

INSTRUCTION MANUAL FOR Folding "Brownie" Cameras

Six-20 and Six-16

Translated via OCR and Google

Only took 2 ½ hours !

Brownie Folding Cameras

Six-20 and Six-16

Kodak-Pathé S.A.F. 39,
Avenue Montaigne and 17, Rue François-1er
Paris

Retail Stores:

LYON: 26, rue de la République. -

NICE: 13, avenue de la Victoire. -

MARSEILLE: 37, rue Saint-Ferréol.

CANNES: 1, rue du Maréchal-Foch. -

BORDEAUX: 2, Place de Tourny.

ALGIERS: 48, rue d'Isly.

Kodak Limited 43, Stassart Street, BRUSSELS

Retail Stores: 55, Neuve Street, 21,

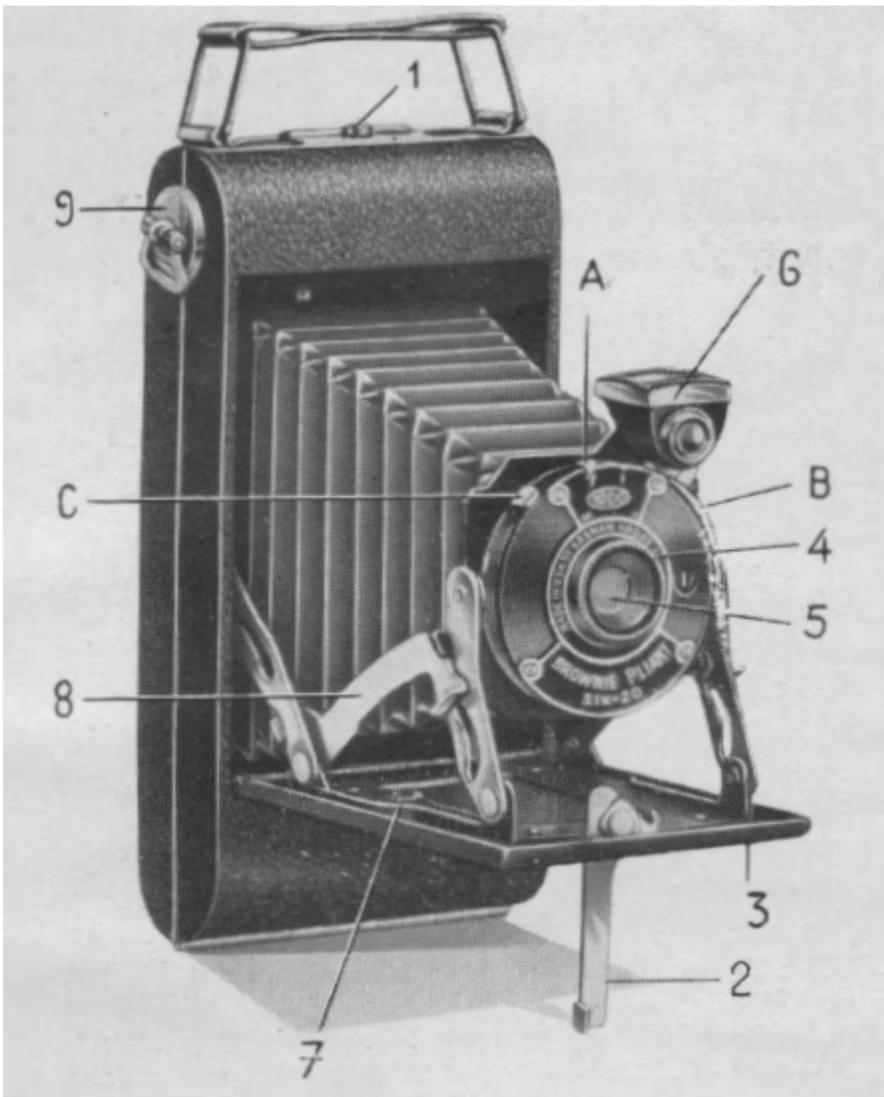
Avenue de la Toison d'Or BRUSSELS

Kodak S.A., LAUSANNE. '1, r. of the Confederacy.

GENEVA f.' Kodak (Egypt) S.A., :!0,

Maghraby Sharia And CAIRE.

The "Brownie" Folding Six-20



- 1. Back lock.
- 2. Closing hook on the support.
- 3. Small board.
- 4. Shutter.

- 5. Objective lens.
- G. Viseur.
- 7. Tripod mounting screw.
- 8. Support arm.
- 9. Winding key.

A - Speed indicator.

B - Disc controlling the diaphragms.

C - Shutter exposure lever.

Important Before loading the camera and taking photographs, carefully read the following instructions. Pay particular attention to the shutter operation. During loading and unloading, carefully keep the protective paper tightly wrapped around the film spool to protect it from light.

The camera can be loaded or unloaded in daylight. However, these operations should be performed in dim light, not in direct sunlight.

LOADING

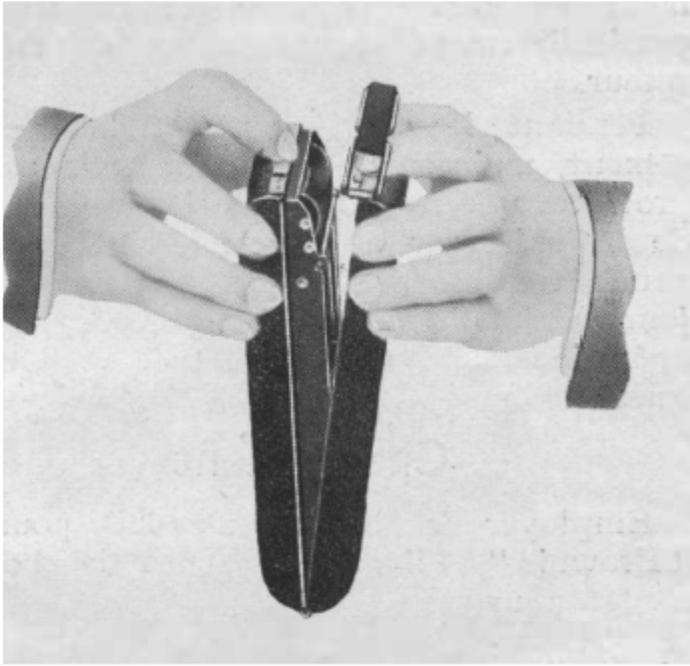
Use spool No. 620 for the "Brownie" Folding Six-20 and spool No. 616 for the "Brownie" Folding.

Push the locking button in the direction of the arrow. Open the back of the device.



Lift the nearest reel holder from the hinged back of the camera and place the blank film reel inside.

Ensure that The word "TOP" printed on the paper is located on the opposite side to the winding key. Tear off the adhesive label that surrounds the spool and pass the protective paper over the two rollers. Insert the end of the paper as far as possible into the longer side of the slot in the empty spool's axle.





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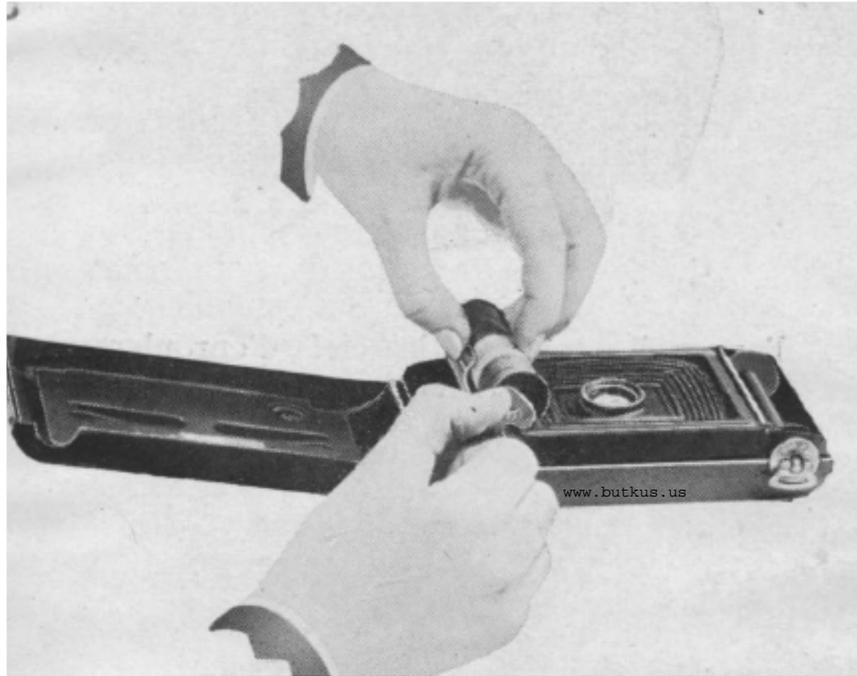
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**If you use Pay Pal or wish to use your credit card,
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Donate: www.PayPal.me/butkus

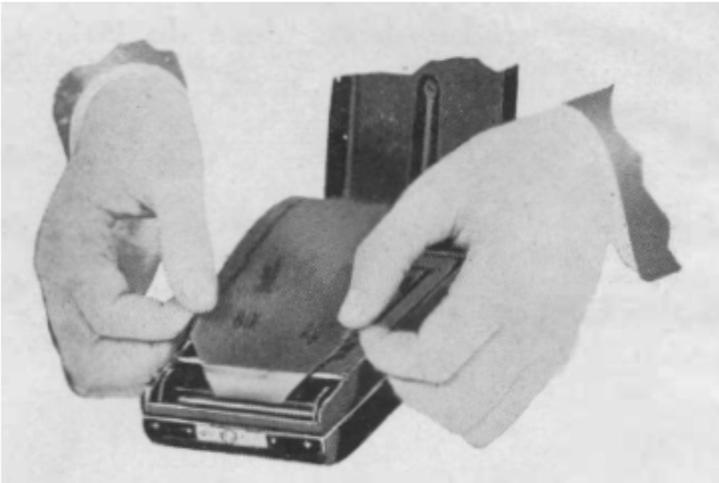
venmo: @mike-butkus-camera Ph. 2083

Give the key one or two turns to wrap a little paper around it and make sure it engages properly.



To close the back: press it until the spring-loaded lock closes by itself with a slight click.

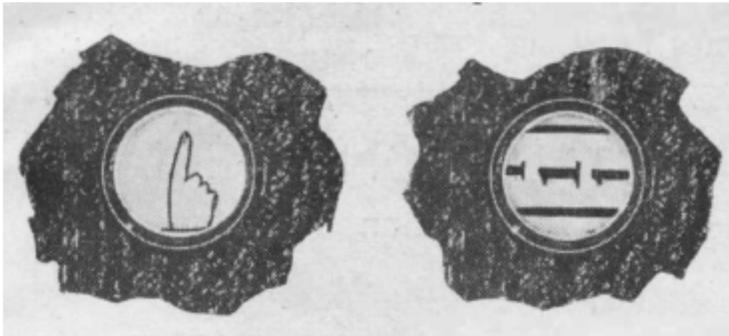
After pushing the small disc located on the back of the



the device, turn the winding key, while carefully observing the window in the back.



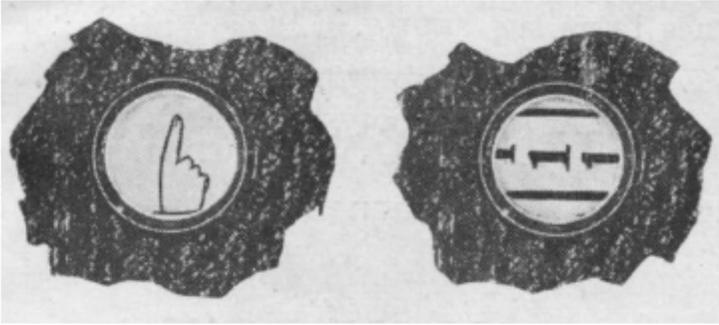
After a few turns, a hand appears. Then turn more slowly.



Continue until number 1 is centered in the window.
The film is now in place for the first exposure.
After each exposure, be sure to wind the film.



After a few turns, red appears. Then turn more with one hand slowly



Continue until number 1 is exactly in the center of the window.

The film is now in place for the first exposure.

After each exposure, be sure to wind the film.

(This is correct if using 620 film. A 616 camera uses a larger image size, so the 120 film number on that kind of camera does not align correctly.)

There are YouTube or classic camera sites that can advise you how to get decent framing with 616 film's larger negative.



The film advances and brings the next number into position.
This prevents two images from being superimposed on each other.

SPECIAL INSTRUCTIONS

concerning Kodak
panchromatic films



Pg8

The small disc shown in the engraving below, and bearing the inscription "Open only while winding", is intended for

Protect the "Kodak" "SuperSensitive Panchromatic" film and the "Kodak" "Panatomic" film from any light leakage through the red window.

It must be kept constantly closed . . .



Pg 9

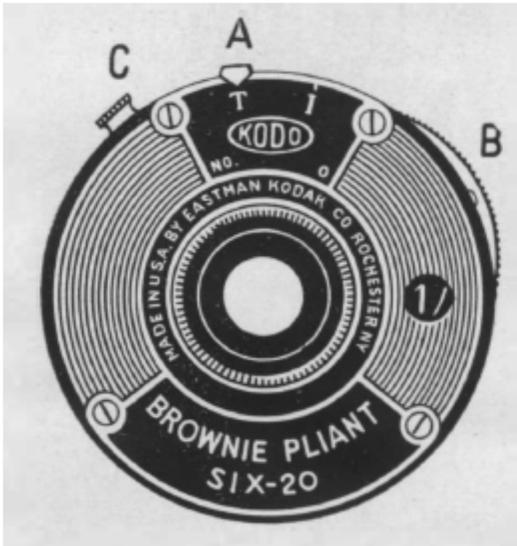
This applies except during the time required to set a number. To reveal the window, rotate the dial in the direction of the arrow, as indicated in the engraving above, and without touching the upper button.

To open the camera:

Release the locking lever and lower the front panel, as shown in the illustration on page [page number], until it locks into place.

This brings the lens and shutter into position.

The "Kodo" shutter of the "Brownie" Folding Six-20



A - Index for instantaneous or time exposures.

B - Aperture diaphragm disc.

C - Exposure lever.

Instantaneous – standard picture (I would assume 1/30 sec)

Place index finger A on "I". Rotate disc B by its serrated edge to bring the opening into position.

(Using ASA 25 film speed apertures are around $f/12.5$, $f/16$, $f/22$, $f/32$)

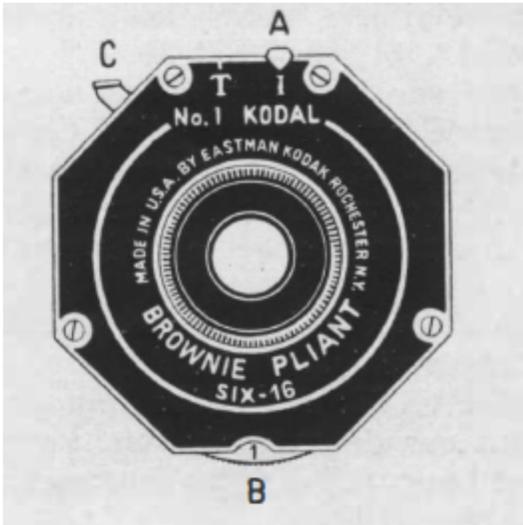
Any smartphone can get a free or cheap light meter app.

Shutter is 1/30 sec or so. Using the ASA / film speed trick in bright sunlight, ASA 25 film should be 1/25 sec shutter at F/16.

You still need 616 film (if that is the camera) or 120 onto a 620 roll or other tricks. A 120 roll can be "sized" to fit a 620 camera.

There are adapters that say they work on 616 but the numbers on the 120 film will not match in the red window.)

The "Kodak" shutter of the "Brownie" Folding Six-16



PG 11

Select the correct aperture setting. (See the section "Using the Diaphragms," pages 13 and 14.) The aperture settings are indicated by numbers 1, 2, 3, and 4, and these numbers appear in a circular opening when you rotate disk B.

To take the picture, press lever C once, either up or down. You should hear a slight click at this point. Move the lever slowly to avoid shaking the camera.

(This camera has NO shutter speed, it is believed to be by 1/25 or so) So you can only adjust the aperture for different lighting. Inside lighting will be tricky with "T" and either a tripod or on a firm surface.)

Exposure

Place the index mark A in front of the letter "T". Rotate disc B until No. 1, 2, 3, or 4 appears in the circular opening. See instructions on pages 13, 14, 25, 26, and 30. Press lever C until you hear a slight click. This opens the shutter. Set the required exposure time using a watch. Press lever C in the opposite direction. This closes the shutter. You should never take exposures while holding the camera in your hand.

IMPORTANT: Never oil the shutter. In case of malfunction, return the camera to your supplier for repair.

Distance from the subject to the camera (this camera has no focus, it is set)

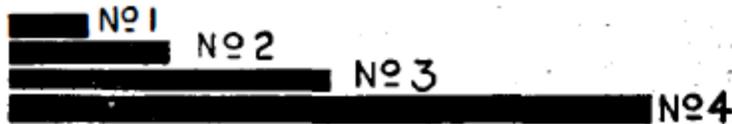
To obtain a sharp and clear image of the entire subject, the camera should not be too close to the subject.

The distance between them varies depending on the aperture used (the smaller the aperture, the shorter the distance).

The table below shows these distances:

Aperture opening	Distance to subject
No. 1	2 m 40 cm and beyond
No. 2	2 m 1 cm and beyond
No. 3	1 m 65 cm and beyone
No. 4	1 m 20cm and beyond

The diagram below shows the relative exposure times required for the same subject with different apertures.



(So No. 1 is the widest aperture... shorter DOF.

No. 4 has the smallest aperture but greater DOF (Depth of Field – more in focus)

Remember, the film speeds were ASA 20 at that time.

Use of diaphragms

The diaphragm openings (or, more simply, "the apertures") control the amount of light that passes through the lens and strikes the film. The size of the openings is increased or decreased by turning the toothed disc B, see page 10 or 11. Each opening has an area equal to half the area of the next larger opening (indicated by a lower number) and admits approximately half as much light. Opening No. 1 is the largest.

No. 1. - Used for all ordinary outdoor scenes, such as close-up landscapes showing little or no sky, groups and street scenes, and moving subjects, when the subject is in bright sunlight and the shutter is set to instantaneous.

For indoor shots, see the tables on pages 25 and 26.

No. 2. - For ordinary landscapes with sky and a main subject in the foreground; for all close-up scenes by the sea or on the water, with the shutter set to instantaneous. For indoor shots whose exposure times are given in the table on page 25.

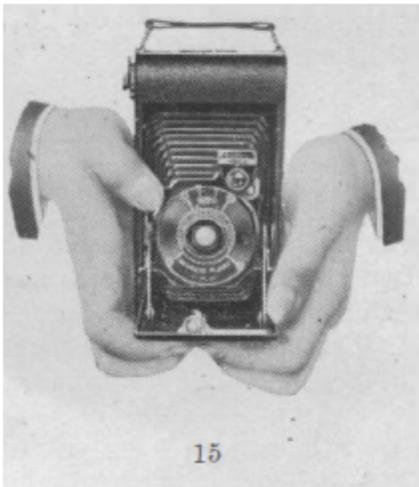
No. 3. - For instantaneous photography of distant scenes, beach scenes, seascapes, scenes without prominent or dark subjects in the foreground, and for photographing clouds in bright sunlight. For indoor posed shots, see pages 25 and 26, and for outdoor posed shots in cloudy weather, see page 30. For outdoor portraits, see page 28.

No. 4. - For indoor shots and for outdoor shots in cloudy weather, see pages 25, 26 and 30. Never use this aperture for instantaneous exposures. Failure will result if you use aperture No. 4 for instantaneous exposures. The smaller the diaphragm aperture used, the sharper the close-up objects will be.

All exposure times given for outdoor subjects should be applied during the hours between 2 1/2 hours after sunrise and 2 1/2 hours before sunset. If it is earlier or later, a longer exposure is required. However, when using Kodak Verichrome film, (differnet ASA 10-25) at that time good results can be obtained by shooting from one hour after sunrise until one hour before sunset. For subjects in the shade, under porches or trees, a longer exposure is necessary (see page 29). In this case, place the camera on a tripod or other firm support. Never hold it in your hands.

The Viewfinder

The viewfinder shows, on a very reduced scale, the exact part of the scene being photographed that will appear in the image. (that tiny box on the top). For sideways shots [landscape], that viewfinder should turn)





When taking snapshots, hold the camera firmly against your body, as shown in the figure above. When pressing the shutter release, hold your breath for a moment.

If the camera is moved during the exposure, the image will be blurred.

The viewfinder can be easily rotated and used for either vertical or horizontal shots. Look through the viewfinder directly above its center and frame the subject by turning slightly to the right or left: see the illustration on page 16.

To take a vertical shot, hold the camera as shown in the figure on page 15. Only the white part of the diagram opposite will appear in the image.



To take a horizontal shot, rotate the viewfinder and hold the camera like this is shown in the previous figure. Only the white part of the diagram shown opposite will appear in the final image.

Taking instant photographs

To take instant photographs, the subject, not the camera, must be abundantly lit by the sun. The sun should be at a three-quarter angle or behind the photographer. If it were in front of the lens, the photograph would be overexposed, as the lighting would be too intense.

Instructions regarding portraits are given on pages 27 to 29.



Hold the camera level. The Folding Brownie must be held level. If it is impossible to include the entire subject in the viewfinder, move back until, with the camera held level, the entire subject appears in the viewfinder. If the subject is below the height



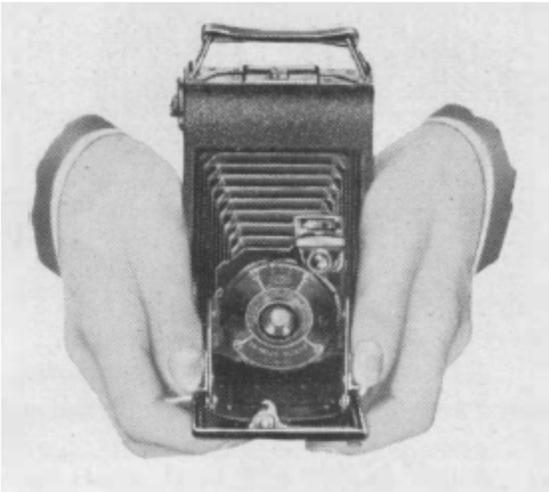
Effect produced when the device is not held level.

Normally, when photographing a young child or a dog, the operator will have to bend down in order to hold the camera level with the center of the subject. After taking the picture, turn the key a few times until No. 2 (or the next number) is in the center of the window.

To close the device:

Press the two folding metal arms that support the platform, as shown in the illustration below.

The front section and the bellows fold down automatically. After closing the flap, make sure that it is securely latched.



Unloading the Camera

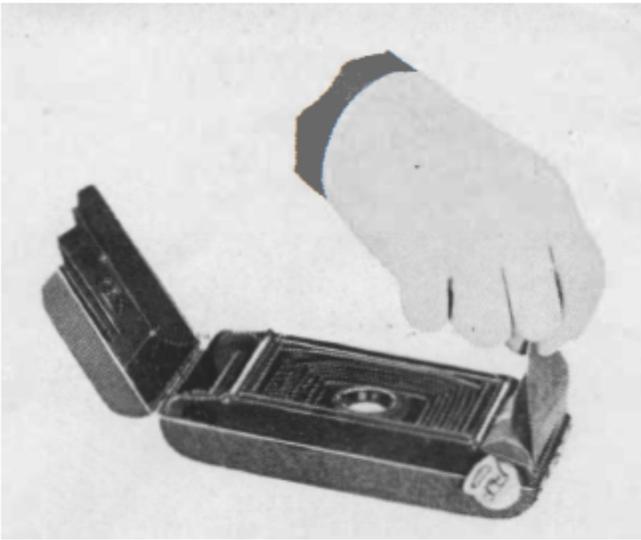
When the last portion of film has been exposed, turn the winding key until the end of the paper backing passes the window. In a dimly lit place, open the back of the Brownie Folding Camera as shown on pages 3 and 4.

Hold the end of the paper backing firmly while you finish winding it onto the spool using the key. If the small adhesive label folds under the roll, turn the key to free it. Then take hold of both ends

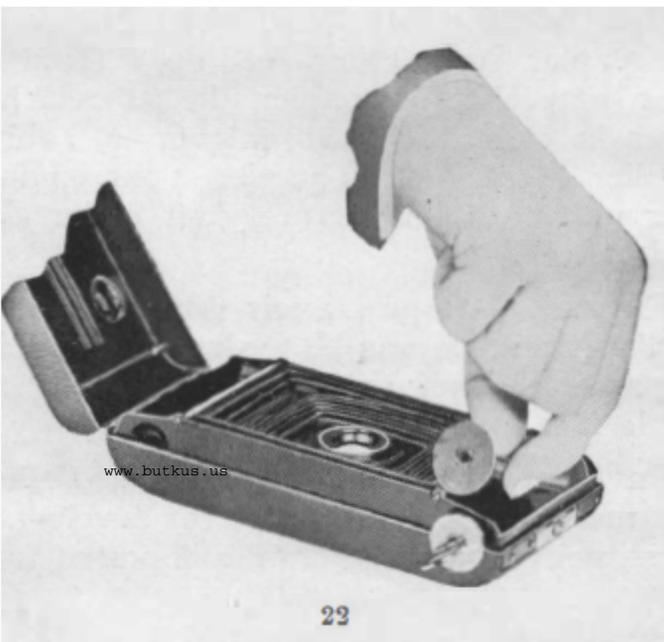


of the protective paper and label to prevent the paper from coming loose. Pull the key all the way out and remove the spool. Fold 1.5 cm (1/2 inch) of the paper back to make it easier to open later, then secure it with the label.

Scratches - After removing the spool from the camera, do not twist it while winding the paper (try to make it smaller), as this would cause scratches on the film. Wrap the exposed spool. It is now ready to be developed. You can either entrust it to your usual supplier or do the developing yourself.



IMPORTANT. - Development should be carried out as soon as possible after exposure. The image quality on all sensitive products is greatly affected (don't leave it in a very hot car)

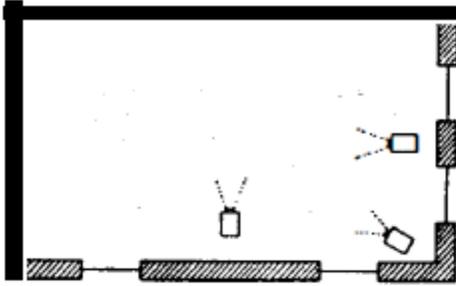


improved and preserved by prompt development after exposure. Remove the empty spool and place it in the opposite spool holder (on the winding key side), engaging the spool holder's pin in the round opening of the spool's spindle. The slotted end of the spool will then be on the winding key side. The camera is ready to be reloaded.

It is a good idea to reload the Folding Brownie immediately so that you are always ready to take more pictures.

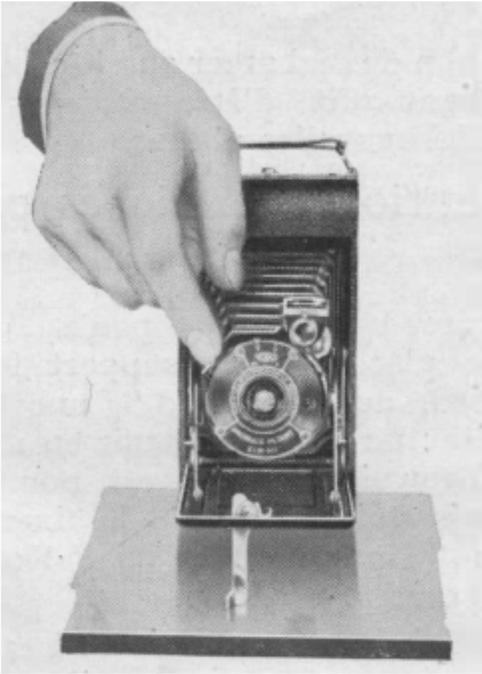
Taking Posed Shots - Interiors

To take posed shots, the camera must be placed on a stable support such as a tripod, an "Optipod," a table, or a chair; never hold it in your hands. The Folding Brownie is equipped with a screw thread that allows it to be attached to a tripod, an "Optipod," or a "Kodapod," in the vertical position.



Position the camera so that the viewfinder captures the view you want to capture. This shows the positions in which the device should be placed so that it is never facing a window, as the bright light from the window would obscure the image. If it is not possible to avoid all windows, close the curtains on the window that faces the device.

If you place the device on a table for a vertical view, use as



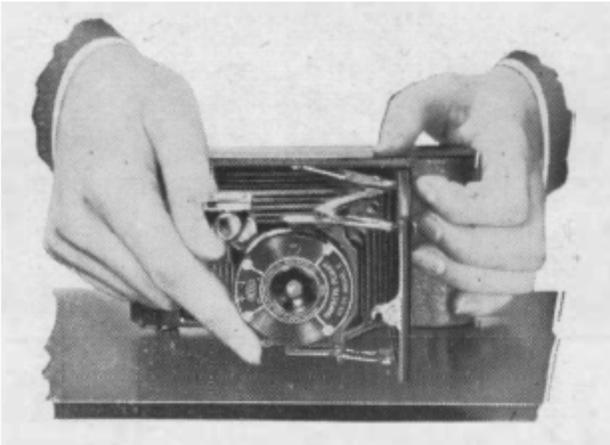
support the closing hook 2. The device should not be more than 5 to 7 cm from the edge of the table. To take a horizontal view, rotate the viewfinder and position the device as shown below (page 26).

Display table for interiors with opening No. 2

White walls illuminated by a single window.	6 sec	15 sec	30 sec	1 min
White walls illuminated by more than one window.	4 sec	10 sec	20 sec	40 sec
Walls and draperies in neutral colors, illuminated by a single window.	12 sec	30 sec	1 min	2 min
Walls and draperies in neutral colors, illuminated by more than one window.	8 sec	20 sec	40 sec	1 min 20 sec
Dark-colored walls and draperies illuminated by a single window	40 sec	1 min 20 sec	2min 20 sec	5 min 20sec
Dark-colored walls and draperies illuminated by more than one window	20	40	1 min 20 sec	2 min 40 sec

The instructions given above apply to rooms that receive direct sunlight, and should be followed during the hours between three hours after sunrise and three hours before sunset. If it is earlier or later, a longer exposure time will be necessary.

(assuming ASA 25 film)



Set the shutter for time exposure as indicated on page 12. When everything is ready, gently press the exposure lever once to open the shutter; give the necessary exposure using a watch, then press the lever again to close the shutter. After the exposure, turn the winding key to advance a new section of film into place.

If you do not wish to take any more time exposures, set the shutter back to instantaneous exposure, following the instructions on page 10.

Exposure table for interiors

The table on page 25 shows the appropriate exposure times under varying lighting conditions, using aperture No. 2.

With opening No. 1, place half of piece

No. 3, then piece

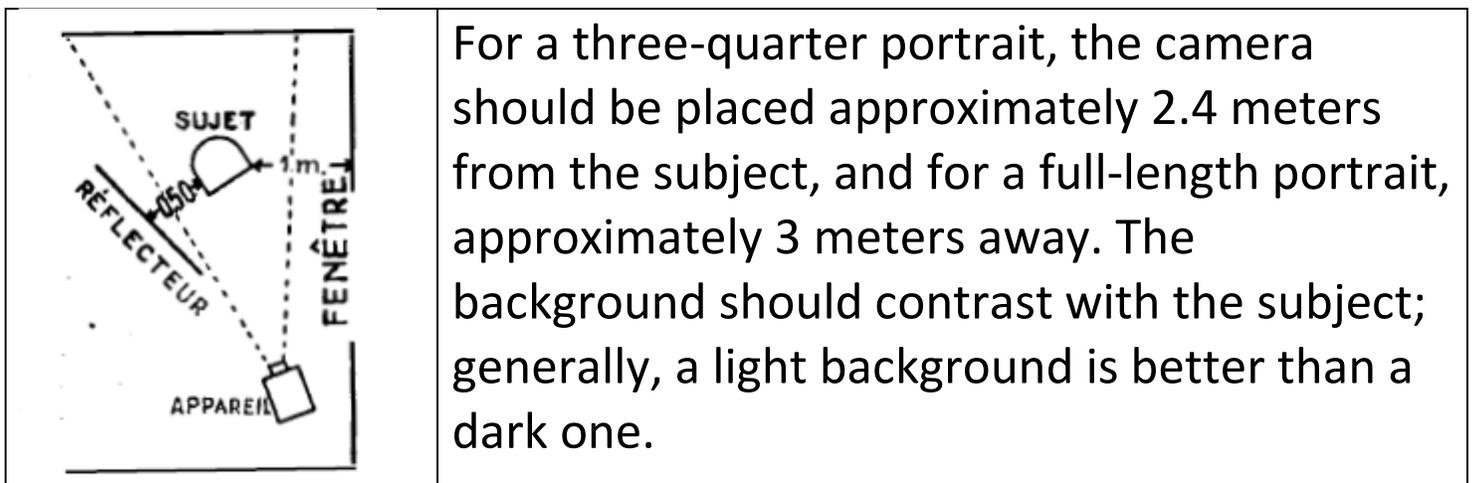
No. 4 twice, and then four times for the

time indicated in the table.

The smaller the aperture used, the sharper the close-up objects will be. Aperture No. 2 gives the best results in interior photography.

Portraits

Have the subject sit in a chair, partially facing the light, their body slightly turned away from the camera and their face turned towards it. The Folding Brownie should be placed slightly higher than a regular table. The subject should look at an object at the same level as the lens or directly at the lens itself. Center the image in the viewfinder.



By adopting the arrangement shown in the diagram opposite, good lighting will be obtained for the subject's face. The use of a reflector helps to bring out details in the shadowed areas.

A towel or a white tablecloth, held by an assistant or draped over a screen, will constitute a perfect reflector; it should be placed at the angle and in the position indicated by the diagram above.

(since there is no "flash" contacts in the lens... an electronic flash is not available.)

Outdoor Portraits

To take an outdoor portrait in very bright sunlight, the subject should be in the shade of a building or a large tree, but with a clear, unobstructed sky above them. Use aperture No. 3 or 4 and expose for 1 or 2 seconds. By proceeding in this manner, you will avoid shadows on the face that have a very unpleasant effect.

The Kodak Portrait Lens

The Kodak portrait lens allows you to take beautiful bust portraits. It is also used to photograph flowers or similar subjects, which are then captured in larger dimensions. Place the lens on the camera's objective and compose the image using the viewfinder. Slightly rotate the Kodak lens to the left, because, given the short distance between the lens and the subject, it is necessary to center the subject by eye instead of using the viewfinder.

(not sure how these worked on folding cameras. I have seen strings in these "kits" that show the needed distance from the lens to the subject. Using the string to provide the distance needed by attaching to the front of the camera and pulling taut to the subject. Plus the diameter of the lenses are all different, and they are held on by a "slip on" method. So it's not a one fits many cameras)

When using the Kodak portrait lens, the focus must be set to infinity and the camera placed exactly one meter from the subject. Measure this distance from the lens to the subject's face very carefully. The exposure time is the same as without the portrait lens. The Brownie Folding Six-20 uses portrait lens No. 8, and the Brownie Folding Six-16 uses portrait lens No. 13.

"Kodak" Diffusion Screen (called "soft focus" these days)

The "Kodak" diffusion screen is an additional accessory used in the same way as the "Kodak" portrait lens. This screen has the effect of softening the sharp lines of the image and thus gives it a more artistic appearance. The Brownie Folding Six-20 uses the No. 8 diffusion screen and the Brownie Folding Six-20 uses the No. 13 diffusion screen.

Obtaining posed shots

Outdoors

When using the smallest aperture settings (No. 3 or 4), the amount of light passing through the lens is so reduced that very short exposures can be used outdoors.

Adjust the shutter by placing your index finger above the lens in front of the letter "T" and place the camera on a stable support. Do not hold it in your hand. In slightly cloudy weather, an exposure of 1 to 3 seconds is sufficient. In very overcast weather, use 4 to 8 seconds. In direct sunlight, do not take pictures outdoors.

Appliance maintenance

Occasionally wipe the inside of the appliance and the bellows with a slightly damp cloth, especially if the appliance has been unused for some time.

Clean the lenses.



Obtained with a dusty lens

Obtained with clean lens

Use a proper lens cleaning cloth.

The illustrations above show the difference in the results obtained, on the one hand, with a dusty lens and, on the other hand, with a clean lens.

The lenses will be cleaned as follows:

Open the back of the device, as shown on pages 6 and 7; then open the front as described on page 10. Wipe the front and back of the lens with a clean tissue.

Never unscrew the lens.

KODAK-PATHÉ S A. F