
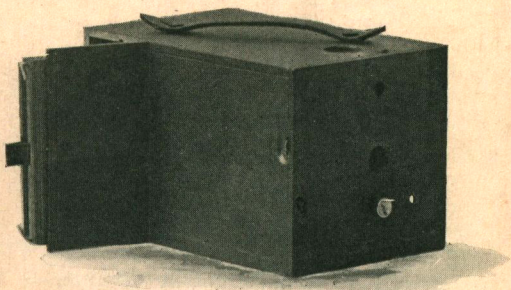


INSTRUCTIONS

FOR USING 

EASTMAN'S  
No. 2 EUREKA CAMERA.



EASTMAN KODAK CO.  
ROCHESTER, N. Y.

*KODAK,*  
*Trade Mark, 1888.*

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

**MANUFACTURERS OF**

Kodaks,  
Kodets,  
Bullet Kodaks,  
Bulls-Eye Kodaks,  
Falcon Kodaks,  
Eureka Cameras,  
Eastman's Solio Paper,  
Western Collodion Paper,  
Eastman's Dry Plates,  
Eastman's Standard Bromide Paper,  
Eastman's Platino Bromide Paper,  
Eastman's Enameled Bromide Paper,  
Eastman's Matte-Enamel Bromide Paper,  
Eastman's Transparent Film,  
Eastman's Transparency Plates,  
Eastman-Walker Roll Holders,  
View Cameras, Tripods and  
Other Specialties.



THE operation of the No. 2 Eureka Camera is simple in the extreme. It requires no focusing, and has no trappy attachments. Before taking any pictures, however, the operator should familiarize himself with the working of the shutter, operating it for both time and instantaneous exposures several times before withdrawing the slide from the plate holder and preparing to take any pictures.

## LOADING WITH PLATES.

I. In using glass plates the plate holders must be loaded in a dark room—that is, a room from which all white light has been excluded. See page 8.

II. Provide also

1 dozen Eastman's Extra Rapid Dry Plates,  $3\frac{1}{2} \times 3\frac{1}{2}$ .

1 Eastman Improved Orange Candle Lamp.

A shelf or table on which to work.

III. Set up the lamp as described in the directions contained in the box in which it is packed.

IV. Remove the dark slides from the plate holders.

V. Open the box of plates by running a thin knife blade around the edge of the box.

VI. Take out one of the plates and place it in the holder, face up. (The face is the dull side.) Brush gently over the face of the plate with a camel's hair brush to remove dust.

VII. Replace the dark slide in the holder. Turn the holder over and load in the same manner.



VIII. Repeat the operation until all of the plate holders have been filled, then close up the remaining plates in the box and put them away in a dark drawer or wrap up securely.

The rest of the operations may be performed in daylight.

IX. Open the little door at the back of camera and insert one of the plate holders in front of the wooden partition. See that the groove in holder fits into place, otherwise light will leak in and spoil the plate.

X. Pull out the dark slide.

The plate is now in position for making the first picture.

After making the exposure reinsert the dark slide in the plate holder. Remove the plate holder from the camera by means of the leather lug, pressing back against the spring slightly to start it and re-insert it with the opposite side to the front.

XI. Pull out the dark slide and the camera is ready for another exposure.

## MAKING THE EXPOSURES.

### Section I.—Instantaneous Exposures.

(“Snap Shots.”)

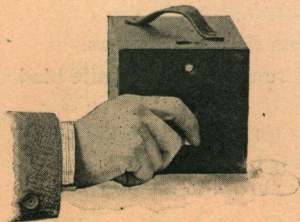


FIG 1

I. Set the shutter by turning the button underneath the lens to the right until it catches. See Fig. 1. The camera is now ready for the first snap shot. A safety wing prevents the light from passing through the lens during the act of setting the shutter.

To take instantaneous pict-



ures 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.

### USE THE LARGEST STOP.

Snap Shots can only be made when the largest stop is in the lens. If a smaller stop be used the light will be so much reduced that it will not sufficiently impress the image on the plate and failure will result. In making snap shots, the slide B shown in Fig. 2 should be pushed in to the limit of motion. The exposure lever A controls time and instantaneous exposures. For snap shots this lever must be in.

Slide B controls the stops, of which there are three. When it is clear in the largest stop is in place. This is the one to use for all snap shots, except where the sunlight is *unusually* strong, and there are no heavy shadows, such as views on the water or in tropical or semi-tropical climates, when the middle stop may be used.

The smallest stop must never be used for snap shots or absolute failure will result.

Aim the camera at the object to be photographed and locate the image in the finder. The finder shows the scope of view and is a fac-simile of what the picture will be. Hold the camera steady, *push the exposure lever* on the right hand side *down* with the thumb of the right hand.

*This makes the exposure.*

*For snap shots the exposure lever A and slide B must both be in, as shown in Fig. 3. Note the difference between Figs. 2 and 3.*

Replace the dark slide in plate holder.

Repeat the foregoing operations for each picture.

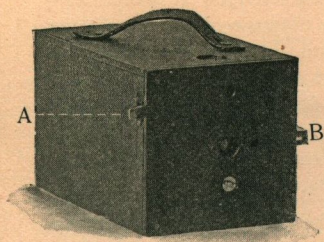


FIG. 2.

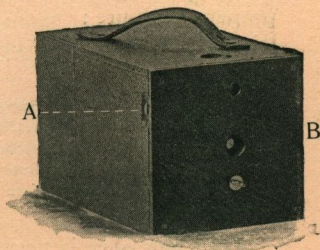


FIG. 3.

## Section II.—Time Exposures Indoors.

### 1. Put the Camera in Position.

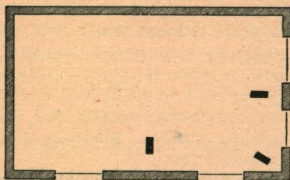


Diagram showing position of camera.

FIG. 1.

Use some firm support, like a tripod or table. Set in such a position that the finder will embrace the view desired.

The diagram shows the proper position 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 the range of the camera.

To make a time exposure place the camera on some firm support like a table or tripod, and pull out the time exposure lever A, near the finder as shown in figure 2; set the shutter by turning the button as shown in Fig. 1, page 2. Steady the camera with one hand and push down on the exposure lever and release it to open shutter; give the proper exposure; again press this same lever. This closes the shutter.

**NOTE:** It will be seen that when the exposure lever A is pulled out, the shutter strikes as it passes the lens, stopping it half way across, with the opening over the lens.

Try this a few times, before exposing a plate, to become accustomed to the operation.

Put a new plate in position as described before.

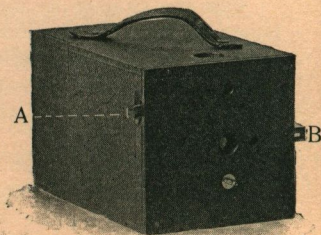


FIG. 2



The time required for interior exposures with the largest stop will vary from 2 seconds to 3 minutes, according to the light outside, number of windows and color of walls and hangings. Early in the morning or late in the afternoon the time required will be even longer. With the second stop the time required will be half more and with the smallest stop four times the time required with the largest.

### Section III.—Time Exposures in the Open Air.

When the smallest stop 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 exposure must be much shorter.

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

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

WITH HEAVY CLOUDS—From 2 to 5 seconds will be required.

The above is calculated for the same hours as mentioned above 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 tripod, chair or table.

## STOPS.

The stops should be used as follows :

**1** THE LARGEST—For *all ordinary instantaneous exposures* when the sun shines.

**2**  
**3** THE MIDDLE—For instantaneous exposures when the sunlight is unusually strong and there are no heavy shadows ; such as in views on the sea shore, or on the water, or in tropical or semi-tropical climates : also for interior time exposures.

**1**  
**4** THE SMALLEST—For time exposures out doors in cloudy weather. *Never for instantaneous exposures.* The time required for time exposures on cloudy days with smallest stop will range from  $\frac{1}{4}$  second to 5 seconds, according to the light. The smaller the stop the sharper the picture.

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

This will be the result if you use the smallest stop for instantaneous exposures. ○



**DEVELOPING.**

Provide an Eastman's A B C Developing and Printing Outfit.



This outfit contains paper and chemicals for 24 pictures and can be used with any camera for films or plates up to and including 4 x 5. The simplest, cheapest and best outfit for the beginner. It contains:

1 Eastman's Improved Candle Lamp, - - - - \$ .25	2 Dozen Sheets 4 x 5 Solio Paper, - - - - \$ .30
4 Developing Trays, - - .40	1 2-oz. Bottle Solio Toning Solution, - - - - .15
1 Glass Beaker, - - .12	1 Package of Bromide of Potassium, - - - - .10
1 4 x 5 Printing Frame, - .25	1 Ounce of Glycerine, - .05
1 4 x 5 Glass for same, - .05	1 Instruction Book, - - - -
1 Stirring Rod, - - .05	
$\frac{1}{2}$ Dozen Developing Powders, .25	
$\frac{1}{2}$ Pound Hyposulphite Soda, .07	
	\$2.04
<b>*Price Complete, neatly Packed,</b>	<b>\$1.50</b>

\*This outfit cannot be shipped by mail.

Also provide a pitcher of cold water (preferably ice water), 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 plates are extremely sensitive to white light, either daylight or lamplight, *and would be spoiled if exposed to it even for a fraction of a second.*



THE LAMP.

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 plates unless it is held close to them. Set the lamp on the table at least eighteen inches from and with the *side* toward the operator.

2. Open one of the developer powders, then 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.

3. Take one of the exposed plates and lay it, face up, in a tray and pour upon it the developer. Rock it back and forth to prevent streaks and air bubbles; in about 1 minute it will begin to darken in spots, representing the lights of the picture, and in about two 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 the development may be watched by holding the negative from time to time, up to the lamp.



4. Transfer the negative to the second tray and rinse two or three times with water.

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

As each negative is developed it should be put in the washing tray and the water changed twice to prevent the developer remaining from staining it.

5. Put two tablespoonfuls of Hyposulphite of Soda into the third tray, fill two-thirds full of water, and stir until dissolved. This is called the fixing bath.

6. 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 each.

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

8. 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 negatives 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. Neither must any of the fixing solution be allowed to touch the plates 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.

9. When the negatives are *thoroughly washed* stand them up on edge to dry. Do not try to dry them artificially.

When dry the negatives are ready for printing.

## **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 failures result.

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 exposures.

### **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.

### **Over-Development.**

Caused by leaving the negatives 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 plate in the developer or fixing bath, are liable to cause spots, and streaks are caused by allowing the plates to remain uncovered in part by the various solutions while in them.

White, milky spots are evidence that the negative has not been properly fixed, and the negative should be put back into the fixing bath and then re-washed.

### Scratches.

Glass plates must be handled in the various solutions *one at a time*, otherwise the corners of the glass are liable to scratch and destroy the negatives.

### **PRINTING ON EASTMAN'S SOLIO PAPER.**

Having found that amateurs can easily handle our Solio Paper we have now substituted it for the Ferro-Prussiate Paper, which we formerly furnished with the A B C outfits, as it makes far handsomer pictures than the blue prints.

Solio prints have a warm, brown tone and are usually mounted on card-board and highly burnished.

**METHOD OF PRINTING.**—Open the printing frame of the A B C outfit and lay the negative back down upon the glass (the back is the shiny side). Place upon this a piece of Solio paper, face down. Replace the back of the frame and secure the springs. The back is hinged to permit of uncovering part of the print at a time to inspect it without destroying its register with the negative. The operation of putting in the sensitive paper must be performed in a subdued light, that is to say, in an ordinary room, as far as possible from any window. The paper not used must be kept covered in its envelope.

The printing frame, when filled as directed, is to be laid glass side up, in the strongest light possible (sunlight preferred) until the light, passing through the negative into the sensitive paper, has impressed the image sufficiently upon it. The progress of the printing can be examined from time to time by removing the frame from the strong light, and opening one half of the hinged back, keeping the other half fastened to hold the paper from shifting. The printing should be continued until the print is a little darker tint than the finished print should be. Place prints without previous washing in the following combined toning and fixing bath :

2 oz. Eastman's Solio Toning Solution.

4 oz. Cold Water.



Pour the toning solution into one of the trays and immerse the prints one after the other in the toning bath. Five or six prints can be toned together if they are kept in motion and not allowed to lie in contact. Turn the prints all face down and then face up and repeat this all the time they are toning. The prints will begin to change color almost immediately from reddish brown to reddish yellow, then brown to purple. The change will be gradual from one shade to another and the toning should be stopped when the print gets the shade desired.

Six ounces of toning solution will tone two dozen prints ; after that a new solution should be made the same as before.

When the proper shade has been attained in toning bath, the prints should be transferred for five minutes to the following salt solution to stop the toning :

Salt, 1 oz.  
Water, 32 oz.

Then transfer the prints to the washing tray and wash one hour in running water, or in 16 changes of water.

The prints are then ready for mounting or they can be laid out and dried between blotting papers.

## PRICE LIST.

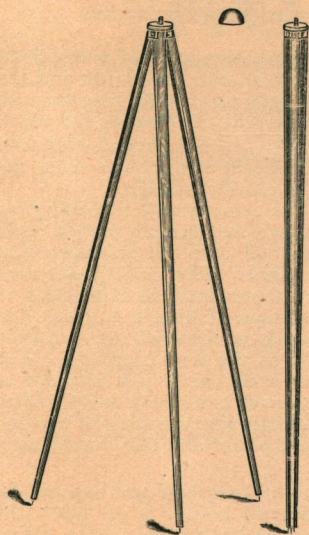
No. 2 Eureka camera, with one double plate holder, achromatic lens, - - - - -	\$4.00
Double plate holders, $3\frac{1}{2} \times 3\frac{1}{2}$ each, - - -	.75
Eastman's Extra Rapid Dry Plates, per dozen $3\frac{1}{2}$ $\times 3\frac{1}{2}$ , - - - - -	.35
Eastman's A B C Developing and Printing outfit, complete for developing and printing 24 pic- tures, - - - - -	1.50
Eastman's Solio paper, $3\frac{1}{2} \times 3\frac{1}{2}$ per dozen, -	.15
Solio combined Toning and Fixing Solution, per 8 oz. bottle, - - - - -	.50
Toning and Fixing Solution can be shipped by mail in 4 ounce bottles as follows: 4 ounces Ton- ing and Fixing Solution ( <i>20c. extra postpaid.</i> )	.25
Black Sole Leather Carrying Case, - - -	1.25
Staff Tripod, - - - - -	1.50
Bulls-Eye Tripod (Folds in Two Sections) - - -	2.00
Eastman's Hydrochinon Developer Powders per doz. (Sufficient for 48 oz. developer.) -	.50
Hyposulphite Soda, pulverized, per pound, -	.10
Bromide Potassium, per ounce bottle, - -	.15
Mounts, white embossed, per doz., - - -	.14
“ “ “ “ hundred, - - -	1.10
Eastman's Improved Orange Candle Lamp, -	.25
No. 1 Kodak Dark Room Lamp, one inch wick, -	1.50
No. 2 Kodak Dark Room Lamp, $\frac{5}{8}$ inch wick, -	1.00
Luxo Flash Lamp, - - - - -	1.25
“ “ powder, per oz., - - - - -	.60

EASTMAN KODAK CO.

Rochester, N. Y.



## The Improved Staff Tripod.



A very convenient tripod for 4 x 5 cameras or smaller. Especially adapted to use with the Eureka Camera. It does not fold, but closes together, forming a staff or cane.

**Strong,**

**Light, . . .**

**Convenient . . .**

Made of best seasoned maple, with accurately milled brass fittings.

**Length,**

**48 inches.**

**Weight,**

**17 ounces.**

Price of Improved Staff Tripods, \$1.50.

*Illustrated Tripod Catalogue free.*

Folding Tripods,  
\$2.00 to \$5.00.  
Ten Styles and Sizes.

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

# THE CARTRIDGE SYSTEM

OF

## FILM PHOTOGRAPHY.

In the cartridge system of film photography as exemplified in the Pocket Kodak, the Cartridge Kodak, the Bullet and the Bulls-Eye, the film is put up in light-tight rolls that may be inserted in the camera in broad daylight. Extending the whole length of the strip of film and several inches beyond each end is a strip of black paper, which, in connection with the flanges on the spool, forms a light-proof cartridge.

After inserting the spool in the camera and threading up the black paper the camera is closed and the key turned until the black paper has been reeled off and the sensitive film brought into place in the focal plane. The black paper runs with and behind the film, and at proper intervals is marked in white with the number of the section of film, 1, 2, 3, etc. In the back of the camera is a small window of red celluloid through which the figures appear as the key is turned. The figures as seen through the window thus show just how far to turn the key and how many exposures have been made. After all the exposures have been made a few extra turns of the key entirely covers the film with black paper and the camera may be unloaded in daylight.

The black paper running the full length of and beyond the ends of the film, the pull of the roll holder is all upon the paper, a great improvement over the other types, where, owing to a piece of black paper being attached to each end of the film, there are three sections and therefore a liability to pull apart.

BICYCLE KODAKS, \$5.00 to \$25.00.

EASTMAN KODAK COMPANY,

Rochester, N. Y.



Definition of the word

# “KODAK”

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The *Standard Dictionary* says :

“Kodak is an arbitrary word constructed for trade-mark purposes.”

We originated and own this trade-mark. No camera is a “Kodak” unless manufactured by the Eastman Kodak Company.

Don't let the clerk sell you any other camera under the name of “Kodak.”

**If it isn't our make, it isn't a “Kodak.”**

*“ You press the button,  
We do the rest.”*

**EASTMAN KODAK CO.,**

**Rochester, N. Y.**