

This manual is for reference and historical purposes, all rights reserved.

**This page is copyright© by M. Butkus, NJ.**

This page may not be sold or distributed without the expressed permission of the producer

I have no connection with any camera company

On-line camera manual library

This is the full text and images from the manual. This may take 3 full minutes for the PDF file to download.

**If you find this manual useful, how about a donation of \$3 to: M. Butkus, 29 Lake Ave., High Bridge, NJ 08829-1701 and send your e-mail address so I can thank you. Most other places would charge you \$7.50 for a electronic copy or \$18.00 for a hard to read Xerox copy.**

**This will allow me to continue to buy new manuals and pay their shipping costs.**

**It'll make you feel better, won't it?**

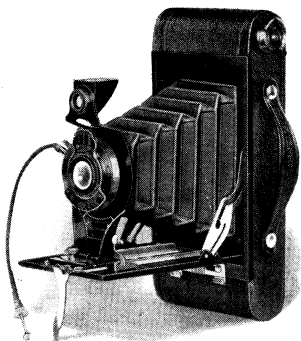
**If you use Pay Pal or wish to use your credit card,  
click on the secure site on my main page.**

*Picture taking with the*

No. 2

Folding *Autographic*  
Brownie Camera

Rapid Rectilinear Lens



EASTMAN KODAK COMPANY,  
ROCHESTER, N. Y.

# "Kodak"

TRADE MARK

1888



EASTMAN KODAK COMPANY,  
ROCHESTER, N. Y.



*Manufacturers of*

Kodak Cameras,	Brownie Cameras,
Kodak Film,	Kodak Film Tanks,
Velox Paper,	Solio Paper,
Brownie Developing Boxes,	
Brownie Enlarging Cameras,	
Eastman Royal Bromide Paper,	
Eastman Standard Bromide Paper,	
Eastman Velvet Bromide Paper,	
Eastman Brilliant Velvet Bromide Paper,	
Eastman Matte-Enameled Bromide Paper,	
Eastman Enameled Bromide Paper,	
Kodak Dry Mounting Tissue,	
Eastman Tested Chemicals,	
Tripods and Other Specialties.	

*Trade Marks Reg. U. S. Pat. Off.*

*September, 1923.*

# "KODAKERY"

*A monthly magazine that teaches how to make better pictures, will be sent FREE OF CHARGE to anyone who purchases one of our amateur cameras from a dealer in photographic goods, provided this blank is filled out and sent to us within 30 days from the date the camera was purchased.*

EASTMAN KODAK COMPANY.

TO THE EASTMAN KODAK CO., ROCHESTER, N. Y.:

*In accordance with your offer, please place my name on the mailing list for "KODAKERY" (with the understanding that there is to be no cost to me), I having purchased a*

TEAR OFF HERE

.....  
(Kind of Camera)

from.....

(Name of Dealer)

on.....

(Date Here)

**Print your name and address plainly:**

.....  
.....  
.....  
N. B.—The magazine will be sent for one year only on above offer. After that the subscription price will be 60 cents per annum, but you are not under the slightest obligation to renew.—E. K. Co.

Form No. 336.23.

*Picture taking with the*

No. 2

Folding *Autographic*  
Brownie Camera

Rapid Rectilinear Lens



*Published by*  
EASTMAN KODAK COMPANY  
ROCHESTER, N. Y.

## Order Film by Number

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

**A-120** is the number of film for this camera (No. 2 Folding Autographic Brownie).

The number appears on the carton, on the cartridge, and on the Autographic door, which is located on the back of the camera.

Autographic film can be used in old style Brownies, old style film can be used in Autographic Brownies, but to get *autographic results* Autographic film must be used in an Autographic Brownie.

### IMPORTANT

When Autographing film, bear down with the stylus as heavily as the paper will stand without tearing.

## Before Loading

Before taking any pictures with the No. 2 Folding Autographic Brownie Camera read the following instructions carefully. Make yourself perfectly familiar with the camera, 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 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. Throughout all the operations of loading and unloading, be extremely careful to keep the red paper wound tightly around the film to prevent the admission of light.

# CONTENTS

## PART I

Loading the Camera, . . . . .	5
-------------------------------	---

## PART II

Making the Exposures, . . . . .	11
Operating the Shutter, . . . . .	11
Instantaneous Exposures, . . . . .	14
Focusing, . . . . .	15
Diaphragms, . . . . .	17
Making the Exposure, . . . . .	19
Autographic Feature, . . . . .	25
Time Exposures—Interiors, . . . . .	29
To Make a Portrait, . . . . .	34
Time Exposures—Outdoors, . . . . .	36
Flash-light Exposures, . . . . .	37

## PART III

Removing the Film, . . . . .	43
Finishing the Pictures, . . . . .	48



## PART I

### Loading the Camera

THE film for the No. 2 Folding Autographic Brownie Camera, is furnished in a light-proof cartridge and the camera can, therefore, be loaded in daylight. This should be done, however, in a subdued light, *not* in the glare of bright sunlight. It should also be borne in mind that after the seal is broken, care must be taken to keep the red paper taut on the spool, otherwise it may slip and loosen sufficiently to fog the film.



THE FILM  
No. A-120

1. To load the camera, take a position where the daylight is somewhat subdued, not in the direct sunlight, and remove front of camera. To do this, push metal lock to the right, Fig. 1, page 6. Then grasp the front of camera by the two metal edges and lift it upwards, first lifting that end on which the lock is fastened, and remove entirely that part of the camera. Fig. 2, page 6.

The camera is now ready for loading.

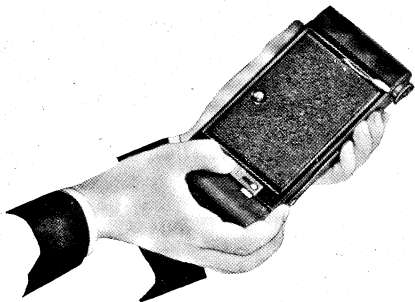


Fig. 1

2. At each end of the camera will be found a recess for holding the film spools.

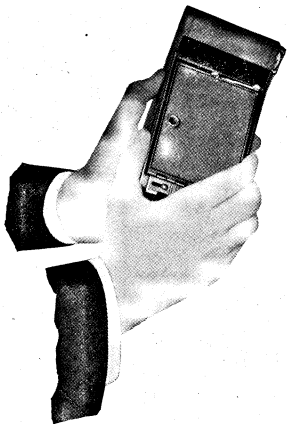


Fig. 2

As sent out from the factory, there is one empty spool at the winding end of the camera, and the fresh cartridge is to be inserted in the opposite end.

The empty spool, which is used as the reel, must now be removed. This may be done by first pulling out the winding key to limit of motion, which will release the spool, and it can then be readily removed. Fig. 3.

3. Break and remove the gummed band that holds the end of red paper, from the cartridge, unfold the end and thread the red paper into the longer opening of the slit in empty spool, so that the slot in the end of spool will be at the top, while at the same time the slot at end of full spool will be at the bottom of the cartridge. Then give the empty spool three or four turns, or until the black lines

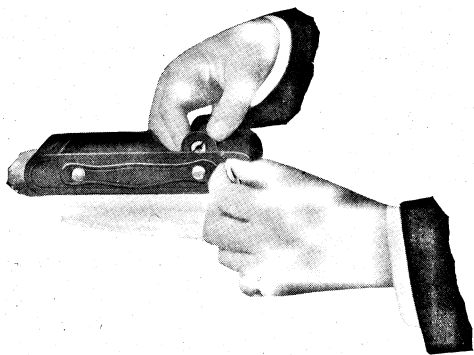


Fig. 3

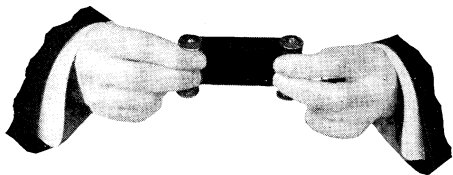


Fig. 4

on outside of paper are reached, at the same time being careful that the paper draws straight and true. See Fig. 4.

**To secure a tight grip on the red paper unfold the end, and thread it into the longer opening in the slit in reel *as far as it will go*. By doing this the red paper will not be liable to slip.**

4. The camera may now be loaded by first unrolling about four inches of the red paper and then placing the two spools into the film pockets at each end of the camera. Fig. 5.

### Important

Be sure to get the top of spool at top of camera (each spool is marked with the word "Top", on the red paper near the top of the spool) when inserting,

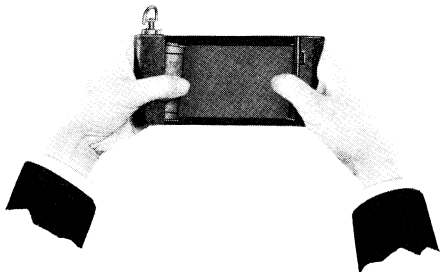


Fig. 5

otherwise the film will come on the wrong side of red paper when reeled off and total failure will result. The winding key is on the top of the camera.

5. After spools have been placed into the pockets, push the full spool as far back as possible in order that the tension spring may hold it securely in place, creating sufficient drag to draw the film taut, and afford perfect register of the focal plane.

Press in on the winding key in top of camera and turn it to the left, until the web on the key fits into slot in top of empty spool, which is the reel. Fig. 6.

### Caution

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

6. The camera must now be closed, reversing the operation shown in Figs. 1 and 2. When replacing front of camera after it is loaded, first insert

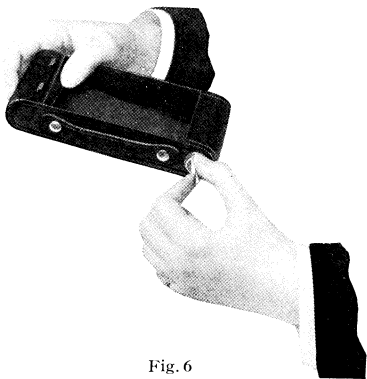


Fig. 6

the end opposite the lock, the edge of box must be in the metal groove at end of front, then drop the end on which the lock is fastened down into place. Make sure that the metal lock is fastened securely.

Throughout the foregoing operations, from the time the gummed band is broken on the fresh roll of film until the camera is closed, keep the red paper wound tightly on the roll. If it is allowed to loosen, light will be admitted and the film fogged.

7. The roll of film in the camera is covered with red paper and this must be partly reeled off before a picture can be taken. Turn the key to the left and watch in the little red window in the back of the camera. When about ten or twelve turns have been given, a black index hand will appear in the little red window. This hand is a warning that the first number is approaching. Then turn the key slowly until figure 1 appears exactly in the center of the red window.

Press in on the winding key while turning it, so as to keep the web on the key, in the slot in end of spool, and to avoid the key loosening and allowing film and red paper to unwind.

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



1  
1  
1

## PART II

### Making the Exposures

**B**EFORE making an exposure with the No. 2 Folding Autographic Brownie, either time or instantaneous, be sure of four things:

**First**—That the shutter is adjusted properly, for instantaneous, time or “bulb” exposures as desired.

**Second**—That the diaphragm lever is placed at the proper stop opening.

**Third**—That the camera is focused.

**Fourth**—That an unexposed section of the film is turned into position.

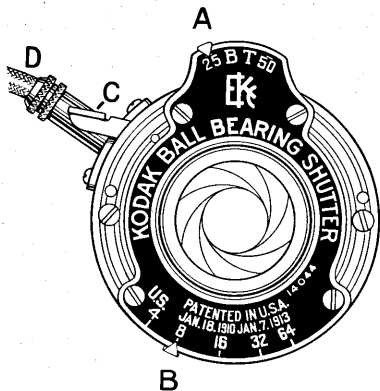
### Operating the Shutter

Perfect familiarity with the shutter is essential to successful picture taking with any camera.

The following directions should, therefore, be carefully read and the shutter operated several times before threading the film up for use.

**NOTE**—The shutter is self-setting. Exposures are made by pressing push-pin at end of cable release D or pushing down on exposure lever C. See diagram of shutter on page 12.

Avoid making too sharp a bend in the cable release, or it will be liable to kink.



## “Snapshots”

### For all Ordinary Instantaneous Exposures

**First**—Move the lever A to 25 or 50 (representing the speeds of the shutter), according to the time of instantaneous exposure desired. This adjusts the shutter for Instantaneous Exposures.

**Second**—Move the lever B to U.S. 8. Lever B controls the iris diaphragm and U.S. 8 is the proper opening for ordinary Instantaneous Exposures when the subject is in bright sunshine, using speed 25.

**Third**—Press push-pin at end of cable release D or push down on exposure lever C. *This makes the exposure.*

**NOTE**—Press push-pin on cable release with a firm, quick movement, at the same time be sure to hold the camera rigid, as a slight jarring will cause a blurred negative.



## Time Exposures

**First**—Move the lever A to the point “T” (time). This adjusts the shutter for Time Exposures.

**Second**—Move the lever B to U.S. 4, 8, 16, 32 or 64. See instructions for the use of the diaphragms or stops as given on pages 17 and 18, also the table for making Interior Time Exposures on pages 32 and 33, and the table for Time Exposures Outdoors, page 36.

**Third**—Press the push-pin at end of cable release D or push down on exposure lever C. *This opens the shutter.* Time the exposure by a watch. Again press the push-pin or the exposure lever. *This closes the shutter.*

## Bulb Exposures

When it is desirable to make a very short time exposure this is best accomplished by making a “Bulb Exposure”.

**First**—Move the lever A to the point “B” (bulb). This adjusts the shutter for “Bulb” Exposures.

**Second**—Move the lever B controlling the stops, to U.S. 4, 8, 16, 32 or 64. See instructions for the use of the diaphragms or stops as given on pages 17 and 18, also the table for making Interior Time Exposures on pages 32 and 33, and the table for Time Exposures Outdoors, page 36.

**Third**—Press the push-pin at end of cable release D or push down the exposure lever C, to open the shutter, and release it to close the shutter. *This makes the exposure.* The shutter will remain open as long as the push-pin or the exposure lever is under pressure.

**Important**—*Never oil shutter.* In case of accident, return camera to your dealer or to us for repairs.

As a general rule, make exposures with the cable release instead of with the lever C, as the cable release is less likely to jar the camera.

## **Instantaneous Exposures**

### **“Snapshots”**

When making instantaneous exposures or snapshots, the subject should be in the broad, open sunlight, but the camera must not. The sun should be behind the back or over the shoulder of the operator. If it shines directly into the lens it will blur and fog the picture.

For special instructions in regard to making portraits indoors, see page 34.

### **Use Stop U.S. 8 and Speed 25**

For all ordinary outdoor work, when the subject is in the bright sunshine, use stop U.S. 8 and use speed 25. If a smaller stop is used for ordinary snapshots, the light will be so much reduced that it will not sufficiently impress the image on the film, and failure will result.

When making portraits out of doors, when the sun is shining brightly, have the subject in the shade of a building or a large tree, but with clear and unobstructed sky overhead—then use stop U.S. 4 and use speed 25. By following this rule unpleasant and distorting shadows on the face will be avoided.

In views at the seashore and on the water when the sunlight on the subject is *unusually strong* and there are no heavy shadows, stop U.S. 16 and speed 50 should be used.

For ordinary *landscapes*, in bright sunshine with clear sky overhead, use stop U.S. 16 and speed 25.

If a smaller stop opening than U.S. 16 is used for snapshots, *absolute failure will result*, except that U.S. 32 should be used for extremely distant views, marine, snow scenes and clouds, in bright sunshine, using speed 25.

## Focus on the Subject

Pull up the lever on front of camera, located at the winding end. Fig. 1. This unlocks the bed of camera. Then pull lever forward and push down the bed of camera to the limit of motion.

At the front of camera bed and at one side will be found a focusing scale which is to be used for focusing the camera. The focusing scale has three slots marked 8, 25 and 100 feet.

It is not necessary to estimate the distance with any more than approximate accuracy; for instance, if the focus is set at the slot marked 25 feet (the



Fig. 1. Opening the Front

usual distance for ordinary street work), everything from about  $15\frac{1}{2}$  feet to about 66 feet will be in focus. When the camera is focused in this manner, it may then be used as a regular fixed focus camera; and for ordinary snapshots use stop U.S. 8. When using stop U.S. 8 the range of sharpness will be about 14 feet to infinity, see table on page 17. Where the principal object is nearer or at a great distance, the focus should be changed accordingly. For distant views set the focus with the catch or lever in the slot marked 100 feet, and when the subject is about 8 feet from the lens, use the slot marked 8 feet. Where the subject is close to the lens, then use a Kodak Portrait Attachment, see page 35, or use a small stop opening, see table on page 17.

## What Depth of Focus Means

Suppose now that the lens is used at its full opening, U.S. 4, and the focus is set at eight feet. An object eight feet distant will be absolutely sharp, but objects six and twelve feet distant will not be. Stop the lens down to U.S. 16 and those objects each side of the exact point of focus will increase in sharpness. Go farther and use stop U.S. 64, and everything from about four and three-quarters feet to thirty-six feet will be sharp.

It will thus be seen that the smaller the stop the greater the depth of focus, i. e., the greater the power of the lens to sharply define, at the same time, objects nearer the camera and farther from the camera than the principal object in the picture, which, of course, is the object focused

upon. But it is obvious that with the small stops the exposure must be correspondingly lengthened.

The following table will be a help in determining the range of critical definition or depth of focus when the No. 2 Folding Autographic Brownie Camera (when it is fitted with the Rapid Rectilinear Lens) is focused with different stops:

STOPS	U.S.4	U.S.8	U.S.16	U.S.32	U.S.64					
Distance Focused Upon	RANGE OF SHARPNESS.									
	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.
100 Ft.	29 to Inf.	22 to Inf.	17 to Inf.	13 to Inf.	9 to Inf.					
25 Ft.	15½ to 66	14 to Inf.	11½ to Inf.	9½ to Inf.	7½ to Inf.					
8 Ft.	6¾ to 10	6½ to 11	6 to 13	5¼ to 18	4¾ to 36					

"Inf." is the abbreviation for Infinity—meaning an infinite distance from the lens.



**U.S. 4**



**U.S. 8**



**U.S. 16**



**U.S. 32**



**U.S. 64**

This diagram shows the actual sizes of the stop openings or diaphragms of the shutter used on the No. 2 Folding Autographic Brownie Camera when the camera is fitted with the Rapid Rectilinear Lens. It clearly shows the relative sizes of the various stop openings and the difference between their areas.

COPYRIGHT 1922  
BY EASTMAN KODAK COMPANY

## Diaphragms

The diaphragms, sometimes called stops, should be used as follows:

**U.S.4**—For instantaneous exposures on *slightly* cloudy days,

using speed 25; also for portraits out of doors, when the sun is shining, see page 14.

**U.S. 8**—For *all ordinary instantaneous exposures* when the subject is in bright sunshine, and use speed 25.

**U.S. 16**—For instantaneous exposures when the sunlight on the subject is *unusually strong* and there are no heavy shadows, such as in views at the seashore and on the water, using speed 50; for ordinary *landscapes*, in bright sunshine with clear sky overhead, using speed 25; also for Interior Time Exposures, the time for which is given in the table on page 33.

**U.S. 32**—For instantaneous exposures of extremely distant views, marine, snow scenes and clouds, in bright sunshine, using speed 25; also for Time Exposures.

**U.S. 64**—For Time Exposures Outdoors in cloudy weather. *Never for instantaneous exposures.* The time required for time exposures on cloudy days with smallest stop will range from 1 second to 8 seconds, according to the light, see page 36. The smaller the stop the sharper the picture, see table on page 17.

*Absolute failure will result*, if the *smallest stop* (U.S. 64) is used for instantaneous exposures.

NOTE—In all of the instructions in this manual, where the subject is out of doors, the exposures given are calculated for

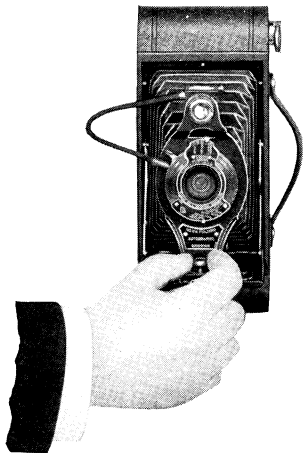


Fig. 2. Extending the Bellows

hours from 2½ hours after sunrise until 2½ hours before sunset. If earlier or later the time required will be longer. 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.

## Extending the Bellows

Extend the bellows by pulling out the front of camera. Grasp the round post on slide plate and pull out the front to the slot marked for the distance desired, 8, 25 or 100 feet, and the camera will be in focus for the distance at which you place the catch. Fig. 2, page 18.

NOTE—The focusing scale is marked both for feet and for meters and care should be taken not to confound them.

The catch or locking device is on the left side at the bottom of front board, and to set the focus, press the lever, then pull out front of camera to the slot marked for the distance desired.

## Making the Exposure

Aim the camera at the object to be photographed and locate the image in the finder, which is placed on the front of the camera.

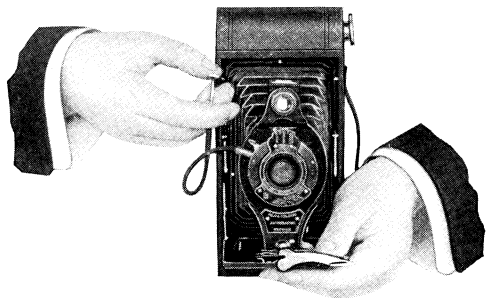


Fig. 3

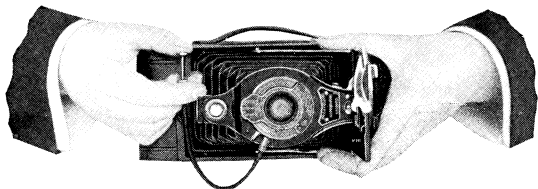


Fig. 4

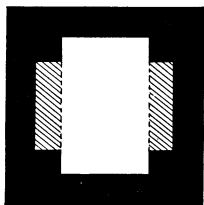
For a vertical exposure hold the camera as shown in Fig. 3, page 19. For a horizontal picture the camera must be held as shown in Fig. 4, turning the finder as indicated.

Hold the camera steady,—hold it level as shown in illustrations, and press the push-pin at end of cable release. *This makes the exposure.*

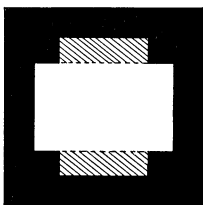
Always look into the finder from directly over it, *not at an angle*. The finder gives the scope of view and shows a facsimile of the picture as it will appear, but on a reduced scale. Any object that does not show in the finder will not show in the picture.

It will be noticed that the top of the finder is notched, as shown in Fig. 5, page 21. This is done so that the one finder will correctly show the view included when the camera is held in either vertical or horizontal position. As the picture taken with the No. 2 Folding Autographic Brownie is oblong, it will readily be seen that unless the finder was made in this manner it could not correctly show the exact view intended when the camera is held in either position.





VIEW INCLUDED WHEN  
MAKING A VERTICAL  
PICTURE



VIEW INCLUDED WHEN  
MAKING A HORIZONTAL  
PICTURE

Fig. 5

Remember that the view included within the shaded portions will not show in the picture.

Fig. 6 shows how to hold the camera when making an exposure without the use of the cable release. Grasp the bed of camera firmly with the left hand, steady it with the right and with the thumb of the right hand lightly push down on the exposure lever.

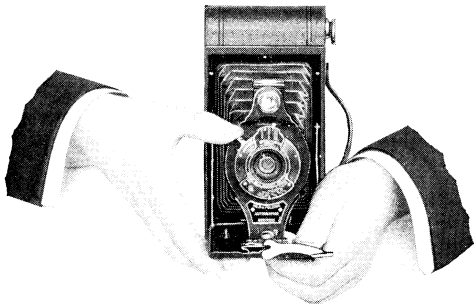
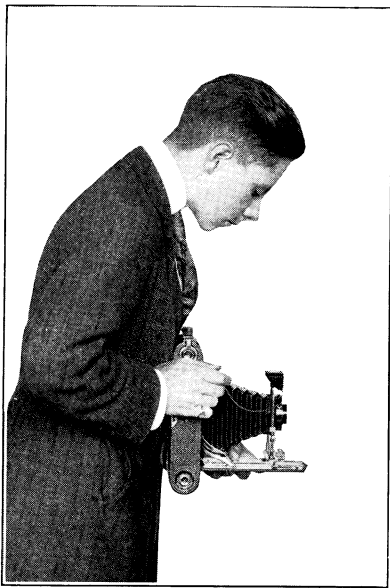
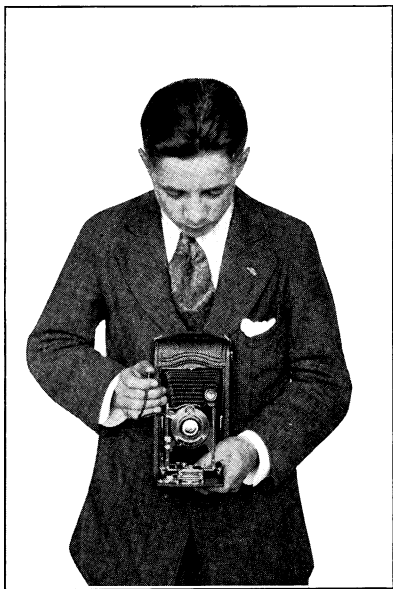


Fig. 6



## **Important**

**When making instantaneous exposures with any camera, hold it firmly against the body**



as shown in illustrations, and when operating the cable release or pushing down on the exposure lever, hold the breath for the instant.

## Hold Camera Level

The camera must be held level.

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. 7.

When making this picture the camera was pointed too high. This building should

have been taken from the building opposite, and at a level corresponding with the middle of the subject.

The operator should hold the camera *level*, after withdrawing to a proper distance, as indicated by the image shown in the finder.

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

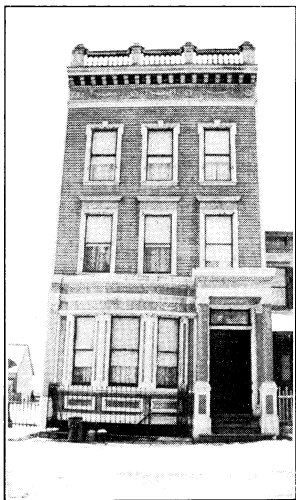


Fig. 7  
Effect produced by tilting the camera

## The Autographic Feature

The Autographic Brownie has a spring-door on the back covering a narrow slot through which the writing is done upon the red paper. The slot is provided with an automatic safety spring border which operates when the door is open to press the papers into contact with back of the film, thus securing the sharp printing of the image of the writing and preventing the diffusion of light around the edges of the slot. This slot is located so that normally the writing comes between the exposures.

4 lb. Brook Trout, E.G.C. 6/23/16

---

Band Concert, Maplewood Pk. 7/3/16

---

George Edward learns to walk, 7/10/16

---

Empire State Express, f.6.3. 1/200 sec.

---

Moving Day, 111 Fulton Ave. 2/19/16

---

Flood, Erie, Pa. 8/3/15 - 6.30 P.M.

AN AUTOGRAPHIC NEGATIVE

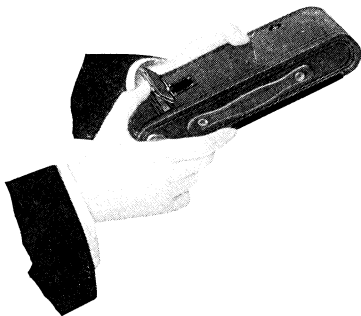


Fig. 8

## The Autographic Record as a Guide

Many amateurs have distinctly improved the quality of their work by making notes, at the time of exposure, of the prevailing conditions, as: Bright light, 1-25 sec., stop U.S. 8, which, by the way, can be easily abbreviated to B, 1-25, 8. By keeping such records the amateur can quickly find the causes of failure, if any. By comparing negatives and records he will soon get a line on his errors and when he knows what his errors are, he can easily rectify them. It is obvious that the best way to make these records is autographically—*on the film, at the time.*

### The Operation

After the picture is taken, lift up the spring-door on back of camera with thumb (Fig. 8). Use the stylus, held in as upright a position as is convenient, and write on the strip of exposed red paper any memorandum desired, such as the title of the pic-

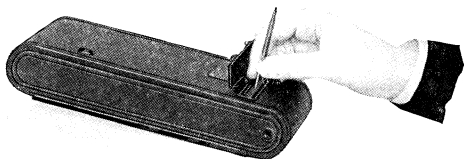


Fig. 9  
Position of stylus when writing record data on  
Autographic Film Cartridge used in  
Autographic Brownie

ture, the date, or details in regard to the exposure, light, stops, etc., (Fig. 9).

The "Autographic Negative" printed on page 25 is merely to suggest a few of the thousand and one ways in which autographic records may be used to add value to the negatives.

**To get a clear impression, press firmly on both up and down strokes. While writing or afterwards the sun should not be allowed to shine upon the paper.** The action of the stylus so affects the tissue as to permit the light to record the writing upon the film. After finishing the writing the door should be left open for the printing, in accordance with the following table:

*(Expose to the sky, but not to the sun.)*

	OUT OF DOORS	INDOORS CLOSE TO WINDOW
BRILLIANT LIGHT	2 to 5 Seconds	5 to 7 Seconds
DULL LIGHT	5 to 10 Seconds	10 to 15 Seconds

**Incandescent Light**, distance 2 inches, 30 to 60 seconds.

**Welsbach Light**, distance 6 inches, 30 to 60 seconds.

Close the door before winding the next section of film into place.

**Caution**—In order to locate the writing accurately in the space between the negatives, it is important that the film should be turned so that the exposure number centers perfectly in the red window in the back of the Brownie.

**Turn a new section of film into position:** Press in slightly on the winding key in top of camera, and turn it slowly to the left, until the next number appears in the red window. Three or four turns will be sufficient to accomplish this. See Fig. 10. The warning index hand appears only before No. 1.

Repeat the foregoing operations for each picture.



Fig. 10

Turning a new section of film into position

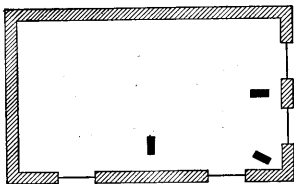


**Important**—When you have made the exposure on the last section of the roll of film and have made the autographic record of it in accordance with the foregoing directions, turn the winding key of the Brownie until the letter (A) appears in the center of the window in the back of the camera. Raise the spring-door and write your name on the red paper, expose it to the sky the same as was done when making the exposure records, then close the spring-door and finish winding film and red paper for removal from the camera. The film is now ready to send to your finisher, and when developed will be readily identified by the autographic copy of your name which you wrote on the red paper.

## Time Exposures—Interiors

To make a Time Exposure, open and focus the camera as when making an Instantaneous Exposure, see pages 15 and 16, then place the camera in position on a table, chair, tripod or some other firm support.

If a table or chair is used, be sure to place the camera not more than two or three inches from the edge, so as to avoid including part of the table or chair in the picture.



Diagram, showing positions for Camera

Place the camera in such a position that the finder will embrace the view desired. The diagram 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.

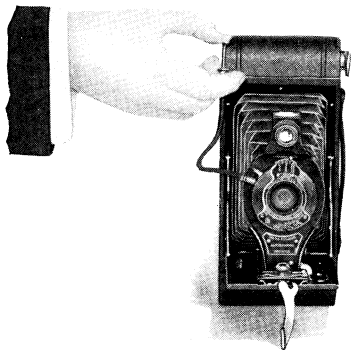


Fig. 11

Fig. 11 shows the camera in position for a vertical exposure. The camera is also provided with tripod sockets and may be used on a tripod.

When it is desired to make a horizontal time exposure without the use of a tripod, pull down the same lever at front of bed of camera, that was

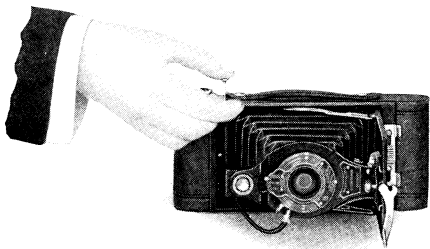


Fig. 12

used for the support when taking a vertical exposure, and place the camera in the position as shown in Fig. 12, page 30.

Adjust the shutter for a Time Exposure, as described on page 13.

All being in readiness, press the push-pin at end of cable release, or push down on exposure lever, once to open and again to close the shutter. Time the exposure by a watch.

### Another Method

Another way of making short time exposures, which has much to recommend it, is as follows:

Hold the palm of the hand or a card close to the front of the camera, so as to cover the lens and exclude all light (see Fig. 13). Push down the

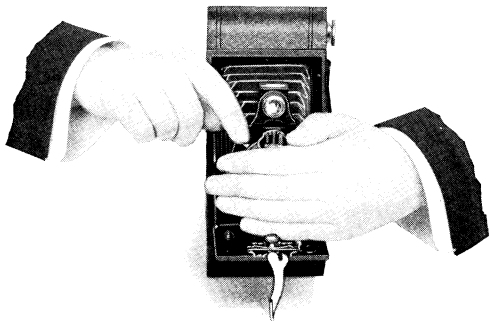


FIG 13

exposure lever to open the shutter; remove the hand and give the proper exposure; replace the hand in front of the lens and again press the lever to close the shutter.

**CAUTION**—If using the hand, be careful not to touch the front of the lens, or it will leave a finger mark.

Some experienced amateurs prefer this method as it practically does away with all danger of jarring the camera during exposure, and thus blurring the picture.

### **Turn the Winding Key:**

After making the autographic record, press in slightly on the winding key and turn the next section of film into position, as described before. (See page 28.)

The camera is now ready for the next Interior Exposure.

Follow the directions given heretofore for each successive exposure.

When the last Interior Exposure is made, adjust the shutter for Instantaneous Exposures as before directed.

### **Time Needed for Interior Exposures**

The following table gives the approximate time of the exposure required under varying conditions of light. The time given in the table is with stop U.S. 16 in the lens. If stop U.S. 8 is used give one-half the time; with stop U.S. 4, one-fourth the time; with stop U.S. 32 give twice the time,

and if stop U.S. 64 is used, give four times the time of the table. The smaller the stop the sharper the picture, see table on page 17. Stop U.S. 16 gives the best average results for Interiors:

**White walls and more than one window:**

bright sun outside, 4 seconds;  
hazy sun, 10 seconds;  
cloudy bright, 20 seconds;  
cloudy dull, 40 seconds.

**White walls and only one window:**

bright sun outside, 6 seconds;  
hazy sun, 15 seconds;  
cloudy bright, 30 seconds;  
cloudy dull, 60 seconds.

**Medium colored walls and hangings and more than one window:**

bright sun outside, 8 seconds;  
hazy sun, 20 seconds;  
cloudy bright, 40 seconds;  
cloudy dull, 80 seconds.

**Medium colored walls and hangings and only one window:**

bright sun outside, 12 seconds;  
hazy sun, 30 seconds;  
cloudy bright, 60 seconds;  
cloudy dull, 120 seconds.

**Dark colored walls and hangings and more than one window:**

bright sun outside, 20 seconds;  
hazy sun, 40 seconds;  
cloudy bright, 80 seconds;  
cloudy dull, 2 minutes, 40 seconds.

**Dark colored walls and hangings and only one window:**

bright sun outside, 40 seconds;  
hazy sun, 80 seconds;  
cloudy bright, 2 minutes, 40 seconds;  
cloudy dull, 5 minutes, 20 seconds.

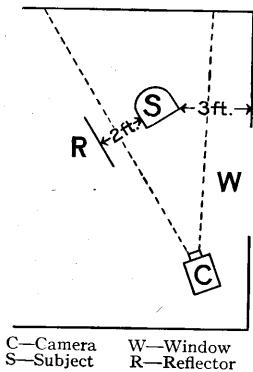
The foregoing table is calculated for rooms where windows get the direct light from the sky, and

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

Have the subject sitting in a chair partly facing the light, and turn the face slightly towards the camera, which should be located a little higher than an ordinary table. The eyes of the subject should be centered on an object at the same level with the lens. Center the image in the finder. For a three-quarter figure the camera should be about 8 feet from the subject and for a full-length figure about 10 feet. The background should form a contrast with the subject. When making portraits indoors, a light background usually gives a more pleasing effect than a dark one.



To produce a satisfactory illumination of the face, have the subject, camera and window in the positions as shown in the diagram. It is advisable to use a reflector, to obtain more detail in the shaded part of the face. A white towel or sheet placed over a screen or high piece of furniture will make a suitable reflector; place it at an angle and in

the position as indicated in the diagram.

For further instructions describing other methods used to produce various lighting effects, ask your dealer or write to us for a copy of the booklet: "At Home with a Kodak."

For instructions in regard to making portraits outdoors when the sun is shining, see page 14.

## **Kodak Portrait Attachment**

By using the Kodak Portrait Attachment, large head and shoulder portraits of various sizes may be obtained.

The Attachment is simply an extra lens slipped on over the regular lens, and in no way affects the operation of the camera except to change the focus.

When the Attachment is in position and the camera set:

At 8 feet focus, the subject must be exactly 2 feet 9 inches from the lens.

At 25 feet focus, place the subject 3 feet 8 inches from the lens.

At 100 feet focus, place the subject 4 feet 2 inches from the lens.

Use **Kodak Portrait Attachment No. 8** with the No. 2 Folding Autographic Brownie Camera.

## **Kodak Diffusion Portrait Attachment**

The Kodak Diffusion Portrait Attachment is a supplementary lens used in exactly the same manner as the regular Kodak Portrait Attachment. It produces a true, soft-focus effect entirely free from

objectionable "fuzziness" or out-of-focus appearance. By using this Attachment, portraits are made more artistic, due to the softening effect of diffusion.

When ordering, specify **Kodak Diffusion Portrait Attachment No. 8**; this is the size that fits the No. 2 Folding Autographic Brownie Camera.

## **Time Exposures—Outdoors**

When the smallest stop (U.S. 64) is in the lens the light admitted is so much reduced that time exposures out of doors may be made the same as interiors, but the exposures must be much shorter.

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

**With Light Clouds**—From 1 to 3 seconds will be sufficient.

**With Heavy Clouds**—From 4 seconds to 8 seconds will be required.

The foregoing table is calculated for hours from 2½ hours after sunrise until 2½ hours before sunset, and for objects in the open. 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 hands. Always place it upon some firm support, such as a tripod, table or chair.**



For exceedingly short time exposures as described on page 36, use the "Bulb Exposure", see page 13.

## Flash-light Exposures

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 a Kodak 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.

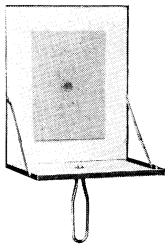
Evening parties, groups around a dinner or card table or single portraits may be readily made by the use of our flash sheets, thus enabling the amateur to obtain souvenirs of many occasions which, but for the flash-light, would be quite beyond the range of the art.

**Preparation for the Flash**—The shutter should be adjusted for a Time Exposure, as described on page 13 of this manual (stop U.S. 8 must be used), then place the camera on some level support where it will take in the view desired, see pages 29 and 30.

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 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 light from 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 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. By using the Kodak Flash Sheet Holder, however, all these contingencies are taken care of, and we strongly advise its use.

## The Kodak Flash Sheet Holder



This holder may be held in the hand, *always between you and the flash sheet*, or it may be used on any tripod, it being provided with a socket for this purpose. The sheet is placed in position in the center of the larger pan over the round opening, which has a raised saw-tooth edge extending half-way around it. Press with the thumb

on the sheet, so a slight break is made and a portion of the sheet projects partially through the opening. Then to insure the sheet being more securely fastened, press around the notched edge, forcing this portion of the flash sheet firmly into position on the pan.

To set off the flash, merely insert a lighted match, from behind, through the round opening in the center.

## 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 from behind, through the round opening in the center of the holder.

*If the Kodak Flash Sheet Holder is not used, 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 press the push-pin or push the exposure lever to close the shutter. Make the autographic record by following the table as given on pages 27 and 28, and turn the next section of film into place with the winding key, ready for another picture.

## The Flash Sheet

The size of the sheet required to light a room varies with the distance of the object farthest from the camera, and the color of the walls and hangings:

### 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.

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

**To Make a Portrait**—Have the subject sitting in a chair partly facing the camera (which should be located a little higher than an ordinary table) and turn the face slightly towards the camera, having the eyes centered on an object at the same level with the lens. The proper distance from the camera to the subject can be ascertained by looking at the image in the finder. For a three-quarter figure this will be about 8 feet and for a full-length figure about 10 feet.

For use of the Kodak Portrait Attachment, see page 35.

The flash should be on the side of the camera away from the face, that is, the subject should not face it. The flash should be at about the same height or a little higher than the head of the subject.

**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 is 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 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 light wall will be suitable.

The finder on the camera will aid the operator in composing the picture 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. The lights may be left on while the picture is being made, provided none of them show in the finder.

Eastman Flash Sheets burn more slowly than flash powders, producing a much softer light and are, therefore, far preferable for 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, cheaper and capable of producing the best results. The cartridges are superior only when absolutely *instantaneous* work is essential.

### **Closing the Camera**

1. To disengage front from lock on focusing scale so that it may be pushed back, press in with finger on catch which is located just above the focusing scale.

2. Keep catch pressed and slide back the front a short distance. The catch may then be released and front pushed back into the camera box. Reverse the operation as shown in Fig. 2, page 18.

3. Close the camera by pressing down on arm locks on each side of bed as shown in illustration (Fig. 14). The bed will now close readily.

### Caution

Before closing the bed of the camera make sure that the finder is in the position for making a vertical exposure or in the upright position. The front board must be pushed back *to*, and *only to*, the limit of motion.

If the finder and front board are in proper position they will not interfere with the bed in closing.

Avoid making too sharp a bend in the cable release when closing the camera, or it will be liable to kink.

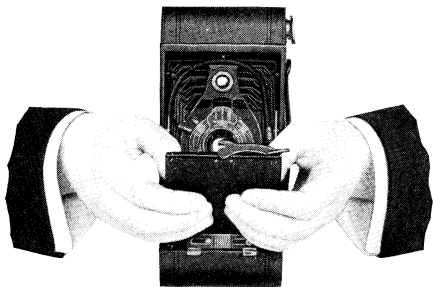


Fig. 14

Closing the Bed of Camera

## PART III

### Removing the Film

**W**HEN changing the spools of film in the Brownie Camera, avoid doing so in the *direct* sunlight.

The change can be made in the open, but to avoid all liability of fogging the edges of the film it should be done in a subdued light.

1. When the last section of film has been exposed and the autographic record of your name has been made according to instructions on page 29, give the winding key about twelve extra turns. This covers the film with red paper again.

2. Provide an extra spool of film (No. A-120) to fit the camera and take a position where the daylight is somewhat subdued, *not* in the direct sunlight.

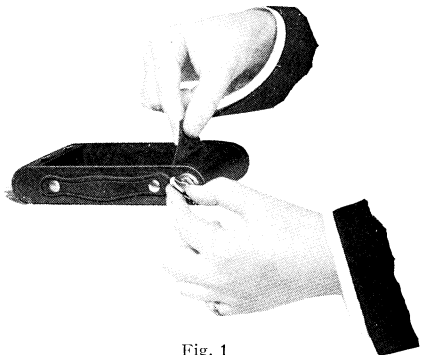


Fig. 1  
Holding red paper taut while turning key

3. Remove the front of camera as described on page 5.

4. Holding the paper taut so as to wind tightly, turn the key until paper is all on reel. See Fig. 1, page 43.

5. Hold ends of red paper and sticker together, to prevent paper from loosening on roll. If sticker folds under roll, when wound, turn the winding key to bring it up.

6. Pull out winding key to the limit of motion, and lift out roll of film as shown in Fig. 2.

7. Fold over about half-an-inch at end of red paper (so as to make subsequent breaking of the seal easy) and then seal with the sticker.

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

The roll of film is now ready for developing and printing.

9. Now remove empty spool and load as described in Part I, page 5.

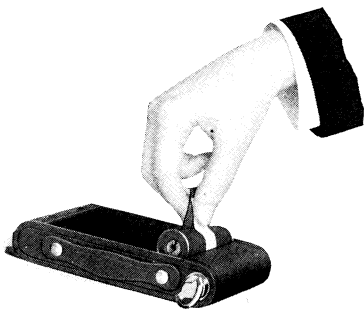


Fig. 2  
Lifting out roll of exposed film



## Important

Film should be developed as promptly as possible after exposure.

The quality of the image on all sensitized products is retained by immediate development after exposure.

*Load your Brownie with Kodak Film.*

*Look for this Trade Mark on the box:*

**EASTMAN**  
*Autographic*

*“If it isn't Eastman, it isn't Kodak Film.”*

### “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 red paper keeps inside the flanges at the ends of the spool.

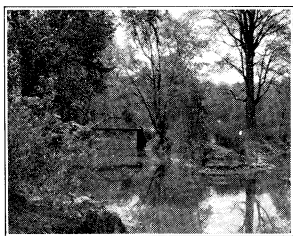
## Keep Dust Out of the Camera

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

It is, therefore, well to wipe out the inside of camera and bellows 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.

## Clean Lenses

Dirty or dusty lenses are frequently the cause of photographic failures. These pictures illustrate this point clearly. The sharp, full-timed picture on this

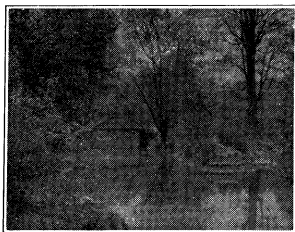


CLEAN LENS

page was taken with the lens clean and in good order. To produce an effect as is shown in the picture on the next page, the face or the back of the lens is lightly touched with the thumb, which is slightly damp with perspiration.

Lenses should be frequently examined. Remove the front of the camera from the back, as described on pages 5 and 6 (when there is no film in it) then open the front of the camera, extend the bellows and open the shutter. Adjust the shutter as when making a Time Exposure; the largest stop (U.S. 4) should be in position. Hold the camera so that the front is towards the light, then look through the lens from the back of the camera, and if the lens is found to be dirty, it should be wiped, both front and back, with a clean, soft linen handkerchief. In summer weather this needs special attention.

Large spots of dust or dirt on the lens will cause defects in the picture, while if the lens is evenly covered with a film of dust, dirt or moisture,



LENS SLIGHTLY DIRTY

the effect will be to cut off a great deal of light and make the picture under-timed.

## Finishing the Pictures

THERE are two distinct steps in the making of photographs—the picture *taking* and the picture *finishing*. In order to free our instruction books from all unnecessary details, which might be confusing, we furnish with the camera the directions for *picture taking* only.

The instructions in this little book are ample for the manipulation of the camera under every condition that the amateur is likely to encounter. Similarly, those who wish to do their own developing and printing will find equally full instructions accompanying the Kodak Film Tanks (for developing in daylight) or our Outfits for tray or dark-room use.

To develop Film (No. A-120) used in the No. 2 Folding Autographic Brownie, provide, preferably, a "Brownie" Kodak Film Tank. (These films may be developed in the larger tanks that are made for use with films of longer spool length—but not so economically.) The Film (No. A-120) may also be developed in daylight in the No. 2 Brownie Developing Box; the method of developing film in the Box is different than when using the Tank.

If the dark-room method of development is preferred, an Eastman A B C Developing and Printing Outfit should be provided.

In keeping with our plan and purpose to provide the users of our cameras with every help in the production of good pictures, we will be glad to

furnish such developing and printing instructions, at any time, whether a tank or outfit is purchased or not.

With the Kodak Film Tank and Velox paper many amateurs find as great pleasure in the finishing of the pictures as in the taking of them, and are able to produce, by the simple methods we have perfected, work of the highest order.

We never lose interest in the purchaser of a Brownie. We are not only willing but are anxious at all times to help solve any problems that he may encounter, either by sending on the necessary printed instructions or by individual correspondence. Such customer, in availing himself of the knowledge of our experts, puts himself under no obligations to us. He is simply availing himself of one of the things that he is entitled to when he buys a Brownie or a Kodak—and that is, Kodak service.

EASTMAN KODAK COMPANY,  
ROCHESTER, N. Y.

## PRICE LIST

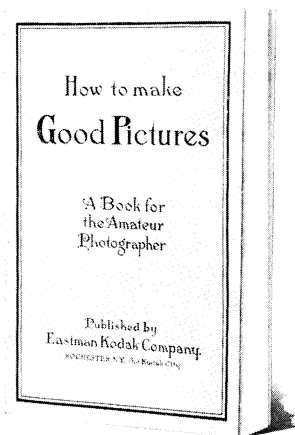
<b>Autographic Film Cartridge, No. A-120,</b> 6 exposures, $2\frac{1}{4} \times 3\frac{1}{4}$ .....	\$ .25
<b>Carrying Case for the No. 2 Folding Auto-</b> <b>graphic Brownie Camera.....</b>	1.50
<b>Kodak Portrait Attachment, No. 8 for</b> use with the No. 2 Folding Autographic Brownie Camera.....	.75
<b>Kodak Diffusion Portrait Attachment,</b> No. 8.....	1.25
<b>Kodak Color Filter, No. 8.....</b>	.75
<b>Kodak Sky Filter, No. 8.....</b>	.75
<b>"Brownie" Kodak Film Tank.....</b>	3.50
Duplicating Outfit for above Tank.....	1.50
<b>Brownie Developing Box, No. 2.....</b>	1.75
<b>Developer Powders for "Brownie" Kodak</b> Film Tank or Brownie Developing Box, per pkg. $\frac{1}{2}$ doz.....	.20
<b>Eastman A. B. C. Developing and Print-</b> <b>ing Outfit, for dark-room development,</b> (for 4 x 5 negatives or smaller), complete	2.00
<b>Kodak Acid Fixing Powder, per 1-lb. pkg.</b>	.25
Per $\frac{1}{2}$ -lb. pkg.....	.15
Per $\frac{1}{4}$ -lb. pkg.....	.10

<b>Kodaloid Printing Masks No. 3</b> , for use with No. 2 Brownie Negatives, each.....	\$ .10
<b>Velox Paper</b> , per dozen 2¼ x 3¼.....	.12
<b>Nepera Solution</b> , for developing Velox, per 4-ounce bottle.....	.28
<b>Velox Transparent Water Color Stamps</b> , complete booklet of 12 colors.....	.45
<b>Velox Transparent Water Color Stamp Outfit</b> , consisting of Artist's Mixing Palette, three special Camel's Hair Brushes, and one book of Velox Transparent Water Color Stamps (12 colors)	1.00
<b>Eastman Reducer and Stain Remover</b> , per pkg. of 5 tubes.....	.50
<b>Velox Re-developer</b> , per package containing 2-ounce bottle.....	.30
<b>Solio Paper</b> , 2¼ x 3¼, per pkg., 2 dozen	.20
<b>Combined Toning and Fixing Solution for Solio</b> , per 8-ounce bottle.....	.50
Per 4-ounce bottle.....	.30
<b>Eastman Pyro Developer Powders</b> , in sealed glass tubes, per box of 5 tubes..	.25
<b>Eastman Hydrochinon and Special Developer Powders</b> , in sealed glass tubes, per box of 5 tubes.....	.30
<b>Eastman Pyro Developer Powders</b> , per ½ dozen pairs.....	.25
<b>Glass Stirring Rod Thermometer</b> .....	1.50
<b>Kodak Dark-room Lamp, No. 2</b> , ⅝-inch wick.....	1.25
<b>Eastman Flash Sheets, No. 1</b> , per package of ½ dozen.....	.35

<b>Eastman Flash Sheets, No. 2, per package</b> of ½ dozen . . . . .	\$ .56
<b>No. 3, per package of ½ dozen . . . . .</b>	.84
<b>Kodak Flash Sheet Holder . . . . .</b>	1.25
<b>Eastman Film Developing Clips (nick-</b> <b>eled) 3½-inch, per pair . . . . .</b>	.25
<b>Kodak Junior Film Clips, No. 1, each . . . . .</b>	.12
<b>Kodak Trimming Board, 5-inch . . . . .</b>	.75
<b>No. 0 Kodak Metal Tripod . . . . .</b>	2.75
<b>Bull's-Eye Tripod . . . . .</b>	2.00
<b>Flexo Tripod . . . . .</b>	1.50
<b>Optipod, for attaching camera to the edge of</b> a table, chair, fence, etc. . . . .	1.25
<b>Eastman Film Negative Album, to hold</b> 100 2¼ x 3¼ negatives. . . . .	1.00
<b>Kodak Dry Mounting Tissue, 3 dozen</b> sheets, 2¼ x 3¼. . . . .	.10
<b>Eastman Photo Blotter Book, for blotting</b> and drying prints. . . . .	.40
<b>Baltic Mounts for prints 2¼ x 3¼, per 100</b>	2.60
Per 50. . . . .	1.30
<b>Agrippa Album, flexible leather cover,</b> loose-leaf, 50 black leaves, size 7 x 11. . . . .	3.00
Cloth cover. . . . .	1.50
<b>Kodak Print Roller, double, 6-inch . . . . .</b>	1.00
<b>Flexo Print Roller, single, 4-inch . . . . .</b>	.35







**A** PRACTICAL book for the amateur. It describes in a simple, understandable way every phase of photography that the amateur is likely to be interested in, such as various methods of making exposures, developing, printing, making enlargements, etc. Profusely illustrated. 172 pages.

**Price, \$ .40**

*Price subject to change without notice.*

**EASTMAN KODAK COMPANY**

*At your dealer's*

**ROCHESTER, N. Y.**

# SERVICE DEPARTMENT

ADDITIONAL ASSISTANCE FOR  
MAKING BETTER PICTURES

**A**LTHOUGH we give in this manual all of the essential directions for using the camera it accompanies, there are amateurs who wish for further knowledge of photography.

The Service Department is at their service, *your* service.

Do not hesitate to call on us for information on any photographic subject.

*We are at your service, write to us—  
there is no charge, no obligation.*

Address all Communications

**SERVICE DEPARTMENT  
EASTMAN KODAK COMPANY  
ROCHESTER, N. Y., U. S. A.**



## *Velox* *now identifiable*

**T**O protect Kodak amateurs, and to protect Developing and Printing houses that endeavor to give their customers the best possible results, we have made Velox paper identifiable. The trade name "Velox" is printed, faintly, on the back of every sheet. Look for it.

Insist on Velox—the paper that exactly meets the requirements of amateur negatives—and know you're getting the best results possible from your films.

*The Velox Book tells the working of a simple paper in simple terms—a valuable photographic help. Free from us or your dealer.*

**EASTMAN KODAK COMPANY**  
ROCHESTER, N. Y.