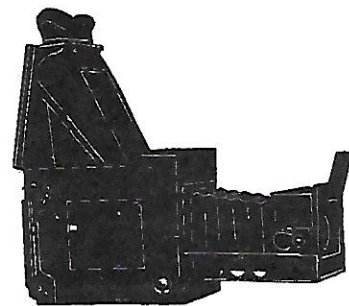


# GRAFLEX HISTORIC QUARTERLY

---



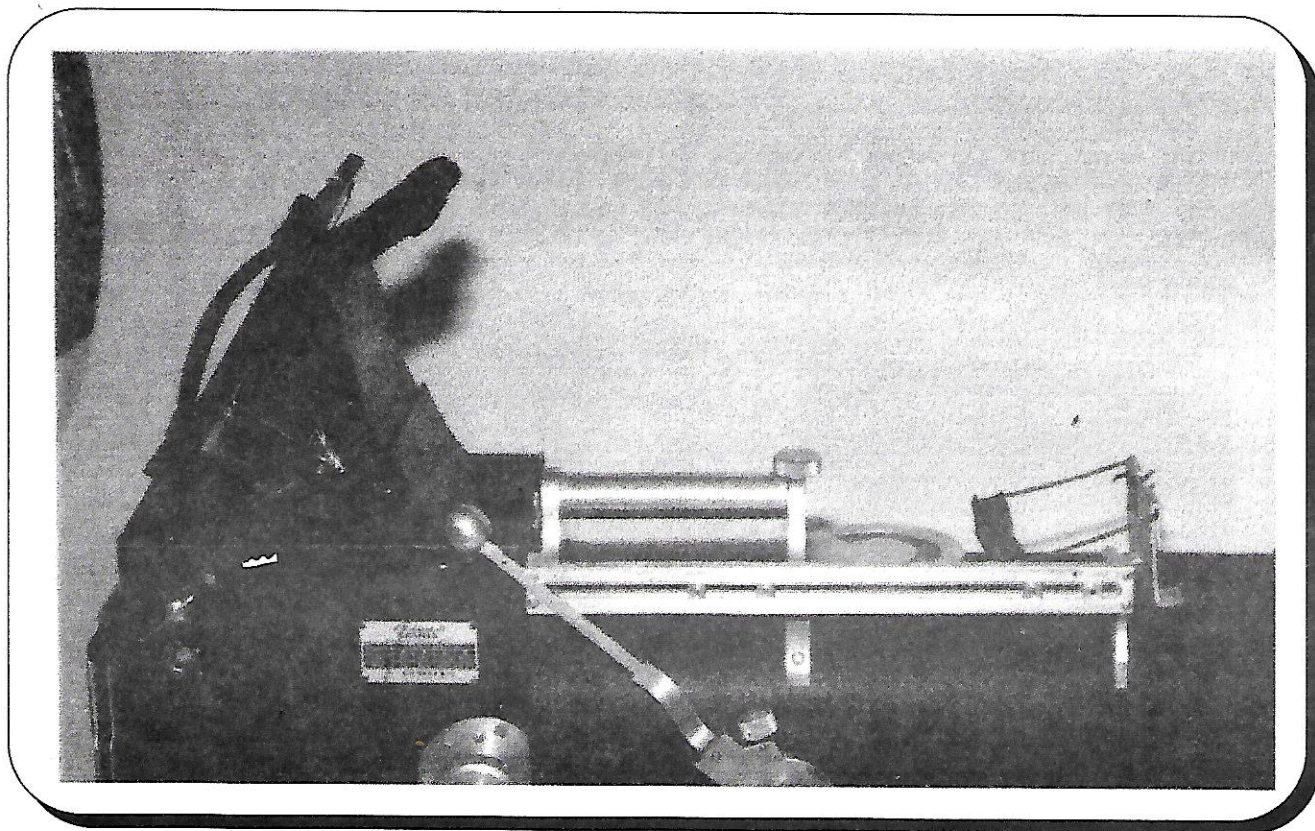
**VOLUME 3 ISSUE 4**

**FOURTH QUARTER 1998**

FEATURES

- Eastman House Treasure 2
- Ask Tim Holden ..... 5
- Graflex Stereo..... ..6
- 'Flex back Modification...7
- Classified ..... 8
- National Geographic story..8

**Graflex's  
ORIGINAL  
Big Bertha!**





*Editor's Note: In Volume 1 Issue 3 of GHQ, Jim Chasse started the topic of the famous Big Bertha cameras. In this issue, we get to look further into their origins.*

GEORGE EASTMAN HOUSE TREASURES #3  
by Mike Hanemann

"Big Bertha" ("BB") cameras, the sports photographer's mainstay of the 1920'-40's, are interesting and often differ in how they were built and designed to focus. The original

Big Bertha was designed and built by a press photographer, Joe Sprague. Sprague eventually joined Graflex as a sales engineer and representative to the press photographer corps.

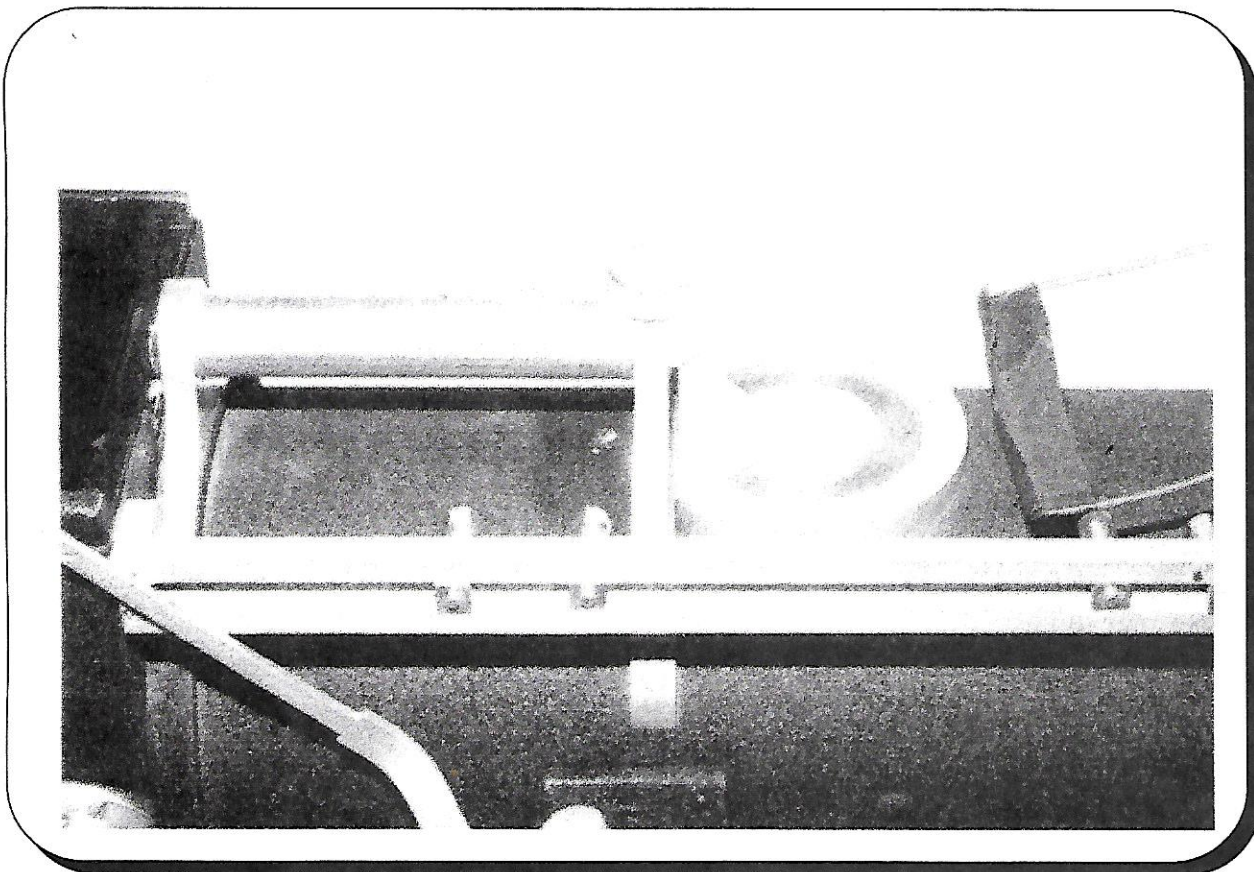
My review of over 50 Graflex catalogs at George Eastman House and on loan from many of you, shows no Big Bertha cameras listed. I was advised by Tod Gufastson of GEH, Tim Holden, and others that Graflex did make BB's on special order. The Graflex built BB's all carry the unique mechanical set up shown in the photographs. If yours matches the photos, you have a genuine Graflex BB; if not it's from one of the numerous camera craftsmen of the period.

ORIGINAL BIG BERTHA LENSES AND MOUNTING  
- GHQ Editors

A more detailed rundown of the original configurations found on the BB's was found in the Little Technical Library's Chapter V, "Special Sports Cameras:" [vol. 27, "Press Photography for the Freelance" by Kip Ross, 1924]

1941

"The most popular Big Bertha outfit is one which was originally designed in its present form by Joseph A. Sprague, now an employee of Folmer Graflex Corporation. It was Sprague who brought the Big Bertha to its present perfection in building outfits to special order for the big New York syndicates and newspapers. Since it is the best known, I shall describe the Sprague outfit in detail, taking the popular 28-inch model as an example. The lens is a 70 cm (approximately 28-inch) Zeiss Triplet, with a maximum aperture of f5.0. The special features of this lens are that it is exceedingly light in weight for its size, and although it has only three elements, its definition is excellent. Designed especially for long-focus work, the maximum corrections are confined to the center of the image, so that about the largest size negative with which the lens could safely be used is 8x10 inches. This lens costs in the neighborhood of \$700.



*Detail  
of  
original  
Bertha's  
handle  
and  
focus  
display.*

"As mounted for the Big Bertha, the lens is screwed into a flange inserted at the end of a tapering tube of duraluminum which extends rearwards to cover the actual bellows of the 5x7 Home Portrait model Graflex from which the front board has been removed. The bellows of the camera are joined with the inside of the dural tube so as to be light-tight. The whole is built upon a metal base, also of dural: about 3 feet long, 8 inches wide, and 3/4 of an inch thick along the sides, although in cross section this base is actually thinner in structure, with the central portion of the base hollow. The camera is fastened rigidly to one end of the base, while the lens assembly slides forward and back upon highly polished rods of stainless steel. Focusing is done by means of a gear wheel and rack, and the whole outfit works just like any other reflex camera. The 40-inch Big Bertha is of identical

construction except for the necessary slight decrease in extension; the 40-inch lens is a Dallmeyer telephoto with about 20 inches extension, while the 28-inch long focus lens actually works at that distance.

"As built by Sprague, the Big Berthas usually are supplied with "gear-shift" systems for rapid focusing to pre-set distances. This system consists of a gear wheel engaging the focusing lock just ahead of the regular hand focusing knob. Attached to this gear wheel is a lever which extends upward to rest with its inside face against a crescent-shaped metal guide paralleling the side of the camera and equipped with adjustable metal stops moving in a slot along the length of the guide. These stops protrude slightly from the slot so as to obstruct the passage of the lever as it slides along the guide in focusing."

# GRAFLEX, INC.

PHOTOGRAPHIC EQUIPMENT SINCE 1890

ROCHESTER &  NEW YORK, U.S.A.

WELCOME TO THE FAMILY OF FINE CAMERA OWNERS:

It is a pleasure to acknowledge receipt of the card registering your newly purchased Graflex-made camera. In the belief that you would like to be kept posted on developments of interest, we are sending you our complete catalog and putting your name on our mailing list. If your name or address appears incorrectly on the envelope, please tear it out (since it contains the mailing list key) and return it to us with the necessary corrections. Also please be sure to notify us of any change of address.

Your camera has been designed for the making of fine pictures. To further help you, our Technical Service Department stands ready to supply assistance relating to the use of your new camera. Please feel free to call upon us.

Yours for Prize-Winning Pictures,

*T. T. Holden*  
T. T. Holden, Director  
Technical Service Dept.

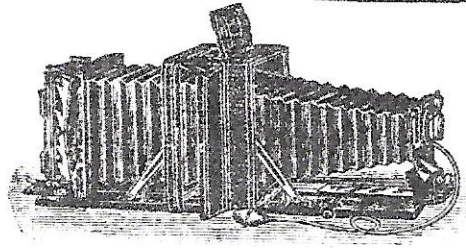
TTT:j

P.S. Ask your dealer about the 400-page book "Graphic Graflex Photography".

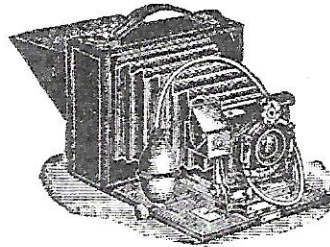


# GRAPHIC CAMERAS.

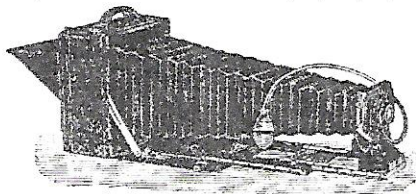
Absolutely the Highest Grade and Most Complete Cameras Made.



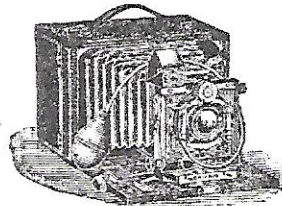
|                          |    |               |         |
|--------------------------|----|---------------|---------|
| REVERSIBLE BACK GRAPHIC. |    |               |         |
| 4 x 5,                   | 22 | inch Bellows, | \$45.00 |
| 5 x 7,                   | 25 | " "           | 50.00   |
| 6 1/2 x 8 1/4,           | 33 | " "           | 64.00   |
| 8 x 10,                  | 33 | " "           | 75.00   |



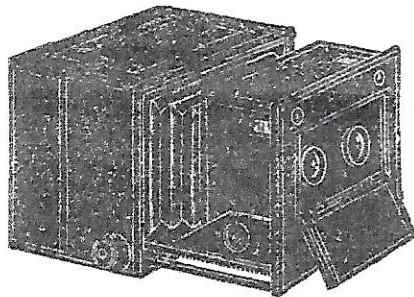
|                    |  |  |         |
|--------------------|--|--|---------|
| CYCLE GRAPHIC, SR. |  |  |         |
| 4 x 5,             |  |  | \$30.00 |
| 5 x 7,             |  |  | 40.00   |



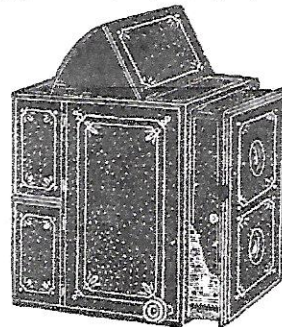
|                                |    |               |         |
|--------------------------------|----|---------------|---------|
| REVERSIBLE BACK CYCLE GRAPHIC. |    |               |         |
| 4 x 5,                         | 18 | inch Bellows, | \$38.00 |
| 5 x 7,                         | 22 | " "           | 48.00   |
| 6 1/2 x 8 1/4,                 | 25 | " "           | 58.00   |



|                |  |  |         |
|----------------|--|--|---------|
| GRAPHIC.       |  |  |         |
| 4 x 5,         |  |  | \$30.00 |
| 5 x 7,         |  |  | 40.00   |
| 6 1/2 x 8 1/4, |  |  | 60.00   |
| 8 x 10,        |  |  | 60.00   |
| 11 x 14,       |  |  | 120.00  |



5 x 7 TELESCOPIC STEREO GRAPHIC. - \$70.00



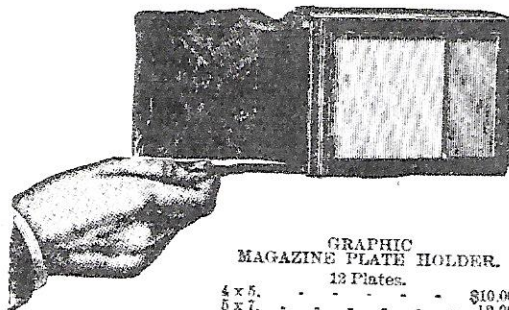
|                    |  |  |         |
|--------------------|--|--|---------|
| TWIN LENS GRAPHIC. |  |  |         |
| 4 x 5,             |  |  | \$75.00 |
| 5 x 7,             |  |  | 100.00  |

Our Cameras are distinguished by their SUPERIOR FINISH, ORIGINALITY, and BEAUTY.

WE MAKE **25** STYLES OF GRAPHICS.

CAMERAS MADE TO ORDER.

SEND FOR CATALOGUE. SKILFUL REPAIRING.



GRAPHIC MAGAZINE PLATE HOLDER.  
12 Plates.  
4 x 5, \$10.00  
5 x 7, 12.00

**The Folmer & Schwing Mfg. Co.,** No. 404 BROADWAY, NEW YORK.

GRAPHIC AGENTS:

OBRIG CAMERA CO., 165 Broadway, New York.  
W. C. CULLEN, 61 William St., New York.  
ALMER COE, 65 State St., Chicago, Ill.  
THE H. H. KIFFE CO., 425 Broadway, New York.  
E. R. MEYROWITZ, 104 East 23d St., New York.  
DANIELS & FISHER, Denver, Col.

F. G. SCHMIDT, 11 East 42d St., New York.  
S. B. KRAUS, 657 Broadway, Brooklyn.  
KIRK, GEARY & CO., Sacramento and San Francisco, Cal.  
WILLIAMS, BROWN, & EARLE, 918 Chestnut Street, Philadelphia, Pa.



# ASK TIM HOLDEN

Mr. Holden, Director of Technical Service, will answer questions of general interest in these columns. Please address them to Graflex, Inc., Dept. H, Rochester 8, N. Y.

*Q. How much does the coating of lens elements increase its speed?*

A. A great many claims have been made for the increased speed of coated lenses, but most of the lenses used with GRAFLEX and Speed GRAPHIC Cameras have only 6 or 8 air-glass surfaces, and the actual increase of speed will probably be little more than 25%. This is only  $\frac{1}{4}$  of a stop, and even with color film, you are allowed greater latitude in exposure calculations. For all practical purposes with these lenses, you may consider that there will be no increase of speed, but the clarity and brilliance of the black-and-white negatives and especially the color transparencies will be increased materially.

*Q. Can I have the black metal parts of my Speed GRAPHIC replated with chrome?*

A. Your camera is one which was made right along with those which went forward to the various branches of the Armed Forces for combat duty. The metal parts of the camera are so designed that in order to replate them, it is necessary to dismantle the camera almost completely to remove these parts. They must be cleaned, plated, and polished, after which the camera must be individually reassembled. The cost of this work is quite high, and there is no saving in throwing away the black-finished parts throughout. Even if you were agreeable to having all this accomplished at the relatively high cost involved, we still prefer not to undertake the work, since we have as yet been unable to resume special order work of which this is a part.

*Q. What do the letters "M" and "F" stand for on my shutter?*

A. Photographic flash lamps are divided into several groups. One of these is represented by the small bayonet-base, gas-filled, SM or SF lamps. These are known as the "F" type bulbs and have an ignition delay of approximately five milliseconds. This is the time which elapses between the closing of the circuit and the instant the level of illumination produced by the bulb reaches a useful point. The second major group is the type "M" bulb. These have a delay of approximately twenty milliseconds and they are represented by most of the foil- and wire-filled bulbs used for synchronization purposes. A very few bulbs of this type can

be used for synchronization with the focal plane shutter but most of the bulbs regularly used are intended for front shutter synchronization. The third group is of minor importance, since it consists of some of the very large bulbs which are not intended for synchronization purposes. These have varying ignition delays and should not be synchronized. In some shutters, the letter "X" is used to indicate the proper setting for Kodatron and other high-speed gaseous discharge tubes which are considered to have an instantaneous or "0" (zero) delay.

*Q. The built-in self timer of my supermatic shutter does not work. What should I do?*

A. If your shutter has the two contact posts extending from the side, you have a new shutter with built-in synchronization mechanism, instead of the delayed action mechanism. The camera instruction manual outlines the method of using the built-in synchronization feature. Note that it requires first, the cocking of the shutter and then, cocking the synchronizer mechanism. Currently, there are no shutters being supplied with Speed GRAPHIC cameras, with built-in, self-timing mechanism.

*Q. With my new Speed GRAPHIC and synchronized shutter, the bulb will fire, but the shutter will not go off when I press the button on the back of the battery case. What is wrong?*

A. The A-20 connecting cord in the front shutter must be plugged into the series outlet which, in the GRAFLEX battery case, is beneath the red button of the main switch at the back of the battery case. This means that the shutter must be released mechanically with the finger, cable release, or finger Release. The shutter itself will then close the switch between the batteries and the bulb, to fire the bulb in synchronization with the opening of the blades of the shutter.

*Q. In my Miniature Speed GRAPHIC camera, some of the pictures seem to be off-center, especially when taken vertically. Is something wrong with the tubular viewfinder?*

A. It is possible that the front standard of the camera may have dropped from the normal position. When the lens is properly centered, the top of the black moulded

front frame will be even with the top of the two uprights of the front standard. If the lens is dropped from center, your tubular viewfinder will not give you correct centering of the subject matter.

*Q. When using the tubular viewfinder, horizontal pictures, the image is centered but vertical pictures are not properly centered. Is the viewfinder usable only when the camera is held horizontally?*

A. The parallax adjustment is so made that when you look through the center of the rear and front lenses, your line of vision will cross the optical axis (a line from the center of the film extended through the center of the lens) at the indicated distance from the camera. This angle remains the same regardless of the position of the camera, but it appears to be easier to look through the finder at an incorrect angle when the camera is held for the making of vertical pictures. I am sure to check this position carefully when holding the camera on its side and make certain you "see" all four sides of the finder as you look through it.

*Q. Where can I get combination attachments for my National GRAFLEX lens?*

A. At the time that the National GRAFLEX cameras were designed an originally placed on the market, there were no combination lens attachments for them. Your camera is unusually compact in view of the size of the negative produced. The lens folds into the camera which is a definite advantage when the camera is being carried. As a result of these various features, the camera was fitted with a lens which includes a little wider angle of view than is normal or other cameras producing the same approximate negative size. Consequently lens attachments which are suitable for use on other cameras tend to cut off the light which would pass through the National GRAFLEX camera lens and reach the corners of the film. As yet, no special attachments of the combination type have been made for this camera.

While we have not been able to keep a large stock of accessories for these cameras, your dealer can probably supply you with quite a number of filters. These are in the standard National GRAFLEX filter mount and will slip right over the camera lens.

## THE EQUIPMENT SHOWCASE

ONE of the more interesting Graflex cameras is the 5x7 stereo. The series was offered from 1907 through 1922. Production was usually in batches of 25 and the total of the series is estimated at "considerably fewer than 500." Company records from the period are not complete and no exact total can be stated.

All 5x7 Graflex holders would fit, and the choice was wide: plate, cut film, cut film magazine, plate magazine, rim pack adapter, and the six exposure # 54 roll film holder.

The name was embossed in gold

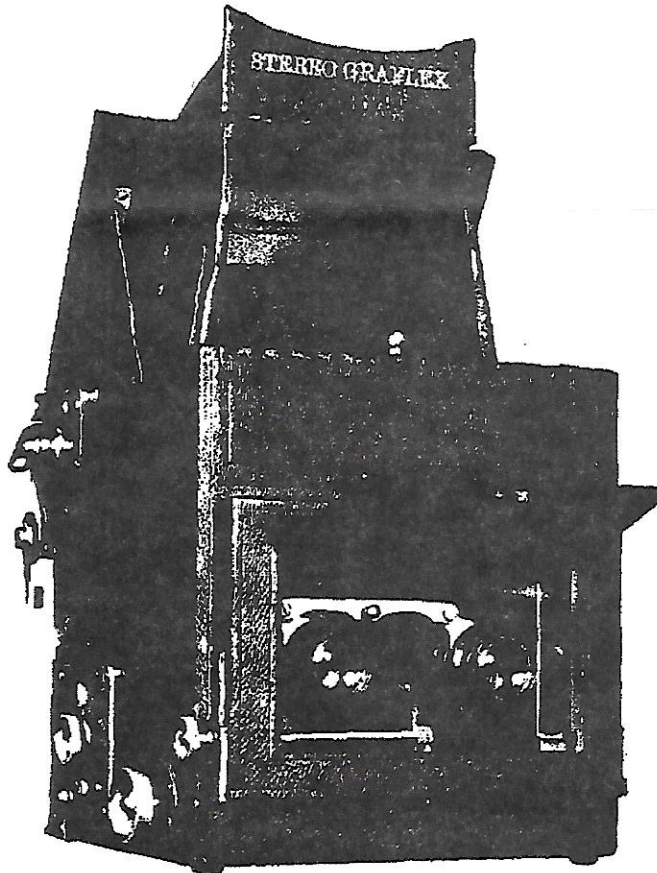
leaf on the finder hood as standard procedure, however more than one have been seen without it, indicating a variance with the routine, or else replacement parts.

It was always rather expensive, ranging from \$252 to \$292, with matched lenses.

Features which made this a rather special item were: focal plane shutter, T to 1/1000 sec.; through the lens reflex viewing, and rising front for foreground control. The 5x7 negatives were oversize compared to most stereo images. This allowed further control

in cropping when the prints were cut down and mounted on cards for the stereoscope. Of course, as in most stereo cameras, alternate lens capping would permit two conventional non-stereo views on each film.

Unique to this camera was a set of special prisms in the viewfinder hood which showed an exact, erect view of the scene with the stereoscopic effect, full size on the ground glass. This was definitely one large stereo camera which could be hand held in action! The example illustrated resides in the N.M. Graver collection, Rochester, N.Y. □



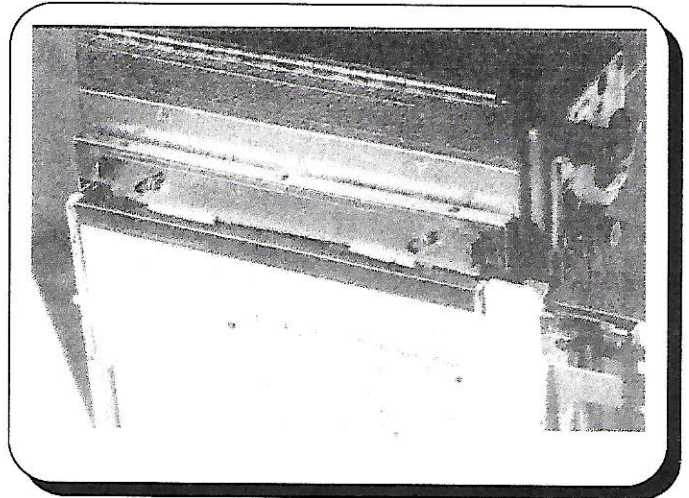
*Reprinted with permission from the Graphic Antiquarian 10/1971*



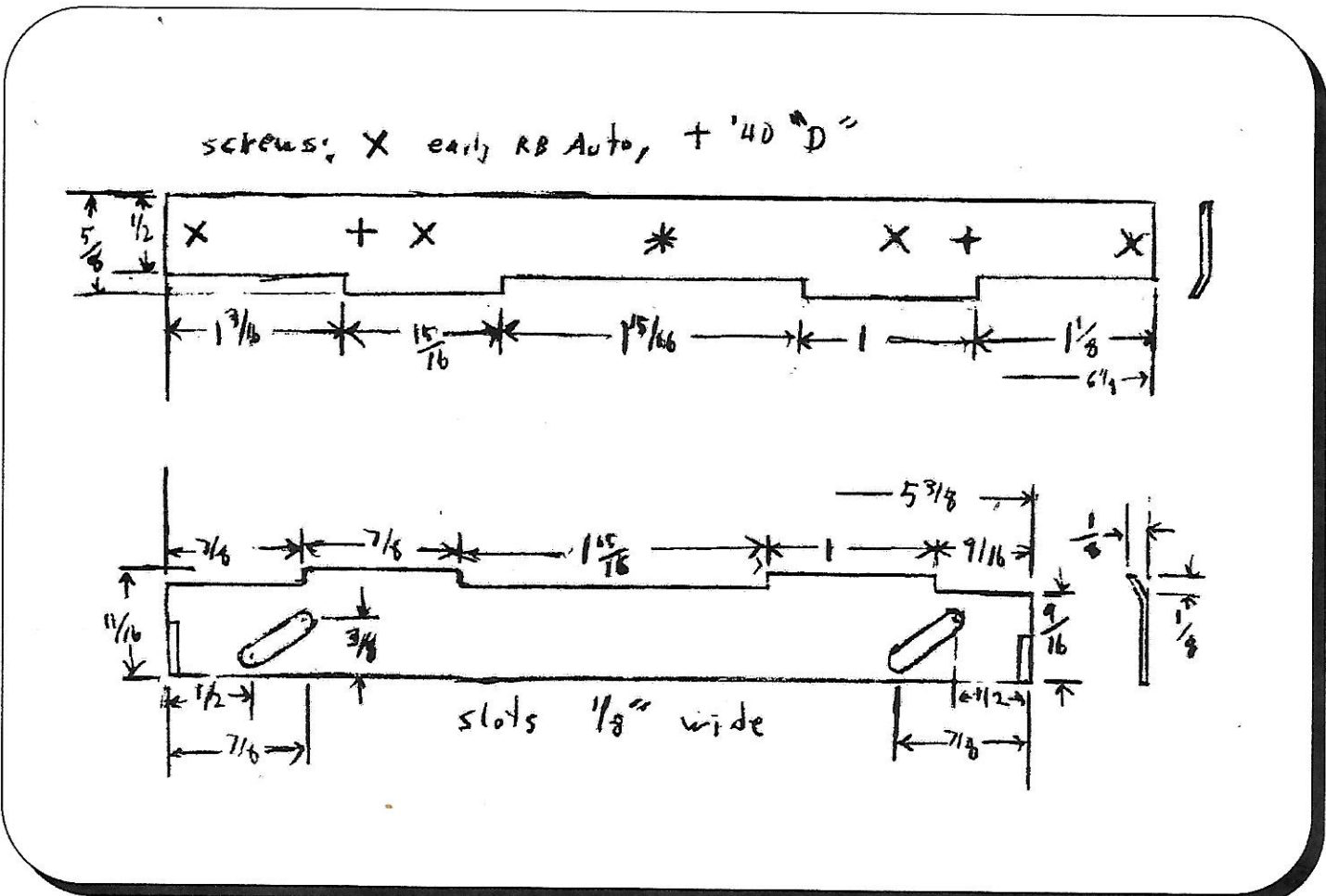
MODIFYING A GRAFLEX BACK ECONOMICALLY  
by An Anonymous Reader

This scheme uses fixed and sliding back bars per the accompanying sketch. Directions are given for a 4x5 RB Auto and also a "D." The bars replace the stock ones and are held on by the original 7 screws. These bars allow Polaroid backs and Grafmatics to be used without permanent modifications to either the camera or the holder and without any \$100 Graflok back or \$175 mating operation. They should work with any other Graflok accessory. Bars hacksawed and filed from .045 steel work fine, but other methods and materials might be suitable. The slanted tabs on each bar fit into the slots on a Polaroid holder or the groove on a Grafmatic. These tabs and the push tabs on the sliding bar are, of course, cut out flat and then bent upward.

Conveniently with 4x5 Graflex SLR's, four 1/16 felt strips added between the camera and accessory back give the same lens-to-film/mirror spacing as originally required. This has been checked with a Graflex 120 roll holder, but obviously you should check your own spacing as well. The strips can be attached to either the camera or the back in any suitable manner such as using rubber cement. A gap between



longitudinal and transverse felt strips at the dark slideside of the revolving back accepts the 1/16 rib on the holder so that the holder need not be modified. The scheme allows the back to be revolved although a Polaroid back has to be inserted after revolving and won't fit with the processing protrusion upward. Seems like regular 4x5 cut film holders could be used by cutting slots in the sides like the slots in the Polaroid -- 5 minutes with a "hobby tool"?



**WANT AD POLICY:**

*Any subscribers wishing to place a want ad selling or seeking Graflex-related items may send them to the GHQ for inclusion at no charge (at this time). The editors reserve final publication decisions.*

WANTED: Front sports wire finders for 3-1/4x4-1/4 Pre-Anniversary Speed Graphics. Two needed. Bill Baker, 36 Treasury St., St. Augustine, FL 32084

**CORRECTION**

In our Vol. 3, Issue 1 early this year, we reprinted an article by Dick Paine on 3x4 cameras, and did not fully credit that it originally appeared in Shutterbug, November 1976.

**Graflex Historic Quarterly**

*The Quarterly is dedicated to enriching the study of the Graflex Company, its history, and products. It is published by and for hobbyists, and is not a for-profit publication.. Other photographic groups may reprint material provided credit is given GHQ and the author. We would appreciate a copy of the reprint.*

**DOES YOUR ADDRESS LABEL HAVE A RED**

**R**

on it? If so, this is your LAST ISSUE unless you renew. Each year's subscription is 4 issues. If you think the notice is in error, please contact us. Address on back. **PLEASE RENEW NOW! This is your only reminder.**

**GRAFLEXES STATED TO BE OBSOLETE BY 1900**  
by Steve Church

As some may know, the National Geographic Magazine in an August 1998 article, "BEHIND THE SCENES, Still Shooting for Perfection" has pictures of a dilapidated Graflex "B," which was used by former editor Grosvenor, and of a No. 4 Cartridge Kodak which was used by Arctic explorer Peary and takes No. 104 (4x5) roll film. The pictures are accompanied by a statement that, by the end of the 19th century, glass plates used in equipment such as the "B" had given way to technology such as the roll film camera.

The facts are that the particular Kodak was made in 1897-1900 and the No. 4 Cartridge Kodak was discontinued following 1907. Also, and as we know, the "B" was introduced in 1923, and glass plates were used by sports photographers at least until the late 1920's. Furthermore,

**SUBSCRIBER NOTICE:**

If anyone did not receive the previous issue of this newsletter, please contact the address below. Sometimes one goes astray!

Publisher: Mike Hanemann  
Editor: J.C. Welch  
One Year Subscription: \$14  
*[payable to Mike Hanemann]*  
Contact: Mike Hanemann  
P.O. Box 22374  
Milwaukee, OR 97269  
Or J.C. Welch  
1777 Lake Dr.  
Eugene, OR 97404  
e-mail hanemann @ europa.com  
or equinox@pond.net (J.C.W's email)

"B's" could use roll film and Graflexes are sold today for serious photography while the Kodak No. 4 is a collector's curiosity. Glass plate holders were advertised into the 1940's, and Speed Graphics, which could just as equally use plate holders were made until 1973.

Since this misinformation will mislead innocent children by implying that Graflexes were already obsolete by 1900, we must somehow let the public know the truth -- that these American made cameras were the world leader in professional single lens reflex cameras from about 1907 until the 1950's and will, apparently, still be in use in the 2000's as the only surviving such camera in large format.

Further misinformation about "B's" appeared in, of all places, page 280 of the 1943 fifth edition of the Morgan & Lester Graphic Graflex Photography book which has a picture captioned, "4 x 5 R. B. Series B Graflex equipped with a 17-inch Dallmeyer telephoto for medium distance photos," while the picture shows a "D" complete with lens door side gussets and furred hood.

Of course, Morgan & Lester didn't have Paine's book; we don't know what the excuse is for the Geographic.