

GRAFLEX



AND SPEED GRAPHIC CAMERAS





**A NATURAL
FOR COLOR
PHOTOGRAPHY**

All of the illustrations in this catalog identified as prize-winners received their awards in the Graflex Golden Anniversary Picture Contest.

Above: "WHO'S THERE?"
By Samuel A. Grimes—winner of Fifth Prize in the Color Class. Made in a Miniature Speed Graphic on Kodachrome film using one blue flash lamp, 1/40 second at *f*/5.6.

Front Cover: "SEASCAPE"
By Gerry O. Roth—winner of Second Prize in the Color Class. Made in an Anniversary Speed Graphic on Kodachrome film, 1/25 second at *f*/5.6.

AMONG AMATEURS, professionals, naturalists, botanists, medical men—all who are interested in taking pictures in natural color—Graflex and Speed Graphic cameras are prime favorites. One of the big reasons is the ground glass focusing feature of these cameras. Permitting the owner to compose his picture carefully and to see exactly what his negative will record before he releases the shutter, this feature enables him to make best possible use of his film. Then, too, the availability of Graflex and Speed Graphic cameras in sheet film sizes from 2 $\frac{1}{4}$ x 3 $\frac{1}{4}$ to 5 x 7 permits the owner to make color transparencies of adequate size for direct projection or for the making of color prints or enlargements. An ever-increasing number of color photographers insure their success by choosing Graflex and Speed Graphic cameras.

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A GUIDE TO MORE

INTERESTING PICTURES



Fifty Years of Progress

FOR half a century, GRAFLEX-made cameras have been the dependable mainstay of serious photographers. The steadily increasing use of GRAFLEX and Speed Graphic cameras year after year has been a great source of satisfaction and a great responsibility as well. Each year, GRAFLEX has been keenly conscious of its obligation to make these cameras better serve their owners. The American-made, Prize-Winning Cameras illustrated and described herewith ably reflect this obligation. They are as fine as skilled craftsmanship and fifty years of precision camera-making experience can make them. And the Graflex-Commercial Credit Company Easy Payment Plan now makes it possible for you to have one of these cameras for as little as 20% down with a full year to pay the balance, if you wish. Your GRAFLEX Dealer will give you complete information.

PRINCIPLES AND FEATURES

Of the **GRAFLEX**

GRAFLEX cameras offer the serious photographer a combination of valuable picture-taking advantages found in no other camera. The more important of these are:

A SINGLE LENS SYSTEM—for focusing and taking pictures. The lens produces an image on the ground glass identical with that later appearing on the negative. This image remains on the ground glass until you release the shutter. There is no problem of parallax. You visually pre-determine the sharpness, depth of field and composition of your subject. You get what you see.

FULL-VISION GROUND GLASS, RECEIVING ITS IMAGE FROM A REFLECTING MIRROR—for enabling pictures to be evaluated and composed before they are made. This externally coated and polished mirror is set within the camera at an angle that projects the image, received from the single lens system, upward upon the ground glass where it is seen right side up and in the same size as it will appear on the negative.

REVOLVING BACK—for instant change-over from horizontal to vertical pictures or vice versa without the necessity of changing the normal taking position of the camera. The back revolves at the touch of a finger to make this possible.

GRAFLEX FOCAL PLANE SHUTTER—for very wide latitude of controlled instantaneous exposures, 25 speeds up to 1/1000 are provided. This shutter is more efficient than

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the between-the-lens type in many applica-

tions, admitting more light during a given time of exposure. When this advantage is needed most—at the higher shutter speeds and larger lens apertures—the GRAFLEX focal plane shutter demonstrates its greatest superiority.

This is shown graphically in the comparative strips below. Each strip shows a series of flashes occurring at intervals of 1/1000 second and totalling an exposure of 1/100 second. A varying portion of the lens is prevented from transmitting light during the opening and closing phases of the between-the-lens shutter, while the entire effective aperture transmits light during the whole exposure with the focal plane shutter.



The between-the-lens shutter is wide open during only the fifth and sixth flashes.



The Graflex focal plane shutter transmits all the available light during the entire exposure.

GRAFLEX cameras combine ruggedness of construction with simplicity of operation and certainty of focusing. It is an admirable camera choice for those who strive for prize-winning pictures.

1. Look into the focusing hood. You see a reflected image of the subject, right side up, full picture size—to the instant of exposure.
2. When the pleasingly composed image is clear on the ground glass, the subject is in sharp focus.
3. The mirror reflects the image to the ground glass. When the exposure release is pressed, the mirror swings upward out of the way, instantly releasing the focal plane shutter—securing the desired picture.
4. Focus is under easy and positive control to the very instant of exposure.
5. Superior lens gathers ample light for the focal plane shutter which transmits appreciably more light than does any other type of shutter.

Of the **SPEED GRAPHIC**

Here are the features which have made the Speed Graphic the most popular camera among amateurs as well as photo-journalists, news gatherers and others who have learned to depend upon it for rapid-fire photographic work. While most of these features are incorporated in standard models of the Speed Graphic, some of them are available optionally in the form of accessory equipment.

LENS-COUPLED RANGE FINDER—for instant and dependably sharp focusing while "shooting."

GROUND GLASS FOCUSING—for view camera type work with the all-purpose Speed Graphic.

VERNIER FOOTAGE SCALES—for accuracy in pre-setting camera lenses upon any estimated or measured distance.

PARALLAX-CORRECTING TUBULAR VIEW FINDER—for accurate inclusion of desired area in close-up work.

WIRE FRAME VIEW FINDER—for rapid centering and framing of picture areas.

CHOICE OF "BACKS"—"Graphic Back" for rapid insertion and withdrawal of negative

material with the receding built-in ground glass focusing panel; "Graflex Back" for use with all GRAFLEX film and plate accessories which include film pack adapters, roll film holders, plate and sheet film holders and plate and sheet film magazines.

GRAFLEX FOCAL PLANE SHUTTER—for fully controlled, efficient, instantaneous exposures up to 1/1000, operated either manually or by means of a cable release.

"BETWEEN-THE-LENS" SHUTTER—for exposures ranging from one full second up to 1/200 or 1/400, with "time," "bulb" and the delayed action feature—and for convenient adaptation of the Speed Graphic to synchroflash photography.

FOCAL PLANE SHUTTER FLASH SYNCHRONIZATION—built into the 2¼ x 3¼ Miniature Speed Graphic, permitting flash exposures up to 1/1000.

INTERCHANGEABLE LENSBOARDS—for quick and dependable adaptation of many available lenses of a wide range of focal lengths and speeds.

RISING FRONT—for photography of tall objects.

In addition to these features, available on standard models of Speed Graphic cameras, the New *Anniversary* Models offer the following important improvements:

TANDEM-TYPE, LINKED TRACKS—for simultaneous movement of front and rear camera tracks, so useful in wide angle lens work.

RIGIDLY-LOCKING DROP BED—for maximum strength and rigidity during wide angle lens work.

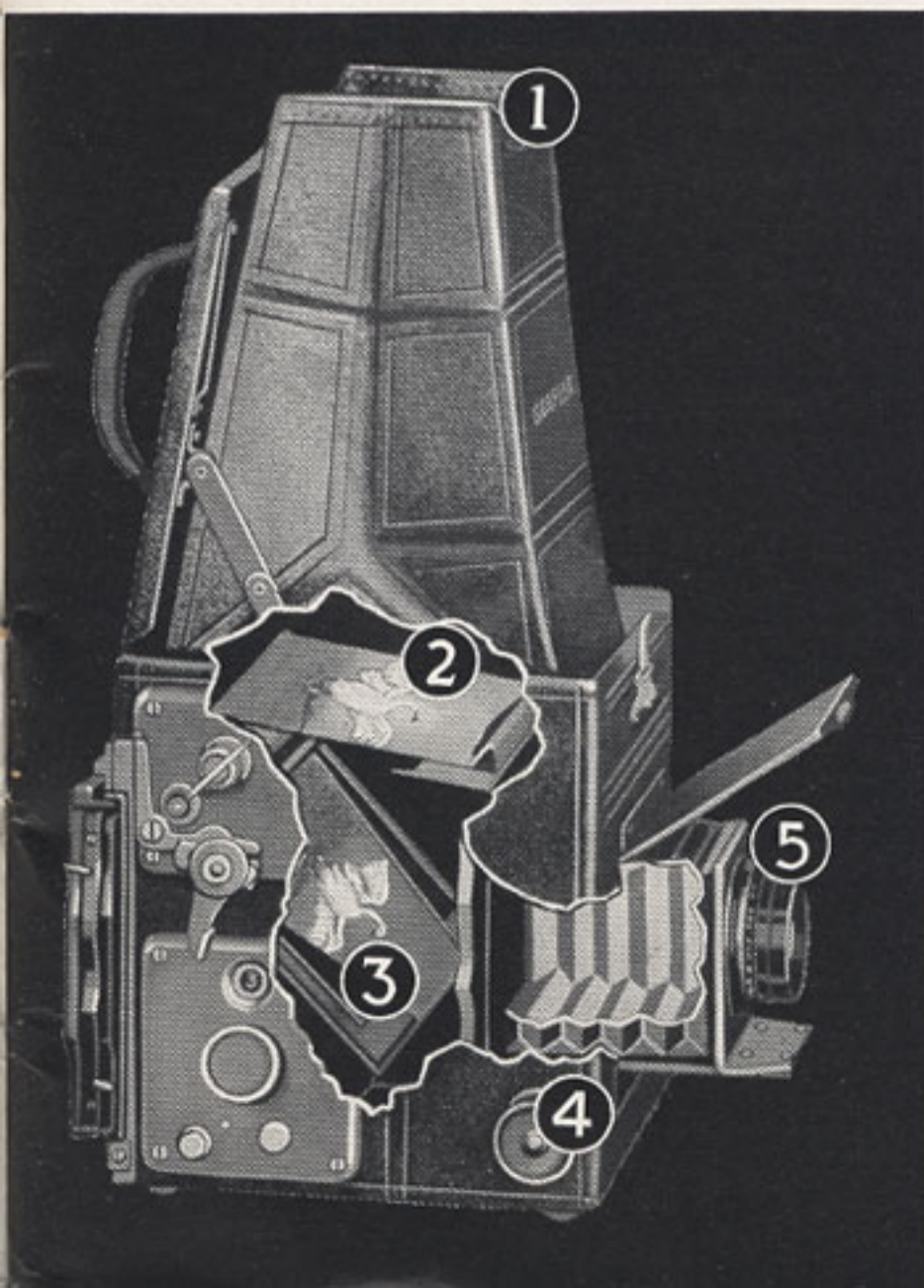
RIGID LENS STANDARD WITH POSITIVE LOCK—for fool-proof focusing.

LATERALLY SHIFTING FRONT—for elimination of distortion in vertical views of tall subjects.

TELESCOPING WIRE FRAME VIEW FINDER—retractable into the lens standard for greater ease of manipulation of front shutter controls.

DUAL FOCUSING CONTROLS—activating helical gear rack-and-pinion track for smoother focusing with either right or left hand.

This array of features combined with the traditional sturdiness of construction of the camera and precision of its fittings, renders the Speed Graphic the outstanding hand camera of the day, destined to serve its owner indefinitely with prize-winning pictures.





2¼ x 3¼

Miniature
**SPEED
 GRAPHIC**

*Shown with Accessory
 Rangefinder*

THIS all-purpose camera has won the enthusiastic acclaim of amateurs and professionals alike. Just what its name implies—a really small Speed Graphic, 36% smaller than any other Speed Graphic ever built—it is an ideal camera for carrying with you wherever you go. Light, compact and versatile, it possesses the ability to make superior pictures under all conditions, day or night. Here is a camera that will give you years of picture-taking pleasure and trouble-free service.

Although small and compact—it measures but 5½" high, 4⅞" wide and 3½" deep—this camera has all the recognized Speed Graphic features that

have made these cameras renowned for dependability and versatility. Here are some of the more important: dependable Graflex focal plane shutter with twenty-four shutter speeds to 1/1000; the ability to use speed, telephoto and wide angle lenses interchangeably; conventional front-shutter flash synchronization; optical and wire frame view finders; ground glass focusing and double extension bellows.

In addition to all these the 2¼ x 3¼ Miniature Speed Graphic possesses many new and advanced

Flash synchronization with either the focal plane shutter or the auxiliary front shutter enables the Miniature Speed Graphic owner to continue his picture-taking when the sun goes down.



features that greatly increase its all-purpose usefulness. Built-in focal plane shutter flash synchronization broadens its range of picture-taking. All-metal bed, back, front standard and internal case reinforcements give maximum strength and protection. Helical racks and pinions afford smooth focusing action. Dual focusing controls permit both right-hand and left-hand operation. Precision vernier footage scales, individually calibrated at the factory for each camera-and-lens combination, are an aid to accurate focus. A parallax-correcting tubular view finder assures you of correctly framed and centered pictures. An accessory internally-coupled range finder gives instant focus.

Possessing this great galaxy of advanced features, the $2\frac{1}{4}$ x $3\frac{1}{4}$ Miniature is a splendid camera for all-around finer shooting, day or night.

CHOICE OF "BACKS"

The choice of a back for the $2\frac{1}{4}$ x $3\frac{1}{4}$ Miniature Speed Graphic should be governed by the uses to which you expect to put your camera. One of the major differences between the "Graphic Back" and the "Graflex Back" is in the method by which film and plate accessories are accepted.

For fast, on-the-spot shooting where rapid interchange of film or plate holders is essential, the "Graphic Back" undoubtedly will be your choice. Its spring-actuated ground glass focusing screen accepts both the Graphic sheet film holders and the Graphic film pack adapter.

Greatest possible camera versatility is obtained with the "Graflex Back" which interchangeably accepts all Graflex film and plate accessories including the convenient sheet film magazines and the accessory Graflex focusing panel.

Complete details on page 26. See supplement for camera, lens and accessory prices.

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Above: "Iris" by Philip B. Mansfield. Made in a Miniature Speed Graphic using two No. 1 Photofloods and exposed for two seconds at $f/32$. Sixth Prize-winner in the Industrial and Scientific Class.

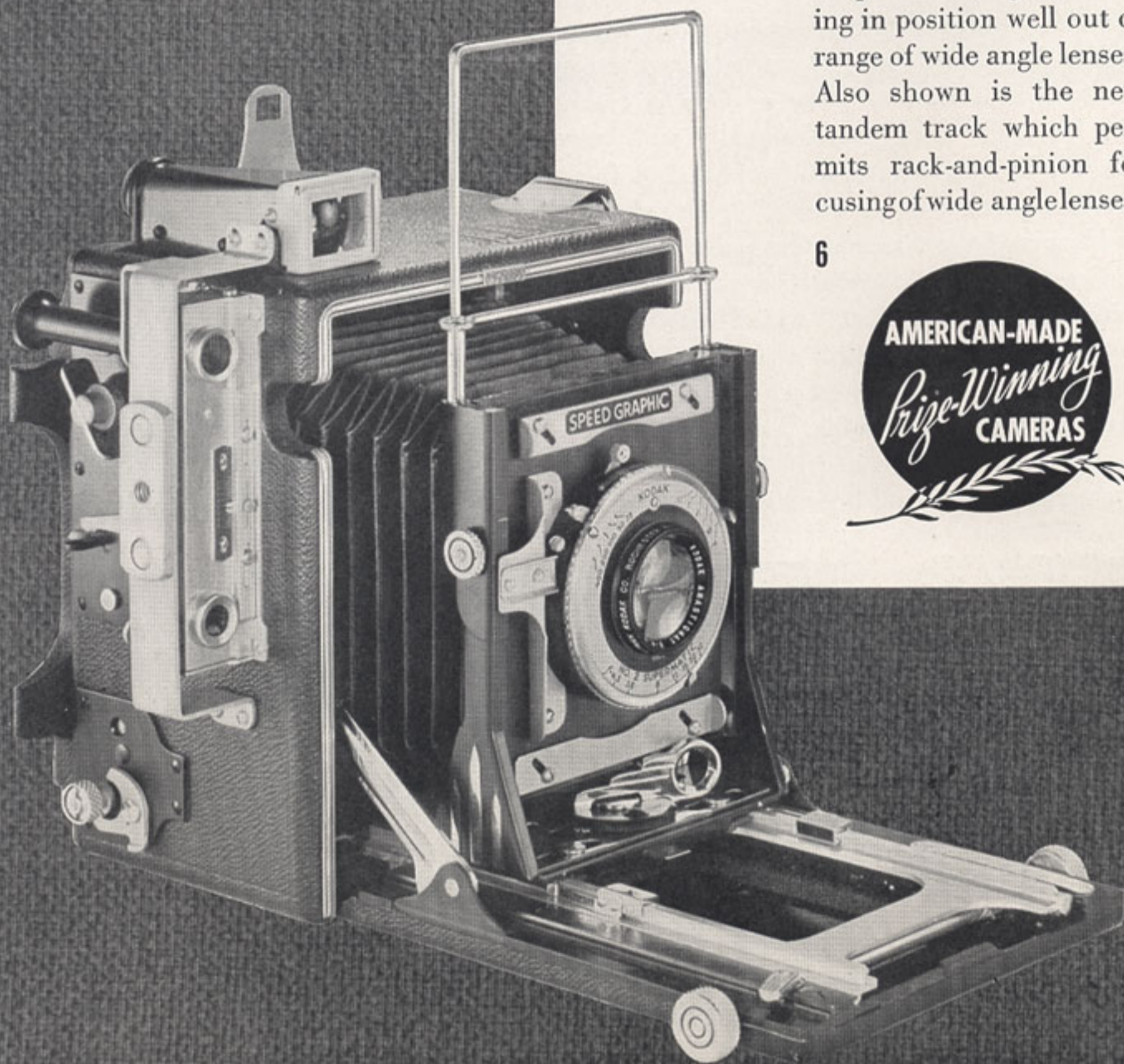
Right: "Gonzaga U. vs. Nelson Maple Leafs"—a Miniature Speed Graphic shot by Eugene Bauer. A Medal-winner in the Action Class. Made with a No. 16 Photoflash, $1/250$ second, $f/8$.



Anniversary
**SPEED
GRAPHIC**

3 1/4 x 4 1/4 • 4 x 5

*Shown with Accessory
Rangefinder*



COMBINING new versatility, new convenience and new beauty of appearance with already recognized Speed Graphic dependability, these Anniversary models are better able than ever before to give you superior pictures anywhere, any time. Their many new features—in addition to all the other Speed Graphic features—provide these cameras with a greatly extended range of usefulness. They are potential prize-winners for any owner—the “waited-for” team-mates for the 2 1/4 x 3 1/4 Miniature Speed Graphic.

Some of the important new features which have been incorporated in these cameras are illustrated at the bottom of the opposite page. The illustration at the left shows the new all-metal bed which drops down, rigidly locking in position well out of range of wide angle lenses. Also shown is the new tandem track which permits rack-and-pinion focusing of wide angle lenses.

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"The News"—Sixth Prize-winner, Pictorial and Portrait Class, by William Land. Made in a 3¼ x 4¼ Speed Graphic using a No. 21 Photoflash, 1/100 second at f/32.



"Discovery" by Howard Vincent O'Brien—A Medal-winner in the Humor Class. Made in a 4x5 Speed Graphic with an exposure of 1/100 second and f/8.

The illustration in the center shows several new features: the dual focusing controls which permit both right-hand and left-hand operation, a positive track lock to lock the lens in position after obtaining proper focus, and the one-piece metal front standard with its locking lever.

Illustrated at the right is the new front standard assembly that rises and shifts to the right or left. This permits correction for unusual perspective in either horizontal or vertical picture-taking position.

These 3¼ x 4¼ and 4 x 5 Anniversary Speed Graphics have been endowed with new beauty of appearance and new durability through the judicious use of satin and bright chrome trim.

Complete details on Page 26. See supplement for camera, lens and accessory prices.

5 x 7 SPEED GRAPHIC

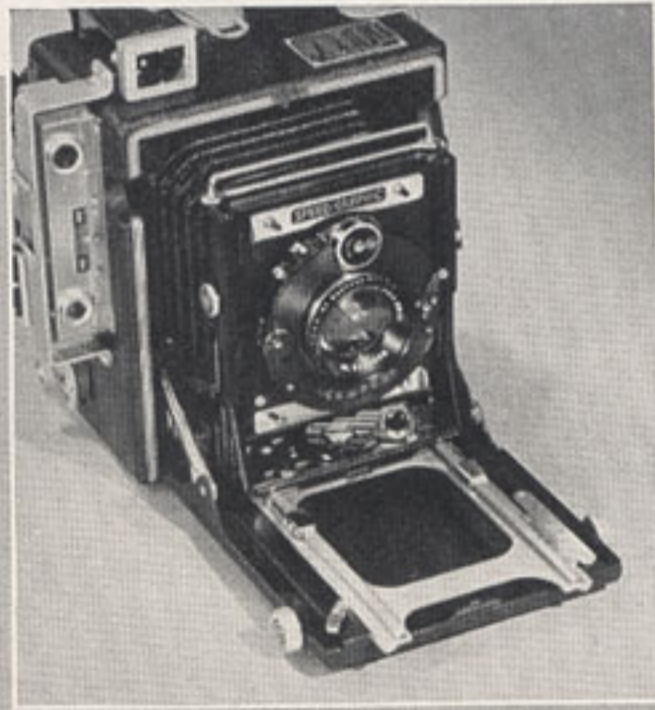
A 5 x 7 Speed Graphic is also available—used for commercial, industrial and color photography where larger negative sizes are desired. It, too, is available with either "Graphic Back" or "Graflex Back."

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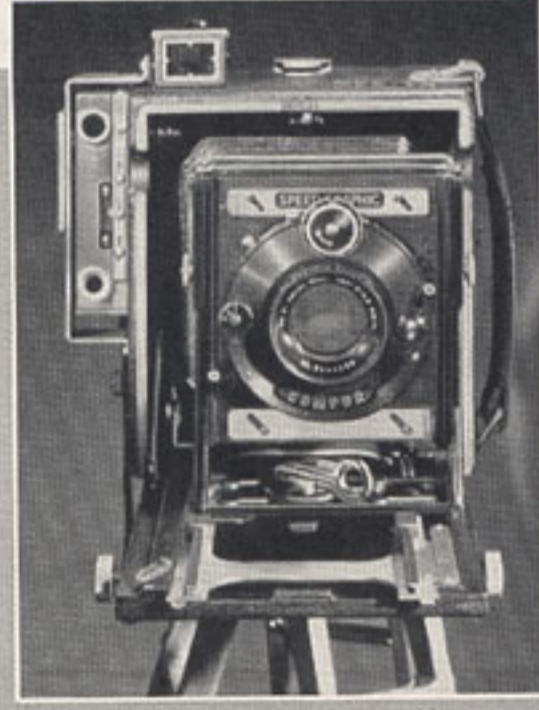
Features of the 3¼ x 4¼ and 4 x 5 Anniversary Speed Graphics



NEW ALL-METAL DROP BED AND LINKED TRACK



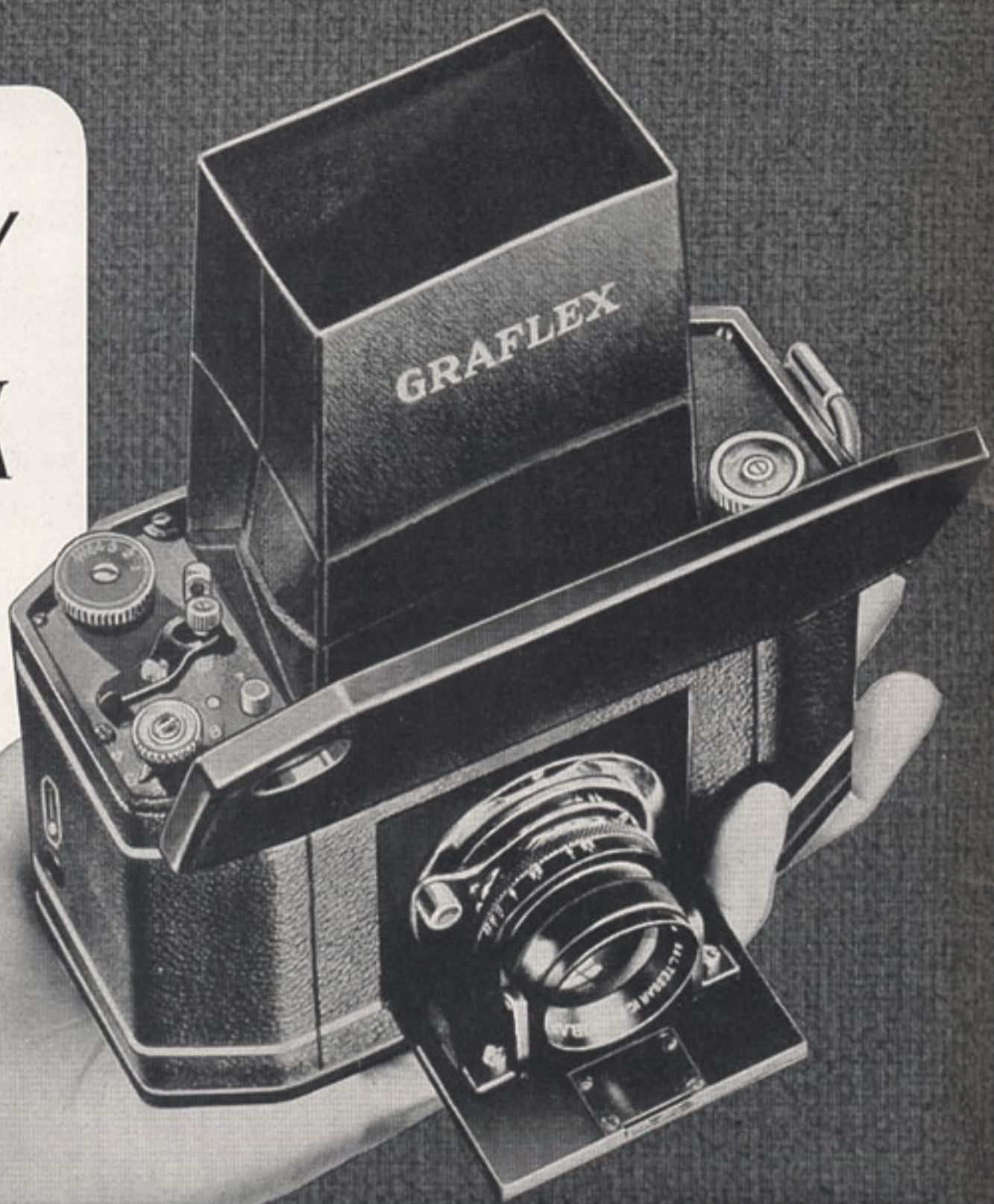
NEW TRACK LOCK AND DUAL FOCUSING CONTROLS



ALL-METAL LATERALLY SHIFTING FRONT STANDARD

National
GRAFLEX

**"JUST A
HANDFUL"**



BECAUSE this extremely compact camera—it's just a handful—embodies so many recognized Graflex features, it has been called the finest of American-made miniature reflexes. Also contributing to its great popularity is the fact that it makes ten big, album-size pictures on a regular 8-exposure film roll.

This camera features Graflex full-vision ground glass focusing whereby you see your image right side up on the ground glass to the very instant you release the shutter. This feature, coupled with a focal plane shutter that provides speeds to 1/500 second and "bulb," and a Bausch & Lomb Tessar $f/3.5$ lens, enables this camera to meet practically any picture-taking occasion. Other features include a self-erecting top cover, built-in exposure guide, automatic film measuring meter that enables ten pictures to be made on an 8-exposure film roll, film lock that holds film taut for each exposure, ruby window cover, built-in micro-focuser, ability to use a telephoto lens and cable release to facilitate slow exposures on a tripod and permit the use of an accessory self-timer.



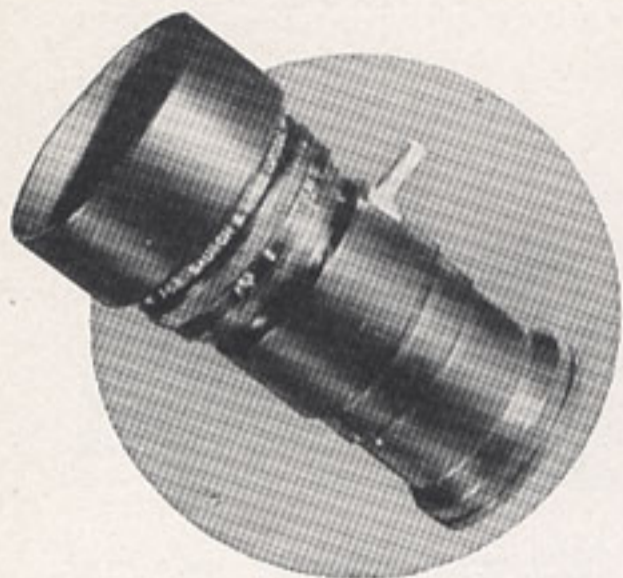
National GRAFLEX Telephoto Lens

MORE and more hobbyists and amateurs are finding the National Graflex the ideal small camera for prize-winning pictures. The accessory 140 mm. Bausch & Lomb $f/6.3$ Telephoto lens brings new picture-taking possibilities within the range of this already versatile camera.

Naturalists, sportsmen, pictorialists and hobbyists—all find the telephoto lens a valuable accessory since it is so readily interchanged with the standard lens. It almost doubles the image size when in use.

National Graflex accessories are presented on Page 24. Complete details appear on Page 26. See supplement for camera, lens and accessory prices.

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Right: "Pressure Vessels" by George N. Chapman. This National Graflex picture was a Sixth Prize-winner in the Industrial and Scientific Class. Made at 1/60 second, $f/8$.

Below: Here is a reproduction of a contact print from Mr. Chapman's negative showing that real album-size prints are obtainable with the National Graflex without enlarging.





SERIES

B

GRAFLEX

REVOLVING BACK

$2\frac{1}{4} \times 3\frac{1}{4} \bullet 3\frac{1}{4} \times 4\frac{1}{4}$
 4×5

STATIONARY BACK

5×7

THE popular price of the Series B Graflex, together with its ability to make truly outstanding pictures, make it an admirable camera choice. Being essentially an all-around camera and having great versatility and proven dependability, it has found favor in the hands of amateurs and professionals everywhere who appreciate and seek fine camera equipment.

Each Series B is a matched instrument—fitted with a Kodak Anastigmat $f/4.5$ lens by skilled Graflex craftsmen. This camera comes to you ready to produce vivid negatives for finer album-sized contact prints . . . excellent for enlarging into prize-winning pictures. In fact, almost every picture contest produces proof of the ability of these cameras to make the kind of pictures that win prizes and recognition for their owners.

The solidly-built metal front into which the Kodak lens threads, accepts for interchangeable use any of the accessory telephoto lenses listed on Page 28 and in the price supplement. Graflex full-vision ground glass focusing and the Graflex focal plane shutter combine to deliver superior results under varied conditions. And, when the occasion arises, the camera can be set instantly for time exposures. Any Series B Graflex accepts inter-



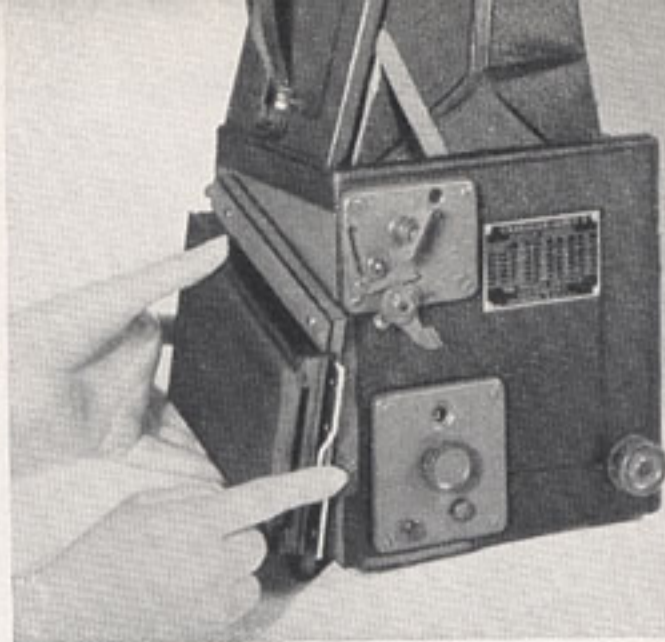
changeably all Graflex film and plate accessories listed for their respective sizes, including the well-liked sheet film magazines in twelve or eighteen septum sizes.

REVOLVING BACK

Each of the three smaller Series B cameras is equipped with a revolving back—a light-tight turn-table to which the film or plate accessory is attached by means of a slide lock. Pressing a button located on the side of the camera at the back, permits this turn-table to be rotated so that the film or plate is in either vertical or horizontal position. This enables vertical or horizontal subjects to be pictured with equal facility.

The 5 x 7 Series B Graflex is equipped with stationary back and is remarkably compact for a reflex camera which makes such generous-size pictures. It is especially desirable for photographers engaged in commercial, industrial and color work because of its ability to give the user large, 5" x 7" contact prints.

Complete details on Page 26. See supplement for camera, lens and accessory prices.



The Graflex Revolving Back is illustrated above. At a touch of the finger, the film can be instantly rotated to accommodate horizontal or vertical compositions.

"Throwing the Bull." A 3 1/4 x 4 1/4 Series B Graflex picture by Levis-Greenfield, a Sixth Prize-winner in the Action Class. Made at 1/1000 second, f/6.3.



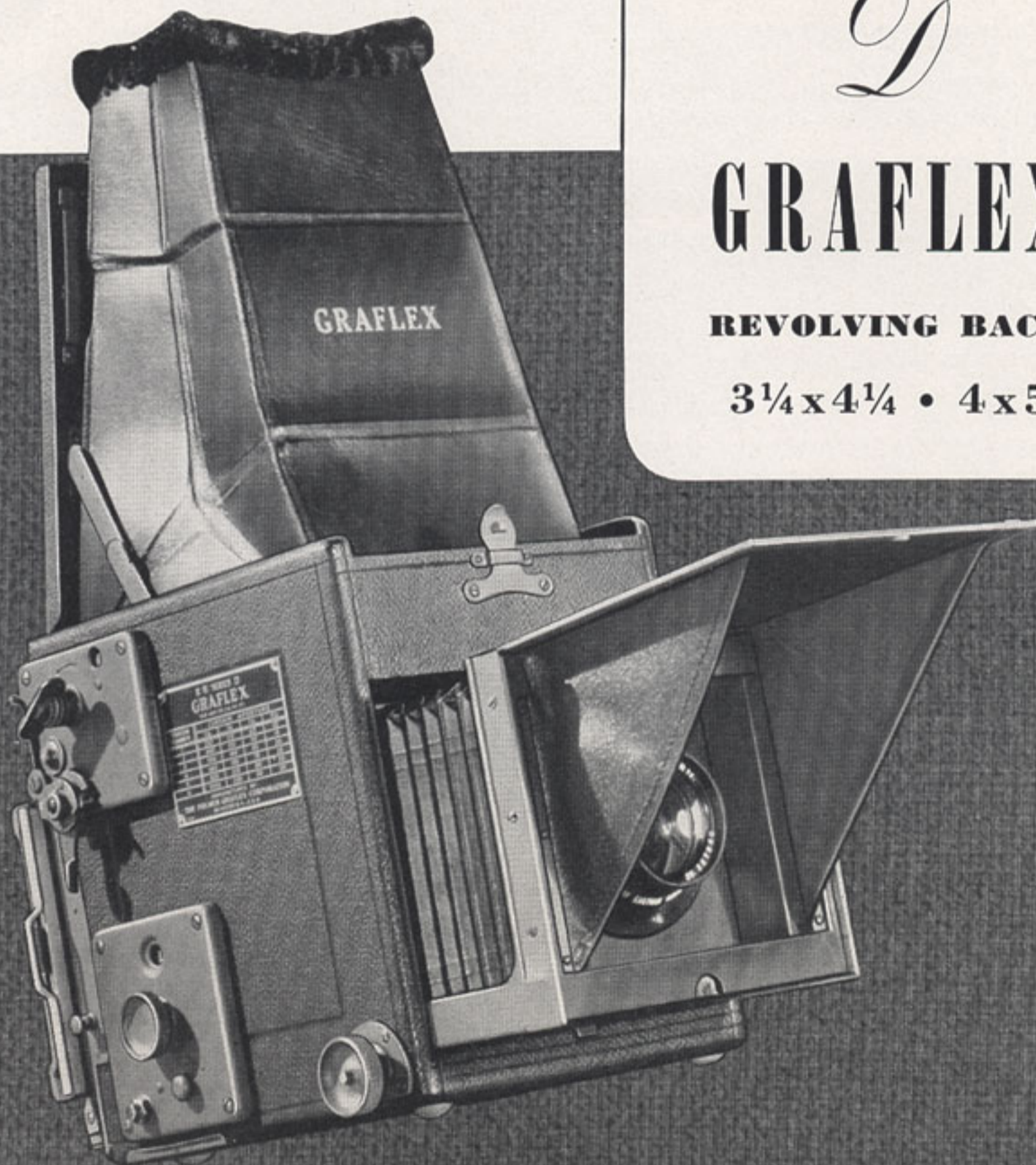


AMATEURS, professionals, scientists, explorers—all who demand top-notch camera performance—know the Series D Graflex for the all-around excellent picture-maker it is. Discriminating photographers in many fields have made it their unqualified camera choice. That is why many of the most outstanding pictures in national magazines, newspapers and salon exhibits are made with the Series D. Even in the

press field, it is depended upon for many types of sports and feature pictures.

This versatile camera best demonstrates its unparalleled capabilities when difficult, almost impossible conditions are encountered. Employing Graflex full-vision ground glass focusing, it enables you to see your picture up to the instant you take it. This feature plus the dependable Graflex focal plane shutter which has an extremely wide range of speeds, and a lensboard that will accept lenses as fast as $f/2.9$, give the user an array of advantages that make him equal to practically every picture-taking occasion.

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SERIES

D

GRAFLEX

REVOLVING BACK

3 1/4 x 4 1/4 • 4 x 5



“After the Race.” This Series D Graflex picture by John K. Zielinsky was a Medal-winner in the Pictorial and Portrait Class. Made at 1/50 second, *f*/11.

Add to these a built-in lens shade that keeps glare and stray reflections from striking the negative, an increased bellows length that permits large close-ups without the use of special lenses or attachments, a revolving back that enables you to take vertical or horizontal pictures with equal facility and the ability to use sheet film, packs, plates or roll film—consider all these advanced features and it becomes easy to see why the Series D Graflex has achieved such universal popularity. Then, too, the fact that these cameras use $3\frac{1}{4} \times 4\frac{1}{4}$ or 4×5 film permits 8×10 or 11×14 prints to be made with but modest enlargement—a consideration for the owner who offers his prints for sale or who enters them in salon exhibitions.

Many noted photographers whose work is constantly being sought for use in advertising and illustrative work as well as for inclusion in outstanding salon competitions throughout the world, are enthusiastic users of the R. B. Series D Graflex. Among these are Rowena Brownell, Doris Day, Robert Ripley, Torkel Korling, Fred P. Peel, H. Armstrong Roberts, Dr. Paul E. Truesdell and Dr. Richard L. Sutton—all of whose pictures are included in the presentation on Pages 16 and 17.

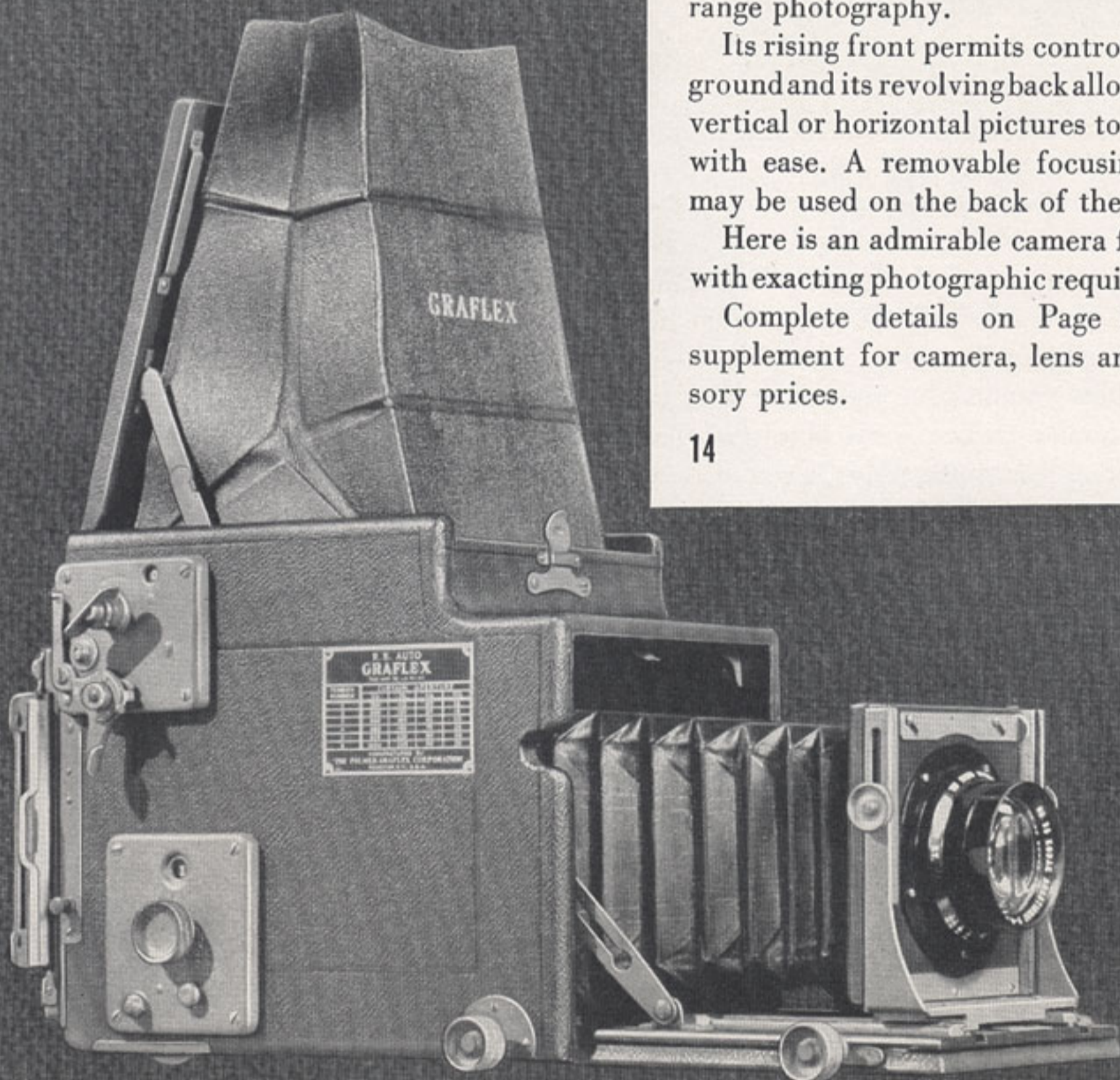
Complete details of the R. B. Series D Graflex are on Pages 26 and 27. See supplement for camera, lens and accessory prices.

Auto

GRAFLEX

REVOLVING BACK

3 1/4 x 4 1/4



ACTUAL size photographs of small objects such as flowers, jewels, specimens, designs or prints are often essen-

tial. Big images of distant scenes or objects are often desirable. Both these extremes are within the range of the versatile Revolving Back Auto Graflex.

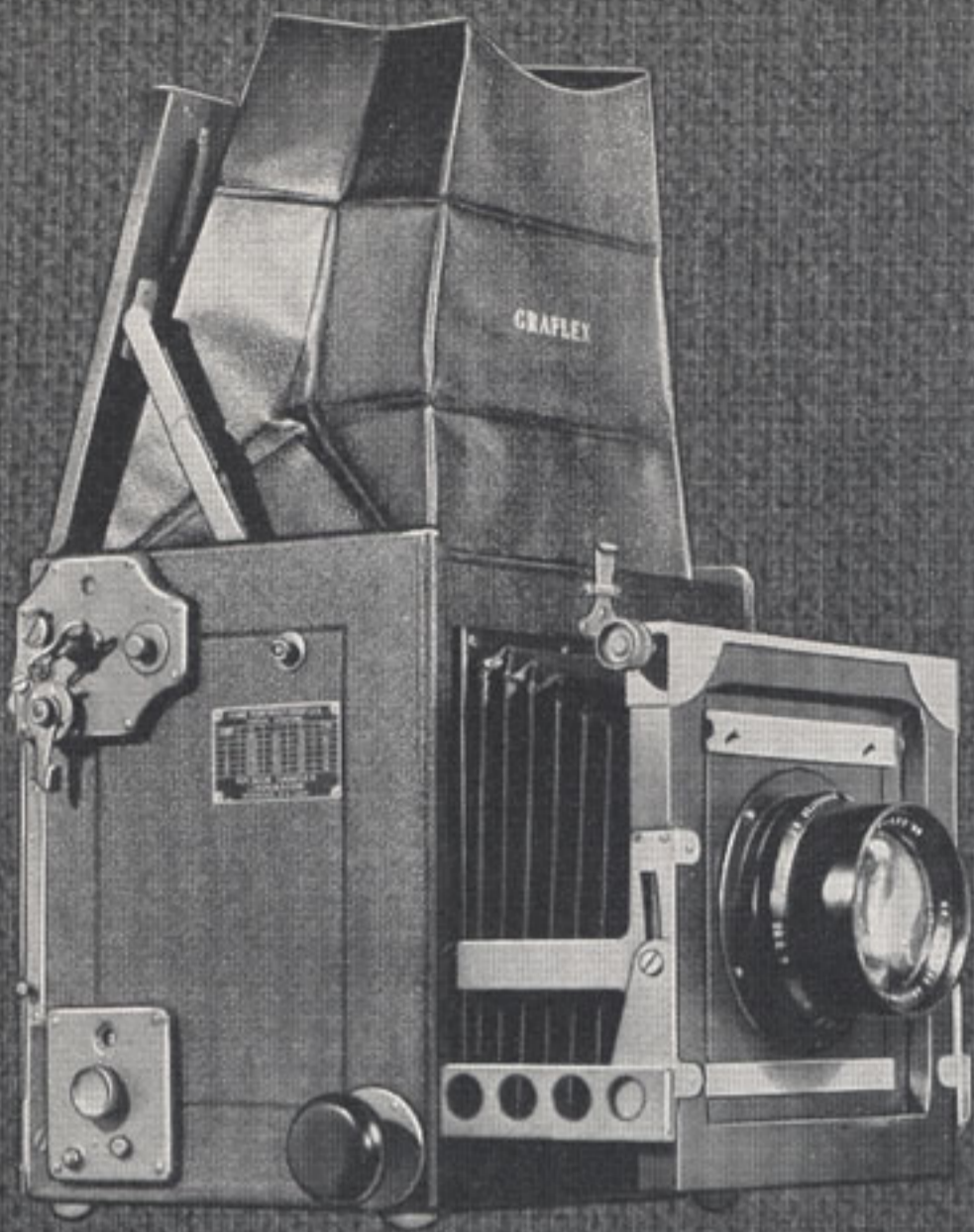
A removable lensboard accepts the Kodak Anastigmat and other normal focal length lenses, as well as the convertible Protar and telephoto lenses listed for this camera.

Its double extension bellows permits 1-to-1 copying and the use of single elements of convertible lenses for long-range photography.

Its rising front permits control of foreground and its revolving back allows either vertical or horizontal pictures to be made with ease. A removable focusing panel may be used on the back of the camera.

Here is an admirable camera for those with exacting photographic requirements.

Complete details on Page 27. See supplement for camera, lens and accessory prices.



HOME PORTRAIT GRAFLEX

REVOLVING BACK

5 x 7



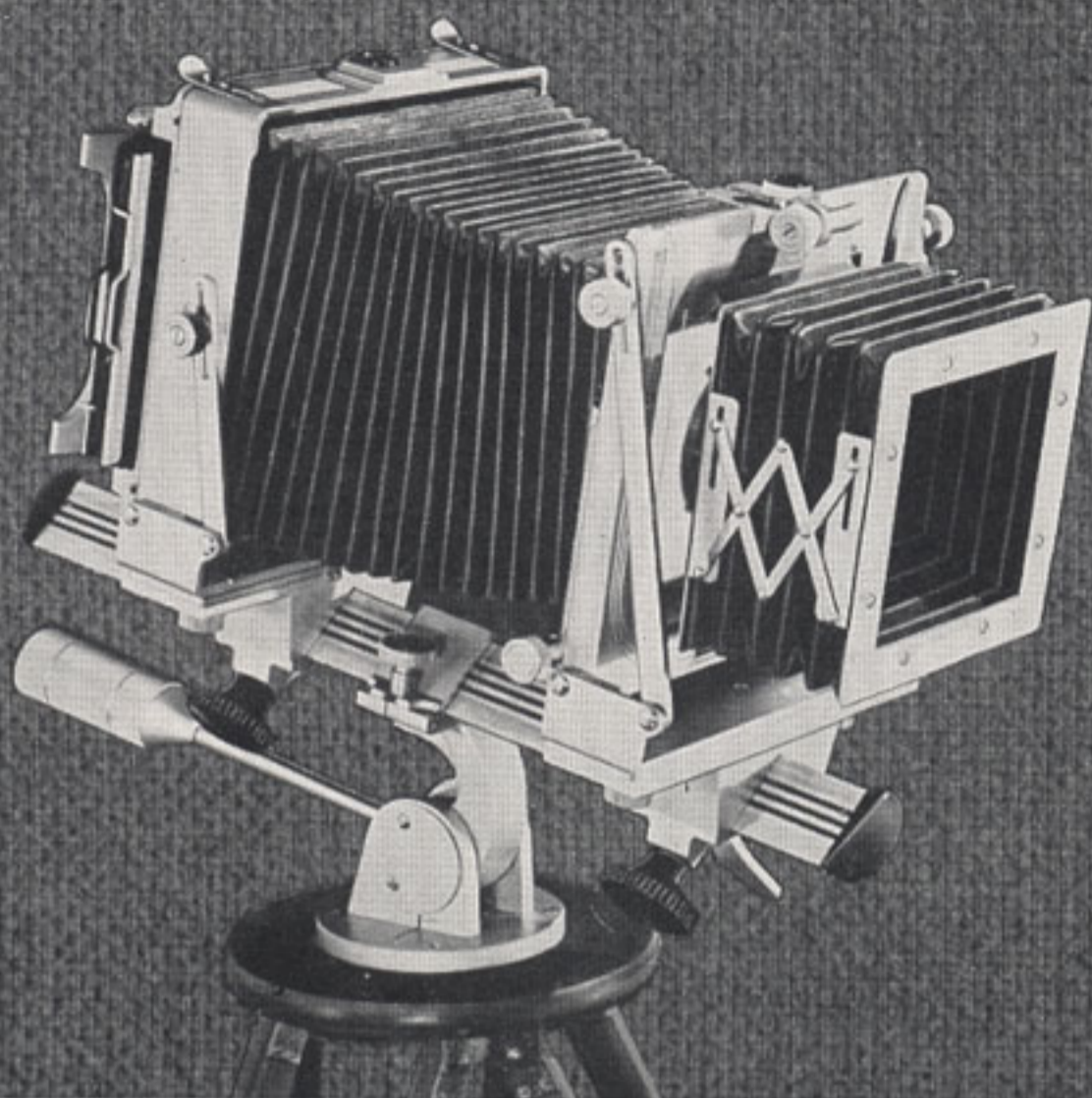
IN THIS CAMERA, Graflex full-vision ground glass focusing has been combined with an especially adapted focal plane shutter and other special features to provide a truly outstanding camera for interior home portrait photography. The lensboard rises, lowers and tilts; the sensitive finger-tip control and revolving back are invaluable. Kodak Anastigmat and other $f/4.5$ lenses as well as $f/3.5$ and telephoto lenses are interchangeably usable. The large film area of this camera—5" x 7"—permits using lenses that secure big images without approaching the subject too closely. Its focal plane shutter provides an unusual range of speeds.

With this portable camera, the user can move about freely, watching his subject in the hood . . . keeping his subject in perfect focus . . . always ready to capture that perfect instant of expression.

Complete details on Page 27. See supplement for camera, lens and accessory prices.

SPECIAL PRESS MODEL

The unusual features of this camera have proved invaluable in the news field for sports and long-range photography. For this purpose, the camera is equipped at slight extra cost with a special high speed focal plane shutter. On special order lenses as long as 40" can be especially fitted.



GRAPHIC VIEW CAMERA

4 x 5

*Shown with Accessory
Lens-shade*



ALMOST limitless combinations of adjustments are provided in this highly flexible camera. With it you can create practically any linear perspective in the negative or eliminate it entirely; you can distort the form of objects under many conditions and bring into sharp focus, at the same time, objects that (because of their positions relative to the camera and to each other) could not possibly be so photographed with the ordinary camera. Supplementing this unusual range of adjustments, the greatest possible rigidity is assured by a simple but complete system of locks and braces—making the Graphic View Camera ideal for even such exacting requirements as those of direct-separation color work.

The Graphic View Camera's removable metal lensboard permits the use of a wide variety of lenses and will accept lensboards of the 4 x 5 and 5 x 7 Speed Graphics so that their lenses may be used without upsetting the adjustment of flash synchronizers. Extreme flexibility is given by a front that rises 3", tilts forward and backward, swings, and shifts; and a back that also tilts, swings and shifts. These two in combination provide all the adjustments necessary to control perspective and field. The camera is of all-metal construction with tarnish- and scratch-resistant finish. A 12½" bellows extension permits one-to-one copying with focal lengths up to 6", large close-ups even with long-focus lenses, and direct magnification with short-focus lenses. Ground-glass focusing is available with either

"Graphic" or "Graflex" back.

Since both lens and back may be moved, there is complete and convenient control of focus and scale when working at extremely close distances.

A real departure in view camera design is the inverted V-section aluminum alloy bed. The front and back are moved along it by large, convenient controls and a smooth-running rack and pinion, and are firmly locked in any position by quick-acting levers. This construction makes it possible to shift the entire camera forward or back to preserve camera balance or to prevent cut-off when working with wide-angle lenses. It also provides great rigidity and stability and makes the camera extremely light and compact.

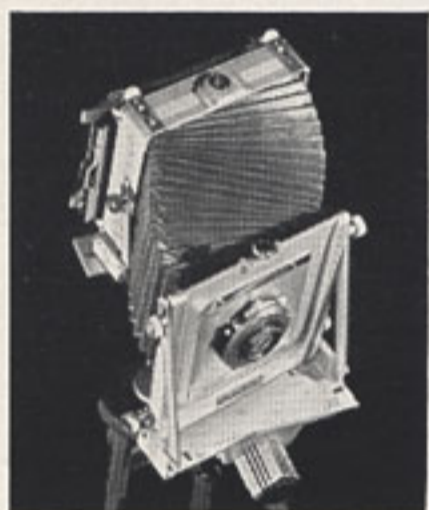
Built integrally with the camera is a smooth-working revolving and tilting base which also serves as a tripod head. This feature permits quick, easy and accurate positioning of the camera.

A spirit level is built into the top of the camera. The back is reversible to facilitate the making of horizontally- or vertically-proportioned pictures. The accessory lens-shade is adjustable for various focal lengths.

The Graphic View Camera is built to such close tolerances and has component parts of such great intrinsic strength that it is safe to say that no other view camera even approaches its ruggedness and reliability. Here is the ultimate in camera flexibility and craftsmanship.

Complete details on Page 27. See Price Supplement for camera, lens, and accessory prices.

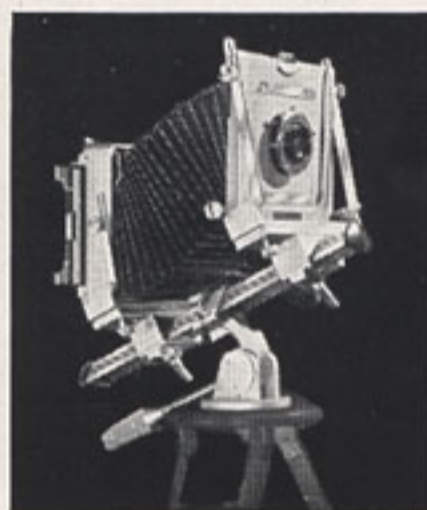
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Great flexibility of both front and back permits almost unlimited combinations of adjustments of lens and film.



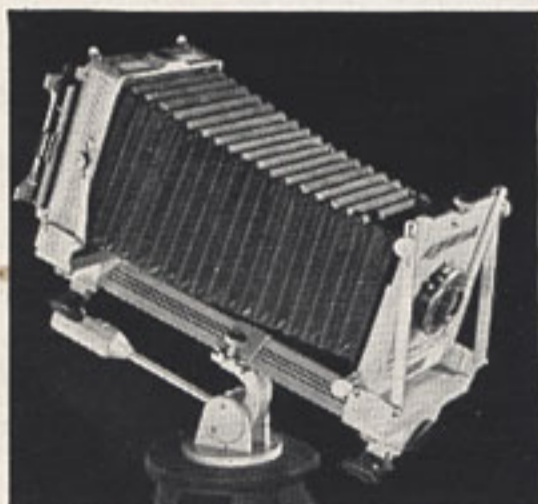
The front has a rise of 3" for controlling foreground and photographing tall objects without tilting the camera.



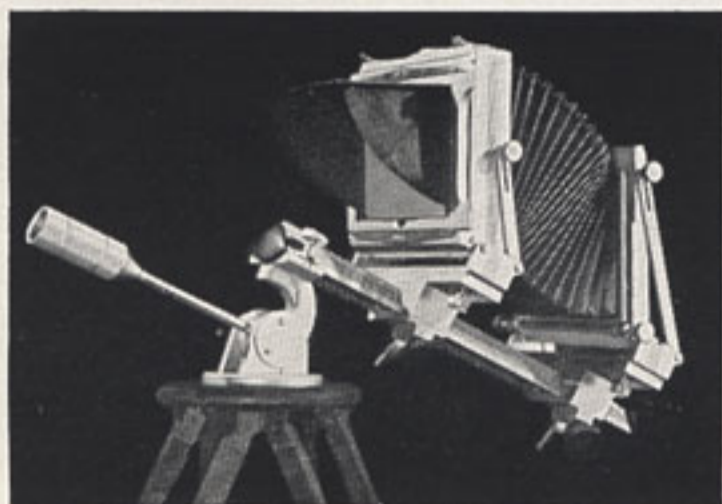
When shooting upward, linear perspective may be altered by tilting lens and film forward to make vertical lines parallel.



When shooting downward, linear perspective may be altered by tilting both lens and film backward to create parallelism of vertical lines.



12½" bellows extension permits one-to-one copying even with lenses up to 6"; direct magnification with short-focus lenses.



The entire camera and bed may be shifted forward on the revolving—tilting tripod head in order to position it extremely close to the subject.

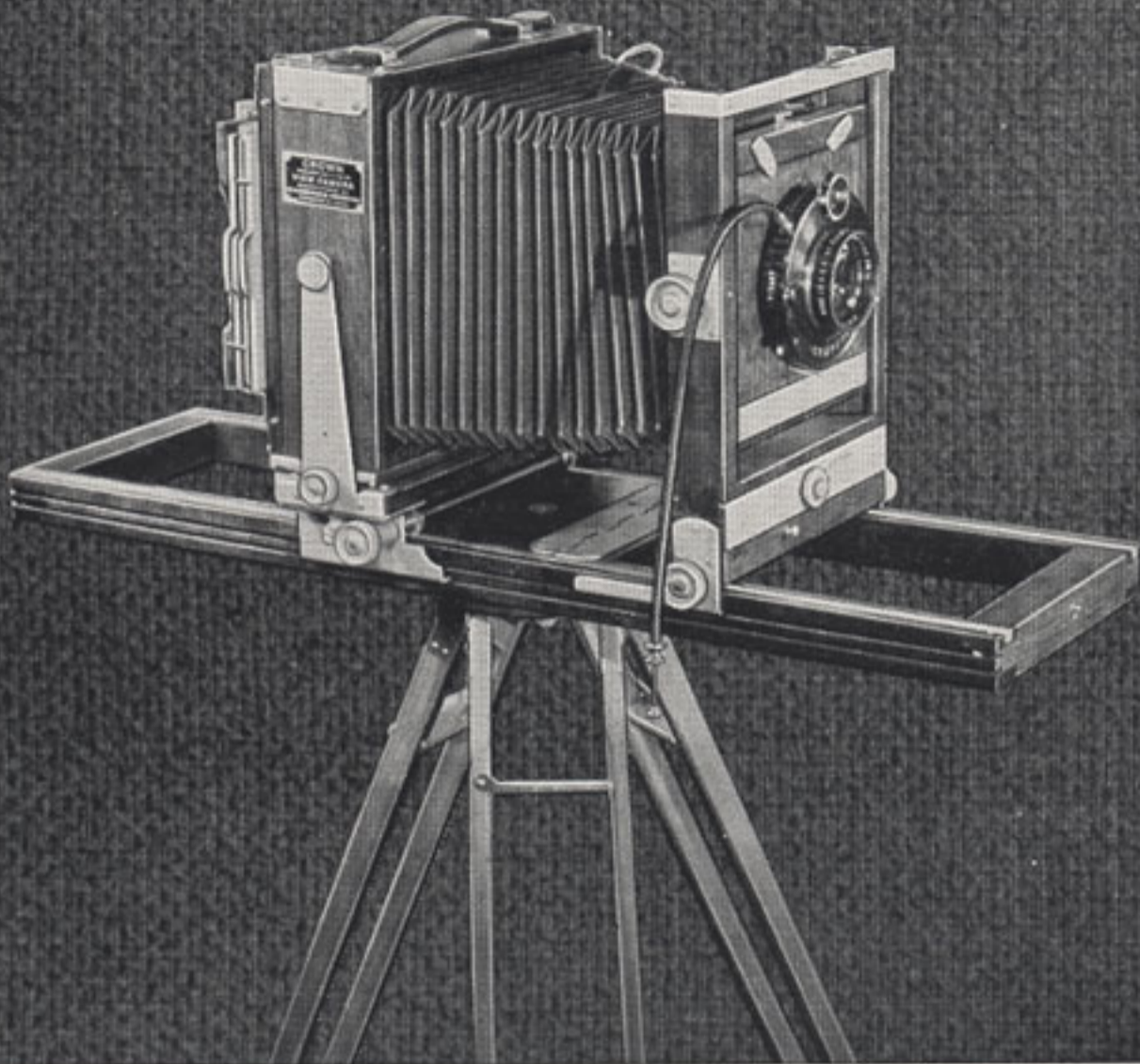


To prevent the picture from being cut-off when wide-angle lenses are used, the camera front and back may be shifted forward on the bed.

*Grand
Prize = Winner*
in the **GRAFLEX**
Golden Anniversary
PICTURE CONTEST

This spectacular Kodachrome by Larry P. Keighley was unanimously chosen by the judges as the outstanding picture of the Graflex Golden Anniversary Picture Contest. Accordingly it won for Mr. Keighley First Prize in the Color Class and Grand Prize for the entire competition. Entitled "Camden Fire", it was made in a 4x5 Speed Graphic at 1/25 second, f/9. It made history when published in the Philadelphia *Inquirer* as one of the first spot news pictures in full color.





CROWN VIEW CAMERA

4 x 5

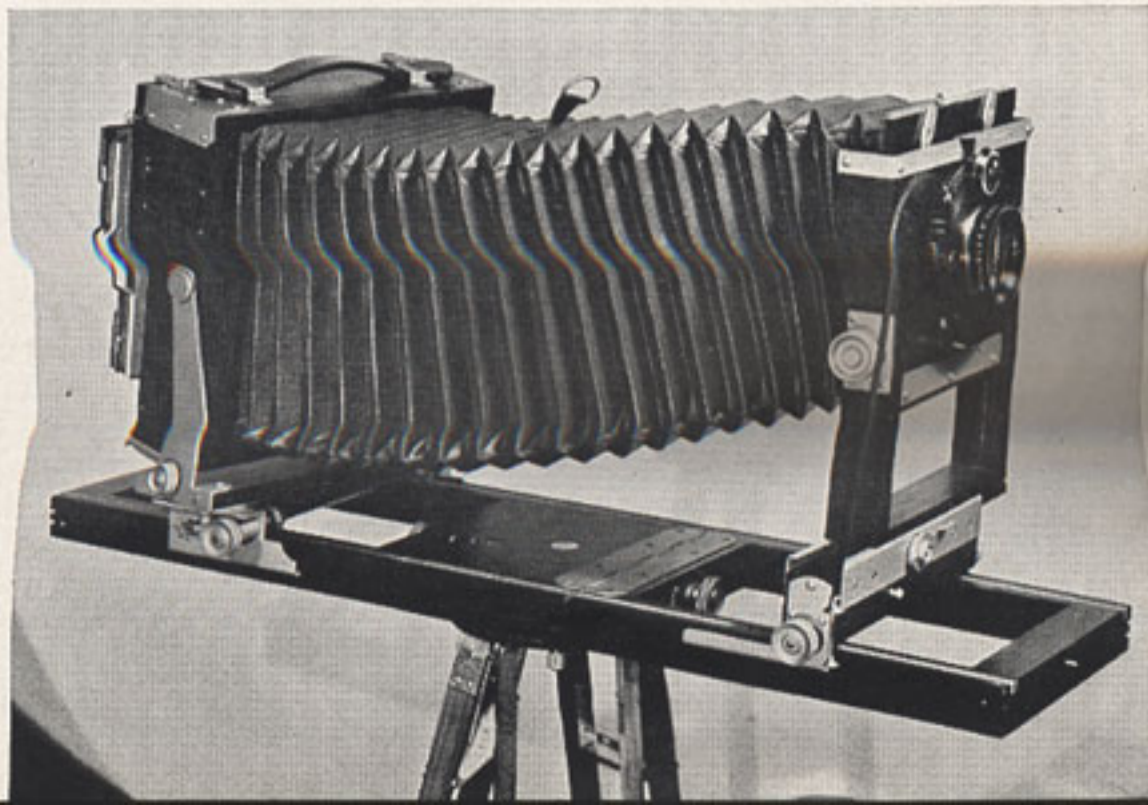


A LEGION of hobbyists and serious workers have welcomed this camera—a Graflex-made view camera that is small and compact and uses economical 4 x 5 film (or 3 $\frac{1}{4}$ x 4 $\frac{1}{4}$ size if one of the available reducing backs is used). Its many advanced features give great versatility and flexibility.

A 4" x 4" lensboard allows the use of a wide variety of wide angle, speed and telephoto lenses. Owners of Graflex and Speed Graphic cameras find it an ideal complement to their equipment, Speed Graphic owners in particular being able in most instances to use their lenses in shutter interchangeably on both cameras. A 19" bellows draw, makes it ideal for copying. A rear extension bed, a rising, falling and shifting front, and a tilting and swinging back are additional features.

Complete details on Page 27. See supplement for camera, lens and accessory prices.

Great flexibility is given the 4 x 5 Crown View Camera by its rising, falling and shifting front and its tilting and swinging back.



EQUIPMENT SUMMARY

THE following table presents at a glance the equipment and accessories which are either standard equipment or available as accessories for the GRAFLEX-made camera you propose purchasing.

	Na- tional Series II	Ser. B	R.B. Ser. B	R.B. Ser. D	R.B. Auto	R.B. Home Por- trait	SPEED GRAPHICS				Graflex Back all sizes.
							Graphic Back				
							2¼x3¼	3¼x4¼	4x5	5x7	
Graflex Film Pack Adapter		✓	✓	✓	✓	✓					✓
Graflex Roll Holder*		✓	✓	✓	✓	✓					✓
Graflex Sheet Film Holder		✓	✓	✓	✓	✓					✓
Graflex Sheet Film Maga- zine (12 Films)		✓	✓	✓	✓	✓					✓
Graflex Sheet Film Maga- zine (18 Films) †			✓	✓	✓						✓
Graphic Film Pack Adapter							✓				
Graphic Sheet Film Holder							✓	✓	✓		
Century Film Holder										✓	
Graflex Plate Holder		✓	✓	✓	✓	✓					✓
Graflex Plate Magazine*		✓	✓	✓	✓	✓					✓
Graphic Plate Holder									✓		
Century Plate Holder										✓	
Extra Lensboard				✓	✓	✓	✓	✓	✓	✓	✓
Carrying Case	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Rear Focusing Panel		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Filters	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Sunshade	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

*Supplied in 3¼ x 4¼, 4 x 5 and 5 x 7 sizes only.

†Supplied in 3¼ x 4¼ and 4 x 5 sizes only

✓Indicates that accessory may be applied
For prices please turn to Supplement.

COLOR PHOTOGRAPHY

GRAFLEX cameras are ideally suited for color photography. Standard color plates are accommodated in the regular plate holders. It is only necessary to reverse the ground glass in the rear focusing panel to compensate for the difference in register of color plates.

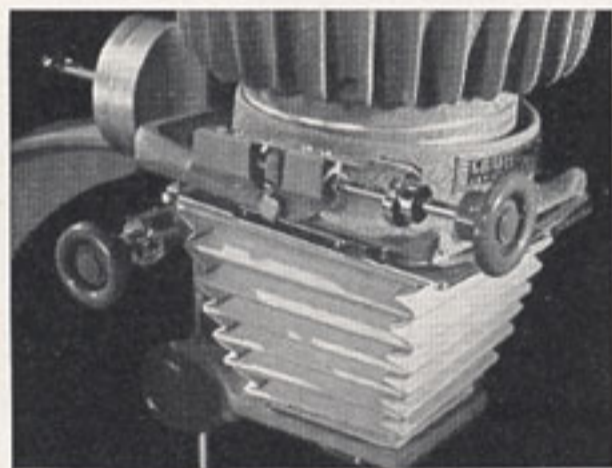
Color films are used in the same manner as standard cut film or roll film.

GRAFLEX

Variograph

ENLARGER

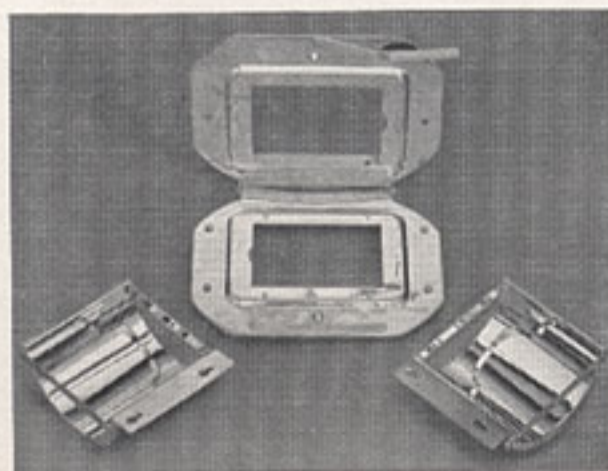
*Shown with Accessory
Variograph Easel Holder*



The Variograph controls tilt the negative in two planes.



Bellows, Lens and Focusing Column and red glass filter.



Negative Carrier and Accessory Rollfilm Receivers.

FOR users of all cameras making negatives up to $2\frac{1}{4}$ " x $3\frac{1}{4}$ "—the Miniature Speed Graphic, the $2\frac{1}{4}$ " x $3\frac{1}{4}$ " R. B. Series B Graflex, the National Graflex among others—this enlarger brings genuine flexibility and versatility into the darkroom. It gives to projection printing the same freedom that a fine view camera offers in making negatives.

Of its score or more of new and advanced features, the Variograph controls are of especial interest to the serious worker. Tilting the negative carrier in *two* planes, this enlarger facilitates and simplifies the practise of *Variography*—the art of altering linear perspective to attain more pleasing pictorial effects, as illustrated in the two pictures at the top of this page.

Exceptional rigidity is given this enlarger by its tripod column which furnishes four anchor points for the head and keeps it from swinging out of alignment during adjustment. Its exceptionally large baseboard— 24 " x 32 "—is another reason for its great stability.



A straight enlargement showing the unnatural effect of sharply converging horizontal and vertical lines.

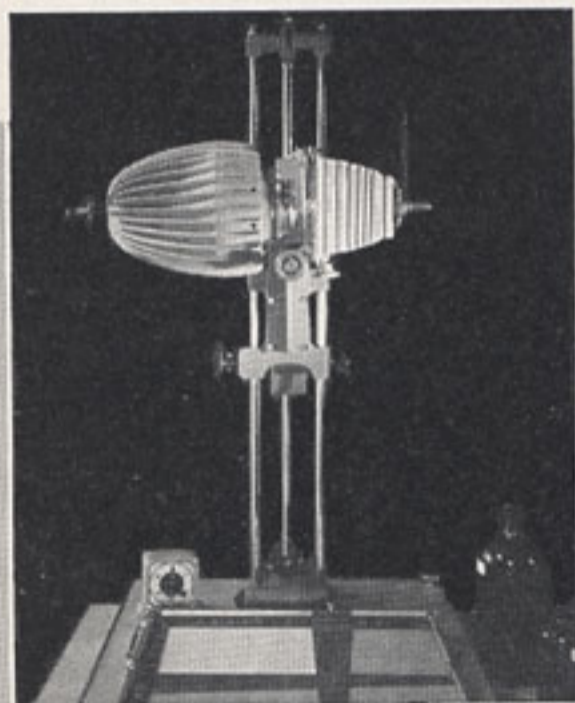


A Variograph in which the linear perspective has been altered to produce a more pleasing picture.

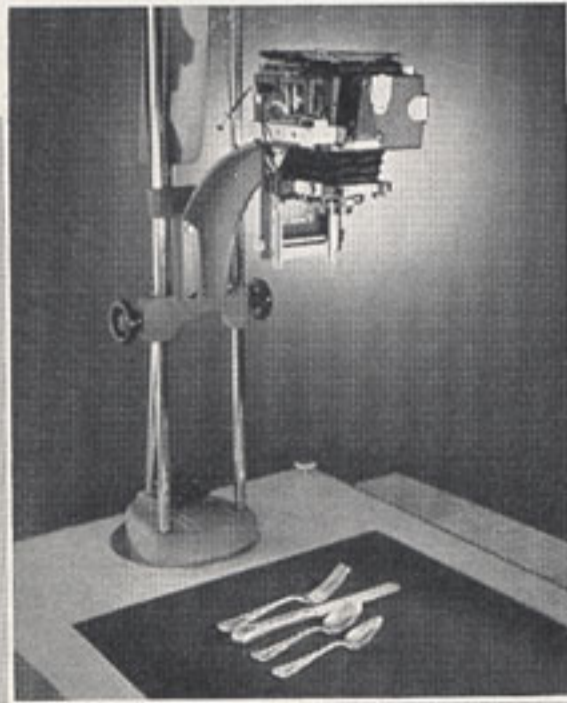
Condensers provide brilliant, even illumination. Linear enlargements up to $18.2\times$ and reductions down to $.25\times$ may be made on the baseboard. Its unique book-type negative carriers may be used with or without glass pressure plates which adjust themselves automatically to negative materials of various thicknesses. Simple, handy controls give exactly the adjustments you want without fumbling in the dark. An adapter converts it for indoor view camera work, its rotating head and tripod column permit either medium or large size murals to be made, and its removable head enables you to engage in copying, macrophotographic, microphotographic and photomicrographic work. The regular red glass filter supplied may be replaced with a 3-color separation filter carrier for the making of 3-color separation negatives.

Built with typical Graflex precision and ruggedness, the Graflex Variograph Enlarger provides you with an attractive, lifetime darkroom unit. More complete information about this finest of moderately-priced, precision-built enlargers is presented in a free booklet—available from your Dealer. It will show you the way to prize-winning pictures.

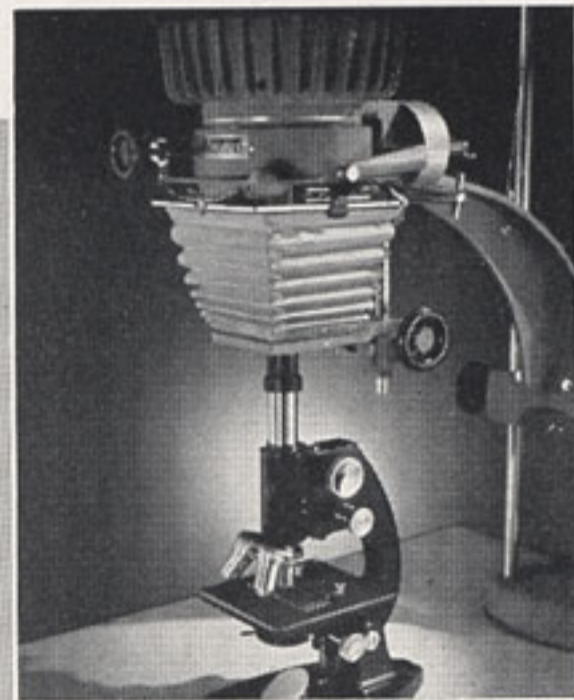
23



By rotating the enlarger head to a horizontal position, murals of any size permitted by the quality of the negative, may be produced.



The enlarger's easel and tripod column make copying and close-ups with your hand camera easy and convenient and efficient.



A microscope and adapter may be used with the enlarger-camera assembly to afford excellent photomicrographic equipment.

ACCESSORIES AND ATTACHMENTS

National Graflex Accessories

1. **TELEPHOTO LENS**—The 140 mm. B & L Telephoto *f*/6.3 Lens with detachable sunshade, almost doubles the image size from a given distance.

2. **DIRECT VIEW FINDER**—for candid or eye-level photography.

3. **SUNSHADE**—Effectively shielding extraneous sky and sun light from the regular lens, it makes for more brilliant negatives and finer pictures.

4. **FILTERS AND COPYING ATTACHMENTS**—contribute handsomely toward better pictures. Ten filters and two copying attachments are available for the 75 mm. lens; four filters for the 140 mm. telephoto lens.

5. **SUEDE CARRYING CASE**—Protect your *National* GRAFLEX from the elements with this neat, foldable case. Opens and closes by means of a zipper.

6. **GRAIN-LEATHER CARRYING CASE**—A popular choice for fine appearance and long life.

7. **TELEPHOTO LENS CASE**—an indispensable accessory for telephoto lens owners.

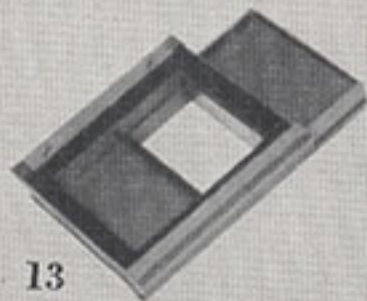
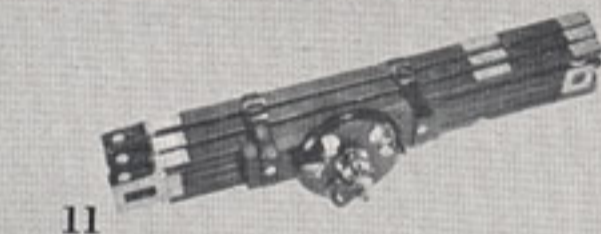
8. **SPORTSMAN'S CARRYING CASE**—Made of fine grain-leather, this velveteen-lined case holds and protects the camera *while in use*.

9. **CARRY-ALL CASE**—Holds camera and *all* accessories (except tripod) in separate compartments.

10. **CABLE RELEASE**—facilitates slow exposures on a tripod and permits the use of an accessory self-timer.

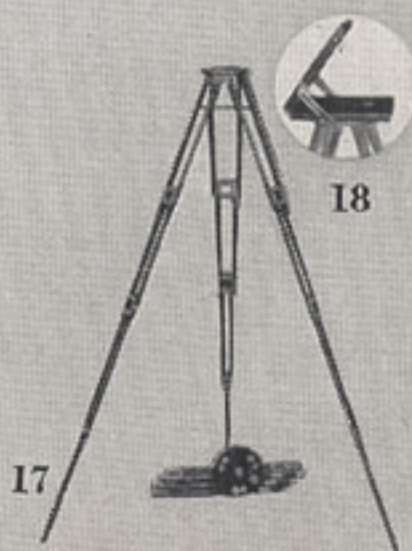
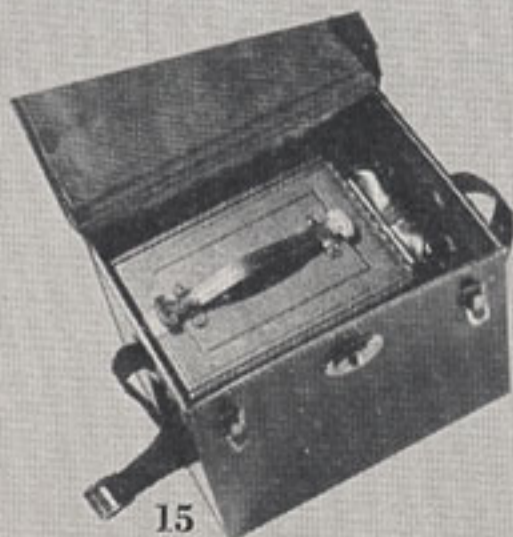
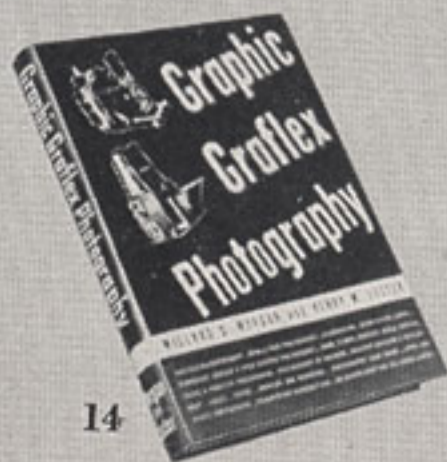
11. **CROWN JR. TRIPOD**—a handsome, compact ebony tripod of ideal height for the *National* GRAFLEX and other miniature cameras.

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12

13



18

17

15

16

14

To Add to Your Picture-taking Pleasure

12. KODAK ANASTIGMAT $f/4.5$ LENSES—Noted for definition and flatness of field. Available in barrel and in between-the-lens shutter, they are listed and recommended for GRAFLEX and Speed Graphic cameras.

13. DIVIDING GRAFLEX BACK—Available in 4 x 5 size, the Dividing Graflex Back makes two pictures on each film or plate. It fits Graflex cameras as well as the Speed Graphic with "Graflex Back," and accepts all Graflex film and plate accessories.

14. "GRAPHIC GRAFLEX PHOTOGRAPHY"—The most complete book on the use of Graflex and Speed Graphic cameras ever published! By Willard D. Morgan, Henry M. Lester and 20 other experts. More than 400 pages—26 chapters—hundreds of illustrations! A book *you* should own.

15. GRAFLEX CARRYING CASES—are made of selected leather, lined with corduroy, and fitted with lock and key. Each accepts the camera with any Graflex film or plate accessory fitted to it.

16. "PHOTOGRAPHIC ENLARGING"—A complete enlarging book written by a master of the subject, Franklin I. Jordan F.R.P.S. Contains 224 pages comprising 19 chapters and 75 illustrations. Invaluable in every library. Now in its second edition.

17. CROWN TRIPOD—Strong, steady and dependable, the Crown Tripod is the favorite in the field. Made of oil-soaked and water proofed selected cherry.

18. CROWN TRIPOD TILTING TOP—is a valuable companion accessory, permitting the movement of the camera through a 180 degree arc—from horizontal to vertical.

Graflex Film and Plate Attachments

19. GRAFLEX ROLL HOLDER—In the GRAFLEX Roll Holder, a positive film lock affords plate-like efficiency to the 6-exposure roll film used. (S.S. Panchromatic, Panatomic and Verichrome are regularly supplied for the smaller listed sizes; Verichrome only for the 7 x 5 size.) This desirable accessory is detachable at will and interchangeable with other GRAFLEX attachments. *Sizes provided:* 4 1/4 x 3 1/4 (No. 51 C); 5 x 4 (No. 53 C); and 7 x 5 (No. 54).

20. GRAFLEX FILM PACK ADAPTER—When quick re-loading counts, the GRAFLEX Film Pack Adapter is fully appreciated. Twelve-exposure daylight loading packs for it are widely distributed in a choice of emulsions, a contributing factor to its popular appeal. The GRAFLEX Film Pack Adapter interchanges with other GRAFLEX attachments.

Sizes provided: 2 1/4 x 3 1/4; 3 1/4 x 4 1/4; 4 x 5; and 5 x 7. Graphic Film Pack Adapter available in 2 1/4 x 3 1/4 size.

21. GRAFLEX SHEET FILM AND PLATE MAGAZINES—The GRAFLEX Cut Film Magazine affords the user the greatest selection of negative material—the wide variety

of emulsions available in sheet films. The films may be removed singly or in multiples for development, as the occasion demands.

The GRAFLEX Plate Magazine gives the same advantages to users of dry plates.

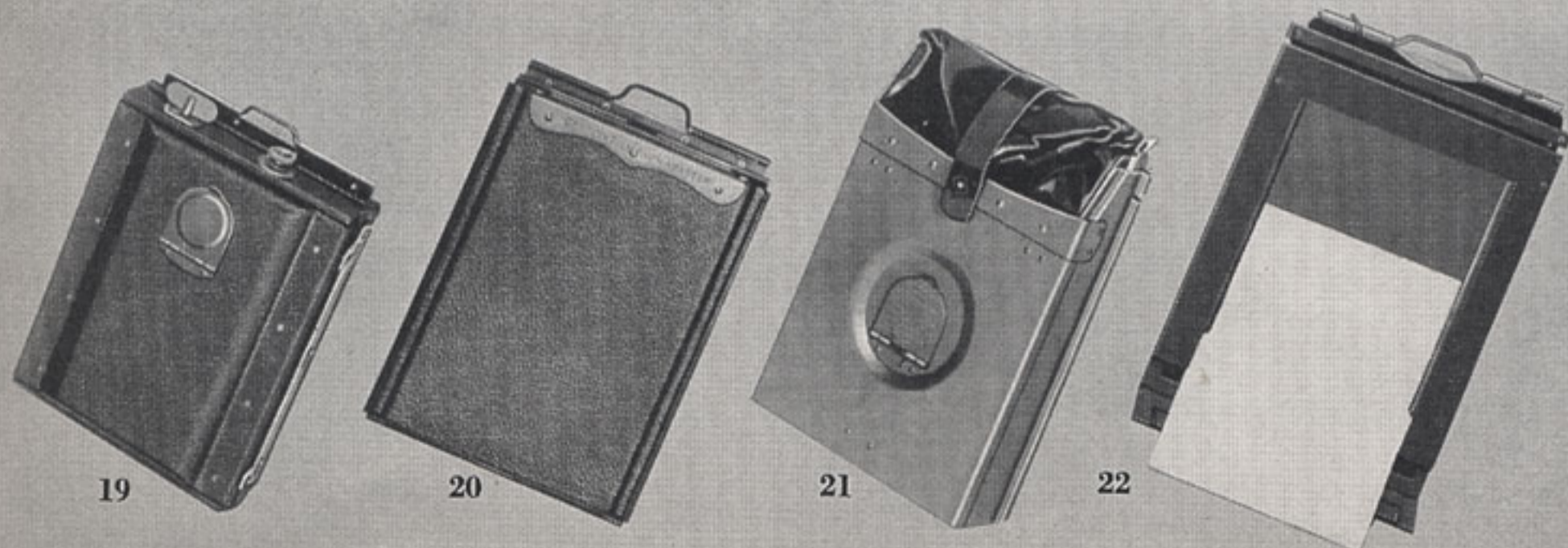
Both magazines are interchangeable with other GRAFLEX attachments.

Sizes provided: 12 sheet films capacity: 2 1/4 x 3 1/4; 3 1/4 x 4 1/4; 4 x 5; and 5 x 7. 12 plates capacity: 3 1/4 x 4 1/4; 4 x 5; and 5 x 7. 18 sheet films capacity: 3 1/4 x 4 1/4; and 4 x 5.

22. GRAFLEX SHEET FILM AND PLATE HOLDERS—The GRAFLEX Sheet Film Holder, too, affords the user the widest choice of negative material. The holder, interchangeable with other GRAFLEX attachments, accepts two films which may be removed singly for development.

The GRAFLEX Plate Holder affords like advantages to the user of dry plates and color plates.

Sizes provided: 2 1/4 x 3 1/4; 3 1/4 x 4 1/4; 4 x 5; and 5 x 7. (*Graphic Sheet Film Holders are supplied for the 2 1/4 x 3 1/4, 3 1/4 x 4 1/4 and 4 x 5 Speed Graphics with Graphic Back; Century holders in the 5 x 7 size.*)



FEATURES AND DETAILS

SPEED GRAPHIC

INTERCHANGEABLE LENSES—A large removable lensboard and long bellows permit the interchangeable use of a wide selection of speed, wide-angle and telephoto lenses.

BROAD EXPOSURE RANGE—The focal-plane shutter, in combination with a between-the-lens shutter, affords controlled exposures ranging from one full second to 1/1000.

VIEWFINDERS—The folding wire frame finder is convenient for following fast action. The tubular optical finder supplied on the three smaller sizes is ideal for all-around photography; its parallax adjustment makes for accuracy in shooting at various distances.

GROUND GLASS FOCUSING PANEL—This is built on those cameras supplied with the "Graphic Back," which accepts *Graphic* holders and the Kodak film pack adapter. A *Graphic* Film Pack Adapter is available for the 2 1/4 x 3 1/4 size. Cameras supplied with "Graflex Back" use the accessory *Graflex* Focusing Panel interchangeably with all *Graflex* film and plate accessories.

COUPLED RANGEFINDERS—The accessory coupled rangefinder rounds out the *Speed Graphic* as the only all-purpose candid camera.

PHOTOFLASH SYNCHRONIZATION—With a synchronizer-equipped *Speed Graphic*, you can keep on shooting after sundown.

Details

2 1/4" x 3 1/4" Picture size: 2 1/4" x 3 1/4"; Bellows capacity: 9"; Lensboard: 2 1/2" square; Focal-plane shutter: 24 speeds up to 1/1000 and "Time;" Built-in focal-plane shutter flash synchronization. Available with either "Graphic Back" or "Graflex Back."

3 1/4" x 4 1/4" Picture size: 3 1/4" x 4 1/4"; Bellows capacity: 12"; Lensboard: 3 1/4" square; Focal-plane shutter: 24 speeds up to 1/1000 and "Time." Available with either "Graphic Back" or "Graflex Back."

4" x 5" Picture size: 4" x 5"; Bellows capacity: 13 1/2"; Lensboard: 4" square; Focal-plane shutter: 24 speeds up to 1/1000 and "Time." Available with either "Graphic Back" or "Graflex Back."

5" x 7" Picture size: 5" x 7"; Bellows capacity: 16"; Lensboard: 4" square; Focal-plane

shutter: 24 speeds up to 1/1000 and "Time." The 5 x 7 *Speed Graphic*, when supplied with "Graphic Back," accepts *Century Riteway* film holders and the Kodak film pack adapter; with "Graflex Back," it regularly accepts *Graflex* film and plate accessories.

National GRAFLEX

INSTANT ACTION—Top cover "pops" open and focusing hood springs into position instantly at the touch of a button.

BUILT-IN EXPOSURE GUIDE—Accurately calibrated for all picture-taking hours of the day, and for all months of the year.

FILM MEASURING METER—Automatically measures the film as you wind it after each exposure, gives ten 2 1/8" x 2 1/2" pictures from each 8-exposure roll.

BUILT-IN MICRO-FOCUSER—Magnifies the ground glass image . . . making it easy to see when your subject is accurately focused.

GRAFLEX FOCAL-PLANE SHUTTER—The *National Graflex* is provided with the dependable *Graflex* focal-plane shutter.

Details

Picture size: 2 1/8" x 2 1/2"; Lens: B & L 75 mm. Tessar f/3.5; Focal-plane shutter speeds: 8 from 1/30 to 1/500 second and "Bulb."

TELEPHOTO LENS—An accessory B & L 140 mm. Telephoto f/6.3 lens practically doubles the image size.

R. B. SERIES B GRAFLEX

GRAFLEX FEATURES—*Graflex* full-vision ground-glass focusing, the *Graflex* focal-plane shutter and ability to use sheet film, film packs, roll film or plates.

REVOLVING BACK—On all models except 5 x 7, the "Graflex Back" revolves to facilitate the taking of either horizontal or vertical subjects.

Details

2 1/4" x 3 1/4" Picture size: 2 1/4" x 3 1/4"; Bellows capacity: 7 3/8"; Focal length of lens: 5 1/2"; Closest working distance: 21"; Focal-plane shutter: 25 speeds up to 1/1000 and "Time;" Revolving Back.

3 1/4" x 4 1/4" Picture size: 3 1/4" x 4 1/4"; Bellows capacity: 8 7/8"; Focal length of lens: 6 3/8"; Closest working distance: 23"; Focal-plane shutter: 25 speeds up to 1/1000 and "Time;" Revolving Back.

4" x 5" Picture size: 4" x 5"; Bellows capacity: 10 1/8"; Focal length of lens: 7 1/2"; Closest working distance: 27"; Focal-plane shutter: 25 speeds up to 1/1000 and "Time;" Revolving Back.

5" x 7" With Stationary Back—Picture size: 5" x 7"; Bellows capacity: 11"; Focal length of lens: 8 1/2"; Closest working distance: 29"; Focal-plane shutter: 25 speeds up to 1/1000 and "Time;" Stationary Back.

R. B. SERIES D GRAFLEX

INTERCHANGEABLE LENSBOARD—Permits use of a wide range of lenses.

REVOLVING BACK—The "Graflex Back" revolves to facilitate the taking of either horizontal or vertical subjects.

GRAFLEX FEATURES—GRAFLEX full-vision ground-glass focusing and the proven Graflex focal plane shutter.

OTHER FEATURES—Generous bellows length, built-in lens-shade and ability to use sheet film, roll film, film packs or plates.

Details

3 1/4" x 4 1/4" Picture size: 3 1/4" x 4 1/4"; Bellows capacity: 8 1/4"; Lensboard: 3 1/4" square; Minimum focal length accommodated: 6"; Focal-plane shutter: 25 speeds up to 1/1000 and "Time;" Revolving Back.
4" x 5" Picture size: 4" x 5"; Bellows capacity: 12"; Lensboard: 3 3/4" square; Minimum focal length accommodated: 7"; Focal-plane shutter: 25 speeds up to 1/1000 and "Time;" Revolving Back.

R. B. AUTO GRAFLEX

LONG BELLOWS DRAW—Permits full-sized pictures and large close-ups of subjects to be obtained.

INTERCHANGEABLE LENSBOARD—Affords easy interchangeability of regular, convertible, and special purpose lenses, in barrel and shutter.

REVOLVING BACK—RISING FRONT—Revolving Back greatly facilitates the taking of horizontal and vertical pictures, while the rising front controls foreground. Graflex focusing panel at rear enables image to be measured or examined under magnification.

GRAFLEX FEATURES—GRAFLEX full-vision focusing, focal-plane shutter, and ability to use sheet film, roll film, film packs or plates are important features.

Details

3 1/4" x 4 1/4"—Picture size: 3 1/4" x 4 1/4"; Bellows capacity: 15 1/2"; Lensboard: 3 1/4" square; Minimum focal length accommodated: 7"; Focal-plane shutter: 25 speeds up to 1/1000 and "Time;" Revolving Back.

R. B. HOME PORTRAIT GRAFLEX

LENS-FRONT VERSATILITY—Raises, lowers, tilts; accepts a wide selection of lenses.
PORTABILITY—Operator can move about freely, watching his subject in the focusing hood, always ready for his picture.

LARGE SIZE PORTRAITS—Large images may be obtained with a 5 x 7 film size without approaching the subject too closely—an important feature for home portrait work.

Details

5" x 7" Picture size: 5" x 7"; Minimum focal length accommodated: 10"; Bellows capacity: 13 3/4"; Lensboard: 5" square; Focal-plane shutter: 24 speeds up to 1/500 and "Time;" Revolving Back.

GRAPHIC VIEW CAMERA

RIGID, ALL-METAL CONSTRUCTION—The use of aluminum alloys give this camera maximum structural strength coupled with light weight.
RISING, TILTING, SWINGING AND SHIFTING FRONT—This feature gives greatest possible flexibility in positioning the lens, so necessary in interior and architectural work.

TILTING, SWINGING AND SHIFTING BACK—In connection with the front adjustments, this back provides all the movements for controlling linear perspective and sharp field.

FRONT AND BACK FOCUSING—Permits complete and convenient control of focus and scale when working at very close range.

12 1/2" BELLOWS EXTENSION—For 1:1 copying and large close-ups with lenses up to 6" focal length; direct magnifications with short-focus lenses.

REMOVABLE LENSBOARD—Its ability to use a wide variety of lenses makes this camera equal to every view-camera job. Accepts lensboards of 4" x 5" and 5" x 7" Speed Graphics, in addition to the metal lensboard supplied with it.

GROUND-GLASS FOCUSING—Available with either 4" x 5" and 3 1/4" x 4 1/4" "Graphic" or 4" x 5" and 3 1/4" x 4 1/4" "Graflex" Backs. Shielded ground glass to facilitate focusing.
MONORAIL BED—Gives great lightness, compactness, rigidity, simplified construction and operation.

SMOOTH-WORKING REVOLVING AND TILTING BASE—This base also serves as a tripod head, permitting quick, easy and accurate positioning of the camera.

CAMERA SHIFT—The camera may be shifted forward or backward on the bed to preserve balance with heavy objectives, and to prevent cut-off when wide-angle lenses are used.

REVERSIBLE BACK—Makes possible the taking of either horizontally or vertically-proportioned pictures.

SPIRIT LEVEL—Built into top of the camera for greatest convenience and visibility.

Details

4" x 5" Picture size: 4" x 5" or 3 1/4" x 4 1/4"; Lensboard: 4" square; Bellows extension: 3" to 12 1/2" (measured from film plane to front of lensboard); movements of both lens and film: Lateral shift, 5/8" each way; Swing, 12° right and 12° left; Tilt, 22° forward and 26° back; Rise of lens, 3". Backs: Graphic, 4" x 5" and 3 1/4" x 4 1/4"; Graflex, 4" x 5" and 3 1/4" x 4 1/4".

CROWN VIEW CAMERA

Of the features possessed by the GRAPHIC View Camera and noted above, the 4" x 5" CROWN View Camera has the following: Removable Lensboard; Rising, Falling, and Shifting Front; Double Extension Bellows; Ground-Glass Focusing; Lens and Film Focusing (when accessory Rear Extension Bed is used); Tilting and Swinging Back. The camera body, front standard and bed are constructed of selected cherry.

Details

4" x 5" Picture size: 4" x 5"; Bellows capacity: 19"; Lensboard: 4" square, model J; Minimum bellows extension: 3 9/16"; Rise of front: 1" from center; Fall of front: 1 3/8" from center; Lateral shift of front: 1 1/8" from center; Horizontal swing of back: 12 degrees from center; Tilt of back: 12 degrees from center.

LENSES

IN order that GRAFLEX cameras may secure the superior results for which they are recognized, only excellent and proved lenses are offered as equipment for them. The table below demonstrates at a glance the versatility of GRAFLEX-made cameras with regard to lenses accommodated.

Lens Speed		National Graflex												
		5x7 Ser. B	2 1/4 x 3 3/4 R. B. Ser. B.	3 1/4 x 4 1/4 R. B. Ser. B	4x5 R. B. Ser. B	3 1/4 x 4 1/4 R. B. Ser. D	4x5 R. B. Ser. D	3 1/4 x 4 1/4 R. B. Auto	5x7 R. B. Home Portrait	2 1/4 x 3 3/4 Speed Graphic	3 1/4 x 4 1/4 Speed Graphic	4x5 Speed Graphic	5x7 Speed Graphic	
f/4.5	Kodak Ektar											✓		
f/4.7	Kodak Ektar												✓	✓
f/4.5	Kodak Anastigmat		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
"	Bausch & Lomb					✓	✓	✓	✓	✓	✓	✓	✓	✓
"	Cooke					✓	✓	✓	✓	✓	✓	✓	✓	✓
"	Dallmeyer					✓	✓	✓	✓	✓	✓	✓	✓	✓
"	Goerz					✓	✓	✓	✓	✓	✓	✓	✓	✓
"	Ross					✓	✓	✓	✓	✓	✓	✓	✓	✓
"	Schneider					✓	✓	✓	✓	✓	✓	✓	✓	✓
"	Zeiss					✓	✓	✓	✓	✓	✓	✓	✓	✓
f/3.5	Bausch & Lomb	✓												
"	Cooke					✓	✓	✓				✓		
"	Dallmeyer					✓	✓	✓		✓		✓	✓	✓
"	Ross					✓	✓	✓				✓	✓	✓
"	Schneider					✓	✓	✓		✓		✓	✓	✓
"	Zeiss					✓	✓	✓		✓	✓	✓	✓	✓
f/2.9	Cooke					✓	✓	✓				✓		
"	Plaubel					✓	✓	✓				✓		
TELEPHOTO LENSES														
f/6.3	Bausch & Lomb	✓												
"	Ross											✓	✓	
f/5.6	Cooke		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
"	Dallmeyer		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
f/5.5	Schneider					✓	✓	✓			✓	✓	✓	✓
f/4.5	Dallmeyer					✓	✓	✓	✓	✓	✓	✓	✓	✓

INFORMATION UPON REQUEST

✓Indicates that lens may be fitted.

For lens prices please turn to Supplement.

THE GRAFLEX camera has attained its reputation as the most efficient of all "still" cameras through the scientific application of time-proven principles of optics by GRAFLEX experts in the GRAFLEX factory. The selection and fitting of the proper lens to the camera by these experts is of utmost importance, requiring as it does, knowledge of the Art together with extreme skill of workmanship and minute inspection. In their hands the photographic unit of GRAFLEX and lens is made a unit of perfection.

COMPARATIVE DATA

THE following table summarizes in a comparative way some of those factors of interest to the person selecting a camera to meet specific requirements.

Camera	Picture Size Inches	Std. Lens Speed f/Value	Focal Length	Bellows Capacity Inches	Min. Focus Lens* Inches	Closest Working Distance	Lensboard	Crown Tripod Recommended	Sensitized Material Used		
National Graflex	2 1/8 x 2 1/2	3.5	3"			42"	Lensboard part of camera	Jr.	Roll Film		
Series B Graflex	5x7	4.5	8 1/2"	11		29"		4	Roll Film, Film Pack, Sheet Film, Plates.		
R. B. Series B Graflex	2 1/4 x 3 1/4	4.5	5 1/2"	7 3/8	For Telephoto lenses see supplement Listed lens standard equipment . . .	21"		1	Film Pack, Sheet Film, Plates.		
	3 1/4 x 4 1/4	4.5	6 3/8"	8 7/8		23"		1 2	Roll Film, Film Pack, Sheet Film, Plates.		
	4x5	4.5	7 1/2"	10 1/8		27"		2	Roll Film, Film Pack, Sheet Film, Plates.		
R. B. Series D Graflex	3 1/4 x 4 1/4	2.9 3.5 4.5	Dependent on lens selected	8 1/4		6		According to focal length of lens used	3 1/4" Sq.	1	Roll Film, Film Pack, Sheet Film, Plates.
	4x5	3.5 4.5		12		7			3 3/4" Sq.	2	Roll Film, Film Pack, Sheet Film, Plates.
R. B. Auto	3 1/4 x 4 1/4	4.5		15 1/2		7	3 1/4" Sq.		2	Roll Film, Film Pack, Sheet Film, Plates.	
R. B. Home Portrait	5x7	3.5 4.5		13 3/4		10	5" Sq.		4	Roll Film, Film Pack, Sheet Film, Plates.	
Speed Graphic Cameras	2 1/4 x 3 1/4	3.5 4.5		9	Accepts Wide Angle Lenses				2 1/2" Sq.	Jr. 1	<i>Graphic Back:</i> Film Pack, Sheet Film. <i>Graflex Back:</i> Film Pack, Sheet Film, Plates.
	3 1/4 x 4 1/4	2.9 3.5 4.5		12					3 1/4" Sq.	1	
	4x5			13 1/2					4" Sq.	1 2	<i>Graphic Back:</i> Film Pack, Sheet Film, Plates. <i>Graflex Back:</i> Film Pack, Sheet Film, Plates, Roll Film.
	5x7	4.5	16	4" Sq.				2			

*Varies with make, speed and mounting of the lens.

For prices, please turn to Supplement.

PICTURE SIZES

Simulating contact prints, the illustrations on these pages show the picture sizes obtained with the several models of Graflex and Speed Graphic cameras. Album-sized prints are yours in every instance.



2 1/8 x 2 1/2

"Stowing the Sail." This National Graflex picture by Arthur M. Underwood shows the actual picture size obtainable with this camera—a splendid miniature reflex for action, pictorial subjects and portraiture.



2 1/4 x 3 1/4

Above: "Fisherman's Home"—a Miniature Speed Graphic picture by Jack Romagna. A Sixth Prize-winner. Cameras available in the 2 1/4 x 3 1/4 size are the Miniature Speed Graphic and the R.B. Series B Graflex.

3 1/4 x 4 1/4

Left: "Family Portrait — 1940." This Speed Graphic picture by Julius Shulman was a Prize-winner in the Humor Class. Cameras available in the 3 1/4 x 4 1/4 size include the Anniversary Speed Graphic, the R.B. Series B, the R.B. Series D, the R.B. Auto Graflex and with appropriate back, the Crown View and Graphic View cameras.

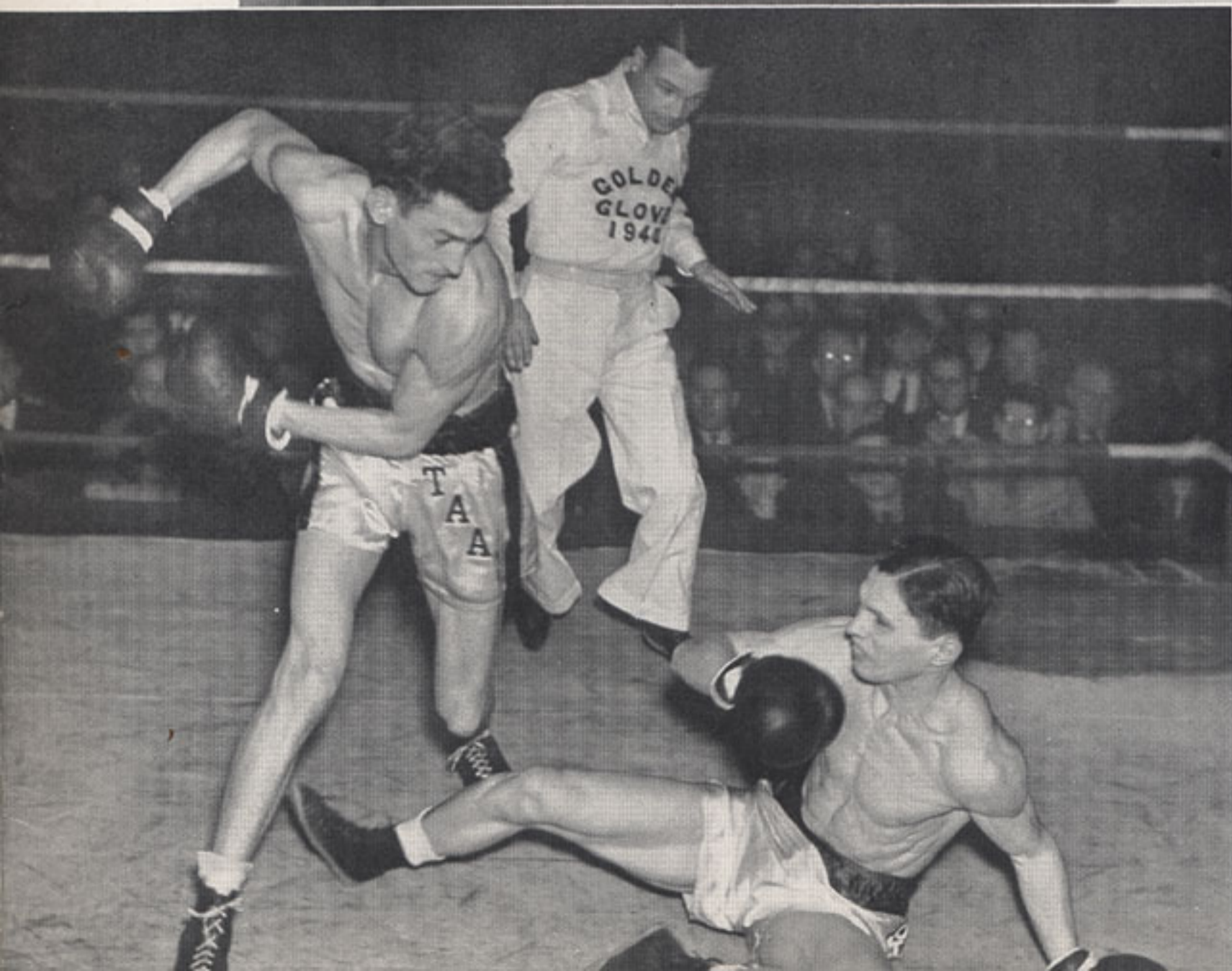


5 x 7

Right: "Apache Sunshine—Arizona" by Joseph Miller—a Sixth Prize-winner in the Pictorial and Portrait Class. Cameras available in 5x7 size include the Speed Graphic, the Series B Graflex with stationary back and the R. B. Home Portrait Graflex.

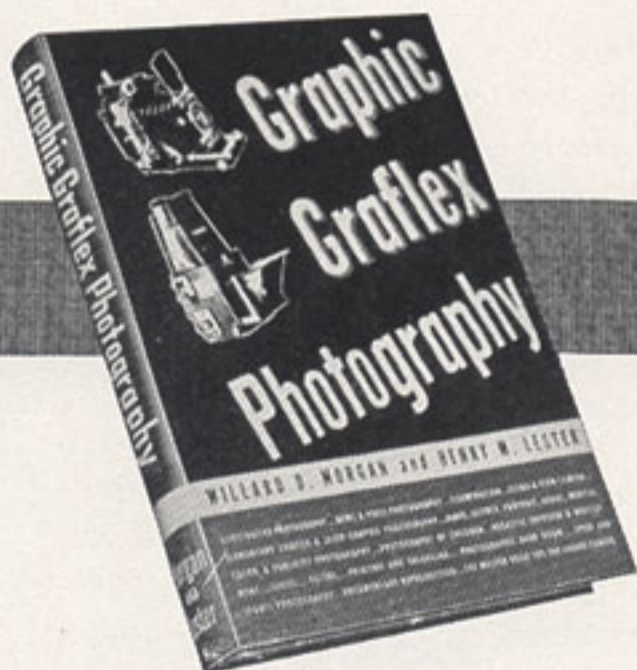
4 x 5

Below: "Golden Gloves—1940." This Speed Graphic shot by R. M. McCormack was a Sixth Prize-winner in the Action Class.



Cameras available in the 4x5 size include the Anniversary Speed Graphic, R.B. Series B, R.B. Series D, the Crown View and the Graphic View cameras.

A GUIDE TO MORE INTERESTING PICTURES



HOW TO CHOOSE A LENS

Condensed from the chapter
by R. Kingslake in the book
Graphic Graflex Photography

THERE are a number of factors to be taken into account in choosing a lens, many of them conflicting, so it is necessary to consider which are of most importance when deciding what kind of a lens to use for a particular purpose.

A lens is defined by its *focal length* and the diameter of its maximum *aperture*. These factors control the *perspective* and *speed* of the lens, and *depth of field*, *image size*, and the angular *field of view*. In addition a lens must give adequate sharpness over the whole picture.

We begin with the most important, *perspective*, for no photograph will be pleasing unless it "looks right." To secure good perspective, the entire object being photographed should be as far as possible from the camera. Failure to observe this may result in an exaggerated magnification of those parts nearest the camera.

Another point is that the eye cannot satisfactorily take in an angular field much greater than 50° , which is its normal viewing angle. The final picture must be looked at from the correct center of perspective, which, in a contact print, is at the point originally occupied by the lens of the camera. When the picture is enlarged the center of perspective moves away from it, and the correct viewing point is distant from the

print by an amount equal to the focal length of the taking lens multiplied by the number of times enlargement. Thus, 12" would be the correct distance for viewing a three-times enlargement of a picture made with a 4" lens.

The "normal" focal length of a camera lens should be about equal to the diagonal of the film. The principal types of special-purpose lenses have focal lengths greater or less than normal. *Long-focus lenses* give larger images of objects at a given distance, and have a narrower field of view. A special type of long-focus lens, known as a *telephoto lens*, is so designed that it requires less bellows extension than an ordinary lens giving the same size of image, and hence is much more convenient to use. *Wide angle lenses* are of relatively short focal length and are especially designed to cover a larger negative than ordinary lenses of the same focal length. They cover a wide field of view and give a smaller image of objects at a given distance than will a "normal" focal length.

In choosing a lens for use on a Graflex camera, it must be remembered that the "back focus," or distance from the rear of the lens to the focal plane (film), must allow room for the swing of the mirror of the camera. It is largely this consideration which has led to the use of focal lengths slightly

longer than the diagonal of the film in most reflex cameras.

The ratio of the focal length of the lens to its maximum aperture diameter is called the *f/* number. It should be noted that the quantity of light admitted by a lens is equal to the product of *image illumination* and the *time of exposure*. The amount of light admitted by a lens in a given length of time is determined by the area of its aperture. When we double the diameter of the aperture, its area is quadrupled, and hence the amount of light varies as the square of the aperture (*f/* number). We obtain the same effective darkening of the film if we double the lens speed and halve the exposure time. If we change from *f/4* to *f/8* we must give 4 times the exposure time to get the same ultimate film density. For this reason, the stop numbers on most lenses run in a series of steps such that each step gives half the speed of the step before it. Equal *f/* numbers have similar values on all lenses regardless of focal length.

If one object is focused sharply in the camera, there is a finite range within and beyond the focused object which also appears acceptably in focus. This range of distances is called the *depth of field*, and its extent depends on how the lens is used and how the final picture is viewed. For instance, many objects which appear sharp when the print is viewed directly are blurred under a magnifying glass or when the print is enlarged. Provided the print is viewed from its correct center of perspective, the depth of field will depend only on the diameter of the clear aperture of the taking lens and on the dis-

tance of the object. (This diameter may be found approximately by dividing the focal length by the *f/* number.) A 6" lens at *f/8* has the same depth of field as a 3" lens at *f/4*, since in both cases the aperture has a diameter of 0.75".

Whenever possible, the matter of a lens for a Graflex or Speed Graphic should be discussed with the manufacturer or dealer before buying. If it is a matter of fitting some other lens to the camera, a summary of the discussion above may be of value.

First, Speed: Most out-of-doors pictures will be made at *f/6.3* or *f/8*, so the maximum speed of the lens is not important except for poor light, fast action, and color photography. An *f/3.5* lens is 1.7 times as fast as *f/4.5*, and *f/2.9* is 2.4 times as fast.

Second, Focal Length: In the Graflex and other reflex cameras, the minimum focal length of the lens is determined by the construction of the camera. The table on page 25 of this catalog gives the minimum focal lengths (or, rather, distance from front of lensboard to focal plane) that can be accommodated.

In the Speed Graphic cameras, except for optical limitations, there is virtually no lower limit to the focal lengths that can be used; and at the other extreme telephoto lenses up to nominal focal lengths of 24" can be fitted because their flange-to-film distance is much less than their focal length.

The ordinary barrel mount with iris diaphragm will normally be used in a Graflex and may be used in the Speed Graphic when a front-lens shutter is not required.

SYNCHROFLASH PHOTOGRAPHY

Condensed from the chapter by Willard D. Morgan
in the book *Graphic Graflex Photography*

TODAY the advantages of the modern flash synchronizer are available to everyone. The term "synchroflash" simply means that a flashbulb can be ignited at the same moment that the camera shutter is opened by means of an intermediate synchronizing mechanism.

As the flashbulb is so intense in brilliance, it is possible to use small diaphragm stops and also fast shutter speeds. This means that even with the 4 x 5 Speed Graphic cameras it is possible to produce sharp detailed negatives with ample depth of field. In fact, a

flashbulb gives the larger camera the advantages which can be obtained with small cameras using short focal length lenses when it comes to depth of field.

With the synchronizer fitted to his camera the photographer is always sure of light in the field of view of his lens, no matter where he goes or points his camera.

Single or multiple flashbulbs may be used with synchronizers or with the "open and close" method of flash photography. Many times the single flash picture can be improved

by using supplementary reflectors or by placing the subject near a light wall so as to reflect light into the darker shadows caused by the one-directional light source.

When using two or three flashbulbs in synchronization with the camera, complete freedom of lighting is obtained.

In "synchro-sunlight" photography the flashbulb is used to illuminate distracting dark shadows while the general sunlight gives the complete illumination of all the background. With this method dark shadows under large hat brims may be illuminated in black and white or even in color photography with the new blue daylight flashbulbs.

PHOTOGRAPHY OF CHILDREN

Condensed from the chapter by Torkel Korling
in the book *Graphic Graflex Photography*

THE most appealing pictures of children are invariably those that reveal no "labored" effort on the photographer's part. Children are natural only when they do what they want to, and that is what you want in their pictures. In following their daily routine of sleeping, bathing, dressing, eating and playing, the photographer will find unlimited variety of interesting and pleasing photographic compositions.

The most salable baby picture to an advertiser of any product at all is, perhaps, a large head of a fair-complexioned boy of six months to a year and a half. Perfection of features with curly ringlets of hair is not nearly as important as a funny little nose, a minus-one-tooth-smile, an unruly lock of hair and other characteristics that will give the picture a humorous appeal.

When photographing a child, you want him to look up, preferably toward a third person who should be present to assist whenever needed. This third person can be anyone who is familiar with the child and can command his confidence. However, you must help this assistant in influencing the child's behavior in any way which may tend to make a more pleasing photograph.

In working with children, you will find that any devices that stimulate their imagination rather than their absorption in tricky toys, result in much better opportunities for real pictures. Childish expressions of joy, sorrow and interest may last long enough for

With the introduction of the flashbulbs with longer burning times it is now possible to use the Speed Graphic focal plane shutter for synchronization up to 1/1000. The 2¼ x 3¼ Speed Graphic has this feature built right into the focal plane shutter.

In choosing exposures for flash photography, there are several important factors to observe . . . know your film speed, select the proper flashbulb, determine the distance between the flash source and the subject, and coordinate the shutter speed with diaphragm opening. In multiframe photography, the flashbulb nearest the subject determines the exposure.

time exposure but every reaction has a certain peak of expression of shortest duration. This expression peak is what you are waiting for and exercising all your patience to get. By learning to watch for these expression peaks the whole problem of child photography is greatly simplified. The Graflex camera gives you an opportunity to follow this build-up of action right on the ground glass to the instant when the shutter is released.

Backgrounds should be as natural as you want the subjects to be. Their purpose is to fill the space that the subject does not need, and to suggest the situation. They should not attract direct attention and, hence, be as inconspicuous as possible.

In my work I use a 4 x 5 Graflex. You can use the same type of camera or any other Graflex model because the actual technique is very much the same. It will be necessary for you to attach yourself so completely to the focusing knob and shutter release that you may consider yourself as part of the camera. Supplementary photofloods or synchronized flashbulbs can be used very successfully. In my own work, I use the synchronizer extensively because this permits the use of small lens stops with an abundance of illumination.

Out of doors the old amateur rule of letting the sun come from over your shoulder will let you get away with a minimum of exposure, but your subject will take on a rather miserable expression. Put a lens

shade on your lens, then reverse the rule to protect your subject's eyes and get a brilliant lighting. A good rule that cannot be changed is to expose for detail in the shadows.

Good photography of children and their pets really comes down to just simple straightforward photographic practice. You need a good camera with the accompanying lighting equipment for making exposures

which have fine detail. The next step is in knowing just when to push the shutter release while watching for those appealing expressions. And the final step is in developing and printing the picture. Once you have your camera technique in hand, your main emphasis should be on careful and patient selective watching of the childish actions of your subjects.

NEWS AND PRESS PHOTOGRAPHY

Condensed from the chapter by Frank Scherschel and Stanley E. Kalish in the book *Graphic Graflex Photography*

THE taking of good news pictures can be learned only by actual practice, for practice alone develops the trait of knowing a picture when you see one. And it is the small-town news photographer who can best develop this ability. The average cameraman in the small town bemoans his lot. True, those big national stories seldom come his way, but he forgets something far more vital in picture taking that is always at hand . . . freshness.

In large cities, a dozen or more photographers frequently have to shoot together and make the same photograph. The cameraman in the smaller community works alone. He has the opportunity to develop new twists to routine picture making and to think about improved technique and originality.

All newspaper photographs fall into four divisions:

1. The fast-breaking, thrilling news assignment. That's Glamour No. 1.
2. The sports assignment.
3. The routine assignment. That's not glamour. That's eighty percent of the work.
4. Finally, there are those special assignments such as society, fashions, rotogravure jobs, and commercial work.

Sports assignments are fun if you like sports. It does take lots of physical effort . . . particularly if track meets are to be covered event-by-event. Hurdle events are shot at the first barrier . . . dash events and the longer runs are covered at the finish. Distance runs have to be shot early in the race if you wish to show all of the runners. Individual performers are taken in the weight events. Ordinarily the best time to photograph the jumps is after the event, because

it is a waste of time and film trying to pick a winner from among a dozen or more competitors. Get the winner to make an exhibition jump for form rather than for height. However, outstanding performers sometimes are temperamental boys so it is wise to take at least one picture during the actual performance. Guard against letting a shoulder or arm hide the athlete's face.

Film development is by time-and-temperature. Because deadlines are always at hand, photographers do not have the time to come in from bright daylight and let their eyes adjust to the dim green light safe for panchromatic film.

The caption for a picture is as important as the photo itself. A photographer should train himself to get names spelled correctly, for the cardinal sin on a newspaper is to identify any person wrongly.

Today's news photographer is not an automaton who clicks the shutter on his camera. He must differentiate between "snapshooting" and making his pictures tell their stories. His is the responsibility of being the interpreter of the scene. He must keep up with the trends and technical changes, and also be a student of pictures.

The photographer of tomorrow will have improvements in technique. And in technique will lie photography's greatest gains, for no matter how good the equipment, pictures cannot improve unless the man behind the camera learns to make better photographs. We believe that the breeding ground of this improved technique is the small-town newspaper, because, as we have pointed out, the photographer there has the opportunity for experimentation which the man in the metropolis does not have.

PHOTOGRAPHIC EQUIPMENT

THE cameras and equipment herein described will be found on sale wherever photographic equipment of highest quality is sold. Dealers will gladly demonstrate the range, versatility and simplicity of operation of Graflex and Speed Graphic cameras, the Graflex Enlarg-or-Printer, and other GRAFLEX precision products.

GRAFLEX equipment is made by the FOLMER GRAFLEX CORPORATION, Rochester, N. Y., U.S.A., manufacturers of:

Studio and Commercial Equipment—The complete line of CENTURY, FOLMER, CROWN and CIRKUT cameras and equipment serves every professional and commercial need.

Photorecord Microfilm Camera Equipment—A complete portable outfit for the rapid reproduction on 35 mm. film of printed and low-relief subjects in a wide range of sizes.

Finger Print Camera—A practical and efficient portable camera, with built-in illumination, for producing accurate full-sized photographic records of finger prints, signatures, jewelry, fabric patterns and other small objects.

Graflex Compact Identification Outfit and Graflex Identification Unit—These are two units designed to make standardized identification pictures. Both types are used by police departments in the detection of criminals and prevention of crime. Correctional institutions and hospitals employ them in the registration of their inmates. Governmental agencies, large hotels, department stores and manufacturers use them in photographically recording their personnel and in the issuance of identification passes.

Technical Department—The Technical Department is maintained to provide photographic information. GRAFLEX owners desirous of securing superior results with their equipment are invited to submit their problems or queries to this department for solution. Every helpful advice and aid will be rendered. If additional information is desired regarding the above photographic equipment, you are cordially invited to write the Technical Department. When writing please indicate size and model of camera.



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