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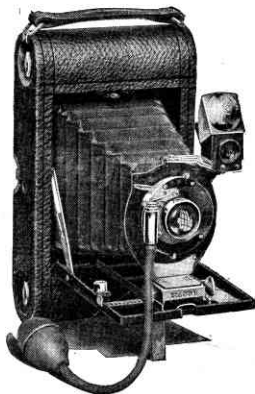
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PICTURE TAKING

WITH THE
No. 3
FOLDING
POCKET
KODAK.



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

KODAK
Trade Mark, 1888.

EASTMAN KODAK COMPANY,
ROCHESTER, N. Y.

MANUFACTURERS OF

Kodaks,
Brownie Cameras,
Cartridge Roll Holders,
Kodak Tank Developers,
Kodak Developing Machines,
Kodak Dry Mounting Tissue,
Velox Paper,
Eastman's Solio Paper,
Eastman's Sepia Paper,
Eastman's Ferro-Prussiate Paper,
Eastman's Velvet Bromide Paper,
Eastman's Royal Bromide Paper,
Eastman's Standard Bromide Paper,
Eastman's Enamel Bromide Paper,
Eastman's Matte-Enamel Bromide Paper,
Eastman's Platino Bromide Paper,
Eastman's W. D. Platinum Paper,
Eastman's Transparent Film,
Eastman's Dry Plates,
Eastman's Kodoid Plates,
Eastman's Transparency Plates,
Tripods and
Other Specialties.

August, 1906.

PICTURE TAKING WITH THE

FOLDING
POCKET KODAK
No. 3

PRICE, 10 CENTS.

PUBLISHED BY THE
EASTMAN KODAK COMPANY,
ROCHESTER, NEW YORK.

BEFORE LOADING.

Before taking any pictures with the No. 3 Folding Pocket Kodak read the following instructions carefully and make yourself perfectly familiar with the instrument, taking especial care to learn the construction of the shutter. Work it for both time and instantaneous exposures several times before threading up the film.

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

EASTMAN KODAK COMPANY,
Rochester, N. Y.

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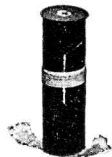
Mounting.

PART I.

SECTION I.

LOADING WITH FILM.

The film for the No. 3 Folding Pocket Kodak is furnished in light-proof cartridges 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. It should also be borne in mind that after the seal is broken care must be taken to keep the black paper taut on the spool, otherwise it may slip and loosen sufficiently to fog the film.



The Film.



FIG. 1.

Opening the Kodak.

I. To load the Kodak, take a position at a table where the daylight is somewhat subdued, and grasping the instrument with the right hand, remove the back by pressing in simultaneously with the thumb and second finger of the left hand, as indicated in Fig. I.

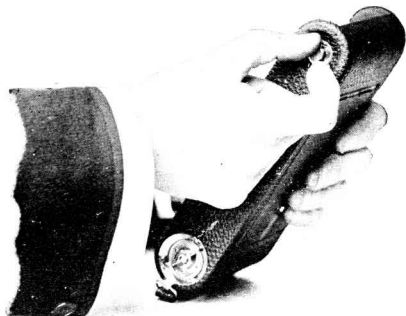


FIG. II.

Springing Out a Spool Pin.

II. The Kodak having been opened, an empty spool having a slit in it will be seen in the winding end of the camera. This forms the reel onto which the film is wound after exposure. The full spool is to be placed in the recess at the opposite end of the Kodak. To accomplish this turn to the right (as indicated by arrows) on the little cam levers at each end of the recess, thus drawing out the center pins. See Fig. II.

III. Drop the film cartridge into this recess, as shown in Fig. III., being careful to *get the top of spool at the top of the camera.* Each cartridge is marked on the end.



FIG. III.
Inserting the Cartridge.

NOTE. If the cartridge is inserted wrong end up, the black paper instead of the film will be brought next the lens, resulting, of course, in the absolute loss of the pictures.

IV. Turn the two cam levers to the left until they are fixed in position by the embossed stops. It will be noted that this centers the axis pins in the spool which is to revolve upon them.



FIG. IV.
Threading up the Black Paper.

V. Cut the gum slip that holds the end of the black paper; pass the paper over the two aluminum rollers and

thread into the slit in reel, as shown in Fig. IV. Be careful in so doing that the paper draws straight and true.

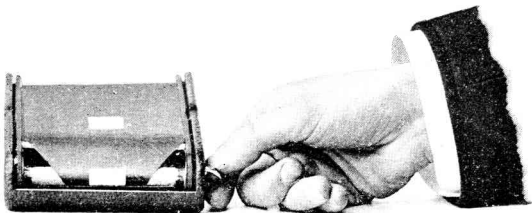


FIG. V.

Turning the Key to Bind Paper on Reel.

VI. Give the key one or two slight turns—just enough to bind the paper on the reel—and no more. See Fig. V.

The paper should now be in position indicated in Fig. VI.



FIG. VI.

Showing position of paper.

VII. Replace the back on Kodak, being careful to put it on right side up, (*i. e.* get the top at the top), and snapping the springs at top and bottom fully into place. Care should always be taken to handle the back of Kodak carefully, especially when it is detached from camera, as even a slight bend would make it fit badly, resulting very probably in a leakage of light and consequent loss of film.

Throughout the foregoing operations, from the time the gum slip is cut on the fresh roll of film until the back board is once more in place, keep the black paper wound

tightly on the roll. If it is allowed to loosen, light will be admitted and the film fogged.

VIII. The roll of film in the camera 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



FIG. VII.

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

the little red celluloid window at the back of the camera. When fifteen to eighteen turns have been given, the number 1 will appear before the window. Fig. VII.

SECTION 2. LOADING WITH PLATES.

I. In using glass plates the plate holder must be loaded in a dark-room—that is, a room from which all white light has been excluded, as described on page 44.

II. Provide also

- No. 3 F. P. K. Glass Plate Adapter.
- No. 3 F. P. K. Plate Holders.
- 1 dozen Eastman's Extra Rapid Plates,
3¼ x 4¼.
- 1 Kodak Candle Lamp.
- A shelf or table on which to work.

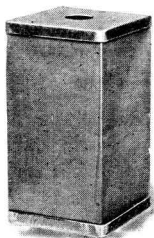


FIG. I.
The Lamp.

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

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.

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

The remaining operations may be performed in daylight.

IX. Remove the back from the camera as before described. (See page 4.)

NOTE.—There must, of course, be no film in the Kodak when opening it for use with plates.

X. Snap the plate adapter into place, taking care that the springs at each side engage with the catches and that the back is right side up, i. e., the plate holder should draw from the winding side of Kodak. The plate holders and ground glass are inserted or removed in the usual manner.

XI. To focus on ground glass pull down on nicked catch at bottom of back, which releases the ground glass shade. See Fig. II. (See page 11.)

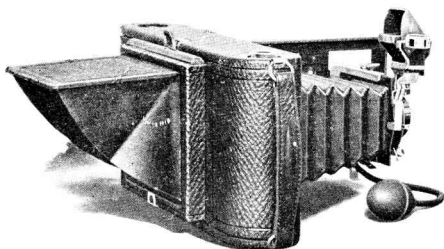


FIG. 11.

Showing Focusing Shade Raised.

XII. After focusing close the shutter, remove the ground glass and insert one of the plate holders.

XIII. Pull out the dark slide. The plate is now in position for making the first picture, and the exposure should be made the same as for films. After making the exposure re-insert the dark slide in plate holder. Remove the plate holder from the camera by means of leather lug, pressing back slightly on same to start it.

To prepare Focusing Scale so that it may be used (instead of Ground Glass) with Plates, proceed as follows :

As the focal plane for film and the focal plane for plates are not the same, it will be necessary to mark the scale especially for use with the plates. To do this is a simple matter, but it should be done with care, as future results depend upon it. Measure off a distance of six feet from some plainly defined object, focus carefully, using the

largest stop; note the position of the pointer over the focusing scale (it will be about $\frac{3}{8}$ of an inch back of the corresponding mark for film); mark the scale for six feet by scoring a line on scale plate with a fine pointed awl. Repeat the foregoing operation for ten, fifteen and twenty-five feet, then focus on some object one hundred feet or more away. In the latter case the actual measurement is not necessary.

PART II.

MAKING THE EXPOSURES.

Before making an exposure with the No. 3 Folding Pocket Kodak, either time or instantaneous, be sure of four things :

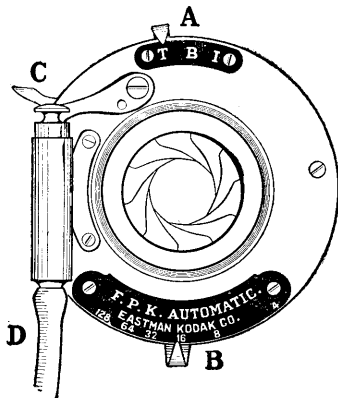
FIRST—That the shutter is adjusted properly.

(For time, instantaneous or bulb exposures as desired.)

SECOND—That the diaphragm stop is set at the proper opening.

THIRD—That the camera is focused.

FOURTH—That an unexposed section of the film is turned into position. (Or a fresh plate is in position.)



SECTION I.

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 up the film for use.

NOTE: To attach the tube D simply moisten the end a trifle and it will be found to slip into place readily.

"SNAP SHOTS."

For all Ordinary Instantaneous Exposures.

FIRST—Set the lever A at the point "I." This adjusts the shutter for instantaneous exposures.

SECOND—Set the lever B at No. 8. Lever B controls the iris diaphragm and No. 8 is the proper opening for ordinary instantaneous exposures.

NOTE. 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, use the diaphragm No. 16. With *light* clouds or *slightly* smoky atmosphere use No. 4. *With heavy clouds do not attempt instantaneous exposures.*

THIRD—Compress the rubber bulb on tube D or press down the release C. *This makes the exposure.*

NOTE. Squeeze the bulb with a firm quick movement.

TIME EXPOSURES:

FIRST—Set the lever A at the point T (time). This adjusts the shutter for time exposures.

SECOND—Set the lever B at No. 16, 32, 64 or 128. See instructions for use of stops, p. 26.

THIRD—Press the bulb. *This opens the shutter.* Time exposure by the watch. Again press the bulb. *This closes the shutter.* Shutter may be opened by touching release C and closed by a second pressure if desired.

BULB EXPOSURE.

When it is desirable to make a very short time exposure this is best accomplished by making a "bulb exposure."

FIRST—Set the lever A at the point "B" (bulb). This adjusts the shutter for bulb exposures.

SECOND—Set the lever B controlling the stops at No. 16, 32, 64 or 128 as desired. See page 26.

THIRD—Compress the bulb to open the shutter, and release it to close the shutter. *This makes the exposure.* The shutter will remain open as long as the bulb is under pressure.

NOTE. This method will not answer for a long time exposure for the reason that when the compressed air has leaked out, the shutter will close of itself.

Do not oil any part of the shutter.

In case of accident return shutter to your dealer or to us for repairs.

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

SECTION 2. INSTANTANEOUS EXPOSURES.

"SNAP SHOTS."

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

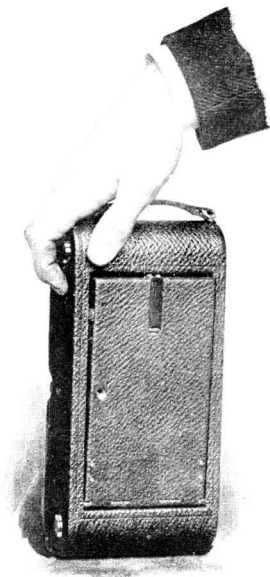


FIG. I.
Opening the Front.

1.—FOCUS ON THE SUBJECT.

I. Press the concealed button as shown in Fig. I. and push down the bed of camera to the limit of motion.

II. Grasp the springs at bottom of front board; pull out the front until the pointer on the lower left hand side of front board is over the figures on the index plate nearest the estimated distance of the *principal object* to be photographed in feet. Fig. II.

NOTE.—The index plate is scaled both by feet and by metres and care should be taken not to confound them.

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 25 feet, but where the *principal object* is nearer or farther away, the focus should be moved accordingly. The index plate is divided for 6, 10, 15, 25 and 100 feet. Everything beyond 100 feet is in the 100 foot focus. Nothing nearer than 6 feet can be focused without using the ground glass.

AUTOMATIC LOCKING DEVICE.

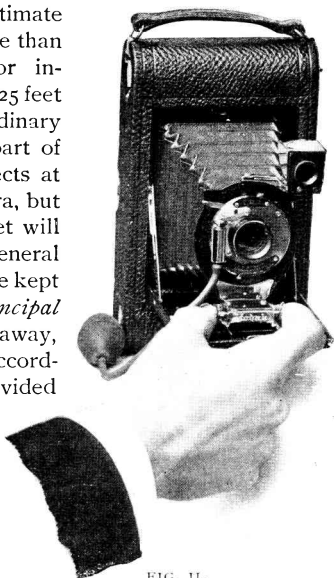
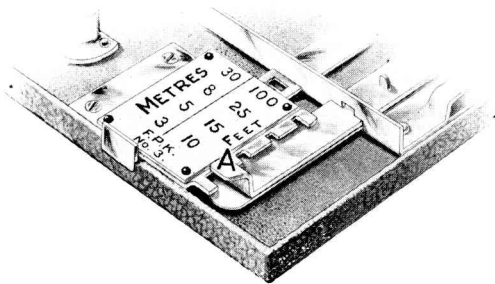


FIG. II.

*Extending the Bellows and
Focusing.*

By means of the locking device on bed of camera the front locks automatically at 10, 15, 25 or 100 feet focus.

To set the focus, press down on lever A and set catch in slot marked for the distance desired, 10, 15, 25 or 100 feet (the device is also marked in metres). Now pull out front of camera to limit of motion and the instrument will be in focus for the distance at which you have set the catch.

When you do not wish to use the locking device shove lever to extreme right.

WITH PLATES.

When using plates the ground glass *may* be employed for focusing if desired. Insert ground glass in plate adapter. Raise the focusing shade. Open the shutter. Focus carefully with the largest stop before the lens and when the lines show sharp and true, close the shutter. Remove the ground glass and insert plate holder.

2.—USE STOP NO. 8.

For all ordinary out-door work when the sun is very bright use stop No. 8. 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 views on the water when the sunlight is *unusually strong* and there are no heavy shadows, or in tropical or semi-tropical climates, diaphragm No. 16 may be used.

If a smaller stop opening than No. 16 be used for snap shots *absolute failure will result.*

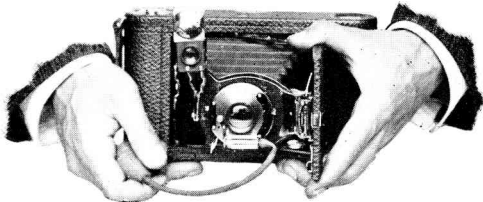


FIG. III.

3.—LOCATE THE IMAGE.

Aim the camera at the object to be photo-

graphed and locate the image in the finder. For a horizontal picture hold the camera as shown in Fig. III., reversing the finder as indicated. Always look into the finder from directly over it, *not at an angle*. (Of course, when the focusing glass is employed the image will be located on that instead of in the finder.)

For a vertical exposure the camera must be held as shown in Fig. IV. The finders give the scope of view and show a 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.

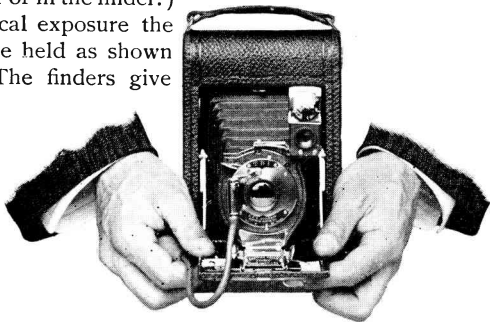


FIG. IV.

Fig. V. shows how to hold the camera when making an exposure without the use of the bulb. Grasp the bed of Kodak firmly with the left hand, steady it with the right and with the thumb of the right hand lightly touch the exposure lever.

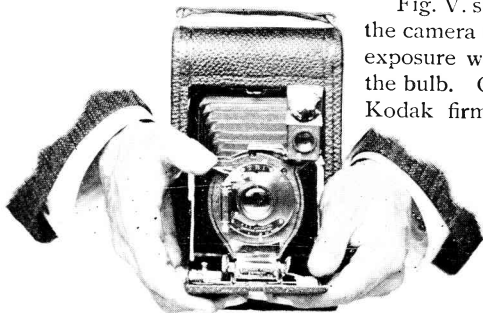


FIG. V.

5.—HOLD IT LEVEL.

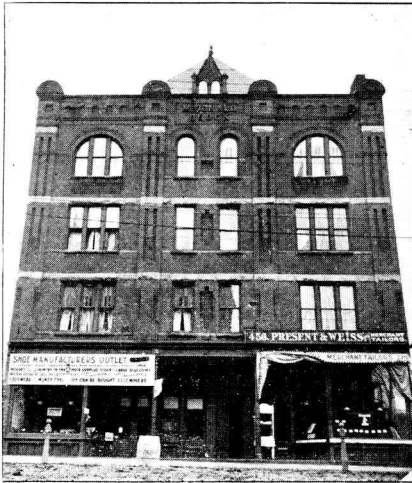


FIG. VI.

The Kodak 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. VI.

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 on 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.

5.—COMPRESS THE BULB.

HOLD THE CAMERA STEADY,
HOLD IT LEVEL AND
COMPRESS THE BULB.

This makes the Exposure.

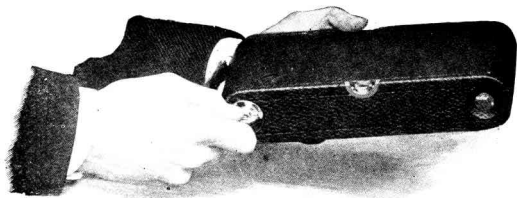


FIG. VII.

TURN A NEW SECTION OF FILM INTO POSITION :
Turn the key in top of camera slowly to the left, until the next number appears before the red window. Three or four turns will be sufficient to accomplish this. See Fig. VII.

Repeat the foregoing operations for each picture.

SECTION 3.
TIME EXPOSURES.
INTERIORS.

1. Put the Kodak in position.
Set camera in such a position that the finder will

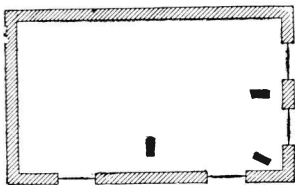


Diagram showing position of Kodak.

embrace the view desired.

The diagram shows the proper position for the Kodak. 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 Kodak.

To make a time exposure, place the Kodak on some firm support like a table or tripod, and focus as before described.

Fig. I. shows the Kodak in position for a vertical exposure. The Kodak 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 out the slide in bed of Kodak as shown in Fig. II.

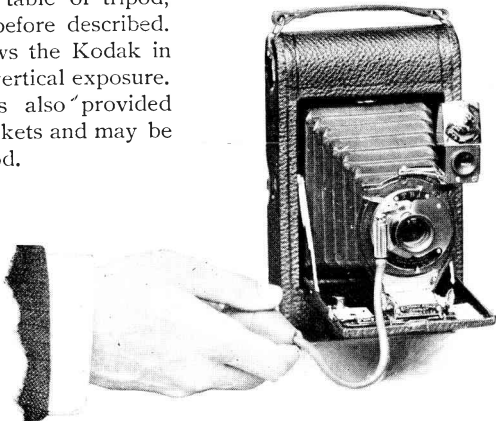


FIG. I.

Adjust the shutter for a time exposure as described on page 14.

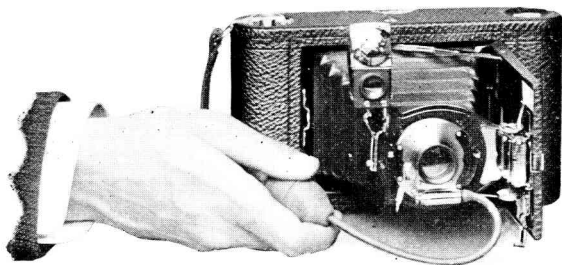


FIG. II.

All being in readiness, compress the bulb or touch the lever once to open and again to close the shutter. Time the exposure by the watch.

TURN THE KEY.

Turn a new film into position as described before (see page 21).

THE KODAK 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 time of the exposure required under varying conditions of light with the stop No. 16 in the lens. If the stop No. 8 is used give only one-half the time, if the stop No. 128 is used give 8 times the time of the table. The smaller the stop the sharper the picture. The No. 16 gives the best 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 is calculated for rooms whose windows get the direct light from the sky and for hours from three hours after sunrise until three hours before sunset.

If earlier or later the time required will be longer.

TO MAKE A PORTRAIT.

Place the sitter in a chair partly facing the light, and turn the face slightly toward the camera (which should be at the height of an ordinary table.) Center the image in the finder. For a three-quarter figure the Kodak should be from 6 to 8 feet from the figure, and for a full figure, 8 to 10 feet. The background should form a contrast with the sitter.

KODAK PORTRAIT ATTACHMENT.

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

By means of the Portrait Attachment large head and shoulders portraits of various sizes may be obtained. With the Attachment in position and the focus set at 6 feet the subject should be placed exactly 2 feet, 8 inches, from the lens.

At 8 feet focus, place the subject 3 feet from the lens.
 At 15 feet focus, place the subject $3\frac{1}{2}$ feet from the lens.
 At 25 feet focus, place subject 4 feet from lens.
 At 100 feet focus, place subject $4\frac{1}{2}$ feet from lens.

TIME EXPOSURES IN THE OPEN AIR.

When the stop No. 128 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— $\frac{1}{8}$ second.

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 Kodak is held in the hand. Always place it upon some firm support, such as a tripod, chair or table.

For exceedingly short time exposures, as above described, use the "bulb exposure." See page 15.

DIAPHRAGMS.

The stops should be used as follows :

No. 4.—For instantaneous exposures on *slightly* cloudy days.

No. 8.—For *all ordinary instantaneous exposures* when the sun shines.

No. 16.—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 page 24.

Nos. 32 and 64.—For interiors. *Never for instantaneous exposures.*

No. 128.—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 1.5 second to 5 seconds, according to the light. The smaller the stop the sharper the picture.

Absolute failure will be the result if you use the smallest stop for instantaneous exposures.

SECTION 4.

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 cardboard, a pin and a match complete the list of essential extras.

The cost then is :

One Package Eastman's Flash Sheets, No. 1, 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 flashlight, 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 21 of

this manual (except that the No. 8 stop must be used), and placed on some level support where it will take in the view desired.

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

The flash sheet should *always* be placed two feet behind and two or three feet to one side of the camera. If placed in front, or on a line with front of 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 flash should be at the same height or a little higher than the camera. The support upon which the flash is to be made should not project far enough in front of it to cast a shadow in front of the Kodak. An extra piece of cardboard 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 sheets 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 sheets. |
| " | 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 8 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 AND FLASH POWDER.

Eastman's Flash Cartridges or Flash 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