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No. 4

INSTRUCTION BOOK.

PRICE, 10 CENTS.

PUBLISHED BY
EASTMAN KODAK CO.
ROCHESTER, N. Y.
Successor to Boston Camera Mfg. Co.

KODAK
Trade Mark, 1888.

EASTMAN KODAK COMPANY,

ROCHESTER, N. Y.

MANUFACTURERS OF

Kodaks,
Cartridge Roll Holders,
Eastman's Solio Paper,
Eastman's Dekko Paper,
Eastman's Sepia Paper,
Eastman's Dry Plates,
Eastman's Royal Bromide Paper,
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 Paper-Film,
Eastman's Transparency Plates,
Tripods and
Other Specialties.

Feb. 1900.

THE
No. 4 BULLS-EYE
KODAK.

INSTRUCTION BOOK.

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

Successor to Boston Camera Mfg. Co.

BEFORE LOADING.

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

The first and most important thing for the amateur to bear in mind is that the light which serves to impress the photographic image upon the sensitive film in a small fraction of a second when it comes through the lens, can destroy the film as quickly as it makes the picture. Until it has been developed and fixed, the film must never be exposed to white light for even a fraction of a second, (this includes gaslight, lamplight, 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.

EASTMAN KODAK COMPANY,
Rochester, N. Y.

CONTENTS.

PART I.

LOADING THE CAMERA.

The film for the Bulls-Eye Kodak is furnished in light-proof rolls and the instrument can therefore be loaded in daylight. The operation should, however, be performed in a subdued light, not in the glare of bright sunlight.

THE FILM.

TO LOAD.

FIG. 1.

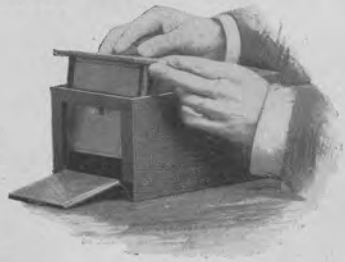


FIG. 2.

I. Take a position at a table as far as possible from any window; open the door in back of camera and press to the left on brass ear as shown in Fig. 1. Now lift the roll holder from box as shown in Fig. 2.

II. Push out on the spring which is at the bottom of the front left hand corner of the roll holder (Fig. 3).

III. Put the full spool into this recess; slip the pins into place in the hole in axis of spool and release the spring. Be sure and get the "*Top*" *at the top.* Each spool is marked on the end.

FIG. 3.

FIG. 4.

IV. Remove the back board of roll holder by sliding it out as shown in Fig. 4.

V. Cut the gum slip that holds the end of the paper and thread the black paper under both cross pieces and pull out beyond the end of Kodak eleven inches. (Fig. 5.) Pass the paper across the rollers and under the third and fourth cross pieces.

FIG. 5.

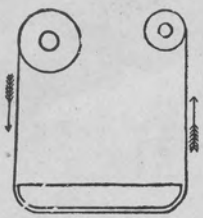
VI. Thread into the slot in reel (see Fig. 6), being careful that the paper draws straight and true and turn the key until the paper is taut.

FIG. 6.

VII. Replace the back board on roll holder, reversing the operation shown in Fig. 4.

Insert the camera body in the case once more and secure with the brass ear at back of camera. See Fig. 1.

Throughout the foregoing operations, from the time the gum slip is cut on the fresh roll of film, until the roll holder is



The paper should be in this position.

once more in place in the case, take care that the black paper does not slip and loosen, if it does it will fog the film.

VIII. The roll of film in the Kodak is covered with black paper and this must be reeled off before a picture can be taken. Turn the key slowly to the left and watch in the little red celluloid window in the back board of roll holder. When 15 to 18 turns have been given, the figure 1 will appear before the window.

The Film is now in position for making the First Picture.

IX. Close the door in back of camera.

PART II.

MAKING THE EXPOSURES.

Before making an exposure with the Bulls-Eye, either time or instantaneous, be sure of four things:

First—That the shutter is set properly.
(For time or instantaneous exposures as desired.)

Second—That the proper stop is in position before the lens.

Third—That the camera is focused.

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

Section I.—Instantaneous Exposures.
("*Snap Shots.*")

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

1.—FOCUS ON THE SUBJECT.

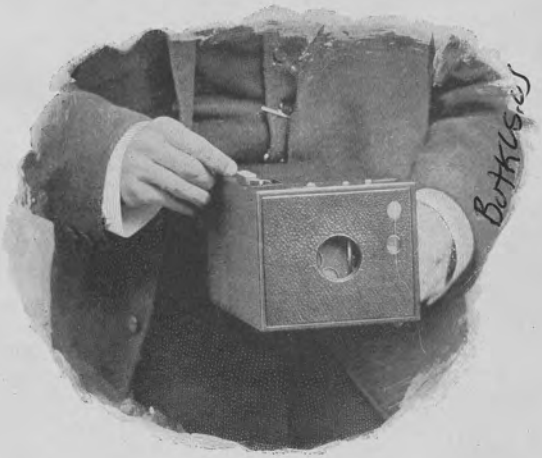


FIG. 1.

Set the focus by placing the pointer over the figures on the index plate nearest the estimated distance of the *principal object* to be photographed *in feet.*

It is not necessary to estimate the distance with any more than approximate accuracy. For instance, if the focus is set at 25 feet, (the usual distance for ordinary street work) the sharpest part of the picture will be the objects at that distance from the camera, but everything from 15 to 35 feet will be in good focus. For general street work the focus may be kept at 50 feet, but where the *principal object* is nearer or farther away, the focus should be moved accordingly. The index plate is divided for 8, 10, 12, 15, 20, 25, 50 and 100 feet. Everything beyond 100 ft. is in the 100 feet focus. Nothing nearer than 8 feet can be focused.

2.—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 film and failure will result. In making snap shots both of the slides shown in Fig. 2 should be pushed down to the limit of motion. Slide A controls time and instantaneous exposures. For snap shots this slide must be down.

FIG. 2.

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

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

For snap shots the slides must both be down as shown in Fig. 3.


FIG. 3.

3.—LOCATE THE IMAGE.

Aim the camera at the object to be photographed and locate the image in the finder. There are two finders, one for horizontal and one for vertical exposures. For a horizontal picture hold the camera as shown in Fig. 4.

FIG. 4.

For a vertical exposure the camera must be held as shown in Fig. 5. The finders give the scope of view and show an exact fac-simile 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.

FIG. 5.

5.—HOLD IT LEVEL.

The Kodak must be held level.

If the operator attempts to photograph a tall building, while standing near it, by pointing the Kodak upward (thinking thereby to center it) the result will be similar to Fig. 6.

FIG. 6.

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

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

If the object be low down like a small child or a dog, the Kodak should be held down level with the center of the object. See Fig. 7.

FIG. 7.

FIG. 8.

5.—PUSH THE LEVER.

The shutter is always set, and is operated by pushing the spring alternately to right or left. (See Fig. 8.)

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.

Hold the Kodak Steady,

Hold it Level and

Push the Lever.

This makes the Exposure.

Turn the film into position: Open the door in back of camera and turn the key slowly to the left, until the next number appears before the window. Three or four turns will be sufficient to accomplish this.

Repeat the foregoing operations for each picture.

Section 2.

TIME EXPOSURES INDOORS.

1. Put the Camera in Position.

Diagram showing position of camera.

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.

FIG. 1.

To make a time exposure, place the camera on some firm support like a table or tripod, and pull out the time stop (A) near finder, as shown in Figure 2; focus as before described

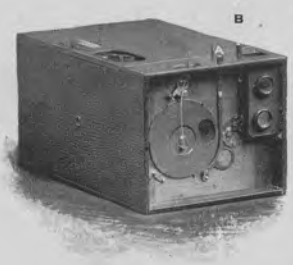


FIG. 2.

(see page 6), steady the camera with one hand and push the lever to open the shutter (see Fig. 1): give the proper time, (using a watch if more than two seconds), and press the lever in the opposite direction to close the shutter.

NOTE: It will be seen that when the time slide 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 winding the film into position, to become accustomed to the operation.

Turn a new film into position as described before. (See page 11.)

For interiors the following table is a good guide:

Time Needed for Interior Exposures.

This table is for the largest stop. When the second stop is used add one-half more time; when the smallest stop is used give ten times the time of the table:

White walls and more than one window:

bright sun outside, 2 seconds;
hazy sun, 5 seconds;
cloudy bright, 10 seconds;
cloudy dull, 20 seconds.

White walls and only one window:

bright sun outside, 3 seconds;
hazy sun, 8 seconds;
cloudy bright, 15 seconds;
cloudy dull, 30 seconds.

Medium colored walls and hangings and more than one window:

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

Medium colored walls and hangings, and only one window:

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

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

bright sun outside, 10 seconds;
hazy sun, 20 seconds;
cloudy bright, 40 seconds;
cloudy dull, 1 minute, 20 seconds.

Dark colored walls and hangings and only one window:

bright sun outside, 20 seconds;
hazy sun, 40 seconds;
cloudy bright, 1 minute, 20 seconds;
cloudy dull, 2 minutes, 40 seconds.

The foregoing is calculated for rooms whose windows get the direct light from the sky and for hours from 3 hours after sunrise till 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). Centre the image in the finder. For a bust picture the camera should be 6 to 8 feet from the figure; for a three-quarter figure 8 to 10 feet, and for a full figure, 10 to 12 feet. The background should form a contrast with the sitter.

NOTE: In making portraits the subject may be a little less than 8 feet from the camera provided the smallest stop is used and time given accordingly but the pointer on camera must be at eight feet. As a general rule, use the middle stop for portraits.

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 ½ 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 seashore, or on the water, or in tropical or semi-tropical climates; also for interior time exposures, the time for which is given in the table on pages 13 and 14.

1-10. THE SMALLEST—For time exposures outdoors in cloudy weather. *Never for instantaneous exposures.* The time required for time exposures on cloudy days with the smallest stop will range from ½ 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.

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 souvenirs of many occasions which, but for the flash light, would be quite beyond the range of the art.

PREPARATION FOR THE FLASH.

The camera should be prepared for time exposure, as directed on page 12 of this Manual (except that the largest stop must be used), and placed on some level support where it will take in the view desired.

Pin a Flash Sheet by one corner to a piece of 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 Kodak, 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 lamp 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 Kodak. 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 Kodak 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 cardboard, one above the other, the corners slightly overlapping.

TABLE.

For	10	feet	distance	and	light	walls	and	hangings	use	1	sheet.
"	10	"	"	"	dark	"	"	"	"	2	"
"	15	"	"	"	light	"	"	"	"	2	"
"	15	"	"	"	dark	"	"	"	"	3	"
"	25	"	"	"	light	"	"	"	"	3	"
"	25	"	"	"	dark	"	"	"	"	4	"

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

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

Eastman'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 Bulls-Eye. The operation should, however, be performed in a subdued light.

I. When the last film has been exposed, turn the kev until the letter S (stop) appears.

FIG. 1.

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

FIG. 2.

III. Open the camera as before described and take the roll holder from the box.

IV. Holding it taut, so as to wind tightly, turn the key until the paper is all on the reel. (See Fig. 2.)

V. Hold the reel tightly with one hand to prevent the paper from loosening and secure the end of black paper by means of the gummed slip that will be found in the end of roll. Loosen the key by turning to the right and pull it out. (Fig. 3).

FIG. 3.

VI. Remove the film from camera by swinging the roll outward. The ratchet carrier being pivoted will swing out with the roll, which is then merely pulled away from the ratchet pins, when it will be free. See Fig. 4.

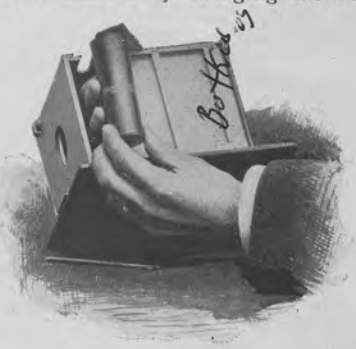


FIG. 4.

VII. Wrap up the roll immediately to prevent the light from injuring the film.

VIII. Now take out the empty spool (this will form the new reel) and slip the three pins in the ratchet wheel into the holes in the end of the spool (see Fig. 5). Swing the ratchet carrier back into place; insert the key and turn to the left until it is screwed firmly into the spool. This forms the new reel.

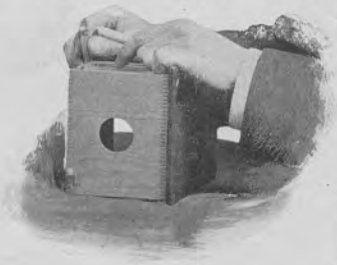


FIG. 5.

IX. Load as described in part one, page 3. The roll of exposures can now be mailed to us for finishing, (see price list) or you can do the developing and printing yourself.

NOTE: In mailing us film for development do not fail to mark the package plainly with your name and address and write us a letter of advice, with remittance.

IN GENERAL.

We recommend everyone to do their own developing. With our A B C outfit it is very simple and inexpensive, no regular dark room is required, and the operator can obtain proofs from the negatives as soon as they are dry.

If, however, the Kodaker prefers to have us "Do the rest," he can send his exposures to us by mail.

We have larger and better facilities for developing and printing and more skilled operators than anyone else, and it is to our interest to get the *best results from every negative.*

PART IV.

DEVELOPING.

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

THE OUTFIT CONTAINS:

1 Eastman Candle Lamp,	$ .25	2 Dozen Sheets 4 x 5 Solio Paper,	$ .25
4 Developing Trays, - -	.40	1 2-oz. Bottle Solio Toning Solution, - - - - - -	.15
1 Glass Beaker, - -	.12	1 Package 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 Manual, - - - - - -	.10
1 Stirring Rod, - - - -	.05		
½ Dozen Developer Powders,	.25		
½ Pound Hyposulphite Soda,	.07		$2.09

Price Complete, neatly Packed, $1.50.

*These outfits cannot be shipped by mail.

To Avoid Curling, Develop Transparent Film Face Down.

Also provide a pair of shears, 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 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.

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.

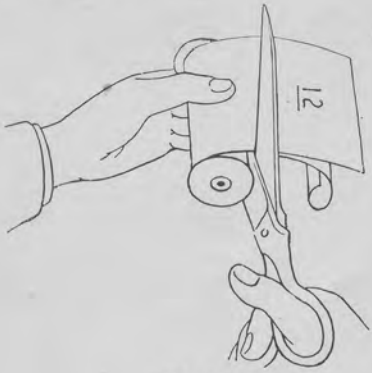


FIG. 1.
RIGHT.

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.

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.

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.

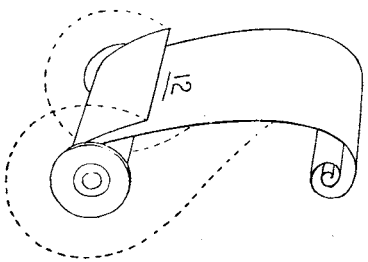
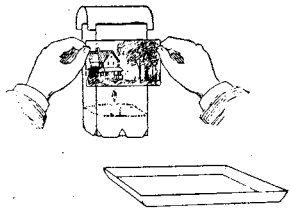


FIG. 2.
WRONG.

3. Fill one of the trays nearly full of water, and put into it the exposures one by one, *face down*; put them in edgewise, to avoid air bells, and immerse them fully.

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



4. 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 and pour into second tray.

5. Take one of the exposures from the water and immerse it, *face down*,* in the second tray. 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 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.

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

*Paper Film must be handled *face up* in order to watch the progress of development.

Only one negative 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 films 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 films from staining them.

7. Put two tablespoonfuls of Hypo-sulphite of Soda into the fourth 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 10 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 negatives in motion, or transferring them back and forth to tray No. 3, one by one, to ensure the water acting evenly upon them.

The fixing solution must only be used in tray No. 4, and the negatives after fixing, must not be put in either No. 1 or 2 trays. 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 5 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 Part V.

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 Kodaker 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-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 while 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 are evidence that the negative has not been properly fixed, and the negative should be put back into the fixing bath and then rewashed.

PART V.

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 cardboard 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 photograph 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.

*Do not use Solio with Paper-Film negatives.

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 the diluted toning solution will tone two dozen prints; after that a new solution should be made 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.

Printing from Paper-Film Negatives.

Paper-Film negatives should be printed on Dekko or Velox paper, as the partial opacity of the paper base makes the use of a printing-out paper like Solio, too slow. Full directions accompany each package of paper.

EASTMAN KODAK COMPANY,
Rochester, N. Y.

PRICE LIST.

No. 4 Bulls-Eye Kodak, for 4 x 5 pictures (not loaded),	$12 00
Transparent Film Cartridge, 12 exposures, 4 x 5,	90
Do., 6 exposures,	45
Do., 2 cartridges, 2 exposures each, (4 ex.),	35
Paper-Film Cartridge, 12 exposures, 4 x 5,	60
Do., 6 exposures,	30
Black Sole Leather Carrying Case,	2 00
Staff Tripod,	1 50
Bulls-Eye Tripod,	2 00
A B C Developing and Printing Outfit, including Solio Paper and Toning Solution for 24 prints (see page 22),	1 50
Solio Paper, 4 x 5, per pkg. 2 dozen,	25
Combined Toning and Fixing Solution for Solio, per 8 oz. bottle,	50
Toning and Fixing Solution can be shipped by mail in 4 ounce bottles as follows: 4 ounces Toning and Fixing Solution (*20c. extra postpaid*),	30
Eastman's Dekko Paper, 4 x 5, per doz.,	25
Eastman's Dekko Developer Powders, per doz. pairs,	50
Eastman's Sepia Paper, per pkg., 2 doz., 4 x 5,	20
Eastman's Hydrochinon Developer Powders, per doz., (do not stain the fingers),	50
Eastman's Pyro Developer Powders, per doz.,	50
Mounts, white or queen's gray, embossed, per dozen,	20
Do., per 100,	1 30
Mounts, Scotch gray, ivy green, carbon black or royal brown, bevel edges, per doz.,	15
Do., per 100,	95
Hypo-sulphite Soda, pulverized, per pound,	10
Bromide Potassium, per ounce bottle,	15
Developing, Printing and Mounting only, each,	15
Developing only, each,	08
Printing and Mounting only, each,	10

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

10 x 12 Bromide Enlargements, mounted on card,	$1 00
11 x 14 Bromide Enlargements, mounted on card,	1 25
14 x 17 Bromide Enlargements, mounted on card,	1 50
Kodak Albums to hold 104 pictures 4 x 5, removable leaves. (For pasting in prints) Style A, Cloth bound,	2 00
Do., Style B, Half Morocco, gold edges,	2 50
Do., Style C, Full Morocco, gold edges,	3 50
Eastman's Indexed Film Negative Album, to hold 100, 4 x 5 Film Negatives,	1 00
Eastman's Flash Lamp,	1 25
" " Powder, per oz. bottle,	60
" " Sheets, per pkg. of ½ doz.,	25
Eastman's No. 1, Flash Cartridges, per pkg. of ½ doz.,	60
" " 2, " " " "	40
" " 3, " " " "	25
"Picture Taking and Picture Making," 120 pages, cardboard cover,	50
Do., Cloth Bound,	1 00
Eastman's Photo Paste, per 3 oz. tube,	15
" " " " 5 " "	25

EASTMAN KODAK CO.
Rochester, N. Y.

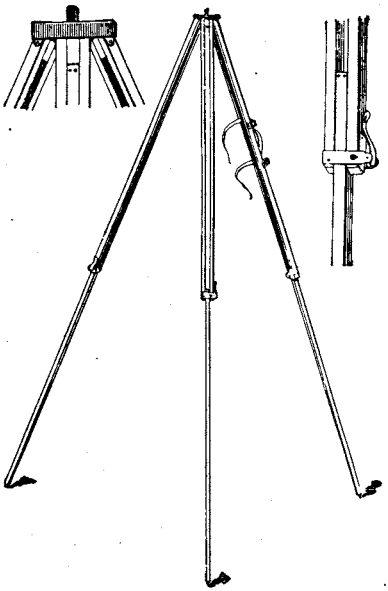
TERMS.

The prices in this Manual are strictly net, except to regular dealers who carry our goods in stock.

All prices are f. o. b. at Rochester. We make no charge for packing.

For the convenience of our customers we recommend that they make their purchases from a dealer in photographic goods as by so doing they can save both time and express charges. Where orders are sent direct, remittances must be by New York draft, express order, postal order or currency (if currency, letter must be registered). Amounts less than one dollar may be remitted in postage stamps. We do not accept personal checks.

EASTMAN KODAK COMPANY,
Rochester, N. Y.

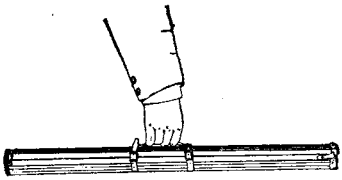


THE BULLS-EYE TRIPOD.

A compact and convenient tripod for use with any camera up to and including 4 x 5. A brass top plate with milled edges holds the socket screw securely and seats it in place in the camera when turned —thus doing away with the nuisance of the ordinary screw, turned by means of a key handle inconveniently located under the plate between the tripod legs, and always likely to be missing when most wanted.

The Bulls-Eye Tripod folds in two sections and is provided with a leather handstrap for carrying. Made of the best seasoned spruce with brass fittings.

Price, - - - ***$2.00***



EASTMAN KODAK CO.

Rochester, N. Y.

DEKKO

Platinum-like effects and easy manipulation—these qualities combine in Eastman's **Dekko**—the short day paper.

Dekko prints by sunlight or gaslight. **Dekko** can be developed and fixed in an ordinary room—by gaslight or subdued daylight. It works day or night. **Dekko** is the amateur's matte paper.

Expose; rinse; develop; fix; wash. Just five operations and each of them easy.

FOUR GRADES:

Carbon Matte, **Egg-Shell Matte,**
Plain Matte, **Rough Matte.**

For sale by all dealers.

EASTMAN KODAK CO.,

Rochester, N. Y.