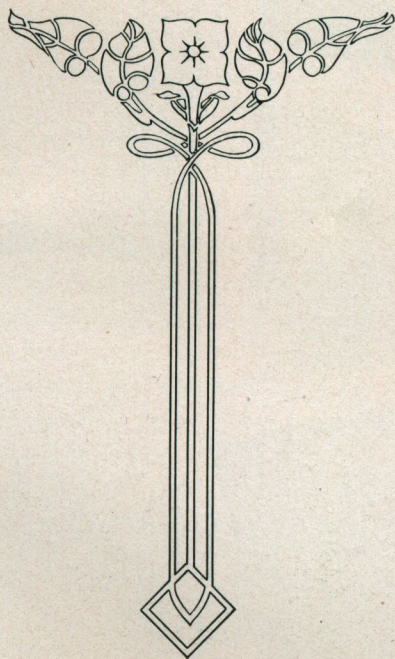


GRAFLEX

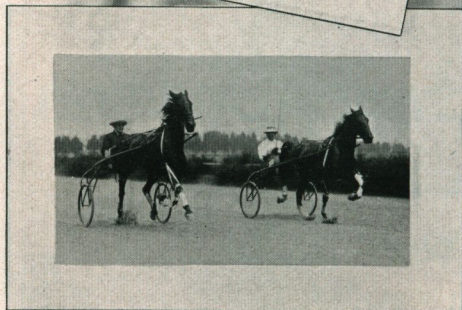
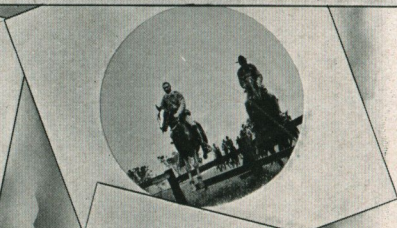
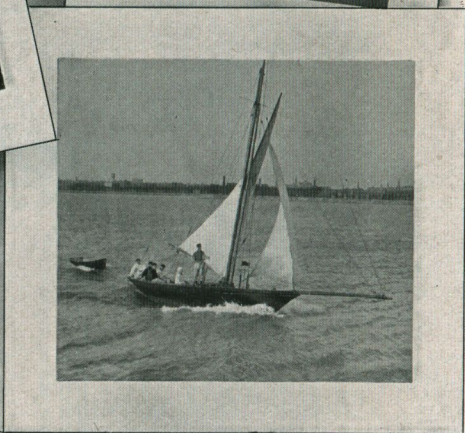
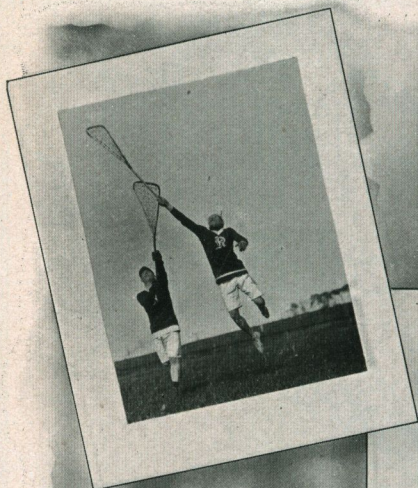
Graffex^{and} Graphic Cameras



Folmer & Schwing Division
Eastman Kodak Co.

Rochester, N.Y.

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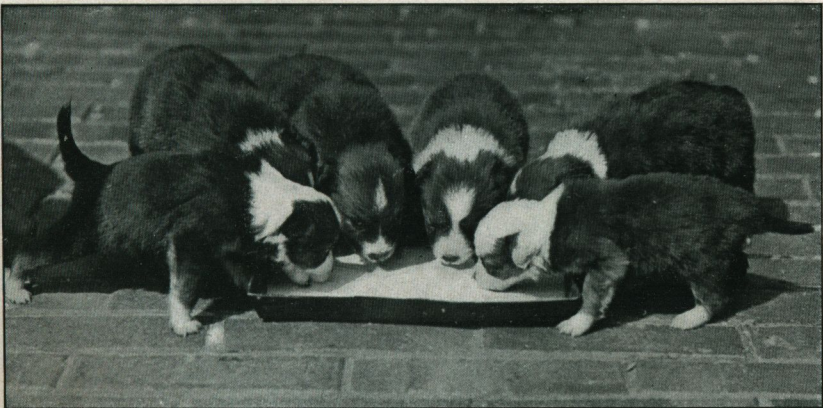


GRAFLEX PHOTOGRAPHY



TO those who are familiar with the convenience, ease and, above all, the accuracy of photography with the Graflex Camera, it is needless to call attention to the many special features that enable the Graflex to accomplish photographic results far beyond the limitations set by all other cameras. It is for those who have not used a Graflex—who are not familiar with its construction and advantages—that this brief description of the Graflex is intended.

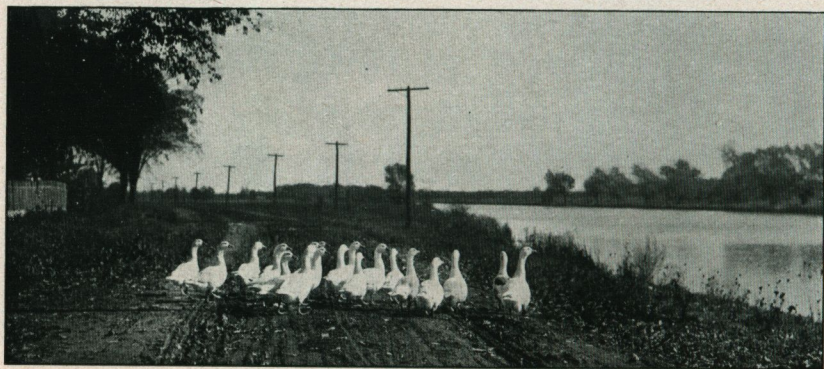
The Graflex is not a camera specialized for one kind of work; it covers the entire photographic field; is equal to any photographic emergency. The Graflex will do everything that any other camera will do, only it will do it better. The same principles that enable the Graflex to portray with the utmost precision of detail, the most rapidly moving objects, will also enable it to secure perfect results under conditions that, with an ordinary camera, would result in failure.





It is unnecessary to elaborate upon the advantages of focusing objects accurately upon the ground glass; every photographic worker is familiar with the many disadvantages of the tiny "finder," the inability to compose or arrange a picture on its microscopic surface, the difficulty of seeing the image at all unless the light happens to be just right, and the uncertainty of securing on the negative everything that is shown in the finder. With the Graflex, the picture is seen through a nicely adjusted hood, the exact size of negative, and *right side up*. This image remains brilliantly visible up to the very instant of exposure. It is not necessary to rely upon a more or less accurate focusing scale for distances. The operator of a Graflex knows to a certainty that his picture is in focus; he sees exactly what he will get on his negative, and there has been no estimate or guess as to the distance between the camera and subject.

It is in child portraiture that the ability to see the image





on the ground glass up to the very instant that the exposure is made, is particularly valuable; every motion and change of expression of the little subject may be

closely watched on the screen; the photographer may move about, selecting different positions until the composition is correct, when a slight pressure releases the shutter and the exposure is made. As a Focal Plane Shutter is part of every Graflex, instantaneous photographs may be made indoors, on cloudy days, or in the shade, thus eliminating the unpleasant effect invariably secured in photographing children in the bright sun.





There is hardly a more charming branch of photography than that of finding, and preserving, the artistic bits of composition concealed in even the most commonplace surroundings, and it is here that the Graflex is pre-

eminent. No motion of the city streets is too rapid to be caught with the Graflex, there is none of the unpleasant blurring of rapidly moving vehicles.

With the Graflex the country landscape appears on the focusing screen exactly as it will appear on the finished print; the awkward tripod and bothersome focusing cloth are eliminated; the operator by moving from place to place may watch the changing composition on the ground glass, until the exact pictorial effect is secured and the exposure made. With the Graflex this exposure may be so brief that even on the windiest days the foliage will be clear and distinct.

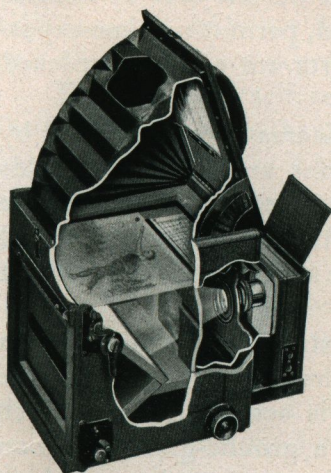




GRAFLEX CONSTRUCTION

A few words about Graflex construction—a subject of importance to every camera user:

There is probably no photographic shutter that has received as much favorable attention, or as much commendation by photographers—professional and amateur—as the Graflex Focal Plane Shutter. The remarkable success achieved by this shutter is not due to its marvelous effectiveness alone, but also to its extreme simplicity and durability. The Graflex Shutter is one of the factors that have done much to give the Graflex its present recognized standing. The principle of the Focal Plane Shutter is so well known, and its advantages over all other types of shutters so firmly established, that little need be said



Sectional Illustration
Showing Graflex Principle

on this subject. A more extended discussion, however, of the relative advantages of the Focal Plane Shutter will be found on page 33.

The Graflex Shutter consists of a long curtain, with aper-



tures varying from full opening to an eighth of an inch, and so constructed that the aperture retains, during exposure, an absolutely uniform, parallel and not a wedge-shaped, opening.

All adjustments are easily and quickly made from the outside of the camera. The shutter is set by the turning of the winding key—the width of the aperture being indicated on an index dial near this key. By setting a rotating disc, the shutter may be set for time or instantaneous, as may be desired. The shutter release is conveniently located on left side of camera, while a finger release is also provided, permitting time exposures of any duration. All wearing parts are of case hardened steel.

The speed of the shutter may be increased or decreased by a tension button and six varying tensions are allowed with this shutter. Any speed from time to $\frac{1}{1000}$ of a second may be secured in the Auto Graflex, while in the Press Graflex a speed of $\frac{1}{1500}$ of a second is attainable. The action is entirely without jar or vibration.

Decidedly the most unique adjustment ever adapted to a camera is the reflecting mirror which has added so much to the utility of the Graflex. This mirror is set at an angle which reflects the image from the lens on a ground-glass screen on top of the camera and shows the object to be photographed, right-side up and full size of plate. As the mirror is released by a push button on the left side of the camera, it releases the shutter just as the mirror itself swings up out of the cone of light. The mirror is mounted in a rigid frame and when in position for focusing, retains a perfect plane which insures

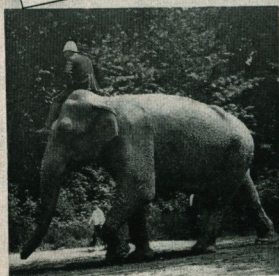
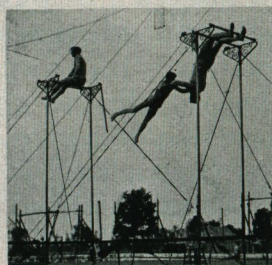


coincident register of focus. It seats against an air cushion formed in the top of the camera, thus preventing vibration. There is a safety device provided which prevents the rewinding of the curtain while the mirror is up, only allowing the curtain to be rewound when the mirror is set, thus preventing fogging of plate or film when the dark slide is drawn. The reflector itself is made out of specially-ground optical plane glass carefully silvered and backed with a special preparation to prevent deterioration of the silver, and thus preserving the original brilliancy and efficiency of the mirror. It is even far superior to a silvered surface mirror.

The Graflex itself is made of mahogany, covered in fine Persian Morocco leather. All visible wood parts are given a fine ebonized finish. The metal work is oxydized—a beautiful gun metal effect being secured. The front runs out on two side arms, milled from heavy brass, running between metal guides, insuring absolute rigidity and no lost motion. When the front is extended, the lens cover opens instantly and automatically. The front is secured by a piano hinge extending the full width of the camera. The front, when opened, allows the removal of the lens and lens board.

Focusing is done by turning a large milled head at the right side of the camera near the front. Tripod plates are provided.

The aim has been merely to touch upon the principle features in Graflex construction. The minor ones, however, have received just the same careful attention.

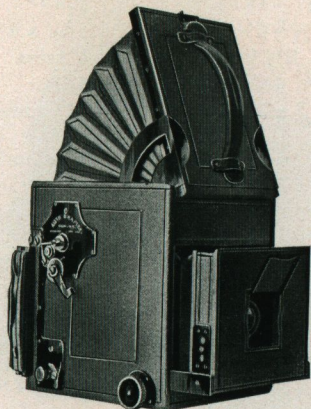


THE AUTO GRAFLEX

FOLMER'S PATENT, FEBRUARY 5, 1907.

The Auto Graflex in general construction conforms with the detail given on pages 7 and 8.

In addition to the reflecting mirror, a supplementary mirror is provided. This mirror is placed on top of the focusing hood, and with it the camera may be used when reversed. It also allows the operator to hold the camera on a level with the eyes, or at a lower elevation.



Auto Graflex Opened

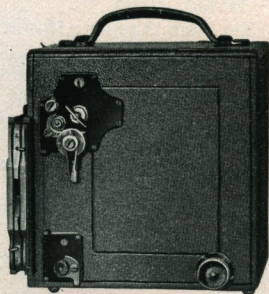
Two tripod sockets are supplied. The regular Auto Graflex Focal Plane Shutter with safety device is a part of this camera. This shutter may be set at any speed from time to $\frac{1}{1000}$ of a second.

A very unique arrangement on the Auto Graflex is the retaining device for holding in position the plate holder, Cartridge Roll Holder, or Film Pack Adapter. It is a sliding lock which is simple, quick and reliable in its operation.

The Auto Graflex will take either the Graflex Magazine Plate Holder which may be loaded with twelve glass plates; the Cartridge Roll Holder which permits of the use of daylight loading roll film; or the Film Pack Adapter which takes the Film Pack.

To it may also be fitted any of the well-known Anastigmat Lenses. These will be found listed on the next page.

The Auto Graflex has surely established a new standard



Auto Graflex Closed



in camera construction. By the foremost photographers—professionals and amateur, both—it is accorded a superior position owing to its availability—the ability to do with it, a range of work not possible with any other type of camera.

The Auto Graflex is offered in three sizes, $3\frac{1}{4} \times 4\frac{1}{4}$, 4×5 and 5×7 .

Specifications

	$3\frac{1}{4} \times 4\frac{1}{4}$	4×5	5×7
Dimensions when closed	$6\frac{1}{4} \times 5\frac{3}{8} \times 6\frac{3}{4}$	$7\frac{1}{8} \times 6\frac{1}{8} \times 7\frac{3}{8}$	$9\frac{1}{4} \times 8\frac{1}{4} \times 9\frac{1}{2}$
Focal capacity	7 inches	$8\frac{1}{2}$ inches	12 inches
Weight	$3\frac{1}{2}$ lbs.	$4\frac{3}{4}$ lbs.	8 lbs.
Size of Lens Board	$2\frac{3}{4} \times 2\frac{3}{4}$ inches	3×3 inches	4×4 inches
Minimum focus of Lenses accommodated	$5\frac{1}{2}$ inches	6 inches	$7\frac{1}{4}$ inches

Prices

	$3\frac{1}{4} \times 4\frac{1}{4}$	4×5	5×7
Auto Graflex without Lens, including one Double Holder	60.00	75.00	90.00
With B. & L. Zeiss Tessar Lens, Series II b, f 6.3 No. 4	93.50	No. 5 115.00	No. 6 149.50
With B. & L. Zeiss Tessar Lens, Series I c, f 4.5 No. 14	100.50	No. 15 122.00	No. 16 162.00
With B. & L. Plagimat Lens, f 6.8 No. 1	94.00	No. 2 115.00	No. 4 145.00
With Cooke Lens, Series IV, f 5.6 No. 25	98.00	No. 26 118.00	No. 27 144.00
With Isostigmat Lens, Series II, f 5.8 No. 4	93.00	No. 4a 109.50	No. 6a 136.00
With Goerz Lens, Series III, f 6.8 No. 1	105.00	No. 2 126.50	No. 3 152.50
Graflex Magazine Plate or Cut Film Holder, Extra	13.00	13.00	15.00
Film Pack Adapter, leather covered, extra	4.50	5.00	7.50
Cartridge Roll Holder, leather covered, extra	7.50	7.50	10.00
Leather Case for Camera and Film Pack Adapter with Lock and Key	10.00	11.00	13.00
Leather Case, for six plate holders, with Lock and Key	6.00	6.00	11.00
Leather Case for Camera and Magazine Plate Holder or Roll Holder	11.50	12.50	15.00
Extra Graflex Plate Holders, each	2.50	2.50	3.50
Extra Lens Boards, each . . . . .	.50	.60	.70

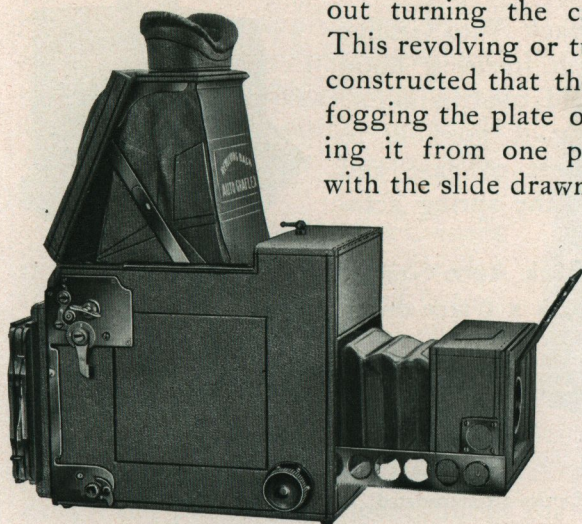
To insure proper fitting, we recommend that cameras be bought from us complete with lenses as listed. We will not hold ourselves responsible for results with any of our cameras when lenses are not fitted by us.

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

THE REVOLVING BACK AUTO GRAFLEX

FOLMER'S PATENT, FEBRUARY 5, 1907.

The Revolving Back Auto Graflex is fitted with revolving back, so that vertical or horizontal pictures may be taken without turning the camera on its side. This revolving or turn-table back is so constructed that there is no danger of fogging the plate or film while reversing it from one position to another with the slide drawn.



Revolving Back Auto Graflex

A detailed description of the reflecting mirror will be found on page 8. On account of the mirror being longer, in order to intercept the cone of light for the vertical as

well as horizontal plate, it makes the body of the camera a trifle longer than the regular Auto Graflex and this permits of fitting longer side arms.

The box being telescopic in form, allows the use of longer focus lenses than with the regular Auto Graflex.

The No. 10 Series VIIa Zeiss Lens, fitted to this camera makes an ideal outfit, as the doublet of $7\frac{7}{8}$ inches may be used, and likewise the front single combination, by removing the back combination. This gives two diameters over the doublet, or the same subject may be photographed at double the distance, giving the same size.

The focusing hood may be opened ready for use when carrying the camera, by pressing a small lever located conveniently near the thumb.

The regular Auto Graflex Focal Plane Shutter with safety



device, preventing the re-setting of the shutter before setting the mirror, thus preventing fogging the plate or film, is fitted to this camera, the same as all other Graflex Cameras. For further details regarding the shutter see pages 33 and 34.

The Revolving Back Auto Graflex Camera is fitted with focusing hood and complete eye shield, obstructing all outside light, making it possible to focus with the greatest of ease and accuracy. It has also the spring actuated lens cover.

The Revolving Back Auto Graflex Camera is made in the 4 x 5 size only.



Revolving Back Auto Graflex

Specifications

Dimensions when closed	9½ x 6½ x 8¼
Focal capacity,	12½ inches
Weight	6¾ lbs.
Size of Lens board	3½ x 3½ inches
Minimum focus of Lenses accommodated,	7¼ inches

Prices

	4 x 5
Revolving Back Auto Graflex without Lens, including one Double Holder	\$125.00
With B. & L.-Zeiss Tessar Lens, Series II b, No. 6, f-6.3	184.50
With B. & L.-Zeiss Tessar Lens, Series I c, No. 16, f-4.5	197.00
With B. & L.-Zeiss Protar Lens, Series VII a, No. 10, f-6.3	207.00
With B. & L. Plagtimat Lens, No. 4, f-6.8	180.00
With Cooke Lens, Series IV, No. 27, f-5.6	179.00
With Goerz Lens, Series III, No. 3, f-6.3	187.50
With Isostigmat, Series II, No. 6a, f-5.8	171.00
Graflex Magazine Plate or Cut Film Holder, extra	13.00
Film Pack Adapter, leather covered, extra	5.00
Cartridge Roll Holder, " " "	7.50
Leather Case for Camera and Film Pack Adapter, with Lock and Key	12.00
Leather Case for 6 Plate Holders, Lock and Key	6.00
Leather Case for Camera and Magazine Plate Holder or Roll Holder	14.00
Extra Graflex Plate Holders, each	2.50
Extra Lens boards	.70

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.

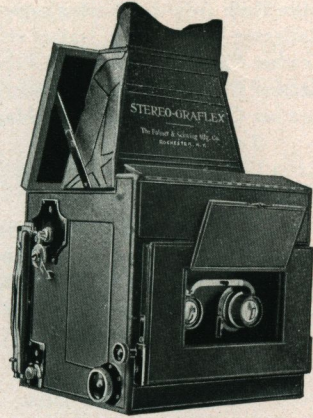
When customers already own Anastigmat Lenses and send them to us for fitting, a nominal charge will be made for the work.



THE STEREO AUTO GRAFLEX

FOLMER'S PATENT FEBRUARY 5, 1907.

The beauty of stereoscopic pictures and the fascination of producing them with a thoroughly modern equipment, is being more and more appreciated by an increasing number of photographers. This accounts for the growing popularity of the finest outfit ever made for stereo work,—the Stereo Auto Graflex.



Stereo Auto Graflex

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.

It must be readily apparent that the incorporation of the Graflex idea in a stereo camera makes possible the production of a class of stereograms which otherwise could not be secured.

Specifications

Dimensions, when closed	8¼ x 9 x 8¾
Focal capacity	8 inches
Weight	8 lbs.
Size of Lens board	3 x 5¾
Minimum focus of Lenses accommodated	6¼ inches



Prices

Stereo Auto Graflex without Lenses, including one Double Plate Holder .	\$200.00
With matched B. & L.-Zeiss Tessar Lenses, Series II b, No. 5, f -6.3 .	280.00
With matched Plastigmat Lenses, No. 2, f -6.8	280.00
With matched Goerz Lenses, Series III, No. 1, f -6.3	292.50
Graflex Magazine Plate or Cut Film Holder, extra	15.00
Film Pack Adapter, leather covered, extra	7.50
Cartridge Roll Holder, leather covered, extra	10.00
Leather Case for Camera and Film Pack Adapter, with Lock and Key .	13.00
Leather Case for six Plate Holders, with Lock and Key	10.00
Leather Case for Camera and Magazine Plate Holder or Roll Holder with Lock and Key	15.00
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.

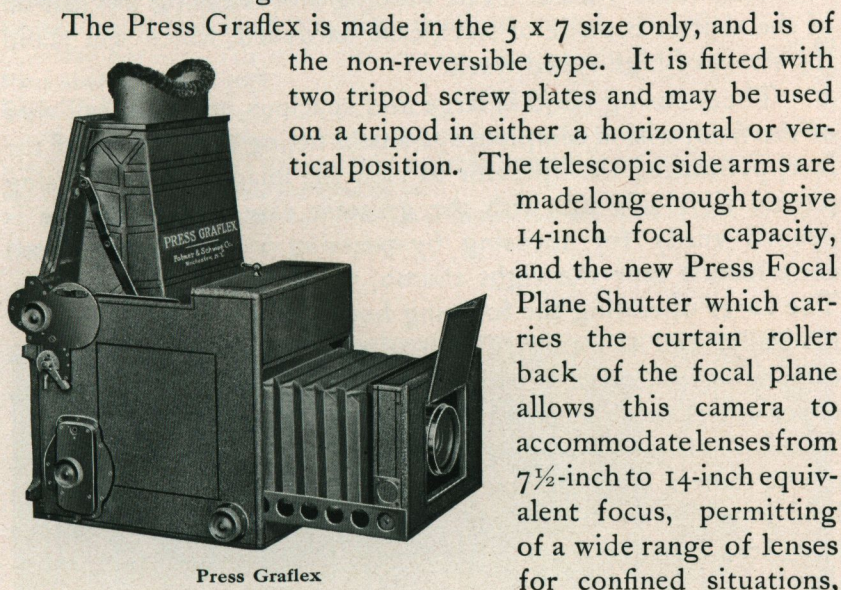
When customers already own Anastigmat Lenses and send them to us for fitting, a nominal charge will be made for the work.



THE PRESS GRAFLEX

FOLMER'S PATENT FEBRUARY 5, 1907.

There is probably no one that subjects a camera to such strenuous usage, or demands as much of a photographic equipment, as does the newspaper photographer, and the fact that the Press Graflex is being used by a large majority of the successful press photographers attests its wonderful advantages in this most exacting field.



The Press Graflex is made in the 5 x 7 size only, and is of the non-reversible type. It is fitted with two tripod screw plates and may be used on a tripod in either a horizontal or vertical position. The telescopic side arms are made long enough to give 14-inch focal capacity, and the new Press Focal Plane Shutter which carries the curtain roller back of the focal plane allows this camera to accommodate lenses from 7½-inch to 14-inch equivalent focus, permitting of a wide range of lenses for confined situations,

or the use of long-focus lenses for track or field work. The minimum focus of lens which the Press Graflex will take is 7 inches.

The tension roller is operated by a clock spring, which may be speeded up to $\frac{1}{1500}$ part of a second, or lowered to $\frac{1}{2}$ of a second. Slow instantaneous exposures can be made by setting the curtain aperture index at "O," handling the camera the same as for regular instantaneous work; the mirror opens the exposure as it swings upward out of the cone of light, automatically tripping the curtain which terminates the exposure. Time exposures of any duration can also be made.



The curtain is wound by one complete turn with a large milled head button. The number indicating size of the exposing aperture, reflected upward by a right-angle prism, is always in full view of the operator, obviating the necessity of turning the camera on its side. The curtain of the Focal Plane Shutter being of the Auto type, is re-enforced with tape edges, with struts of three-ply stock, which will stand any high-speed work. The curtain roller bearings in the side plates are bushed, giving longer bearings. These are more durable and cause less friction than the ordinary kind. The winding and releasing mechanism of the shutter is made of steel, case hardened, which will stand the strain of high-speed work.

The focusing hood is large and spacious, giving a full view of the field, with a complete eye shield fitting the contour of the face, permitting the operator to view the image on the focusing screen, right-side up, with the greatest ease. The camera is opened ready for focusing by pressing a small lever placed conveniently near the right thumb, when carrying the camera. The cover operating the focusing hood is likewise opened automatically, and the construction of this cover is such that the camera may be carried ready for use while it is open. The lens cover opens automatically the moment the front is racked out. Tension springs bearing against the side arms prevent the front of the camera from moving back or forth when the camera is held in an inclined position. The camera is provided with a large lens board and ample lens space to accommodate Anastigmat Lenses.

A detachable, spring-actuated panel holds the plate holder or film pack adapter in place. This panel may be detached whenever the Graflex Magazine Plate Holder or Graflex Cartridge Roll Holder is used.

Specifications

Dimensions	.	.	.	.	.	11 x 8 $\frac{3}{8}$ x 9 $\frac{3}{4}$
Focal capacity	.	.	.	.	.	14 inches
Weight	.	.	.	.	.	10 $\frac{1}{2}$ lbs.
Size of Lens board	.	.	.	.	.	4 x 4 inches
Minimum focus of Lenses accommodated	.	.	.	.	.	7 $\frac{1}{2}$ inches



Prices

5 x 7

Press Graflex without Lens, including one Double Plate Holder	\$110.00
With B. & L.-Zeiss Tessar Lens, Series II b, No. 6, f -6.3	169.50
With B. & L.-Zeiss Tessar Lens, Series I c, No. 16, f -4.5	182.00
With B. & L.-Zeiss Protar Lens, Series VII a, No. 13, f -6.3	216.50
With B. & L. Plastigmat Lens, No. 6, f -6.8	200.00
With Cooke Lens, Series II, No. 22, f -4.5	167.50
With Cooke Lens, Series IV, No. 27, f -5.6	164.00
With Goerz Lens, Series I b, No. 3, f -4.5	177.00
Graflex Magazine Plate or Cut Film Holder, extra	15.00
Film Pack Adapter, leather covered, extra	7.50
Cartridge Roll Holder, leather covered, extra	10.00
Leather Case for Camera and Plate Holder or Adapter attached, with Lock and Key	16.00
Extra Graflex Holders, each	3.50
Extra Lens boards, each	.75

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.



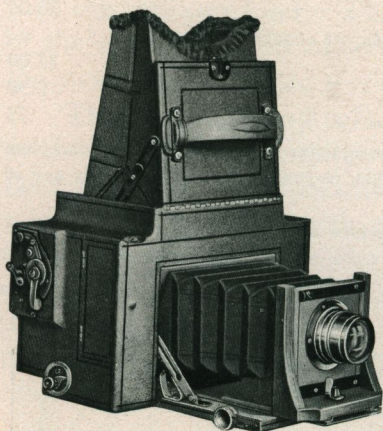


THE 3A GRAFLEX

FOLMER'S PATENT FEBRUARY 5, 1907.

Film simplicity and convenience combined with the Graflex idea have produced in the 3A Graflex, a camera of remarkable utility.

The added advantages of a daylight loading film arrangement in connection with the other recognized superior features of the Graflex Camera should really constitute the ideal hand camera. This, together with the consideration that no extra attachments are required, and that the film used, $3\frac{1}{4} \times 5\frac{1}{2}$, is of a standard size, obtainable anywhere, and of most beautiful proportions for hand camera work, leaves little to be desired for a complete, convenient and compact equipment.



3 A Graflex

The 3A Graflex Camera is designed to take 3A Kodak film, for pictures $3\frac{1}{4} \times 5\frac{1}{2}$. It is of the folding type, incorporating all the features of the regular Graflex, and on account of being an exclusive film, as well as folding type of camera, it is much more compact.

The regular Graflex Focal Plane Shutter, giving various instantaneous exposures from $\frac{1}{10}$ to $\frac{1}{1000}$ part of a second, and time exposures of any duration, is a part of this camera. It is also fitted with a safety device, preventing the re-winding of shutter while the mirror is up, thus eliminating the danger of fogging film. The front is drawn out on a platform similar to the ordinary folding camera. This platform is fitted with a metal track running in guide ways, which are carefully milled from thick brass. The track being wide and perforated in the

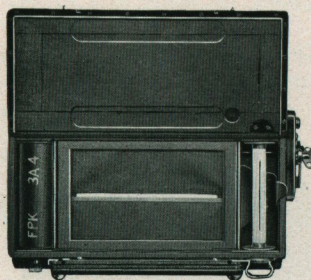
center, affords extra lens space, thus gaining compactness. Focusing is done by a carefully adjusted rack and pinion. When the camera is closed the lens recedes into the body of the camera, swinging the mirror and bellows frame back into a very compact space.

The back is hinged and when opened affords easy access to the film spool compartments. The unexposed spool of film is placed in the film pocket on left side of



3 A Graflex Closed

camera, and held between two spring actuated centers. These centers are drawn out and turned to the right to lock, permitting the spool to be removed or a new one re-inserted. The receiving spool at right end engages the sliding center in the upper part of the compartment, the lower centers upon the web of the winding key. A small strap is placed in the bottom of this film compartment, facilitating the removal of the exposed roll of film. This back is locked securely by means of a sliding bolt. The surplus space at either end of the camera is converted into storage pockets for extra spools of film.



Section of Back of 3 A Graflex
Showing Film Holder

The upper part of the focusing hood, which opens automatically when the cover of camera is raised, is shaped to fit the contour of the face, excluding all outside light and enabling the operator to focus perfectly.

The body of the camera is made from selected mahogany, thoroughly kiln-dried, lock-jointed, and covered with the best quality of Persian Morocco. All exposed wood parts are ebonized, and metal parts oxydized in gun metal finish. Two tripod sockets are fitted.



The 3 A Graflex when fitted with a No. 7 Series VII a Zeiss Lens affords an ideal outfit, the camera having sufficient focal capacity to accommodate the doublet of $6\frac{3}{8}$ -inch equivalent focus, as well as the front single combination, used in its normal position in front of the mount.

Specifications.

Dimensions	. . . . .	$10\frac{1}{4} \times 5 \times 6\frac{7}{8}$
Focal capacity	. . . . .	10 inches
Weight	. . . . .	$4\frac{1}{2}$ lbs.
Size of Lens board	. . . . .	3 x 3 inches
Minimum focus of Lenses accommodated	. . . . .	6 inches

Prices

		$3\frac{1}{4} \times 5\frac{1}{2}$
3 A Graflex without Lens	. . . . .	\$ 75.00
With B. & L.-Zeiss Tessar Lens, Series II b, No. 5 a, f -6.3	. . . . .	124.00
With B. & L.-Zeiss Protar " " VII a, No. 7, f -6.3	. . . . .	143.00
With B. & L.-Zeiss Tessar " " I c, No. 15, f -4.5	. . . . .	122.00
With B. & L. Plastigmat " No. 2, f -6.8	. . . . .	115.00
With Cooke Lens, Series III a, No. 4, f -6.5	. . . . .	114.50
With Cooke Lens, Series IV, No. 27, f -5.6	. . . . .	129.00
With Isostigmat Lens, Series II, No. 4 a, f -6.3	. . . . .	109.50
Leather Case for 3 A Graflex, extra	. . . . .	11.00
Extra Lens boards, each	. . . . .	.60

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 NATURALISTS' GRAFLEX

FOLMER'S PATENT FEBRUARY 5, 1907.

The Naturalists' Graflex Camera is designed especially for naturalists' work in photographing birds, wild animals, or similar subjects where long-focus or tele-photo lenses are required.



The Naturalists' Graflex

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 x $6\frac{1}{4}$ x $9\frac{3}{4}$	Weight	7½ lbs.
Focal capacity	26 inches	Size of Lens Board	4 x 4 inches
Minimum focus of Lenses accommodated			$12\frac{3}{4}$ inches

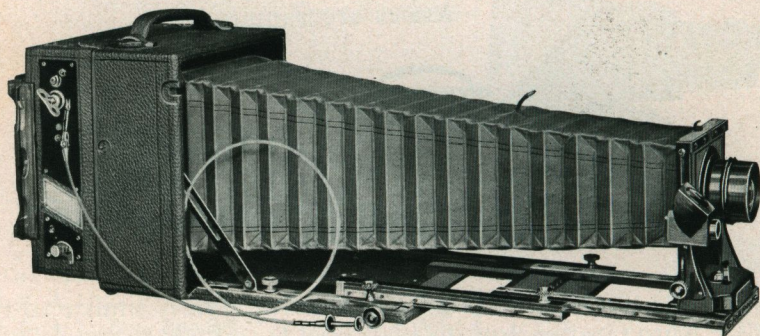
Prices

Naturalists' Graflex without Lens, including one Double Plate Holder	4 x 5
With B. & L.-Zeiss Protar Lens, Series VII a, No. 19, f-6.3	\$190.00
With Goerz Lens, Series III, No. 6, f-6.8	378.50
B. & L. High Power, Tele-Photo Attachment, extra	297.00
Graflex Magazine Plate or Cut Film Holder, extra	24.00
Film Pack Adapter, leather covered, extra	13.00
Extra Graflex Holders each	5.00
	2.50



THE REVOLVING BACK CYCLE GRAPHIC

In keeping with the desire to continue to maintain for the Cycle Graphic its reputation as the foremost camera of its type,

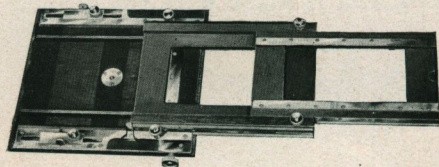


Cycle Graphic with Graflex Focal Plane Shutter attached

several very valuable improvements have been added. The new Revolving Back and the new adjustment for raising and lowering the front are the most notable.

Lenses working at a large aperture are necessarily much larger than those having a slower speed. The 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 it is one of the features which has given

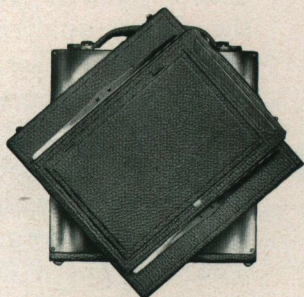


Cycle Graphic Bed extended

the Graphic its prestige 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, re-enforced 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 lens space when closed. The construction of these tracks



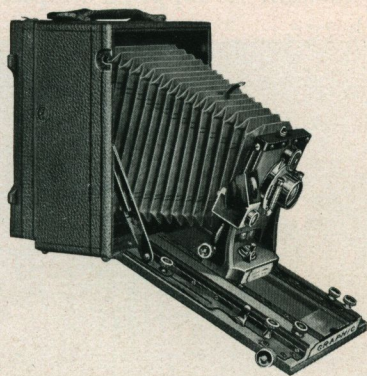
Rear of Cycle Graphic showing
Revolving Back

affords a wider base for the lens support and prevents any lateral or oscillating 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, which is 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 turn table 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.



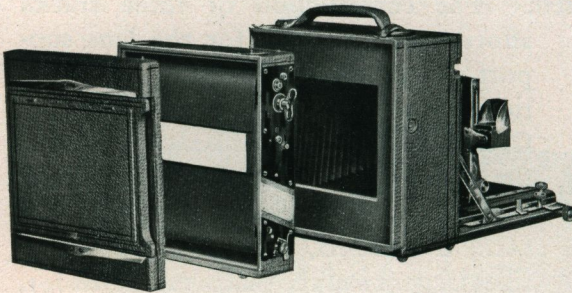
Cycle Graphic showing Drop Bed
arrangement

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.

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



Cycle Graphic showing Revolving Back and Graflex Focal Plane Shutter detached

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.





Specifications

	4 x 5	5 x 7	6½ x 8½	8 x 10
Dimensions . . .	6⅞ x 4 x 7⅛	8¾ x 4¾ x 9¼	10⅜ x 4½ x 10⅜	12 x 5 x 12
Focal capacity . .	17 inches	22½ inches	26 inches	30 inches
Weight . . .	3¾ lbs.	6¼ lbs.	7½ lbs.	10½ lbs.
Size of Lens board	2½ x 2½ in.	3⅛ x 3⅛ in.	4⅛ x 4⅛ in.	4½ x 4½ in.

Prices

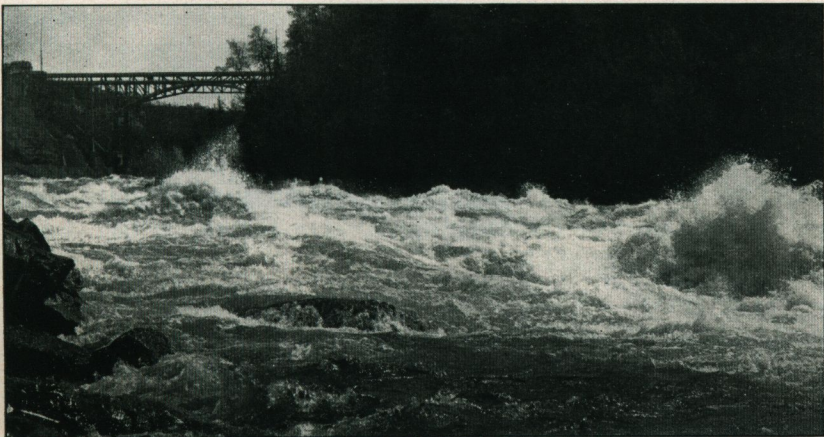
Including one Double Plate Holder and Sole Leather Carrying Case.

	4 x 5	5 x 7	6½ x 8½	8 x 10*
Revolving Back Cycle Graphic with Graphic Rapid Rectilinear Lens and Automatic Shutter . . .	\$ 40.00	\$ 50.00	\$ 62.00	\$ 75.00
Revolving Back Cycle Graphic without Lens or Shutter	32.00	40.00	49.00	60.00
With B. & L. Plagmat Lens and Volute Shutter	No. 2 89.00	No. 3 105.00	No. 5 142.50	No. 6 170.00
With B. & L.-Zeiss Protar Lens, Series VII a and Volute Shutter	No. 7 117.00	No. 10 140.50	No. 11 162.00	No. 17 247.50
With Goerz Series III Lens and Volute Shutter	No. 2 100.50	No. 3 121.00	No. 4 142.50	No. 6 187.00
Extra Plate Holders, each	1.00	1.25	1.75	2.00
Graflex Focal Plane Shutter, extra	22.00	24.00	27.00	31.00

*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 STEREOSCOPIC GRAPHIC

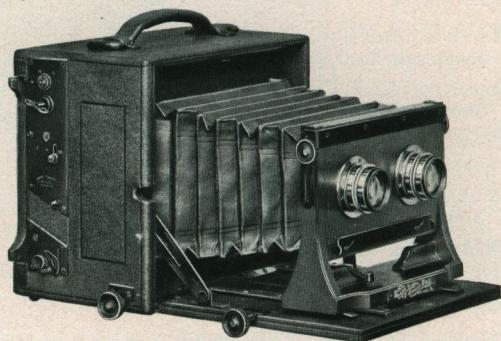
with Auto Graflex Shutter

FOLMER'S PATENTS NOVEMBER 5, 1901; FEBRUARY 5, 1907.

The Stereoscopic Graphic represents the highest type of folding stereo camera.

It is constructed of selected, kiln-dried mahogany, highly finished and covered with the best quality black grained leather. All metal parts are oxydized 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 cam-



Stereoscopic Graphic with Auto Graflex Shutter

era, 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 foreground. 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 33.)

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 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 regular lens, the camera can be used to excellent advantage for 5 x 7 work.

Specifications

Dimensions when closed,	8 $\frac{7}{8}$ x 5 $\frac{1}{2}$ x 7 $\frac{7}{8}$
Focal capacity	12 $\frac{3}{4}$ inches
Weight	6 lbs.
Size of Lens board	3 $\frac{1}{8}$ x 6 $\frac{1}{2}$ inches
Minimum focus of Lenses accommodated .	3 inches

Prices

Stereoscopic Graphic without Lenses, including one Double Plate Holder . .	\$ 80.00
Stereoscopic Graphic with matched Graphic Rectilinear Lenses	100.00
Stereoscopic Graphic with matched B. & L.-Zeiss Tessar Lenses II b, No. 4, f-6.3	150.00
Stereoscopic Graphic " " " " " " " II b, No. 5, f-6.3	163.00
Stereoscopic Graphic " " " " " " " Protar " VII a, No. 7, f-6.3	219.00
Stereoscopic Graphic " " " " " " " Plastigmat Lenses No. 2, f-6.8	163.00
Stereoscopic Graphic " " " " " " " Protar Lenses V, No. 1	128.00
With matched Cooke Lenses, Series III, No. 3 $\frac{1}{2}$, f-6.5.	157.50
With matched Goerz Lenses, Series III, No. 1, f-6.8	192.50
Extra for B. & L.-Zeiss Tessar Lens, Series II b, No. 6, f 6.3 for full-size plate	59.50
Extra for B. & L.-Zeiss Protar " " " VII a, No. 10, f-6.3 for full-size plate	82.00
Leather Carrying Case, extra	10.00
Graphic Plate Holders, extra	1.25

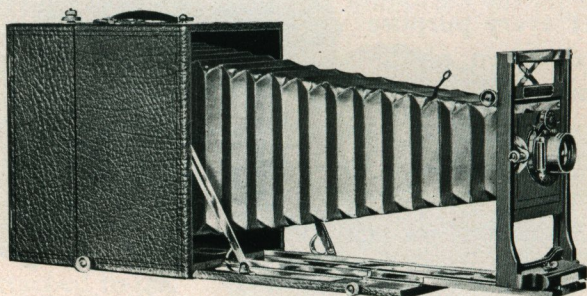
To insure proper fitting, we recommend that cameras be bought from us complete with lenses as listed. We will not hold ourselves responsible for results with any of our cameras when lenses are not fitted by us.

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



THE CIRKUT CAMERAS AND OUTFITS

Designed for the specific purpose of making panoramic pictures, it is now generally conceded that not alone does the Cirkut Camera perform that work, but that it performs it wonderfully well.



Cirkut Camera

For many years the great field of Panoramic Photography has been just a little 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 eye sees 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 two sizes, No. 10 and No. 16, the former for film either 6, 8 or 10 inches wide, the latter for 10, 12, 14 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 determine 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 performing the film after each exposure.

Cirkut Outfits are supplied in two sizes, No. 6 and No. 8, the former being a special 5 x 7 hand camera to which is fitted the Cirkut Attachment, while the No. 8 is an attachment fitted to a 6½ x 8½ camera. The No. 6 Cirkut Outfit takes 6½ inch film, and negatives up to six 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 No. 6 and No. 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 picture.

The camera itself is of the best type of construction, substantially built in every particular, with rising and falling front.

Prices

Including Sole Leather Carrying Case for Camera and extra Case for Tripod.

	No. 10	No. 16
Cirkut Cameras fitted with Turner-Reich Convertible Anastigmat Lens Series II and No. 4 Century Shutter	\$290.00	\$425.00
	No. 6	No. 8
Cirkut Panoramic Outfits complete	\$112.50	\$175.00

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



ANASTIGMAT LENSES

The 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.

THE GRAFLEX FOCAL PLANE SHUTTER

FOLMER'S PATENT, FEB. 5, 1907, AND APR. 21, 1908.

For 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

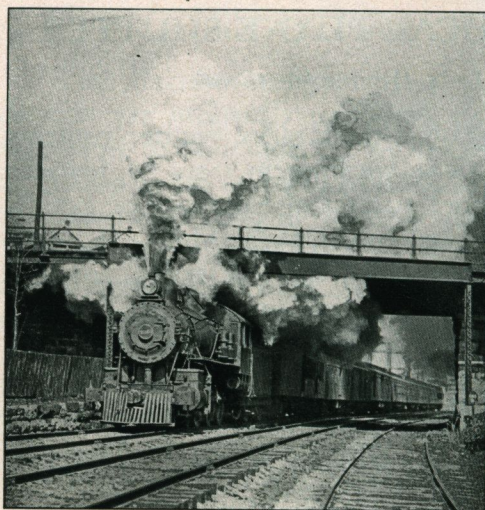


moving objects, such as horse and automobile races, railroad trains, foot-ball games, base-ball contests, etc., there is no style of shutter that can equal the Graflex. And while constructed primarily for high-speed work, it is also adapted for slow automatic exposures and time exposures of any duration. 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. With the between-lens type of shutter there is only a fraction of the exposure given with the working aperture of the lens, varying from that down to the pinhole. It therefore follows that with the between-lens type of shutter, high-speed exposures would be ineffective, owing to the method of lighting.

By simply turning a small key the speed can be varied from time to $\frac{1}{1000}$ part of a second. The maximum speed of an ordinary shutter placed at the diaphragm of a lens does not



exceed $\frac{1}{100}$ of a second and many shutters of this class do not give shorter exposures than $\frac{1}{50}$ of a second.

The Graflex Shutter is instantly set for any exposure by a *half-*

turn of the winding key. Dials on the outside indicate both the size of curtain aperture and the tension of roller spring controlling the speed.

The curtain of the Graflex Shutter is made on an entirely new principle—in one long piece, with apertures ranging from full opening to $\frac{1}{8}$ of an inch. This insures an absolutely uniform aperture for the admission of light, and not a wedge-shaped opening, as is so often the case with shutters having a double adjustable curtain.

The Graflex Shutter is as easy to operate as an ordinary shutter and can be adapted to all makes of folding plate cameras. Graflex Focal Plane Shutters are fitted to the Graphic without extra charge, but when ordered for other cameras we add cost of adapting.

Specifications

	4 x 5	5 x 7	6½ x 8½	8 x 10
Dimensions	6¼ x 6¼ x 2	8¼ x 8¼ x 2	9¾ x 9¾ x 2½	11½ x 11½ x 2½
Weight	15 oz.	22 oz.	26 oz.	32 oz.

Prices

	4 x 5	5 x 7	6½ x 8½	8 x 10
Graflex Focal Plane Shutter	\$22.00	\$24.00	\$27.00	\$31.00



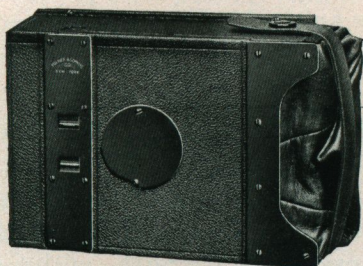


THE GRAFLEX MAGAZINE PLATE OR CUT FILM HOLDER

FOLMER'S PATENT, AUGUST 15, 1899.

The Graflex Magazine Plate Holder is made to carry twelve glass plates or cut films loaded into metal septums.

Each septum is numbered on the back, the number appearing before the ruby window of the magazine, as each exposure is made.



Graflex Magazine Plate Holder

When a plate is exposed the septum is drawn into a leather bag attached to the end of a 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 the thickness of the plate. The serial numbers are placed in these depressions. Springs at the back of the magazine force the septums forward and bring the front plate into exact register for each exposure.

When the 12 plates or cut films have been exposed, the extra septum or dark slide returns to the front, closing the magazine, so that it can be detached from the camera in daylight.

It is not necessary to expose all the plates or films before starting to develop. One or more plates can be removed from the magazine at any time in the dark-room.

Specifications

	$3\frac{3}{4} \times 4\frac{1}{4}$	4×5	5×7
Dimensions . . .	$5\frac{3}{4} \times 4\frac{1}{4} \times 2\frac{1}{8}$	$6\frac{1}{2} \times 5 \times 2\frac{1}{4}$	$8\frac{3}{4} \times 6\frac{1}{4} \times 2\frac{1}{2}$
Weight . . .	1 $\frac{1}{4}$ lbs.	1 $\frac{3}{4}$ lbs.	2 $\frac{3}{4}$ lbs.

Prices

$3\frac{3}{4} \times 4\frac{1}{4}$ each, . . .	\$ 13.00
4 x 5 " . . .	13.00
5 x 7 " . . .	15.00

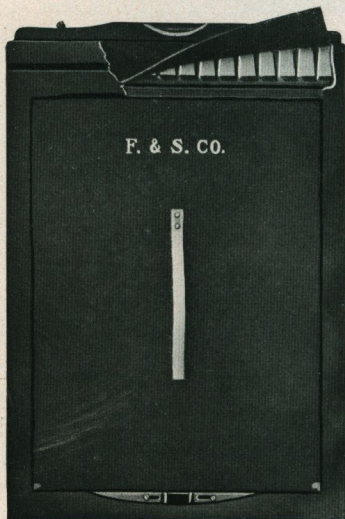


THE GRAFLEX PLATE HOLDER

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 finger spring cut-off, which excludes all light and prevents fogging of plates when drawing or replacing slides.



Graflex Plate Holder showing Cut-off

The holder is grooved, instead of 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 forefinger 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.

Prices

3¼ x 4¼ each	.	.	.	.	.	.	\$2.50
4 x 5 "	.	.	.	.	.	.	2.50
5 x 7 "	.	.	.	.	.	.	3.50



THE GRAPHIC PLATE HOLDER

FOLMER'S PATENT OCTOBER 25, 1904.

Graphic 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 finger spring 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* at all times.

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.



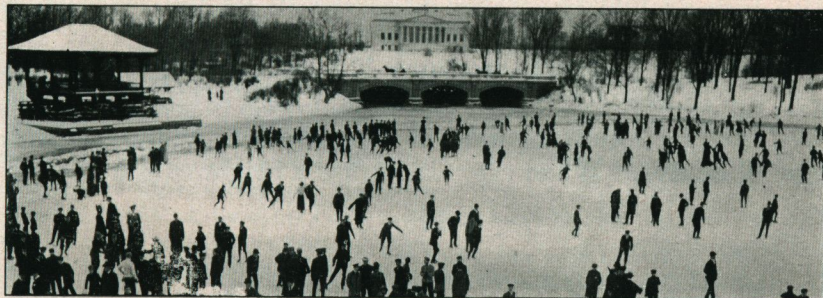
Section of Graphic Plate Holder showing Cut-off

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.

Prices

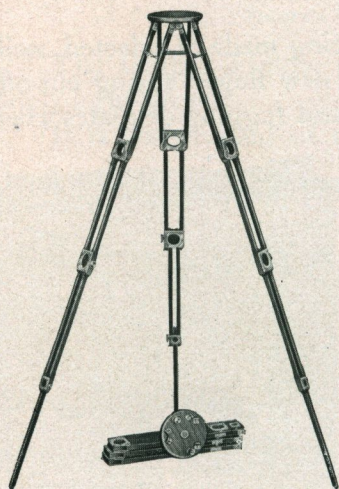
4	x	5	each	.	.	.	.	.	.	\$1.00
5	x	7	"	.	.	.	.	.	.	1.25
6½	x	8½	"	.	.	.	.	.	.	1.75
8	x	10	"	.	.	.	.	.	.	2.00





THE CROWN TRIPOD

FOLMER'S PATENT, JUNE 23, 1903.



The 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 shellacked. 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.

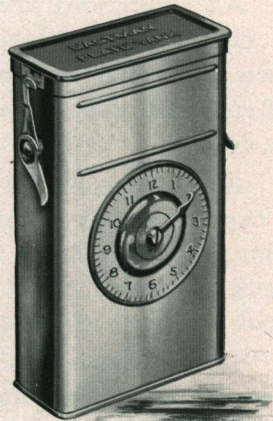
The No. 3 closed, measures 20 inches long and weighs with top, 70 ounces. When extended it has a height of $5\frac{1}{2}$ feet.

Price

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

THE EASTMAN PLATE TANK

The Eastman Plate Tank is the same in theory as the highly successful Kodak Film Tank, with, of course, such modifications as are rendered necessary by the physical difference between plates and film. That equally successful results are produced goes without saying. The Eastman Plate Tank consists of a metal solution cup, with tightly-fitting cover, a rack for holding twelve plates, or less, during development and fixing, and an ingenious loading block for loading the plates into the rack in the dark-room. The exposed plates are loaded into the rack and placed in the tank in the dark room, and the tank cover fastened in place. As soon as the plates have been lowered into the developer, the time is noted by watch or clock, and the hand on dial on front of tank set to indicate time when development will be complete. Development is allowed to continue for fifteen minutes, the tank being reversed several times. After development the developer is washed out of the plates, and the fixing bath poured into the tank. Fixing may be carried on in daylight.



Prices

Eastman Plate Tank, 4 x 5, including Solution Cup, Plate Rack, and Loading Block	\$ 3.50
Ditto, 5 x 7	4.50
Kit for 4 x 5 Tank, to take $3\frac{1}{4} \times 4\frac{1}{4}$ plates	.50
Kit for 5 x 7 Tank, to take $4\frac{1}{4} \times 6\frac{1}{2}$ plates	.75
Eastman Plate Tank Developer Powders, for 4 x 5 tank, per pkg., $\frac{1}{2}$ doz.	.20
Ditto, for 5 x 7 tank, per package, $\frac{1}{2}$ dozen	.35
Kodak Acid Fixing Powder, per 1-pound package	.25



OUR TERMS

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

Remittance can be made by draft on New York, post office 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.

May 1, '08.

ACKNOWLEDGEMENT.

*We are indebted to J. E. Rogers, Mrs. C. R. Miller,
W. A. Staples, Mr. and Mrs. C. E. Woods and others
for the photographs used for our illustrations.*

DIN-2126

