex Focal Plane Shutter with five fixed apertures, permitting exposures of any duration from "time" to $\frac{1}{1000}$ of a second. A safety device is provided which prevents the winding of the shutter curtain until the reflecting mirror is depressed, thus preventing the possibility of fogging the plate or film.

The front is of exceptional rigidity, as the focusing racks and frontstandards are stamped from one piece of heavy brass.



Auto Graflex Junior-side view

This insures absolute parallelism of the front and focal plane, and also gives the front a permanent rigidity.

The focusing hood is readily detachable, allowing easy access to the ground glass focusing screen. This focusing hood is automatic in its action, and is finished with a square top, making it exceptionally easy to secure vertical pictures with the camera held on its side.

The focusing pinion is adjusted through a split washer, which affords sufficient tension to hold the front at any point when focusing, irrespective of the position of the camera.

The Auto Graflex Junior is supplied with a depressed cupped metal front for carrying the lens. This metal front is threaded to accept the B. & L.-Zeiss Tessar No. 13 Series Ic Lens, Zeiss Kodak Anastigmat No. 1 Lens, and Cooke No. 20 Series II Lens. The Auto Graflex Junior is fitted with one tripod screw plate in the bottom of the camera.





THE REVOLVING BACK GRAFLEX JUNIOR

HIS camera is similar in construction to the $2\frac{1}{4}x3\frac{1}{4}$ Auto Graflex Junior, and makes a picture $2\frac{1}{4}x3\frac{1}{4}$ inches. It is fitted with revolving back, which permits the operator to turn the back from a vertical to a horizontal position without removing the back from the camera, a particularly valuable feature for those who wish to make vertical negatives without turning the camera on its side. The revolving back may be changed from horizontal to vertical—or any intermediate—position without danger of fogging the plate or film when the slide is withdrawn. In order to intercept the rays of light for vertical as well as horizontal negatives, it is necessary to make the reflecting mirror a trifle longer than that supplied with the Auto Graflex Junior. This slightly increases the length of the body of the camera, which permits the use of long focus lenses.



REVOLVING BACK GRAFLEX JUNIOR-Continued

The shutter is the same as that supplied with other Graflex Cameras, having five fixed apertures permitting exposures of any duration from time to $\frac{1}{1000}$ of a second. A safety device is provided which prevents the winding of the shutter curtain till the mirror is depressed, preventing the fogging of plate or film.

The front is of the same rigid construction as that on the Auto Graflex Junior, and the detachable focusing hood gives easy access to the focusing screen.



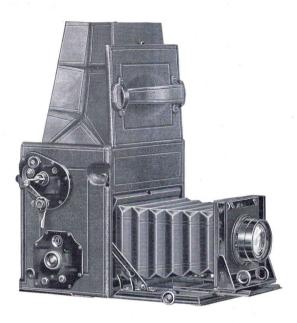
R. B. Graflex Junior Closed

The Revolving Back Graflex Junior is supplied with depressed cupped metal front for carrying the lens. This metal front is threaded to accept the B. & L.-Zeiss Tessar Lens, Series Ic, No. 15, the Cooke Lens, Series II, No. 21, and the Zeiss Kodak Anastigmat Lens No. 3. The Revolving Back Graflex Junior is fitted with one tripod socket in the bottom of the camera.

SPECIFICATIONS

Dimensio	ns	$wh\epsilon$	en e	clos	ed					•	Ť				$6 \times 4\frac{1}{2} \times 6\frac{1}{4}$
Focal cap	pac	ity					*								$7\frac{1}{4}$ in.
Weight				·								į		٠,	$3\frac{1}{4}$ lbs.
Minimum	fo	cus	of	len	ıs a	cco	mm	oda	ited						$5\frac{1}{4}$ in.

Revolving Back Graflex Junior, without lens, including one	e d	oub	le	$2\frac{1}{4} \times 3\frac{1}{4}$
plate holder			. \$	65.00
With Zeiss Kodak Anastigmat Lens, $f.6.3$, No. 3			,	88.25
With B. & LZeiss Tessar Lens, Series Ic, $f.4.5$, No. 15 .				105.50
With Cooke Lens, Series II, f.4.5, No. 21				106.00
Graflex Roll Holder			*	6.00
Graflex Magazine Plate Holder, Model A, extra				10.00
Graflex Film Pack Adapter, extra				3.00
Leather case for camera and plate holder with lock and key				5.50
Leather case for six plate holders with lock and key . $\ \ . \ \ .$				2.50
Leather case for camera with magazine plate holder attached				7.00
Extra Graflex plate holders, each	•			1.50



THE COMPACT GRAFLEX

HE Compact Graflex is the result of a well directed effort to supply a thoroughly efficient $3\frac{1}{4} \times 5\frac{1}{2}$ reflecting camera in the smallest possible size consistent with the accuracy and rigidity of construction necessary in a reflecting camera.

This Graflex embodies many new features, and particular attention is directed to the new automatic safety curtain which is actuated by the swinging mirror frame, protecting the plate or film when the mirror is set. As soon as the release lever is pressed the swinging mirror drops the safety curtain, and allows the focal plane shutter to make the exposure in the usual way. The mirror frame in this camera is constructed of aluminum which reduces the weight of the instrument, and as the mirror frame sets against an air cushion in the top of the camera, it eliminates all danger of vibration, a valuable feature when making slow exposures while holding the camera in the hand. An improved mechanism is provided for setting the shutter for time or instantaneous exposures, and the new shutter winding tension is so constructed that all mechanism inside the plate is thoroughly protected.

The focusing hood is made amply large to afford full view of the focusing screen when making exposures when the camera is held in



COMPACT GRAFLEX
-Continued

position for making vertical negatives. This hood is made so that it is detachable, affording easy access to the focusing screen.

The lens board support is made of metal, and is fitted with spring actuated clamp which firmly grips the track at any desired point.

The Compact Graflex is fitted with the regular Graflex Focal Plane Shutter, permitting exposures of any duration from time to $\frac{1}{1000}$ of a second. The back of the camera is constructed to take the Graflex Plate Holder, Graflex Film Pack Adapter, Graflex Magazine Plate Holder or the improved Graflex Roll Film Holder.



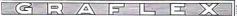
The Compact Graflex

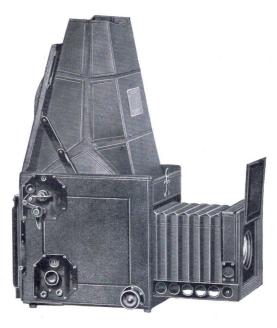
31/4 x 51/9

SPECIFICATIONS

Dimensions when closed .							$3\frac{1}{4} \times 5\frac{1}{2}$ $7 \times 4\frac{7}{8} \times 7$
Focal capacity							
Weight						•	$5\frac{1}{2}$ lbs.
Size of lens board		· ·		٠			$3_4^1 \times 3_4^1$
Minimum focus of lens accor	mmod	lated			Q.		6 in.

	0/4 20 0/2
Compact Graflex without lens, including one double plate holder .	\$ 70.00
With Zeiss Kodak Anastigmat Lens, No. 4	96.25
With B. & LZeiss Tessar, Series Ic, No. 15a	120.00
With Cooke Lens, Series II, No. $21\frac{1}{2}$	120.00
Graflex Roll Holder	8.00
Graflex Magazine Plate Holder, Model A	14.00
Graflex Film Pack Adapter, leather covered, extra	5.50
Leather Carrying Case for camera with plate holder or film pack	
adapter attached	6.00
Sole Leather Case for camera with magazine plate holder attached	7.00
Extra Graflex Plate Holders, $3\frac{1}{4}$ x $5\frac{1}{2}$	2.50
Extra lens boards, each	.50





THE TELESCOPIC REVOLVING BACK GRAFLEX

SPECIFICATIONS

						$3\frac{1}{4} \times 4\frac{1}{4}$	4 x 5
Dimensions when closed		Ŧ			,	$6\frac{3}{4} \times 5\frac{1}{2} \times 6\frac{7}{8}$	$8\frac{3}{8} \times 6\frac{3}{8} \times 7\frac{7}{8}$
Focal capacity		Ŧ	4		×	$8\frac{1}{2}$ in.	12 in.
Weight			,	190		$4\frac{1}{2}$ lbs.	$6\frac{3}{4}$ lbs.
Size of lens board					٠.	$3\frac{1}{4} \times 4\frac{1}{4}$ in.	4×4 in.
Minimum focus of lens ac	con	nmo	oda	ted		$5\frac{3}{4}$ in.	$7\frac{1}{8}$ in.

Telescopic R. B. Graflex without lens, including one double plate holder	$3\frac{1}{4} \times 4\frac{1}{4}$ \$ 90.00	
With Zeiss Kodak Anastigmat, f.6.3	No. 3 113.25	No. 5 134.50
With B. & LZeiss Tessar, Ic, f.4.5	No. 15 130.50	No. 16 162.00
With Cooke Lens, Series II, f.4.5	No. 21 131.00	No. 21½ 150.00
Graflex Roll Holder	7.00	8.00
Graflex Magazine Plate Holder, Model A, extra	12.50	14.50
Film Pack Adapter, leather covered, extra .	4.50	5.00
Leather case for camera and Film Pack Adapter, with lock and key	8.00	10.00
Leather case for camera and magazine plate holder or roll holder	10.00	11.50
Extra Graflex Plate Holders, each	2.50	2.50
Extra lens boards, each	.50	.75



THE TELESCOPIC REVOLVING BACK GRAFLEX

HIS camera is fitted with a revolving or turn-table back, similar to that supplied with the Revolving Back Auto Graflex, described on page 27, enabling the operator to make either vertical or horizontal negatives without turning the camera on its side.



Telescopic R. B. Graflex Closed

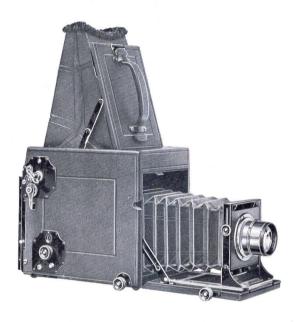
The camera can be brought into position for action quickly and easily. Pressure on a release, located near the handle, opens the camera and brings the hood into position for focusing, while the lens cover opens automatically the instant the front is racked out. An exceptionally large front board permits the use of the most rapid Anastigmat Lenses, and sufficient bellows capacity is provided for lenses of long enough focus to give the best pictorial effect.

The regular Graflex Focal Plane Shutter and Reflecting Mirror, as described on pages 5, 6 and 7, are part of this camera. The shutter is actuated to give automatic exposures from $\frac{1}{10}$ to $\frac{1}{1000}$ of a second, as well as time exposures of any duration.

The large, roomy focusing hood is attached in such a manner that it may be readily detached from the camera, rendering the focusing screen easily accessible for cleaning or replacing.

The Telescopic Revolving Back Graflex is furnished in $3\frac{1}{4}x4\frac{1}{4}$ and 4x5 sizes.





REVOLVING BACK AUTO GRAFLEX

Folmer's Patent, February 5, 1907, and June 8, 1908

SPECIFICATIONS

						$3\frac{1}{4} \times 4\frac{1}{4}$	4×5
Dimensions when closed	×					$8\frac{3}{4} \times 5\frac{1}{2} \times 7\frac{1}{2}$	$10 \times 6\frac{1}{4} \times 8\frac{1}{2}$
Focal capacity						15 in.	18 in.
Weight						$6\frac{1}{2}$ lbs.	$8\frac{1}{2}$ lbs.
Size of lens board						3×3 in.	$3\frac{3}{4} \times 3\frac{3}{4}$ in.
Minimum focus of lenses	acc	omi	mod	ate	$^{\mathrm{ed}}$	$7\frac{1}{8}$ in.	$8\frac{3}{8}$ in.

Revolving Back Auto Graflex, without lens, including one double plate holder	3½ x 4½ \$100.00	4×5 \$115.00
Fitted with Zeiss Kodak Anastigmat Lens . No.	5 134.50	No. 6 161.50
Fitted with B. & LZeiss Protar Lens, Series		
VIIa No.	10 169.50	No. 13 205.50
Fitted with B. & LZeiss Tessar Lens, Series Ic No.		
Fitted with Cooke Lens, Series II No.	$21\frac{1}{2}$ 150.00	No. 22 177.00
Graflex Roll Holder	7.00	8.00
Graflex magazine plate holder, Model A, extra	12.50	13.50
Film Pack Adapter, leather covered, extra .	4.50	5.00
Leather case for camera and Film Pack Adapter, with lock and key	8.00	9.00
Leather case for camera and magazine plate holder	9.00	10.50
	T 1 T 1 T 1	
Extra Graflex plate holders, extra	2.50	2.50
Extra lens boards	.60	.70



REVOLVING BACK AUTO GRAFLEX

N many lines of photographic work it is frequently necessary to make vertical negatives without turning the camera on its side, and for

those desiring a camera of this type the Revolving Back Auto Graflex is particularly valuable. The revolving or turn-table back may be changed from horizontal to vertical, or any intermediate position, without danger of fogging the plate or film when the slide is drawn.

In order to intercept the rays of light for vertical as well as horizontal negatives, it is necessary to make the reflecting mirror a



Revolving Back Auto Graflex

trifle longer than that supplied with cameras of the non-reversing type; this slightly increases the length of the body of the camera and also permits the use of long focus lenses. The front bed is fitted with a telescopic rack of exceptional rigidity which can be drawn out beyond the edge of the platform, giving the greatest possible bellows capacity. When short or medium focus lenses are used, the bed may be dropped out of the cone of light and the rear pinion used for focusing. In using lenses of long focus or the single combinations of the convertible lenses, the front of the camera may be



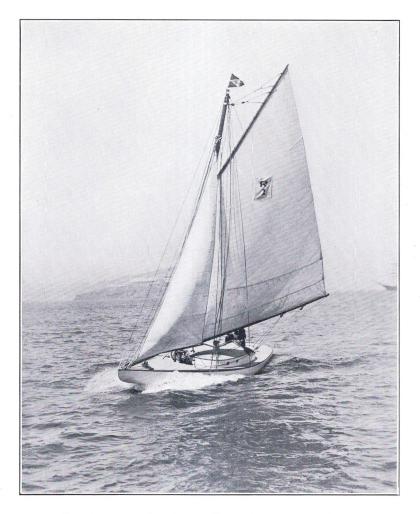
Revolving Back Auto Graflex Closed

racked out beyond the edge of the bed by using the forward pinion.

The Revolving Back Auto Graflex is fitted with a specially designed rising and falling front which permits full movement of the front regardless of the position of the bellows, as when the front is racked in as far as it will go, the entire bellows will rise, the front and rear bellows frames sliding in grooves.



REVOLVING BACK AUTO GRAFLEX—Continued



Size of picture made with a 4x5 Revolving Back Auto Graflex

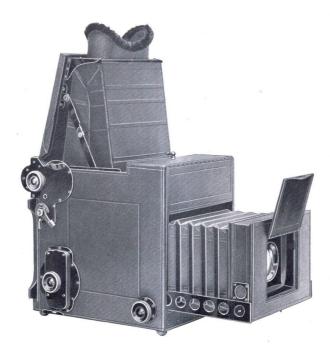
When opening the camera by pressing the release catch near the handle, the focusing hood automatically comes into position. The hood is of ample size to permit accurate focusing for either horizontal or vertical pictures.

The regular Graflex Focal Plane Shutter, actuated to give exposures from time to $\frac{1}{1000}$ of a second, is part of this camera.

The Revolving Back Auto Graflex is made in two sizes, $3\frac{1}{4}x \, 4\frac{1}{4}$ and 4x5.







THE PRESS GRAFLEX

Folmer's Patent, February 5, 1907, and June 8, 1909

SPECIFICATIONS

Dimensions, $11x8\frac{1}{4}x9\frac{3}{4}$; focal capacity, 14 in.; weight, $11\frac{1}{2}$ lbs.; size of lens board, 4x4 in.; minimum focus of lens accommodated, 8 in.

	5×7
Press Graflex without lens, including one double plate holder	\$110.00
With Zeiss Kodak Lens, f.6.3, No. 5	144.50
With B. & LZeiss Tessar Lens, Series Ic, f.4.5, No. 16	172.00
With Cooke Lens, Series II, f.4.5, No. 22	172.00
Graflex Roll Holder	9.00
Graflex magazine plate holder, Model A, extra	15.00
Film Pack Adapter, leather covered, extra	7.50
Leather case for camera and plate holder or adapter attached, with	
lock and key	11.00
Leather case for camera and magazine plate holder attached, with	
lock and key	12.50
Extra Graflex holders, each	3.50
Extra lens boards, each	.75



THE PRESS GRAFLEX

HE photographic department of the larger daily newspapers and illustrated magazines is rapidly becoming a factor of the utmost importance, and the Press Graflex is especially designed to meet the most exacting requirements of those engaged in this line of work.

The Press Graflex is constructed to withstand very strenuous usage without injury to the mechanism, or throwing out of alignment the most delicate adjustments, and the shutter is speeded up to give exposures as brief as $\frac{1}{1500}$ of a second, as well as time exposures of any duration.

When carrying this camera it is instantly accessible for focusing, as the top is opened by pressing a lever conveniently located near the handle; this automatically brings the focusing hood into position. The lens cover also opens the instant the front is racked out, permitting the camera to be brought into action with the least possible loss of time. This is a feature of great value to the newspaper photographer, who frequently has little or no time to prepare for making a negative.

The telescopic side arms are of sufficient length to give a bellows extension of fourteen inches, while the special construction of this camera will permit the use of lenses having a focal length as short as eight inches. The shutter curtain is wound by one complete turn of a large milled head, and the number indicating the size of the exposing aperture is reflected upward by a small right angle prism. This, together with the fact that the tension apertures are plainly visible when the camera is in its normal position, makes it unnecessary to turn the camera on its side to see either the aperture or tension index.

The focusing hood is large and spacious, giving a full, unobstructed view of the field, while the eye-shield closely fits the contour of the face, effectually excluding outside light. A detachable, spring actuated ground glass panel holds the plate holder or film pack adapter in place; this panel may be detached when using the Magazine Plate Holder or Cartridge Roll Holder, or may be used for focusing when the camera is on a tripod in an elevated position. The Press Graflex is fitted with two tripod plates for either vertical or horizontal negatives. The Press Graflex is made in the 5×7 size only.





THE HOME PORTRAIT GRAFLEX

SPECIFICATIONS

Dimensions, $10\frac{3}{4} \times 9 \times 10\frac{3}{4}$ in.; focal capacity, 18 in.; weight, $13\frac{1}{4}$ lbs.; size of lens boards, 5×5 and $6\frac{1}{2} \times 6\frac{1}{2}$ in.; minimum focus of lens accommodated, $10\frac{1}{2}$ in.

Home Portrait Graflex without lens, including one doub	ole p	olate	e ho	older	5×7 \$130.00
With Zeiss Kodak Anastigmat lens, f.6.3, No. 6					176.50
With B. & LZeiss Tessar, Ic, f.4.5, No. 18		,			269.50
With Cooke Lens, Series II, $f.4.5$, No. $22\frac{1}{2}$					232.00
Graflex Roll Holder		÷			9.00
Graflex magazine plate holder, Model A, extra	Ř	à.			15.00
Film Pack Adapter, leather covered, extra					7.50
Leather case for camera and holder, with lock and ke	ey				14.00
Extra Graflex plate holders, each					3.50
Extra lens boards, 5x5, each	ŧ	ž.			.80
Extra lens boards, $6\frac{1}{2} \times 6\frac{1}{2}$, each		,			1.00

THE HOME PORTRAIT GRAFLEX

S its name implies, this camera is designed to meet the requirements of those making portraits at home.

Although this camera is primarily intended for portrait work, it is equally efficient in all other branches of photography where excessive shutter speed is not essential. The Home Portrait Graflex is fitted with a special Focal Plane Shutter which



Home Portrait Graflex Showing Swinging Front

will give automatic exposures as long as $\frac{1}{2}$ second, or instantaneous exposures of any duration up to $\frac{1}{500}$ of a second. By a unique adjustment increased illumination may be secured with automatic exposures, by adding one or more of the exposing apertures to the full curtain opening. This adjustment consists of an escapement, which permits the curtain to travel its full length, utilizing all apertures. As an example, the curtain may be set for the full 7-inch and the next smaller, 2-inch, opening, this would give the effect of a 9-inch curtain aperture, or the curtain may be adjusted to give the 7-inch, 2-inch and the 1-inch opening. The shutter is adjusted to give time exposures of any duration.

One of the special features of this camera that makes it exceptionally efficient in portrait work is the swinging front movement.

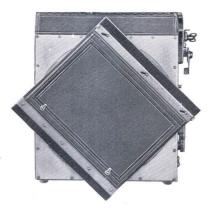




HOME PORTRAIT GRAFLEX -Continued

By a slight turn of a quick acting screw, the front may be tipped either up or down to correct the false perspective frequently obtained in sitting figures or in groups where some of the subjects are placed in front of others. By means of this device it is possible to obtain just the diffusion required in the draperies. The fact that the image remains brilliantly visible while the adjustments are being made eliminates all uncertainty in regard to the effect secured.

The construction of the camera front is such that short, as well as long, focus lenses may be used. One lens board is flush with the front of the camera for use with medium or long focus lense. Another smaller board fitted to the depressed front permits the use of lenses

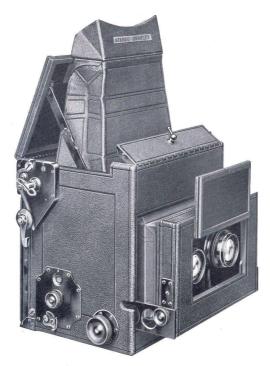


Home Portrait Graflex-Revolving Back

having shorter focal lengths. In addition to these features, the front is fitted with a raising and lowering device which affords ample movement in either direction.

The Revolving Back with which this camera is equipped will permit the making of either vertical or horizontal negatives without tipping the camera on its side. When changing the back from one position to another, it is not necessary to remove it from the camera. A slight pressure on the release allows the back to revolve from a vertical to horizontal, or any intermediate, position.

The Home Portrait Graflex takes the regular 5x7 Graflex Plate Holder, Magazine Plate Holder or Film Pack Adapter. For those who prefer roll film we supply the Graflex Roll Holder, which takes 5x7 Eastman Graflex film. A tripod socket is provided that the camera may be used on a tripod for prolonged exposures.



THE STEREO AUTO GRAFLEX

Folmer's Patent, February 5, 1907

SPECIFICATIONS

Dimensions, when closed, $8\frac{1}{4} \times 9 \times 8\frac{3}{4}$ in.; focal capacity, 8 in.; weight, 8 lbs.; size of lens board, $3 \times 5\frac{3}{4}$ in.; minimum focus of lenses accommodated, $6\frac{1}{4}$ in.

THE PRICE	
	5 x 7
Stereo Auto Graflex without lenses, including one double plate holder	\$150.00
With matched pair Zeiss Kodak Lenses, f.6.3, No. 3	196.50
With matched pair B. & LZeiss Tessar, Series IIb, f.6.3, No. 5	212.00
Graflex Roll Holder	9.00
Graflex magazine plate holder, Model A, extra	15.00
Film Pack Adapter, leather covered, extra	7.50
Leather case for camera and Film Pack Adapter, with lock and key .	9.00
Leather case for camera and magazine plate holder or roll holder,	
with lock and key	10.00
Extra Graflex plate holders, each	3.50
Extra lens boards, each	2.00

To insure proper fitting we recommend that cameras be bought from us complete with lenses as listed. We will not hold ourselves responsible for results with any of our cameras when lenses are not fitted by us.

When customers already own Anastigmat lenses and send them to us for fitting, a nominal charge will be made for the work.



THE STEREO AUTO GRAFLEX

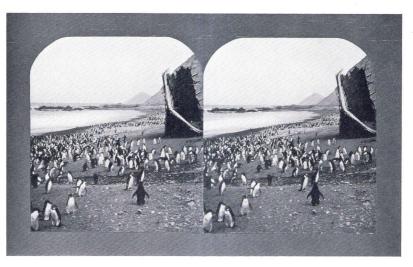
HERE is probably no branch of photography that affords greater pleasure than the making of stereoscopic pictures, and the steadily increasing number of purchasers of the Stereo Graflex indicates that stereo photography is growing in popularity.

The Stereo Auto Graflex Camera is a counterpart of the regular Graflex in stereo form. This camera is constructed with a wide front to carry a matched pair of lenses for the production of stereoscopic pictures.

It differs entirely from any other form of stereo camera, not only in its unique design and perfect adjustment, but in the method of focusing. The hood at the top is practically a stereoscope, as it contains a pair of stereo prisms. These prisms are arranged to give the stereoscopic effect when focusing, as the operator sees but one image on the ground-glass screen—right side up—not inverted. The object is viewed just as one would see the finished stereogram through a stereoscope.

A rising front operated by a rack and pinion enables the operator to cut off the foreground when desired. The stereo partition is a part of the camera and is not removable.

The Stereo Graflex is fitted with the regular Graflex Focal Plane Shutter with safety device, giving exposures of any duration from time to $\frac{1}{1000}$ of a second.





THE NO. O GRAPHIC CAMERA

Folmer's Patent, February 5, 1907, and April 21, 1908

RIEFLY described the No. 0 Graphic is a high grade fixed or universal focus film camera, fitted with a high speed Anastigmat lens and Graflex Focal Plane Shutter.

It is needless to elaborate on the advantages of a universal focus camera, one that does not have to be set or adjusted for varying distances, and is always in focus; nor is it necessary to enumerate the manifold advantages of the Graflex Focal Plane Shutter, especially when used in conjunction with a high speed Anastigmat lens such as is supplied with the No. 0 Graphic. When these advantages are considered with the fact that this camera uses a standard size of regular Kodak Film, it will be instantly seen that the No. 0 Graphic embodies a higher degree of efficiency than has ever been secured in a fixed focus camera.

The extreme simplicity of operation and the fact that it is unnecessary to focus makes it possible for the merest novice in photography to secure a very large percentage of perfect results. With the lens working at its full aperture of f.6.3, everything up to within twelve feet of the camera is in focus, and by using a smaller diaphragm this distance can be greatly decreased.

The body of the No. 0 Graphic is made of selected mahogany and aluminum covered with the best quality of Morocco leather.



No. 0 GRAPHIC CAMERA
-Continued

The lens is the Zeiss Kodak Anastigmat f.6.3, having a focal length of three inches. The diaphragm is controlled from the outside of the camera by a unique mechanical device, the lens opening being plainly shown on a dial on the top of the instrument.

The well known Auto Graflex Focal Plane Shutter is part of the No. 0 Graphic. This shutter has three apertures for instantaneous exposures— $\frac{1}{4}$, $\frac{3}{4}$ and $1\frac{1}{2}$ inches, giving a range of instantaneous exposures from $\frac{1}{10}$ to $\frac{1}{500}$ of a second, and one full opening for time exposures of any duration. The tension on the shutter spring is adjustable, regulating the speed of exposure.



Size of picture made with No. 0 Graphic Camera

A speed table indicates the exposure speeds with varying tensions and the different curtain apertures. An automatic sky-shade prevents the strong sky rays from creating halation and serves the purpose of an automatic cap, which closes, blocking the light while the curtain is being re-set. When it is necessary to give time exposures the shade may be locked open.

A specially constructed folding sight finder is provided, recording approximately the field covered by the lens when the camera is held on a level with the eyes at normal reading distance. Fitted to this finder is a small metal bound mirror which, when swung into position, converts the instrument into a deceptive angle camera, permitting the making of photographs at right angles to the line of vision.



Size of picture made with No. 0 Graphic Camera



No. 0 GRAPHIC CAMERA
-Continued

The shutter winding key is conveniently placed at the right of the camera, a register dial showing the curtain aperture in position for exposure. Should it be necessary to use a larger shutter opening than that indicated on the dial, pressure on a small button located near the winding key brings the next larger shutter opening into position without danger of exposing the film, as the button releases the shutter without opening the sky-shade or automatic lens cover.

The No. 0 Graphic takes the regular No. 0 F. P. Kodak Film for pictures $1\frac{5}{8}x2\frac{1}{2}$ inches, the film spool being adjusted between two spring actuated centres, which, upon being drawn out, locks in position, permitting the film spool to be placed in position or removed; a turn to the left will allow the centres to spring forward and engage the spool ends. A small tension spring fitted in the film pocket creates sufficient drag to draw the film taut, and affords perfect register of focal plane.

Every part of the No. 0 Graphic is adjusted with micrometer precision. The lens is of the best possible type for the work for which it is intended. The shutter is rapid enough for exposures of extremely short duration. This, together with the fact that every part of the picture is in perfect focus, makes it possible to enlarge the pictures to post-card size, or larger, and still retain perfect definition and brilliancy.

Probably the most valuable feature of the No. 0 Graphic is the fact that the negatives made with this camera show such microscopic definition and marvelous depth, that the negatives may be enlarged to many times their original size and still retain all the brilliancy of a contact print. We provide a camera, the No. 0 Graphic Enlarging Camera, by means of which No. 0 negatives may be enlarged to $6\frac{1}{2} \times 8\frac{1}{2}$ or smaller. The No. 0 Graphic Enlarging Camera is fully described on page 40.

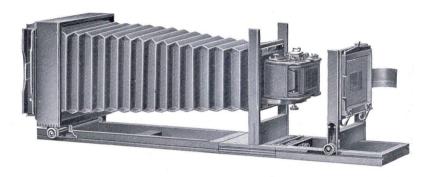
The tourist who does not wish to carry a bulky photographic outfit, and who wishes to secure negatives that may be enlarged to any desired size, can make no better selection than the No. 0 Graphic.

SPECIFICATIONS

Dimensions, $5 \times 3\frac{1}{2} \times 3\frac{1}{4}$ in.; weight, 25 oz.

	THE PRICE												$1\% \times 2\%$	
No. 0 Graphic Camera .													\$36.00	
Sole leather carrying case													3.00	





THE NO. O GRAPHIC ENLARGING CAMERA

ITH this camera enlargements $6\frac{1}{2} \times 8\frac{1}{2}$ or smaller may be made from No. 0 Graphic negatives on Bromide or developing papers, with either daylight or artificial light, the resulting enlargement having all the brilliancy of a contact print. This camera is extremely easy to operate, and the making of enlargements with it is no more complicated than the making of prints in the usual way. The negative to be enlarged is placed in the carrier while the No. 0 Graphic is placed in position with the back removed and the lens shade elevated; the camera is then pointed towards the light and the image focused on the ground glass. After focusing a scribe line may be marked on the scale so that refocusing will not be necessary when making subsequent enlargements of the same size. The holder, containing a sheet of Bromide or developing paper, is then placed in position, the slide drawn and the exposure made. As the same lens used for making the negative is used for enlarging, all the brilliancy and detail are retained in the enlargement.

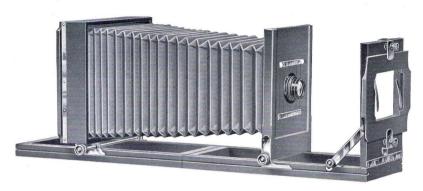
The No. 0 Graphic Enlarging Camera is furnished with mats for making 3A ($3\frac{1}{4}x5\frac{1}{2}$) enlargements only, although a negative 4x5 and smaller may be enlarged to any size up to $6\frac{1}{2}x8\frac{1}{2}$, full capacity of camera.

THE PRICE

No. 0 Graphic Enlarging Camera, including holder .			\$20.00
Do., with R. R. Lens, 6-inch, and Automatic Shutter			30.00



616 × 816



THE GRAFLEX ENLARGING CAMERA

HE Graflex Enlarging Camera is constructed to make enlargements 8×10 and smaller from negatives of any size up to 4×5 or $3\frac{1}{4} \times 5\frac{1}{2}$ inches.

The negative carrier is fitted so that it may be adjusted to any position, vertical, horizontal and oscillating movements being afforded. The frame to which the negative carrier is attached is also adjustable so that it may be tilted either towards or away from the lens, allowing the operator to correct any distortions in negatives where the lines are not parallel.

We regularly list the camera with the No. 3 Zeiss Kodak Anastigmat Lens, but the front board is of sufficient size to accommodate any of the lenses with which the Graflex Cameras are fitted. With this instrument enlargements may be made on Bromide or developing paper, either by daylight or artificial light, and it is a valuable addition to the equipment of any photographer wishing to make enlargements without incurring the expense of elaborate enlarging apparatus.

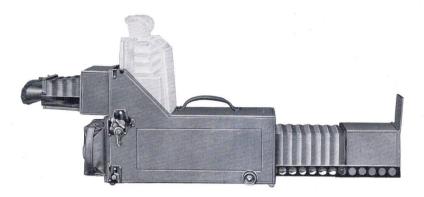
SPECIFICATIONS

Bellows capacity				÷				. 28 inches
Length of bed								. 34 inches
Size of lens board	1					•		$4\frac{1}{4} \times 4\frac{1}{4}$ inches
Weight								$8\frac{3}{4}$ pounds

THE PRICE

Graflex Enla	rgi	ng	Car	mer	a,	8 x 1	10, i	ncl	ludi	ng	one	e B:	rom	ide	P	ape	r a	nd	
Plate He	old	er		,						,									\$25.00
Zeiss Kodak	Aı	nas	tign	nat	L	ens,	f.6	.3,	No	. 3,	in	ba	rrel	wi	th	Iris	D	ia-	
phragm	•																		23.25





THE NATURALISTS' GRAFLEX

Folmer's Patent, February 5, 1907, and April 21, 1908

HE Naturalists' Graflex Camera is designed especially for naturalists' work in photographing birds, wild animals, or similar subjects where long focus or telo-photo lenses are required. The camera in general design and construction is similar to the regular Auto Graflex, but the increased length of camera accommodates much longer side arms. These arms are made of heavy brass, giving a liberal extension, yet maintaining absolute rigidity. The focus is obtained by reflection on the upper mirror, and enables the operator to conceal himself behind a stone or log and focus from the rear of the camera without exposing too much of his person, as would be the case in using the ordinary type of Graflex Camera.

The focusing hood is hinged so that it will swing up, permitting the operator to view the image in the same way as with the Press Graflex.

The Naturalists' Graflex will accommodate lenses of from $12\frac{3}{4}$ to 26 inches equivalent focus, and is fitted with the regular Graflex Focal Plane Shutter.

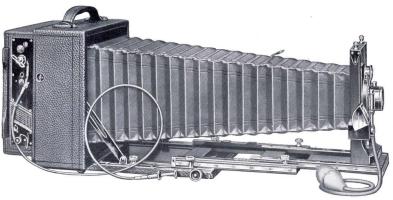
SPECIFICATIONS

Dimensions, $19 \times 6\frac{1}{4} \times 9\frac{3}{4}$ in.; focal capacity, 26 in.; weight, $7\frac{1}{2}$ lbs.; size of lens board, 4×4 in.; minimum focus of lenses accommodated, $12\frac{3}{4}$ in.

THE PRICE

Naturalists' Graflex, 4 x 5, without lens, including one double plate	4×5
holder	\$150.00
With B. & LZeiss Protar Lens, Series VIIa, No. 19, f.6.3	310.50
B. & L. High Power, Tele-Photo Attachment, extra	37.00
Graflex magazine plate or cut film holder, Model A, extra	13.50
Film Pack Adapter, leather covered, extra	5.00
Extra Graflex holders, each	2.50



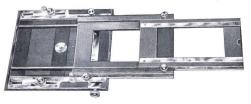


REVOLVING BACK CYCLE GRAPHIC

OR many years the Graphic Camera has held the reputation of being the foremost camera of its type, which accounts for its extensive use by an increasing number of photographers—both professional and amateur. For the technical worker the Revolving Back Graphic is particularly valuable, as its rigid construction and accurate adjustment make it indispensable for those engaged in scientific research, involving the application of photography.

Lenses working at a large aperture are necessarily much larger than those having a slower speed. Graphic Cameras are constructed with a view to accommodating lenses of this type, an especially large and rigid front being provided to accept the largest Anastigmats.

The rigidity of the Graphic—due to the most careful, accurate and thorough construction ever incorporated in photographic apparatus—is still a Graphic feature which will bear particular emphasis, and is one of the features which has given the Graphic its prestige



Cycle Graphic Bed Extended

with scientific and advanced photographic workers.

To allow the use of long-focus lenses, sufficient bellows capacity is provided. The front runs

out on telescopic framed tracks, reinforced by angle brass guides with milled head binding screws, which lock the bed rigidly in place. These extension tracks being in the form of frames allow extra large

REVOLVING BACK CYCLE GRAPHIC—Continued

lens space when closed. The construction of these tracks affords a wider base for the lens support and prevents any lateral or oscillating



Rear of Cycle Graphic showing Revolving Back

movement, thus rendering the Cycle Graphic particularly adaptable for tele-photo or any other extremely accurate work. Cycle Graphics will take, if desired, lenses two or more sizes larger than the plate really calls for. The front is clamped with a wide base block and heavy bolt, likewise insuring the utmost rigidity and also strength. There is also a fine rack and pinion for accurate focusing, operated by a large milled head button.

The swing back is secured by an adjustment of the side arms

running in a slotted plate on the platform and locked by means of milled head binding screws.

The revolving back involves the same principle as that employed in the Revolving Back Graflex. It consists of a cupped-up plate turntable carrying a frame fitted to receive the regular ground glass back carriage or the Graflex

Focal Plane Shutter. It may be turned instantly from horizontal to vertical or to any intermediate position. The revolving back is fitted to all Graphic Cameras except the 8 x 10.

The new rising and falling front mechanism, by means of which the front may be raised or lowered to any desired position, is at the same time a lock in itself. No further locking device or binding screws are required.



REVOLVING BACK CYCLE GRAPHIC - Continued

The Cycle Graphic is constructed of the best quality selected stock, lock jointed, and covered with handsome black grained leather. The bellows is of the finest quality red Russia leather.

A brilliant view finder, with hood, is attached to the front, moving with it while focusing. The lens board is removable. The Revolving Back Cycle Graphic is listed with the well known Anastigmat lenses, and to complete an outfit of this kind, the Graflex Focal Plane Shutter is quite indispensable, if it is desired to secure the very best results that can be had with a lens of this type. When the Graflex Shutter is ordered as a part of this outfit no extra charge is made for fitting, and a carrying case which will hold the camera with Focal Plane Shutter attached, is supplied in place of the regular case without extra charge.

The regular Premo Film Pack Adapter is interchangeable with the Graphic Plate Holder in the 4×5 and 5×7 sizes.

SPECIFICATIONS

	-	4 x 5	5 x 7	$6\frac{1}{2} \times 8\frac{1}{2}$	8×10
Dimensions		$6\frac{7}{8} \times 4 \times 7\frac{1}{8}$	$8\frac{3}{4} \times 4\frac{1}{4} \times 9\frac{1}{4}$	$10\frac{3}{8} \times 4\frac{1}{2} \times 10\frac{3}{8}$	$12 \times 5 \times 12$
Focal capacity .		17 in.	$22\frac{1}{2}$ in.	26 in.	30 in.
Weight		$3\frac{3}{4}$ lbs.	$6\frac{1}{4}$ lbs.	$7\frac{1}{2}$ lbs.	$10\frac{1}{2}$ lbs.
Size of lens board		$2\frac{1}{2} \times 2\frac{1}{2}$ in.	$3\frac{1}{8} \times 3\frac{1}{8}$ in.	$4\frac{1}{8} \times 4\frac{1}{8}$ in.	$4\frac{1}{5} \times 4\frac{1}{5}$ in.

THE PRICE

Including one double plate holder and sole leather carrying case

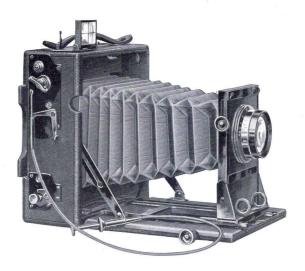
Revolving Back Cycle Graphic with				
Graphic Rapid Rectilinear	4×5	5×7	61/2 x 81/2	8 x 10*
Lens and Automatic Shutter	\$ 40.00	\$ 50.00	\$ 62.00	\$ 75.00
With Zeiss Kodak Anastigmat Lens	No. 3	No. 5	No. 6	
and Compound Shutter	71.55	95.30	113.70	
With B. & LZeiss Protar Lens,				
Series VIIa, and Compound	No. 7	No. 10	No. 13	No. 17
Shutter	105.30	127.30	157.70	222.40
Extra plate holders, each	1.00	1.25	1.75	2.00
Graflex Focal Plane Shutter, extra	15.00	16.00	17.50	20.00
Supplementary bed for Wide Angle				
Lenses	7.00	7.50	8.00	9.00

^{*}Furnished with reversible back only.

To insure proper fitting we recommend that cameras be bought from us complete with lenses as listed. We will not hold ourselves responsible for results with any of our cameras when lenses are not fitted by us.

When customers already own Anastigmat lenses and send them to us for fitting, a nominal charge will be made for the work.





THE SPEED GRAPHIC

SPECIFICATIONS

	$3\frac{1}{4} \times 4\frac{1}{4}$	4×5	$3\frac{1}{4} \times 5\frac{1}{2}$	5 x 7
Dimensions	$5\frac{3}{4} \times 2\frac{3}{4} \times 6\frac{1}{4}$	$6\frac{1}{2} \times 4 \times 6\frac{3}{8}$	$7 \times 3\frac{1}{8} \times 7\frac{1}{2}$	$8\frac{3}{4} \times 3\frac{3}{4} \times 9\frac{3}{8}$
Focal capacity .	10 in.	12 in.	12 in.	16 in.
Weight	$2\frac{1}{2}$ lbs.	$3\frac{1}{2}$ lbs.	$3\frac{3}{4}$ lbs.	$5\frac{1}{2}$ lbs.
Size of lens board	$2\frac{1}{2} \times 2\frac{1}{2}$ in.	$3^{1}_{4} \times 3^{1}_{4}$ in.	$3\frac{1}{4} \times 3\frac{1}{4} \text{ in.}$	$3\frac{3}{4} \times 3\frac{3}{4}$ in.

THE PRICE

Including one double plate holder

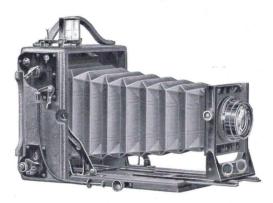
Speed Graphic without lens		$3\frac{1}{4} \times 4\frac{1}{4}$ 332.00	4×5 \$35.00		
With Zeiss Kodak	1		******	***************************************	# 23.33
Anastigmat Lens,					
f.6.3	No. 2	$51.00 \mathrm{N}$	o. 3 58.25	No. 4 63.75	No. 5 77.50
With B. & LZeiss					
Tessar, Series Ic,					
f.4.5	No. 14	67.00 N	o. 15 75.50	No. 15a 87.50	No. 16 105.00
With Cooke Lens,					
Series II, $f.4.5$.	No. $20\frac{1}{2}$	67.50 N	0.21 76.00	No. 211 87.50	No. 22 105.00
Sole leather carry-					
ing case, with lock					
and key, to hold					
camera and five					
extra plate hold-					
ers		5.50	6.00	6.50	7.50
Extra lens boards,					
each		.35	.40	.40	.50
Extra plate holders,					
each		1.00	1.00	1.00	1.25

THE SPEED GRAPHIC

HE Speed Graphic Camera is designed to meet the requirements of those desiring Focal Plane Shutter efficiency in a compact folding camera.

The Speed Graphic is made of selected, kiln-dried mahogany especially treated to withstand climatic changes. The front is large enough to accept the high speed Anastigmat lenses, and

sufficiently firm to prevent vibration when the camera is used with the bellows extended to its full capacity. A piano hinge extending the full width of the camera attaches the camera body to the folding platform, which is framed and paneled to insure a maximum of rigidity without excessive



Speed Graphic Open

weight. The extension track is made in the form of a frame, which is not only extremely rigid, but allows the lens to rest between the tracks when the camera is closed.

The Speed Graphic is covered with the best grade Morocco leather, and the bellows, which is of ample length to accommodate the single combinations of convertible lenses, is made of black leather. All exposed wood parts are ebonized and the metal work is oxidized, producing an instrument of attractive appearance. The Speed Graphic is supplied with a non-reversible back, and when making vertical negatives the camera is turned on its side, two tripod sockets being provided.

The 4×5 , $3\frac{1}{4} \times 5\frac{1}{2}$ and 5×7 Speed Graphic Cameras are equipped with the regular Graflex Focal Plane Shutter described on page 53. This shutter is actuated to give automatic exposures of any duration from $\frac{1}{10}$ to $\frac{1}{1000}$ of a second, and it is also possible to give time exposures of any duration. The shutter on the $3\frac{1}{4} \times 4\frac{1}{4}$ Speed Graphic differs from that on the larger sizes, in that it has but four instead of five openings, and the exposure speeds run from "time" to $\frac{1}{500}$ of a second, which is amply rapid for a camera using as short focus a lens as does the $3\frac{1}{4} \times 4\frac{1}{4}$ Speed Graphic.

SPEED GRAPHIC-Continued



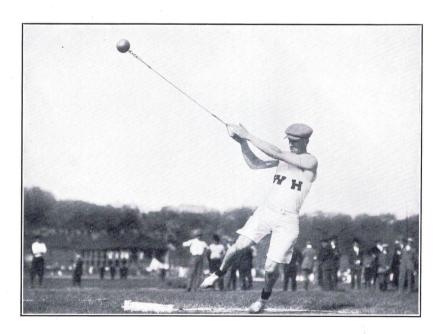
Speed Graphic Closed

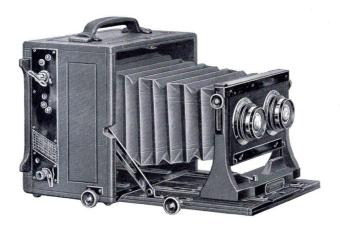
The $3\frac{1}{4}x4\frac{1}{4}$ Speed Graphic is a particularly compact camera, as the curtain is adjusted to the camera to wind in a reverse manner to that on the other instruments of this type, allowing it to be stored in such a way as to decrease the size of the camera.

The spring actuated ground glass focusing panel on all Speed Graphic Cameras is fitted with a spring cover which is equipped with side shields; when this cover is released it effectively answers the purpose of a focusing cloth. The ground glass back will accept the Graphic Plate Holder or the Premo Film Pack Adapter. Focusing is done by rack and pinion, a large milled head for focusing being conveniently

located at the right side of the drop bed.

The Speed Graphic Cameras are furnished with the folding Graphic Sight Finder. Horizontal and vertical centering lines engraved on the finder lens make it possible to exactly center the object by means of a sight bar at the back of the finder. When the finder frame is folded down, the sight bar automatically drops into position. These cameras are provided with a rising front, and the front boards can be easily removed by shifting a sliding lock bar.





THE STEREOSCOPIC GRAPHIC

With Auto Graflex Shutter

Folmer's Patents, November 5, 1901, February 5, 1907

SPECIFICATIONS

Dimensions, when closed, $8\frac{7}{8} \times 5\frac{1}{2} \times 7\frac{7}{8}$ in., focal capacity, $12\frac{3}{4}$ in.; weight, 6 lbs.; size of lens board, $3\frac{1}{8} \times 6\frac{1}{2}$ in.; minimum focus of lenses accommodated, 3 in.

THE PRICE	
Stereoscopic Graphic without lenses, including one double plate holder \$ 70.00	
Stereoscopic Graphic with matched Graphic Rectilinear Lenses 90.00	
Stereoscopic Graphic with matched Zeiss Kodak Anastigmat Lenses,	
No. 3, f .6.3	
Stereoscopic Graphic with matched B. & LZeiss Tessar Lenses, Series	
IIb, No. 4, f.6.3	
Stereoscopic Graphic with matched B. & LZeiss Protar Lenses, Series	
VIIa, No. 7, f.6.3	
Stereoscopic Graphic with matched B. & LZeiss Protar Lenses, Series	
V, No. 1	
Extra for Zeiss Kodak Anastigmat Lens No. 5, f.6.3, for full size	
plate	
Extra for B. & LZeiss Protar Lens, Series VIIa, No. 10, f.6.3, for	
full size plate	
Leather carrying case, extra	
Extra lens boards, each	
Graphic plate holders, extra	



THE STEREOSCOPIC GRAPHIC

HE Stereoscopic Graphic represents the highest type of folding stereo camera. It is constructed of selected, kilndried mahogany, highly finished and covered with the best quality black grained leather. All metal parts are oxidized in gun metal finish.

The front platform is attached to the box by a heavy piano hinge with short knuckles, extending full length of the camera, giving great strength when the camera is opened. The platform drops out of the way, for use with lenses of short focus.

The front is securely fastened to a wide track of hard milled brass, preventing oscillation and side movement when the camera is

racked out. Focus is adjusted by rack and pinion.

An extra pinion is set in the body of the camera for use with wide angle lenses when the front platform is dropped. The front adjusts for sky and foregound. Length of bellows is twelve inches.

The Auto Graflex Focal Plane Shutter is incorporated with and forms

a part of the camera, and is a feature of the outfit. (See description, page 53.)

Our special spring roller partition automatically adjusts itself to lenses of any focal length, as the front is racked in and out. A removable, spring actuated ground-glass focusing screen is fitted to the camera and a large hinged focusing panel, with side shields, gives full view of the screen. The regular lenses are a pair of Graphic Rapid Rectilinear, of just the right focus to include a pleasing angle of view. They may be used to advantage for architectural subjects and views—in fact, they answer every purpose for general stereo photography, when the high-grade Anastigmat form of lens is not desired. By removing the stereo partition and replacing the stereo lenses with a single lens, the camera can be used to excellent advantage for 5 x 7 work.





CIRKUT CAMERAS AND OUTFITS

OR many years the great field of Panoramic Photography has been out of reach merely because there was no suitable apparatus to allow of exploiting it. To make a panoramic picture—that is, to make it true as the eyes see it—true as to perspective and free from distortion, is something that had not been possible until the Cirkut provided the means of overcoming the difficulties that heretofore existed. And how successfully it has been done is evidenced by the large number of Cirkuts now in use.

It requires but a moment's consideration to discover the almost limitless opportunities of a camera with the wide range of possibilities that the Cirkut possesses. Survey the field. It is not alone for scenery, but for manufacturing plants, residences, country estates, public grounds, games and groups, that the Cirkut proves its usefulness.

Cirkut Cameras are made in three sizes, Nos. 5, 10 and 16, the former for film either 5, 6, 8 or 10 inches wide, the latter for 10, 12 or 16-inch widths. Any length of negative up to about 12 feet with the No. 10, and 18 feet with the No. 16, may be made, the length of the negative being determined by the focal length of the lens used. A scale is provided by means of which the operator can deter-

CIRKUT CAMERAS AND OUTFITS—Continued

mine the length of film required for any exposure, and a register on the top of the tripod indicates the amount of film consumed and that still remaining unexposed. There is also a device for perforating the film after each exposure.

An entirely new Cirkut Camera has been provided for the amateur or professional photographer requiring a panoramic camera for pictures not exceeding 5 inches in width. This is the new No. 5 Cirkut Camera, which will make a negative 5 inches wide and of any length up to 42 inches.

This little instrument is constructed on the same principle and with the same careful attention to detail as the larger cameras, and will produce results equal in quality to those secured with the larger cameras and outfits. Unlike the other Cirkuts the No. 5 is self-contained; it has no extra film attachment, the mechanism for operating the camera being contained in the body of the instrument. A pocket at the side of the camera is provided to contain the gear wheels and winding key.

Cirkut Outfits are supplied in two sizes, No. 6 and No. 8, the former being the 5×7 Cycle Graphic to which is fitted the Cirkut Attachment, while the No. 8 is an attachment fitted to a $6\frac{1}{2} \times 8\frac{1}{2}$ Cycle Graphic. The No. 6 Cirkut Outfit takes $6\frac{1}{2}$ -inch film and negatives up to 6 feet long may be made, and with the No. 8 Outfit a negative 8 inches wide and any length up to 8 feet may be made. By removing the Cirkut Attachments, the cameras supplied with the Nos. 6 and 8 Cirkut Outfits may be used with plates in the usual manner. Only Eastman Daylight-loading Film is used. The construction of the camera allows of the most careful focusing. The image can be seen on the ground glass not alone full width but full length of the picture.

The Cycle Graphic Cameras as supplied with Cirkut Outfits Nos. 6 and 8 are fully described on pages 43 to 45.

THE PRICE

Including Sole Leather Carrying Cases

rkut Came vertible A Shutter	nas	tigm	at 1	Lens	, Se	eries	II	, and	10 🖁	3290.00	No. 16 8	\$425.00
irkut Cam Special C												100.00
irkut Pano and Shutt									6	112.50	No. 8	175.00

Note.—A special Cirkut catalogue contains full information regarding Cirkut apparatus, copy of which which will be mailed on request.

THE GRAFLEX FOCAL PLANE SHUTTER

Folmer's Patent, February 5, 1907, and April 21, 1908

OR ultra rapid photography, the Graflex Shutter presents numerous advantages over those working in front of, between or behind the lens. To secure successful negatives of rapidly moving

objects, such as horse and automobile races, railroad trains, football games, base-ball contests, etc., there is no style of shutter that can equal the Graflex. And while constructed primarily for high-speed work, it is also adapted for slow automatic exposures and time exposures of any duration. Its position immediately in front of the sensitive plate or film insures the distribution of light with equal intensity upon every portion of



the sensitized surface. In addition, the principle upon which it is constructed not only gives the maximum of speed, but at the same time the plate receives a greater volume of light in a given time than with any other type of shutter.

In comparing the Focal Plane Shutter with the between-lens type of shutter, which is most commonly in use, particular stress should be laid upon the fact that with the Focal Plane shutter there is absolutely no diminishing of the volume of light passing through the lens, in other words the full efficiency of the aperture used is maintained during exposure.

SPECIFICATIONS

			4×5	5×7	$6\frac{1}{2} \times 8\frac{1}{2}$	8×10
Dimensions			$6\frac{1}{4}x6\frac{1}{4}x1\frac{3}{4}$	$8\frac{3}{8}x8\frac{3}{8}x1\frac{3}{4}$	$10x10x1\tfrac{7}{8}$	$11\frac{1}{2}x11\frac{1}{2}x2$
Weight .		,	16 oz.	26 oz.	32 oz.	40 oz.

THE PRICE

4x5 5x7 61/2x81/2 8x10 Graflex Focal Plane Shutter, \$15.00 \$16.00 \$17.50 \$20.00

GRAFLEX ROLL HOLDER

1915 MODEL

HE Graflex Roll Holder 1915 model takes the new Eastman Graflex Film, and will interchange with the Plate Holders on Graflex Cameras.

The Holder is substantially made and occupies the space of two Plate Holders. It can be easily loaded in daylight by raising the hinged back and removing the spool carrying mechanism,



when the black paper on the film spool is passed over the face of the carrier to the receiving spool. A retarding ratchet is provided whereby the film may be drawn absolutely flat after it is in position for exposure, affording a true recording plane. The Graflex Roll Holder is fitted with a dark slide, which permits the removal of the Holder from the Camera before the entire roll has been exposed, without injuring the film.

Film for the Graflex Roll Holder is designated by a number which is stamped on the inside back cover of the Roll Holder, as well as on the carton containing the Film.

GRAFLEX ROLL HOLDERS 1915 Model

2½ x 3½ For Graflex Roll Holder Film No. 50					,	\$6.00
3½ x 4½ For Graflex Roll Holder Film No. 51						
$3\frac{1}{4} \times 5\frac{1}{2}$ For Graflex Roll Holder Film No. 52		2				8.00
4 x 5 For Graflex Roll Holder Film No. 53						8.00
5 x 7 For Graflex Roll Holder Film No. 54						9.00

Graflex Roll Holders will fit Graflex Cameras only

EASTMAN GRAFLEX FILM

No. 50	3^{1}_{4}	X	$2^{\frac{1}{4}}$	6	Exposures					9	\$.20
No. 51	$4\frac{1}{1}$	x	31	6	Exposures						.35
No. 52	$5\frac{1}{2}$	X	31	6	Exposures				0.0		.40
No. 53	5	x	4	6	Exposures	÷					.45
					Exposures						

To avoid error order Film by number



EASTMAN PLATE TANK

TO secure the best results, Graflex negatives on glass plates should be developed in the Eastman Plate Tank. This tank consists of a heavy metal solution cup with a tight-fitting cover, permitting the tank to be reversed during development, a cage for holding the plates, and a simple loading device. Eastman Plate Tanks are supplied to accept plates made with all Graflex Cameras for which plate holders are provided.

THE PRICE

Eastman Plate Tank, 4x5, for 4x5,	$3\frac{1}{4}$	$5\frac{1}{2}$,
$3\frac{1}{4} \times 4\frac{1}{4}$ and $2\frac{1}{4} \times 3\frac{1}{4}$ plates			\$3.50
Eastman Plate Tank, 5x7			4.50



KODAK FILM TANK



MODAK Film Tanks of standard sizes will accept the film spools for the Graflex Roll Holder, as well as those used by the 1A and 3A Graflex.

THE PRICE

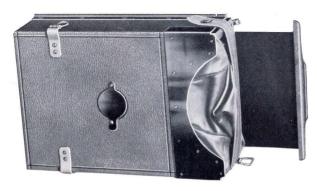
$3\frac{1}{2}$ -inch Kodak Film Tank, for $3\frac{1}{4} \times 5\frac{1}{2}$ 3A Film, $2\frac{1}{2} \times 4\frac{1}{4}$ 1A Film and	
$3\frac{1}{4} \times 2\frac{1}{4}$ Eastman Graflex Film No. 50	\$5.00
5-inch Kodak Film Tank, for $4\frac{1}{4} \times 3\frac{1}{4}$ Eastman Graflex Film No. 51 and	
5 x 4 Eastman Graflex Film No. 53	6.00
7-inch Kodak Film Tank, for $5\frac{1}{2} \times 3\frac{1}{4}$ Eastman Graflex Film No. 52 and	
7x5 Eastman Graflex Film No. 54	7.50



THE GRAFLEX MAGAZINE PLATE HOLDER—MODEL A

With Independent Dark Slide

HE Graflex Magazine Plate Holder is designed to carry twelve glass plates or cut films in metal septums. Each septum is numbered on the back, the number appearing at a ruby window in the back of the magazine as each exposure is made. When a plate is exposed the septum is drawn into a leather bag attached to the end of the magazine, by means of a brass rod, and re-inserted by hand into the rear of the magazine holder.



Each septum has a depression in the back which serves as a spring to force the plate forward into focus regardless of its thickness. The serial numbers are placed in these depressions. Springs at the back of the magazine force the septums forward, and bring the plate in position for exposure into exact register. It is not necessary to expose all the plates before development, as one or more plates can be removed at any time in the dark room. The Magazine Holder may be removed from the camera at any time, as the dark slide effectually prevents the light from reaching the plates or films.

SPECIFICATIONS

	$2\frac{1}{4} \times 3\frac{1}{4}$	$3\frac{1}{4} \times 4\frac{1}{4}$	4×5	$3\frac{1}{4} \times 5\frac{1}{2}$	5×7
Dimensions	$5 \times 3_8^1 \times 2_8^1$	$6\frac{1}{4} \times 2\frac{1}{4} \times 4\frac{1}{4}$	$7\frac{1}{4} \times 2\frac{3}{8} \times 5$	$7\frac{3}{8} \times 2\frac{1}{4} \times 4\frac{1}{2}$	$9\frac{1}{4} \times 2\frac{5}{8} \times 6\frac{1}{4}$
Weight	14 oz.	$1\frac{1}{2}$ lbs.	2 lbs.	2 lbs.	$3\frac{1}{2}$ lbs.

4 x5, each					,						13.50
$3_4^1 \times 5_2^1$, each											14.00
5 x7, each			,						120	r.	15.00



THE GRAFLEX PLATE HOLDER

Folmer's Patent, October 25, 1904

THE Graflex Holder is simple, strong, practical and absolutely light-proof. It is constructed of well-seasoned, selected cherry, handsomely finished in black, and fitted with new spring finger cut-off, which excludes all light and prevents fogging of plates when drawing or replacing slides. The holder is grooved, instead of



Graflex Plate Holder Showing Cut-off

tongued, affording increased thickness and strength without increase of space occupied. The Graflex Holder is loaded by inserting one end of the plate under the rabbet where the slide is withdrawn, and placing the other end against the septum. With the thumb and fore-finger draw the two sliding locks together. These locks hold the plate securely. They also do away with the side and end rabbets and allow the full width and length of the plate to be exposed, with the exception of less than $\frac{1}{16}$ of an inch at one end.

Graflex Plate Holders are fitted with a new special slide that will not warp, buckle or collect dust like hard rubber.

THE PRICE

THE GRAPHIC PLATE HOLDER

Folmer's Patent, October 25, 1904

RAPHIC Plate Holders are the most practical holders in the market. They are compact, yet strong, being made of selected, well-seasoned cherry and fitted with our new spring finger cut-off, which prevents the entrance of light and fogging of plates when drawing or replacing slides. Springs on either side of the

septum keep the plates in absolute register.

To load the Graphic Holder one end of plate is inserted under the rabbet where the slide is withdrawn, and the other end placed against the septum, being held in place by the two sliding locks at opposite end of holder.



Section of Graphic Plate Holder Showing Cut-off

The locks do away with the side and end rabbets and allow the full width and length of the plate to be exposed with the exception of less than $\frac{1}{16}$ of an inch at one end.

Graphic Plate Holders are fitted with mat finish slides, of a special material, that will not warp, crack, buckle or collect dust like hard rubber.

THE PRICE— $3\frac{1}{4}$ x $4\frac{1}{4}$, each \$1.00 4 x 5, each \$1.00 $3\frac{1}{4}$ x $5\frac{1}{2}$, each \$1.00 5 x 7, each \$1.25 $6\frac{1}{2}$ x $8\frac{1}{2}$, each \$1.75 8 x 10, each \$2.00

GRAPHIC SIGHT FINDER

THESE finders are so constructed that they may be readily attached to the camera. Horizontal and vertical centering lines, engraved on the lens, make it possible to exactly center the object by means of vertical sight bar at the back of the bed plate. When the lens frame on the finder is folded down, the bar

automatically drops into position. This finder is thoroughly effective, and occupies but little space.

THE PRICE

 $3\frac{1}{4} \times 5\frac{1}{2}$. . . \$2.75 4×5 . . . \$2.75 5×7 . . . \$3.25

GRAFLEX COLOR PLATE HOLDER

RAFLEX Color Plate Holders are designed especially for color photography. They can be used either for Autochrome Plates or with other color plates, which are made through a lined screen. When using Autochrome Plates a sheet of black card-

board one thirty-second of an inch in thickness should be placed in the holder in order that the sensitized surface of the plate will be brought into correct register. When

be brought into correct register. making photographs on colorplates, which are exposed through a lined screen, it is unnecessary to use the cardboard backing as the thickness of the glass on which the plates are coated brings the sensitized surface into the correct position. Receding springs compensate for glass of varying thickness, which makes this holder suitable for any type of color plate. Graflex Color Plate Holders are indispensable to those



engaged in color photography as they eliminate all uncertainty as to whether the subject is correctly focused. Graflex Color Plate Holders can be used only with Graflex Cameras to which the regular Graflex Plate Holders are adjustable. These holders are constructed of selected cherry, ebonized and finished in the same manner as the Graflex Holder.

THE PRICE

$2\frac{1}{4} \times 3\frac{1}{4}$							2		v				\$3.00
3½ x 4 (Lanter	n s	lide	e),	eac	h				ě				3.50
$3\frac{1}{4} \times 4\frac{1}{4}$, each				٠.									3.50
4 x5, each													4.00
$3\frac{1}{4} \times 5\frac{1}{2}$, each													
5×7 , each													$\bf 5.25$

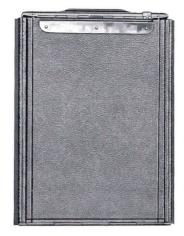


GRAFLEX FILM PACK ADAPTER

MODEL A-With Slide

HE Graflex Film Pack Adapter is covered with the same fine grade of leather that is used on the Graflex, and can be used with all the Graflex Cameras except the 1A and 3A, which instruments use roll films exclusively. The Graflex Film Pack Adapter takes the standard Premo Film Pack, and on all the Graflex Cameras except the Press, may be loaded without removing from the camera. On the Press Graflex the adapter is inserted in the same manner as a plate holder into a spring actuated back. The entire operation of loading and unloading is effected

in broad daylight. Exposures are



made with the film pack as usual, but at any time the adapter slide may be inserted and the adapter removed in daylight.

THE PRICE

Graflex Film Pack Adapter, 21/4 x 31/4 31/4 x 41/4 4×5 31/4 x 51/6 Model A \$3.00 \$4.50 \$5.00 \$5.50 \$7.50



GRAFIEX

THE CROWN TRIPOD

Folmer's Patent, June 23, 1903



HE Crown is a four-section telescopic folding tripod, absolutely rigid, quickly set up and readily adjusted for height. It is made of selected straight-grained cherry, soaked in an oil bath for ten days before being finished.

The wood is then rubbed down and shellaced. This treatment renders it extremely tough and practically waterproof.

For carrying, the lower sections telescope into the third and the upper section folds back upon it, making it very compact.

All binding screws on lower sections of this tripod are "upset" and cannot be lost. Taper pins in the ear pieces of the head fit snugly into metal-tipped sockets of the legs, preventing loose joints and side play.

Expansion brackets in

the upper section make it impossible for the legs to be detached from the head until brackets are folded.

The No. 1, when closed, measures $16\frac{1}{4}$ inches and weighs, with top, 36 ounces. When extended to its full capacity, it stands $4\frac{1}{3}$ feet high.

The No. 2, closed, measures $17\frac{1}{4}$ inches long and weighs, with top, 65 ounces. When extended, it has a height of $4\frac{2}{3}$ feet.

The No. 3, closed, measures 20 inches long and weighs, with top, 70 ounces. When extended, it has a height of $5\frac{1}{2}$ feet.

The No. 4, closed, measures $19\frac{1}{2}$ inches long and weighs, with top, 84 ounces. When extended, it has a height of $5\frac{1}{2}$ feet.

THE PRICE

No. 1 Crown Tripod with 4-inch top		100					\$5.50
No. 2 Crown Tripod with 6-inch top				100			6.00
No. 3 Crown Tripod with 6-inch top							7.50
No. 4 Crown Tripod with 6½-inch top							8.50



CARRYING CASES FOR CROWN TRIPODS



OR convenience in carrying the Crown Tripod, we supply a solidly constructed carrying case with a long compartment for the tripod legs, and a smaller compartment attached to the side for the top. These cases are supplied in either sole leather or imitation walrus Fabrikoid.

THE PRICE

No. 1 Imitation Wal	rus	Fa	brik	oid,	le	athe	er	ends,	leath	er	cap			٠,	\$3.00
No. 2 Imitation Wali	us	Fal	brik	oid,	lea	athe	r	ends,	leath	er	cap			×	3.50
No. 3 Imitation Wali	us	Fal	orik	oid,	lea	athe	r	ends,	leath	er	cap				4.00
No. 4 Imitation Wal	rus	Fa	brik	oid,	lea	athe	r	ends,	leath	er	cap		 100	.=	4.50
No. 1 Sole Leather															4.00
No. 2 Sole Leather					×										4.75
No. 3 Sole Leather		9												×	6.00
No. 4 Sole Leather											ě	į.		ē	6.75



CROWN TILTING TRIPOD TOP



THE Crown Tilting Tripod Top is made in two sizes, Nos. 1 and 2, and designed for use with the Crown Tripods. By the aid of this attachment the camera may be tilted at any angle upward

or downward, and also reversed for vertical pictures without changing the back or removing it from the tripod. Its portability and compactness will at once commend it to the photographer,

especially for out-of-door use. The top is perfectly rigid, no matter what position it may occupy.

THE PRICE

Crown Tilting Tripod Top No. 1 \$2.00 Crown Tilting Tripod Top No. 2 2.50

CROWN FLASH LAMP

For Pure Magnesium Only

THE Crown Flash Lamp is so constructed that the magnesium powder is stored in the body of the lamp and blown up through the center of flame, thoroughly consuming it and producing a powerful light. The head of the lamp is filled with lamp-wick, sat-

urated with alcohol. This gives a large flame, which is very essential in a perfect flash lamp. The head of the lamp is removable in order to fill the magazine with magnesium powder. A safety disc is provided, to protect the hand when using the lamp. Tube and mouth pieces are also furnished.

The double spreader will not clog up and is more powerful than any other lamp of double its cost now on the market. Long or short flashes can be made.



The Crown is the perfection of flash lamps, being safe, economical and reliable. It is finished in polished nickel and presents a very handsome appearance. This lamp is intended for use with pure magnesium only, and explosive flash-powder of any kind must not be used with it.

THE PRICE



ANASTIGMAT LENSES

HE Rectilinear Symmetrical Lenses with which hand cameras are ordinarily equipped, possess one inherent defect impossible to overcome. This defect is astigmatism, which may be defined as the inability to focus at the same time vertical and horizontal lines lying in the same plane.

The Anastigmat Lens with its superior correction has several

advantages over the Rectilinear Lens. It has greater speed because it may be used with full opening, and the resulting image will be brilliant and sharp all over. The sharpness is not confined to one spot, as is the case with the Rectilinear Lens when used with full opening.

It has greater covering power, that is, area in which the image is sharply defined, and a flatter field permitting the formation of flat images, not curved. Its greater speed and covering capacity enable it to be used, therefore, advantageously under conditions where the ordinary lens is valueless.



No ordinary lens of the old type condenses to fine points, the light passing through it obliquely to the margin of the plate. The reflected images of such lenses are built up of blurred lines of light which overlap and cause a noticeable lack of definition in many photographs, especially at the margins. This defect is called "Astigmatism," and lenses that are free from it are called "Anastigmats."

We can supply the Graflex fitted with any standard make of lens not regularly listed which may be adapted for it.

ON FITTING LENSES

While we list Graflex Cameras without lenses, we can not be responsible for any outfit leaving our factory incomplete. The best results cannot be secured unless the lens is accurately fitted, and so mounted that the flange is absolutely parallel to the sensitive plate or film. Therefore, in justice to ourselves, and for the purpose of avoiding errors, our guarantee only applies to cameras that are shipped from our factory complete with lenses attached.

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ZEISS KODAK ANASTIGMAT f.6.3

	Size of Plate covered	Particular to Pa	PI	RICE
No.	with Stop f.6.3 Inches	Equivalent Focus Inches	Lens in Barrel	Lens in Compound Shutter
1	2½ x 4½	41/2	\$18 50	\$29 50
2	$3\frac{7}{4} \times 4\frac{7}{4}$	5	19 00	30 00
3	4 x 5	$6\frac{1}{8}$	23 25	37 25
4	$3\frac{1}{4} \times 5\frac{1}{2}$	$6\frac{7}{8}$	26 25	38 75
5	5 x 7	81/4	34 50	51 50
6	$6\frac{1}{9} \times 8\frac{1}{9}$	10	46 50	63 50

BAUSCH & LOMB-ZEISS TESSAR, Series Ic, f.4.5

	Size of Plate covered	Desired to the		PRICE	
No.	with Stop f.4.5 Inches	Equivalent Focus Inches	Lens in Barrel with Iris Diaphragm	Lens Fitted with Volute Shutter	Lens Fitted with Compound Shutter
13	$2\frac{1}{2} \times 3\frac{1}{2}$	41	\$ 31 00	\$ 48 00	\$ 43 50
14	$3\frac{1}{4} \times 4\frac{1}{4}$	5	35 00	52 00	49 00
15	4 x 5	6	40 50	59 00	54 50
15a	5 x 7	$7\frac{1}{16}$	50 00	68 50	67 00
16	5 x 8	81	62 00	82 00	79 00
17	$6\frac{1}{2} \times 8\frac{1}{2}$	$9\frac{7}{8}$	99 00	119 00	117 50
18	8 x 10	$11\frac{3}{4}$	139 50		
18a	10 x 12	$14\frac{2}{5}$	180 00	*****	
19	11 x 14	$15\frac{3}{4}$	217 00		
20	14 x 17	$19\frac{3}{4}$	310 00	*****	

BAUSCH & LOMB-ZEISS PROTAR, Series VIIa

	Size of Plate	Equivalen Single Pro		Combined	S3		PRICE	
No.	covered with Full Aperture Inches	Front Lens	Back Lens	Equiva- lent Focus Inches	Speed f	Lens in Barrel with Iris Diaphragm	Lens Fitted with Aluminum Volute Shutter	Lens Fitted with Aluminum Comp'd Shutter
4	4 x 5	83	$8\frac{3}{4}$	$5\frac{1}{16}$	6.3	\$ 48 50	\$ 65 00	\$ 61 00
5	$4\frac{1}{4} \times 6\frac{1}{2}$	$11\frac{3}{16}$	$8\frac{3}{4}$	$5\frac{5}{8}$	7.	53 00	70 00	65 50
6	$4\frac{1}{4} \times 6\frac{1}{2}$	$13\frac{3}{4}$	$8\frac{3}{4}$	$6\frac{1}{8}$	7.7	59 50	78 00	73 50
7	$4\frac{1}{2} \times 7\frac{7}{4}$	$11\frac{3}{16}$	$11\frac{3}{16}$	$6\frac{3}{8}$	6.3	57 00	74 00	71 00
8	5 x 7	$13\frac{3}{4}$	$11\frac{3}{16}$	7	7.	63 50	82 00	77 50
9	5 x 8	$16\frac{1}{8}$	$11\frac{3}{16}$	71	7.7	74 00	92 50	91 00
10	5 x 8	$13\frac{3}{4}$	$13\frac{3}{4}$	$7\frac{1}{2}$ $7\frac{7}{8}$	6.3	69 50	88 00	83 50
11	$6\frac{1}{2} \times 8\frac{1}{2}$	$16\frac{1}{8}$	$13\frac{3}{4}$	$8\frac{1}{2}$	7.	80 00	98 50	97 00
12	$6\frac{7}{2} \times 8\frac{7}{2}$	$18\frac{7}{8}$	$13\frac{3}{4}$	$9\frac{7}{8}$	7.7	98 50	118 50	115 50
13	$6\frac{1}{2} \times 8\frac{1}{2}$	$16\frac{1}{8}$	$16\frac{1}{8}$	$9\frac{1}{4}$	6.3	90 50	109 00	107 50
14	7 x 9	$18\frac{7}{8}$	$16\frac{1}{8}$	10	7.	109 00	129 00	126 00
15	7 x 9	$23\frac{1}{8}$	$16\frac{1}{8}$	$10\frac{7}{8}$	7.7	128 00	148 00	146 50
16	7 x 9	$18\frac{7}{8}$	$18\frac{7}{8}$	$10\frac{13}{16}$	6.3	126 50	146 50	143 50
17	8 x 10	$23\frac{1}{8}$	$18\frac{7}{8}$	$11\frac{7}{8}$	7.	145 50	165 50	164 00
18	8 x 10	27	$18\frac{7}{8}$	$12\frac{3}{4}$	7.7	171 50	191 50	190 00
19	8 x 10	$23\frac{1}{8}$	$23\frac{1}{8}$	$13\frac{1}{4}$	6.3	160 50	180 50	179 00

COOKE LENSES, Series II. Full Aperture, f.4.5

No.	DIMENSIONS IN INCHES		PRICE
	Focus	Plates Covered with Full Aperture	PRICE
20	4	$3\frac{1}{4} \times 4\frac{1}{4}$	\$ 31 00
$20\frac{1}{3}$	5	$3\frac{1}{4} \times 4\frac{1}{4}$	35 50
$20\mathbf{\hat{b}}$	51/2	$3\frac{1}{4} \times 4\frac{1}{4}$	39 00
21	65	4 x 5	41 00
$21\frac{1}{2}$	7	5 x 7	50 00
22	8	5 x 8	62 00
$22\frac{1}{2}$	$10\frac{1}{2}$	$6\frac{1}{2} \times 8\frac{1}{2}$	102 00
$\begin{array}{c} 22\frac{1}{2} \\ 23 \end{array}$	13	8 x 10	157 50



TERMS

ALL quotations are net and f.o.b. Rochester. We make no charge for packing, and guarantee safe arrival when forwarded by express. Shipments by mail are always at the risk of the purchaser and postage must invariably be added to the cost.

Remittance can be made by draft on New York, postoffice or express money order, or registered letter. Personal checks from parties unknown to us, will delay shipment of goods until check can be collected. Ten cents must be added to all personal checks to cover cost of exchange.

For the convenience of our customers, we suggest they purchase through a regular dealer in photographic goods, as they can thus save time and transportation charges.

FOLMER & SCHWING DIVISION
EASTMAN KODAK COMPANY
ROCHESTER, N. Y.

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