

# GRAFLEX AND GRAPHIC CAMERAS

1914

FOLMER & SCHWING DIVISION

EASTMAN KODAK COMPANY
ROCHESTER, N. Y.





# THE GRAFLEX



OU who photograph for pleasure or profit, have not fully realized the joys of photography until you have used a Graflex. The business-like certainty of operation, the accuracy of construction, and the finished beauty of the instrument, combine to make the Graflex preeminently the quality Camera.

The purchase of a Graflex brings with it the pride of possession, the satisfaction of knowing you have the best,

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

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

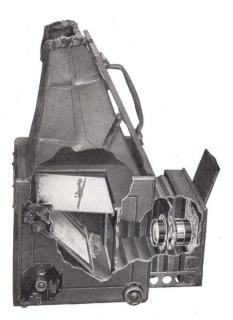
The Graflex, employing well known optical principles in a new way, completely eliminates uncertainty of focus and makes it possible to obtain fully timed negatives indoors, in the shade, or on cloudy days, with exposures of





very short duration, while exposures as brief as one fifteen-hundredth, of a s very short duration, while under favorable light conditions exposures as brief as one one-thousandth, or even one fifteen-hundredth, of a second may be made with full assurance of a fully timed negative.

The principle of construction and method of operating



Sectional Illustration showing Graflex Principle

the Graflex are extreme-The Graflex ly simple. shows the image right side up, the size it will appear in the negative up to the instant of ex-This is accomposure. plished by placing an optically perfect mirror in the body of the camera, at such an angle that the image projected by the lens is reflected from the mirror to a fine ground glass screen in the top of the camera (see illustration). The operator, looking into the focusing hood, sees the

picture exactly as it will be reproduced in the finished print. The distance between the subject and the camera is immaterial, as a slight turn of the focusing button instantly adjusts the focus as the subject approaches or recedes from the camera. This feature is of inestimable value to those who have been dependent upon the image as shown in the finder, on account of the finder image being so small that composition and arrangement of the subject are next to impossible. Another feature that adds great uncertainty to the results obtained with cameras fitted with finders is the fact that no matter how badly out of focus the subject





may be on the plate or film, the image in the finder is always sharp. This necessitates the use of another device of uncertain value that is eliminated by the Graflex, and that is the focusing scale. With the Graflex there is no guess work. A glance in the focusing hood shows instantly whether, or not, the subject is in focus. The Graflex operator knows to a certainty that, with proper exposure, the finished print will be an exact reproduction of the image as seen on the focusing screen.

No less important than the reflecting principle as applied to the Graflex is the fact that the most highly efficient shutter ever designed is built into and part of every Graflex Camera. While the Graflex Focal Plane Shutter is so well known and extensively used that an extended description

is unnecessary, there are still a few photographers who associate the term "Focal Plane" with exposures of extremely short duration,—overlooking the fact that the same optical principles that enable a shutter to secure a fully-timed negative in  $\frac{1}{1000}$  of a second, will also permit the making of perfect negatives under light conditions that with shutters of the usual type would result in badly underexposed negatives. For all kinds of photography indoors and out there is no shutter as efficient as the one supplied with the Graflex.

The Graflex Focal Plane Shutter consists of a long curtain with a number of fixed apertures varying from full size of negative to an eighth of an inch in width. These openings being fixed insure at all times an absolutely uniform rectangular aperture. This curtain operates as closely as possible to the surface of the plate or film when in position for exposure, the duration of exposure being regulated by the size of the



Graflex Shutter



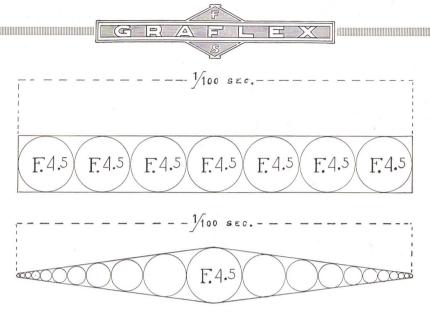


curtain aperture employed, it moves across the focal plane shutter has on be instantly appreciated of Focal Plane Shutter permit efficiency during the whom shutters of the between less its full diaphragm opening of the exposure, the remander period being utilized by the shutter. The principle is non the following page.

The shutter in every of give automatic exposures except in the Press Graff second may be obtained, and which has a maximum should have a maximum should be a shown instant the different tensions on the following on the following page. curtain aperture employed, and by the rapidity with which it moves across the focal plane. The great advantage that a focal plane shutter has over those of the usual type will be instantly appreciated when it is considered that the Focal Plane Shutter permits the lens to work at its entire efficiency during the whole period of exposure. shutters of the between lens type the lens is working at its full diaphragm opening during only a small fraction of the exposure, the remaining portion of the exposure period being utilized by the opening and closing of the shutter. The principle is illustrated in the two diagrams

The shutter in every Graflex Camera is actuated to give automatic exposures from  $\frac{1}{10}$  to  $\frac{1}{1000}$  of a second, except in the Press Graflex where a speed of  $\frac{1}{1500}$  of a second may be obtained, and the Home Portrait Graflex, which has a maximum shutter speed of  $\frac{1}{500}$  of a second. A speed table shows instantly the speeds obtained with the different tensions on the curtain spring and the various curtain apertures. The first vertical line of figures on the speed table indicates the tension on the curtain spring, the shutter curtain moving with the greatest rapidity when the spring is wound to the highest tension,—No. The first horizontal line of figures ( $\frac{1}{8}$  inch,  $\frac{3}{8}$  inch, etc.) shows the width of the curtain aperture. Naturally, the narrower the opening moving across the focal plane, the shorter the exposure. The remaining numbers indicate parts of a second, 1000 showing that when the tension spring is wound to 6 and the curtain aperture  $\frac{1}{8}$  of an inch, the exposure will be  $\frac{1}{1000}$  of a second. If it is intended to give an exposure of  $\frac{1}{215}$  of a second the tension should be wound to 4 and the curtain aperture set at \( \frac{3}{8} \) of The shutter is an inch, as indicated on the speed table. arranged to give time exposures of any duration, and by setting the curtain at O (open) and allowing the rising





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

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

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

mirror to commence, and the dropping curtain to terminate the exposure, automatic exposures of approximately  $\frac{1}{5}$  of a second may be made.

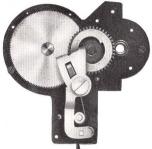
The operation of the Graflex is simple in the extreme. Focusing is done with a large milled head conveniently located at the right of the camera. Exposure is made by pressure on the lever at the left of the camera. This lever allows the mirror to swing up out of the cone of light, the mirror in turn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

Every part of every Graflex is made and adjusted with









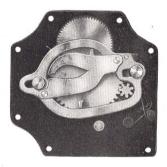


Press Graflex Shutter Control Mechanism

through metal guides. In the 1A, 3A and Revolving Back models the platform is fitted with a metal track running in guide ways milled with the utmost precision from brass of sufficient thickness to insure absolute rigidity. In the Auto, Press, Telescopic Revolving Back and Naturalist models the racking out of the front causes the lens cover to open instantly and automatically. A piano hinge allows the front to be opened, rendering lens and front board readily accessible. For those who wish to give prolonged exposures the Graflex is provided with tripod plates.

the utmost precision. Nothing is sacrificed for efficiency. Every Graflex is subjected to a rigid inspection and test before being placed on the market, insuring to the purchaser the greatest possible camera value.

The Graflex is constructed of mahogany covered with the finest grade of Persian Morocco leather, which harmonizes perfectly with the rich appearance given by the oxidized metal work and ebonized finish of all visible wood parts. In the Auto, Press and Naturalist models the front runs out on two side arms milled from heavy brass, working

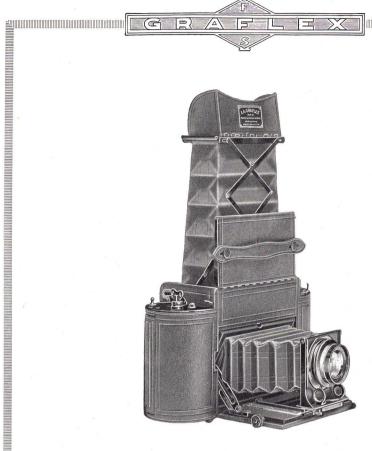




Auto Graflex Shutter Control Mechanism







# THE 1A GRAFLEX

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

#### SPECIFICATIONS

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

| THE PRICE   | 2½ x 4¼  |
|---|----------|
| 1A Graflex without lens                                   | \$ 60.00 |
| With Zeiss Kodak Anastigmat Lens, f.6.3, No. 2            | 79.00    |
| With B. & LZeiss Tessar Lens, Series Ic, f.4.5, No. 14    | 95.00    |
| With Cooke Lens, Series II, $f.4.5$ , No. $20\frac{1}{2}$ | 95.50    |
| Leather Case for 1A Graflex, extra                        | 6.00     |
| Extra lens boards, each                                   | .40      |

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



# THE 1A GRAFLEX

OR those desiring a reflecting camera that is thoroughly efficient and occupies the least possible space, the 1A Graflex makes an ideal equipment.

This camera takes regular 1A Kodak film and makes a picture of very pleasing proportions,  $2\frac{1}{2} \times 4\frac{1}{4}$  inches.

As in the other Graflex models, this camera is equipped with a focal plane shutter, giving exposures of any duration from time to  $\frac{1}{1000}$  of a second and the image may be seen the size it will appear in the negative, up to the instant of exposure, right side up. In order to make the camera as compact as possible the focusing screen is made a trifle narrower than the full width of the negative; this does not interfere in the slightest degree with accurate focusing.

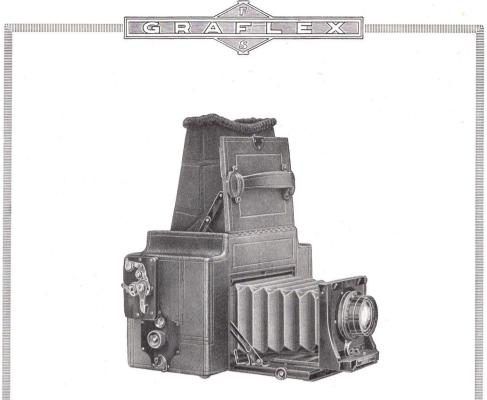
The 1A Graflex is fitted with the safety device, which prevents the winding of the curtain when the mirror is up; this insures the setting of the shutter, and what is more important, prevents the unintentional fogging of the film. The focusing hood folds compactly in the top of the camera, and when extended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

Another improvement which adds much to the ease of operation is the method of adjusting the film spools, a self centering device making it necessary to simply drop the film spool into position, when it finds its own center. The film winding key when drawn out and given a slight turn locks open; another turn allows it to snap back into position, holding the spool securely in place and creating sufficient pressure to prevent play. The film pockets are provided with tension springs which prevent the rolls from unwinding.

The 1A Graflex is an ideal camera for the automobilist, tourist, or anyone desiring a thoroughly efficient reflecting camera contained in the least possible space. We do not supply Plate Adapters for the 1A Graflex.







# THE 3A GRAFLEX

#### **SPECIFICATIONS**

#### THE PRICE

| SPECIFICATIONS  Dimensions, $10\frac{1}{4} \times 5 \times 6\frac{7}{8}$ in.; focal capacity, $10$ in.; weight, $7$ lbs.; size of lens board, $3\frac{1}{4} \times 3\frac{1}{4}$ in.; minimum focus of lenses accommodated, $6\frac{1}{4}$ in.  THE PRICE $3\frac{1}{4} \times 5\frac{1}{4}$ 3A Graflex without lens . \$ 75.00  With Zeiss Kodak Lens, $f.6.3$ , No. 4  | Folmer's Patent, February 5, 1907, and April 21, 1908  |
|--|--|
| Dimensions, $10\frac{1}{4} \times 5 \times 6\frac{7}{3}$ in.; focal capacity, $10$ in.; weight, $7$ lbs.; size of lens board, $3\frac{1}{4} \times 3\frac{1}{4}$ in.; minimum focus of lenses accommodated, $6\frac{1}{4}$ in.  THE PRICE $314 \times 5\frac{1}{2}$ 3A Graflex without lens  | Former's Fatent, February 5, 1907, and April 21, 1908  |
| of lens board, $3\frac{1}{4} \times 3\frac{1}{4}$ in.; minimum focus of lenses accommodated, $6\frac{1}{4}$ in.  THE PRICE $3\frac{1}{4} \times 5\frac{1}{2}$ 3A Graflex without lens  | SPECIFICATIONS   |
| 334 x 5½ 3A Graflex without lens . \$75.00 With Zeiss Kodak Lens, $f.6.3$ , No. 4  |  |
| 3A Graflex without lens  | THE PRICE  |
| With Zeiss Kodak Lens, f.6.3, No. 4  With B. & LZeiss Tessar Lens, Series Ic, f.4.5, No. 15a  125.00  With Cooke Lens, Series II, f.4.5, No. 21½  Leather Case for 3A Graflex, extra  S.00  Extra lens boards, each  To insure proper fitting we recommend that cameras be bought from us complete with lenses as listed. We will not hold ourselves responsible for results with any of our cameras when lenses are not fitted by us.  Where customers already own Anastigmat lenses and send them to us for fit- | 31/4 x 5   |
| With B. & LZeiss Tessar Lens, Series Ic, f.4.5, No. 15a 125.00  With Cooke Lens, Series II, f.4.5, No. 21½ 125.00  Leather Case for 3A Graflex, extra 8.00  Extra lens boards, each 50  To insure proper fitting we recommend that cameras be bought from us complete with lenses as listed. We will not hold ourselves responsible for results with any of our cameras when lenses are not fitted by us.  Where customers already own Anastigmat lenses and send them to us for fit-                              | 3A Graflex without lens  |
| With Cooke Lens, Series II, f.4.5, No. 21½   | With Zeiss Kodak Lens, f.6.3, No. 4  |
| With Cooke Lens, Series II, $f.4.5$ , No. $21\frac{1}{2}$  | With B. & LZeiss Tessar Lens, Series Ic, f.4.5, No. 15a 125.0  |
| Leather Case for 3A Graflex, extra   |  |
| To insure proper fitting we recommend that cameras be bought from us complete with lenses as listed. We will not hold ourselves responsible for results with any of our cameras when lenses are not fitted by us.  Where customers already own Anastigmat lenses and send them to us for fit-  |  |
| plete with lenses as listed. We will not hold ourselves responsible for results with<br>any of our cameras when lenses are not fitted by us.  Where customers already own Anastigmat lenses and send them to us for fit-   |  |
|  | plete with lenses as listed. We will not hold ourselves responsible for results wi   |
|  | Where customers already own Anastigmat lenses and send them to us for fting, a nominal charge will be made for the work.   |
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# THE 3A GRAFLEX

A

LL the advantages of a reflecting camera of the highest possible type, with film simplicity and convenience, combine to make the 3A the most popular of the Graflex models. The 3A Graflex makes pictures of the most pleasing proportions,  $3\frac{1}{4} \times 5\frac{1}{2}$ , on regular 3A Kodak Film,

which may be obtained wherever camera supplies are sold.

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

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

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

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

Any of the well known Anastigmat lenses may be fitted to the 3A Graflex, provided the lens is of suitable focal length. The fact





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



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



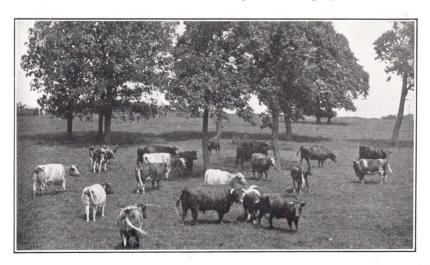
3 A GRAFLEX-Continued



3 A Graflex Closed

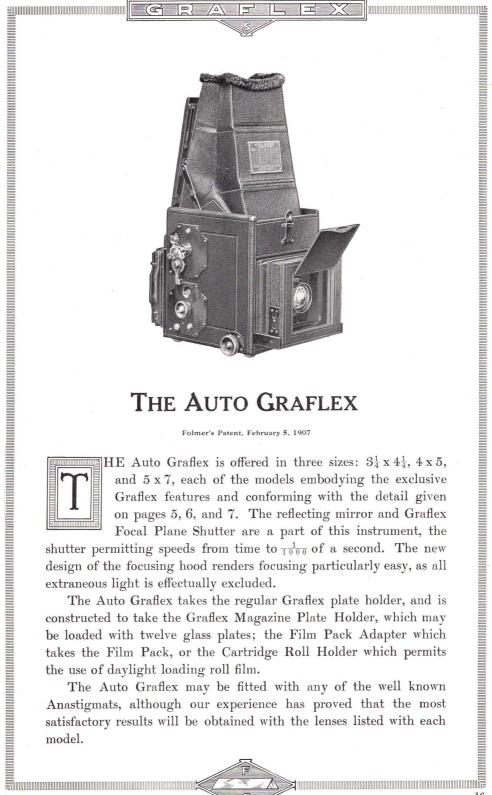
that the 3A will accept lenses having a focus as short as  $6\frac{1}{4}$  inches as well as those of greater length, the camera having a bellows capacity of 10 inches, allows the operator of a 3A Graflex to make photographs of subjects close to the camera. Our experience has proved that the best results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

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









## THE AUTO GRAFLEX

Folmer's Patent, February 5, 1907

HE Auto Graflex is offered in three sizes:  $3\frac{1}{4} \times 4\frac{1}{4}$ ,  $4 \times 5$ , and 5 x 7, each of the models embodying the exclusive Graflex features and conforming with the detail given on pages 5, 6, and 7. The reflecting mirror and Graflex Focal Plane Shutter are a part of this instrument, the

shutter permitting speeds from time to  $\frac{1}{1000}$  of a second. The new design of the focusing hood renders focusing particularly easy, as all extraneous light is effectually excluded.

The Auto Graflex takes the regular Graflex plate holder, and is constructed to take the Graflex Magazine Plate Holder, which may be loaded with twelve glass plates; the Film Pack Adapter which takes the Film Pack, or the Cartridge Roll Holder which permits the use of daylight loading roll film.

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

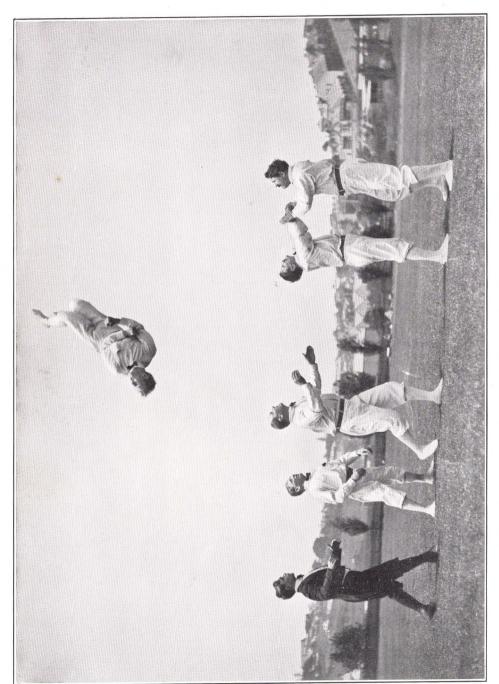




Size of picture made with  $3\frac{1}{4} \times 4\frac{1}{4}$  Auto Graflex



Size of picture made with 4 x 5 Auto Graflex



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



AUTO GRAFLEX-Continued

The Auto Graflex has a established a new standar camera construction. B foremost photographers—fessional and amateur, be it is accorded a superior tion owing to its availabil the ability to do with it a of work not possible with other type of camera. The Auto Graflex has surely established a new standard in camera construction. By the foremost photographers—professional and amateur, bothit 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.

No pains have been spared to make the Auto Graflex a thoroughly efficient instrument.



Auto Graflex Closed

#### SPECIFICATIONS

|                             | $3\frac{1}{4} \times 4\frac{1}{4}$                     | $4 \times 5$   | 5 x 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 in.  | $8\frac{1}{2}$ in.                                     | 12 in.   |
| Weight                      | $4\frac{1}{2}$ lbs.                                    | $5\frac{1}{2}$ lbs.                                    | 9 lbs.   |
| Size of lens board          | $2\frac{3}{4} \times 2\frac{3}{4}$ in.                 | 3 x 3 in.  | $4 \times 4$ in.                                       |
| Minimum focus of lenses ac- |  |  |  |
| commodated                  | 5 in.  | 6 in.  | $7\frac{1}{2}$ in.                                     |

#### THE PRICE

|    | Weight $4\frac{1}{2}$ lbs. $5\frac{1}{2}$ lbs. 9 lbs. Size of lens board $2\frac{3}{4}$ x $2\frac{3}{4}$ in. $3$ x $3$ in. $4$ x $4$ in.  |
|----|---|
|    | Minimum focus of lenses accommodated 5 in. 6 in. $7\frac{1}{2}$ in.   |
|    | Commodated 5 m. 6 m. 72 m.  |
|    | THE PRICE   |
|    | Auto Graflex without lens, in- $3\frac{1}{4} \times 4\frac{1}{4}$ $4 \times 5$ $5 \times 7$   |
|    | cluding one double holder \$55.00 \$ 65.00 \$ 80.00   |
|    | With Zeiss Kodak Lens, f.6.3 No. 2 74.00 No. 3 88.25 No. 5 114.50   |
|    | With B. & LZeiss Tessar, Series  Ic. f 4.5  No. 14 90.00 No. 15 105.50 No. 16 142.00  |
|    | Ic, f.4.5 No. 14 90.00 No. 15 105.50 No. 16 142.00 With Cooke Series II f.4.5 No. 203 90.50 No. 21 106.00 No. 22 142.00   |
|    | With Cooke, Series II, f.4.5 No. 20½ 90.50 No. 21 106.00 No. 22 142.00  |
|    | Graflex magazine plate holder,<br>Model A, extra  |
|    | Film Pack Adapter, leather covered, extra 4.50 5.00 7.50  |
|    | Cartridge Roll Holder, leather covered, extra   |
|    | Leather case for camera and Film Pack Adapter, with lock and key 6.50 7.50 10.00  |
|    | Leather case for six plate holders, with lock and key 4.00 5.00 6.00  |
|    | Leather case for camera and   |
|    | magazine plate or roll holder . 7.50 9.00 11.50   |
|    | Extra Graflex plate holders, each 2.50 2.50 3.50  |
|    | Extra lens boards, each   |
|    | Ground glass panels to interchange with plate holders 2.00 2.50 3.50  |
|    | To insure proper fitting we recommend that cameras be bought from us complete with lenses as listed. We will not hold ourselves responsible for results with any of our cameras when lenses are not fitted by us.  Where customers already own Anastigmat lenses and send them to us for fitting, a nominal charge will be made for the work. |
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# THE AUTO GRAFLEX JUNIOR

#### **SPECIFICATIONS**

Dimensions closed,  $6\frac{1}{4} \times 5 \times 5$  in.; focal capacity,  $5\frac{1}{2}$  in.; weight, 39 ozs.; minimum focus of lens accommodated, 4 in.

#### THE PRICE

| Auto Graflex Junior, 2½ x 3½, without lens, including one double plate | $2\frac{1}{4} \times 3\frac{1}{4}$ |
|--|------------------------------------|
| holder   | \$35.00                            |
| With Zeiss Kodak Anastigmat Lens No. 1                                 | 53.50                              |
| With B. & LZeiss Tessar Series Ic, f.4.5, No. 13                       | 66.00                              |
| With Cooke Lens Series II, f.4.5, No. 20                               | 66.00                              |
| Graflex Magazine Plate Holder, Model A, extra                          | 10.00                              |
| Graflex Film Pack Adapter, extra                                       | 3.00                               |
| Leather case for camera and double plate holder, with lock and key $.$ | 5.00                               |
| Leather case for 6 plate holders with lock and key                     | 2.50                               |
| Leather case for camera and magazine plate holder                      | 6.50                               |
| Extra Graflex plate holders, each                                      | 1.50                               |





# THE AUTO GRAFLEX JUNIOR

HIS little camera effectively supplies the growing demand for a small, compact camera of the reflecting type. Although it is small in size and light in weight, it embodies all of the exclusive Graflex features—the reflecting mirror, Graflex Focal Plane Shutter with safety device, and,

above all, Graflex quality and workmanship.

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

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



Auto Graflex Junior-side view

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

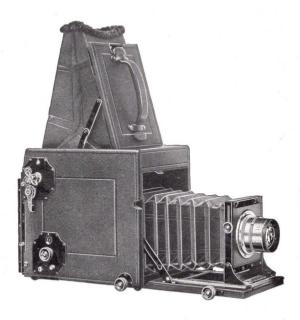
The focusing hood is readily detachable, allowing easy access to the ground glass focusing screen. This focusing hood is automatic in its action, and is finished with a square top, making it exceptionally easy to secure vertical pictures with the camera held on its side.

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

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







# REVOLVING BACK AUTO GRAFLEX

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

#### **SPECIFICATIONS**

|                                     |    | $3\frac{1}{4} \times 4\frac{1}{4}$                     | $4 \times 5$                                     |
|-------------------------------------|----|--|--|
| Dimensions when closed              |    | $8\frac{1}{4} \times 5\frac{1}{2} \times 7\frac{1}{2}$ | $9\frac{1}{2} \ge 6\frac{1}{8} \ge 8\frac{1}{2}$ |
| Focal capacity                      |    | 15 in.   | 18 in.   |
| Weight                              |    | 6 lbs.   | $8\frac{1}{2}$ lbs.                              |
| Size of lens board                  |    | 3 x 3 in.  | $3\frac{3}{4} \times 3\frac{3}{4} \text{ in.}$   |
| Minimum focus of lenses accommodate | d. | $7\frac{1}{8}$ in.                                     | $8\frac{3}{8}$ in.                               |

#### THE PRICE

| Revolving Back Long Focus Auto Graflex, with-  | $3\frac{1}{4} \times 4\frac{1}{4}$ | 4 x 5         |
|--|------------------------------------|---------------|
| out lens, including one double plate holder    |                                    | \$125.00      |
| Fitted with Zeiss Kodak Anastigmat Lens .      | No. 5 144.50 No.                   | 6 171.50      |
| Fitted with B. & LZeiss Protar Lens, Series    |                                    |               |
| VIIa   | No. 10 179.50 No.                  | <b>215.50</b> |
| Fitted with B. & LZeiss Tessar Lens, Series Ic | No. 15a 160.00 No.                 | 17 224.00     |
| Fitted with Cooke Lens, Series II              | No. 211 160.00 No. 5               | 187.00        |
| Graflex magazine plate holder, Model A, extra  |                                    | 14.50         |
| Film Pack Adapter, leather covered, extra .    | 4.50                               | 5.00          |
| Cartridge Roll Holder, leather covered, extra  | 7.50                               | 7.50          |
| Leathercase for camera and Film Pack Adapter,  |                                    |               |
| with lock and key                              | 9.00                               | 10.00         |
| 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                          | 10.00                              | 11.50         |
| Extra Graflex plate holders, extra             | 2.50                               | 2.50          |
| Extra lens boards                              | .60                                | .70           |





# REVOLVING BACK AUTO GRAFLEX

N many lines of photographic work it is frequently necessary to make vertical negatives without turning the cam-

era on its side, and for those desiring a camera of this type the Revolv-

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

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



Revolving Back Auto Graflex

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

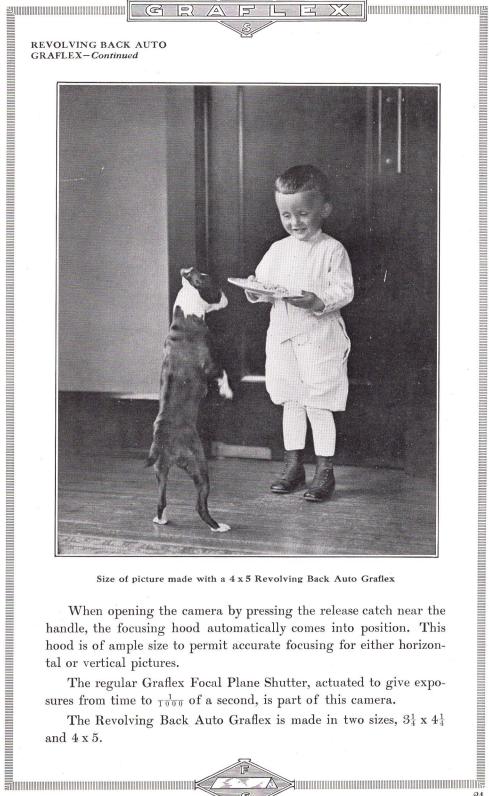


Revolving Back Auto Graflex Closed

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

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





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

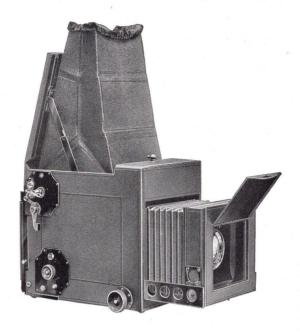
When opening the camera by pressing the release catch near the handle, the focusing hood automatically comes into position. This hood is of ample size to permit accurate focusing for either horizontal or vertical pictures.

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

The Revolving Back Auto Graflex is made in two sizes,  $3\frac{1}{4} \times 4\frac{1}{4}$ 







# THE TELESCOPIC REVOLVING BACK AUTO GRAFLEX

#### **SPECIFICATIONS**

Dimensions, when closed,  $9\frac{1}{2} \times 6\frac{3}{8} \times 8$  in.; focal capacity, 12 in.; weight, 8 lbs.; size of lens board,  $4 \times 4$  in.; minimum focus of lens accommodated,  $7\frac{1}{4}$  in.

#### THE PRICE

|  | $4 \times 5$ |
|--|--------------|
| Telescopic R. B. Auto Graflex without lens, including one double plate |              |
| holder   | 120.00       |
| With Zeiss Kodak Anastigmat, f.6.3, No. 5                              | 154.50       |
| With B. & LZeiss Tessar, Ic., f.4.5, No. 16                            | 182.00       |
| With Cooke Lens, Series II, $f.4.5$ , No. $21\frac{1}{2}$              | 170.00       |
| Graflex magazine plate holder, Model A, extra                          | 14.50        |
| Film Pack Adapter, leather covered, extra                              | 5.00         |
| Cartridge Roll Holder, leather covered, extra                          | 7.50         |
| Leather case for camera and Film Pack Adapter, with lock and key       | 10.00        |
| Leather case for camera and magazine plate holder or roll holder .     | 11.50        |
| Extra Graflex plate holders, each                                      | 2.50         |
| Extra lens boards, each  | .75          |





# THE TELESCOPIC REVOLVING BACK AUTO GRAFLEX

T

HIS camera is fitted with a revolving or turn-table back, similar to that supplied with the Revolving Back Auto Graflex, described on page 23, enabling the operator to make either vertical or horizontal negatives without turning the camera on its side.



Telescopic Revolving Back Auto Graflex Closed

The camera can be brought into position for action quickly and easily. Pressure on a release, located near the handle, opens the camera and brings the hood into position for focusing, while the lens cover opens automatically the instant the front is racked out. An exceptionally large front board (4 x 4 inches) permits the use of the most rapid Anastigmat Lenses, and sufficient bellows capacity is provided for lenses of long enough focus to give the best pictorial effect.

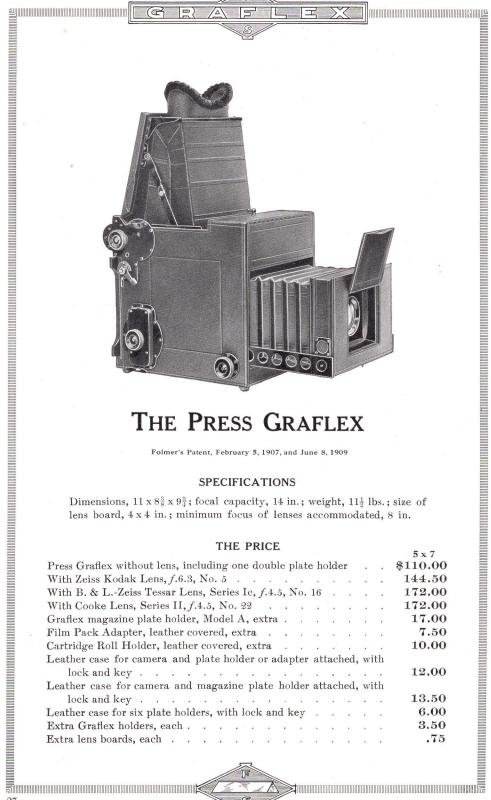
The regular Graflex Focal Plane Shutter and Reflecting Screen, as described on pages 5, 6 and 7, are part of this camera. The shutter is actuated to give automatic exposures from  $\frac{1}{10}$  to  $\frac{1}{1000}$  of a second, as well as time exposures of any duration.

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

The Telescopic Revolving Back Auto Graflex is furnished in the 4 x 5 size only.







# THE PRESS GRAFLEX

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

#### **SPECIFICATIONS**

Dimensions,  $11 \times 8\frac{3}{8} \times 9\frac{3}{4}$ ; focal capacity, 14 in.; weight,  $11\frac{1}{2}$  lbs.; size of lens board, 4 x 4 in.; minimum focus of lenses accommodated, 8 in.

#### THE PRICE

| THE TRICE   |      | $5 \times 7$ |
|---|------|--------------|
| Press Graflex without lens, including one double plate holder .   |      | \$110.00     |
| With Zeiss Kodak Lens, f.6.3, No. 5                               |      | 144.50       |
| With B. & LZeiss Tessar Lens, Series Ic, f.4.5, No. 16            |      | 172.00       |
| With Cooke Lens, Series II, f.4.5, No. 22                         |      | 172.00       |
| Graflex magazine plate holder, Model A, extra                     |      | 17.00        |
| Film Pack Adapter, leather covered, extra                         | 0.00 | 7.50         |
| Cartridge Roll Holder, leather covered, extra                     |      | 10.00        |
| Leather case for camera and plate holder or adapter attached, wit | h    |              |
| lock and key  |      | 12.00        |
| Leather case for camera and magazine plate holder attached, with  | h    |              |
| lock and key  |      | 13.50        |
| Leather case for six plate holders, with lock and key             |      | 6.00         |
| Extra Graflex holders, each                                       | 14   | 3.50         |
| Extra lens boards, each   |      | .75          |





#### THE PRESS GRAFLEX

T

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

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

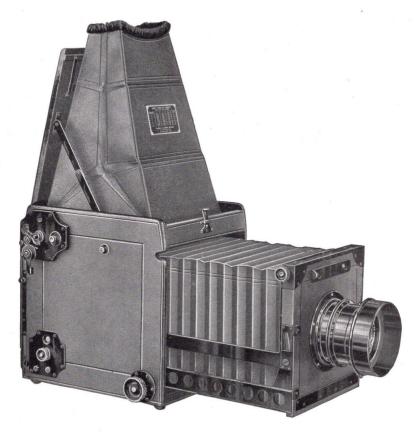
When carrying this camera it is instantly accessible for focusing, as the top is opened by pressing a lever conveniently located near the handle; this automatically brings the focusing hood into position. The lens cover also opens the instant the front is racked out, permitting the camera to be brought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

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

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







# THE HOME PORTRAIT GRAFLEX

#### **SPECIFICATIONS**

Dimensions,  $8\frac{3}{4} \times 10\frac{1}{2} \times 11\frac{1}{4}$  in.; focal capacity, 18 in.; weight,  $12\frac{1}{2}$  lbs.; size of lens boards,  $5 \times 5$  and  $6\frac{1}{2} \times 6\frac{1}{2}$  in.; minimum focus of lenses accommodated,  $9\frac{1}{2}$  in.

| THE PRICE   | 5 x 7    |
|---|----------|
| Home Portrait Graflex without lens, including one double plate holder | \$150.00 |
| With Zeiss Kodak Anastigmat lens, f.6.3, No. 6                        | 196.50   |
| With B. & LZeiss Tessar, Ic, f.4.5, No. 17                            | 249.00   |
| With B. & LZeiss Tessar, Ic, f.4.5, No. 18                            | 289.00   |
| With Cooke Lens, Series II, $f.4.5$ , No. $22\frac{1}{2}$             | 252.00   |
| Graflex magazine plate holder, Model A, extra                         | 17.00    |
| Film Pack Adapter, leather covered, extra                             | 7.50     |
| Cartridge Roll Holder, leather covered, extra                         | 10.00    |
| Leather case for camera and holder, with lock and key                 | 12.00    |
| Extra Graflex plate holders, each                                     | 3.50     |
| Extra lens boards, 5 x 5, each  | .80      |
| Extra lens boards, $6\frac{1}{2} \times 6\frac{1}{2}$ , each          | 1.00     |



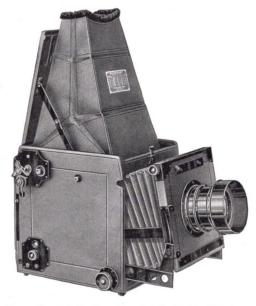


#### THE HOME PORTRAIT GRAFLEX

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

Although this camera is primarily intended for portrait work, it is equally efficient in all other branches of photography where excessive shutter speed is not essen-

tial. The Home Portrait Graflex is fitted with a special Focal Plane



Home Portrait Graflex Showing Swinging Front

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

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

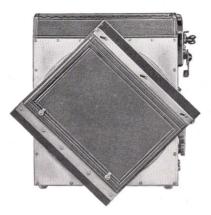




HOME PORTRAIT GRAFLEX

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

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



Home Portrait Graflex-Revolving Back

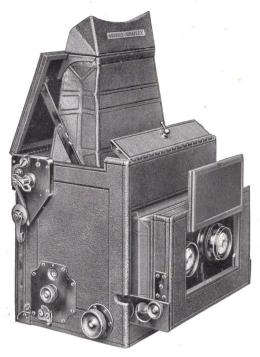
having shorter focal lengths. In addition to these features, the front is fitted with a raising and lowering device which affords ample movement in either direction.

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

The Home Portrait Graflex takes the regular 5 x 7 Graflex Plate Holder, Magazine Plate Holder or Film Pack Adapter. For those who prefer roll film we supply the Graflex Cartridge Roll Holder, which takes 7-inch cartridge roll holder film. A tripod socket is provided that the camera may be used on a tripod for prolonged exposures.







# THE STEREO AUTO GRAFLEX

Folmer's Patent, February 5, 1907

#### **SPECIFICATIONS**

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

| THE PRICE   | 5 x 7    |
|---|----------|
| Stereo Auto Graflex without lenses, including one double plate holder | \$160.00 |
| With matched pair Zeiss Kodak Lenses, f.6.3, No. 3                    | 206.50   |
| With matched pair B. & LZeiss Tessar, Series IIb, f.6.3, No. 5        | 222.00   |
| Graflex magazine plate holder, Model A, extra                         | 17.00    |
| 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 .    | 10.00    |
| Leather case for six plate holders, with lock and key                 | 7.00     |
| Leather case for camera and magazine plate holder or roll holder,     |          |
| with lock and key   | 12.00    |
| Extra Graflex plate holders, each                                     | 3.50     |
| Extra lens boards, each   | 2.00     |

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

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





# THE STEREO AUTO GRAFLEX

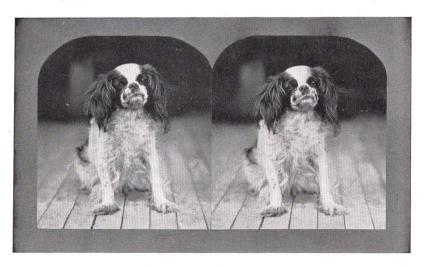
HERE is probably no branch of photography that affords greater pleasure than the making of stereoscopic pictures, and the steadily increasing number of purchasers of the Stereo Graflex indicates that stereo photography is growing in popularity.

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

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

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

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









## THE NO. 0 GRAPHIC CAMERA

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

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

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

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

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

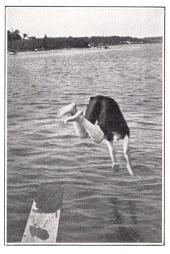




No. 0 GRAPHIC CAMERA -Continued

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

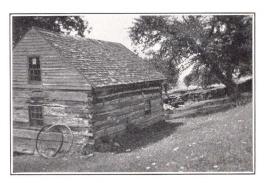
The lens it tigmat f.6.3, three inches. trolled from the by a unique mopening being on the top of The well ker Graphic. The ertures for in \frac{1}{4}, \frac{3}{4} \text{ and } 1\frac{1}{2} \text{ of instantane } \frac{1}{500} \text{ of a second for time expostension on the able, regulating the stream of the curtain is ures the stream of the curtain is ures the shad. A special ing approximate held on a level this finder is position, convenity in the model. The well known Auto Graflex Focal Plane Shutter is part of the No. 0 Graphic. This shutter has three apertures for instantaneous exposures- $\frac{1}{4}$ ,  $\frac{3}{4}$  and  $1\frac{1}{2}$  inches, giving a range of instantaneous exposures from  $\frac{1}{10}$  to  $\frac{1}{500}$  of a second, and one full opening for time exposures of any duration. The tension on the shutter spring is adjustable, regulating the speed of exposure.



Size of picture made with No. 0 Graphic Camera

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

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



Size of picture made with No. 0 Graphic Camera



No. 0 GRAPHIC CAMERA

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

The No. 0 Graphic takes the regular No. 0 F. P. Kodak Film for pictures  $1\frac{5}{8}$  x  $2\frac{1}{2}$  inches, the film spool being adjusted between 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 37.

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

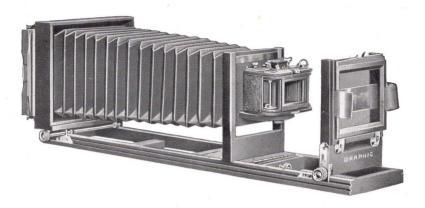
#### SPECIFICATIONS

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

|                            |  | T | HE | P | RIC | CE |  |  |  | 15% x 2½ |
|----------------------------|--|---|----|---|-----|----|--|--|--|----------|
| No. 0 Graphic Camera .     |  |   |    |   |     |    |  |  |  | \$40.00  |
| Sole leather carrying case |  |   |    |   |     |    |  |  |  | <br>3.00 |







# THE NO. 0 GRAPHIC ENLARGING CAMERA

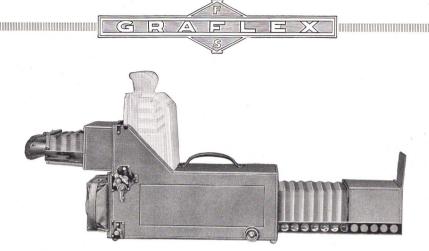
ITH this camera enlargements  $6\frac{1}{2} \times 8\frac{1}{2}$  or smaller may be made from No. 0 Graphic negatives on Bromide or developing papers, with either daylight or artificial light, the resulting enlargement having all the brilliancy of a contact print. This camera is extremely easy to operate, and

the making of enlargements with it is no more complicated than the making of prints in the usual way. The negative to be enlarged is placed in the carrier while the No. 0 Graphic is placed in position with the back removed and the lens shade elevated; the camera is then pointed towards the light and the image focused on the ground glass. After focusing a scribe line may be marked on the scale so that refocusing will not be necessary when making subsequent enlargements of the same size. The holder, containing a sheet of Bromide or developing paper, is then placed in position, the slide drawn and the exposure made. As the same lens used for making the negative is used for enlarging, all the brilliancy and detail are retained in the enlargement.

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

| No. 0 Graphic Enlarging Camera, including holder .  |    |  |  | \$24.00 |
|---|----|--|--|---------|
| Do., with R. R. Lens, 6-inch, and Automatic Shutter | ų. |  |  | 34.00   |





# THE NATURALISTS' GRAFLEX

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

HE Naturalists' Graflex Camera is designed especially for naturalists' work in photographing birds, wild animals, or similar subjects where long-focus or 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.

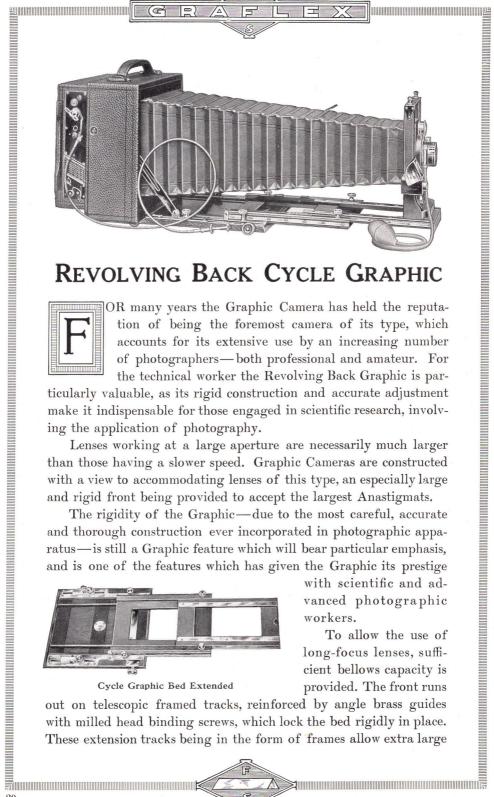
#### SPECIFICATIONS

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

| Naturalists' Graflex, 4 x 5, without lens, including one double plate | 4 x 5       |
|---|-------------|
| holder  | \$150.00    |
| With B. & LZeiss Protar Lens, Series VIIa, No. 19, f.6.3              | 310.50      |
| B. & L. High Power, Tele-Photo Attachment, extra                      | 37.00       |
| Graflex magazine plate or cut film holder, Model A, extra             | 14.50       |
| Film Pack Adapter, leather covered, extra                             | <b>5.00</b> |
| Extra Graflex holders, each   | <b>2.50</b> |





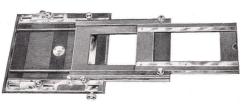


# REVOLVING BACK CYCLE GRAPHIC

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

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

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



Cycle Graphic Bed Extended

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





REVOLVING BACK CYCLE

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



Rear of Cycle Graphic showing Revolving Back

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.

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

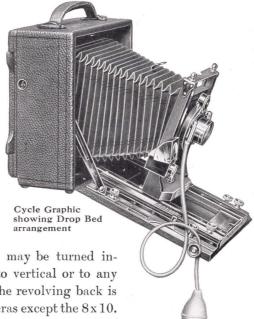
running in a slotted plate on the platform and locked by means of milled head binding screws.

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 8x10.

The new rising and falling front mechanism, by means of which the front may be raised or lowered to any desired position, is at the same time a lock in itself.

No further locking device or binding screws are required.





REVOLVING BACK CYCLE GRAPHIC-Continued

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

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

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

#### **SPECIFICATIONS**

|                    | $4 \times 5$                                | 5 x 7  | $6\frac{1}{2} \times 8\frac{1}{2}$                 | 8 x 10                                 |
|--------------------|---|--|--|--|
| Dimensions         | $6\frac{7}{8} \times 4 \times 7\frac{1}{8}$ | $8\frac{3}{4} \ge 4\frac{1}{4} \ge 9\frac{1}{4}$ | $10\frac{3}{8} \ge 4\frac{1}{2} \ge 10\frac{3}{8}$ | $12 \times 5 \times 12$                |
| Focal capacity .   | 17 in.                                      | $23\frac{1}{2}$ in.                              | 26 in.   | 30 in.                                 |
| Weight             | $3\frac{3}{4}$ lbs.                         | $6\frac{1}{4} \text{ lbs.}$                      | $7\frac{1}{2}$ lbs.                                | $10\frac{1}{2} \text{ lbs.}$           |
| Size of lens board | $2\frac{1}{2} \times 2\frac{1}{2}$ in.      | $3_8^1 \times 3_8^1$ in.                         | $4\frac{1}{8} \times 4\frac{1}{8}$ in.             | $4\frac{1}{2} \times 4\frac{1}{2}$ in. |

#### THE PRICE

Including one double plate holder and sole leather carrying case.

| Revolving Back Cycle Graphic with<br>Graphic Rapid Rectilinear<br>Lens and Automatic Shutter | 4 x 5<br>\$ 40.00 | 5 x 7<br>\$ 50.00 | 6½ x 8½<br>\$ 62.00 | 8 x 10*<br>\$ 75.00 |
|--|-------------------|-------------------|---------------------|---------------------|
| With Zeiss Kodak Anastigmat Lens   | No. 3             | No. 5             | No. 6               |                     |
| and Compound Shutter   | 71.55             | 92.30             | 113.70              |                     |
| With B. & LZeiss Protar Lens,  |                   |                   |                     |                     |
| Series VIIa, and Compound  | No. 7             | No. 10            | No. 13              | No. 17              |
| Shutter  | 105.30            | 127.30            | 157.70              | 222.40              |
| Extra plate holders, each  | 1.00              | 1.25              | 1.75                | 2.00                |
| Graflex Focal Plane Shutter, extra   | 15.00             | 16.00             | 17.50               | 20.00               |
| Supplementary bed for Wide Angle   |                   |                   |                     |                     |
| Lenses   | 7.00              | 7.50              | 8.00                | 9.00                |

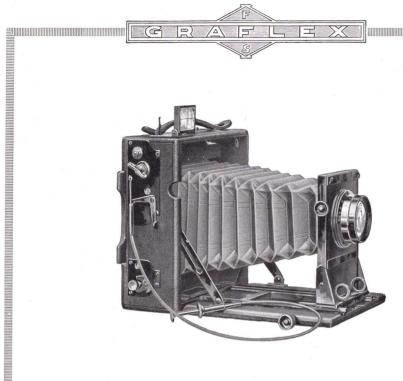
<sup>\*</sup>Furnished with reversible back only.

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

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







# THE SPEED GRAPHIC

#### **SPECIFICATIONS**

|                    |  | 4 x 5                                       | $3\frac{1}{4} \times 5\frac{1}{2}$                     | 5 x 7                                       |
|--------------------|--|---|--|---|
| Dimensions         |  | $3\frac{3}{4} \times 7 \times 8\frac{1}{2}$ | $3\frac{1}{8} \times 7\frac{1}{2} \times 7\frac{1}{2}$ | $3\frac{3}{4} \times 9 \times 9\frac{1}{2}$ |
| Focal capacity .   |  | . 12 in.                                    | 12 in.   | 16 in.                                      |
| Weight             |  | 3 lbs.                                      | $3\frac{1}{4}$ lbs.                                    | $4\frac{1}{4}$ lbs.                         |
| Size of lens board |  | $3\frac{1}{4} \times 3\frac{1}{4}$ in.      | $3\frac{1}{4} \times 3\frac{1}{4}$ in.                 | $3\frac{3}{4} \times 3\frac{3}{4}$ in.      |

#### THE PRICE

#### Including one double plate holder.

|                                   | $4 \times 5$        | $3\frac{1}{4} \times 5\frac{1}{2}$ | 5 x 7         |
|-----------------------------------|---------------------|------------------------------------|---------------|
| Speed Graphic without lens        | \$35.00             | \$37.50                            | \$ 43.00      |
| With Zeiss Kodak Anastigmat       |                     |                                    |               |
| Lens, $f.6.3$                     | No. 3 58.25         | No. 4 63.75                        | No. 5 77.50   |
| With B. & LZeiss Tessar, Series   |                     |                                    |               |
| Ic, f.4.5                         | No. 15 <b>75.50</b> | No. 15a 87.50                      | No. 16 105.00 |
| With Cooke Lens, Series II, f.4.5 | No. 21 <b>76.00</b> | No. $21\frac{1}{2}$ 87.50          | No. 22 105.00 |
| Sole leather carrying case, with  |                     |                                    |               |
| lock and key, to hold camera      |                     |                                    |               |
| and five extra plate holders .    | 7.00                | 7.50                               | 8.50          |
| Extra lens boards, each           | .40                 | .40                                | .50           |
| Extra plate holders, each         | 1.00                | 1.00                               | 1.25          |





# THE SPEED GRAPHIC

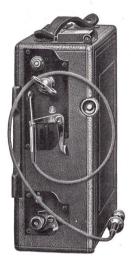
HE Speed Graphic Camera is designed to meet the requirements of those desiring Focal Plane Shutter efficiency in a compact folding camera.

The Speed Graphic is made of selected, kiln-dried mahogany especially treated to withstand climatic changes.

The front is large enough to accept the high speed Anastigmat lenses,

and sufficiently firm to prevent vibration when the camera is used with the bellows extended to its full capacity. A piano hinge extending the full width of the camera attaches the camera body to the folding platform, which is framed and paneled to insure a maximum of rigidity without excessive weight. The extension track is made in the form of a frame, which is not only extremely rigid, but allows the lens to rest between the tracks when the camera is closed.

The Speed Graphic is covered with the best grade of Morocco leather, and the bellows, which is of ample length to accommodate the single combinations of convertible lenses, is made of black leather. All exposed wood parts are ebonized and the metal work



Speed Graphic Closed

is oxidized, producing an instrument of attractive appearance. The Speed Graphic is supplied with a non-reversible back, and when making vertical negatives the camera is turned on its side, two tripod sockets being provided.

Built into and part of the Speed Graphic is the regular Graflex Focal Plane Shutter, as described on page 48. This shutter is actuated to give exposures of any duration from "time" to  $\frac{1}{1000}$  of a second.

The Speed Graphic is provided with a spring actuated ground glass focusing panel, which accepts either Graphic Plate Holders or the Premo Film Pack Adapter.

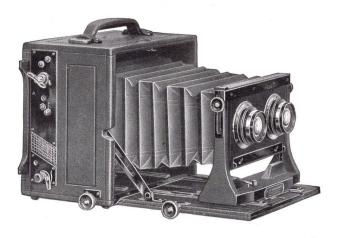
The Speed Graphic includes the following adjustments:

Rack and Pinion Focusing, Two Tripod Sockets, Direct View Finder, Removable Lens Board,

Rising Front.







# THE STEREOSCOPIC GRAPHIC

#### SPECIFICATIONS

|                | GRAFLEX   |                     |
|----------------|---|---------------------|
|                | THE STEREOSCOPIC GRAPHIC  With Auto Graflex Shutter  Folmer's Patents, November 5, 1901, February 5, 1907  SPECIFICATIONS  Dimensions, when closed, $8\frac{1}{5} \times 5\frac{1}{2} \times 7\frac{2}{5}$ in.; focal capacity, $12\frac{3}{4}$ in.; weighbs.; size of lens board, $3\frac{1}{8} \times 6\frac{1}{2}$ in.; minimum focus of lenses accordated, 3 in.  THE PRICE  ereoscopic Graphic without lenses, including one double plate holder sereoscopic Graphic with matched Graphic Rectilinear Lenses ereoscopic Graphic with matched Zeiss Kodak Anastigmat Lenses, No. 3, f.6.3  ereoscopic Graphic with matched B. & LZeiss Tessar Lenses, Series  Ulb. No. 4, f.6.3 |                     |
|                | THE STEREOSCOPIC GRAPHIC  | C                   |
|                | With Auto Graflex Shutter   |                     |
|                | Folmer's Patents, November 5, 1901, February 5, 1907  |                     |
|                | SPECIFICATIONS  |                     |
|                | Dimensions, when closed, $8\frac{7}{8} \times 5\frac{1}{2} \times 7\frac{7}{8}$ in.; focal capacity, $12\frac{3}{4}$ in.; weighbs.; size of lens board, $3\frac{1}{8} \times 6\frac{1}{2}$ in.; minimum focus of lenses accordated, 3 in.   | en e                |
|                | THE PRICE   | 5 x 7               |
| Sto<br>Sto     | ereoscopic Graphic without lenses, including one double plate holder<br>ereoscopic Graphic with matched Graphic Rectilinear Lenses ereoscopic Graphic with matched Zeiss Kodak Anastigmat Lenses,   |                     |
| Sto            | No. 3, f.6.3  | 116.50<br>129.00    |
| G:             | VIIa, No. 7, f.6.3  | 184.00              |
| Ste            | ereoscopic Graphic with matched B. & LZeiss Protar Lenses, Series V, No. 1.   | 110.00              |
| Ex             | tra for Zeiss Kodak Anastigmat Lens No. 5, f.6.3, for full size plate   | 40.00               |
| Ex             | tra for B. & LZeiss Protar Lens, Series VIIa, No. 10, f.6.3, for full size plate  | 69.50               |
| Le<br>Ex<br>Gr | IIb, No. 4, f.6.3  ereoscopic Graphic with matched B. & LZeiss Protar Lenses, Series VIIa, No. 7, f.6.3  ereoscopic Graphic with matched B. & LZeiss Protar Lenses, Series V, No. 1  tra for Zeiss Kodak Anastigmat Lens No. 5, f.6.3, for full size plate  tra for B. & LZeiss Protar Lens, Series VIIa, No. 10, f.6.3, for full size plate  ather carrying case, extra  tra Lens Boards, each  aphic plate holders, extra   | 9.00<br>.60<br>1.25 |
|                |   |                     |





# THE STEREOSCOPIC GRAPHIC

PHIC
ghest type of selected, kilnered with the etal parts are
y piano hinge, giving great ops out of the
hard milled the camera is HE Stereoscopic Graphic represents the highest type of folding stereo camera. It is constructed of selected, kilndried mahogany, highly finished and covered with the best quality black grained leather. All metal parts are oxidized in gun metal finish.

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

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

racked out. Focus is adjusted by rack and pinion.

An extra pinion is set in the body of the camera for use with wide angle lenses when the front platform is dropped. The front adjusts for sky and 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, pages 48, 49.)

THE STE

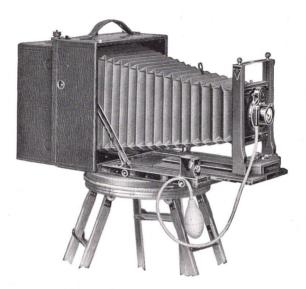
THE Stereosco
folding stered dried mahog best quality oxidized in general way, for use with lenses
The front is secure brass, preventing oscillar racked out. Focus is an justed by rack and pinion.

An extra pinion is sein the body of the camer for use with wide angulenses when the front plate form is dropped. The front adjusts for sky an foreground. Length of bellows is twelve inches. The Auto Grafle Focal Plane Shutter is in corporated with and form a part of the camera, and the outfit. (See descript)

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







# CIRKUT CAMERAS AND OUTFITS

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

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

'ITS

btography
no suitable
panoramic
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l and that
rating the 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 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.







# THE GRAFLEX FOCAL PLANE SHUTTER

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

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

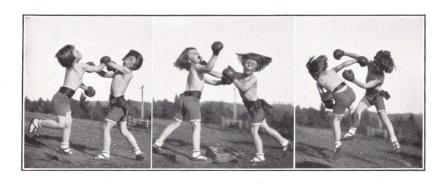
tives of rapidly moving objects, such as horse and

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





GRAFLEX FOCAL PLANE SHUTTER-Continued

the lens, in other words the full effice aperture used is maintained during. With the between-lens type of shut only a fraction of the exposure give working aperture of the lens, varying down to the pinhole. It therefore with the between-lens type of shutter exposures would be ineffective, owe method of lighting.

By simply turning a small key to be varied from time to \$\frac{1}{1000}\$ part of the maximum speed of an ording placed at the diaphragm of a lens doe \$\frac{1}{100}\$ of a second, and many shutters of not give shorter exposures than \$\frac{1}{30}\$ of the work of the 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

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

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

8 x 10 Dimensions  $6\frac{1}{4}x6\frac{1}{4}x2$   $8\frac{1}{4}x8\frac{1}{4}x2$   $9\frac{3}{8}x9\frac{3}{8}x2\frac{1}{8}$   $11\frac{5}{8}x11\frac{5}{8}x2\frac{1}{8}$ 32 oz.

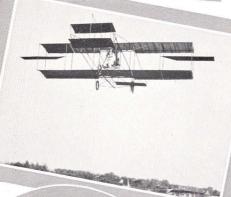
 $6\frac{1}{2} \times 8\frac{1}{2}$ 8 x 10 \$17.50 \$20.00



# 













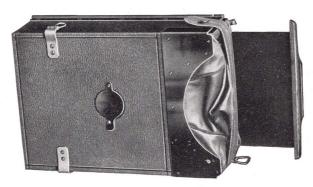


# THE GRAFLEX MAGAZINE PLATE HOLDER MODEL A

#### With Independent Dark Slide

HE Graflex Magazine Plate Holder is designed to carry twelve glass plates or cut films in metal septums. Each septum is numbered on the back, the number appearing at a ruby window in the back of the magazine as each exposure is made. When a plate is exposed the septum

is drawn into a leather bag attached to the end of the magazine, by means of a brass rod, and re-inserted by hand into the rear of the



THE GRAFLEX

With

THE Graflex twelve glass septum is n at a ruby vexposure is is drawn into a leather means of a brass rod, a magazine holder.

Each septum has a d to force the plate forwar serial numbers are place of the magazine force to position for exposure in pose all the plates befor removed at any time in be removed from the car prevents the light from:

Dimensions

Weight

3½ x 4½, each
4 x 5, each
5 x 7, each HOLDER

gned to carry eptums. Each ber appearing gazine as each ed the septum magazine, by ne rear of the set the back get the plate in cessary to explates can be entirely the Holder may ide effectually

5 x 7 8\frac{3}{4} x 6\frac{1}{4} x 2\frac{1}{2} 2\frac{3}{4} 1bs.

\$14.50 \tag{1.50} \tag{1.7.00} Each septum has a depression in the back which serves as a spring to force the plate forward into focus regardless of its thickness. The serial numbers are placed in these depressions. Springs at the back of the magazine force the septums forward, and bring the plate in position for exposure into exact register. It is not necessary to expose all the plates before development, as one or more plates can be removed at any time in the dark room. The Magazine Holder may be removed from the camera at any time, as the dark slide effectually prevents the light from reaching the plates or films.

#### **SPECIFICATIONS** $3\frac{1}{4} \times 4\frac{1}{4}$

 $4 \times 5$ 

|                              |  | 8 |  |   | $5\frac{3}{4} \times 4\frac{1}{4} \times 2\frac{1}{8}$<br>$1\frac{1}{4}$ lbs. |    |    |    |     |   | bs. | - 10 | $8\frac{3}{4} \times 6\frac{1}{4} \times 2\frac{1}{2}$<br>$2\frac{3}{4} \text{ lbs.}$ |  |  |         |  |  |
|------------------------------|--|---|--|---|---|----|----|----|-----|---|-----|------|---|--|--|---------|--|--|
|                              |  |   |  |   |   | TI | HE | PR | RIC | Ε |     |      |   |  |  |         |  |  |
| $\times 4\frac{1}{4}$ , each |  |   |  | , |   |    |    |    |     |   | v   |      |   |  |  | \$14.50 |  |  |
| x5, each                     |  |   |  |   |   |    |    |    |     |   |     |      |   |  |  |         |  |  |
| x 7 each                     |  |   |  |   |   |    |    |    |     |   |     |      |   |  |  |         |  |  |

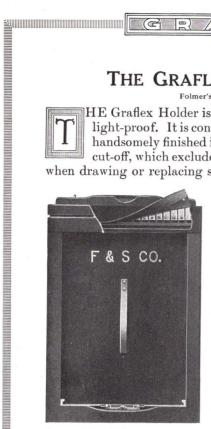




## THE GRAFLEX PLATE HOLDER

Folmer's Patent, October 25, 1904

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



Graflex Plate Holder Showing Cut-off

tongued, affording increased thickness and strength without increase of space occupied. The Graflex Holder is loaded by inserting one end of the plate under the rabbet where the slide is withdrawn, and placing the other end against the septum. With the thumb and 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.

#### THE PRICE

3½ x 4½, each \$2.50 4 x 5, each \$2.50 5 x 7, each \$3.50

# THE GRAPHIC PLATE HOLDER

Folmer's Patent, October 25, 1904

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

the septum keep the plates in absolute

register.

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



Section of Graphic Plate Holder Showing Cut-off

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

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

THE PRICE-4 x 5, each \$1.00 5 x 7, each \$1.25 62 x 82, each \$1.75 8 x 10, each \$2.00





# GRAPHIC SIGHT FINDER

HESE finders are so constructed that they may be readily attached to the camera. Horizontal and vertical centering lines, engraved on the lens, make it possible to

exactly center the object by means of vertical sight bar at the back of the bed plate. When the lens frame on the finder is folded down,

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

#### THE PRICE

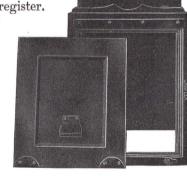
 $3\frac{1}{4} \times 5\frac{1}{2}$  . . . . \$2.75 4 x 5 . . . . \$2.75 5 x 7 .

# GRAFLEX COLOR PLATE HOLDER

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

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

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



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

| 34 x 4 (Lanter                            | n s | slide | e), | eac | h |  |  |  |  |   |  |  | \$4.50              |
|---|-----|-------|-----|-----|---|--|--|--|--|---|--|--|---------------------|
| $3\frac{1}{4} \times 4\frac{1}{4}$ , each |     |       |     |     |   |  |  |  |  | ÷ |  |  | 4.50                |
|   |     |       |     |     |   |  |  |  |  |   |  |  | 5.00                |
| 5 x7, each                                |     |       |     |     |   |  |  |  |  |   |  |  | $\boldsymbol{6.25}$ |



# GRAFLEX FILM PACK ADAPTER

#### MODEL A-With Slide

HE Graflex Film Pack Adapter is covered with the same fine grade of leather that is used on the Graflex, and can

be used with all the Graflex Cameras except the 1A and 3A, which

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HE Graflex
fine grade
be used
Graflex C
the 1A a
instruments use roll
sively. The Graflex F
apter takes the standar
Pack, and on all the
eras except the Press,
without removing from
On the Press Graflex
inserted in the same
plate holder into a sp
back. The entire open instruments use roll films exclusively. The Graflex Film Pack Adapter takes the standard Premo Film Pack, and on all the Graflex Cameras except the Press, may be loaded without removing from the camera. On the Press Graflex the adapter is inserted in the same manner as a plate holder into a spring actuated back. The entire operation of loading and unloading is effected in



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

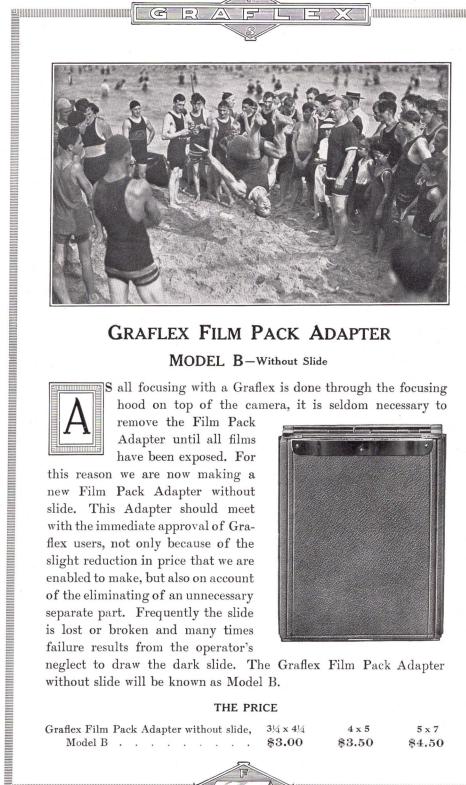
#### THE PRICE

3½ x 4½  $4 \times 5$  $5 \times 7$ Graflex Film Pack Adapter, Model A \$4.50 \$5.00 \$7.50









# GRAFLEX FILM PACK ADAPTER

MODEL B-Without Slide

S all focusing with a Graflex is done through the focusing hood on top of the camera, it is seldom necessary to

remove the Film Pack Adapter until all films have been exposed. For

this reason we are now making a new Film Pack Adapter without slide. This Adapter should meet with the immediate approval of Graflex users, not only because of the slight reduction in price that we are enabled to make, but also on account of the eliminating of an unnecessary separate part. Frequently the slide is lost or broken and many times failure results from the operator's



neglect to draw the dark slide. The Graflex Film Pack Adapter without slide will be known as Model B.

#### THE PRICE

31/4 x 41/4 Graflex Film Pack Adapter without slide,  $4 \times 5$ 5 x 7 \$3.00 \$3.50 \$4.50





## THE CROWN TRIPOD

Folmer's Patent, June 23, 1903

THE

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

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

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

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

Expansion brackets in

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

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

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

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

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

| No. 1 Crown Tripod with 4-inch top               |  |  |   |  |   |  | \$5.50 |
|--|--|--|---|--|---|--|--------|
| No. 2 Crown Tripod with 6-inch top               |  |  |   |  |   |  |        |
| No. 3 Crown Tripod with 6-inch top               |  |  |   |  |   |  | 7.50   |
| No. 4 Crown Tripod with $6\frac{1}{2}$ -inch top |  |  | * |  | , |  | 8.50   |





# CARRYING CASES FOR CROWN TRIPODS



F

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

| No. 1 Imitation | Walrus | Fa  | brik | oid, | lea | ther | ends  | , leat  | her | cap |  |  | \$3.00 |
|-----------------|--------|-----|------|------|-----|------|-------|---------|-----|-----|--|--|--------|
| No. 2 Imitation | Walrus | Fa  | brik | oid, | lea | ther | ends  | , leath | her | cap |  |  | 3.50   |
| No. 3 Imitation | Walrus | Fal | brik | oid, | lea | ther | ends. | leatl   | ner | cap |  |  | 4.00   |
| No. 4 Imitation | Walrus | Fal | brik | oid, | lea | ther | ends, | leath   | ner | cap |  |  | 4.50   |
| No. 1 Sole Leat | her .  |     |      |      |     |      |       |         |     |     |  |  | 4.00   |
| No. 2 Sole Leat | ther . |     |      |      |     |      |       |         |     |     |  |  | 4.75   |
| No. 3 Sole Leat | her .  |     |      |      | ,   |      |       |         |     |     |  |  | 6.00   |
| No. 4 Sole Leat | ther . |     |      |      |     |      |       |         |     |     |  |  | 6.75   |







# THE EASTMAN PLATE TANK

HE 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.

#### THE PRICE

| Eastman Plate Tank, 4 x 5, including solution cup, plate rack, and           | d        |
|--|----------|
| loading block  | . \$3.50 |
| Ditto, 5 x 7   | . 4.50   |
| Kit for $4 \times 5$ tank, to take $3\frac{1}{4} \times 4\frac{1}{4}$ plates | 50       |
| Kit for $5 \times 7$ 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 package            | ,        |
| $\frac{1}{2}$ dozen  | 20       |
| Ditto, for $5 \times 7$ tank, per package, $\frac{1}{2}$ dozen               | 35       |
| Kodak Acid Fixing Powder, per 1-pound package                                | 25       |





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# CROWN TILTING TRIPOD TOP



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

upward or downward, and also reversed for vertical pictures without changing the back or removing it from the tripod. Its portability and compactness will at once commend it to the photographer, especially for outof-door use. The top is perfectly rigid, no matter what position it may occupy.

#### THE PRICE

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

## CROWN FLASH LAMP

For Pure Magnesium Only

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

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

The double spreader will not clog up and is more powerful than any other lamp of double its cost now on

the market. Long or short flashes can be made.



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

#### THE PRICE

Crown Flash Lamp





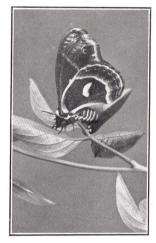
# **ANASTIGMAT LENSES**

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

The Anastigmat Lens with its superior correction has several

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

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



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

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

# ON FITTING LENSES

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



| CAMERA   |      | Zeiss Kodak                  | , f.6.3  | B. & I                       | LZeiss Tes      | sar, Ic, f.4.5                        | Cooke Lens, II, f.4.5 |        |               |  |
|--|------|------------------------------|----------|------------------------------|-----------------|---------------------------------------|-----------------------|--------|---------------|--|
| CAMERA   | No.  | Inches                       | Price    | No.                          | Inches          | Price                                 | No.                   | Inches | Price         |  |
| 1A Graflex   | 2    | 5                            | \$ 79 00 | 14                           | 5               | \$ 95 00                              | 201                   | 5      | \$ 95 50      |  |
| 3A Graflex   | 4    | 678                          | 101 25   | 15a                          | $7\frac{1}{16}$ | 125 00                                | $21\frac{7}{9}$       | 7      | 125 00        |  |
| $2\frac{1}{4} \times 3\frac{1}{4}$ Auto Graflex, Jr    | 1    | 41/3                         | 53 50    | 13                           | 41              | 66 00                                 | 20                    | 4      | 66 00         |  |
| $3\frac{1}{4} \times 4\frac{1}{4}$ Auto Graflex        | 2    | 5                            | 74 00    | 14                           | 5               | 90 00                                 | 201                   | 5      | . 90 50       |  |
| 1 x 5 Auto Graflex                                     | 3    | 61                           | 88 25    | 15                           | 6               | 105 50                                | 21                    | 61     | 106 00        |  |
| 5 x 7 Auto Graflex                                     | 5    | 81                           | 114 50   | 16                           | 81              | 142 00                                | 22                    | 8      | 142 00        |  |
| 5 x 7 Press Graflex                                    | 5    | 81                           | 144 50   | 16                           | 81              | 172 00                                | 22                    | 8      | 172 00        |  |
| 5 x 7 Home Portrait Graflex                            | 6    | 10                           | 196 50   | 17                           | 97              | 249 00                                | 221                   | 101    | 252 00        |  |
| B <sub>4</sub> x 4 <sub>4</sub> Revolving Back Graflex | 5    | 8‡                           | 144 50   | 15a                          | $7\frac{1}{16}$ | 160 00                                | $21\frac{7}{2}$       | 7      | 160 00        |  |
| 1 x 5 Revolving Back Graflex                           | 6    | 10                           | 171 50   | 17                           | 970             | 224 00                                | 22                    | 8      | 187 00        |  |
| 4 x 5 Telescopic R. B. Graflex                         | 5    | $8\frac{1}{4}$               | 154 50   | 16                           | $8\frac{1}{4}$  | 182 00                                | $21\frac{1}{2}$       | 7      | 170 00        |  |
| CAMERA   |      | with Zeiss Ko<br>mat Lens, f |          | with B. & I<br>ar, Series Ic |                 | Fitted with B. &<br>Protar, Series VI |                       |        | h Cooke Serie |  |
|  | Comp | ound Shutt                   | er Con   | anound Shu                   | ttor            | Compound Sh                           | ntter                 | Compos | and Shutter   |  |

|                  |                         | CHIVIE  | RA   |  |  |  |  | Fitted<br>Anasti  |   |   |   |   |   |   | with I<br>r, Seri                                      |  |  | s  |  |  |  |  | k LZ<br>IIa, f.  |  | Fi   |  |  |  | oke \$<br>f.6.3  | Series  |
|------------------|-------------------------|---|--|--|--|--|--|---|---|---|---|---|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|
|                  |                         |   |  |  |  |  |  | Com   | poun  | nd Sh   | utte  | r   |   | Com   | pound  | Shut   | ter  |  |  | Com  | poun   | d Sl   | hutter   | r  |  | Con  | ipot   | ind  | Shut   | ter   |
| x 5              | Revol                   | ving B  | ack (  | Cycl   | e Gi   | aphi   |  | No. 3 L 2 S   |   | \$  | Prio  |   | 15  |   |  |  | rice<br>8 80   | )  |  | L)   |  | #  | Pric<br>3105   |  |  | L)   |  |  |  | rice<br>9–30  |
| x 7              | Revol                   | ving B  | ack (  | Cycl   | e G  | aphi   |  | 5 T )   |   |   | 92  | 30  | 16  | Lì  |  | . 12   | 2 80   | )  | 10   | Lì   |  |  | 127  | 30   | $21\frac{1}{2}$  | Lì   |  |  | 105  | 7 80  |
| $x 8\frac{1}{2}$ | Revol                   | ving B  | ack (  | Cycl   | e G  | raphi  | c  | $\left\{ \begin{array}{l} 6 & L \\ 3 & S \end{array} \right\}$  |   |   | 113   | 70  |   |   |  | . 16   | 7 70   | )  | 3  | S  |  |  | 157  | 70   |  |  |  |  | 163  | 3 70  |
| x 10             | Rever                   | sible B   | ack (  | Cycl   | e G  | raphi  | c  |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  | 222  | 40   |  |  |  | <br>*S   | 191<br>eries   | 1 90<br>IV  |
| Ext              | ra for                  | Graflex   | Foc  | al P   | lane   | Shu  | tter   | , fitted  | L   | 4 x   | 5.  | ;   | \$15  | 00 8  | 5 x 7  |  | \$16   | 3 00   | 6  | 1 x 8  | $\frac{1}{2}$ .  |  | . \$17   | 50   | 8 x  | 10   |  | . ,  | \$20 (   | 00  |
|                  |                         | CAME  | ERA  |  |  |  |  |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |  | Fit  |  |  |  |  |  | ,   |
| $x 5\frac{1}{2}$ | Speed                   | Graphi  | ic .   | :  |  | :  |  | No.4  |   | :   | :   | . \$  | 63  | 75  | No   | o. 15a   |  |  |  |  | 87   | 50   | N  | No. 21   | $\frac{1}{2}$ .  |  |  |  | 8'   | 6 00<br>7 50<br>5 00                                  |
| 111              | x 7 x 8½ x 8½ x 10  Ext | $x 	ext{ 7 Revol}$ $x 	ext{ 8} 	extstyle{1}{2} 	ext{ Revol}$ $x 	ext{ 10 Rever}$ $Extra 	ext{ for } 	ext{ }$ $x 	ext{ 5 Speed}$ $x 	ext{ 5} 	ext{ Speed}$ | x 7 Revolving Box 8½ Revolving Box 10 Reversible Box 10 Extra for Graflex  CAME  x 5 Speed Graphi  x 5½ Speed Graphi | x 7 Revolving Back ( x 8½ Revolving Back ( x 10 Reversible Back ( Extra for Graflex Foc  CAMERA  x 5 Speed Graphic .  x 5½ Speed Graphic . | x 7 Revolving Back Cycle x 8½ Revolving Back Cycle x 10 Reversible Back Cycle Extra for Graflex Focal P  CAMERA  x 5 Speed Graphic  x 5½ Speed Graphic | x 7 Revolving Back Cycle Grant Reversible Back Cycle Grant | x 7 Revolving Back Cycle Graphi x 8½ Revolving Back Cycle Graphi x 10 Reversible Back Cycle Graphi Extra for Graflex Focal Plane Shu CAMERA  x 5 Speed Graphic  x 5½ Speed Graphic | x 7 Revolving Back Cycle Graphic x 8½ Revolving Back Cycle Graphic x 10 Reversible Back Cycle Graphic  Extra for Graflex Focal Plane Shutter  CAMERA  x 5 Speed Graphic | $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$ | $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ |

| CAMERA  |   |   |  |       |  |  | Kodak<br>, f.6.3 | Fitted v<br>Tessar |    |  |    |     |    |   | Fi     |                 |  | ke I<br>.4.5 | ens,  |    |
|---|---|---|--|-------|--|--|------------------|--------------------|----|--|----|-----|----|---|--------|-----------------|--|--------------|-------|----|
| 4 x 5 Speed Graphic.                              |   |   |  | No. 3 |  |  | \$ 58 25         | No. 15 .           | ٠. |  | \$ | 75  | 50 | N | No. 21 |                 |  |              | \$ 76 | 00 |
| $3\frac{1}{4} \times 5\frac{1}{2}$ Speed Graphic. | 2 |   |  | No. 4 |  |  | 63 75            | No. 15a .          |    |  |    | 87  | 50 | 1 | No. 21 | $\frac{1}{2}$ . |  |              | 87    | 50 |
| 5 x 7 Speed Graphic.                              |   | ٠ |  | No. 5 |  |  | 77 50            | No. 16 .           |    |  | 1  | 105 | 00 | 1 | No. 22 | 3 .             |  |              | 105   | 00 |



### ZEISS-KODAK ANASTIGMAT f.6.3

|     | Size of Plate covered              | Essimilari E               | P              | RICE                        |
|-----|------------------------------------|----------------------------|----------------|-----------------------------|
| No. | with Stop f.6.3<br>Inches          | Equivalent Focus<br>Inches | Lens in Barrel | Lens in Compound<br>Shutter |
| 1   | 2½ x 4½                            | 41                         | \$18 50        | \$29 50                     |
| 2   | $3\frac{1}{4} \times 4\frac{1}{4}$ | 5                          | 19 00          | 30 00                       |
| 3   | 4 x 5                              | 61                         | 23 25          | 37 25                       |
| 4   | 3½ x 5½                            | $6\frac{3}{4}$             | 26 25          | 38 75                       |
| 5   | 5 x 7                              | 81                         | 34 50          | 51 50                       |
| 6   | $6\frac{1}{2} \times 8\frac{1}{2}$ | 10                         | 46 50          | 63 50                       |

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

|     | Size of Plate covered              | The state of the same      | ,                                     | PRICE                              |                                      |
|-----|------------------------------------|----------------------------|---------------------------------------|------------------------------------|--------------------------------------|
| No. | with Stop f.6.3<br>Inches          | Equivalent Focus<br>Inches | Lens in Barrel with<br>Iris Diaphragm | Lens Fitted with<br>Volute Shutter | Lens Fitted with<br>Compound Shutter |
| 4   | 31 x 41                            | 5 8                        | \$ 29 50                              | \$ 46 50                           | \$ 42 00                             |
| 5   | 4 x 5                              | $6\frac{1}{8}$             | 31 00                                 | 48 00                              | 45 00                                |
| 5k  | $3\frac{1}{4} \times 5\frac{1}{2}$ | $6\frac{7}{8}$             | 38 50                                 | 55 50                              | 51 00                                |
| 5a  | 5 x 7                              | $7\frac{1}{16}$            | 43 50                                 | 62 00                              | 57 50                                |
| 6   | 5 x 8                              | 81                         | 53 00                                 | 71 50                              | 70 00                                |
| 7   | 61 x 81                            | 10                         | 71 50                                 | 90 00                              | 88 50                                |
| 8   | 8 x 10                             | 12                         | 105 50                                | 125 50                             | 124 00                               |
| 9   | 10 x 12                            | 143                        | 136 50                                | 156 50                             |                                      |
| 9a  | 11 x 14                            | $16\frac{1}{2}$            | 166 00                                |                                    |                                      |
| 10  | 14 x 17                            | $19\frac{7}{4}$            | 217 00                                |                                    |                                      |

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

|     | Size of Plate covered              | 71                         |                                       | PRICE                              |                                      |
|-----|------------------------------------|----------------------------|---------------------------------------|------------------------------------|--------------------------------------|
| No. | with Stop f.4.5<br>Inches          | Equivalent Focus<br>Inches | Lens in Barrel with<br>Iris Diaphragm | Lens Fitted with<br>Volute Shutter | Lens Fitted with<br>Compound Shutter |
| 13  | 2½ x 3½                            | $4\frac{1}{2}$             | \$ 31 00                              | \$ 48 00                           | \$ 43 50                             |
| 14  | $3\frac{1}{4} \times 4\frac{1}{4}$ | 5                          | 35 00                                 | 52 00                              | 49 00                                |
| 15  | 4 x 5                              | 6                          | 40 50                                 | 59 00                              | 54 50                                |
| 15a | 5 x 7                              | $7\frac{1}{16}$            | 50 00                                 | 68 50                              | 67 00                                |
| 16  | 5 x 8                              | 81                         | 62 00                                 | 82 00                              | 79 00                                |
| 17  | $6\frac{1}{2} \times 8\frac{1}{2}$ | $9\frac{7}{8}$             | 99 00                                 | 119 00                             | 117 50                               |
| 18  | 8 x 10                             | $11\frac{7}{8}$            | 139 00                                |                                    |                                      |
| 18a | 10 x 12                            | $14\frac{5}{8}$            | 180 00                                |                                    |                                      |
| 19  | 11 x 14                            | $15\frac{3}{4}$            | 217 00                                |                                    |                                      |
| 20  | 14 x 17                            | $19\frac{3}{4}$            | 310 00                                |                                    |                                      |

# BAUSCH & LOMB-ZEISS PROTAR, Series VIIa

|     | Size of Plate                           |                  | nt Focus of<br>otars, Ins. | Combined                        | Speed |  | PRICE  |  |
|-----|---|------------------|----------------------------|---------------------------------|-------|--|--|--|
| No. | covered with<br>Full Aperture<br>Inches | Front<br>Lens    | Back<br>Lens               | Equiva-<br>lent Focus<br>Inches | f     | Lens in Barrel<br>with Iris<br>Diaphragm | Lens Fitted with<br>Aluminum<br>Volute Shutter | Lens Fitted with<br>Aluminum<br>Comp'd Shutter |
| 4   | 4 x 5                                   | 834              | $8\frac{3}{4}$             | $5\frac{1}{16}$                 | 6.3   | \$ 48 50                                 | \$ 65 00                                       | \$ 61 00                                       |
| 5   | 41 x 61                                 | $11\frac{3}{16}$ | $8\frac{3}{4}$             | $5\frac{5}{8}$                  | 7.    | 53 00                                    | 70 00  | 65 50  |
| 6   | $4\frac{1}{4} \times 6\frac{7}{2}$      | $13\frac{3}{4}$  | 83                         | $6\frac{1}{8}$                  | 7.7   | 59 50                                    | 78 00  | 73 50  |
| 7   | $4\frac{1}{2} \times 7\frac{7}{4}$      | 11 3             | $11\frac{3}{16}$           | $6\frac{3}{8}$                  | 6.3   | 57 00                                    | 74 00  | 71 00  |
| 8   | 5 x 7                                   | 133              | 113                        | 7                               | 7.    | 63 50                                    | 82 00  | 77 50  |
| 9   | 5 x 8                                   | 161              | 113                        | $7\frac{1}{2}$                  | 7.7   | 74 00                                    | 92 50  | 91 00  |
| 10  | 5 x 8                                   | 133              | $13\frac{1}{4}^{\circ}$    | $7\frac{7}{8}$                  | 6.3   | 69 50                                    | 88 00  | 83 50  |
| 11  | $6\frac{1}{2} \times 8\frac{1}{2}$      | $16\frac{1}{8}$  | $13\frac{3}{4}$            | 81/2                            | 7.    | 80 00                                    | 98 50  | 97 00  |
| 12  | $6\frac{1}{2} \times 8\frac{1}{2}$      | $18\frac{7}{8}$  | $13\frac{3}{4}$            | 91                              | 7.7   | 98 50                                    | 118 50   | 115 50   |
| 13  | $6\frac{1}{2} \times 8\frac{1}{2}$      | $16\frac{1}{8}$  | $16\frac{7}{8}$            | $9\frac{1}{4}$                  | 6.3   | 90 50                                    | 109 00   | 107 50   |
| 14  | 7 x 9                                   | $18\frac{7}{8}$  | $16\frac{1}{8}$            | 10                              | 7.    | 109 00                                   | 129 00   | 126 00   |
| 15  | 7 x 9                                   | $23\frac{1}{8}$  | 161                        | 107                             | 7.7   | 128 00                                   | 148 00   | 146 50   |
| 16  | 7 x 9                                   | $18\frac{7}{8}$  | $18\frac{7}{8}$            | $10\frac{1}{16}$                | 6.3   | 126 50                                   | 146 50   | 143 50   |
| 17  | 8 x 10                                  | $23\frac{1}{8}$  | $18\frac{9}{8}$            | $11\frac{1}{3}^{\circ}$         | 7.    | 145 50                                   | 165 50   | 164 00   |
| 18  | 8 x 10                                  | 27               | $18\frac{7}{8}$            | $12\frac{3}{4}$                 | 7.7   | 171 50                                   | 191 50   | 190 00   |
| 19  | 8 x 10                                  | 231              | $23\frac{1}{8}$            | $13\frac{1}{4}$                 | 6.3   | 160 50                                   | 180 50   | 179 00   |





# B. & L.-ZEISS EXTREME WIDE ANGLE, Series V. f.18

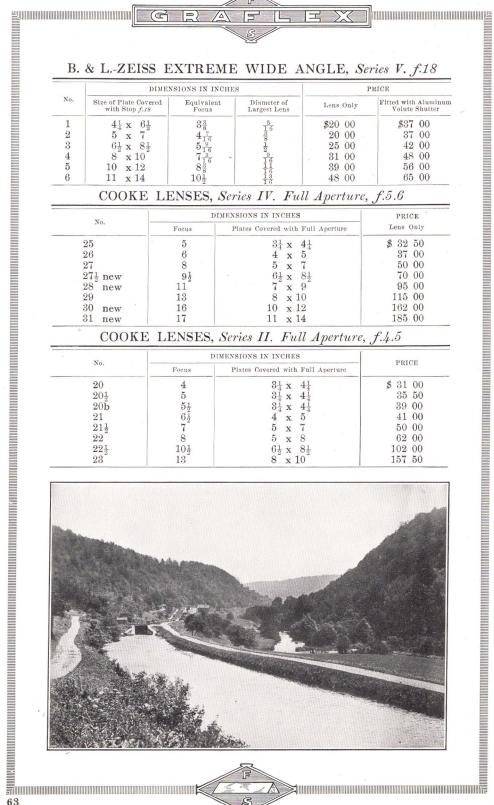
|     | DIMEN                                   | SIONS IN INCHE           | S                           |           | PRICE                                  |
|-----|---|--------------------------|-----------------------------|-----------|--|
| No. | Size of Plate Covered<br>with Stop f.18 | Equivalent<br>Focus      | Diameter of<br>Largest Lens | Lens Only | Fitted with Aluminum<br>Volute Shutter |
| 1   | 4½ x 6½                                 | 33                       | 5                           | \$20 00   | \$37 00                                |
| 2   | 5 x 7                                   | 4.7                      | 30                          | 20 00     | 37 00                                  |
| 3   | 6½ x 8½                                 | $5\frac{19^{\circ}}{18}$ | 1                           | 25 00     | 42 00                                  |
| 4   | 8 x 10                                  | 730                      | 9                           | 31 00     | 48 00                                  |
| 5   | 10 x 12                                 | 83                       | 11                          | 39 00     | 56 00                                  |
| 6   | 11 x 14                                 | 101                      | 13                          | 48 00     | 65 00                                  |

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

| No.     |                | DIMENSIONS IN INCHES              | PRICE     |
|---------|----------------|-----------------------------------|-----------|
| No.     | Focus          | Plates Covered with Full Aperture | Lens Only |
| 25      | 5              | 3½ x 4½                           | \$ 32 50  |
| 26      | 6              | 4 x 5                             | 37 00     |
| 27      | 8              | 5 x 7                             | 50 00     |
| 27½ new | $9\frac{1}{2}$ | 6½ x 8½                           | 70 00     |
| 28 new  | 11             | 7 x 9                             | 95 00     |
| 29      | 13             | 8 x 10                            | 115 00    |
| 30 new  | 16             | 10 x 12                           | 162 00    |
| 31 new  | 17             | 11 x 14                           | 185 00    |

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

| 27                     | 1     | DIMENSIONS IN INCHES               | PRICE    |  |  |
|------------------------|-------|------------------------------------|----------|--|--|
| No.                    | Focus | Plates Covered with Full Aperture  | FRICE    |  |  |
| 20                     | 4     | 3½ x 4½                            | \$ 31 00 |  |  |
| 201                    | 5     | $3\frac{1}{4} \times 4\frac{1}{4}$ | 35 50    |  |  |
| $20\tilde{\mathbf{b}}$ | 51    | $3\frac{1}{4} \times 4\frac{1}{4}$ | 39 00    |  |  |
| 21                     | 65    | 4 x 5                              | 41 00    |  |  |
| $21\frac{1}{2}$        | 7     | 5 x 7                              | 50 00    |  |  |
| 22                     | 8     | 5 x 8                              | 62 00    |  |  |
| $22\frac{1}{2}$        | 101   | $6\frac{1}{2} \times 8\frac{1}{2}$ | 102 00   |  |  |
| 23                     | 13    | 8 x 10                             | 157 50   |  |  |







# **OUR TERMS**

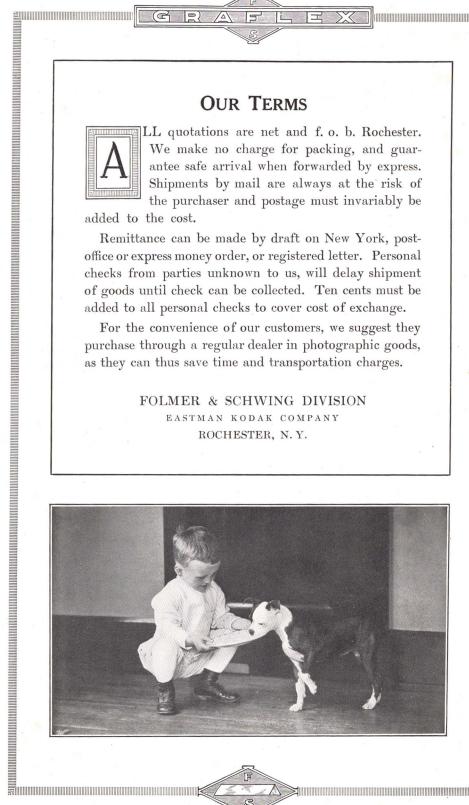
added to the cost.

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

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

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

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





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