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Picture taking with the

No. 2-A Folding Cartridge Premo Camera

(Rapid Rectilinear Lens)

EASTMAN KODAK COMPANY
ROCHESTER, N. Y.

Picture taking with the

No. 2-A Folding Cartridge Premo Camera

(Rapid Rectilinear Lens)

2A Folding Cartridge [illegible]
[illegible] Exchange. Inc.
[illegible] st Hoboken. N. J.
Dec. [illegible], 1921.

Published by
EASTMAN KODAK COMPANY
ROCHESTER, N. Y., U. S. A.

Order Film by Number

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

116 is the number of film for this camera (No. 2-A Folding Cartridge Premo). The number appears on the carton, on the cartridge and on the back of the camera.

May, 1920.

Before Loading

BEFORE taking any pictures with the No. 2-A Folding Cartridge Premo Camera read the following instructions carefully. Make yourself perfectly familiar with the camera, taking especial care to learn how to operate the shutter. Work it for both time and instantaneous exposures several times before threading up the film.

The first thing for the amateur to bear in mind is that the light which serves to impress the photographic image upon the sensitive film in a fraction of a second when it comes through the lens, can destroy the film as quickly as it makes the picture. Throughout all the operations of loading and unloading, be extremely careful to keep the duplex paper wound tightly around the film to prevent the admission of light.

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Part III

PART I

Loading the Camera

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

The Film, No. 116

1. To load the camera, take a position where the daylight is somewhat subdued and remove front of camera by pushing metal lock to the left, Fig. 1. Grasp the front of camera by the two metal

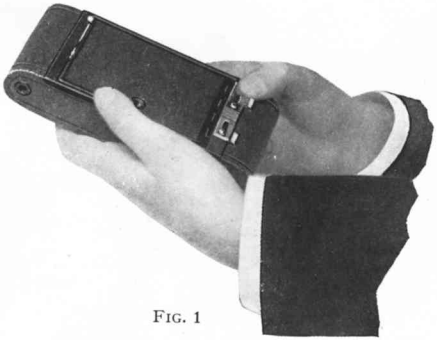


FIG. 1

FIG. 2

edges and lift it upwards, first lifting that end on which the lock is fastened, and remove entirely that part of the camera. Fig. 2. The camera is now ready for loading.

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

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

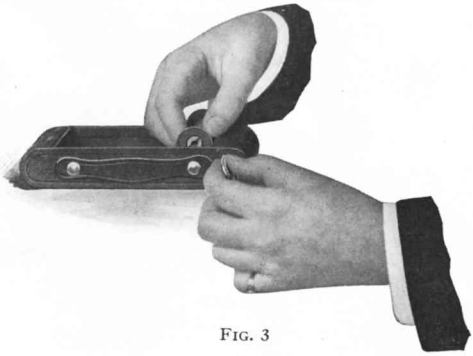


FIG. 3

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

3. Remove the gummed slip that holds the end of duplex paper, from the cartridge, and thread tapered end of duplex paper into the slit of the empty spool, *so that the slot in the end of spool will be at the top, while at the same time the slot at end of full spool will be at the bottom of the cartridge.* Then give the empty spool three or four turns, or until the black lines on outside of paper are reached, at the same time being careful that the paper draws straight and true. See Fig. 4.

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

FIG. 4

Important

Be sure to get the top of spool at top of camera (each spool is marked with the word "Top," on the duplex paper near the top of the spool) when inserting, otherwise your film will come on the

FIG. 5

wrong side of duplex paper when reeled off and total failure will result.

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

FIG. 6

Turn winding key at top of camera toward the front, until the web on the key engages in slot in top of spool. Fig. 6.

Caution

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

6. The camera should now be closed, reversing the operation shown in Figs. 1 and 2. When re-

placing front of camera after it is loaded, first insert the end opposite the lock, the edge of box should be in the metal groove at end of front, then drop the end on which the lock is fastened down into place. Make sure that the metal lock is fastened securely.

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

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

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

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

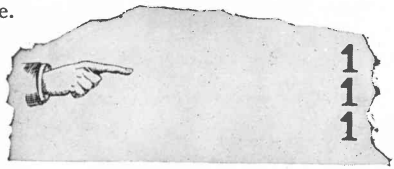


FIG. 7

PART II

Making the Exposures

Before making an exposure with the No. 2A Folding Cartridge Premo, either time or instantaneous, be sure of four things:

First—That the shutter is adjusted properly.

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

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

Third—That the camera is focused.

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

Operating the Shutter

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

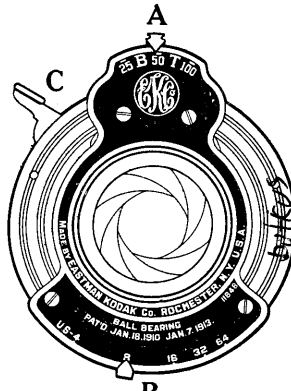
The following directions should, therefore, be carefully read and the shutter operated several times before threading the film up for use.

The shutter is self-setting.

"Snapshots"

For All Ordinary Instantaneous Exposures

First—Set the indicator A at 25, 50 or 100. This adjusts the shutter for instantaneous exposures and represents the speeds of the shutter.



NOTE—The lever A should be used at 100 only when taking moving objects in bright sunshine, and lever B must always be placed at No. 4 when taking this kind of a picture.

Second—Set the indicator B at No. 8. Lever B controls the Iris diaphragm and No. 8 is the proper opening for ordinary instantaneous exposures, in bright sunshine, using speed 25.

Third—Press down on lever C and release it. *This makes the exposure.*

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 Nos. 4, 8, 16, 32 or 64. See instructions for the use of the stops for Interior Exposures as given in table on page 27, also the table for Time Exposures in the Open Air, page 29.

Third—Press down on lever C. *This opens the shutter.* Time the exposure by a watch. Again press the lever. *This closes the shutter.*

Bulb Exposures

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

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

Second—Set the indicator B controlling the stops at Nos. 4, 8, 16, 32 or 64. See instructions for the use of the stops for Interior Exposures as given in table on page 27, also the table for Time Exposures in the Open Air, page 29.

Third—Press lever to open the shutter, and release it to close the shutter. *This makes the exposure.* The shutter will remain open as long as the lever is under pressure.

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

Instantaneous Exposures
"Snapshots"

When making instantaneous exposures, the subject 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. If it shines directly into the lens it will blur and fog the picture.

Use Stop No. 8

For all ordinary outdoor work when the sun is bright, use stop No. 8 and use speed 25. If a smaller stop is used for ordinary snapshots, the light will be so much reduced that it will not sufficiently impress the image on the film, and failure will result.

When making portraits out of doors, when the sun is shining bright, place the subject in the shade of a building or large tree, but with clear and unobstructed sky overhead—then use stop No. 4 and use speed 25. By following this rule unpleasant and distorting shadows on the face will be avoided.

In views on the water when the sunlight is *unusually* strong and there are no heavy shadows, diaphragm No. 16 and speed 50 may be used.

If a smaller stop opening than No. 16 is used for snapshots, *absolute failure will result*, except that No. 32 may be used for extremely distant views, marine or snow scenes, or clouds, in bright sunshine, at speed 25.

Focus on the Subject

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

Grasp the round post on slide plate to pull out the front.

At the front of camera bed and at one side will

FIG. 1. Opening the Front.

be found an index plate which is used for focusing the camera. There are three slots on the index plate, marked 8, 25 and 100 feet. It is not necessary to estimate the distance with any more than approximate accuracy; for instance, if the focus is set at the slot marked 25 feet, (the usual distance for ordinary street work) everything from about 13 feet to about 40 feet will be in good focus. When the camera is focused in this manner, it may then be used as a regular fixed focus instrument, providing the stop indicator is placed midway between No. 8 and No. 16. Where the principal object is nearer or farther, the focus should be changed accordingly. For distant views set the focus with the indicator in the slot marked 100 feet, and nothing nearer than 8 feet can be focused without using a Portrait Attachment, see page 28 or use a small stop opening, see table on page 15.

What Depth of Focus Means

Suppose now that the lens is used at its full opening, U. S. 4, and the focus is set at eight feet. An object eight feet distant will be absolutely sharp, but objects six and ten feet distant will not be. Stop the lens down to U. S. 16 and those objects each side of the exact point of focus will materially increase in sharpness. Go further and use Stop U. S. 64, and everything from five feet to seventeen feet will be sharp.

It will thus be seen that the smaller the stop the greater the depth of focus, i. e., the greater the power of the lens to sharply define, at the same time, objects nearer the camera and further from the camera than the principal object in the picture, which, of course, is the object focused upon. But it is obvious that with the small stops the exposure must be correspondingly lengthened.

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

Stops	U. S. 4		U. S. 8		U. S. 16		U. S. 32		U. S. 64	
Distance Focused Upon	Range of Sharpness									
	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.
100 Ft.	35 to Inf.		28 to Inf.		21 to Inf.		17 to Inf.		12 to Inf.	
25 Ft.	15 "	31	13 "	40	12 "	70	10 " Inf.		9 " Inf.	
8 Ft.	7 "	9	6¾"	10	6 "	11	6 "	13	5 "	17

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

Extending the Bellows

Now pull out the front of camera to the division marked for the distance desired, 8, 25 or 100 feet, and the camera will be in focus for the distance at which you have placed the catch. (Fig. 2.)

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

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

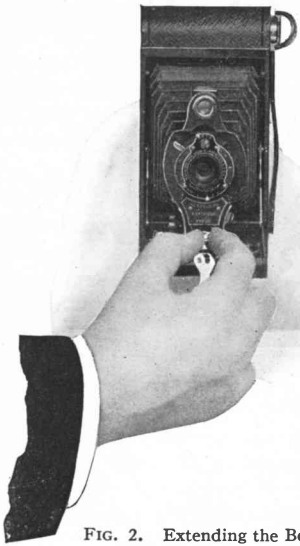


FIG. 2. Extending the Bellows.

How to use the No. 2-A Folding Cartridge Premo as a Fixed Focus Camera

SET FOCUS AT 25 FEET.

USE SPEED 25.

SET DIAPHRAGM MIDWAY BETWEEN NOS. 8 AND 16.

By following the above suggestions this camera can be used as a fixed focus instrument with the additional advantage of being instantly convertible to a focusing camera when conditions call for it. It must be remembered, however, that when using this camera as a fixed focus type, it is necessary that the subject be in brilliant sunlight, in order to obtain a fully timed exposure.

Explanation

A lens is often spoken of erroneously as having a fixed focus.

There is no such thing as a fixed focus lens, but in certain cameras, 3¼ x 4¼ and smaller (equipped with short focus lenses) the lens is immovable, i. e., set at a distance that is a compromise, as to its focus, between far and near points. A camera with a lens so focused, used in combination with a relatively small stop, is designated a fixed focus instrument.

Making the Exposure

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

The finder shows the scope of view and gives a

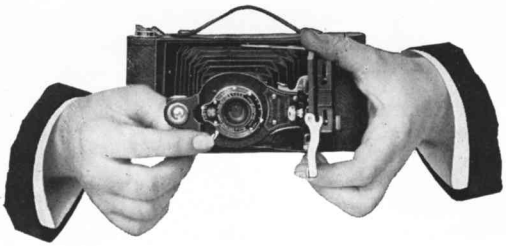


FIG. 3. Pressing the Snapshot Lever

facsimile of what the picture will be. Hold the camera steady—hold it level as shown in Fig. 3, and push the lever. This makes the exposure.

For a vertical exposure the camera must be held on its end. Fig. 4. The finder is reversible so that it will be correct for either horizontal or vertical exposures. The finder gives the scope of view and shows a facsimile of the picture as it will appear,

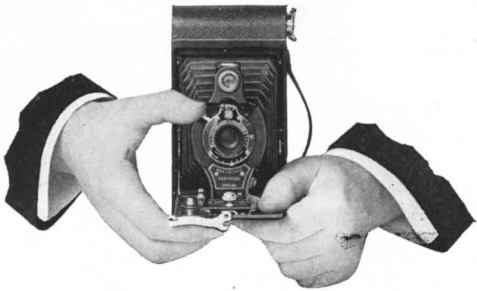
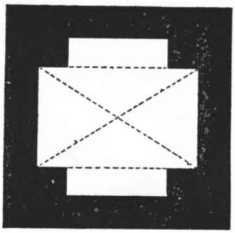


FIG. 4

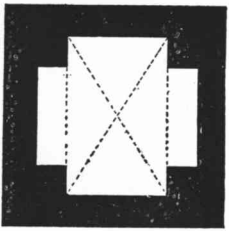
but on a reduced scale. Any object that does not show in the finder will not show in the picture.

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

Remember that only the view indicated in the dotted lines will show in the picture.



View Included When Making a Horizontal Picture



View Included When Making a Vertical Picture

FIG. 5

Important

When making instantaneous exposures hold the camera firmly against the body as shown in illus-

trations and when operating the cable release (when camera is equipped with one) or pressing the exposure lever, hold the breath for the instant.

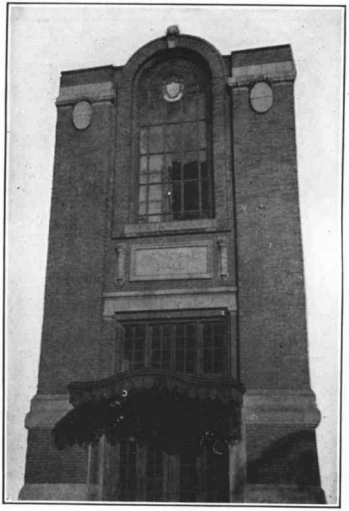


FIG. 6
Effect produced by tilting the camera

Hold it Level

The camera must be held level.

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

When making this picture the camera was pointed too high. This building should have been taken from the building opposite and at a level corresponding with the middle of the subject.

The operator should hold the camera *level*, after

FIG. 7
Turning a new section of film into position

withdrawing to a proper distance, as indicated by the image shown in the finder.

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

Press in on the key in top of camera and turn it 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. 7. The warning hand appears only before No. 1.

Repeat the foregoing operations for each picture.

Time Exposures—Interiors

Place the camera in position on a tripod, table, chair or some other firm support. If a table or

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

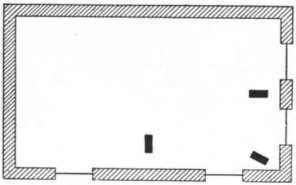


Diagram showing positions of camera.

Set camera in such a position that the finder will embrace the view desired. The diagram shows the proper positions for the camera. It should not be pointed directly at a window as the glare of light will blur the picture. If all the windows cannot be avoided, pull down the shades of such as come within the range of the camera.

Fig. 8 shows the camera in position for a vertical

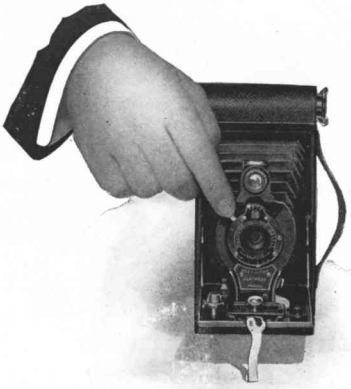


FIG. 8

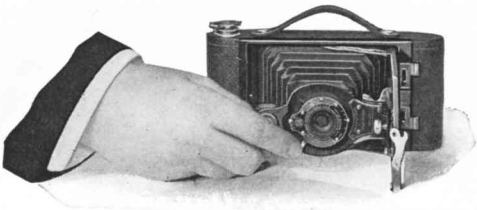


FIG. 9

exposure. The camera is also provided with tripod sockets and may be used on a tripod.

When it is desired to make a horizontal time exposure without the use of a tripod, pull down the same lever at front of bed of camera, that was used for the support when taking a vertical exposure, as shown in Fig. 9.

Adjust the shutter for a time exposure, as described on page 11.

All being in readiness, press the lever, once to open and again to close the shutter. Time the exposure by a watch.

Another Method

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

Hold the palm of the hand before the front of the camera, so as to cover the lens and exclude all light (see Fig. 10). Press the release to open the shutter; remove the hand and give the proper exposure; replace the hand in front of the lens and again press the release to close the shutter.

Some experienced amateurs prefer this method with any camera not having a pneumatic or cable release, as it practically does away with all danger of jarring the camera during exposure, and thus blurring the picture.

TURN THE KEY, moving a new film into position as described before. (See page 23.)

The camera is now ready for the next Interior Exposure.

Follow the directions given heretofore for each successive exposure.

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

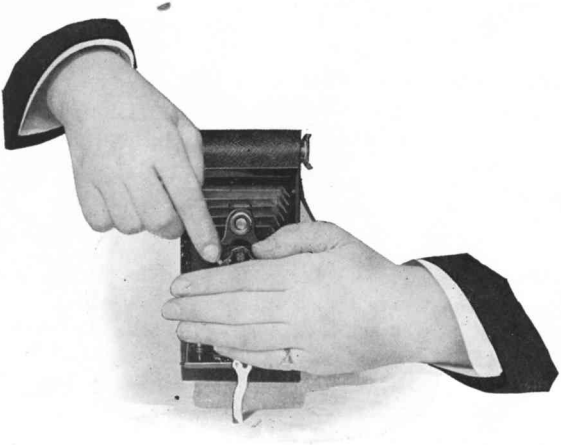


FIG. 10

Time Needed for Interior Exposures

The following table gives the time of the exposure required under varying conditions of light.

The time given in the table is with stop No. 16 in the lens. If stop No. 8 is used, give only one-half the time; with stop No. 4, one-fourth the time; with stop No. 32 give twice the time, and if stop No. 64 is used, give four times the time of the table. The smaller the stop the sharper the picture. The No. 16 gives the best average results for Interiors.

White walls and more than one window:

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

White walls and only one window:

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

Medium colored walls and hangings and more than one window:

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

Medium colored walls and hangings and only one window:

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

Dark colored walls and hangings and more than one window:

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

Dark colored walls and hangings and only one window:

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

The foregoing is calculated for rooms where the 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 subject in a chair partly facing the camera (which should be located little higher than an ordinary table) and turn the face slightly towards the camera, having the eyes centered on an object at the same level with the lens. Center the image in the finder. For a three-quarter figure the camera should be about 8 feet from the subject. The background should form a contrast with the subject.

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 camera except to change the focus.

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

When the Attachment is in position and the camera set:

At 8 feet focus, the subject should be placed exactly 3 feet from the lens.

At 25 feet focus, place the subject 4 feet from the lens.

At 100 feet focus, place the subject 4½ feet from the lens.

Use Kodak Portrait Attachment No. 3 with the No. 2-A Folding Cartridge Premo Camera.

Time Exposures in the Open Air

When the smallest stop (No. 64) is in the lens the light admitted is so much reduced that time exposures out of doors may be made the same as interiors, but the exposures must be much shorter.

With Sunshine—The shutter can hardly be opened and closed quickly enough to avoid overexposure.

With Light Clouds—From ½ to 1 second will be sufficient.

With Heavy Clouds—From 2 seconds to 5 seconds will be required.

The above is calculated for the same hours as mentioned for Interiors on page 28 but 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.

For exceedingly short time exposures as above described use the "bulb exposure". See page 12.

Diaphragms

No. 4. For instantaneous exposures on *slightly* cloudy days, and use speed 25.

No. 8. For *all ordinary instantaneous exposures* when the sun shines, using speed 25.

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, using speed 50; also for Interior Time Exposures, the time for which is given in the table on page 27.

No. 32. For instantaneous exposures of extremely distant views, marine or snow scenes, or clouds, in bright sunshine, at speed 25; also for time exposures.

No. 64. For time exposures outdoors in cloudy weather. *Never for instantaneous exposures.* The time required for time exposures on cloudy days with smallest stop will range from ½ second to 5 seconds, according to the light. The smaller the stop the sharper the picture.

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

Flash-Light Pictures

By the introduction of Eastman Flash Sheets, picture taking at night has been wonderfully simplified. A package of flash sheets, a piece of cardboard, a pin and a match complete the list of essential extras, although a Kodak Flash Sheet Holder is a great convenience.

With flash sheets, no lamp is necessary; there is a minimum of smoke and they are far safer than any other self burning flash medium, besides giving a softer light that is less trying to the eyes.

Many interiors can be taken with the flash sheets that are impracticable by daylight, either by reason of a lack of illumination or because there are windows in a direct line of view which cannot be darkened sufficiently to prevent the blurring of the picture.

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

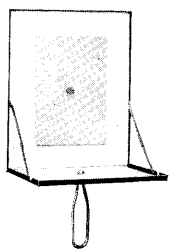
Preparation for the Flash. The camera should be prepared for Time Exposures, as directed on page 11 of this manual. (Stop No. 8 must be used), and place on some level support where it will take in the view desired.

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 camera the light from the flash would strike the lens and blur the picture. It should be placed at one side as well as behind, so as to throw a shadow and give

a little relief in the lighting. The flash should be at the same height or a little higher than the camera. The support upon which the flash is to be made should not project far enough in front of it to cast a shadow in front of the camera. An extra piece of cardboard a foot square placed under the flash sheet will prevent any sparks from the flash doing damage. However, by using the Kodak Flash Sheet Holder, all these contingencies are taken care of, and we strongly advise its use.

The Kodak Flash Sheet Holder



This holder may be held in the hand, *always between you and the flash sheet*, or it may be used on any tripod, being provided with a socket for this purpose. The sheet is placed in position in the center of the larger pan over the round opening which has a raised saw-tooth edge extending half way around it. Press with the thumb on the sheet, so a slight break is made and a portion of the sheet projects partially through the opening. Then to insure the sheet being more securely fastened, press around the notched edge, forcing this portion of the flash sheet firmly into position on the pan.

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

Taking the Picture

Having the camera and the flash sheet both in position and all being in readiness, open the camera shutter, stand at arm's length and touch a match from behind, through the opening in the center of the holder.

NOTE—If you are not using the Kodak Flash Sheet Holder place the match in a split stick at least 2 feet long.

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 Sheet

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

TABLE

For ten feet distance and light walls and hangings, use one No. 1 sheet.

For ten feet distance and dark walls and hangings, use one No. 2 sheet.

For fifteen feet distance and light walls and hangings, use one No. 2 sheet.

For fifteen feet distance and dark walls and hangings, use one No. 3 sheet.

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

To Make a Portrait—Place the subject in a chair partly facing the camera (which should be located a little higher than an ordinary table) and turn the face slightly towards the camera having the eyes centered on an object at the same level

with the lens. The proper distance from the camera to the subject can be ascertained by looking at the image in the finder. For a three-quarter figure this will be from 6 to 8 feet, and for a full figure from 8 to 10 feet.

For use of the Portrait Attachment, see page 28.

The flash should be on the side of the camera away from the face, that is, the subject should not face it. The flash should not be higher than the head of the subject.

To Make a Group—Arrange the chairs in the form of an arc, facing the camera so that each chair will be exactly the same distance from the camera. Half the persons composing the group should be seated and the rest should stand behind the chairs. If the group is large any number of chairs may be used, but none of the subjects should be seated on the floor, as 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. The lights may be left on while the picture is being made, provided none of them show in the finder.

Eastman Flash Sheets burn more slowly than flash powders, producing a much softer light and are, therefore, far preferable 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 Flash Cartridges

Eastman Flash Cartridges may be substituted for the sheets if desired. We recommend the sheets, however, as more convenient, cheaper and capable of producing the best results. The cartridges are superior only when absolutely instantaneous work is essential.

Closing the Camera

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

2. Keep catch pressed and slide back the front a short distance. The catch may then be released and front pushed back into the camera box. Reverse the operation as shown in Fig. 2, page 16.

3. Close the camera by pressing down on arm locks on each side of bed as shown in illustration. (Fig. 11.) The bed will now close readily.

Caution

Before closing the bed of the camera be careful to note that the finder is in the upright position. The front board must be pushed back *to*, and *only to*, the limit of motion.

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

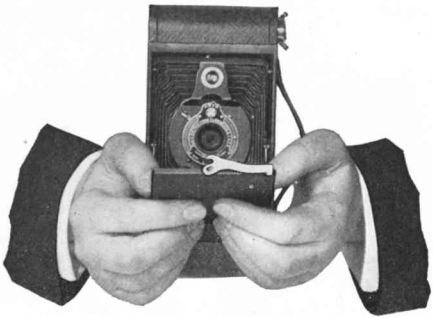


FIG. 11
Closing the Camera.

PART III

Removing the Film

No dark-room is required for changing the spools in the Cartridge Premo Camera.

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

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

2. Provide an extra spool of film to fit this camera and take a position where the light is somewhat subdued, *not* in the direct sunlight.

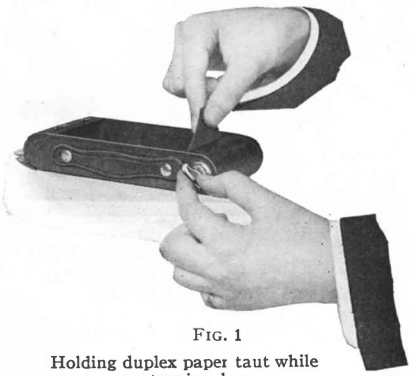


FIG. 1

Holding duplex paper taut while turning key.

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

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

5. Hold ends of duplex paper and sticker together, to prevent paper from loosening on reel. If sticker folds under reel when wound pull it up with the point of a lead pencil.

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

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

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

FIG. 2
Lifting out roll of exposed film.

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

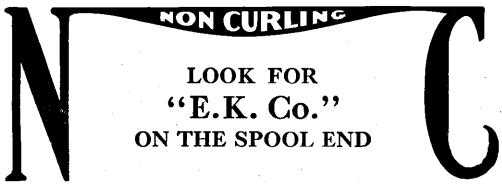
9. Now remove empty spool and load as described in Part 1, page 5.

Important

Film should be developed as promptly as possible after exposure.

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

Load your camera with Kodak Film.
Look for this Trade Mark on the box:



"If it isn't Eastman,
it isn't Kodak Film."

"Cinch Marks"

If the film and paper loosen up a trifle when taken from the camera, many amateurs are likely to take the cartridge in the hand and wind it as closely as possible "cinching" it tightly with a twisting motion. There's nothing more likely to injure the negative than this tight drawing of the film, as it abrades the surface, making fine parallel scratches running lengthwise of the film, which, in some cases, will ruin the negative. *Do not "cinch"*

the cartridge. It simply needs to be wound tightly enough so that the duplex paper keeps inside the flanges.

Keep Dust out of the Camera

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

It is therefore well to wipe out the inside of camera and bellows occasionally with a slightly damp cloth. In summer weather or after the camera has remained idle for any length of time, this needs special attention.

Clean Lenses

Dirty or dusty lenses are frequently the cause of photographic failures. These pictures illustrate this point clearly. The sharp, full timed picture as shown on this page was taken with the lens clean and in good order. To produce the effect shown in the picture on next page the face of the lens was lightly touched with the thumb, which was slightly damp with perspiration.

CLEAN LENS

Lenses should be frequently examined by look-

ing through them and if found to be dirty, should be wiped, both front and back, with a clean, soft linen handkerchief. It is well also to occasionally wipe out the inside of camera with a slightly damp cloth. In summer weather this needs special attention. Large spots of dust or dirt on the lens will cause defects in the picture, while if the lens is evenly covered with a film of dust, dirt or moisture, the effect will be to cut off a great deal of light and make the picture undertimed.

LENS SLIGHTLY DIRTY

Finishing the Pictures

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

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

For use with the No. 2-A Folding Cartridge Premo Camera Film (No.116), provide, preferably, a 2½ inch Kodak Film Tank. (These films may be developed in the larger tanks, but not so economically.)

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

In keeping with our plan and purpose to provide the users of our cameras with every help in the production of good pictures, we will be glad to furnish such developing and printing instructions, whether a tank or outfit is purchased or not.

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

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

EASTMAN KODAK CO.,

ROCHESTER, N. Y.

PRICE LIST

Carrying Case for the No. 2-A Folding Cartridge Premo Camera	$ 2.00
Kodak Portrait Attachment No. 3 for use with No. 2-A Folding Cartridge Premo Camera	.75
Kodak Color Filter, No. 3 . . .	1.15
Kodak Sky Filter, No. 3 . . .	1.15
Kodak Film Cartridge, No. 116, 12 exposures, 2½ x 4¼	.60
Do., 6 exposures	.30
Kodak Film Tank, 2½ inch . . .	5.00
Duplicating Outfit for above Tank . .	2.50
Kodak Tank Developer Powders for 2½ or 3½-inch Tank, per pkg. ½ doz. .	.25
Eastman A. B. C. Developing and Printing Outfit for dark-room development, (for 4 x 5 negatives or smaller), complete	1.65
Kodak Acid Fixing Powder, 1 lb. pkg. .	.35
Do., ½ lb. pkg.	.20
Do., ¼ lb. pkg.	.15
Eastman Printing Masks No. 4, for use with No. 2-A Folding Cartridge Premo Negatives, each	.10
Velox Paper, per dozen 2½ x 4¼ . .	.15
Nepera Solution, for developing Velox, 4 ounce bottle	.28
Velox Transparent Water Color Stamps complete booklet of 12 colors . .	.45

Velox Transparent Water Color Stamp Outfit, consisting of Artist's Mixing Palette, three special Camel's Hair Brushes, and one book of Velox Transparent Water Color Stamps (12 colors) .	$1.00
Eastman Reducer, per pkg., 5 tubes .	.50
Velox Re-developer, per 4 oz. pkg. . .	.50
Solio Paper, 2½ x 4¼, per pkg., 2 dozen .	.25
Combined Toning and Fixing Solution for Solio, per 8 ounce bottle . . .	.50
Do., 4 ounce bottle	.30
Eastman Hydrochinon and Special Developer Powders, in sealed glass tubes, per box of five tubes	.30
Eastman Pyro Developer Powders, in sealed glass tubes, per box of five tubes	.25
Eastman Pyro Developer Powders, per ½ dozen pairs	.25
Glass Stirring Rod Thermometer .	1.00
Kodak Dark Room Lamp, No. 2, ⅝ inch wick	1.00
Eastman Flash Sheets, No. 1, per package, ½ dozen	.35
Do., No. 2, per package of ½ dozen .	.56
Do., No. 3, per package of ½ dozen .	.84
Kodak Flash Sheet Holder . . .	1.25
Eastman Film Developing Clips (nickel) 3½ inch, per pair	.30
Kodak Junior Film Clip, No. 1, each .	.12
Kodak Trimming Board, 5 inch . .	.65

Transparent Trimming Gauge for Kodak Trimming Board, 5 inch	$ .35
No. 0 Kodak Metal Tripod	3.50
Leatherette Carrying Case, for No. 0 Kodak Metal Tripod	1.35
Bulls-Eye Tripod	2.00
Flexo Tripod	1.25
Eastman Film Negative Album, to hold 100 2½ x 4¼ Negatives	.75
Kodak Dry Mounting Tissue, 3 doz. sheets 2½ x 4¼	.10
Eastman Photo Blotter Book for blotting and drying prints	.40
Baltic Mounts for prints 2½x4¼, per 100	2.80
Do., per 50	1.40
Agrippa Album, flexible leather cover, loose-leaf, 50 black linen finish leaves, size 7 x 11	4.00
Do., cloth cover,	1.90
Forum Album, 25 black or Sepia leaves, size 7 x 10	1.25
Kodak Print Roller, double, 6 inch	1.00
Flexo Print Roller, single, 4 inch	.30
Developing Film only, 2½ x 4¼, per roll, 12 exposures	.35
Do., per roll of 6 exposures	.20
Printing and mounting only, on Velox, 2½ x 4¼, each	.09
Do., prints unmounted, each	.07

All prints furnished unmounted unless otherwise specified.

NOTE—If 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.

8 x 10 Bromide Enlargements, mounted on card, each	$1.00
Do., 10 x 12	1.40
Do., 11 x 14	1.75

On enlargement orders, if, in our opinion, the enlargement will be improved by double mounting, we will do so at an additional charge of 10 cents, or triple mounted at 15 cents.

All prices subject to change without notice.

EASTMAN KODAK CO.,
ROCHESTER, N. Y.

Make enlargements from your best Premo negatives

Brownie Enlarging Cameras

are as easy to operate as the Premo Cameras and they make splendid enlargements, too.

Brownie Enlarging Camera No. 3

Makes 5x8½ Enlargements
From 2½ x 4¼ Negatives

Price $6.38

Price subject to change without notice.

EASTMAN KODAK CO.

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