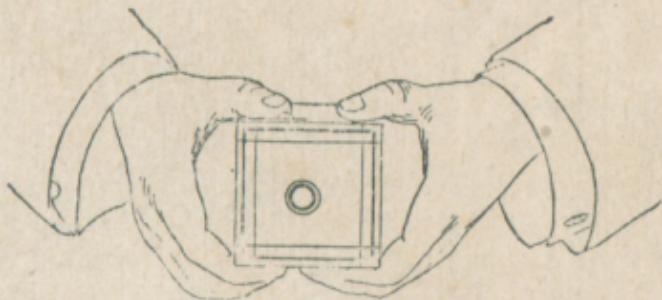


DIRECTIONS FOR USING . . .
THE . . .
BROWNIE
CAMERA.



(Price 10 Cents.)



PUBLISHED BY
EASTMAN KODAK CO.
ROCHESTER, N. Y.

KODAK
Trade Mark, 1888.

EASTMAN KODAK CO.
ROCHESTER, N. Y.

MANUFACTURERS OF

Kodaks,
Brownie Cameras,
Cartridge Roll Holders.
Eastman's Solio Paper,
Eastman's Dekko Paper,
Eastman's Dry Plates,
Eastman's Standard Bromide Paper,
Eastman's Royal Bromide Paper,
Eastman's Platino-Bromide Paper,
Eastman's Enameled Bromide Paper,
Eastman's Matte-Enamel Bromide Paper
Eastman's Transparent Films,
Eastman's Paper-Films,
Eastman's Transparency Plates,
Tripods and
Other Specialties.

JAN., 1900.

BEFORE LOADING.

Before taking any pictures with the Brownie Camera read the following instructions carefully, and make yourself perfectly familiar with the instrument, taking especial care to learn the construction of the shutter. Work it for both time and instantaneous exposures several times before threading up the film.

The first 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 fraction of a second when it comes through the lens can destroy the film as quickly as it makes the picture. Until it has been developed and fixed, the film must never be exposed to white light (this includes gas light, lamp light, etc.), or it will be ruined. Throughout all the operations of loading and unloading, therefore, be extremely careful to keep the black paper wound tightly around the film to prevent the admission of light.

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PART I.

Loading the Brownie Camera.

The film for the 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.



THE FILM.

To load:

1. Take a position at a table as far as possible from any window, place the camera on the table before you and unlock by turning to right on nickel catch as shown in Fig. 1. This releases the winding key, which is now to be removed from camera.

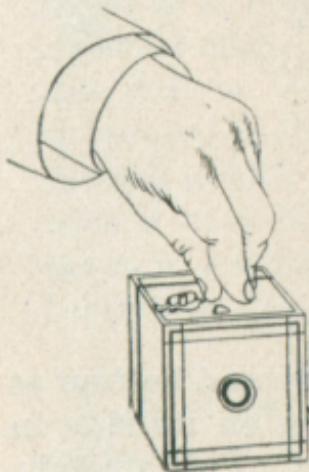


Fig. 1.

2. Now remove back from camera by pressing concealed springs on the sides and *at the same time* pulling it back as shown in Fig. 2.

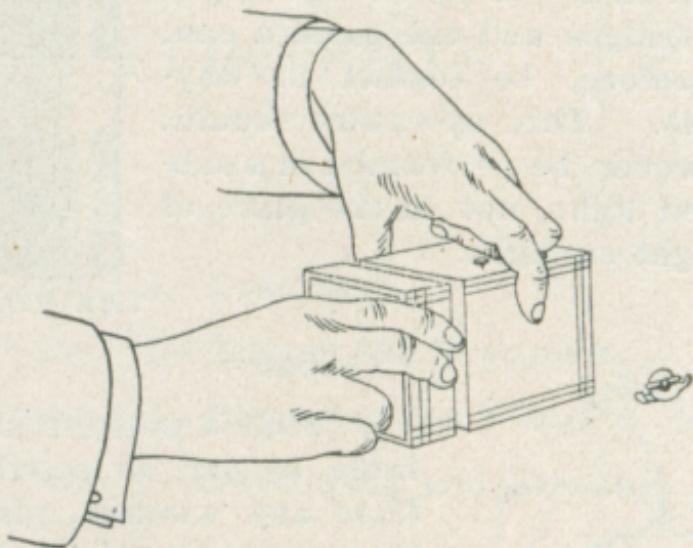


Fig. 2.

3. Grasp roll holder at top and bottom as in Fig. 3 (camera is shown on its side in cut) and remove from box. Pull straight and true and it will come out easily.

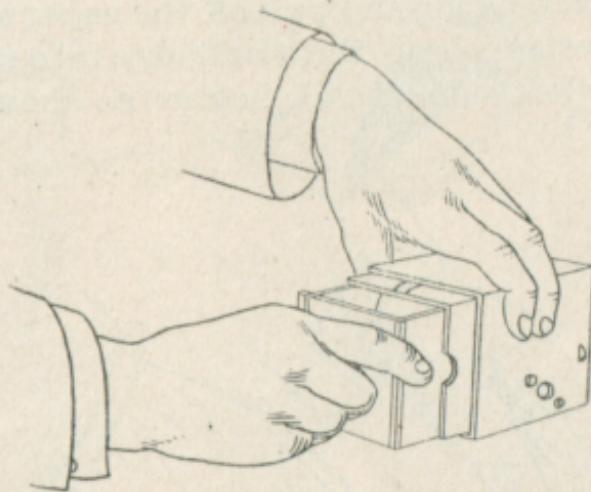


Fig. 3.

4. Examine this roll holder carefully and it will be seen that at each forward corner there is a recess which 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. At the back end of the roll holder is a hinged pasteboard flap with a hole in the center. Care must be taken in loading to see that this flap comes *behind the film*.

5. Now lay the roll holder on its side; take up a Film Cartridge; break the gummed slip that holds down the end of

the black paper and pull off the paper about 3 inches and drop the Cartridge into recess on the left side of roll holder as shown in Fig. 4.

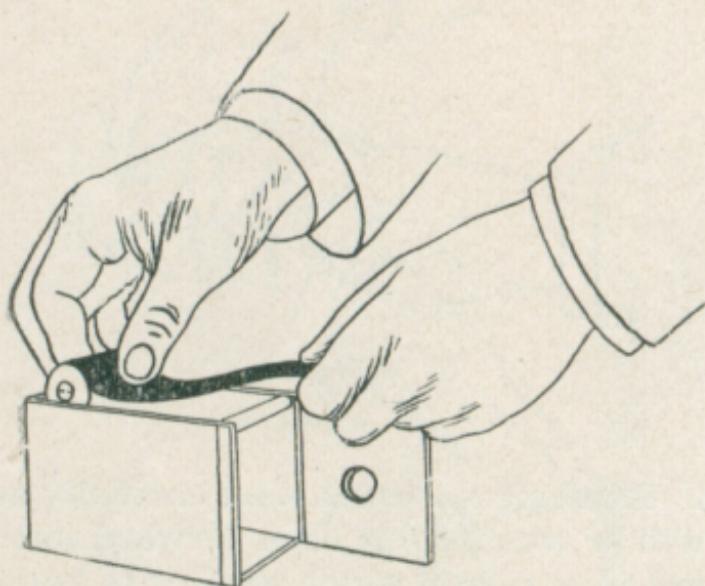


Fig. 4.

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 black paper when reeled off and total failure will result. You can readily tell the top side of roll holder, as it contains the opening through which the key is inserted in the reel.

6. Pass the black paper across the square opening in the back of the roll holder and in front of the pasteboard flap; take the empty reel from its recess and thread the black paper through the slit in this reel as

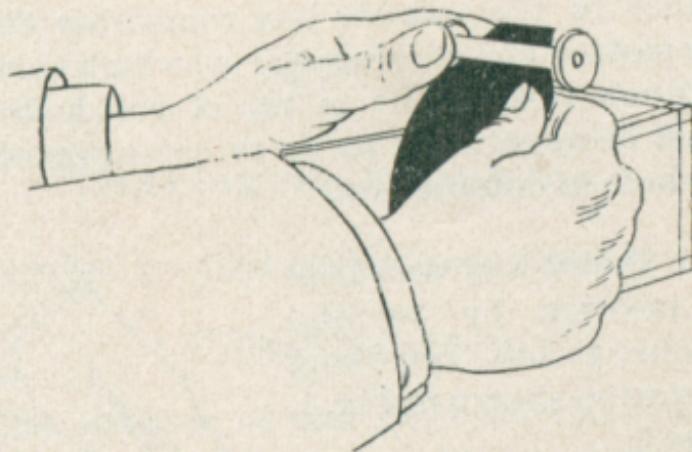


Fig. 5.

shown in Fig. 5, *being extremely careful to have the paper draw straight and true* and give the spool two or three forward turns (to the left from the key end) and re-insert in the recess. If desired, the key may be inserted and turned one revolution to the left, the fingers bearing meanwhile on both spools to make the black paper draw tightly.

Caution.

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

7. The camera is now to be closed, reversing the operations shown in Figs. 2 and 3, page 3. In re-inserting the roll

holder in the outside box remember that the slotted end of winding reel which shows through round hole in top of roll holder, must be uppermost so as to come opposite keyhole in outside box.

8. Insert key and lock in position by turning catches to left, reversing operation shown in Fig. 1, page 3.

9. Turn key to the left, (Fig. 6), until the number 1 appears before the little red window in back of camera. Fig. 7.

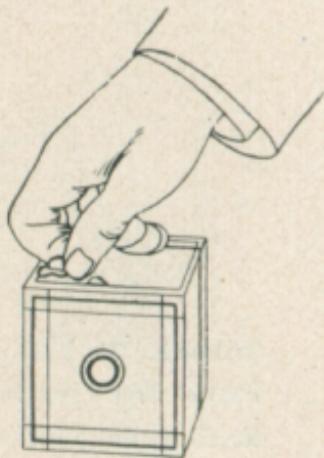


Fig. 6.

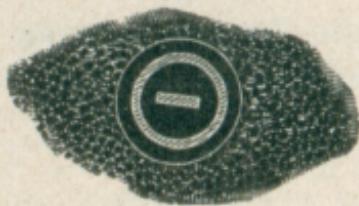


Fig. 7.

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

PART II.

Making the Exposures.

SECTION 1.—INSTANTANEOUS EXPOSURES.

(“SNAP SHOTS.”)

The shutter of the 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 object 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.

The scope of view, *i. e.* the angle which will be included in the picture is indicated by the lines forming the V on top of

camera. The eye will quickly accustom itself to following an imaginary extension of these lines and without actually sighting along them will readily grasp what the picture is to include.

All being in readiness

Hold the Camera Steady

and

Hold it Level

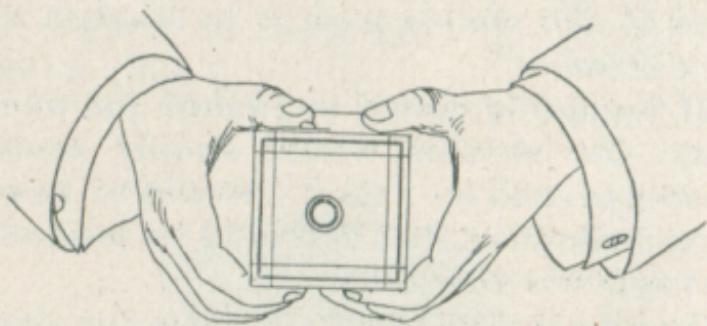


Fig. 1.

as shown in Fig. 1 and press the shutter lever to one side with the thumb of the right hand.

This Makes the Exposure.

If the operator attempts to photograph a tall building, while standing near it, by pointing the camera upward (thinking thereby to centre it) the result will be similar to Fig. 2.

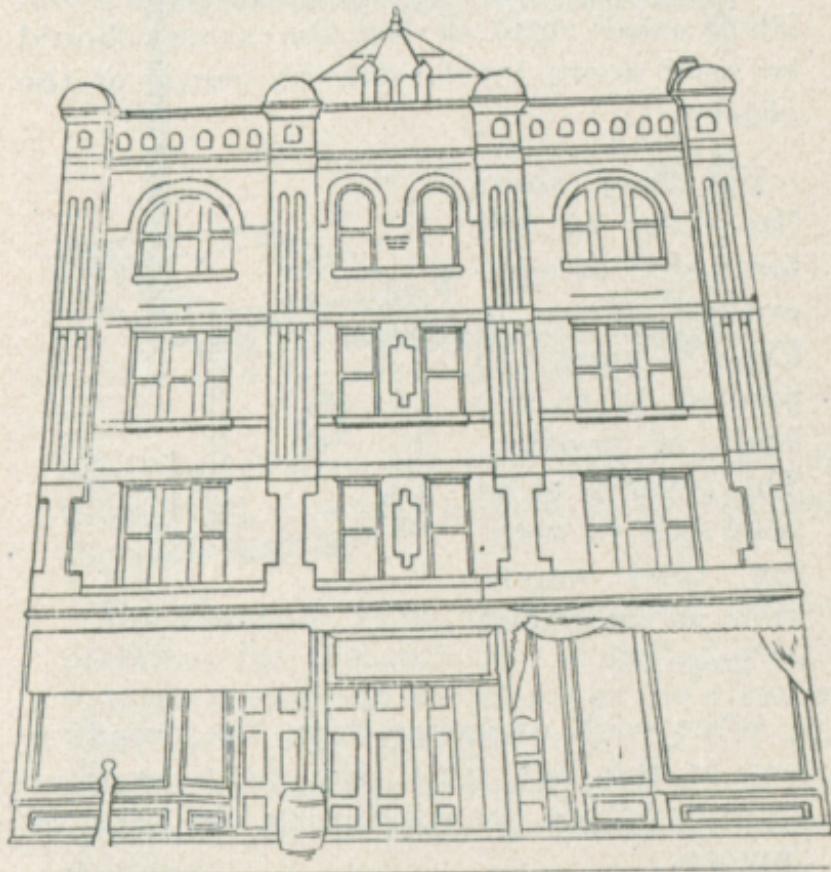


Fig. 2.

EFFECT PRODUCED BY TILTING THE CAMERA.

The camera was pointed too high. This building should have been taken from the middle story window of the building opposite.

If the object is low down on the ground, like a small child, or dog, the camera should be held down level with the center of the object.

For snap shots the lever on left hand side of camera as shown in Fig. 3 must be pushed in to the limit of motion. This lever is to be used only in making time exposures as described on page 13.

After each exposure turn the winding key to the left until the next number appears before the window in the back of camera.

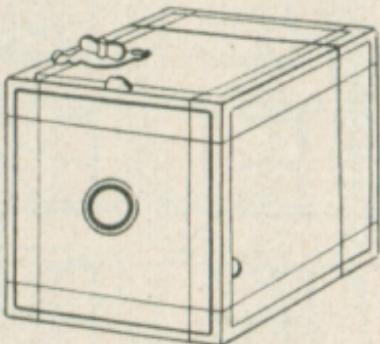


Fig. 3.

SECTION 2.

Time Exposures Indoors.

PUT THE CAMERA IN POSITION.

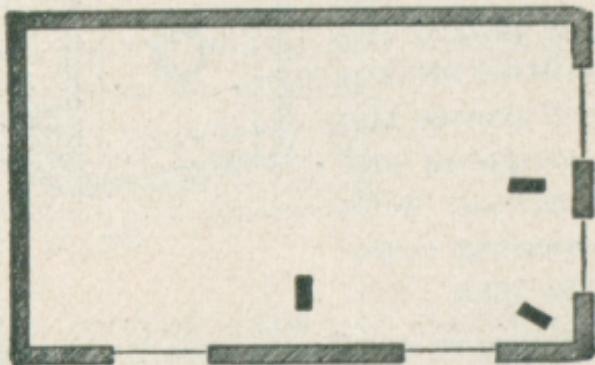


Fig. 1. Diagram showing positions for camera.

Use some firm support, like a chair or table. Set in such position as to embrace the view desired.

The diagram (Fig. 1) 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 on left hand side of camera front as shown in Fig. 2. 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.

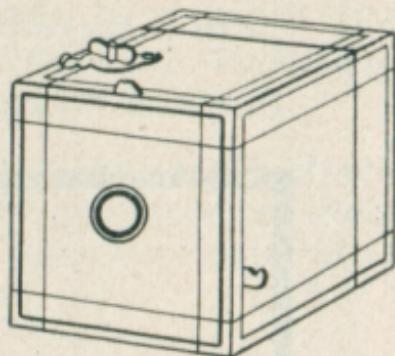


Fig. 2.

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 12.)

For interiors, the following table is a good guide :

Time Needed for Interior Exposures.

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 3 hours after sunrise until 3 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 5 feet from the figure; for a three-quarter figure 7 feet, and for a full figure 10 feet. The background should form a contrast with the sitter.

Time Exposures in the Open Air.

On cloudy days Time Exposures may be made in the open air.

WITH LIGHT CLOUDS—The shutter can hardly be opened and closed quickly enough to avoid over-exposure.

WITH HEAVY CLOUDS—From $\frac{1}{2}$ to 1 second will be sufficient.

The above is calculated for hours from 3 hours after sunrise until 3 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.

SECTION 3.

Flash Light Pictures.

By the introduction of Eastman's Flash Sheets, picture taking at night has been wonderfully simplified. A package of flash sheets, a piece of card-board, a pin and a match complete the list of essential extras.

The cost then is:

One Package Eastman's Flash Sheets, 25c.

With flash sheets no lamp is necessary, there is a minimum of smoke and they are far safer than any of the self-burning flash powders, 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 the 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 souve-

nirs 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 exposure, as directed on page 13 of this Manual, 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 card board which has previously been fixed in a perpendicular position. If the card board is white it will act as a reflector and increase the strength of the picture.

The Flash Sheet should *always* be placed two feet behind and two to 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 light 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 card-board a foot square placed under the Flash Sheet will prevent any sparks from the flash doing damage,

Taking the Picture.

Having the camera and the Flash Sheet both in position and all being in readiness open the camera shutter, stand at arm's length and touch a match to the lower corner of the Flash-Sheet. 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 Sheets.

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 card-board, one above the other, the corners slightly overlapping.

Table.

For 10 feet distance and light walls and hangings use 1 sheet.

For 10 feet distance and dark walls and hangings use 2 sheets.

For 15 feet distance and light walls and hangings use 2 sheets.

For 15 feet distance and dark walls and hangings use 3 sheets.

For 25 feet distance and light walls and hangings use 3 sheets.

For 25 feet distance and dark walls and hangings use 4 sheets.

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 toward the camera. For a three-quarter picture this will be 7 feet, and for a full figure, 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.

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.

BACKGROUNDS.—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 back-

ground 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 light wall will be suitable.

The lights in the room need not be turned out unless they are so situated as to be within range of the camera.

Eastman's 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's Flash Cartridges, Flash Lamps and Flash Powder.

Eastman's Flash Cartridges or Eastman's Flash Lamp and Powder 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 powder or cartridges are only superior where absolutely *instantaneous* work is essential.

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.

1. When the last film has been exposed, give the key about a dozen extra turns. This covers the film with black paper again.

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

3. Remove the back and the roll holder as shown on pages 3 to 5.

4. Remove the reel of exposed film and immediately stick securely down with the gummed slip that will be found at end of black paper. Wrap up to prevent the possibility of injury by light.

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

6. Load as described in Part I, page 3.

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

PART IV.

Developing and Printing.

SECTION 1. DEVELOPING.

Provide a Brownie Developing and Printing Outfit which contains:

1	Eastman Candle Lamp,	.25
3	Developing Trays,	.30
1	Glass Beaker,	.12
1	Brownie Printing Frame,	.10
1	Stirring Rod,	.05
1/6	Dozen Developing Powders,	.10
1/4	Pound Hyposulphite Soda,	.04
1	Dozen 2 1/2 x 2 1/2 Dekko Paper,	.15
1/6	Dozen Dekko Developer Powders,	.10
1	Package Bromide of Potassium,	.10
1	Package Alum,	.05
1	Bottle Glycerine,	.05
		<hr/>
		\$1.41

Price Complete, Neatly Packed, 75 cents.

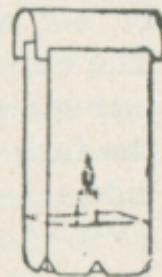
The above outfit contains all of the essentials for developing Brownie negatives, whether made on Paper-Film or Transparent Film, and for making 12 prints from same.

Also provide a pair of shears, a pitcher of *cold* water (preferably ice water), a deep earthen dish, a pail for slops, and a *dark room* having a shelf or table.

By a dark room is meant one that is wholly dark—not a ray of light in it. Such a room can easily be secured at night almost anywhere. The reason a dark room is required is that the film is extremely sensitive to white light, either daylight or lamplight, and would be spoiled if exposed to it, even for a fraction of a second.

Having provided such a room or closet where, when the door is closed, no ray of light can be seen.

1. Set up on the table or shelf the Orange Candle Lamp, and light it as directed in the circular which comes in the box in which the lamp is enclosed.



The lamp gives a subdued yellow or orange light which will not injure the film unless it is held close to it. Set the lamp on the table at least eighteen inches from, and with the *side* toward the operator.

2. Unroll the film and cut the exposures apart, as shown in Fig. 1, cutting them at the marks which appear half way between the numbers.

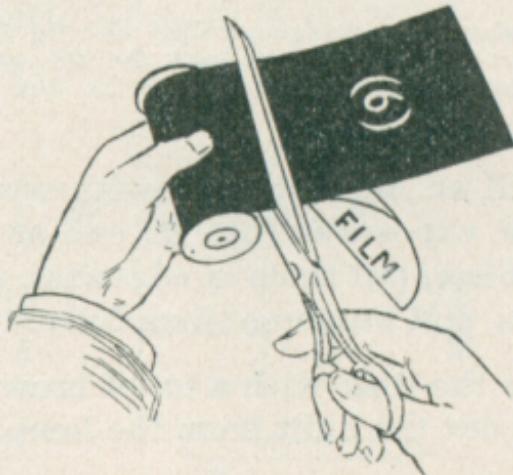


Fig. 1—RIGHT.

In unrolling the film preparatory to development, care must be taken that the end be not allowed to roll up over the paper. The exposures should be cut apart with the *paper on top*. Do not let the fingers touch the face of the film. (The face is the dull side.)

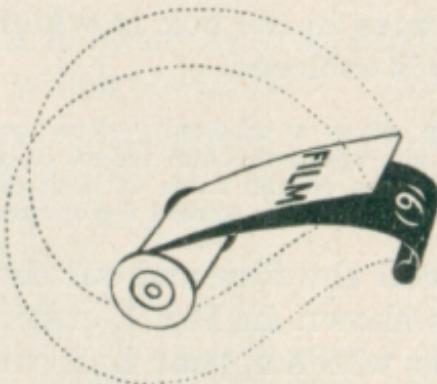


Fig. 2—WRONG.

Fig. 2 shows a cartridge unrolled with the film on top. To correct this, simply turn back the film as indicated by the dotted lines, thus bringing the film under the paper.

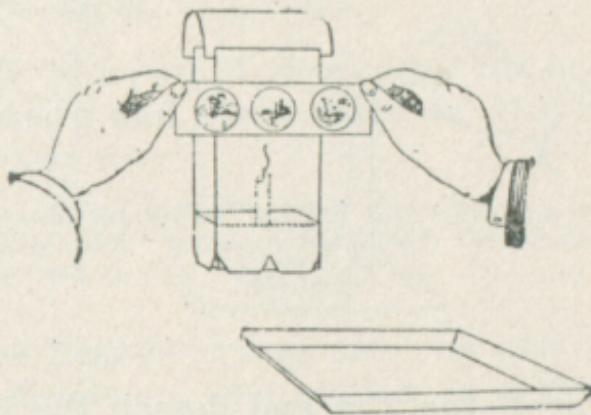
3. Fill an earthen dish with water, and put the exposures into it, one at a time, **face down**; put them in edgewise, to avoid air bells, and immerse them fully.

Cover the dish with a bit of brown paper to keep out the light from the lamp.

4. Open one of the developer powders and put the contents (two chemicals) into the

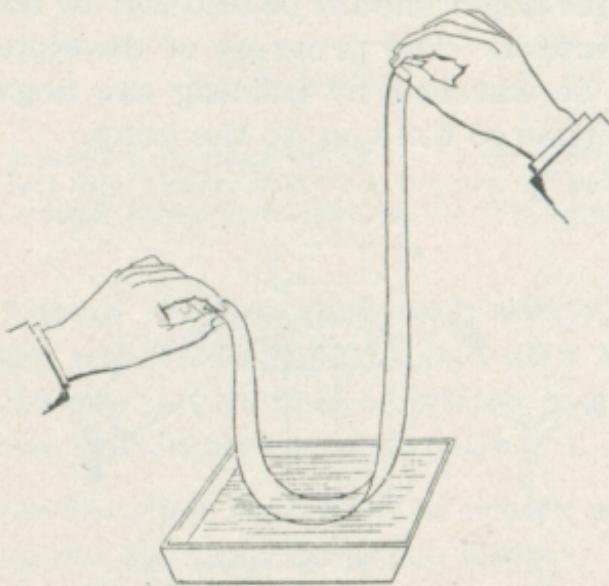
beaker and fill it up to the ring with water. Stir until dissolved with the wooden stirring rod.

5. Take one of the exposures from the water and immerse it in tray of developer. (Develop Paper-Film **face up**, Transparent Film **face down**.) Rock it back and forth, to prevent streaks and air bubbles; in about 1 minute the film will begin to darken in spots, representing the lights of the picture, and in about 2 minutes the operator will be able to distinguish objects in the picture. The developer should be allowed to act 5 to 10 minutes. The progress of development may be watched by holding the negative, from time to time, up to the lamp.



Another Way.

If desired, the development of *Transparent Film* may be started before cutting the negatives apart, and by some this method is preferred, as it removes the possibility of cutting through the negatives. Do not attempt to develop Paper-Film in the manner described below as it will be likely to tear. To develop Paper-Film in the strip, see special instructions accompanying each package.



- a. Unroll the film and detach the entire strip from the black paper.

- b. Pass the film through the tray of clean cold water, as shown in the cut, holding one end in each hand. Pass through the water several times, that there may be no bubbles remaining on the film. When it is thoroughly wet, with no air bubbles, place the strip of film in the tray of water, immersing it fully but not folding tightly so as to crack it.
- c. Prepare the developer, as described in Section 4, page 26.
- d. Now pass the film through the developer in the same manner as described for wetting it, and shown in cut. Keep it constantly in motion, and in about one minute the high lights will begin to darken and you will readily be able to distinguish the unexposed sections between the negatives.
- e. With a pair of shears cut the negatives apart and place them in the tray of clear water.

NOTE.—If the entire strip of film develops evenly the development may be completed before cutting the sections apart.

The negatives may now be immersed in the developer, one section at a time, and developed as before described.

6. Transfer the developed film to the second tray and rinse two or three times with water, leaving it to soak while the next film is being developed.

One dozen negatives can be developed one after the other in one portion of developer; then it should be thrown away and a fresh portion mixed.

Only one section should be developed at a time, until the operator becomes expert, then he can manage three or four in the tray at one time, and the developer will answer for twenty-four negatives before being exhausted.

As each successive negative is developed it should be put, with the preceding negatives, in the washing tray and the water changed twice, to prevent the developer remaining in the film from staining them.

7. Put two tablespoonfuls of Hypo-sulphite of Soda into the third (marked "Hypo") tray, fill two-thirds full of water, and stir until dissolved. This is called the fixing bath.

8. Immerse the negatives one by one in the fixing bath until they are entirely clear of white spots and are transparent instead of milky by transmitted light. This will require about ten minutes.

9. The yellow shade can be removed from the lamp as soon as all the exposures have been fixed.

10. Pour off the fixing solution into the slop bucket, and fill the tray with clear, cold water, repeat this at intervals of five minutes, five or six times, keeping the nega-

tives in motion, or transferring them back and forth to tray No. 2, one by one, to ensure the water acting evenly upon them.

The fixing solution must only be used in tray No. 3 and the negatives, after fixing, must not be put in No. 1 tray or in dish used for preliminary soaking. Neither must any of the fixing solution be allowed to touch the films, through the agency of the fingers, or otherwise, until they are ready to go into the fixing bath, otherwise they will be spotted or blackened, so as to be useless.

11. When the negatives are thoroughly washed, put one-half ounce of glycerine into one pint of water (four portions measured with the developer glass) stir well and soak the negatives in the solution for five minutes, then remove them and wipe off the surplus moisture with a soft, damp cloth, and pin them by the four corners, face up, to a flat surface, to dry.

The glycerine solution may be used repeatedly.

The trays and beaker should now be rinsed out and set away to drain and dry.

When the negatives are dry, they are ready for printing, as described in Section 3.

To avoid curling, Transparent Film should be kept Face Down in all the baths. Paper-Film should be kept Face Down in all of the baths except the developer, where it must be handled Face Up in order to watch the progress of development.

Defective Negatives.

By following closely the foregoing directions, the novice can make seventy-five per cent. or upwards of good negatives. Sometimes, however, the directions are not followed, and failure results.

To forewarn the camerist is to forearm him, and we therefore describe the common causes of failure.

Under-Exposure.

Caused by making snap shots indoors, or in the shade, or when the light is weak, late in the day, or by closing the lens too soon on time exposure.

Under-exposure is evidenced by slowness in the appearance of the image in development, and the absence of detail in the shadows. In under-exposure the sky appears black in development, while the rest of the negative remains white, with no detail.

Over-Exposure.

Caused by too much light.

Negative develops evenly, shadows almost as fast as high lights. No contrast, and no deep shadows. Over-exposure can be overcome in the development, by the addition of bromide of potassium to the developer. The printing and developing outfit includes a package of bromide, with directions for its use. The novice will soon learn to recognize over-exposure, and to apply the remedy.

After the bromide has been added to the developer, it should not be used for another negative unless it is known to have been over-exposed.

Fog.

Caused by white light in the dark room, or holding the film too long in the lamp-light. (Even the yellow light from the lamp will fog the film after a time.)

Fog causes the film to blacken all over soon after the developer is applied, and if the fog is considerable, it obliterates the image entirely.

Over-Development.

Caused by leaving the negative too long in the developer.

In this case the negative is very strong and intense by transmitted light and requires a very long time to print. The remedy is obvious.

Under-Development.

Caused by removal from the developer too soon.

An under-developed negative differs from an under-exposed one, in that it is apt to be thin and full of detail, instead of harsh and lacking in detail. If the development is carried on as before directed this defect is not liable to occur.

Spots, Streaks, Etc.

Air bells on the film in the developer or fixing bath are liable to cause spots ; and streaks are caused by allowing the film to remain uncovered in part by the various solutions while in them.

White, milky spots on Transparent Film are evidence that the negative has not been properly fixed, and the negative should be put back into fixing bath and then rewashed.

Always Develop Transparent Film Face Down.

SECTION 2.

Printing.

Brownie negatives, whether on Transparent Film or Paper-Film, give beautiful, soft black and white effects when printed on the Dekko paper furnished with the Brownie outfits.

Paper-Film negatives must always be printed on Dekko or Velox paper, as the partial opacity of the paper support makes the use of a printing-out paper impracticable on account of the long time required for printing.

Method of Printing.

Open printing frame by pushing up metal catch at end; place the negative face to face with a piece of the Dekko paper and insert in the printing frame with the negative next to the glass; close the printing frame and again press down catch, thus holding the negative in close contact with the paper.

The face of the Dekko is the concave side. The face of a Transparent Film negative is the dull side. The face of a Paper-Film negative is the side on which the image appears.

Light.

Dekko paper may be safely handled for the purpose of placing in printing frame and developing, eight to ten feet away from ordinary full flame artificial light or three or four feet away if light is turned low. With Welsbach gaslight and daylight it is necessary to reduce the light somewhat by shading the lamp or window with one thickness of orange post-office paper. If there is a yellow tinted or dark shade on window, the post-office paper need not be used.

Print by holding six inches from an artificial light or two feet from a window covered with one thickness of tissue paper. The length of exposure varies with the density of negative and strength of the light. With artificial light, using the same negative, the various lights may be approximately compared as follows:

Welsbach gaslight—strongest.

Incandescent light—about one-half as strong as Welsbach gaslight.

Ordinary gaslight—slightly weaker than incandescent light.

Oil lamp of ordinary size—about one-third as strong as an ordinary gas burner.

With a Transparent Film negative of medium density expose one to five minutes at a distance of from six to eight inches from an ordinary gas burner. Double the exposure with Paper-Film.

On account of its uniformity, artificial light is recommended in preference to daylight, as once the amount of exposure with a given artificial light is ascertained, it becomes easy to approximate the amount of time necessary to properly make subsequent exposures; the only variation of time which it is necessary to make being that required by the variation in density of different negatives. With daylight the exposure is only about as many seconds as the above table calls for minutes.

Development.

To develop fill the glass beaker to the ring with water and dissolve therein one pair of the Dekko Developer Powders and add three to five drops of Bromide of Potassium solution. Now immerse print in pure cold water for a few seconds, then place face up in tray and flood with developer. Development should be very rapid. If print has been properly exposed and developer is of right strength, the print will be developed in about 5 seconds from time developer is flowed over same. As soon as image has progressed sufficiently far, remove quickly to following fixing bath.

Fixing Bath.

Hypo-sulphite of Soda,	1 oz.
Alum (crystals),	1/4 oz.
Water,	4 oz.

Fix for 15 minutes, keeping prints separated. When fixed, transfer to washing tray.

If you have not the conveniences for weighing chemicals, put two tablespoonfuls of hypo-sulphite of soda in tray and fill two-thirds full of water, then add one-half of the alum in package furnished with this outfit.

Washing.

Wash one hour in running water or in 12 to 15 changes of clear water, giving 4 or 5 minutes for each change,

Mounting.

Dekko prints should be mounted wet. Lay the wet print face down on table covered with oil or rubber cloth or on sheet of glass and squeegee off all the surplus water, then brush over the back with starch paste, lay the print on the mount, then cover the print with a clean piece of blotting paper and rub into contact.

Details.

CLEAN DISHES: CLEAN HANDS: The faintest trace of Hypo-sulphite of soda will spoil the prints if it gets into contact with them before the proper time. Great care should therefore be used to have both hands and trays clean.

The **BROMIDE OF POTASSIUM** is used as a restrainer and to prevent fog. A small quantity of it must be used, otherwise the high lights are liable to be veiled.

DEVELOPER once used should not be carried over and used the next day or subsequently.

The **OLIVE GREEN** tone is obtained by the addition of Bromide of Potassium.

The **BLUE BLACK** tone is obtained by using only sufficient Bromide of Potassium to clear the whites.

Don't.

DON'T use pulverized, fused, or burned alum; the crystal article is the most uniform and consequently the best.

DON'T use a tray for developing which has previously been used for hypo solution, pyro developer or final washing.

DON'T use an old fixing solution, it is liable to cause trouble.

Difficulties, Their Cause and Remedy.

VEILED WHITES: caused by forcing development, insufficient Bromide, fogged paper. **REMEDY**, give more time, use more Bromide, screen light. Also caused when image flashes up in developer by too much exposure, in which case give less time.

MUDDY SHADOWS: caused by developer being used for too many prints, or by too much Bromide. **REMEDY**, use fresh developer, less Bromide.

PRINTS TOO GREEN: caused by too much Bromide. **REMEDY**, use less. Also caused by weak developer.

PRINTS TOO BLUE BLACK: caused by insufficient Bromide. **REMEDY**, use more.

CONTRASTY PRINTS: caused by insufficient time or negatives too harsh. **REMEDY**, give more time; make softer negatives.

FLAT PRINTS: caused by overtiming or negatives flat. **REMEDY**, give less time in first instance, and if trouble is with negatives give negatives less time; develop further.

STAINS: caused by forcing development, or chemically dirty dishes or hands, insufficient fixing, foreign chemicals. **REMEDY,** do not allow chemicals other than those given in formulas to come in contact with paper; use fresh fixing; keep prints in constant motion the entire 15 minutes they remain in fixing, and if due to forcing development give more time in printing.

ROUND, WHITE SPOTS: caused by air bells which form on face of print when developer is first flowed on. **REMEDY,** use more developer, break air bells with finger.

If other difficulties appear, their cause and remedy will be cheerfully explained if a print showing trouble is sent to us.

PRICE LIST.

Brownie Camera, for $2\frac{1}{4}$ x $2\frac{1}{4}$ pictures, - - - - -	\$1.00
Paper-Film Cartridge, 6 exposures, $2\frac{1}{4}$ x $2\frac{1}{4}$, - - - - -	.10
Transparent Film Cartridge, 6 exposures, $2\frac{1}{4}$ x $2\frac{1}{4}$, - - - - -	.15
Brownie Developing and Printing Outfit, including Dekko Paper for 12 prints, - - - - -	.75
Developing one roll of paper film (6 exposures) and furnishing 1 Dekko print from each negative, (we do not furnish Solio prints from paper-film negatives), - - - - -	.50
Developing one roll of Transparent Film (6 exposures) and furnishing 1 Solio print from each negative, - - - - -	.40
Do., Dekko prints, - - - - -	.50
Developing only, each, - - - - -	.08
Printing and mounting only, each, Dekko, - - - - -	.06
Printing and mounting only, each, on Solio. (We do not furnish Solio prints from Paper-Film negatives.) - - - - -	.04

On orders for developing or printing less than one-half dozen, 25 cents extra will be charged.

Mounts, Scotch Gray, Ivy Green, Royal Brown or Carbon Black.	
Square edges, per dozen, - - -	\$.07
Eastman's Dekko Paper, per doz., $2\frac{1}{2}$ x $2\frac{1}{2}$, - - - - -	.15
Dekko Developer Powders, per doz. pairs, - - - - -	.50
Eastman's Sepia Paper (not to be used with Paper-Film) per pkg. 2 doz., $2\frac{1}{2}$ x $2\frac{1}{2}$, - - - - -	.15
Eastman's Solio Paper (not to be used with Paper Film), per pkg. 2 doz., $2\frac{1}{2}$ x $2\frac{1}{2}$, - - - - -	.20
Solio Combined Toning and Fixing Solution, per 8 oz. bottle, - - -	.50
Do., 4 oz. bottle, - - - - -	.30
Eastman's Flash Lamp, - - - - -	1.25
Eastman's Flash Powder for same, per oz., - - - - -	.60
Eastman's Flash Sheets, per pkg., $\frac{1}{2}$ doz., - - - - -	.25
Eastman's Flash Cartridges, per pkg., $\frac{1}{2}$ doz., No. 1, - - -	.60
do., No. 2, - - - - -	.40
do., No. 3, - - - - -	.25
No. 2 Kodak Dark Room Lamp, ruby and orange glass, $\frac{5}{8}$ -inch wick,	\$1.00
Developing Powders, Eastman's Hydrochinon (do not stain the fingers), per doz., - - - - -	.50

Developing Powders, Eastman's		
Pyro, per doz.,		\$.50
"Picture Taking and Picture Making"—a book for the amateur—		
120 pages, cardboard cover,		.50
do., cloth bound,		1.00
Eastman's Indexed Negative Storage Album, holds 100 Brownie Negatives,		1.00
Eastman's Photo Paste, 3 oz. tube,		.15
Do., 5 oz. tube,		.25
Eastman's Negative Pins, for drying film negatives, per box of 25,		.50

Amounts less than one dollar may be sent in postage stamps.

EASTMAN KODAK COMPANY,

Rochester, N. Y.

If it isn't an Eastman, it isn't a Kodak.

The Flexo Kodak

\$5.00

For $3\frac{1}{2} \times 3\frac{1}{2}$ pictures. Loads in daylight with cartridges for 2, 6 or 12 exposures.

Has improved rotary shutter, set of three stops, fine achromatic lens, view finder, a socket for tripod screw and is covered with a fine quality of grain leather.

Kodaks, \$5.00 to \$35.00.

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Catalogues free.

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