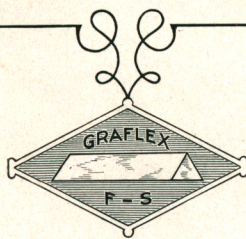




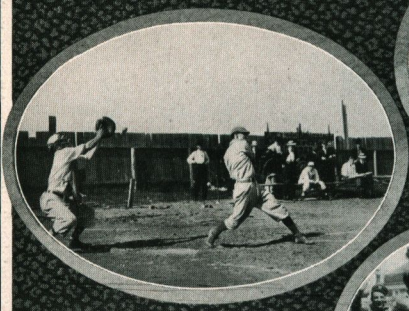
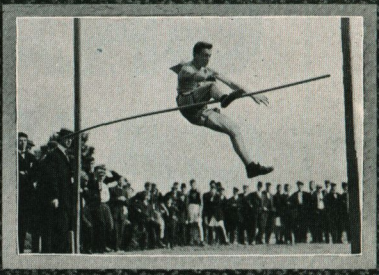
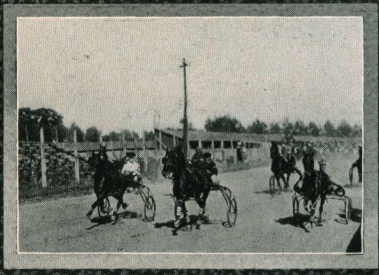
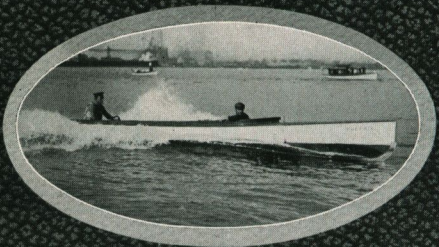
GRAFLEX

GRAFLEX AND GRAPHIC CAMERAS



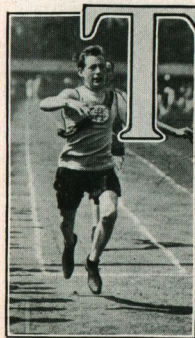
1910

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





THE GRAFLEX



TO those who desire a camera that will give the best possible results with the least degree of uncertainty, and, at the same time, requiring practically no technical information for its accurate use, the Graflex presents more and better reasons for its selection than any other camera.

One of the principal causes of the non-success with cameras of the usual type is the inability of the average person to judge distances. Few indeed are they who can tell accurately whether an object is ten, twelve, fifty or a hundred feet away from them; yet, with most cameras success or failure depends largely on the ability of the user to guess accurately the distance between the subject and the camera. With the Graflex this is eliminated, the distance between the photographer and his subject is immaterial,—a glance in the focusing hood shows the image full size of negative right side up *and the image is brilliantly visible up to the instant of exposure.* The focus may be altered instantly as the subject approaches or recedes from the camera—at no time is it necessary to guess the distance—the Graflex operator knows to a certainty that his subject is in focus, and that everything appearing on the focusing screen will with proper exposure be recorded in the negative; that the image as he sees it at the very instant of exposure, will be exactly reproduced in the finished print.

Another feature fully as valuable to the photographer is the Graflex Focal Plane Shutter, which is a part of every Graflex. This shutter is so well known and widely used that a detailed description is unnecessary, although





there are a few photographers who still associate the term Focal Plane Shutter with extremely brief exposures, overlooking the fact that the same principle that enables the operator to secure a fully timed negative in $\frac{1}{1000}$ or even $\frac{1}{1500}$ of a second, will also give perfect results under light conditions that with a shutter of the ordinary type would result in a badly underexposed negative. As the scientific construction of the Graflex Focal Plane Shutter permits the lens to work at its greatest efficiency during the entire period of exposure, it is possible to make "snap shots" indoors, in the shade, or on dark days.

These are a few of the reasons why the Graflex is fast supplanting all other cameras in the hands of those who wish to secure a camera that will give the greatest possible percentage of perfect results with the least uncertainty.

There is no adjustment or improvement that has ever been added to a camera that has done as much to eliminate photographic uncertainties as the reflecting mirror as applied to the Graflex. This mirror is set at such an angle that it reflects the image from the lens to a ground-glass screen on top of the camera and shows the object to be





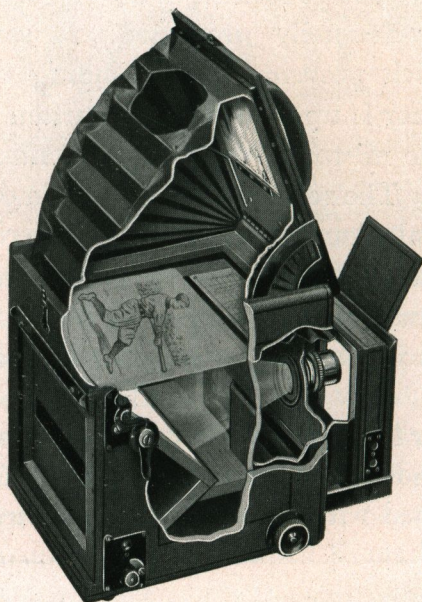
photographed, right side up and the same size that it will appear in the negative. As the mirror is released by a push button on the left side of the camera, it releases the shutter automatically just as the mirror itself swings up out of the cone of light. The rays reflected by the mirror to the ground glass in the top of the camera register absolutely with the recording plane. As the mirror seats against an air cushion formed in the top of the camera, all vibration is effectually prevented. A safety device is provided which prevents the rewinding of the curtain while the mirror is up, allowing the curtain to be rewound only when the mirror is set, thus preventing fogging of plate or film. 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, thus preserving the original brilliancy and efficiency of the mirror. It is even far superior to a silvered surface mirror.

The shutter is unquestionably one of the most important parts of a photographic camera, and the fact that every Graflex is fitted with a specially constructed Focal Plane





Shutter increases the efficiency of the camera to an extent that is difficult to realize by those who are accustomed to shutters of the between-lens type. The remarkable success achieved by this shutter is not alone due to its marvelous effectiveness, but also to its extreme simplicity, durability and ease of operation. The wide use of the Graflex Focal Plane Shutter and the phenomenal results that it has



Sectional Illustration showing
Graflex Principle

accomplished have so firmly established its reputation for superiority over all other types of shutters, that little need be said on this subject. A more extended discussion, however, of the relative advantages of the Focal Plane Shutter over those of the between-lens type will be found on pages 43 and 44.

The Graflex Focal Plane Shutter consists of a long curtain, with fixed apertures varying from full opening to an eighth of an inch, and so constructed that the aperture





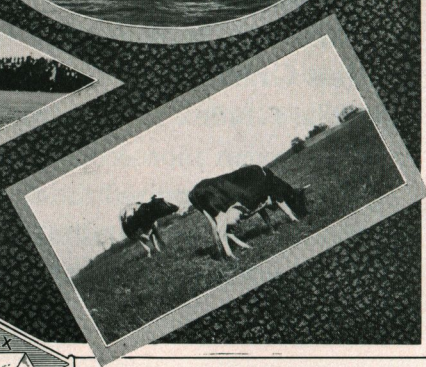
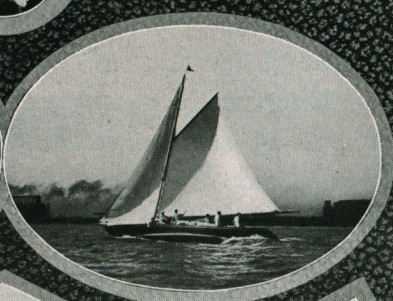
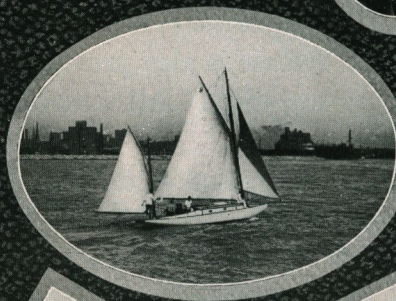
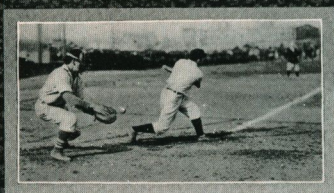
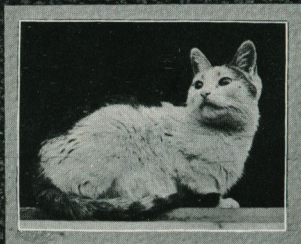
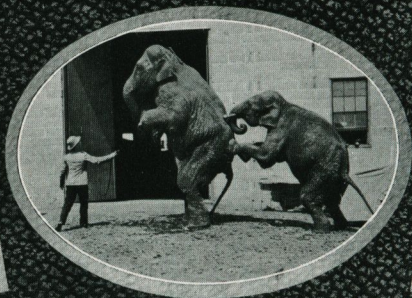
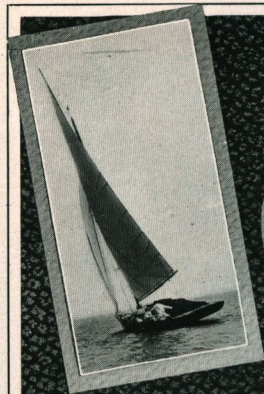
retains, during exposure, an absolutely uniform, parallel—not a wedge-shaped—opening.

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. The shutter may be set for time or instantaneous exposures 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 Graflex itself is made of mahogany, covered with fine Persian morocco leather. All visible wood parts are given a fine ebonized finish. The metal work is oxidized—a beautiful gun metal effect being secured. In the Auto, Press and Naturalists' Graflex the front runs out on two







side arms milled from heavy brass, running between metal guides. In the folding front models the platform is fitted with a metal track running in guideways, carefully milled from thick brass, 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 and, 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.

We have mentioned but a few of the more important Graflex features; there are, however, many minor features in the Graflex that are given the same careful thought and painstaking care to the smallest detail.





THE 1A GRAFLEX

FOLMER'S PATENT FEBRUARY 5, 1907



THE 1A Graflex is constructed with a particular view to furnishing a camera of the highest possible type with all the exclusive Graflex features, occupying the least possible space, and at the same time combining Graflex construction with film simplicity and convenience. The 1A Graflex is exceedingly compact—the ideal camera for the tourist—and makes a negative of very pleasing proportions, $2\frac{1}{2} \times 4\frac{1}{4}$ inches on regular Kodak Film, which can be procured anywhere camera supplies are sold.

With the 1A Graflex, as with the other Graflex models, it is possible to see the image the size it will appear in the negative up to the instant of exposure, and make exposures of any duration from time to $\frac{1}{1000}$ of a second, the 1A Graflex being fitted with the regular Graflex Focal Plane Shutter. This camera is also fitted with a safety device which prevents the winding of the shutter curtain until the mirror is in position for focusing and making of exposure; this insures the setting of shutter, and what is more important prevents the unintentional fogging of film. In order to make the 1A Graflex 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 platform is fitted with a track made of heavy milled brass, a stop being adjusted in a position indicating the universal focus of the lens, which permits the camera to be used for general "fixed focus" work as well as photography involving the utmost accuracy of focus. The depressed platform and the fact that the lens, mirror and bellows all recede into the body of the camera produce an instrument of unusual compactness.

The focusing hood is supported by "lazy tongs" which insure rigidity, a unique device being employed to hold the hood in position when extended. A spring actuated eye-shield excludes extraneous light, adding much to ease and accuracy when focusing.

The back of the camera is made of aluminum, leather covered, and is removed and attached in the same manner as the back on the 1A Kodak. Another improvement adding much to the ease of operation of the 1A Graflex is the method of adjusting 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

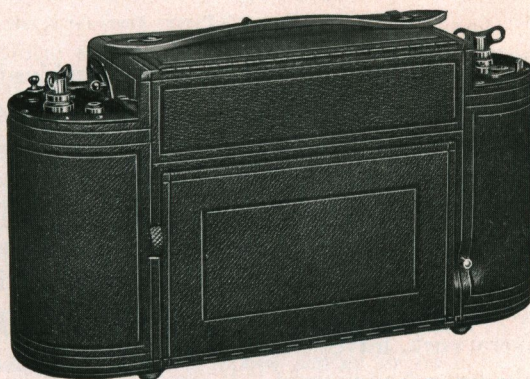




Exact size of picture made with $2\frac{1}{2} \times 4\frac{1}{4}$ 1A Graflex

key, when drawn out and given a slight turn, locks open; another turn in the opposite direction allows it to snap back into position, holding the spool securely in place and creating sufficient pressure to prevent play. Tension springs are provided in the film pockets to prevent the roll from unwinding and permitting film to warp.

Every detail of construction has been carefully considered, making the 1A Graflex the most compact, serviceable and efficient camera of the reflecting type ever before produced.



The 1A Graflex Closed

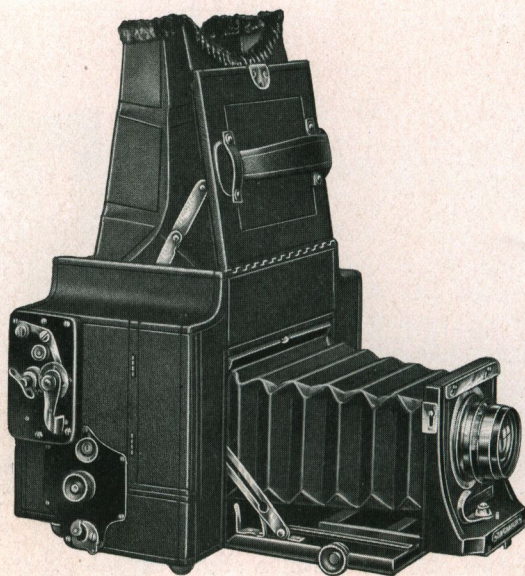
SPECIFICATIONS

Outside dimensions, closed $5\frac{1}{2} \times 9\frac{1}{2} \times 3$	Weight	59 ozs.
Focal capacity $6\frac{1}{2}$ inches	Size of lens board . . .	$2\frac{1}{4} \times 2\frac{3}{8}$ inches
Minimum focus of lenses accommodated $4\frac{1}{2}$ inches		

PRICES

1A Graflex without lens	\$ 60.00
With Zeiss Kodak Anastigmat Lens, <i>f</i> .6.3, No. 2	82.00
With B. & L.-Zeiss Tessar Lens, Series Ic, <i>f</i> .4.5, No. 14	100.50
With B. & L.-Zeiss Tessar Lens, Series IIb, <i>f</i> .6.3, No. 4	94.50
With Cooke Lens, Series IV, <i>f</i> .5.6, No. 25	98.00
Leather case for 1A Graflex, extra	6.00
Extra lens boards, each . . . . .	.40





THE 3A GRAFLEX

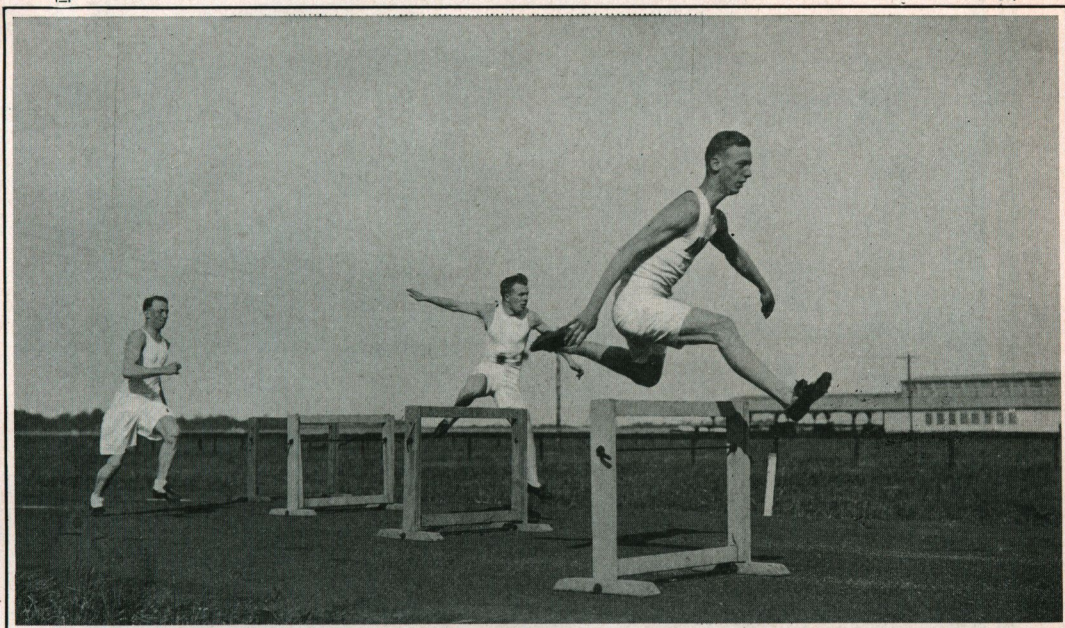
FOLMER'S PATENT FEBRUARY 5, 1907

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.

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





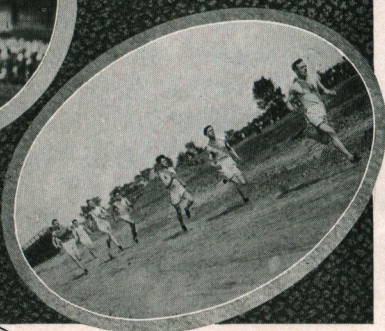
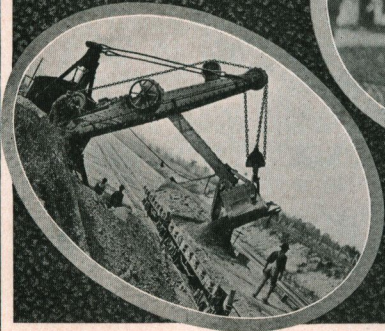
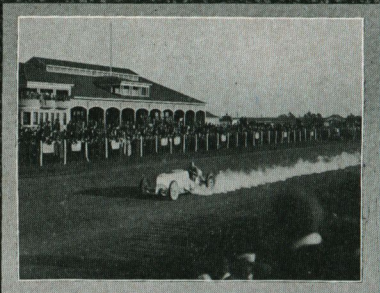
Exact size of picture made with the $3\frac{1}{4} \times 5\frac{1}{2}$ 3A Graflex

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 lower spool center in each of the film compartments is spring actuated, and when drawn out and given a slight turn will lock open, allowing the film spools to be easily placed in position or removed. In the film compartment for the exposed roll of film is fitted a tension spring that acts as an ejector, which facilitates the removal of the exposed roll of film. The back of the camera is locked with a unique spring actuated angle clasp, which securely locks the camera back and can be readily opened.

The surplus space at either end of the camera is converted into storage pockets for extra spools of film.







The 3A Graflex—Continued

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.



3A Graflex Closed

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 oxidized

in gun metal finish. Two tripod sockets are fitted.

The 3A Graflex when fitted with a No. 7 Series VIIa 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	$10\frac{1}{4} \times 5 \times 6\frac{7}{8}$	Weight	$4\frac{1}{2}$ lbs.
Focal capacity	10 inches	Size of lens board	3×3 inches
Minimum focus of lenses accommodated		6 inches	

PRICES

3A Graflex without lens	$3\frac{1}{4} \times 5\frac{1}{2}$ \$ 75.00
With Zeiss Kodak Lens, <i>f</i> .6.3, No. 4	105.50
With B. & L.-Zeiss Tessar Lens, Series IIb, <i>f</i> .6.3, No. 5a	125.50
With B. & L.-Zeiss Tessar Lens, Series Ic, <i>f</i> .4.5, No. 15a	132.50
With B. & L.-Zeiss Protar Lens, Series VIIa, <i>f</i> .6.3, No. 7	141.50
With Cooke Lens, Series IV, <i>f</i> .5.6, No. 27	129.00
With Cooke Lens, Series IIIa, <i>f</i> .6.5, No. 4	114.50
Leather case for 3A Graflex, extra	10.00
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.

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





THE AUTO GRAFLEX

FOLMER'S PATENT FEBRUARY 5, 1907

THE Auto Graflex, in general construction, conforms with the detail given on pages 6, 7 and 9.

The new focusing hood with which the Auto Graflex is now provided, adds greatly to the utility of this camera.

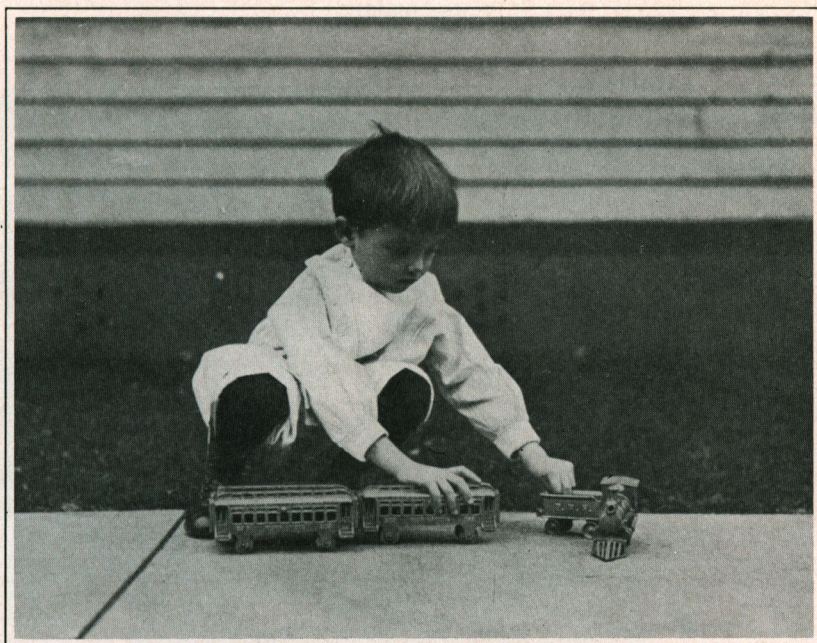
The regular Auto Graflex Focal Plane Shutter with safety device is a part of this camera. This shutter may be set at any speed, from time to $\frac{1}{1000}$ of a second. Two tripod sockets are supplied.

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.

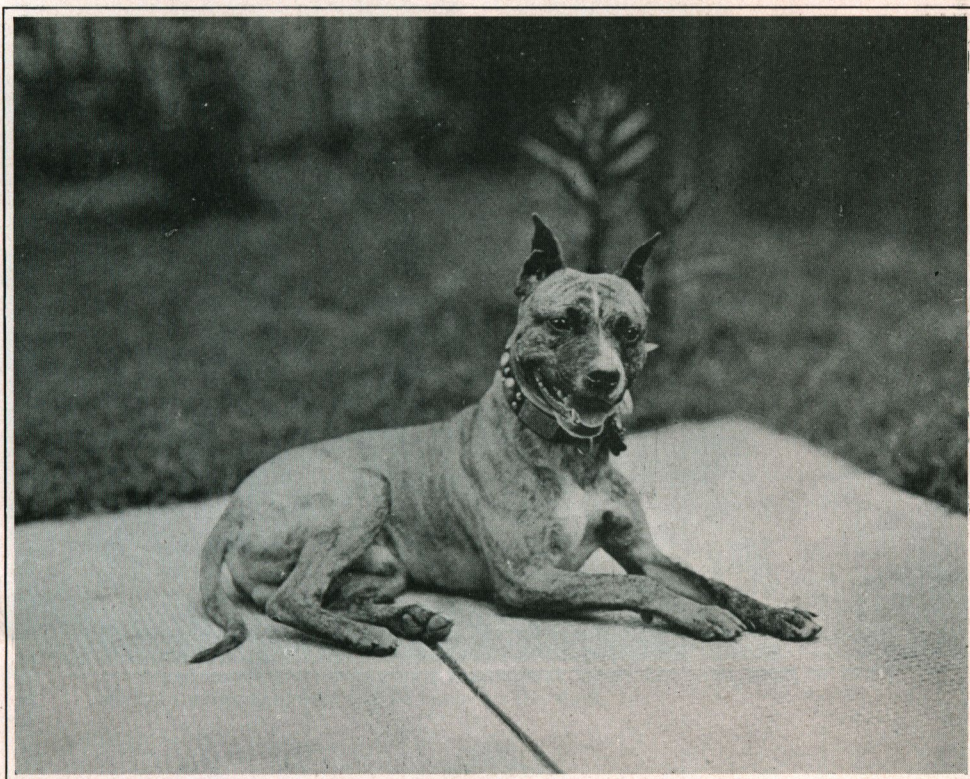
The Auto Graflex will take either the Graflex Magazine Plate Holder, which may be loaded with twelve glass plates; the Cartridge Roll Holder, which permits of the use of daylight loading roll film; or the Film Pack Adapter, which takes the Film Pack.

To it may be fitted any of the well-known Anastigmat Lenses. These will be found listed on pages 51 and 52.

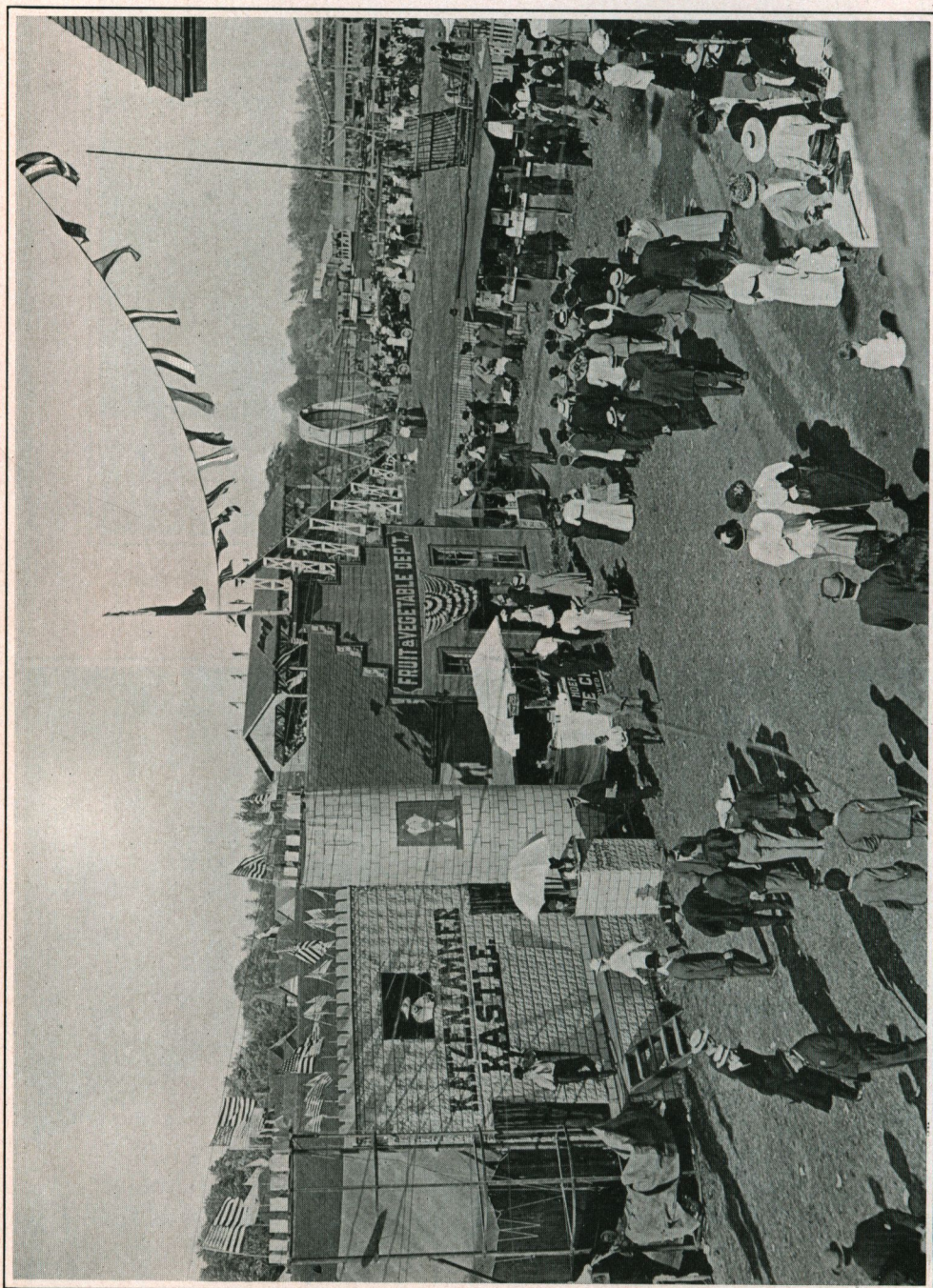




Exact size of picture made with $3\frac{1}{4} \times 4\frac{1}{4}$ Auto Graflex



Exact size of picture made with 4×5 Auto Graflex

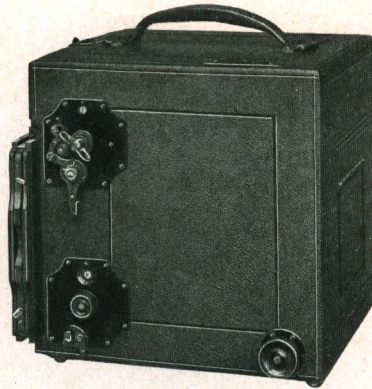


Exact size of picture made with 5 x 7 Auto Graflex



The Auto Graflex has surely established a new standard 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 .



Auto Graflex Closed

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 inches	6 inches	$7\frac{1}{2}$ inches

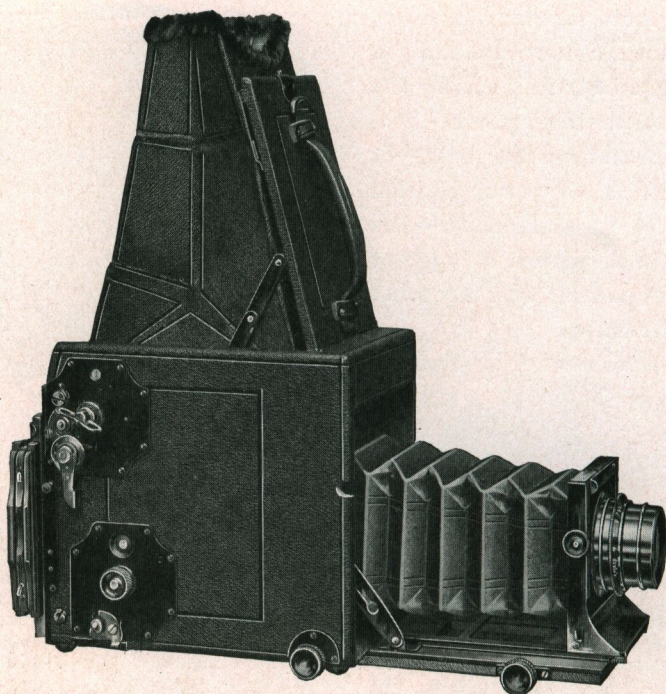
PRICES

	$3\frac{1}{4} \times 4\frac{1}{4}$	4×5	5×7
Auto Graflex without lens, including one double holder . .	\$55.00	\$ 65.00	\$ 80.00
With Zeiss Kodak Lens, <i>f</i> .6.3	No. 2 77.00	No. 3 92.00	No. 5 120.00
With B. & L.-Zeiss Tessar, Series IIb, <i>f</i> .6.3	No. 4 89.50	No. 5 101.00	No. 6 141.50
With B. & L.-Zeiss Tessar, Series Ic, <i>f</i> .4.5	No. 14 95.50	No. 15 112.00	No. 16 152.00
With Cooke, Series IV, <i>f</i> .5.6	No. 25 93.00	No. 26 108.00	No. 27 134.00
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	8.00	9.00	12.00
Leather case, for six plate holders, with lock and key	4.00	5.00	8.00
Leather case for camera and magazine plate holder or roll holder	9.50	10.50	14.00
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, AND JUNE 8, 1909

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.

A detailed description of the reflecting mirror will be found on page 6. On account of the mirror being longer, in order to intercept the cone of light for vertical as well as horizontal plate, it makes the body of the camera a trifle longer than that of the regular Auto Graflex. The front bed being fitted with a telescopic rack allows the front to be drawn out beyond the edge of platform, giving extreme bellows capacity. The fitting of two focusing pinions, one on the body of the camera and another on the front platform,

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The Revolving Back Auto

Graflex—Continued



Exact size of picture made with a 4 x 5 Revolving Back Auto Graflex

allows the main bed to be dropped out of the cone of light when using lenses of short or medium focus, the focus in this case being adjusted by using the rear pinion. Where long focus or single combinations of convertible lenses are used, the forward pinion on platform permits the front of camera being racked a considerable distance beyond forward edge of platform.

The new form of rising front is introduced in this camera, permitting full rise of front regardless of position of bellows, as when front of camera is racked in as far as it will go the entire bellows will rise, the bellows frame sliding in grooves.





The Revolving Back Auto

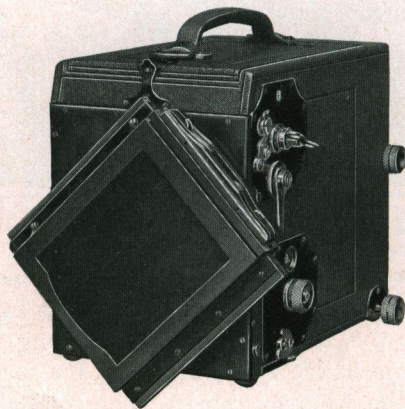
Graflex—Continued

The metal lens board support is riveted to the telescopic bed, affording a front of extreme rigidity and insuring perfect parallelism of front board and focal plane of camera.



Revolving Back Auto Graflex Closed

The focusing hood, being of the collapsible folding type similar to that supplied with the 3 A Graflex, affords a comfortable reading distance, and permits accurate focusing. By pressing the small



Revolving Back Auto Graflex

release catch near end of handle, the camera is opened, when the hood automatically comes into position for focusing.

The regular Auto Graflex Focal Plane Shutter with safety device





The Revolving Back Auto

Graflex—Continued

preventing re-adjusting of shutter before setting mirror, thus preventing fogging the plate or film, is fitted to this camera as on all other Graflex Cameras. For further details regarding the shutter see pages 43 and 44.

The Revolving Back Long Focus Auto Graflex Camera is made in two sizes, $3\frac{1}{4} \times 4\frac{1}{4}$ and 4×5 , with sufficient draw of bellows to accommodate the single elements of a No. 10 Series VIIa Zeiss Convertible Lens fitted to the $3\frac{1}{4} \times 4\frac{1}{4}$, and No. 13 Series VIIa fitted to the 4×5 .

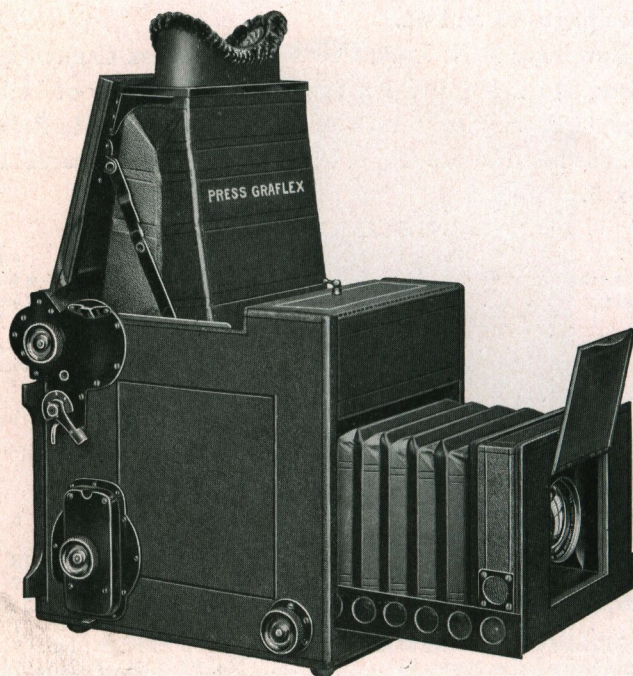
SPECIFICATIONS

	$3\frac{1}{4} \times 4\frac{1}{4}$	4×5
Dimensions when closed	$8\frac{1}{4} \times 5\frac{1}{2} \times 7\frac{1}{2}$	$9\frac{1}{2} \times 6\frac{1}{8} \times 8\frac{1}{2}$
Focal capacity	15 inches	18 inches
Weight	5 lbs.	$6\frac{3}{4}$ lbs.
Size of lens board	3×3 inches	$3\frac{3}{4} \times 3\frac{3}{4}$ inches
Minimum focus of lenses accommodated . . .	7 inches	8 inches

PRICES

	$3\frac{1}{4} \times 4\frac{1}{4}$	4×5
Revolving Back Long Focus Auto Graflex, without lens, including one double plate holder	\$110.00	\$125.00
Fitted with Zeiss Kodak Anastigmat Lens . .	No. 5 150.00	No. 6 179.00
Fitted with B. & L.-Zeiss Protar Lens, Series VIIa	No. 10 190.50	No. 13 230.00
Fitted with B. & L.-Zeiss Tessar Lens, Series Ic	No. 15a 167.50	No. 17 240.50
Fitted with B. & L.-Zeiss Tessar Lens, Series IIb	No. 5a 160.50	No. 7 208.00
Fitted with Cooke Lens, Series IIIa	No. 5 158.50	No. 7 216.00
Fitted with Cooke Lens, Series IV	No. 27 164.00	No. 27 $\frac{1}{2}$ 205.00
Graflex magazine plate or cut film holder, extra	13.00	13.00
Film Pack Adapter, leather covered, extra	4.50	5.00
Cartridge Roll Holder, leather covered, extra	7.50	7.50
Leather case for camera and Film Pack Adapter, with lock and key	10.00	11.00
Leather case for six plate holders, with lock and key	4.00	5.00
Leather case for camera and magazine plate holder or roll holder	11.00	13.00
Extra Graflex plate holders, each	2.50	2.50
Extra lens boards . . . . .	.60	.70





THE PRESS GRAFLEX

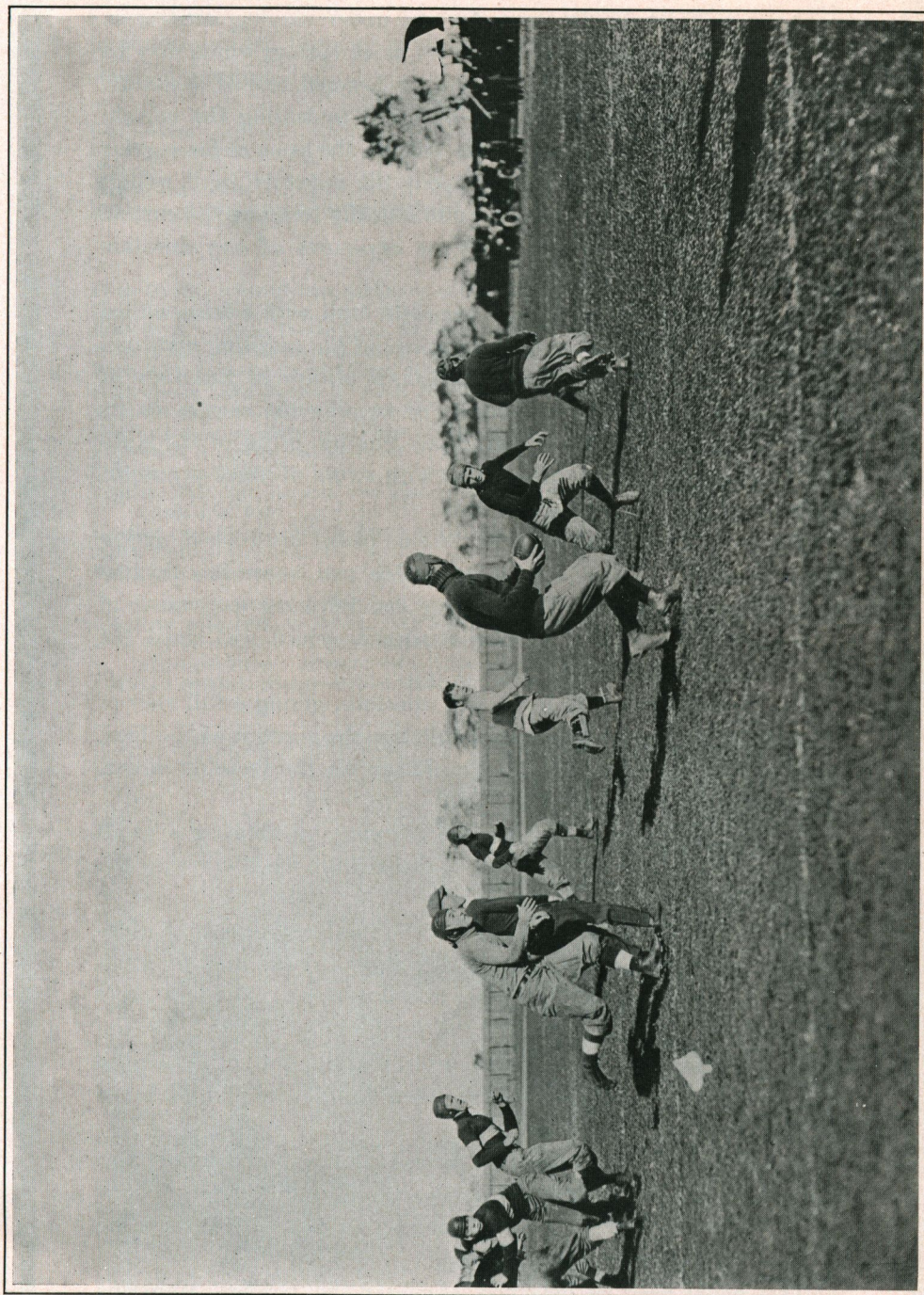
FOLMER'S PATENT FEBRUARY 5, 1907, AND JUNE 8, 1909

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 of sufficient length to give a bellows extension of 14 inches, while the special Press Focal Plane Shutter, which brings the curtain roller back of the focal plane, permits the fitting of lenses with an equivalent focus of 8 inches. This gives the





Exact size of picture made with the 5 x 7 Press Graflex



operator a wide choice in lenses for use under varying conditions.

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 $\frac{1}{5}$ 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 ground-glass 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, and may be employed for focusing when the camera is on a tripod or in an elevated position.

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	8 inches

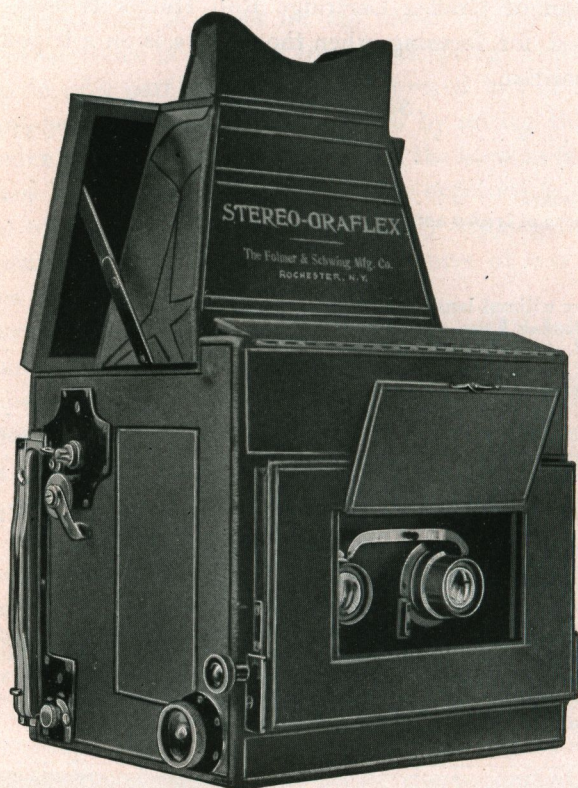
PRICES

	5 x 7
Press Graflex without lens, including one double plate holder	\$110.00
With Zeiss Kodak Lens, f.6.3, No. 5	150.00
With B. & L.-Zeiss Tessar Lens, Series IIb, f.6.3, No. 6	171.50
With B. & L.-Zeiss Tessar Lens, Series Ic, f.4.5, No. 16	182.00
With B. & L.-Zeiss Protar Lens, Series VIIa, f.6.3, No. 13	215.00
With Cooke Lens, Series II, f.4.5, No. 22	167.50
With Cooke Lens, Series IV, f.5.6, No. 27	164.00
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	15.00
Leather case for six plate holders, with lock and key	8.00
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 lens 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

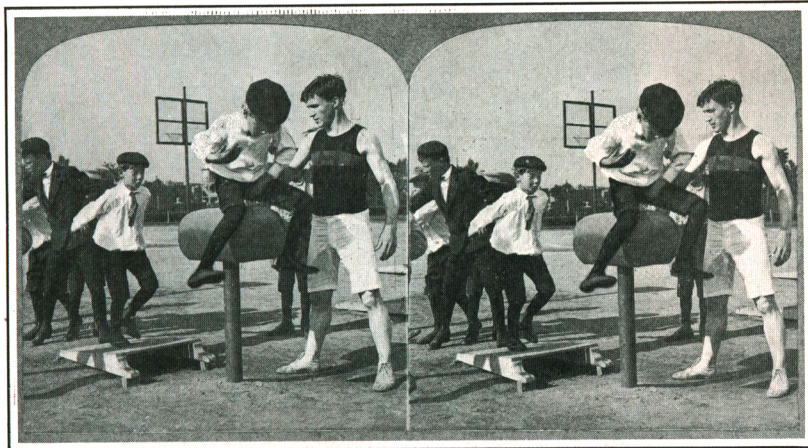
FOLMER'S PATENT FEBRUARY 5, 1907

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.

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,

[28





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.

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

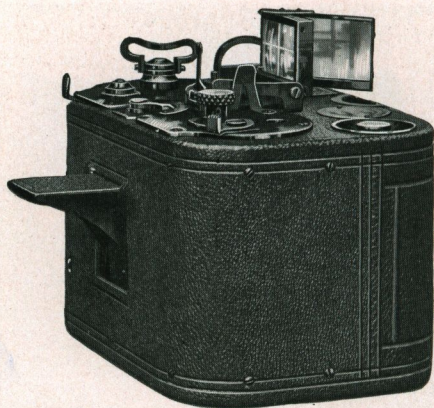
PRICES

Stereo Auto Graflex without lenses, including one double plate holder	\$200.00
With matched pair Zeiss Kodak Lenses, <i>f</i> .6.3, No. 3	254.00
With matched pair B. & L.-Zeiss Tessar, Series IIb, <i>f</i> .6.3, No. 5	272.00
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 Film Pack Adapter, with lock and key	12.00
Leather case for six plate holders, with lock and key	8.00
Leather case for camera and magazine plate holder or roll holder, with lock and key	14.00
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 NO. 0 GRAPHIC CAMERA

FOLMER'S PATENT FEBRUARY 5, 1907, AND APRIL 21, 1908

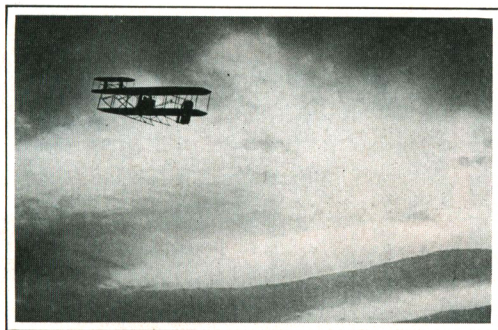
IN presenting the No. 0 Graphic we introduce a type of camera that is radically different from any other photographic instrument and possessing advantages that will at once appeal to photographic workers requiring a camera of the smallest possible size, extreme efficiency and, at the same time, so simple in operation that the merest novice in photography will secure the greatest possible percentage of perfect results. Briefly, 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 Plane Focal 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 body of the No. 0 Graphic is made of selected mahogany and aluminum covered with the best quality of Morocco leather.

The lens is the Zeiss Kodak Anastigmat $f.6.3$, having a focal length of three inches. The diaphragm is controlled from the out-





Exact size of picture made with No. 0 Graphic Camera

side 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. 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.

The shutter winding key is conveniently placed at the right of the camera, 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 $1\frac{5}{8} \times 2\frac{1}{2}$ inches, the film spool being adjusted between





The No. 0 Graphic Camera

Continued

two spring actuated centres, which upon being drawn out and given a slight turn to the right, lock 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.

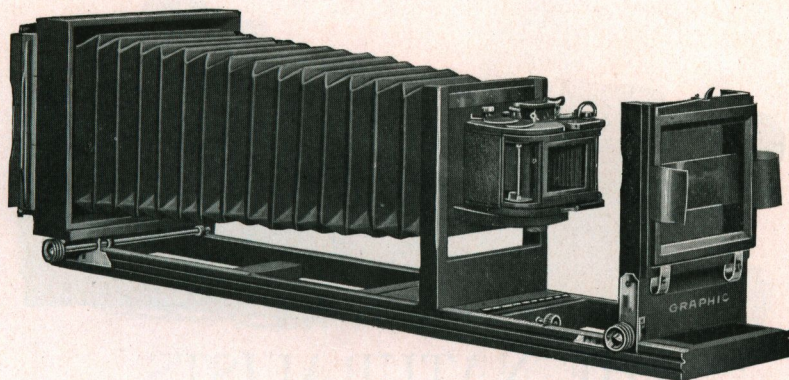
Every part of the No. 0 Graphic is adjusted with micrometer precision. The lens is of the best possible type for the work for which it is intended. The shutter is rapid enough for exposures of extremely short duration. This, together with the fact that every part of the picture is in perfect focus, makes 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 33.

SPECIFICATIONS

Dimensions	5 x 3 $\frac{1}{2}$ x 3 $\frac{1}{4}$
Weight	25 oz.
Price	\$50.00
Sole leather carrying case	4.00





THE NO. 0 GRAPHIC ENLARG- ING CAMERA

WITH 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.

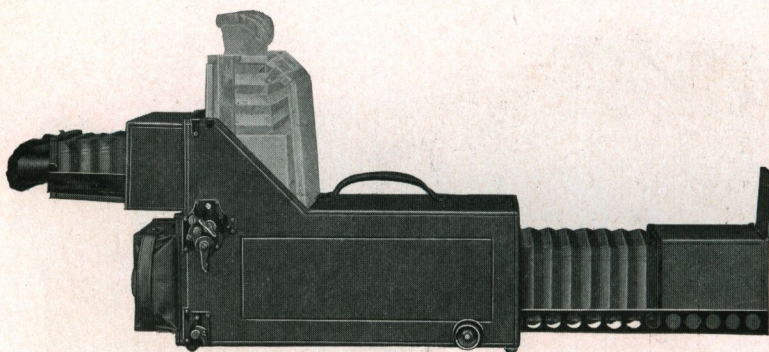
This camera is extremely easy to operate, and the making of enlargements with it is no more complicated than the making of prints in the usual way. The negative to be enlarged is placed in the carrier while the No. 0 Graphic is placed in position with the back removed and the lens shade elevated; the 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. The fact that the lens used for making the negative is used for enlarging, all the brilliancy and detail is retained in the enlargement.

The No. 0 Graphic Enlarging Camera is furnished with mats for making 3A ($3\frac{1}{4} \times 5\frac{1}{2}$) enlargements only, although a negative 4×5 and smaller may be enlarged to any size up to $6\frac{1}{2} \times 8\frac{1}{2}$, full capacity of camera.

PRICE

No. 0 Graphic Enlarging Camera, including holder \$24.00





THE NATURALISTS' GRAFLEX

FOLMER'S PATENT FEBRUARY 5, 1907, AND APRIL 21, 1908

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 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.

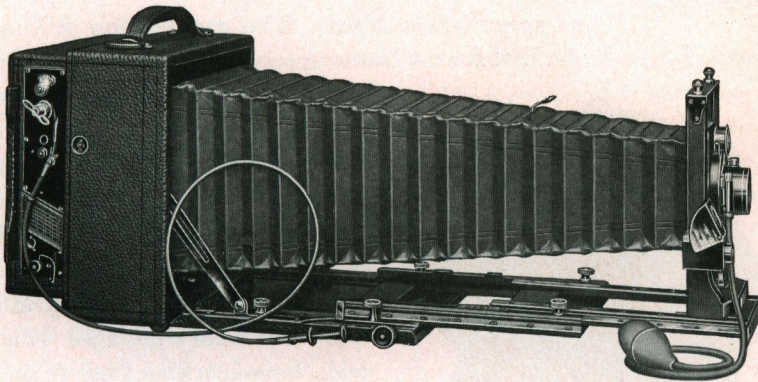
SPECIFICATIONS

Dimensions.	$19 \times 6\frac{1}{4} \times 9\frac{3}{4}$	Weight	$7\frac{1}{2}$ lbs.
Focal capacity	26 inches	Size of lens board	4×4 inches
Minimum focus of lenses accommodated		$12\frac{3}{4}$ inches	

PRICES

Naturalists' Graflex, 4×5 , without lens, including one double plate holder	\$190.00
With B. & L.-Zeiss Protar Lens, Series VIIa, No. 19, $f.6.3$	376.00
B. & L. High Power, Tele-Photo Attachment, extra	37.00
Graflex magazine plate or cut film holder, extra	13.00
Film Pack Adapter, leather covered, extra	5.00
Extra Graflex holders, each	2.50



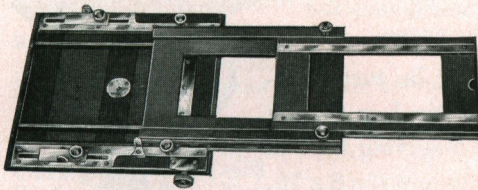


THE REVOLVING BACK CYCLE GRAPHIC

IN keeping with the desire to continue to maintain for the Cycle Graphic its reputation as the foremost camera of its type, 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 is one of the features which has given the Graphic its prestige with scientific and advanced photographic workers.



Cycle Graphic Bed extended

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





The 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 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.

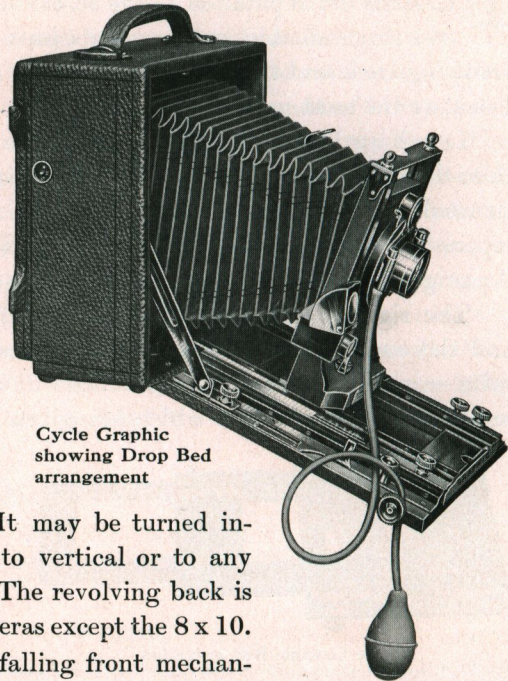


Rear of Cycle Graphic showing
Revolving Back

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.



Cycle Graphic
showing Drop Bed
arrangement





The 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.



SPECIFICATIONS

	4 x 5	5 x 7	6½ x 8½	8 x 10
Dimensions . . .	6⅞ x 4 x 7⅞	8¾ x 4¼ x 9¼	10⅜ x 4½ x 10¾	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.	4½ x 4⅛ in.	4½ x 4½ in.

PRICES

Including one double plate holder and sole leather carrying case

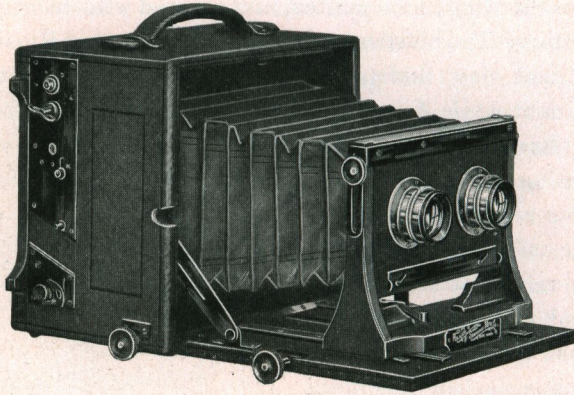
	4 x 5	5 x 7	6½ x 8½	8 x 10*
Revolving Back Cycle Graphic with Graphic Rapid Rectilinear Lens and Automatic Shutter	\$ 40.00	\$ 50.00	\$ 62.00	\$ 75.00
With Zeiss Kodak Anastigmat Lens and Volute Shutter	No. 3 78.30	No. 5 102.30	No. 6 122.70	
With Zeiss Kodak Anastigmat Lens and Compound Shutter	No. 3 77.55	No. 5 100.05	No. 6 124.20	
With B. & L.-Zeiss Protar Lens, Series VIIa, and Volute Shutter	No. 7 117.80	No. 10 142.80	No. 13 173.70	No. 17 247.50
With B. & L.-Zeiss Protar Lens, Series VIIa, and Compound Shutter	No. 7 117.05	No. 10 140.55	No. 13 175.20	No. 17 249.50
With Cooke Lens, Series III, and Volute Shutter	No. 4d 90.80	No. 6d 115.30	No. 6½d 143.70	No. 8 198.50
With Cooke Lens, Series III, and Compound Shutter	No. 4d 88.30	No. 6d 116.80	No. 6½d 145.20	No. 8 200.50
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 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 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 43.)

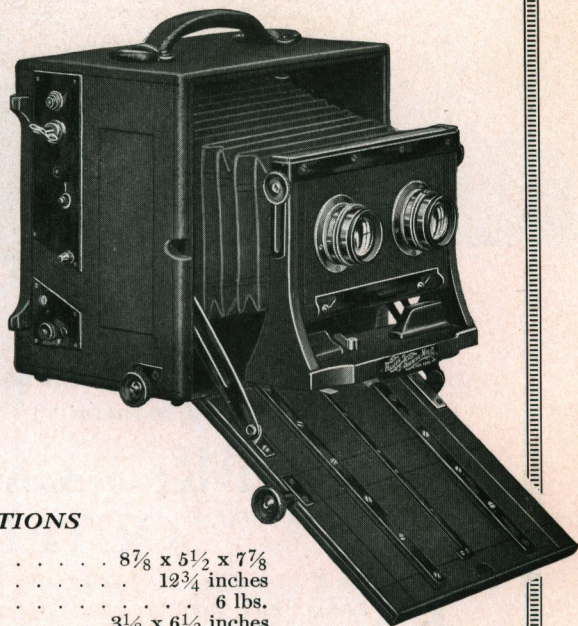
Our special spring roller partition automatically adjusts itself to lenses of any focal length, as the front is racked in and out. A removable, spring actuated ground-glass focusing screen is fitted to





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 ⁷ / ₈ x 5 ¹ / ₂ x 7 ⁷ / ₈
Focal capacity	12 ³ / ₄ inches
Weight	6 lbs.
Size of lens board	3 ¹ / ₈ x 6 ¹ / ₂ inches
Minimum focus of lenses accommodated	3 inches

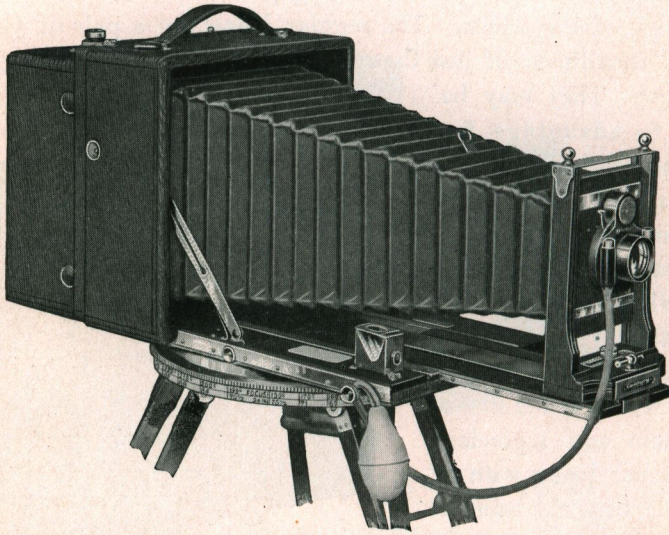
PRICES

Stereoscopic Graphic without lenses, including one double plate holder	\$ 80.00
Stereoscopic Graphic with matched Graphic Rectilinear Lenses	100.00
Stereoscopic Graphic with matched Zeiss Kodak Anastigmat Lenses, No. 3, f.6.3	134.00
Stereoscopic Graphic with matched B. & L.-Zeiss Tessar Lenses IIb, No. 4, f.6.3	149.00
Stereoscopic Graphic with matched B. & L.-Zeiss Protar Lenses VIIa, No. 7, f.6.3	213.00
Stereoscopic Graphic with matched B. & L.-Zeiss Plastigmat Lenses, No. 2, f.6.8	160.00
Stereoscopic Graphic with matched B. & L.-Zeiss Protar Lenses V, No. 1	126.00
With matched Cooke Lenses, Series III, No. 3 ¹ / ₂ , f.6.5	155.00
Extra for Zeiss Kodak Anastigmat Lens No. 5, f.6.3, for full-size plate	40.00
Extra for B. & L.-Zeiss Protar Lens, Series VIIa, No. 10, f.6.3 for full-size plate	80.50
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.





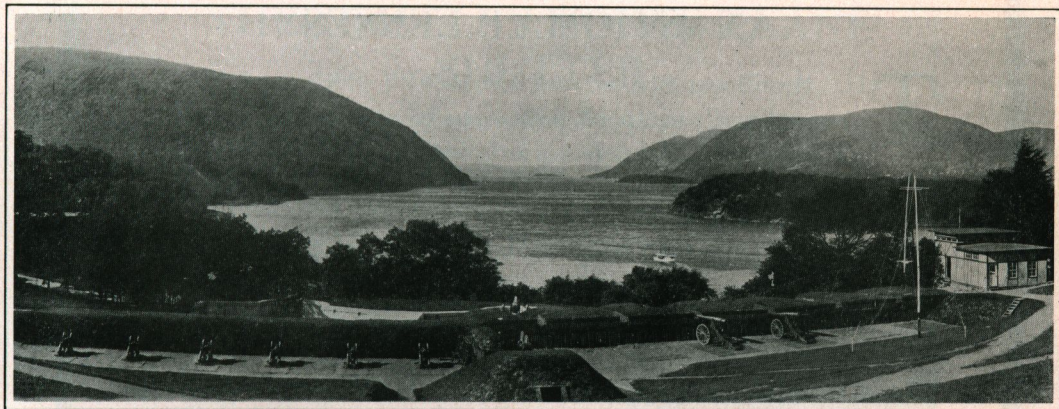
THE CIRKUT CAMERAS AND OUTFITS

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.

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 perforating 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 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 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

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

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 FEBRUARY 5, 1907, AND APRIL 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, 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.

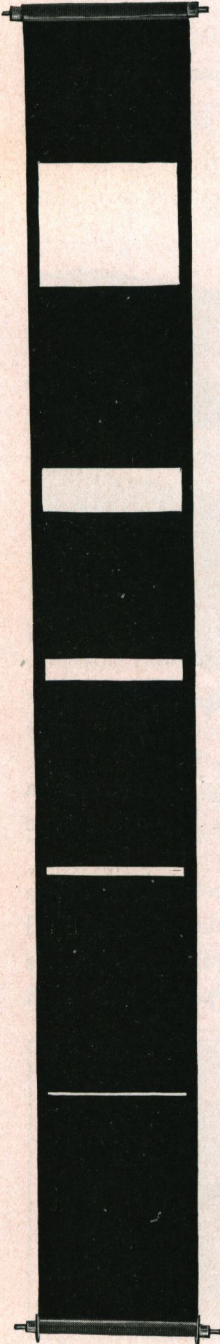


In comparing the Focal Plane Shutter with the between-lens type of shutter, which is most commonly in use, particular stress should be laid upon the fact that with the Focal Plane Shutter there is absolutely no diminishing of the volume of light passing through





The Graflex Focal Plane
Shutter—Continued



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	6½ x 6½ x 2	8½ x 8½ x 2	9½ x 9½ 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

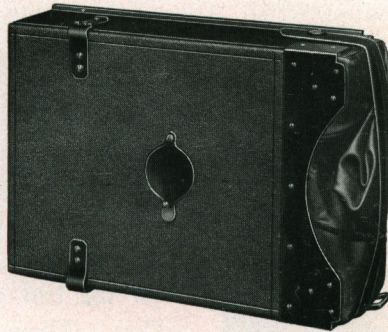




THE GRAFLEX MAGAZINE PLATE OR CUT FILM HOLDER

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.



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 twelve 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

	$3\frac{1}{2} \times 4\frac{1}{4}$	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

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

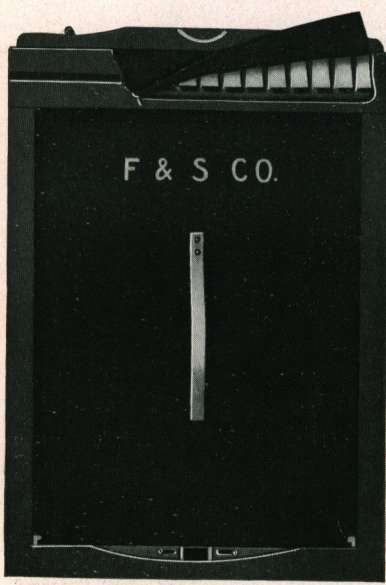




THE GRAFLEX PLATE HOLDER

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 spring finger cut-off, which excludes all light and prevents fogging of plates when drawing or replacing slides. The holder is grooved, instead of tongued, affording increased thickness and strength without increase of space occupied.



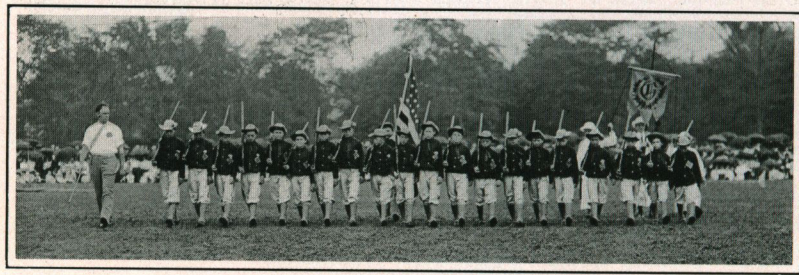
Graflex Plate Holder showing Cut-off
that will not warp, buckle or collect dust like hard rubber.

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

PRICES

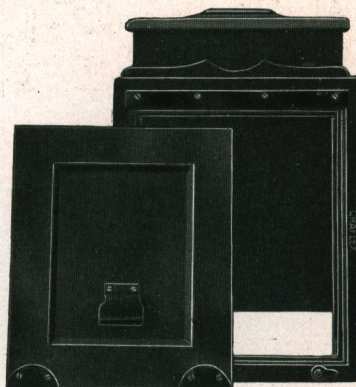
3 1/4 x 4 1/4, each	.....	\$2.50
4 x 5 "	.....	2.50
5 x 7 "	.....	3.50





GRAFLEX COLOR PLATE HOLDER

THE Graflex Color Plate Holder is designed especially for color plates when used with Graflex Cameras. The register of focus is measured from the sensitive surface of plate, which should be placed in the holder with the glass side of plate towards the lens. Receding springs compensate for glass of varying thickness, which makes this holder suitable for any color plate used in a manner reverse to the ordinary plates, and keep the sensitized surface of the color plate in coincident register with the upper ground glass or focusing screen. Graflex Color Plate Holders can be used only with Graflex Cameras, to which regular Graflex plate holders are adjustable, and are constructed of selected cherry, ebonized and finished in the same manner as the Graflex Holders.



PRICES

3 1/4 x 4 1/4, each	.....	\$4.50
4 x 5, "	.....	5.00
5 x 7, "	.....	6.25

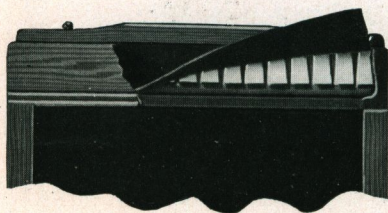




THE GRAPHIC PLATE HOLDER

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



Section of Graphic Plate Holder showing Cut-off

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. 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 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.

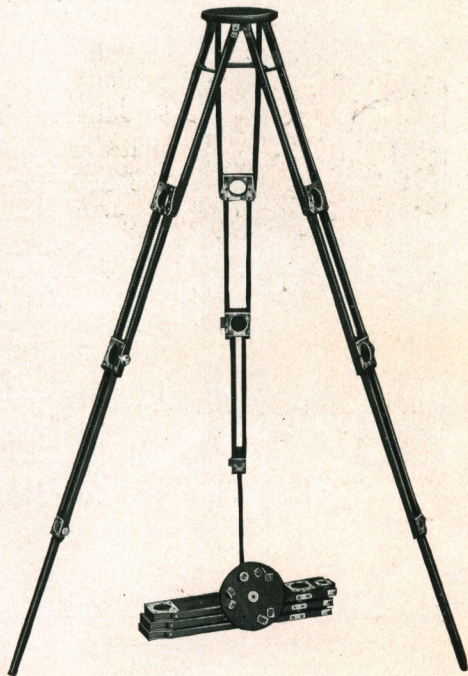
All binding screws on lower sections of this tripod are "upset" and cannot be lost. Taper pins in the ear pieces of the head fit snugly into metal-tipped sockets of the legs, preventing loose joints and side play.

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 16¼ inches and weighs, with top, 36 ounces. When extended to its full capacity, it stands 4½ feet high.

The No. 2, closed, measures 17¼ inches long and weighs, with top, 65 ounces. When extended, it has a height of 4⅔ feet.

The No. 3, closed, measures 20 inches long and weighs, with top, 70 ounces. When extended, it has a height of 5½ feet.



PRICES

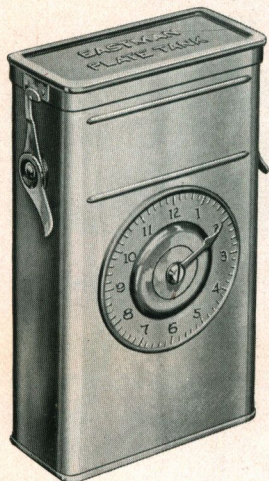
No. 1 Crown Tripod with 4-inch top	\$5.50
No. 2 Crown Tripod with 6-inch top	6.00
No. 3 Crown Tripod with 6-inch top	7.50





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 1/4 x 4 1/4 plates . . . . .	.50
Kit for 5 x 7 tank, to take 4 1/4 x 6 1/2 plates . . . . .	.75
Eastman Plate Tank Developer Powders, for 4 x 5 tank, per pkg., 1/2 doz. . . . .	.20
Ditto, for 5 x 7 tank, per package, 1/2 dozen . . . . .	.35
Kodak Acid Fixing Powder, per 1-pound package . . . . .	.25





ZEISS-KODAK ANASTIGMAT *f.6.3*

No.	Size of Plate covered with Stop <i>f.6.3</i> Inches	Equivalent Focus Inches	PRICE		
			Lens in Barrel	Lens in Volute Shutter	Lens in Compound Shutter
2	3¼ x 4¼	5	\$22 00	\$39 00	\$34 00
3	4 x 5	6½	27 00	44 00	43 25
4	3¼ x 5½	6¾	30 50	47 50	45 00
5	5 x 7	8¼	40 00	58 50	56 25
6	6½ x 8½	10	54 00	72 50	74 00

BAUSCH & LOMB-ZEISS TESSAR, *Series IIb, f.6.3*

No.	Size of Plate covered with Stop <i>f.6.3</i> Inches	Equivalent Focus Inches	PRICE		
			Lens in Barrel with Iris Diaphragm	Lens Fitted with Volute Shutter	Lens Fitted with Compound Shutter
4	3½ x 4½	5¾	\$ 34 50	\$ 51 50	\$ 49 00
5	4 x 5	6½	36 00	53 00	52 25
5 <i>k</i>	3½ x 5½	6¾	46 00	63 00	60 50
5 <i>a</i>	5 x 7	7½	50 50	69 00	66 75
6	5 x 8	8¼	61 50	80 00	81 50
7	6½ x 8½	10	83 00	101 50	103 00
8	8 x 10	12	122 50	142 50	144 50
9	10 x 12	14¾	158 50	178 50	.....
9 <i>a</i>	11 x 14	16¾	178 00	.....	.....
10	14 x 17	19½	252 00	.....	.....
11	16 x 20	23¾	324 00	.....	.....

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

No.	Size of Plate covered with Stop <i>f.4.5</i> Inches	Equivalent Focus Inches	PRICE		
			Lens in Barrel with Iris Diaphragm	Lens Fitted with Volute Shutter	Lens Fitted with Compound Shutter
14	3¼ x 4¼	5	\$ 40 50	\$ 57 50	\$ 56 75
15	4 x 5	6	47 00	65 50	63 25
15 <i>a</i>	5 x 7	7½	57 50	76 00	77 50
16	5 x 8	8¼	72 00	92 00	94 00
17	6½ x 8½	9¾	115 50	135 50	137 50
18	8 x 10	11¾	162 00	.....	.....
18 <i>a</i>	10 x 12	14	210 00	.....	.....
19	11 x 14	15¾	252 00	.....	.....
20	14 x 17	19½	360 00	.....	.....

BAUSCH & LOMB-ZEISS PROTAR, *Series VIIa*

No.	Size of Plate covered with Full Aperture Inches	Equivalent Focus of Single Protars, Ins.		Combined Equivalent Focus Inches	Speed <i>f</i>	PRICE		
		Front Lens	Rear Lens			Lens in Barrel with Iris Diaphragm	Lens Fitted with Volute Shutter	Lens Fitted with Compound Shutter
4	4 x 5	8¾	8¾	5½	6.3	\$ 56 00	\$ 73 00	\$ 70 50
5	4½ x 6½	11¾	8¾	5½	7.	61 50	78 50	77 75
6	4 x 6	13¾	8¾	6	7.7	68 50	87 00	84 75
7	4½ x 7½	11¾	11¾	6	6.3	66 50	83 50	82 75
8	5 x 7	13¾	11¾	7	7.	73 50	92 00	89 75
9	5 x 8	16	11¾	7½	7.7	86 00	104 50	106 00
10	5 x 8	13¾	13¾	7	6.3	80 50	99 00	96 75
11	6½ x 8½	16	13¾	8	7.	93 00	111 50	113 00
12	6 x 8	18	13¾	9	7.7	114 50	134 50	134 50
13	6 x 8	16	16	9½	6.3	105 00	123 50	125 00
14	7 x 9	18	16	10	7.	127 00	147 00	147 00
15	7 x 9	23	16	10½	7.7	148 50	168 50	170 50
16	7 x 9	18	18	10½	6.3	147 50	167 50	167 50
17	8 x 10	23	18	11	7.	169 00	189 00	191 00
18	8 x 10	27	18	12	7.7	199 50	219 50	.....
19	8 x 10	23½	23½	13	6.3	186 00	206 00	208 00





COOKE LENSES, *Series IIIa. Full Aperture, f.6.5*

DIMENSIONS IN INCHES			PRICE		
No.	Focus	Plates covered with Full Aperture	Lens Only	With Volute Shutter	With Compound Shutter
3	5	3¼ x 4¼	\$ 35 00	\$ 52 00	\$ 48 00
4	6⅞	3¼ x 5½	39 50	56 50	55 00
5	7½	5 x 7	48 50	65 50	66 25
6	8¼	5 x 8	53 00	71 50	75 00
7	11	6½ x 8½	91 00	109 50	.....
8	13	8 x 10	120 00	140 00	.....

COOKE LENSES, *Series IV. Full Aperture, f.5.6*

DIMENSIONS IN INCHES			PRICE	
No.	Focus	Plates covered with Full Aperture	Lens Only	With Volute Shutter
25	5	3¼ x 4¼	\$ 38 00	\$ 55 00
26	6	4 x 5	43 00	60 00
27	8	5 x 7	54 00	72 50
27½ new	9½	6½ x 8½	80 00	98 50
28 new	11	7 x 9	110 00	130 00
29	13	8 x 10	130 00	150 00
30 new	16	10 x 12	182 50	.....
31 new	18	11 x 14	208 00	.....

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

DIMENSIONS IN INCHES				DIMENSIONS IN INCHES			
No.	Focus	Plates covered with Full Aperture	PRICE	No.	Focus	Plates covered with Full Aperture	PRICE
20	4	3¼ x 3¼	\$ 35 00	22 new	8	5 x 7	57 50
20½	5	3¼ x 4¼	41 50	22½ new	10½	6½ x 8½	120 00
21	6½	4 x 5	47 00	23 new	13	8 x 10	182 00

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.



1910