

# GRAFLEX GRAPHIC CAMERAS



FOLMER & SCHWING DIVISION

EASTMAN KODAK COMPANY

ROCHESTER · N · Y ·



# THE GRAFLEX



SIDE from its excellence of construction and beauty of finish, the real merit of the Graflex Camera is found in the fact that it eliminates most of the familiar causes of non-success. Add to this the ability of the Graflex to make pictures under conditions impossible with cameras of the usual construction, and you have the reasons why the Graflex is the first choice of those who demand the best.

With the Graflex it is possible to make pictures of moving objects under light conditions that heretofore have made photography impossible, and on days when the sun is shining, the Graflex will make perfect negatives of objects moving with the utmost rapidity. The user of a Graflex finds it unnecessary to either measure or estimate the distance between the camera and his subject; nor is he obliged to go through the elaborate process of focusing on the ground glass under the awkward focusing cloth.

The most desired pictures are very often the ones that are unobtainable except with the Graflex,—snapshots of children playing indoors, pictures of moving objects taken in the soft light of a cloudy day or in the deep shade, and clear, distinct pictures of subjects moving at high speeds. The Graflex will make these pictures with surprising ease and accuracy.

The Graflex, employing well known optical principles in a new way, completely eliminates uncertainty of focus. The Graflex shows the image right side up, the size it will appear in the negative up to the instant of exposure. This is accomplished by placing an optically perfect mirror in

the body of the camera, at such an angle that the image projected by the lens is reflected from the mirror to a fine ground glass screen in the top of the camera (see illustration). The operator, looking into the focusing hood, sees the picture right side up, exactly as it will be reproduced



Sectional Illustration, showing Graflex Principle

in the finished The disprint. tance 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 com-

position and arrangement of the subject are next to impossible. Another feature that adds great uncertainty to the results obtained with cameras fitted with finders is the fact that no matter how badly out of focus the subject may be on the plate or film, the image in the finder is always sharp. This necessitates the use of a focusing scale, compelling the operator to estimate the distance between the camera and the subject. With the Graflex there is no

guess work. A glance in the focusing hood shows instantly whether, or not, the subject is in focus. The Graflex operator knows to a certainty that, with proper exposure, the finished print will be an exact reproduction of the image as seen on the focusing screen.

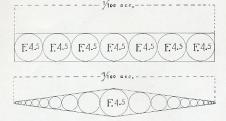
No less important than the reflecting principle as applied to the Graflex is the fact that the most highly efficient shutter ever designed is built into and part of every Graflex Camera. While the Graflex Focal Plane Shutter is so well known and extensively used that an extended description is unnecessary,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

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 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







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 better lens type with the lens disphragm 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 disphragm 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.

Plane Shutter permits the lens to work at its entire efficiency during the whole period of exposure. With shutters of the between lens type the lens is working at its full diaphragm opening during only a small fraction of the exposure, the remaining portion of the exposure period being utilized by the opening and closing of the shutter. The principle is illustrated in the two diagrams shown above.

The shutter in every Graflex Camera is actuated to give automatic exposures from  $\frac{1}{1^{4}}$  to  $\frac{1}{1^{4}}$   $\frac{1}{1^{4}}$   $\frac{1}{1^{4}}$  or a second, except in the Press Graflex where a speed of  $\frac{1}{1^{4}}$  or of a second may be obtained, and the Home Portrait Graflex, which has a maximum shutter speed of  $\frac{1}{1^{4}}$  or of a second. A metal table shows instantly the speeds obtained with the different



tensions on the curtain spring and various curtain aper-

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

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

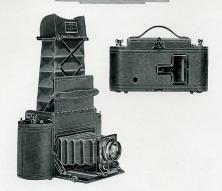
The Graflex is constructed of mahogany covered with the finest grade of Persian Morocco leather, which harmonizes perfectly with the rich appearance given by the oxidized metal work and ebonized finish of all visible wood parts. Although it is rarely necessary to use a tripod with the Graflex, tripod plates are provided, permitting the use of a tripod for prolonged time exposures.





Auto Graflex Shutter Control Mechanism





# THE 1A GRAFLEX

autographic

#### SPECIFICATIONS

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

1A Graflex without lens       \$ 60.00         With B. & L. Kodak Anastignat Lens, f.6.3, No. 2       79.00         With B. & L. Tessar Lens, Series Ic, f.4.5, No. 14       95.00         With Cooke Lens, Series II, f.4.5, No. 20½       95.56         Leather Case for 1A Graflex       5.00         Extra lens boards, each       4.40	414	216 x					2	CI	PR	Ε.	TH	1					
With B. & L. Tessar Lens, Series Ic, f.4.5, No. 14.       95.00         With Cooke Lens, Series II, f.4.5, No. 20½       95.50         Leather Case for 1A Graflex       5.00	.00	\$ 60.												ithout lens	Graflex wi	1A	
With Cooke Lens, Series II, f.4.5, No. 20½         95.56           Leather Case for 1A Graflex         5.00	.00	79.				0. 9	No	.3,	f.6	as,	Lei	at 1	astigm	Kodak Ar	th B. & L.	Wit	
Leather Case for 1A Graflex	.00	95.				14.	0.	N	4.5	f.	Ιc,	ies l	s, Ser	Tessar Le	th B. & L.	Wit	
	.50	95.							201	0.	N	4.5,	II, f.	ens, Series	th Cooke L	Wit	
Extra lens boards, each	.00	5.											flex .	for 1A Gra	ther Case f	Lea	
	40													rds, each	ra lens boar	Ext	

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

Imag's Patent Cabrance 5 1907 and April 21 1909

HE 1A Graflex is the result of a well directed effort to provide a thoroughly efficient reflecting camera contained in the least possible space.

This camera takes regular 1A Kodak Autographic film and makes a picture of very pleasing proportions,  $2\frac{1}{2}x 4\frac{1}{4}$  inches. It is fitted with the new Autographic feature, which enables the operator to title or make a record on the negative when the picture is made. As in the other Graflex models, this camera is equipped with a focal plane shutter, giving exposures of any duration from time to  $\frac{1}{12\sqrt{12}}$  of a second and the image may be seen the size it will appear in the negative, up to the instant of exposure, right side up. In order to make the camera as compact as possible the focusing screen is made a trifle narrower than the full width of the negative; this does not interfere in the slightest degree with accurate focusing.

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

Another improvement which adds much to the case 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. A tripod socket is fitted in the base of the camera. Plate adapters can not be supplied for the IA Graffex.



# THE 3A GRAFLEX

# autographic

#### SPECIFICATIONS

Dimensions,  $10 \ddagger x 5 x 7$ ; focal capacity, 10 in.; weight, 7 lbs.; size of lens board,  $3 \ddagger x 3 \ddagger$  in.; minimum focus of lenses accommodated,  $6 \ddagger$  in. For Film only.

#### THE PRICE

			3½ x 5½
3A Graflex without lens			 \$ 75.00
With B. & L. Kodak Anastigmat Lens, f.6.3,	No. 4		 101.25
With B. & L. Tessar Lens, Series Ic, f.4.5, No	o. 15a		 125.00
With Cooke Lens, Series II, f.4.5, No. 211 .			 125.00
Leather Case for 3A Graflex			 7.00
Extra lens boards, each			 .50

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

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

# THE 3A GRAFLEX

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ALL 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 Graffex models. The 3A Graffex makes pictures of the most pleasing proportions, 3\frac{1}{2}\times 5\frac{1}{2}, on regular 3A Kodak Film, which may be obtained wherever camera supplies are sold.

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

Built into, and part of the SA Graflex, is the regular Graflex Focal Plane Shutter, giving instantaneous exposures from \(^1\)\fo 1 \(^1\)\vec{v}\)\tilde{v}\) 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.

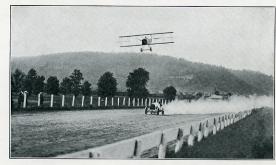
A metal stop is adjusted to the track at a point indicating the "Universal focus" of the lens and when the front is drawn out to this point, distant objects may be photographed without focusing. This is a valuable feature for general landscape work where none of the subjects are close to the camera.

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 focusing hood is detachable, allowing easy access to the ground glass screen when prolonged use makes cleaning necessary. 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 pro-



Size of picture made with 21/6 x 41/4 1A Graflex



Size of picture made with 31/4 x 51/9 3A Graflex

3A GRAFLEX-Continued



3A Graflex Closed, Showing Autographic Feature

vided,—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 dired, lock-jointed and covered with the finest grade of Persian Morocco leather. All exposed wood parts are chonized 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 Graffex, provided the lens is of suitable focal length. The fact that the 3A will accept lenses having a focus as short as  $6\frac{1}{4}$  inches as well as those of greater length, the camera having a bellows capacity of 10 inches, allows the operator of a 3A Graffex 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

The Auto Graflex is offered in three sizes:  $3\frac{1}{4} \times 4\frac{1}{4}$ ,  $4 \times 5$ , and  $5 \times 7$ , 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  $\gamma_{\psi\psi\psi}$  of a second. The new design of the focusing hood renders focusing particularly easy, and is readily detachable.

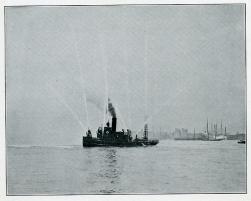
The Auto Graflex takes the regular Graflex plate holder, and is constructed to take the Graflex Roll Holder, the Graflex Magazine Plate Holder, which may be loaded with twelve glass plates, and the Film Pack Adapter which takes the Film Pack.

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





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



Size of picture made with 4 x 5 Auto Graflex



AUTO GRAFLEX-Continued

The 5 x 7 Auto Graflex differs slightly in construction from the 31 x 41 and 4 x 5 sizes. On the 5x7 camera the front, as well as the automatic lens cover, is hinged, and the mechanism for adjusting the shutter for time and instantaneous is operated by a disc instead of the sliding bar supplied on the smaller models. The side arm racks on the two smaller models are stamped from one piece of brass, and the focusing hood is slightly different in construction from that supplied on the 5 x 7 Auto Graflex.

Dimensions when closed .

Focal canacity



5 x 7 Auto Graflex

91 x 81 x 83

63 x 64 x 71

## 3¼ x 4¼ . 5½ x 5½ x 6¼

Focal capacity		og m.	13 In.
Weight			S1 lbs.
Size of lens board	23 x 23 in.	3 x 3 in.	4 x 4 in.
Minimum focus of lenses ac			
commodated		6 in.	7½ in.
	THE PRICE		
Auto Graflex without lens, in-	3¼ x 4¼	4 x 5	
cluding one double holder	\$50.00	\$ 60.00	\$ 75.00
With B. & L. Kodak Lens, f.6.3	No. 2 69.00	No. 3 83.25	No. 5 109.50
With B. & L. Tessar, Series Ic.			
f.4.5	No. 14 85.00	No. 15 100.50	No. 16 137.00
With Cooke, Series II, f.4.5 . 1	No. 201 85.50	No. 21 101.00	No. 22 137.00
Graflex Roll Holder	7.00	8.00	9.00
Graflex Magazine Plate Holder	12.50	13.50	15.00
Film Pack Adapter, leather cov- ered	4.50	5.00	7.50
Leather case for camera and Film Pack Adapter	6.00	7.50	10.00
Leather case for camera and magazine plate holder	7.00	8.50	11.00
Leather case to hold six plate holders	4.00	5.00	6.00
Extra Graffex plate holders, each	2.50	2.50	3.50
Extra lens boards, each	.50	.60	.70
Ground glass panels, to inter- change with plate holders .	2.00	2.50	3.50
Graflex Roll Holder Film, 6 ex- posures	.35	.45	.80





# THE AUTO GRAFLEX JUNIOR

#### SPECIFICATIONS

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

#### THE PRICE

THE TRUE					214 x 314
Auto Graflex Junior without lens, including one doub	ble	plate	hol	der	\$35.00
With B. & L. Kodak Anastigmat Lens, No. 1 .					53.50
With B. & L. Tessar, Series Ic, f.4.5, No. 13					66.00
With Cooke Lens, Series II, f.4.5, No. 20					66.00
Graflex Roll Holder					6.00
Graflex Magazine Plate Holder, Model A					10.00
Graflex Film Pack Adapter					3.00
Leather case for camera and plate holder					4.50
Leather case for six plate holders					3.00
Leather case for camera and magazine plate holder					6.00
Extra Graflex plate holders, each					1.50
Graflex Roll Holder Film, 6 exposures					.20

# THE AUTO GRAFLEX JUNIOR

THIS 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 Tyber 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 front standards are stamped from one piece of heavy brass. This insures absolute parallelism of the front



Auto Graflex Junior-side view

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





# THE REVOLVING BACK GRAFLEX JUNIOR

HIS camera is similar in construction to the  $2\frac{1}{4} \times 3\frac{1}{4}$  Auto Graflex Junior, and makes a picture  $2\frac{1}{4} \times 3\frac{1}{4}$  inches. It is fitted with revolving back, which permits the operator to turn the back from a vertical to a horizontal position without removing the back from the camera, a particularly valuable feature for those who wish to make vertical negatives without turning the camera on its side. The revolving back may be changed from horizontal to vertical—or any intermediate—position without danger of fogging the plate or film when the slide is withdrawn. In order to intercept the rays of light for vertical as well as horizontal negatives, it is necessary to make the reflecting mirror a trifle longer than that supplied with the Auto Graflex Junior. This slightly increases the length of the body of the camera, which permits the use of long focus lenses.

REVOLVING BACK GRAFLEX JUNIOR-Continued

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

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



R. B. Graflex Junior Closed

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

#### SPECIFICATIONS

Dimensions when closed								2¼ x 3¼ 6 x 44 x 6
rocar capacity				-				71 1
Weight			:					3\frac{1}{4} lbs.
Minimum focus of lens a	cco	mm	oda	ted				51 in.

#### THE PRICE

THE PRICE							
Revolving Back Graflex Junior, without lens, inc	·ludi	ng	one	d	oul	le	2¼ x 3¼
With B. & L. Kodak Apartisment I con N							\$ 65.00
With B. & L. Kodak Anastigmat Lens, f.6.3, No.	3 .						88.25
With B. & L. Tessar Lens, Series Ic, f.4.5, No. 15							105.50
with Cooke Lens, Series II, f.4.5, No. 21							106 00
Graffex Roll Holder							100.00
Grafley Magazine Plate H-11 N 111							6.00
Graflex Magazine Plate Holder, Model A							10.00
Graflex Film Pack Adapter							3.00
Leather case for camera and plate holder							5.50
Leather case for six plate holders							5.50
Leather case for six plate holders							3.00
Leather case for camera and magazine plate holder							7.00
Extra Graflex plate holders, each							7.50
Graffex Roll Holder Film, 6 exposures		•					1.50
exposures							90





# THE COMPACT GRAFLEX

THE Compact Graflex is all that its name implies. It is not only small in size, but is built with the accuracy and rigidity necessary in a 31 x 51 and 5 x 7 reflecting camera. This Graflex embodies many new features, and particular attention is directed to the new automatic safety curtain which is actuated by the swinging mirror frame, protecting the plate or film when the mirror is set. As soon as the release lever is pressed the swinging mirror drops the safety curtain, and allows the focal plane shutter to make the exposure in the usual way. The mirror frame in this camera is constructed of aluminum, which reduces the weight of the instrument, and as the mirror frame seats against an air cushion in the top of the camera, it eliminates all danger of vibration, a valuable feature when making slow exposures while holding the camera in the hand. An improved mechanism is provided for setting the shutter for time or instantaneous exposures, and the new shutter winding tension is so constructed that all mechanism inside the plate is thoroughly protected.

The focusing hood is made amply large to afford full view of the focusing screen when making exposures with the camera held in position for making vertical negatives. This hood is made so that

COMPACT GRAFLEX

it is detachable, affording easy access to the focusing screen. The lens board support is made of metal, and is fitted with spring actuated clamp which firmly grips the track at any desired point.

The Compact Gradlex is fitted with the regular Graflex Focal Plane Shutter, permitting exposures of any duration from time to \(\triangleta \) fase cond. The back of the camera is constructed to take the Graflex Plate Holder, Graflex Film Pack Adapter, Graflex Magazine Plate Holder or the improved Graflex Roll Film Holder.

Two tripod sockets are provided, one in the base of the camera for horizontal, and another in the left side for vertical negatives.



The Compact Graflex Closed

#### SPECIFICATIONS

	3¼ x 5½	5 x 7*
Dimensions when closed	7 x 4 x 7	8 x 6 x 9
Focal capacity	10 in.	19½ in.
Weight	5½ lbs.	6½ lbs.
Size of lens board	31 x 31 in.	4 x 4 in.
Minimum focus of lone accommodated	6 in	71 in.

#### THE PRICE

Compact Graflex without lens, including one double 314 x 51/2	5 x 7
plate holder	\$ 90.00
With B. & L. Kodak Anastigmat Lens, No. 4 96.25	No. 5 124.50
With B. & L. Tessar, Series Ic, No. 15a 120.00	No. 16 152.00
With Cooke Lens, Series II, No. 211	No. 22 152.00
Graflex Roll Holder 8.00	9.00
Graflex Magazine Plate Holder, Model A 14.00	15.00
Graflex Film Pack Adapter, leather covered 5.50	7.50
Leather Carrying Case for camera and plate holder	
or film pack adapter 6.50	8.00
Sole Leather Case for camera and magazine plate	
holder	9.50
Leather Case for six plate holders 5.00	6.00
Extra Graflex Plate Holders 2.50	3.50
Extra lens boards, each	.75
Graffex Roll Holder Film, 6 exposures	.80

\*The 5 x 7 Compact Graflex will be ready for delivery July 1st.





# THE TELESCOPIC REVOLVING BACK GRAFLEX

#### SPECIFICATIONS

-							334 x 434	4 x 5
Dimensions when close	d	-	-				6 x 5 x 6 x	Stx 61 x 71
Focal capacity							Si in.	12 in.
Weight						-	41 lbs.	63 lbs.
Size of lens board .							31 x 41 in.	4 x 4 in.
Minimum focus of lens	3	econ	ame	oda	ted		51 in.	71 in.

#### THE PRICE

INE PRICE		
Telescopic R. B. Graflex without lens, includ- ing one double plate holder	\$ 90.00	
With B. & L. Kodak Anastigmat Lens, f.6.3	No. s 113.25	No. 5 134.50
	No. 15 130.50	No. 16 162.00
With Cooke Lens, Series II, f.4.5	No. 21 131.00	No. 21 150.00
Graflex Roll Holder	7.00	8.00
Graflex Magazine Plate Holder	12.50	13.50
Film Pack Adapter, leather covered	4.50	5.00
Leather case for camera and Film Pack Adap- ter, with lock and key	8.00	10.00
Leather case for camera and magazine plate		10100
holder	10.00	11.50
Leather case for six plate holders	4.00	5.00
Extra Graflex plate holders, each	2.50	2.50
Extra lens boards, each	.50	.75
Graflex Roll Holder Film, 6 exposures	.35	.45



# THE TELESCOPIC REVOLVING BACK GRAFLEX

HIS camera is fitted with a revolving or turn-table back, enabling the operator to make either vertical or horizontal negatives without turning the camera on its side.



Telescopic R. B. Graflex Closed

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

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

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

The Telescopic Revolving Back Graflex is furnished in 3\(\frac{1}{4}\) x 4\(\frac{1}{4}\)
and 4 x 5 sizes.





# REVOLVING BACK AUTO GRAFLEX

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

#### SPECIFICATIONS

								3½ x 4½	4 x 5
Dimensions when closed								81 x 51 x 7	10 x 6\pm x 8
Focal capacity								15½ in.	181 in.
Weight			-					51 lbs.	7½ lbs.
Size of lens board .								3 x 3 in.	33 x 33 in.
Minimum focus of lense	s ac	co	m	nod	late	d	-	71 in.	8% in.

#### THE PRICE

THE PRICE	E	
Revolving Back Auto Graflex, without lens, including one double plate holder	3¼ x 4¼ \$100.00	4x5 \$115.00
Fitted with B. & L. Kodak Anastigmat Lens	No. 5 134.50	No. 6 161.50
Fitted with B. & L. Protar Lens, Series VIIa	No. 10 169.50	No. 13 205.50
Fitted with B. & L. Tessar Lens, Series Ic .	No. 15a 150.00	No. 17 214.00
Fitted with Cooke Lens, Series II	No. 211 150.00	No. 22 177.00
Graflex Roll Holder	7.00	8.00
Graflex Magazine Plate Holder, Model A .	12.50	13.50
Film Pack Adapter, leather covered	4.50	5.00
Leather case for camera and Film Pack Adap- ter, with lock and key	8.00	9.00
Leather case for camera and magazine plate holder	9.00	10.50
Leather case for six plate holders	4.00	5.00
Extra Graflex plate holders, each	2.50	2.50
Extra lens boards	.60	.70
Cueffor Poll Holder Pilm Comment	95	4.5



# REVOLVING BACK AUTO GRAFLEX

N many lines of photographic work it is frequently necessary to make vertical negatives without turning the camera on its side, and for those desiring a camera of this type the Revolving Back Auto Graffex is particularly valuable. The revolving or turntable 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.



Revolving Back Auto Graflex Closed

In order to intercept the rays of light for vertical as well as horizontal negatives, it is necessary to make the reflecting mirror a trifle longer than that supplied with 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 racked out beyond the edge of the bed by using the forward pinion.

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



REVOLVING BACK AUTO GRAFLEX-Continued



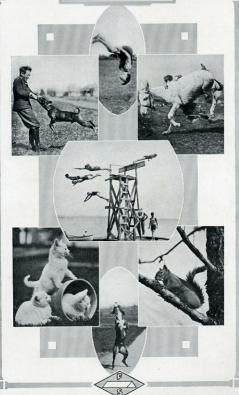
Size of Picture made with 4 x 5 Revolving Back Auto Graflex

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

The regular Graflex Focal Plane Shutter, actuated to give exposures from time to  $_{\Upsilon_0^1 \oplus \overline{0}}$  of a second, is part of this camera.

The Revolving Back Auto Graflex is made in two sizes,  $3\frac{1}{4} \times 4\frac{1}{4}$  and  $4 \times 5$ .







# THE PRESS GRAFLEX

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

#### SPECIFICATIONS

Dimensions, 11 x 8\dag{x} y 9\dag{\text{in.}}; focal capacity, 14 in.; weight, 11\dag{\text{d}} lbs.; size of lens board, 4x 4 in.; minimum focus of lens accommodated, 8 in.

#### THE PRICE

Press Graflex without lens, including one double plate holder		5 x 7 \$110.00
With B. & L. Kodak Anastigmat Lens, f.6.3, No. 5		144.50
With B. & L. Tessar Lens, Series Ic, f.4.5, No. 16		172.00
With Cooke Lens, Series II, f.4.5, No. 29		172.00
Graflex Roll Holder		9.00
Graflex Magazine Plate Holder, Model A		15.00
Film Pack Adapter, leather covered		7.50
Leather case for camera and plate holder or adapter, with lock		
key		12.00
Leather case for camera and magazine plate holder, with lock		
key		13.50
Leather case for six plate holders		6.00
Extra Graffex holders, each		3.50
Extra lens boards, each		.75
Graflex Roll Holder Film, 6 exposures		.80



# THE PRESS GRAFLEX

THIS camera meets the most exacting requirements of newspaper or commercial photographer supplying pictures for publication and the speed with which the camera can be brought into action especially commends it to those engaged in this class 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 Talor 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 and the lens cover opens the instant the front is racked out, permitting the negative to be made 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 Graffex 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  $5 \times 7$ size only.





# THE HOME PORTRAIT GRAFLEX

#### SPECIFICATIONS

Dimensions,  $9\frac{\pi}{4} \times 9 \times 10\frac{1}{2}$  in.; focal capacity, 15 in.; weight,  $11\frac{1}{2}$  lbs.; size of lens board,  $5 \times 5$  in.; minimum focus of lens accommodated,  $9\frac{\pi}{4}$  in.

	IH	iE.	PRI	CE								5 x 7
Home Portrait Graflex without l	ens,	incl	udir	go	ne e	dou	ble	pla	te l	hole	er	
With B. & L. Tessar, Ic, f.4.5,	No.	17									-	229.00
With B. & L. Tessar, Ic, f.4.5,	No.	18										269.50
With Cooke Lens, Series II, f.4	.5, 1	No.	221									232.00
Graflex Roll Holder							-					9.00
Graflex Magazine Plate Holder,	Mod	lel /	١.									15.00
Film Pack Adapter, leather cove	ered											7.50
Leather case for camera and hol												
Leather case for six plate holder	8 .											6.00
Extra Graflex plate holders, each	a .											3.50
Extra lens boards, each												
Graflex Roll Holder Film, 6 ex	cpost	ires										.80



# THE HOME PORTRAIT GRAFLEX

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

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



Home Portrait Graflex Closed

automatic exposures as long as  $\frac{1}{2}$  second, or instantaneous exposures of any duration up to  $\frac{1}{2}$   $\frac{1}{2}$  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. 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 figures are placed



HOME PORTRAIT GRAFLEX

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.

This tilting adjustment can also be employed in a manner similar to a rising and falling front, as when the lens is tilted the front describes an arc, moving up or down according to the way the tilting screw is turned. When the lens is centered, the front board and the focal plane are parallel.



Home Portrait Graflex, Showing Revolving Back

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  $5\times7$  Graflex Plate Holder, Magazine Plate Holder or Film Pack Adapter. For those who prefer roll film we supply the Graflex Roll Holder, which takes  $5\times7$  Eastman Graflex film. A tripod socket is provided that the camera may be used on a tripod for prolonged exposures.

Two buttons, one on each side of the camera, are provided to enable the operator to use a shoulder strap for supporting the camera.





## THE STEREO AUTO GRAFLEX

#### SPECIFICATIONS

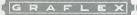
Dimensions when closed, 81 x 9 x 81 in.; focal capacity, 8 in.; weight, 8 lbs.; size of lens board, 3 x 57 in.; minimum focus of lenses accommodated, 6+ in.

#### THE PRICE

 $5 \times 7$ Stereo Auto Graflex without lenses, including one double plate holder \$150.00 With matched pair B. & L. Kodak Anastigmat Lenses, f.6.3, No. 3 196.50 With matched pair B. & L. Tessar, Series IIb. f.6.3, No. 5 . . . 212.00 Graflex Roll Holder 9.00 Graflex Magazine Plate Holder, Model A . 15.00 Film Pack Adapter, leather covered 7.50 Leather case for camera and Film Pack Adapter, with lock and key 9.00 Leather case for camera and magazine plate holder or roll holder. with lock and key . . . 10.00 Extra Graflex plate holders, each 3.50 Extra lens boards, each 2.00 Graflex Roll Holder Film, 6 exposures

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

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



## THE STEREO AUTO GRAFLEX

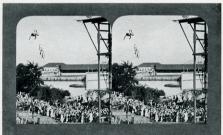
HERE is probably no branch of photography that affords greater pleasure than the making of stereoscopic pictures, and the steadily increasing number of purchasers of the Stereo Graflex indicates that stereo photography is growing in popularity.

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

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

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

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





## THE No. O GRAPHIC CAMERA

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

BRIEFLY 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 Amastigmat lens such as is supplied with the No. 0 Graphic. When these advantages are considered with the fact that this camera uses a standard size of regular Kodak Film, it will be instantly seen that the No. 0 Graphic embodies a higher degree of efficiency than has ever been secured in a fixed focus camera.

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

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





No. 0 GRAPHIC CAMERA

-Continued

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

The well known Auto Graflex Focal Plane Shutter is part of the No. 0 Graphic. This shutter has three apertures for instantaneous exposures— $\frac{1}{4}$ ,  $\frac{3}{4}$  and  $\frac{1}{4}$  inches, giving a range of instantaneous exposures from  $\frac{1}{4}$ ,  $\frac{1}{4}$  and  $\frac{1}{4}$  inches, giving a range of instantaneous exposures from  $\frac{1}{4}$  to 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. ( 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. 6 Graphic Camera



No. 0 GRAPHIC CAMERA

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  $1_{\pi}^{\epsilon} x 2_{\pi}^{\epsilon}$  inches, the film spool being adjusted between two spring actuated centres, which, upon being drawn out, locks in position, permitting the film spool to be placed in position or removed; a turn to the left will allow the centres to spring forward and engage the spool ends. A small tension spring fitted in the film pocket creates sufficient drag to draw the film taut, and affords perfect register of focal plane.

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

Probably the most valuable feature of the No. 0 Graphic is the fact that the negatives made with this camera show such micropic 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  $6\frac{1}{9} \times 8\frac{3}{9}$  or smaller. The No. 0 Graphic Enlarging Camera is fully described on page 40.

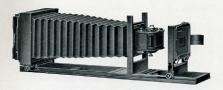
The tourist who does not wish to carry a bulky photographic outht, and who wishes to secure negatives that may be enlarged to any desired size, can make no better selection than the No. 0 Graphic.

#### SPECIFICATIONS

Dimensions, 5 x 31 x 31 in.; weight, 25 oz.

No. 0 Graphic Camera .								\$36.00
Sole leather carrying case								3.00





## THE No. 0 GRAPHIC ENLARGING CAMERA

TH this camera enlargements 6 x 8 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 samera.

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



# THE GRAFLEX ENLARGING CAMERA

HE Graflex Enlarging Camera is constructed to make enlargements  $8 \times 10$  and smaller from negatives of any size up to  $4 \times 5$  or  $3 \nmid x 5 \nmid$  inches.

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

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

#### SPECIFICATIONS

Bellows capacity .							28 in.
Length of bed							36 in.
Size of lens board							41 x 41 in.
Weight							81 lbs.

Graflex Enlarging	Camera,	8 x 10,	including	one	Bromide	Paper	825.00
Holder B. & L. Kodak Ar							\$25.00
Diaphragm .			,				23.25





## THE NATURALISTS' GRAFLEX

Colmor's Patent Echroney 5, 1907, and April 21, 1908

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

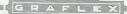
The focusing hood is hinged so that it will swing up, permitting the operator to view the image in the same way as with the Press Graflex.

The Naturalists' Graflex will not accommodate lenses shorter than  $12\frac{a}{4}$  inches and is fitted with the regular Graflex Focal Plane Shutter.

#### SPECIFICATIONS

Dimensions, 19 x 6½ x 9½ in.; focal capacity, 26 in.; weight, 7½ lbs., size of lens board, 4 x 4 in.; minimum focus of lenses accommodated, 19¾ in.

Naturalists' Graffex, 4 x 5, without lens, including or	ne d	lou	ble	pla	te	4 x 5
holder						\$150.00
With B. & L. Protar Lens, Series VIIa, f.6.3, No.	19					310.50
B. & L. High Power Tele-Photo Attachment		-				37.00
Graflex Magazine Plate or Cut Film Holder, Model	Λ					13.50
Film Pack Adapter, leather covered						5.00
Extra Graflex holders, each						2.50
Graffey Roll Holder						8.00





## 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 with scientific and advanced photographic workers.

To allow the use of long-focus lenses, ample bellows capacity is provided. The front runs out on telescopic framed tracks, reinforced by angle brass guides with milled head binding screws, which lock the bed rigidly in place. These extension tracks being in the form of frames allow extra large lens space when closed. The construction of these tracks affords a wider base for the lens support and prevents



REVOLVING BACK CYCLE GRAPHIC-Continued

any lateral or oscillating movement, thus rendering the Cycle Graphic particularly adaptable for tele-photo and 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, insuring the utmost rigidity and strength. There is also a fine rack and pinion for accurate focusing, operated by a large milled head button.



R. B. Cycle Graphic with Supplementary Wide Angle Bed

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. By releasing a small catch at the right of the camera, the back may be revolved from the horizontal to a vertical position and the revolving back frame may be removed without the use of tools. The revolving back is fitted to all Graphic Cameras except the 8 x 10.





REVOLVING BACK CYCLE GRAPHIC-Continued

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

The Cycle Graphic is constructed of the best quality selected stock, lock jointed, and covered with handsome black grained leather. 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 x 5 and 5 x 7 sizes.

#### SPECIFICATIONS

4 x 5	5 x 7	614 x 814	8 x 10
Dimensions 6 x 4 x 7 k	81 x 41 x 91	10% x 4% x 10%	12 x 5 x 12
Focal capacity 17 in.	221 in.	26 in.	30 in.
Weight 34 lbs.	6½ lbs.	71 lbs.	10½ lbs.
Size of lens board . 21 x 21 in.	31 x 31 in.	41 x 41 in.	4½ x 4½ in.

#### THE PRICE

Including double plate	e holder and sol	e leather car	rying case	
Revolving Back Cycle Graphic w Graphic Rapid Rectilinear La and Automatic Shutter	ens 4 x 5	5 x 7 8 55.00	6½ x 8½ 8 65.00	8 x 10* \$ 80.00
With B. & L. Kodak Anastign Lens, f.6.3, and Volute Shut	nat No. 3 ter 79.55	No. 5 101.80	No. 6 118.20	
With B. & L. Protar Lens, Ser VIIa, and Volute Shutter		No. 10 136.80	No. 13 162.20	No. 17 228.90
Extra plate holders, each Graflex Focal Plane Shutter, ex		1.25 21.00	1.75 23.00	2.00
Supplementary bed for Wide An Lenses	gle	7.50	8.00	9.00
Extra lens boards, each	35	.40	.45	.50

\*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

	3½ x 4½	4 x 5	3½ x 5½	5 x 7
Dimensions	54 x 24 x 61	61 x 4 x 61	7 x 31 x 71	82 x 32 x 92
Focal capacity	10 in.	12 in.	12 in.	16 in.
Weight	21 lbs.	3½ lbs.	34 lbs.	5½ lbs.
Size of lens board .	21 x 21 in.	31 x 31 in.	3½ x 3½ in.	31 x 31 in.

#### THE PRICE

#### Including one double plate holde

metu	ums one uou	ore prace norae		
Speed Graphic without lens	3¼ x 4¾ 834.00	4 x 5 \$37.00	3¼ x 5½ \$39.00	5x7 \$ 45.00
With B. & L. Kodak Anastigmat Lens, f.6.3	No. 2 53.00	No. 3 60.25	No. 4 65.25	No. 5 79.50
With B. & L. Tessar, Series Ic, f.4.5.	No. 14 69.00	No. 15 77.50	No. 15a S9.00	No. 16 107.00
With Cooke Lens, Series II,		No. 21 78.00	No. 213 S9.00	No. 22 107.00
"Sole leather carrying case, with lock and key	5.50	6.00	6.50	8.00
Extra lens board	.35	.40	.40	.50
Extra plate holder	1.00	1.00	1.00	1.25

<sup>\*</sup>Carrying cases for Speed Graphic Cameras hold the camera and plate holders as follows:  $3\frac{1}{4} \times 4\frac{1}{4}$ , 5 holders;  $4 \times 5$ , 6 holders;  $3\frac{1}{4} \times 5\frac{1}{2}$ , 5 holders;  $5 \times 7$ , 6 holders.



## THE SPEED GRAPHIC

THE 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



Speed Graphic Open

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

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

The  $4\times5$ ,  $3\lfloor x\delta\rfloor$  and  $5\times7$  Speed Graphic Cameras are equipped with the regular Grafulex Focal Plane Shutter described on page 53. This shutter is actuated to give automatic exposures of any duration from  $\frac{1}{19}$  to  $\frac{1}{19}$  of a second, and it is also possible to give time exposures of any duration. The shutter on the  $\frac{3}{19}$  x4 $\frac{1}{19}$  Speed Graphic differs from that on the larger sizes, in that it has but four instead of five openings, and the exposure speeds run from "time" to  $\frac{1}{19}$   $\frac{1}{19}$  of a second, which is amply rapid for a camera using as short focus a lens as does the  $\frac{3}{12}$  x4 $\frac{1}{19}$  Speed Graphic.

SPEED GRAPHIC-Continued



Speed Graphic Closed

3¼ x 4¼

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

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

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

For those who wish to use Graflex attachments with Speed Graphic Cameras, we can alter the back of the camera to accept the Graflex Roll Holder, Graflex Plate Holder, Magazine Holder, and the Graflex Film Pack Adapter.

Prices for altering the backs of Speed Graphic Cameras to accept Graflex Holders are as follows:

314 x 516

\$4.75 \$5.25 \$5.25 \$6.00



## THE STEREOSCOPIC GRAPHIC

#### With Auto Graflex Shutter

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

#### SPECIFICATIONS.

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

Stereoscopic Graphic without lenses, including one double plate holder \$ 70.00
Stereoscopic Graphic with matched B. & L. Kodak Anastigmat Lenses, No. 3, f.6.3
Stereoscopic Graphic with matched B. & L. Tessar Lenses, Series IIb, No. 4, f.6.3
Stereoscopic Graphic with matched B. & L. Protar Lenses, Series VIIa, No. 7, f.6.3
Stereoscopic Graphic with matched B. & L. Protar Lenses, Series V, No. 1
Extra for Kodak Anastigmat Lens No. 5, f.6.3, for full size plate . 34.50
Extra for B. & L. Protar Lens, Series VIIa, No. 10, f.6.3, for full size plate
Leather carrying case 8.00
Extra lens boards, each
Graphic plate holders, each 1.25



## THE STEREOSCOPIC GRAPHIC

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

The front platform is attached to the body of the camera by a heavy piano hinge, extending the full width of the instrument, and the platform can be dropped 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 front 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 is provided with a raising and lowering adjustment, and the camera has a bottom extension of twelve inches. The Graflex Focal Plane Shutter is built into the body or

is built into the body of the camera, the shutter being actuated to give exposures of any duration from time to  $\frac{1}{1000}$  of a second.

Our special spring roller partition automatically adjusts itself to lenses of any focal length, as the front is racked in and out. A removable, spring actuated ground-glass focusing screen is fitted to the camera and a large hinged focusing panel, with side shields, gives full view of the screen. Any matched pair of standard Anastigmat lenses of suitable focal length may be fitted, but the best results will be secured by using the lenses listed with the camera on page 49. 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

THESE instruments make a continuous panoramic picture on Eastman daylight loading roll film. A motor driven mechanism revolves the camera on the tripod top, and at the same time draws the film across an exposure slot. This makes it possible to secure a picture embracing any angle of view and of any length up to the capacity of the camera.

The Cirkut opens up innumerable opportunities for unusually pleasing pictorial effects, and there is probably no camera that has proved as great a source of profit to the photographer making outdoor views and groups.

Cirkut Cameras are made in three sizes, Nos. 5, 10 and 16, for film 5, 6, 8, 10, 12 and 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 and the distance the camera revolves on the tripod. A scale is provided by means of which the operator can determine the length of film required for any exposure, and a register on

CIRKUT CAMERAS AND OUTFITS-Continued

the top of the film box indicates the amount of film consumed and that still remaining unexposed. There is also a device for perforating the film after each exposure.

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

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

Cirkut Outfits are supplied in two sizes, No. 6 and No. 8, the former being the 5x7 Cycle Graphic to which is fitted the Cirkut Attachment, while the No. 8 is an attachment fitted to a 61 x 81 Cycle Graphic. The No. 6 Cirkut Outfit takes 61-inch film and negatives up to 6 feet long may be made, and with the No. 8 Outfit a negative 8 inches wide and any length up to 8 feet may be made. By removing the Circuit Attachments, the cameras supplied with the Nos. 6 and 8 Cirkut Outfits may be used with plates in the usual manner. Only Eastman Daylight-loading Film is used. The construction of the camera allows of the most careful focusing, as the image can be seen on the ground glass not alone full width but full length of the picture.

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

#### THE PRICE

Cirkut Cameras fitted with Turner-Reich Convertible Anastigmat Lens, Series II, and . . No. 10 \$290.00 No. 16 8425.00

Cirkut Camera, complete, fitted with Special Convertible Lens . . . . . . . . . . Cirkut Panoramic Outfits, complete, with

Lens and Shutter . . . . . . . No. 6 112.50 No. 8

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



## THE GRAFLEX FOCAL PLANE SHUTTER

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

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

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



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

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

#### SPECIFICATIONS

	4 x 5	5 x 7	61/6 x 81/6	8 x 10
Dimensions .	. 64 x 64 x 14	8 x 8 x 1 x 1 x	$10 \times 10 \times 1_8^7$	111x111x2
Weight	. 16 oz.	26 oz.	39 oz.	40 oz.

Graflex Focal Plane Shutter, leather covered, to match Cycle Graphic	4 x 5	5 x 7	6½ x 8½	8 x 10	
Cameras	\$19.00	\$21.00	\$23.00	\$25.00	



## GRAFLEX ROLL HOLDER

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

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



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

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

## GRAFLEX ROLL HOLDERS

					1915	MOD	EL							
21 x 31	For	Graflex	Roll	Holder	Film	No.	50							\$6.00
		Graflex												
31 x 51	For	Graflex	Roll	Holder	Film	No.	52							8.00
		Graffex												
5 x 7	For	Graflex	Roll	Holder	Film	No.	54							9.00
		Gra	flex B	oll Holde	rs will	fit G	rafi	ex	Can	er.	s 01	alv.		

#### EASTMAN GRAFLEX FILM

		1	EASTMAN	GR	AF.	LE:	X	FILM					
No. 50	31 x 21	6	Exposures								\$	.20	
No. 51	41 x 31	6	Exposures									.35	
			Exposures										
No. 53	5 x 4	6	Exposures									.45	
No. 54	7 x 5	6	Exposures									.80	
		To	avoid error	order	Fi	lm I	bт	number					



## EASTMAN PLATE TANK

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





#### THE PRICE

Eastman Plate Tank, 4x5, for	4x	5, 9	1x	51	
31 x 41 and 21 x 31 plates					\$3.50
Eastman Plate Tank, 5 x 7					4.50

## KODAK FILM TANK



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

31-inch Kodak Film Tank, for 31 x 51 3A Film, 21 x 41 1A Film	and	
3½ x 2½ Eastman Graflex Film No. 50		\$5.00
5-inch Kodak Film Tank, for 41 x 31 Eastman Graflex Film No. 5	51 .	6.00
7-inch Kodak Film Tank, for 5½ x 3½ Eastman Graflex Film No	. 52,	
5 x 4 Eastman Graflex Film No. 53 and 7 x 5 Eastman Graflex	Film	
NT- et		7.50



## THE GRAFLEX MAGAZINE PLATE HOLDER MODEL A

#### WITH INDEPENDENT DARK SLIDE

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



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

## SPECIFICATIONS Dimensions 5x31x21 61x21x41 71x21x5 71x21x44 91x21x61

3¼ x 4¼

 $254 \times 354$ 

Weight		14 0	z.	15	lbs	i. '		2	lbs.		21	bs.	3	31 1	lbs.
					TH	ΗE	PR	IC	E						
1 x 31, each															
x 41, each															12.50





## THE GRAFLEX PLATE HOLDER

THE Graftex 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



tougued, affording increased thickness and strength without increase of space occupied. The Graffex 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

2½x3½, each \$1.50 3½x4½, each \$2.50 4x5, each \$2.50 3½x5½, each \$2.50 5x7, 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

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  $\frac{1}{1\pi}$  of an inch at one end.

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

THE PRICE—\$\frac{1}{2}\times 4\frac{1}{2}\times \text{cach} \frac{1}{2}\times \text{J}.00 & 4\frac{1}{2}\times \text{cach} \frac{1}{2}\times 0.0 & 5\frac{1}{2}\times \text{d}\times \text{d} \text{J}.00 & 5\frac{1}{2}\times \text{d} \text{d



## GRAPHIC SIGHT FINDER

MHESE 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

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

31x41 . 82.50 31x51 . \$2.75 4x5 . \$2.75 5x7 . \$3.20

## GRAFLEX COLOR PLATE HOLDER

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

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

be brought into correct register. Wiing 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 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.

21 x 31, each	 \$3.00	4 x 5 , each			\$4.00
31 x 4 (Lantern Slide),					4.50
34 x 44, each	 3.50	5 x 7, each			5.25



## GRAFLEX FILM PACK ADAPTER

MODEL A-With Slide

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

with all the Graflex Cameras except the 1A and 3A, which instruments use roll films exclusively. The Graflex Film Pack Adapter takes the standard Premo Film Pack, and on all the Graflex Cameras except the Press, may be loaded without removing from the camera. On the Press Graflex the adapter is inserted in the same manner as a plate holder into a spring actuated back. The entire operation of loading and unloading is effected in broad daylight. Exposures are made with the film pack as usual, but at any



time the adapter slide may be inserted and the adapter removed in daylight.

#### THE PRICE





## THE CROWN TRIPOD

olerado Bassar Juna 23 1903

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

treatment renders it extremely tough and practically waterproof.

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

it very compact.

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

joints and side play. Expansion brackets in the upper section make it

impossible for the legs to be detached from the head until brackets are folded.

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

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

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

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							\$6.00
No. 2 Crown	Tripod with	6-inch top							6.50
No. 3 Crown	Tripod with	6-inch top							8.00
No. 4 Crown	Tripod with	61-inch to	р.						9.00





## CARRYING CASES FOR CROWN TRIPODS



POR 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 initiation walturs Fabrikoid.

#### THE PRICE

No.	1	Imitation	Walrus	5	Fabi	riko	oid,	lea	the	r e	nds,	leather	cap			\$3.00
No.	2	Imitation	Walru	8	Fabr	riko	oid,	lea	the	re	nds,	leather	cap			3.50
No.	3	Imitation	Walrus	3	Fab	riko	id,	lea	the	re	nds,	leather	cap			4.00
No.	4	Imitation	Walrus	8	Fabr	riko	oid,	lea	the	r e	nds,	leather	cap			4.50
No.	1	Sole Leat	her .													4.00
No.	2	Sole Leat	her .													4.75
No.	3	Sole Leat	her .													6.00
NT		Solo I oat	how.													

#### ON FITTING LENSES

While we list Graflex Cameras without lenses, we can not be resonable 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.



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

THE PRICE

Crown Tilting Tripod Top No. 1 . . \$2.00 Crown Tilting Tripod Top No. 4 . . \$3.50 Professional Tilting Tripod Top . Crown Tilting Tripod Top No. 2 .

## CROWN FLASH LAMP

For Pure Magnesium Only

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

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

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

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

THE PRICE-Crown Flash Lamp .





## B. & L. KODAK ANASTIGMAT f.6.3

	Size of Plate covered	Konfraient Facus	PI	ICE
No.	with Stop f.6.3 Inches	Enches Inches	Lous In Barrel	Lens in Volute Shutter
1	24 x 41	41	\$18 50	\$85 50
2	3½ x 4½	5	19 00	36 00
3	4 x 5	61	23 25	40 25
4	3½ x 54	62	26 25	43 25
5	5 x 7	81	34 50	53 00
a	61 - 61	10	46 50	65.00

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

	Size of Plate covered	Equivalent Focus	PR	ICE
No.	with Stop f.4.5 Inches	Inches	Lens in Barrel with Iris Disphragm	Lens Fitted with Volute Shutter
13	24 x 34	44	\$ 31 00	\$ 48 00
14	81 x 41	5	35 00	52 00
15	4 x 5	6	40 50	59 00
15a	5 x 7	71	50 00	68 50
16	5 x 8	81	62 00	82 00
17	6½ x 8½	97	99 00	119 00
18	8 x 10	117	139 50	
18a	10 x 12	148	180 00	
19	11 x 14	154	217 00	
20	14 × 17	193	310 00	

### BAUSCH & LOMB PROTAR, Series VIIa

	Size of Plate	Equivalen Single Pro	Focus of			Pi	HCE
No.	Full Aperture Inches	Front	Back	Equiva- lent Focus Inches	Speed	Lens in Barrel with Iris Diaphragm	Lens Pitted with Aluminum Volute Shutter
					2.0		
5		83	84	212	6.3	\$ 48 50 53 00	
	41 x 61	1175	84	5 5	7.		70 00
6	41 x 61	134	81	61	7.7	59 50	78 00
7	44 x 74	1175	1176	64	6.3	57 00	74 00
8	5 x 7	134	11	7	7.	63 50	82 00
9	5 x 8	161	117	74	7.7	74 00	92 50
10	5 x 8	133	134	71	6.3	69 50	88 00
11	61 x 81	161	134	81	7.	80 00	98 50
12	64 x 84	181	134	91	7.7	98 50	118 50
13	61 x 81	161	161	91	6.3	90 50	109 00
14	7 x 9	181	161	10	7.	109 00	129 00
15	7 x 9	231	161	10%	7.7	128 00	148 00
16	7 x 9	187	187	1012	6.3	126 50	146 50
17	8 x 10	231	18%	117	7.	145 50	165 50
18	8 x 10	27	187	123	7.7	171 50	191 50
19	8 v 10	921	921	121	6.2	160 50	180 50

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

No.		DIMENSIONS IN INCHES	PRICE
Asi.	Frens	Plates Covered with Full Aperture	PRICE
20	4	81 x 41	\$ 31 00
201	5	31 x 41	35 50
20b	51	81 x 41	39 00
21	6	4 x 5	41 00
211	7	5 x 7	50 00
21½ 22	8	5 x 8	62 00
$\frac{22\frac{1}{2}}{23}$	101	61 x 81	102 00
23"	13	8 x 10	157 50



## TERMS

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

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

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

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

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