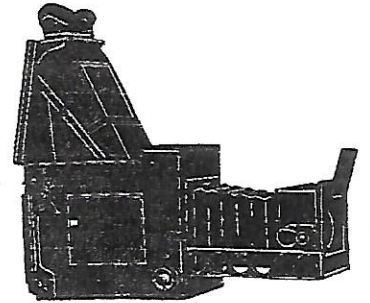


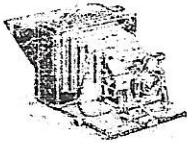
GRAFLEX HISTORIC QUARTERLY



VOLUME 1 ISSUE 2

THIRD QUARTER
1996

THE HIGHEST DEGREE OF PERFECTION IS
ATTAINED IN



FLEXIBLE ANGLE GRAPHIC

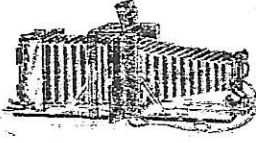
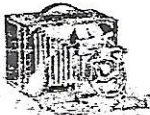


EXHIBIT GRAPHIC



FLEX

CAMERAS MADE
TO ORDER.

We Buy, Sell or
Exchange high grade
Cameras, Lenses



Our large and complete
factory service prompt
and skillful service to
those requiring repair to
Cameras or Lenses.

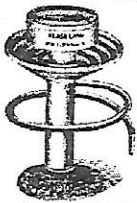
Prices Right.

Our Cameras are
Distinguished by their
Superior Finish, Orig-
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GRAPHIC

CAMERAS, TRIPODS, LAMPS, ETC.

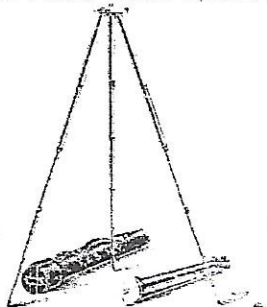
We also carry a complete stock of all requisites at lowest prices.



CROWN LEASE LAMP

WE MAKE
23

Styles of Graphics.



TWIN LENS GRAPHIC

SEND FOR
OUR
CATALOGUE.

THE FOLMER & SCHWING MFG. CO.,
No. 404 BROADWAY, NEW YORK.

GRAPHIC AGENTS.

Graphic Camera Co., 707 Broadway, New York. W. C. Kelton, 62 William St., New York.
H. H. Kille, Co., 523 Broadway, New York. J. J. Meyowitz, 164 E. 24th St., New York.
E. B. Meyowitz, 125 W. 49th St., New York. J. C. Ferris, 60 West 15th St., New York.
S. B. Kraus, 657 Broadway, Brooklyn, N. Y.

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GRAFLEX ON THE INTERNET!

A LARGE AMOUNT OF
INFORMATION ON SPEED
GRAPHIC HISTORY AND
OPERATION, LENSES,
ACCESSORIES, AND RELATED
TOPICS MAY BE ACCESSED
BY:

<http://www.graflex.org>

THE EDITOR, IS LEIGH KLOTZ

From early. . .

This ad (left) is a very early one, dating from 1899, having appeared in Camera & Darkroom Magazine. For one of the latest ads relating to Graflex, turn to page 6.

LAST ISSUE'S MYSTERY PHOTO

Several readers wrote to suggest that the cameras were Auto Graflexes, specifically the early (1911-1915) front-hinge model. Tim Holden, Graflex's official "Answer Man," also suggested that, since the tips of the focusing hoods showed, (one having "fur") they might not be the same exact model.

THE DECEPTIVE ANGLE GRAPHIC

by S. F. Spira

Since the first "detective camera" was introduced in the early 1880s, manufacturers have sought ways of designing cameras to look like anything but cameras. Tool boxes, satchels, books, canes, hats, binoculars, all served as disguises. Another approach was that employed by the circular Stirn, Gray and similar "Vest" cameras, which would shoot through the photographers vest buttonhole.

The Deceptive Angle Graphic represents a departure from both of these concepts; it was made to look very much like a camera, a stereo camera, to be specific, but allowed the photographer to view and photograph his subject at a right angle to his apparent line of sight.¹ In other words, the 'stereo camera' appeared to face straight ahead, in line with the photographers eyes, while the actual exposure was being made at a 90 angle to the stereo lens panel on the camera. Even at close range, it was difficult to suspect the deception, since the front of the Deceptive Angle Graphic is virtually identical in appearance to a Kodak Stereo Box camera (Figure 4), and to several similarly shaped, true stereo cameras of the period.

The Deceptive Angle Graphic (8 1/4 x 6 1/8 x 5 5/8 in, 3lb) was however, more than just a detective camera; it offered a number of design features which were not present in cameras made for the sole purpose of taking surreptitious photographs. It was also beautifully finished, being made of 'selected, kiln dried mahogany and covered with the best quality of black grained leather'.² The camera is a twin-lens type, in which a separate lens projects an image onto the finder's groundglass; in the Deceptive Angle Graphic, this had to be done via a 45 degree mirror. The rack-and-pinion focusing device is concealed inside the camera (Figure 2), with the exception of the focusing lever operated by a thumb from the outside. The point of the focusing lever acts as an index on a graduated focusing scale for 'snapshot' work without the use of groundglass focusing.

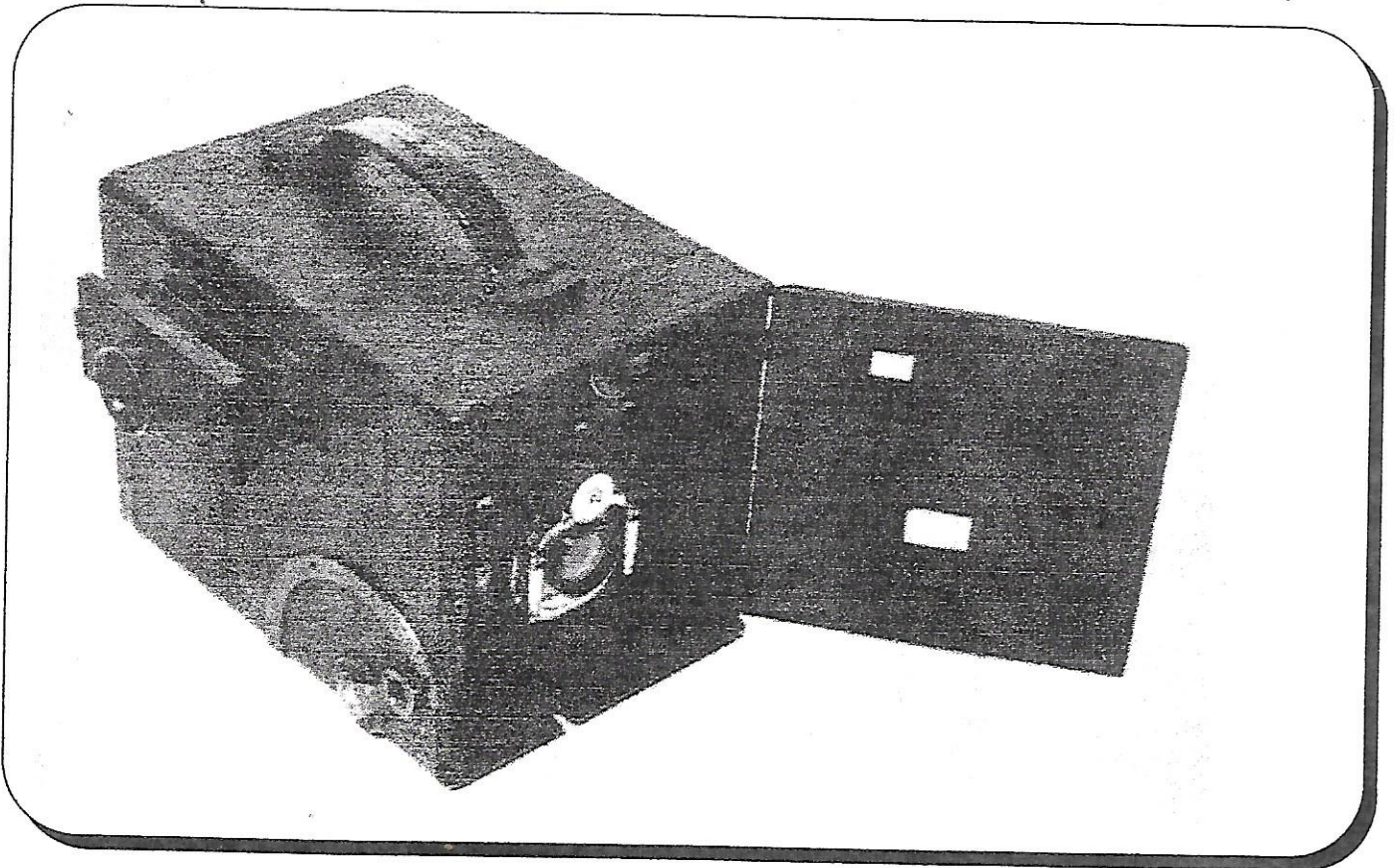


Figure 1. Deceptive Angle Graphic with front door open, exposing lens panel.

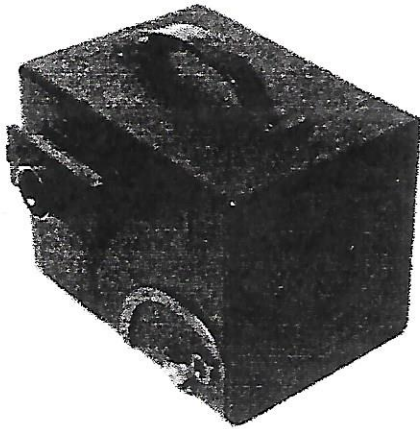


Figure 2. Camera with front door closed (but ready to use)

The telescopic bellows focusing hood is of unusual design; it is drawn out of the camera on two metal side arms riding between metal guides, and positions the viewing lens at the proper distance from the camera to produce a sharp groundglass image. For unhurried conventional picture-taking, the spring-activated groundglass screen, located inside the camera and exposed to

view by a door on the instrument's side, can be used for focusing and composing. The camera's rear compartment, behind the groundglass screen, holds up to three double-plate holders or a cartridge roll holder for use with transparent film cartridges providing 12 3 1/2 x 4 1/2 in. exposures. On the right side of the camera (using the viewfinder as a point of reference) is a hinged door in which there are two rectangular windows, one each for the viewing and taking lenses. With a turn of the knob located between the windows, these openings are closed by means of a centrally-pivoted metal shield.

The Deceptive Angle Graphic could be purchased without a lens and shutter for \$50, or with any one of several combinations of lenses and shutters at higher prices. In 1904 the manufacturer announced that the camera "will only be furnished with lenses when the intending purchaser has a high-grade lens which is intended to be used with the camera, and in such cases we require that the lens be sent to us to insure proper fitting and scaling."³

The price was favorable; at the time, the popular 4x5 in. Graflex cost, without a lens, \$125; the 8x10 in. model was \$325. Prices for the Stereo Graflex, with a set of lenses, started at \$307.

The Deceptive Angle Graflex was manufactured from 1901 onwards for about four years:⁴ only a few are known to have

46 THE FOLMER & SCHWING MFG. CO.

The Deceptive Angle Graphic

Patent Applied For

This camera is in every sense of the word a detective camera, being thoroughly disguised to resemble a stereo camera and so arranged as to photograph subjects at right angles to its apparent line of vision.

It is of the twin lens type, fitted with regular lens and shutter for exposure and a matched lens through which the subject is seen in the same size as on the focusing screen.

This camera possesses unequalled advantages for detective camera work. It is carefully constructed of selected, kiln dried mahogany and covered with the best quality of black grained leather.

The side of the camera is fitted with a pair of dummy stereo lenses and imitation finder apparently in the direct line of vision when the operator is focusing.

The rack and pinion focusing device is concealed inside the camera with the exception of a small focusing lever operated by the thumb from the outside.

The point of the focusing lever acts as an index on a graduated focusing scale for off-hand, snapshot work when in use without focusing screens.

The front of the camera is hinged and may be opened to change or clean the lenses.

Two rectangular apertures are provided in the front through which the lenses work.

407 BROOME STREET, NEW YORK 47

The Deceptive Angle Graphic

Metal shields cover the lens apertures when not in use.

The focusing finder lens reflects the image upon the ground glass screen exactly as it is thrown upon the plate or film by the lower lens.

Lens boards are removable.

The focusing hood is telescopic, being drawn out on two metal side arms riding between metal guides. It is fitted with a single eye tube like a jeweler's glass which permits of sharp and accurate focusing.

A spring actuated, ground glass focusing screen is provided for time exposures or for verification of focus.

A hinged panel in the back affords full view of the focusing screen when used for time exposure.

The rear compartment will carry three Double Plate Holders, Magazine Plate Holder or Cartridge Roll Holder.

The shutter is arranged to set and release from the outside and working parts for both are conveniently placed, within easy reach of thumb near the focusing lever.

Two tripod plates are fitted into this camera.

When high grade anastigmat lenses are fitted to Deceptive Angle Graphics a less expensive lens may be matched for the focusing finder.

This camera is made only in 3 1/4 x 4 1/2 size.

Outside dimensions of Deceptive Angle Graphic are 8 3/4 x 6 1/2 x 6 5/8 inches, and weight is three pounds.

PRICES

Deceptive Angle Graphic, fitted with Graphic Rapid Rectilinear Lenses and Graphic Automatic Shutter.....	3 1/4 x 4 1/2
Extra Plate Holders.....	\$67.00
Graphic Magazine Plate Holder.....	1.15
Cartridge Roll Holder, empty.....	12.00
Sole-Leather Carrying Case.....	5.00
Deceptive Angle Graphic, no Lens or Shutter.....	50.00
Deceptive Angle Graphic Camera, fitted with Series III, No. 0, Goerz Double Anastigmat Lens, Automatic Shutter and Matched Focusing Finder Lens.....	110.00
Deceptive Angle Graphic Camera, fitted with No. 4, Series VIIa, Zeiss Convertible Lens, Automatic Shutter and Matched Focusing Finder Lens.....	135.00

*The Deceptive Angle Graphic Cameras will only be furnished without lenses when the intending purchaser has a high-grade lens which is intended to be used with the camera, and in such cases we require that the lens be sent to us to insure proper fitting and scaling.

Figure 3. Catalogue pages showing cartoon of photographer using Deceptive Angle Graphic; also catalogue descriptions of the camera

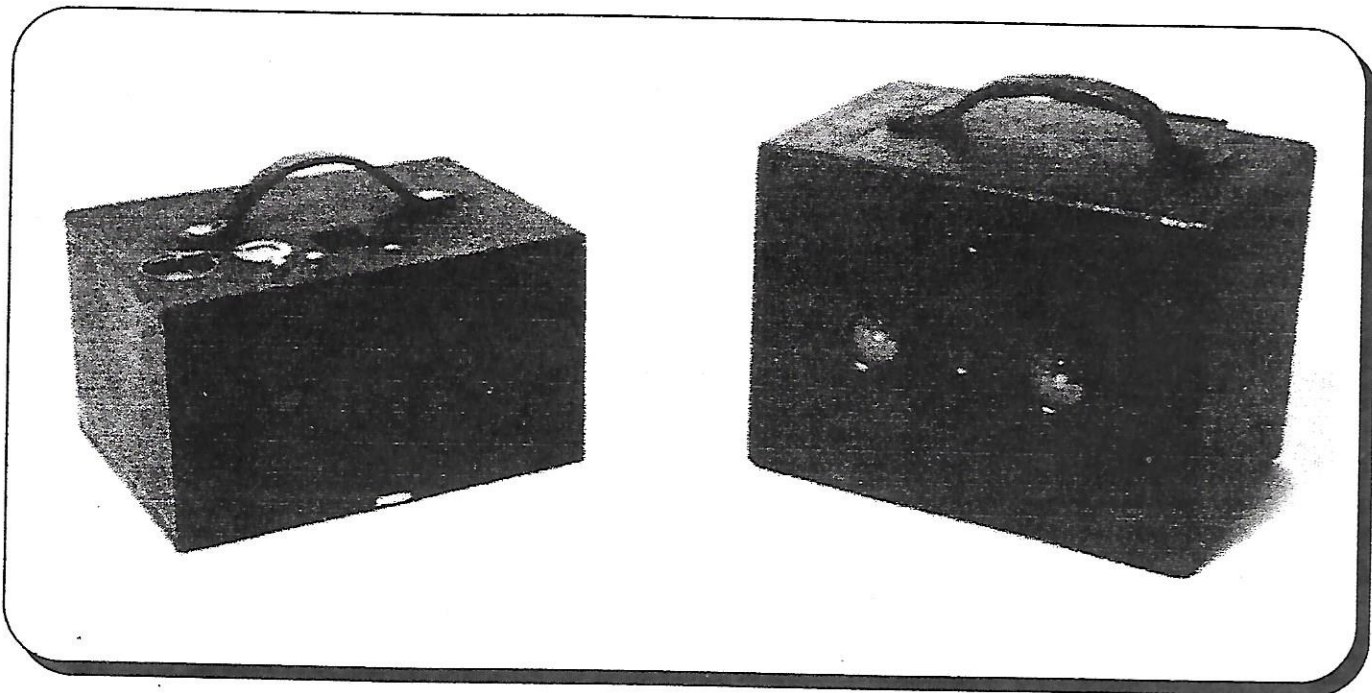


Figure 4. Deceptive Angle Graphic (right), compared with Kodak Stereo Camera (left)

survived, and it is likely that very small numbers were actually produced, despite the prominent and well illustrated description given these cameras in several successive Folmer and Schwing catalogues.

REFERENCES AND NOTES

1. While other detective cameras which allowed viewing at a right angle to the direction which the photographer faced has already been marketed a few years earlier, these were of the monocular or binocular design, and did not have the appearance of a camera.
2. *Catalogue of Photographic Apparatus and Supplies*, Folmer & Schwing Mfg. Co., New York, 1901.
3. *Catalogue and Price List, 1904, of Photographic Apparatus and Specialties*, Folmer & Schwing Mfg. Co., New York, 1904
4. Eaton S. Lothrop, Jr., *A Century of cameras; from the Collection of the International Museum of Photography at George Eastman House*, Morgan & Morgan, inc., Dobbs Ferry, New York, revised and expanded edition (1982)

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Questions & Answers

This issue begins a new column devoted to answering subscribers' restoration, usage, or historic queries. The editors may not be able to reply completely themselves, and might choose to solicit help from other subscribers' expertise!

Dear Editor:

I need some roping for the top of the viewing hoods [reflex cameras]. And I need a source for leather. I have a 3A in terrible condition, but can't bring myself to take the leather off one of the other bodies. - *Georgea L. White*

Rope for viewing hoods was advertised in the April 1993 issue of the Graflex Historical Society Journal by reader Dick Hester, 1002 W. 42nd St., Houston, Texas 77018, 713-681-8588. Although I have not personally seen the product, Dick assures me he still has some, and that samples are available, too.

I know of no source of new leather that will look appropriate for vintage Graflexes. However, I can offer my own practices: 1) Remove the leather from older film pack adapters by careful work with a razor blade or 2) by soaking in tepid water for a short time, then rubbing off the glue and drying between sheets of something absorbent while weighted to keep flat. Use contact cement [I like S-18] and very careful fitting when using. The problem with patches is that they do not contain any of the original leather figuring, if any was present. That kind of replacement leather best comes from another body. - Ed.

GRAFLEX - A BRIEF CHRONOLOGY

By Roger M. Adams, WPCA

The company that was to become known as Graflex had its beginnings in 1887 with the formation of the partnership between William F. Folmer and William E. Schwing. Whether these gentlemen bought out an existing business or started one of their own is not known.

On April 10, 1890, the Folmer & Schwing Manufacturing Company was incorporated, and on June 3, 1890 the new corporation purchased the business of Folmer & Schwing. This new corporation was formed "for the purpose of manufacture and dealing in gas burners, gas lighters, illuminating apparatus, etc."

The Folmer & Schwing Manufacturing Company was manufacturing its illuminating goods and novelties at 271 Canal Street in New York City and during the summer of 1891 put in a photographic sideline pursuing this from a retail store at the same address.

The primary photographic activity was buying and selling cameras and other photographic apparatus. They not only sold new equipment of many different makes, but evidently had a thriving business in used equipment. Advertisements in the back of several of the early catalogs talk about their "Exchange Department", "cash for cameras," and an offer to sell one's camera on consignment for 10% commission. During the 1890's "Bargain Lists" were also printed, listing both new and used equipment of varying kinds. These "Bargain Lists" made such bold statements as "Mammoth Bargain List", "Bargains - the Greatest Bargains of the Season". On the back of these "Bargain Lists" which were actually pamphlets, is the declaration: "We buy, sell, or exchange high grade cameras and lenses." These pamphlets evidently were an extension of their earliest advertising attempts on penny postcards. These postcards appeared as early as 1887 and continued into 1888 and 1889. These too, were "Bargain Lists" of used cameras, indicating that Folmer must have had some interest in photography prior to 1891.

Folmer & Schwing did not actually start manufacturing their own cameras until the Fall of 1897 when they equipped their own factory at 167 to 171 Elm Street, New York City, keeping the store at 271 Canal Street where it remained until 1900.

In late 1899 Folmer & Schwing opened another manufacturing facility at 241 and 243 Centre Street, New York, and used it in addition to the Elm Street plant which ceased operations in 1903. At that time, the facility on Elm was moved into an "L" shaped building running from 251 Centre Street extending through to 407 Broome Street where it remained until the Spring of 1905.

In the meantime, the store at 271 Canal Street was closed in 1900 and moved to 404 Broadway where it stayed until 1903 when it was moved to the newly established office and showroom at the factory at 407 Broome Street where it also remained until the Spring of 1905.

Mr. Folmer applied for a patent on February 17, 1902 for a "Photographic Camera", for which he submitted no model. Although he had patented many things before, this was his FIRST CAMERA patent. This patent, number 716,021 was granted December 16, 1902. This patent was subsequently purchased by the corporation (The Folmer & Schwing Manufacturing Company) on April 14, 1903. Shortly thereafter on May 21, 1903 a new corporation was formed "for the purpose of manufacturing cameras and other photographic supplies". This "second company" was named the

Folmer & Schwing Manufacturing Company of New York. However, the "second company" was only a holding company, as the business operations and bookkeeping continued to be done by the "first company".

In May of 1905, Eastman Kodak Company purchased the Folmer & Schwing Manufacturing Company of New York based on an agreement between Kodak and William F. Folmer. Operations of the company continued at 407 Broome Street in New York City until August of 1905 when fixtures, machinery, etc., were shipped to Rochester and installed and set up in the Century Camera building at 12 Calendon Avenue (later known as 154 Clarissa Street).

From the time the move was made to Rochester, the company was simply known as the Folmer & Schwing Company. However, on January 2, 1906, a "third" company was incorporated and called The Folmer & Schwing Company and was formed for the purpose of merging the "first company" (Folmer & Schwing Manufacturing Co., incorporated April 10, 1890) and the "second company" (Folmer & Schwing Manufacturing Company of New York, incorporated May 21, 1903).

On July 1, 1907, the Folmer & Schwing Company was dissolved, transferring and assigning all property to the Eastman Kodak Company. After this date, operations were continued as the Folmer & Schwing Division of Eastman Kodak Company.

The designation of "Division" continued until 1917 when Eastman Kodak, in an attempt to appease the U.S. Government as the result of an anti-trust lawsuit under appeal, changed the name to "Department".

The Folmer & Schwing Department remained until 1926 when a new corporation was formed as a result of the aforementioned lawsuit forcing Eastman Kodak to divest themselves of the Folmer & Schwing Department. This new corporation was totally independent of Eastman Kodak and was called the Folmer-Graflex Corporation.

The name was changed in June of 1945 to Graflex, Inc. because so many in the industry had come to refer to the company simply as "Graflex" and the company thought it best to conform to that popular usage. Only the name was changed, however, as the company structure and organization remained the same.

In 1956, Graflex merged with a holding company called General Precision Equipment Corporation. They were still called Graflex, Inc., but subtitled "A Subsidiary of General Precision Equipment Corporation".

In 1968, the Singer Company bought General Precision Equipment and Graflex came along as part of the package. At first, they were still called Graflex, Inc., although now it was "A Subsidiary of the Singer Company". Subsequently, the name went to Singer Company/Graflex Division as well as Singer/Graflex.

In 1973, Graflex, Inc. was dissolved. The manufacture of photo products ceased. The audio-visual part of the operation continued as Singer Education Systems under the Singer Education Division.

In 1982, Telex Communications, Inc. purchased the operation from Singer and continued to operate audio-visual manufacturing at what was once the Graflex plant at 3750 Monroe Ave., Rochester.

SIGNIFICANT DATES AND NAME CHANGES
IN THE HISTORY OF GRAFLEX

1887 - Original partnership formed between William F. Folmer and William E. Schwing.

1890 - Folmer & Schwing Manufacturing Company, incorporated April 10, 1890.

1897 - Camera Manufacturing began.

1903 - Folmer & Schwing Manufacturing Company of New York, Incorporated May 21, 1903.

1905 - Eastman Kodak Company purchased Folmer & Schwing Company of New York in May, 1905. Company moved to Rochester, N.Y. and was called the Folmer & Schwing Company, Rochester.

1907 - Company dissolved, becoming Folmer & Schwing Division of Eastman Kodak.

1917 - Renamed Folmer & Schwing Department of Eastman Kodak.

1926 - Folmer-Graflex Corporation formed.

1945 - Name changed to Graflex, Inc.

1956 - General Precision Equipment buys Graflex.

1968 - Singer Company buys GPE making Graflex a part of Singer.

1973 - Graflex dissolved. Singer Educational Systems formed.

1982 - Telex Communications buys Singer Educational Systems.

... to
late

(right) ad from
Aug. 1973
Professional
Photographer

Stableful of workhorses

Whatever your assignment, you'll find you can count on the growing family of fine Graflex equipment to reflect your talent and ability. Every camera, lens and flash has the high built-in quality that gets the job done right.

PACESETTER - Graflex Minita 66, the 2 1/2 square SLR that you'd swear is a 35mm because it looks and handles like one. Only you have work-size format, interchangeable lenses from wide-angle to 1000mm telephoto. Plus interchangeable prism with CDS average metering system as an accessory.

FAITHFUL - Strob 250. The electronic flash that meets all your on-the-go needs. Has 2-second recycling and gives you f-stop readings that tell it exactly like it is. It's extremely accurate for perfect exposures every time.

BRILLIANT - Strob 350 and 500, the light source units with all the carry-around or studio muscle you'll ever need.

3 600 ECPS or 7 150 ECPS output, rechargeable or A/C-powered.

OUTGOING - U 3 Graflex Camera with a wide range of film formats, lenses and three types of view finders. The compact X system promises great photography for press, studio, wedding, commercial or industrial assignments.

FLEXIBLE - Crown Graphic 45, the portable view camera with a reputation for true professional sn. Lens plate flexibility allows tilting or tilt-and-swing. Big 4x5 format is incomparable with other cameras.

Give one of these workhorses a workout at your dealer's. The Singer Company, Graflex Div., Rochester, N.Y. 14603.

SINGER
GRAFLEX PHOTOGRAPHIC PRODUCTS

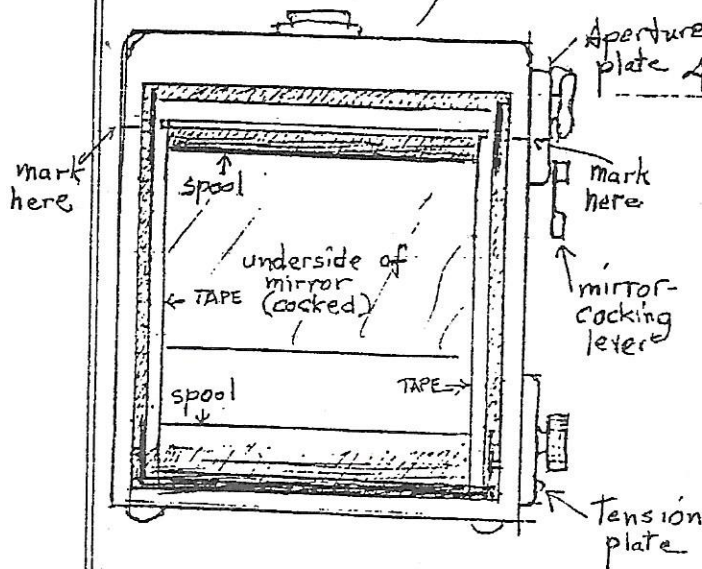


...that's the Graflex system

This restoration tip was submitted by Dick Paine (with the suggestion of Ken Metcalf). An alternate set of directions was featured in an article in the April 1994 Graflex Historical Society Journal.

INSTALLING NEW CURTAIN ON GRAFLEX SLR

1. Remove camera back and bottom plate.
2. Cock the mirror in down position and wind the curtain to "0" (open).
3. Mark the position of the top of the curtain aperture on both sides of the camera back. This is important! The new curtain must be installed exactly in the same position.



4. With a tiny punch knock out the pin holding the mirror-cocking lever. This should be done with a firm blow -- not a series of taps which mightpeen the pin, so that it will never come out. (thin oil helps!)

5. Remove the mirror cocking lever and the four screws that hold the aperture plate.
6. In like manner remove the tension plate.
7. Replace the curtain and reassemble with tension at space ^{between 1&2}, and aperture at "0".

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: Top Handle Speed Graphics in good condition, a 2 cell Graflex flash gun, a 3x4 pre-anniversary wire finder, a 3x4 and 4x5 Anniversary Speed Graphic in excellent original condition, and any Folmer & Schwing camera. Ken Metcalf, 1731 Klier Dr. Concord, CA 94518. phone 510-687-7110 or Email 104122.3117 @compuserve.com

FOR SALE: 12" f4.5 Raptar Telephoto in barrel for 2x3 or 3x4 Graflex. Click stops; lt. weight; needs only 7" from film plane. exc. cond. \$150. J.C. Welch 541-689-8834 (Oregon)

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.

RESTORATION TIPS

Norelco electric shavers makes a fine bi-post cord for Graphex shutters. However, the regular Graflex cords will not work for the 110 volt shavers. (Submitted by Cliff Scofield)

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Graflex Historic Quarterly
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