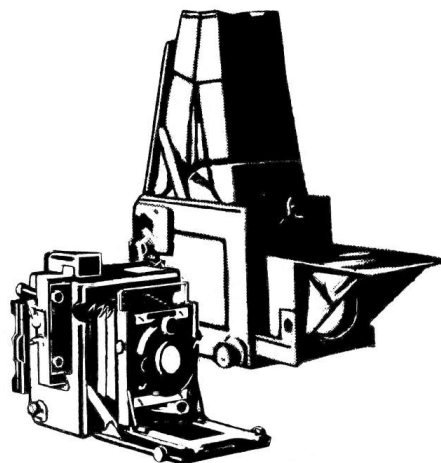


# GRAFLEX HISTORIC QUARTERLY

Since 1996



VOLUME 15 ISSUE 1

FIRST QUARTER 2010

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### Involvement of the Flammang Camera Company in the Manufacture of Cameras for Folmer & Schwing

By Rodger Digilio

Some years ago I acquired my first New York City-made Folmer & Schwing camera. It was a Cycle Graphic Sr. with the serial number 311. See picture on following page.

In email exchanges with Ken Metcalf, the editor of this publication, I became aware that he had a similar camera without a serial number. The belief was that the early cameras were made for

Folmer & Schwing by other manufacturers. The serial numbers probably started when they, themselves, began the manufacture of cameras.

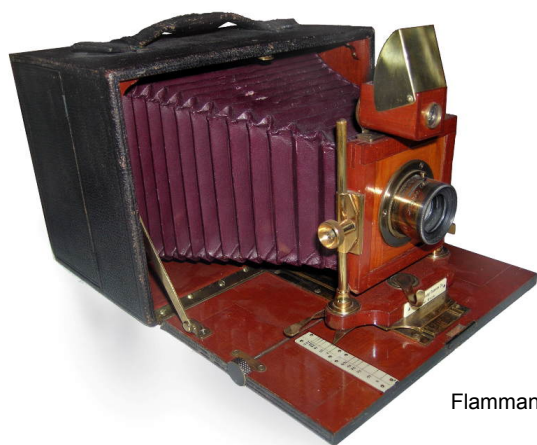
Several years later, I was scrolling through photographic listings on eBay when I happened upon one for a folding plate camera made by the Flammang Camera Company, which I purchased.

I was familiar with Mathias Flammang. He worked for American Optical and had several innovative patents, including a sliding lock for camera rails and the famous Flammang revolving back. I did not realize that he had his own company.

Even more intriguing was the fact that the Flammang camera bore a striking resemblance to Ken's Folmer & Schwing camera and my Cycle Graphic Sr.

More email exchanges followed, and then a 1912 letter from William Folmer was discovered in the archives of George Eastman House. The William Folmer letter, to a Mr. Rudolph Speth of Eastman Kodak, discussed the early manufacture of cameras for and by Folmer & Schwing in New York City.

William Folmer stated that the company put in "a photographic side line during the summer of 1891." It is presumed that they sold cameras made by other manufacturers at this point and for a number of years thereafter. The situation changed in 1895 when Folmer & Schwing contracted with Scoville and Adams to make a number of cameras to order that "were improvements upon their then existing model known as the Henry Clay."



Flammang camera



Folmer & Schwing camera, without a serial number



Flammang camera



Scoville and Adams had acquired American Optical, and Flammang was the superintendent at the Waterbury factory. According to Folmer, Flammang “came to New York City in 1896 desirous of starting a camera business. He solicited orders from the Folmer & Schwing Mfg. Co. ”

Flammang entered into an agreement to make cameras exclusively for Folmer & Schwing. They advanced Flammang money, but the arrangement broke down in 1897. According to Folmer: “...during the summer of 1897 we were unable to secure sufficient deliveries of existing graphic models to meet demand, owing to the fact that Flammang was making hand cameras for the Scoville and Adams Co., G. Gennert, and a number of local dealers. ”

With exclusivity breached, Folmer & Schwing refused to advance Flammang any more money. Apparently the other companies would or could not come to his rescue, and the Flammang Camera Company went out of business. The company was sold to a man named Spellman.

Folmer & Schwing did not buy Flammang’s company. They did, according to William Folmer, hire some of his workers, and some who had worked for American Optical, to staff their new camera factory established in the fall of 1897 at 167-171 Elm Street. From that point on, Folmer & Schwing cameras were made by the Folmer & Schwing company.

I believe a side-by-side comparison of the cameras presents visual evidence to back up written statements in the Speth letter.

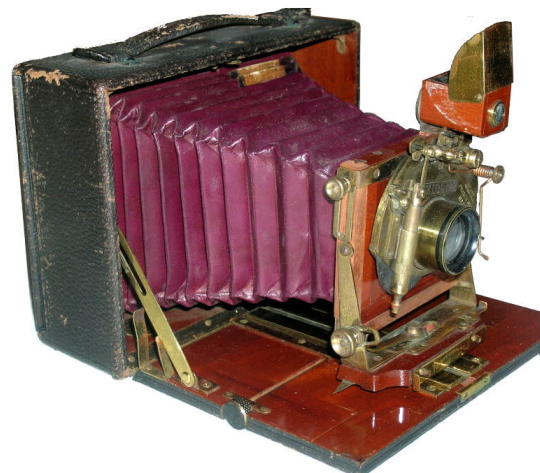
Unfortunately, the letter does not deal with serialization of the cameras. We know Folmer & Schwing started making their own cameras in the fall of 1897. We know they made cameras in New York City until they were purchased by Eastman Kodak and moved to Rochester in 1905. We also know that they existed as a separate company in Rochester until 1907 when they became the Folmer & Schwing Division of Eastman Kodak.

By examining New York City-made Folmer & Schwing cameras and making some logical assumptions, we can de-

velop a working hypothesis on serial numbers. We assume that serialization began with their own production in late 1897 and that it began at 1 or 100. The earliest known is 203 in the George Eastman House collection. We do not know how high the numbers went. I have several New York City-made cameras that have numbers in the 8,000 range but the registry maintained by the editor of the Quarterly lists a number of New York City-made cameras in the low 9,000s. Therefore, we can assume that slightly more than 9,000 cameras were made by the company in New York City.

The registry also lists serial numbers of cameras made by the company when it moved to Rochester. They range from the mid 9,000s to the mid 11,000s. So perhaps another 2,000 cameras were made in Rochester before the company was absorbed as a Division of Kodak.

Documentation may surface in this area as it has on Mathias Flammang. In the absence of documentation, examining serial numbers of cameras that have survived yields the best data. Collectors with cameras which have serial numbers below 13,000 should inform the editor so he can place them in the registry, and we can refine our hypothesis by having a greater universe of serial numbers of surviving cameras.



Cycle Graphic Sr., serial number 311



## An Interesting Series C

By Geoffrey Berliner

Director, The Center for Alternative Photography

I recently purchased a very interesting and unusual Graflex Series C. At first I thought it was modified later by its owner, but, upon closer examination, I came to the conclusion that it is original Graflex and not modified post production.

Here is what I've discovered about it. It has a serial number of 159104, which, according to the Graflex serial number book, shows that it was manufactured in 1927, and it is fitted with the correct Cooke 6½" f2.5



Figure 1

Anastigmat lens. It has the Graflex shutter speed plate which says "Graflex Series C" on the underside of the same door where the serial number is located. The focus hood has pop-up stereo magnifying glasses for easy focusing, which I have never seen on a Graflex other than on a Stereo Graflex. Figure 1, above.

Although not related to the function of the camera, the hood is shorter than the factory hood and has a fur-like edge, and the smaller part of the hood is hinged to the larger piece, possibly to allow for attachment of the handle.

Here's the most interesting part. With the top door open, there's a shelf with a metal plate with a threaded hole, which I presume held a flash unit. Figure 2. Under the plate, there are two size C batteries, which power a beam for focus-



Figure 2

ing, created by a light bulb placed in a hole in the center of the ground glass with two attached wires. Figure 3, right. When a lever (Figure 4.), which is attached to the auxiliary hardware, is depressed to touch the shutter release lever (but before the mirror is released), the light goes on and bounces against the reflex mirror in the down position, casting a beam against the subject. It is possible to focus this light in the dark without looking into the focusing hood. I can only surmise that this camera was made as a low-light press-like camera.

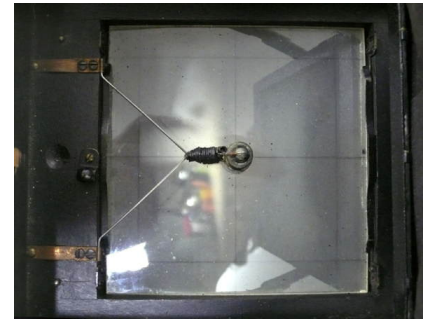


Figure 3

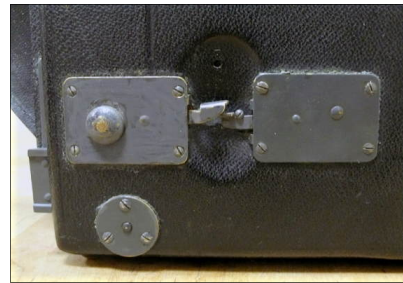


Figure 4



Figure 5

There is a fixture, probably for a flash unit, built directly into the top of the body of the camera. Figure 5 and 6. The flash unit could be placed on the camera with the top door open or closed. On the underside of the narrower section of the top door, there is a contact touching the shelf that transfers a flash signal to the camera with the top door closed.



Figure 6

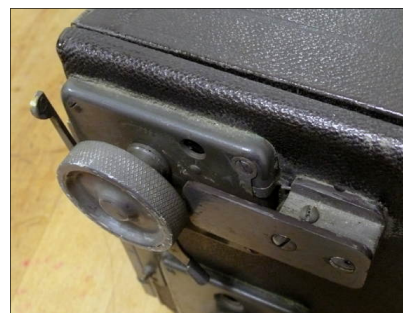


Figure 7

There is a flash sync device on the top shutter winding mechanism, and this winder has a knob like a Press Graflex, not the usual wing-style winder. Figure 7.

The front hood has an auxiliary flange attached to it, also

made by Cooke, that permits the lens to be mounted to the front of the hood with the hood closed, I can imagine only for closer focus or portraits. This flange also has a ring

which screws into the flange to hold the lens cap in place. Figures 8, right.

The clip to keep the front door closed is on the bottom of the front standard, not the bottom of the camera as in all other Graflex SLRs. Figure 9.



Figure 8



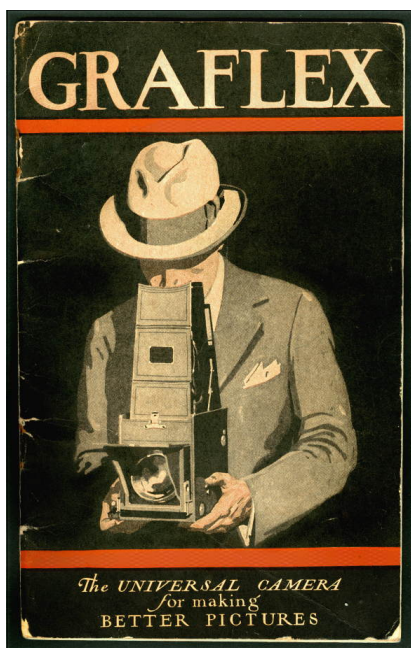
Figure 9

The shutter release plate has an on/off switch, and the secondary plate has a lever that, when slightly touched by the shutter release

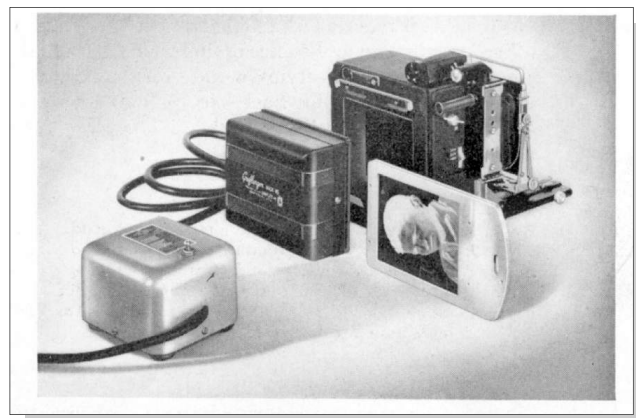
lever, closes the circuit so the light bulb in the ground glass is activated.

All the hardware looks original Graflex. This is certainly one of the most interesting Graflex SLRs I've seen in 25 years of collecting. If you have an opinion about this camera, please let me or Ken know, and we will publish your ideas in the next issue of the GHQ.

[ Ed. Mr. Berliner's interesting Center for Alternative Photography website can be accessed at <http://www.capworkshops.org/index.html>. One course in particular, on the use of antique cameras on May 8, encourages attendees to bring their camera...a Graflex, of course.]



Series C from cover of The Universal Camera for making Better Pictures



## GRAFACTS .....

### The Graflex Graflarger Enlarger and the Aristo Cold Light Pack

Copyright William E. Inman, Sr.

After the end of WWII, Graflex moved forward with new products, one of which was the Aristo Cold Light Pack for the 4x5 Graphic camera.

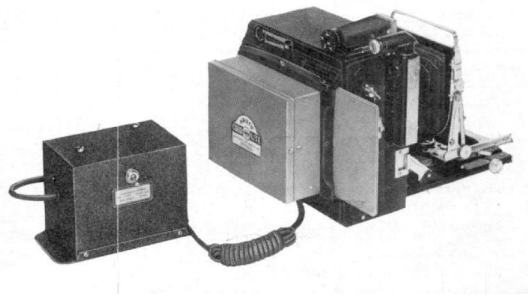
#### March 15, 1950

Graflex became the sole distributor of the Aristo Cold Light Pack for the 4x5 Graphic camera, which had been sold earlier by Aristo Grid Light Company for enlargers and cameras.\* Graflex realized the potential of this product as black and white film was king, and professional and amateur photographers were processing and printing their own exposures. The only color negative films available were amateur Kodacolor as well as Ektacolor Professional sheet film.

The Aristo Cold Light Pack (which included a transformer, light source and glassless negative carrier) turned the 4x5 Graphic and Graphic View cameras into portable enlargers that could be used anywhere, from a regular darkroom to a bathroom darkroom. When originally sold, in addition to use on a tripod, it could be used on a photo-record camera arm. It could be quickly disassembled and stored. In addition to providing a cool even light, it was advertised as a negative viewer and retouching stand when not attached to a camera. Another claim was that it could be adapted for contact printing, or, with the proper filter, it could be used as a safelight!

Shown on the following page is a unit (catalog number 6020) from the March issue of Graflex Trade Notes, while the familiar molded housing transformer and back for 2¼x3¼, 3¼x4¼, and 4x5 were first listed in the July/August issue of Trade Notes. A 1950 catalog has not yet surfaced. So far, the first catalog listing I know of for the Graflarger is November 1, 1951.

According to a memo written to Tim Holden in September 1950, the back could be used on the 4x5 Busch and the



4x5 Burke & James with ease, but was not easily used on other models and sizes.

### 1951

Graflex, for the first time, listed four Graflarger backs, using the Aristo Grid Light and the new housings.

Graflarger "22" (2¼x2¼), catalog number 6012

(This listing was quickly dropped, because Graflex did not make a Graphic in this size, and the "22" was just a "23" with a 2¼x2¼ carrier, which led to dealer confusion.)

Graflarger "23" (2¼x3¼), catalog number 6017

Graflarger "34" (3¼x4¼), catalog number 6018

Graflarger "45" (4x5), catalog number 6019

(All backs came with one glassless negative carrier, and the back [with carrier] was priced at \$35.00.)

Graflarger Stand, catalog number 6040, \$17.50 (without baseboard)

Special negative carriers were also available in 2¼x2¼ for 4x5 and in 2¼x3¼ for 4x5.

Initially, backs were supplied with a W-35 (3500° K) grid, and the 4x5 back could be special ordered with a W-45 (4500° K) grid. This option was gone by 1954.

### Back features:

When first starting to use the Graflarger Back, a 3-minute warm-up time was necessary. The Aristo Grid Lamp was faster than a diffusion enlarger and was suitable for most enlarging papers, including variable contrast papers (because of its balance of green and blue light), as well as color negative film. The Aristo Grid Lamp life was approximately 5,000 to 10,000 hours.

Graflarger Backs could be fitted to any Graflex, Graphic or 4x5 Graphic View camera with a Graphic, Graflok or Graflex back. Parts were supplied for fitting camera with Graphic backs.

### Stand features:

Vertical movement of a minimum of 6-7/8" and a maximum of 29½" from the easel.

The support arm could be rotated 360° for horizontal projection.

The swings and tilts on the Graphic cameras, as well as the Graphic View, offered control of linear perspective.

The Stand could also be used as a copy stand, and could be c-clamped to any baseboard.

The maximum size enlargement with the Graflarger Stand was as follows:

Negative Use	Lens	Magnification	Print Size
2¼x3¼	101mm	5.7x	11½ x 17
3¼x4¼	127mm	4.2x	12 x 16½
3¼x4¼	135mm	3.7x	10½ x 14½
4x5	127mm	4.2x	14¾ x 19
4x5	135mm	3.7x	13 x 17
4x5	152mm	2.9x	10½ x 13½
4x5	162mm	2.7x	9½ x 12½

### 1954-1955

Graflarger Baseboard was available, which measured 18" x 32" x ¾" and was laminated, \$12.75.

### The "Take 'em, Make 'em Outfit" promotion.

Graflex introduced a dressed up 2¼x3¼ Century Graphic (code CY-515) with gray covering and red bellows, with a 103mm Graftar lens in a Century shutter, less viewfinder, and less a Kalart rangefinder, along with a 2¼x3¼ Graflarger Back, Stand and Baseboard, a Grafmatic film holder, and a Home Storage Case. It was a great outfit for the amateur photographer and the "do-it-yourself" boom of the time. It was initially priced at \$199.50.



### 1959-1960

Discontinued the "23" and "34" Graflarger Backs.

### 1967

Discontinued the "45" Graflarger Back and the Graflarger Stand.

\* In some Graflex literature, the term "Cold Light" is given as "Cold Lite." According to Louise Kellsler of Voltarc Technologies/Aristo Lighting Technologies, as of July 2009, Aristo, which still made a Cold Light, went out of business.

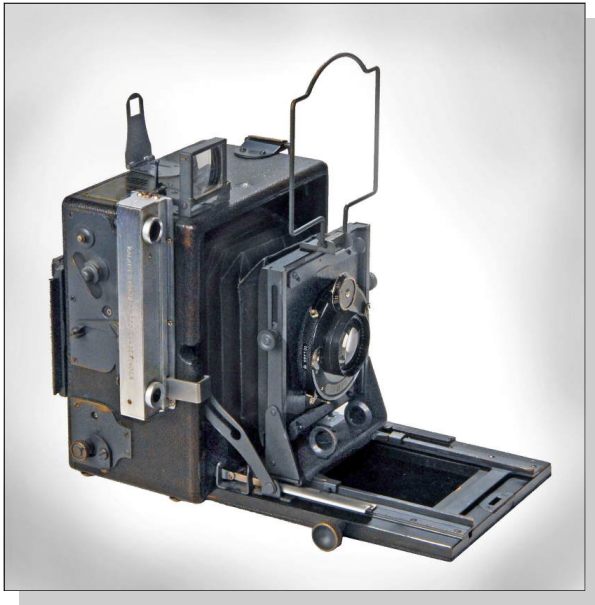
### References:

Graflex price lists and catalogs 1951-1967.

Trade Notes 1950-1953.

Graphic Graflex Photography, 10<sup>th</sup> and 11<sup>th</sup> editions, 1954 and 1958.

Graflarger instruction sheet.



### Authentic?

By Ken Metcalf  
with Jim Chasse

The 2¼ x 3¼ revolving Graflex back pre-Anniversary Speed Graphic of 1937-1938 is one of the most interesting and collectible Graflex cameras. The only substantive difference between this camera and the 3¼ x 4¼ pre-Anniversary Speed Graphic of 1935-1939 is its revolving back (See [GHQ](#) Vol. 14, Issue 3.), which reduces the film size, and film cost, and allows for vertical and horizontal pictures. Both this camera and its replacement, the all new fixed Graphic back 2¼ x 3¼ Miniature, were sold concurrently in late 1938.

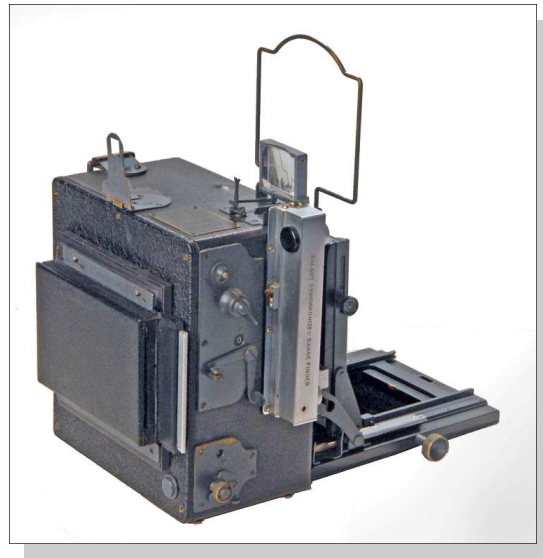
According to Graflex employee and historian, Tim Holden, a batch of 500 cameras (serial numbers 225,988 through 226,487) was placed into production in June of 1937. Although listed in the Graflex serial number book as 3¼ x 4¼, a notation was added (probably in Tim's hand) - "2'3' R B back." Although pictures in Graflex catalogs tend to lead or lag production cameras, I believe the supplements (which were glued into catalogs after 1932) better represent actual production and availability. This camera was listed in a December 10, 1937, Supplement (but not listed in a Supplement dated September 15). Although the camera was noted in the body of catalogs, it was no longer listed in a Supplement dated March 15, 1939. The back alone could be purchased at least as late as 1941 for fitting on the 3¼ x 4¼ Anniversary model and pre-Anniversary Speed Graphics. The next batch (also for 500 cameras) was listed on October 14, 1937, and contained the addition of "Graphic back," in the same hand as the earlier entry. As a Graphic back was standard, it could be concluded that this second batch was a return to the normal back from the revolving back...or not. Of six sample cameras, four are from the original batch, one from several batches earlier and one in the next batch. Neither of the latter two samples is available for examination. For the collector, if the serial number is between 225,988 and 226,487, the camera probably originally had a revolving back, although there are a number of caveats:

It...

...could have been fitted later by Graflex to any 3¼ x 4¼ pre-Anniversary, even earlier than the introduction date, although this is not likely after the introduction of the Miniature.

...could have been removed and replaced with a 3¼ x 4¼ Graflex or Graphic back.

...could have been added later by someone else, either to add the revolving feature or to reproduce a camera similar to the original model.



Pictured here and at the top of the previous column is Jim Chasse's revolving back Speed Graphic (serial number 226,221).

A comparison of finders does not help. We compared a collapsible optical finder from both the 2¼ x 3¼ and 3¼ x 4¼ versions and found that the field of view was the same. One sample camera within the serial number range had a well-done horizontal/vertical mask etched on the finder lens. Although not pictured in catalogs or present in Jim's camera, it is certainly possible that this feature was available on some cameras, possibly from Graflex. Also, the sports finders on Jim's camera and the standard 3¼ x 4¼ are identical.

A lens comparison is also of limited help. A number of lenses offered for the revolving back camera were also offered for the 3¼ x 4¼ version, and in the same focal length. A more "normal" lens of 4-1/8" was still not offered for the revolving back camera when the Miniature was first sold with that lens in late 1938. See catalog chart on following page for suggested lenses. Jim's camera is fitted with a 5¼" Voigtlander Skopar, while the catalog lens is a Heliar. Because of the focal length of the lens, the appearance of this lens on similar Graflex cameras, and the correct Compur shutter, it is reasonable to assume that the lens likely was originally fitted to the camera.

The type of top slide bar, which holds the lensboard, is not easily determined. The catalog picture (also used on the instruction book-

**REVOLVING BACK  
SPEED GRAPHIC 2 1/4 x 3 1/4**

Without Lens, including one Cut Film Holder  
(Plate Holder optional).....

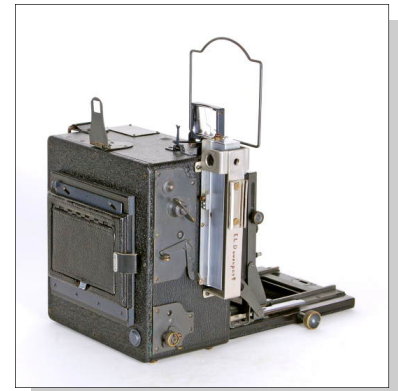
Graflex back :  
\$80.00

	Focal Length	In Barrel with Iris Diaphragm	Compur Shutter
With f.4.5 Kodak Anastigmat Lens.....	5 1/2"	\$113.75	\$125.00
With f.4.5 Bausch & Lomb Tessar.....	5 1/2"	110.00	137.00
With f.4.5 Dallmeyer Serrac.....	5 1/2"	139.50	**
With f.4.5 Goerz Dogmar.....	5"	122.00	132.50
With f.4.5 Ross Xpres.....	5 3/8"	124.00	**
With f.4.5 Schneider Xenar.....	4 3/4"	116.00	131.00 <sup>ΔΔ</sup>
With f.4.5 Voigtlander Heliar.....	5 1/4"	127.50	147.50 <sup>ΔΔ</sup>
With f.4.5 Carl Zeiss Tessar.....	4 3/4"	111.00	117.00 <sup>ΔΔ</sup>
With f.4.5 Carl Zeiss Tessar.....	4 3/4"		127.00 <sup>§</sup>
With f.4.5 Carl Zeiss Tessar.....	5 1/4"	117.00	123.00
With f.4.5 Carl Zeiss Tessar.....	5 1/4"		127.00 <sup>ΔΔ</sup>
With f.3.5 Dallmeyer Dalmac.....	5"	157.50	**
With f.3.5 Ross Xpres.....	5 3/8"	158.00	**
With f.3.5 Schneider Xenar.....	4 3/4"	134.00	145.00 <sup>ΔΔ</sup>
With f.3.5 Voigtlander Heliar.....	5 1/4"	158.50	177.50 <sup>#</sup>
With f.3.5 Carl Zeiss Tessar.....	4 3/4"	136.00	
With f.3.5 Carl Zeiss Tessar.....	5 1/4"	150.00	160.00

Accessory equipment, including Range Finders and Wide Angle and Telephoto Lenses, is listed on page 6.

<sup>ΔΔ</sup>Compur Shutter with Built-in Self-timer.  
<sup>#</sup>Price includes metal lensboard.

<sup>§</sup>Rapid Compur Shutter with Built-in Self-timer.  
<sup>!</sup>Focusing panel, cost additional.      <sup>\*\*</sup>Prices upon request.



listed, and the speed plate is in the wrong location. This camera could have been put together by Graflex as an after-market modification, but authentic...not so much. Well, there goes my chance to sell the camera for big money!

If you have one of these fine cameras or believe a conclusion is wrong, please let us know.

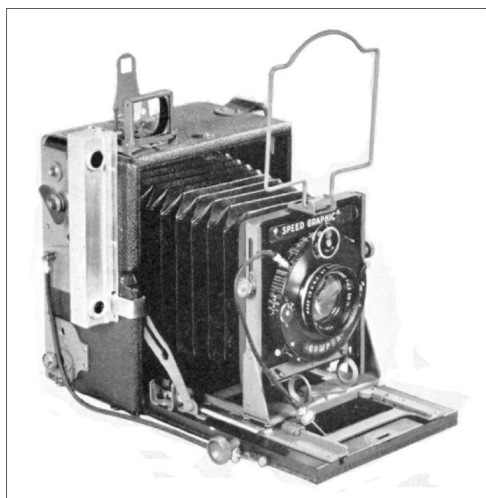


**Jim's Camera**

Jim Chasse recently found an interesting 3-1/4 x 4-1/4 pre-Anniversary Speed Graphic (serial number 228,006, c. 1937).

It is fitted with an obviously Graflex-done shutter sync. of the type later used on the Miniature Speed Graphic.

let) shows pronounced SPEED GRAPHIC lettering on a very dark slide bar. So far, no example of this type bar has been located. Two examples ( numbers 196,929 and 226,272) have the chrome and black slide bar, generally found on later cameras (along with a tubular finder for the later sample), while Jim's camera has a gray bar. Neither of the chrome bar cameras was available for inspection. I think that the gray slide bar is the most likely part for this camera.



Finally, in all samples, the speed chart is located just behind the collapsible optical finder.

Based on sample cameras, the serial number, and features of Jim's camera, I strongly believe his is authentic.

What eludes me is why this camera was produced. With the Miniature undoubtedly being designed, why was there a need to introduce this camera? Possibly to test the market? Reader theories are welcome.

Now, to the title of the article... Authentic? Pictured at the top of the next column is my revolving back Speed Graphic (number 190,256, c. 1936). To the casual observer, this camera could be authentic, and in some respects it is. It has a revolving back fitted to a 3 1/4 x 4 1/4 pre-Anniversary. Now the differences. The revolving back was purchased several years ago, and replaced a spring back. The camera is pictured with an appropriate lens, but it was borrowed from another camera. The camera was manufactured several years and several batches before the revolving back model was



## 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/users, and is not a for-profit publication. Other photographic groups may reprint uncopyrighted material provided credit is given GHQ and the author. We would appreciate a copy of the reprint.

### WANT AD POLICY:

Any subscriber wishing to place a want ad 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.

### Super and Super Speed Update

According to a Quarterly reader, the sentence in the last issue, about the "only" difference between the two cameras should have read "only major differences," as the name is also shown differently on the face of the camera bed and on the front standard.

Also, it has been pointed out that although the body was, in fact, aluminum, the back and bed were magnesium.

Editor and publisher: Ken Metcalf

One-year subscription: mail US\$14  
email Free

[Payable to **Ken Metcalf**]

Contact:

Ken Metcalf  
94 White Thorn Dr.  
Alexander, NC 28701-9792  
E-mail: metcalf537@aol.com

Bill McBride

We are saddened to report the November 2009 passing of Mr. McBride, a friend of the Quarterly.

### ARTICLES

As always, contributors are needed, with articles or interviews.

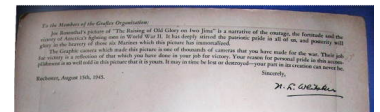
### For Sale

Presentation poster (approximately 11 x 13-1/2), given to employees of Graflex by their president, N.L. Whitaker, for their work in WWII.

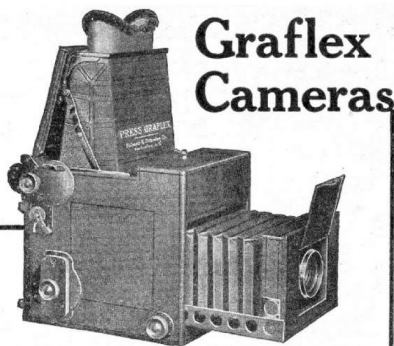
Poster is in fair condition, and as with all of these posters, the handwritten text and signatures are not original. The lighting of the original is not even and may not represent the true color.

Mr. Coates is selling this item, which belonged to his grandfather, who worked for Graflex in the 1950s.

If you are interested, please contact Dave Coates at [davecoa@yahoo.com](mailto:davecoa@yahoo.com) for more details.



Top portion of back. Some posters have a cardboard device to hold the poster upright, but it is not present.



1908 magazine ad

### Some things you can do with a Graflex

Make exposures from time to 1-1000 of a second.  
Make "Snap Shots" indoors.  
Make instantaneous exposures on dark days.  
See the composition of the picture, right side up, full size of negative up to the instant of exposure.  
Secure better photographs than with any other camera.  
Graflex Cameras may be used with Roll Film, Plates or Film Pack.

Graflex Cameras from \$60.00 to \$200.00.  
Catalog free at your dealer's, or

**Folmer & Schwing Division**  
EASTMAN KODAK CO.  
Rochester, N. Y.