PICTURE TAKING
WITH THE
BROWNIE CAMERAS
Nos. 3 and 2-A

Price 10 Cents
EASTMAN KODAK CO.
ROCHESTER, N. Y.
KODAK
Trade Mark, 1888

EASTMAN KODAK CO.
ROCHESTER, N. Y.

Manufacturers of
Kodaks
Brownie Cameras
Kodak Film Tanks
Kodak Dry Mounting Tissue
Velox Paper
Eastman Solio Paper
Eastman Ferro-Prussiate Paper
Eastman Velvet Bromide Paper
Eastman Royal Bromide Paper
Eastman Standard Bromide Paper
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Eastman Non-Curling Film
Tested Chemicals
Tripods and
Other Specialties

Trade Marks Reg. U. S. Patent Office

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EASTMAN KODAK CO.,
ROCHESTER, N. Y.

May, 1912.
ORDER FILM
BY NUMBER

All Kodak Films may be distinguished by the numbers on the ends of the cartons.

124
is the number for film for No. 3 Brownie.

116
is the number for film for the 2-A Brownie. The number appears on both carton and cartridge.

NOTICE

The Duplex paper (black on one side, red on the other) now used in Kodak cartridges is superior to black paper in that it has no deleterious effect upon the keeping qualities of the film and absolutely does away with number markings.

In watching for numbers through the red window, one should now look for black numbers on red paper, instead of, as formerly, white numbers on black paper.

Wherever the term "duplex paper" is used in this manual, reference is made of course, to this black and red paper.

BEFORE LOADING.

Before taking any pictures with either the No. 3 or 2-A Brownie Camera read the following instructions carefully, and make yourself perfectly familiar with the instrument, taking especial care to learn how to operate the shutter. Work it for both time and instantaneous exposures several times before threading up the film.

The first and most important thing for the amateur to bear in mind is that the light which serves to impress the photographic image upon the sensitive film in a small fraction of a second when it comes through the lens, can destroy the film as quickly as it makes the picture. After the film has been developed and all developer thoroughly washed out, it may be quickly transferred in subdued white light to the fixing bath without injury. Throughout all the operations of loading and unloading, be extremely careful to keep the duplex paper wound tightly around the film to prevent the admission of light.

EASTMAN KODAK COMPANY,
Rochester, N. Y.
PART 1.

Loading the Nos. 3 or 2-A Brownie Cameras.

The film for either the No. 3 or 2-A Brownie Camera is put up in light tight cartridges, and the camera can, therefore, be loaded in daylight.

This operation should, however, be performed in a subdued light, not in the glare of bright sunlight.

To Load.

Take a position at a table as far as possible from any window; place the camera on the table before you and pull up on the winding key as in Fig. 1.
2. Now push inward on spring catches just in front of winding key, and to the left of the handle, as shown in Fig. II and III.

This will permit of the withdrawal of the roll holder as shown in Fig. IV.

3. Examine this roll holder carefully and it will be seen that in each forward corner, (just behind the shutter compartment) there is a recess that will just hold a spool of film.

In the recess on the right side will be seen an empty spool, which is to be used as the reel.

4. Place film spool in recess opposite the winding end, Fig. V, and spring out the spool pins, as shown in Fig. VI.
This will permit the spool to drop fully into the recess; then push the spool pins back into place so film spool will revolve upon pins.

The winding end may always be distinguished by the small hole in the side of the roll holder.

**Important.**

Be sure and get the top of spool at top of roll holder (each spool is marked on the end) when inserting, otherwise your film will come on the wrong side of duplex paper when reeled off and total failure will result.

You can readily tell the top side of roll holder, as it contains the opening in the winding end through which the key is inserted in the reel.

5. Now remove the gummed slip that holds down the end of duplex paper and pass duplex paper across opening in the back of the roll holder (Fig. VII), and thread the duplex paper through the slot in the reel as shown in Fig. VIII, being extremely careful to have the
paper drawn straight and true, and give the spool two or three forward turns (to the left from the key end). The spool may be readily turned by revolving the flanges of the spool with the two thumbs.

**Caution.**

If you turn off too much of the duplex paper, before the camera is closed, the film will be uncovered and ruined.

6. The camera is now to be closed reversing the operation shown in Figs. I to IV and pages 5, 6 and 7. In reinserting the roll holder in the outside box, remember that the slotted end of winding reel which shows through round hole in side of roll holder, must be inserted so as to come opposite winding key in outside box.

7. Press in on, and at the same time, turn the winding key until it fits into position, the web at lower end of key fitting into slot in spool end (Fig. XI). This is a reversal of operation shown in Fig. I, page 5.

8. Turn the key slowly to the left and watch the little red window at the back of the camera. When 15 to 18 turns have been given, a hand pointing toward the No. 1 exposure will appear, then turn slowly until the figure 1 appears before the window.

**Fig. X.**

The film is now in position for taking the first picture.

**Load Your Brownie with Kodak Film**

**Look for this trade mark on the box**

**NON CURLING**

**LOOK FOR “KODAK” ON THE SPOOL END.**
PART II.

Making the Exposures.

SECTION I.—Instantaneous Exposures.

"Snap Shots."

The shutter of No. 3 or 2-A Brownie Camera is always set and is operated by pushing the lever alternately to right or left with the thumb.

If the lever stands at the right hand side of slot simply push it to the left and vice versa.

If the spring should be pushed the wrong way, the shutter would simply remain unmoved, and no "click" would be heard, thus indicating that it should be pushed in the opposite direction.

To take instantaneous pictures the subject should be in the broad open sunlight, but the camera should not. The sun should be behind the back or over the shoulder of the operator.

Use the Largest Stop.

Snap shots should only be made when the largest stop is before the lens. If a smaller stop is used, the light will be so much reduced that it will not sufficiently impress the image on the film and failure will result. In making snap shots both of the slides shown in Fig. II, page 16, should be pushed down to the limit of motion.

FIG. II.

Slide A controls the time and instantaneous exposures. For snap shots this slide must be down.

Slide B controls the stops, of which there are three. When it is clear down the largest stop is in place. This is the one to use for all snap shots, except where the sunlight is unusually strong, and there are no heavy shadows, such as views on the water or in tropical or semi-tropical climates, when the middle stop may be used. The smallest stop must never be used for snap shots. (See Fig. II, page 16.)

Aim the camera at the object to be photographed and locate the image in the finder. There are two
finders, one for vertical and the other for horizontal exposures.
For a vertical exposure the camera should be held as shown in Fig I, page 12.
For a horizontal exposure the camera should be held as shown in Fig II, page 13.
Any object that does not show in the finder will not show in the picture.

![Diagram showing positions for camera.](image)

**Fig. III.**
Effect produced by tilting camera.

All being in readiness.

**Hold the Camera Steady and Level**
as shown in Fig. I or II and press the shutter lever to one side with the thumb of right hand.

**Turn a New Film into Position**
Turn the key slowly to the left until the next number appears before the window.
**Note:**—The warning index hand appears only before No. 1.
Repeat the foregoing operation for each picture.
If the operator attempts to photograph a tall building, while standing near it, by pointing the camera upward (thinking thereby to center it) the result will be similar to Fig III.

**SECTION 2**
**Time Exposure Indoors.**
**PLACE THE CAMERA IN POSITION**

![Diagram showing positions for camera.](image)

**Fig. I.** Diagram showing positions for camera.
Use some firm support, like a chair or table. Set in such position that the finder will embrace the view desired.
The diagram (Fig. I) shows the proper positions for the camera. It should not be pointed directly
at a window as the glare of light will blur the picture. If all the windows cannot be avoided pull down the shades of such as come within range of the camera.

Pull out the time slide (A) on left hand side of camera front as shown in Fig. II. When this slide is pulled out the shutter strikes it as it passes the lens, stopping half way across with the opening opposite the lens.

All being in readiness steady the camera with one hand and push the lever to open the shutter; give the proper time (using a watch if more than two seconds) and press the lever in the opposite direction to close the shutter.

Turn a new film into position as described before. (See page 15.)

For interiors the following table is a good guide:

**Time Needed for Interior Exposures.**

This table is for the largest stop. When the second stop is used double the time; when the smallest stop is used give four times the time of table.

White walls and more than one window:
- bright sun outside, 2 seconds;
- hazy sun, 5 seconds;
- cloudy bright, 10 seconds;
- cloudy dull, 20 seconds.

White walls and only one window:
- bright sun outside, 3 seconds;
- hazy sun, 8 seconds;
- cloudy bright, 15 seconds;
- cloudy dull, 30 seconds.

Medium colored walls and hangings, and more than one window:
- bright sun outside, 4 seconds;
- hazy sun, 10 seconds;
- cloudy bright, 20 seconds;
- cloudy dull, 40 seconds.

Medium colored walls and hangings and only one window:
- bright sun outside, 6 seconds;
- hazy sun, 15 seconds;
- cloudy bright, 30 seconds;
- cloudy dull, 60 seconds.

Dark colored walls and hangings, and more than one window:
- bright sun outside, 10 seconds;
- hazy sun, 20 seconds;
- cloudy bright, 40 seconds;
- cloudy dull, 1 minute, 20 seconds.

Dark colored walls and hangings, and only one window:
- bright sun outside, 20 seconds;
- hazy sun, 40 seconds;
- cloudy bright, 1 minute, 20 seconds;
- cloudy dull, 2 minutes, 40 seconds.

The foregoing is calculated for rooms whose windows get the direct light from the sky and for hours from three hours after sunrise until three hours before sunset.

If earlier or later, the time required will be longer.

**To Make a Portrait.**

Place the sitter in a chair partly facing the light, and turn the face slightly toward the camera (which should be at the height of an ordinary table.) For a bust picture the camera should be five feet from the figure; but for a three-quarter figure from six to eight feet, and for a full figure from eight to ten feet. The background should form a contrast with the sitter.
In making portraits where the subject is less than eight feet from the camera, use the smallest stop and time accordingly. (See page 16). As a general rule use the middle stop for portraits.

Kodak Portrait Attachment.

By the use of a Kodak Portrait Attachment this instrument may be used with the sitter at a distance of only three and one half feet, thus enabling the amateur to obtain large head and shoulder pictures equaling in size those of an ordinary Mantello photograph.

The attachment is simply an extra lens to be slipped in lens opening in front-board, and in no way affects the operation of the camera except to change the focus. Price 50 cents. Be sure and specify what camera the attachment is to be used with when ordering.

Time Exposures in the Open Air.

When the smallest stop is before the lens the light admitted is so much reduced that time exposures out of doors may be made the same as interiors, but the exposure must be much shorter.

With Sunshine—The shutter can hardly be opened and closed quickly enough to avoid over exposure.

With Light Clouds—From one-half to one second will be sufficient.

With Heavy Clouds—From two to five seconds will be required.

The above is calculated for hours from three hours after sunrise until three hours before sunset and for objects in the open air. For other hours, or for objects in the shadow, under porches or under trees, no accurate directions can be given; experience only can teach the proper exposure to give.

Time exposures cannot be made while the camera is held in the hand. Always place it upon some firm support, such as a chair or table.

STOPs.

1 The Largest—For all ordinary instantaneous exposures.

2 The Middle—For instantaneous exposures when the sunlight is unusually strong and there are no heavy shadows; such as in views on the seashore, in extremely high, dry climates or on the water or in tropical or semi-tropical climates; also for interior time exposures, the time for which is given in the table on pages 16 and 17.

3 The Smallest—For time exposures out doors in cloudy weather. Not for instantaneous exposures. The time required for time exposures on cloudy days with smallest stop will range from one-half second to five seconds according to the light. The smaller the stop the sharper the picture.

When setting the stops always see that the one to be used is brought to the center of the lens where it catches.

If you use the smallest stop for instantaneous exposures absolute failure will result.
SECTION 3.

Flash Light Pictures.

By the introduction of Eastman Flash Sheets, picture taking at night has been wonderfully simplified. A package of flash sheets, a piece of cardboard, a pin and a match complete the list of essential extras, although an Eastman Flash Sheet Holder is a great convenience.

With flash sheets, no lamp is necessary, there is a minimum of smoke and they are far safer than any other self-burning flash medium, besides giving a softer light that is less trying to the eyes.

Many interiors can be taken with the flash sheets that are impracticable by daylight, either by reason of a lack of illumination or because there are windows in a direct line of view which cannot be darkened sufficiently to prevent the blurring of the picture.

Evening parties, groups around a dinner or card table or single portraits may be readily made by the use of our flash sheets, thus enabling the amateur to obtain souvenirs of many occasions which, but for the flash-light, would be quite beyond the range of the art.

Preparation for the Flash.—The camera should be prepared for time exposures, as directed on page 15 of this manual (except that the largest stop must be used,) and placed on some level support where it will take in the view desired.

Pin a flash sheet by one corner to a piece of cardboard which has previously been fixed in a perpendicular position. If the cardboard is white it will act as a reflector and increase the strength of the flash.

The flash sheet should always be placed two feet behind and two or three feet to one side of the camera. If placed in front, or on a line with front of Camera, the flash would strike the lens and blur the picture. It should be placed at one side as well as behind, so as to throw a shadow and give a little relief in the lighting.

The flash should be at the same height or a little higher than the camera. The support upon which the flash is to be made should not project far enough in front of it to cast a shadow in front of the Camera. An extra piece of cardboard a foot square placed under the flash sheet will prevent any sparks from the flash doing damage. However, by using the Eastman Flash Sheet Holder, all these contingencies are taken care of, and we strongly advise its use.

The Eastman Flash Sheet Holder

This holder may be safely held in the hand, always between you and the flash sheet. Or it may be used on any Kodak tripod, being provided with a socket for this purpose. The sheet is held by a spring finger, in such position that its lower corner projects part way across the circular opening in the holder, as shown in illustration.

Then to set off the flash, merely touch a match to the corner of the sheet through this opening.

Taking the Picture

Having the Camera and the flash sheets both in position and all being in readiness, open the camera shutter, stand at arm's length and touch a match from behind to the lower corner of the flash sheet.

NOTE—If you are not using the Eastman Flash Sheet Holder, place the match in a split stick at least two feet long.

There will be a bright flash which will impress the picture on the sensitive film. Then push the lever to close the shutter and turn a fresh film into place with the key, ready for another picture.
The Flash Sheet

The number of sheets required to light a room varies with the distance of the object farthest from the camera, and the color of the walls and hangings.

When two or more sheets are to be used they should be pinned to the cardboard, one above the other, the corners only very slightly overlapping.

**TABLE**

- For ten feet distance and light walls and hangings use one No. 1 sheet.
- For ten feet distance and dark walls and hangings use one No. 2 sheet.
- For fifteen feet distance and light walls and hangings use one No. 2 sheet.
- For fifteen feet distance and dark walls and hangings use one No. 3 sheet.

**NOTE**—Never use more than one sheet at a time, in the Eastman Flash Sheet Holder.

**To Make a Portrait.**—Place the sitter in a chair partly facing the Camera (which should be at the height of an ordinary table) and turn the face slightly towards the instrument. The proper distance from the camera to the subject can be ascertained by looking at the image in the finder. For a three quarter picture this will be from 6 to 8 feet, and for a full figure from 8 to 10 feet.

The flash should be on the side of the Camera away from the face, that is, the sitter should not face it. The flash should not be higher than the head of the sitter.

For using the portrait attachment, see page 18.

**To Make a Group.**—Arrange the chairs in the form of an arc, facing the Camera so that each chair will be exactly the same distance from the camera. Half the persons composing the group should be seated and the rest should stand behind the chairs. If the group is large any number of chairs may be used, but none of the subjects should be seated on the floor, as sometimes seen in large pictures, because the perspective would be too violent.

**BACKGROUND**—In making single portraits or groups, care should be taken to have a suitable background against which the figures will show in relief; a light background is better than a dark one, and often a single figure or two will show up well against a lace curtain. For larger groups a medium wall light will be suitable.

The finder on the camera will aid the operator in composing the groups so as to get the best effect. In order to make the image visible in the finder the room will have to be well lighted with ordinary lamplight, which may be left on while the picture is being made, provided none of the lights are placed so that they show in the finder.

Eastman Flash Sheets burn more slowly than flash powders, producing a much softer light and are, therefore, far preferable in portrait work; the subject, however, should be warned not to move, as the picture is not taken **instantaneously**, about one second being required to burn one sheet.

**Eastman Flash Cartridges**

Eastman Flash Cartridges may be substituted for the sheets, if desired. We recommend the sheets, however, as more convenient, safer, cheaper and capable of producing the best results. The cartridges are only superior when absolutely **instantaneous** work is essential.

**Keep Dust Out of the Camera**

Defective negatives are often caused by particles of dust which have collected on the inside of the camera and settle upon the film in particles that produce small white spots upon the prints.

It is therefore well to wipe out the inside of camera occasionally, with a slightly damp cloth. In summer weather or after the camera has remained idle for any length of time, this needs special attention.
PART III.

Removing the Film.

No dark room is required in changing the spools in the Brownie Camera.

The operation can be performed in the open air, but to avoid all liability of fogging the edges of the film, it had best be performed in a subdued light.

2. Provide an extra spool of film to fit this camera, taking a position at a table as far as possible from any window.

3. Remove the roll holder as shown on page 7, Fig. IV.

4. Hold ends of duplex paper and sticker together to prevent paper from loosening on reel. Spring out spool pin and lift out roll of film. Fig. I.

   NOTE—If sticker has been wound under reel, revolve spool to bring it up.

5. Fold over half inch at end of duplex paper (so as to make subsequent breaking of the seal easy) and then seal with sticker.

6. Wrap up exposed film immediately to prevent the possibility of light being admitted.

7. Now take the empty spool from the recess on the left side of the camera and transfer to the winding side bringing the slotted end into which the key is to fit opposite the key hole.

   Load as described in Part I, Page 7.

   The roll of exposures can now be mailed to us for finishing or you can do the developing and printing yourself.

“Cinch Marks.”

If the film and paper loosen up a trifle when taken from the camera, many amateurs are likely to take the cartridge in the hand and wind it as closely as possible, cinching it tightly with a twisting motion. There's nothing more likely to injure the negative than this tight drawing of the film, as it abrades the surface, making fine parallel scratches running lengthwise of the film, which, in some cases, will ruin the negative. Do not “cinch” the cartridge. It simply needs to be wound tightly enough so that the duplex paper keeps inside the flanges.
PART IV.

Developing.

There is no necessity of working in a dark room or waiting until night to develop film. It can be done in daylight at any time and place. And the daylight methods of developing film give better results than the dark room way.

Film may be developed in daylight by the Kodak Film Tank method. Detailed directions for developing will be found in the manual which accompanies the goods.

We recommend the Kodak Film Tank method particularly for its simpleness, and the uniformly good negatives which it gives.

Developing with the Kodak Film Tank.

Provide a $3\frac{1}{2}$-inch Film Tank for use with No. 3 or 2-A Brownie Film.

The Kodak Film Tank consists of a wooden box, a light proof apron, a "transferring reel," a metal "solution cup" in which the film is developed, and a hooked rod for removing film from solution. There is also a dummy film cartridge with which one should experiment before using an exposed cartridge. The various parts of the outfit come packed in the box itself.
MAKE ENLARGEMENTS
From Your Best Brownie Negatives

Brownie
Enlarging Cameras

ARE AS EASY TO OPERATE
AS ARE THE BROWNIES
AND THEY MAKE SPLENDID ENLARGEMENTS TOO

Brownie Enlarging Camera No. 3

Makes 6½ x 8½ Enlargements from 3¼ x 4¼ Negatives
and 5 x 8½ Enlargements from 2½ x 4¼ Negatives.

PRICE $3.00.