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

This creation is copyright© by M. Butkus, NJ, U.S.A.

These creations may not be sold or distributed without the expressed permission of the producer

I have no connection with any camera company

On-line camera manual library

If you find this manual useful, how about a donation of \$2 to:
M. Butkus, 29 Lake Ave., High Bridge, NJ 08829-1701
and send your e-mail address so I can thank you.

Most other places would charge you \$7.50 for a electronic copy or
\$18.00 for a hard to read Xerox copy.

This will allow me to continue this site, buy new manuals and pay their shipping costs.

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

If you use Pay Pal, go to my web site

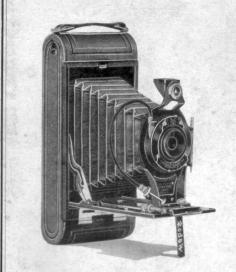
www.orphancameras.com and choose the secure PayPal donation icon.

"If it isn't an Eastman, it isn't a Kodak."

Picture taking with the

Nos. 2C and 3A Pocket Kodaks

Single Lens
(Meniscus Achromatic)



"Kodak"

TRADE MARK

EASTMAN KODAK COMPANY Rochester, N. Y.

Manufacturers of

KODAK BROWNIE AND HAWK-EYE CAMERAS CINÉ-KODAKS KODASCOPES KODAK FILM VELOX SOLIO EASTMAN BROMIDE PAPERS

KODAK FILM TANKS
EASTMAN TESTED CHEMICALS
KODAK DRY MOUNTING TISSUE
TRIPODS AND OTHER PHOTOGRAPHIC MATERIALS

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

August, 1926.

"KODAKERY"

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

Accepting your offer, please put my name on the

EASTMAN KODAK COMPANY.

TO THE EASTMAN KODAK COMPANY, ROCHESTER, NEW YORK.

NOTE—KODAKERY will be sent for one year only on this offer. After that the subscription price will be sixty cents for one year or one dollar for two years, but you are under no obligation to renew.—E. K. Co.

www.orphancameras.com

Picture taking with the

Nos. 2C and 3A Pocket Kodaks

Single Lens
(Meniscus Achromatic)

Order Film by Number

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

The number is also on the cartridge, and on the back of the camera.

A 130 is the number of the film for the No. 2C Pocket Kodak.

A 122 is the number of the film for the No. 3A Pocket Kodak.

Autographic Film can be used in the earlier models of Kodaks, and "N.C." film can be used in Autographic Kodaks.

Autographic results can only be obtained by using Autographic Film in an Autographic Kodak.

IMPORTANT

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

Before Loading

THE Nos. 2C and 3A Pocket Kodaks, are alike except that the No. 3A makes a larger picture. Throughout this book whatever is written applies to either camera except in the matter of film, picture sizes and some accessories.

Before taking any pictures with your Kodak, read the following instructions carefully. Make yourself familiar with the camera, taking especial care to learn how to operate the shutter (see page 10). Work it for both time and instantaneous exposures several times before loading the Kodak with film.

The first thing to bear in mind is that the light, which impresses the 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. While loading and unloading, be very careful to keep the red paper wound tightly around the film to prevent light striking it.

CONTENTS

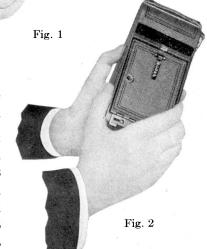
Loading the Kodak .					5
Making the Exposures .		×			10
Operating the Shutter					10
Instantaneous Exposures					14
Focusing					15
Diaphragms					21
Using the Finder					22
Autographic Feature .					27
Time Exposures—Interiors	\mathbf{s}				32
To Make a Portrait .					36
Time Exposures—Outdoor	s				40
Flash-light Exposures.				¥	41
Closing the Kodak .					47
Removing the Film					49
Finishing the Pictures		201			54

Loading the Kodak

THE Nos. 2C and 3A Pocket Kodaks can be loaded or unloaded in daylight. This should be done in a subdued light, not in direct sunlight. Use film No. A 130

for the No. 2C Pocket Kodak, and film No. A 122 for the No.3A Pocket Kodak.

1. Slide back the lock, Fig. 1. Take the front of the camera by the edges and lift the end on which the lock is fastened, then draw out and remove that part of the camera entirely. Fig. 2.



In the winding end of the camera is an empty spool, this is the reel. The roll of film is to be placed in the opposite end.

2. Draw out the winding key as far as it will come, and remove the empty spool, Fig. 3.

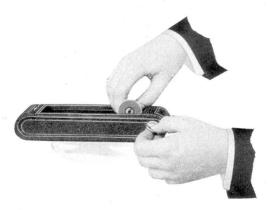
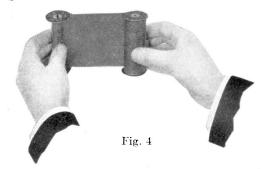


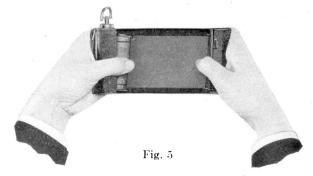
Fig. 3

3. Remove the band that holds the end of the red paper, unfold the end and thread the paper as far as it will go, into the longer opening of the slit in the empty spool. Each spool has one end slotted and the red paper must be inserted in the empty spool with the spools in position so that the slotted ends are on opposite edges of the red paper. Give the empty spool three or four turns,

enough to bind the paper on the reel. Be careful that the paper draws straight and true, and that it does not loosen up on the full spool. See Fig. 4.



4. Unroll about four inches of the red paper and place the two spools into the film pockets at each end of the camera. Fig. 5.



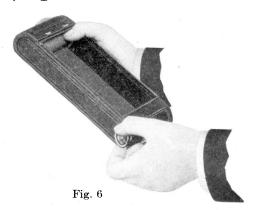
Important: The empty spool or reel must be placed in the winding key end of

Picture taking with the

the camera with its slotted end towards the winding key. The word "TOP" printed on the red paper must be next to the winding key.

Push the full spool into the other pocket as far as it will go, so that the tension spring grips it.

5. Press in and turn the winding key until it fits into the slot in the empty spool or reel, Fig. 6.



Caution: If too much of the red paper is reeled off before the Kodak is closed, some of the film will be uncovered, fogged and ruined.

6. When replacing the front of the Kodak after it is loaded, first insert the

end opposite the lock, the edge of the box must fit into the groove at the end of the front, then drop the end on which the lock is fastened into place. Push over the lock and make sure that it is fastened securely.

From the time the band on the roll of film is broken until the camera is closed, keep the red paper wound tightly on the roll. If it should loosen, light will be ad-

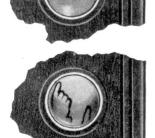
mitted and the film ruined.

7. Turn the key and watch the red window. After ten or twelve turns, a warning hand will appear, then turn slowly until the figure 1 appears in the center of the window.

Press the winding key while turning it, to keep the key

in the slot in the end of the spool.

The film is now in position for the first picture.



Making the Exposures

 ${f B}^{
m EFORE}$ an exposure is made, four things must be done:

First—The shutter must be adjusted for an instantaneous, time or "bulb" exposure.

Second—The diaphragm lever placed at the proper stop opening.

Third—The Kodak focused.

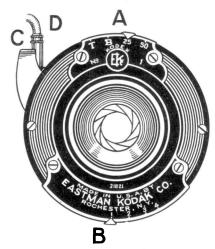
Fourth—An unexposed section of film turned into position.

Exposures are made by pressing the pushpin of the cable release D or pressing the exposure lever C. See diagram of shutter on page 11.

Do not make too sharp a bend in the cable release, or it may kink.

Operating the Shutter

Familiarity with the shutter is necessary for successful picture-taking with any camera. The following directions should be carefully read and the shutter operated several times before loading the Kodak with film.



Instantaneous Exposures "Snapshots"

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

Second—Move the lever B to No. 1. Lever B controls the iris diaphragm and No. 1 is the proper opening for ordinary outdoor work, such as street scenes, nearby views, etc., when the subject is in bright sunlight, using speed 25. See instructions for using the diaphragms or stops on pages 21 and 22.

Picture taking with the

Third—Press the push-pin of the cable release D or press the exposure lever C. This makes the exposure. Be sure to hold the camera steady, as a slight jar will cause a blurred negative.

Time Exposures

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

Second—Move the lever B to Nos. 1, 2, 3 or 4, according to the time of the exposure and the nature of the subject. See instructions for the use of the diaphragms or stops given on pages 21 and 22, also the table for making Interior Time Exposures on pages 35 and 36, and the table for Time Exposures Outdoors, pages 40 and 41.

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

For short time exposures of about ten seconds or less, "Bulb" Exposures are recommended.

"Bulb" Exposures

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

Second—Move the lever B to Nos. 1, 2, 3 or 4. See instructions for the use of the diaphragms or stops given on pages 21 and 22, also the table for making Interior Time Exposures on pages 35 and 36, and table for Time Exposures Outdoors, pages 40 and 41.

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

Time and "Bulb" Exposures must not be made with the Kodak held in the hands.

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

Important—Do not oil any part of the shutter.

In case of accident, return the Kodak to your dealer or to us for repairs.

Instantaneous Exposures "Snapshots"

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

Special instructions for making portraits are given on pages 36, 37, 38 and 45.

Use Stop No. 1 and Speed 25

for all ordinary outdoor work, such as nearby landscapes showing little or no sky, groups and street scenes, when the subject is in the bright sunlight. If a smaller stop is used for ordinary snapshots, the light will be so much reduced that it will not make a satisfactory picture.

For views at the seashore and on the water, when the sunlight on the subject is unusually strong and there are no heavy shadows, stop No. 2 and speed 50 should be used.

For ordinary *landscapes*, in bright sunlight with clear sky overhead, use stop No. 2 and speed 25.

To Focus the Kodak



Fig. 1. Opening the Front.

Press the spring lock with the thumb, to open the front of the Kodak, Fig. 1, then push down the bed of the camera.

On the bed of the camera is a focusing scale marked 6, 8, 10, 15, 25, 50 and 100 feet. This is for focusing the camera.

www.orphancameras.com

Picture taking with the

Draw out the front of the Kodak by the knob on the slide plate, as far as it will come, where the front will lock automatically, Fig. 2. The Kodak will then be in focus for anything 100 feet or more from the lens.



Fig. 2
Drawing out the Front.

To adjust the focus for other distances, turn the knurled screw by pushing it with the thumb, until the indicator over the focusing scale is exactly at the line marked with the figure corresponding to the distance in feet, between the camera and the principal object to be photographed.

It is unnecessary to estimate distances with more than approximate accuracy, when the subject is beyond fifteen feet; 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 about 18 to about 45 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 changed accordingly.

For distant views set the focus at 100 feet. Everything beyond 100 feet is in the 100-foot focus. Nothing nearer than six feet can be focused without using a Kodak Portrait Attachment, see pages 38 and 39, or a small stop opening, see tables on page 19.

What Depth of Focus Means

Suppose that the lens is used at its full opening, No. 1, and the focus is at six feet; an object six feet distant will be sharp, but objects five and seven feet distant will no

be sharp. Stop the lens down to No. 2, and objects each side of the exact point of focus will increase in sharpness and the area within which all objects will be sharp is increased. Go farther and use stop No. 4, and everything from about four and one-half feet to about eight feet will be sharp.

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

The tables on page 19 give the depth of focus or range of sharp definition with the Nos. 2C and 3A Pocket Kodaks when focused with different stops.

The Depth of Focus for Different Stops or Diaphragms

By "depth of focus" is meant the distance, in front of and behind the subject focused on, within which details in the picture will be sharp and distinct.

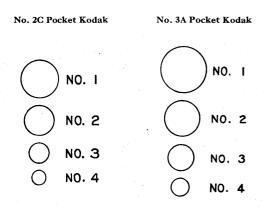
Table for use with the No. 2C Pocket Kodak

Distance	No.	1 ?	No. 2	No.	3	N	lo. 4
Focused Upon	Ft.	Ft. Ft.	Ft.	Ft.	Ft.	Ft.	Ft.
100 Ft. 50 " 25 " 15 " 10 " 8 "	34 to 1 27 to 1 17 to 4 12 to 2 8½ to 1 7½ to	Inf. 22 48 15 21 11	to Inf. to Inf. to 75 to 25 to 13 to 10	18 to 13 to 10 to 7½ to	Inf. Inf. Inf. 33 15	16 14 11 8 ¹ / ₂ 7	to Inf. to Inf. to Inf. to 69 to 20 to 13½
6 "	51 to	$\frac{6\frac{4}{3}}{6\frac{3}{4}}$ 5	to 7	$4\frac{3}{4}$ to		41/2	

Table for use with the No. 3A Pocket Kodak

Distance	No.	1	N	lo. 2	N	To. 3	N	lo. 4
Focused Upon	Ft.	Ft.	Ft.	Ft.	Ft.	Ft	Ft.	Ft.
100 Ft. 50 "	29 to	Inf.	$\frac{32}{24}$	to Inf.	25 20	to Inf.	20 17	to Inf. to Inf.
25 " 15 " 10 "	12 to	$\frac{40}{19}$ $11\frac{1}{3}$	$\begin{vmatrix} 17 \\ 11 \\ 8\frac{1}{2} \end{vmatrix}$	to 52 to 21 to 12	$\frac{15}{10}$	to 93 to 26 to 14	12 9 7 1	to Inf. to 38
8 "	7 to 5 to		7	to $9\frac{1}{2}$ to $6\frac{3}{4}$	$\frac{6\frac{2}{3}}{5\frac{1}{4}}$	to 10	6 4 5	

[&]quot;Inf." is the abbreviation for Infinity—meaning an unlimited distance from the lens.



COPYRIGHT 1922, BY EASTMAN KODAK CO.

These circles show the actual sizes of the stop openings or diaphragms of the shutters used on the Nos. 2C and 3A Pocket Kodaks, when they are fitted with the Single (Meniscus Achromatic) Lens.

They clearly show the relative sizes of the various stop openings and how their areas differ.

Diaphragms

The diaphragms, or stops as they are sometimes called, are the openings that regulate the amount of light passing through the lens. The openings are enlarged or reduced by moving the lever B, see page 11.

No. 1—For all ordinary outdoor work, such as nearby landscapes showing little or no sky, groups and street scenes, when the subject is in bright sunlight, use speed 25.

No. 2—For open views, when the sunlight on the subject is unusually strong and there are no heavy shadows, such as views at the seashore and on the water, use speed 50; for ordinary landscapes, in bright sunlight, with clear sky overhead, use speed 25; also for Interior Time Exposures, the time for which is given in the table on pages 35 and 36.

No. 3—For instantaneous exposures of extremely distant landscapes, marines, snow scenes and clouds only, in bright sunlight, use speed 25; also for portraits out-of-doors, see page 38, and other Time Exposures.

No. 4—For Time Exposures Outdoors on cloudy days. The exposures required for Time Exposures Outdoors are given in the table on pages 40 and 41. Never for instan-

taneous exposures. The smaller the stop the sharper the picture, see pages 17, 18 and 19.

Total failure will be the result, if stop No. 4 is used for instantaneous exposures.

Throughout this manual all exposures given for out-of-door subjects are for the hours between two and a half hours after sunrise and two and a half hours before sunset. If earlier or later the exposures must be longer. For subjects in the shadow, under porches or under trees, no definite directions can be given; experience only can teach the proper exposure to give.

Using the Finder

The finder above the shutter gives the scope of view and shows the picture as it will appear, but on a much reduced scale.

Point the lens at the subject to be photographed and looking into the finder from directly over it—not at an angle, include what you want and compose the picture by changing the direction of the lens.

It will be noticed that the top of the finder is notched, as shown in Fig. 5, page 25.

This enables the one finder to serve when the Kodak is held in either the vertical or the horizontal position. See Figs. 3 and 4.

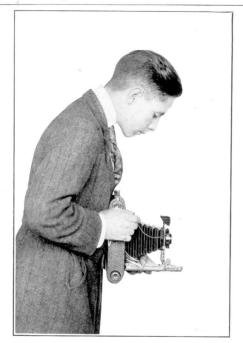


Fig. 3
Holding Kodak in Vertical Position.

Only what is seen in that part of the finder represented by the white area of the diagrams will be included in the picture.



Holding Kodak in Horizontal Position, Showing Finder Properly Turned.



Important

When making instantaneous exposures or snapshots with any camera, hold it firmly against the body as shown. When pressing the push-pin or the exposure lever, hold the breath for the instant.



View Included When Making a Vertical Picture.



View Included When Making a Horizontal Picture.

Fig. 5

Hold the camera steady—hold it level as shown in illustrations, and press the pushpin of the cable release. This makes the exposure.

Using the Exposure Lever



Fig. 6

Fig. 6 shows the method of making a vertical exposure without using the cable release. Hold the bed of the Kodak firmly

with the left hand, steady it with the right and press the exposure lever with the thumb of the right hand.

Hold the Kodak Level



Fig. 7
Effect produced by tilting the Kodak.

The Kodak must be held level. If all of the subject cannot be included in the finder without tilting the lens upwards, move backwards until it is all included with the camera held level.

Tilting the Kodak to bring in the top of a tall building produces the distorted effect shown in Fig. 7, page 26. Sometimes a tall building can be photographed from a building opposite, at a level with the center of the subject.

If the subject is below the normal height, like a small child or a dog, the Kodak should be held down level with the center of the subject.

Autographic Feature

The autographic feature makes it possible to record on the film, at the time of exposure, any data, such as the name of place or subject, the date or any other memo. This is done through a small opening in the back of the Kodak and the record normally comes just outside the picture area of the negative.

The Autographic Records on page 28, suggest a few of the thousand and one ways in which these may be used to add value to your negatives.

The Autographic Record as a Guide

Many amateurs have distinctly improved the quality of their work by making notes, 4lb: Brook Trout, E.G.C. 6/23/16

Band Concert, Maplewood PK. 7/3/16

Seorge Edward learns to welk, 7/10/16

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

Moung Day, 111 Fulton ave. 2/19/16

Flood, Eric, Par. 8/3/15-6.30 P.M.

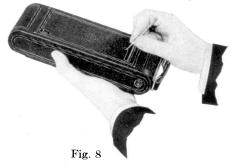
Autographic Records.

at the time of the exposure, of the prevailing conditions, as: Bright light, speed 25, stop No. 1, which is easily abbreviated to: B, 25, 1. By keeping such records the causes of failure, if any, are quickly found. A comparison of negatives and records will soon show how the failures occurred and future mistakes can be avoided. It is obvious that the best way to make these records is autographically—on the film, at the time.

The Method

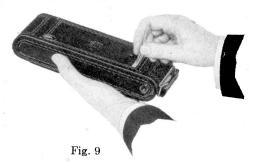
After the exposure has been made, remove the stylus from its place at the side of the shutter. Push back the sliding-door on

the back of the Kodak, with the point of the stylus in the hole in the center of the door, Fig. 8. Hold the stylus as upright as



Pushing Back the Sliding-door.

possible, Fig. 9, and write on the strip of red paper any memorandum desired, such as the date, title of the picture or details of exposure, light, speed and stop.



Position of Stylus when making an Autographic Record.

To get a clear impression, press firmly on both the up and down strokes.

While writing or afterwards, shield the paper from the sun.

When the writing is completed, expose it to the light as follows:

Expose to the Sky, but not to the Sun:

INDOORS
OUT-OF-DOORS CLOSE TO WINDOW

BRILLIANT LIGHT 2 to 5 Secs. 5 to 7 Secs. DULL LIGHT 5 to 10 Secs. 10 to 15 Secs.

Expose to Artificial Light:

ELECTRIC LIGHT, distance two inches, 30 to 60 seconds.

Welsbach Gas Light, distance six inches, 30 to 60 seconds.

Close the sliding-door with the stylus before winding the next section of film into place.

Caution: To place the writing accurately between the negatives the film should be turned carefully until the next number is *centered* in the red window.

Turn a new section of film into position: Press in slightly on the winding key and turn it slowly, until the next number appears in the red window. Three or four turns will be sufficient. See Fig. 10, page 31.

The warning hand appears only before No. 1 of each roll of film.

Repeat these operations after each exposure.



Fig. 10 Winding the Film.

Important—When you have exposed the last section of film and made the autographic record of it, turn the winding key until the letter A appears in the center of the window. Open the sliding-door and write your name on the red paper, expose it to the sky as when making the exposure records, then close the door and finish winding the film and red paper for removal from the Kodak.



The film is now ready to send to your finisher, and when developed will be readily identified by the autographic copy of your name which you wrote on the red paper.

Time Exposures—Interiors

Focus the Kodak as when making an Instantaneous Exposure, see pages 15 and 16, and place it on a table, chair, tripod or other firm support. If a table or chair is used, place the camera not more than two or three inches from the edge, to avoid including part of the table or chair in the picture.

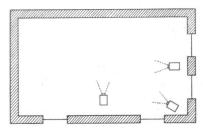


Diagram showing positions for Kodak.

The Kodak should be placed in such a position that the finder will include the view desired. The diagram shows three positions 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, draw the shades of those within range of the lens.



Fig. 11

For a vertical picture raise the nameplate on the bed and place the Kodak on a table or chair, as in Fig. 11. There are tripod sockets for use with a tripod.

To make a horizontal time exposure without a tripod, turn the support on the edge of the bed of the Kodak behind the focusing screw, and place the camera in the position as shown in Fig. 12, page 34.

Adjust the shutter for a Time Exposure by placing the lever A at the top of the shutter exactly at the letter "T," see pages 11 and 12.



Fig. 12

All being ready, press the push-pin of the cable release, or press the exposure lever carefully, once to open, time the exposure by a watch, and again press the push-pin or the exposure lever to close the shutter.

Turn the Winding Key: After making the autographic record, press in the winding key and turn it until the next number appears in the center of the red window.

The Kodak is now ready for the next Interior Exposure.

Follow these directions for each successive exposure.

When the last Interior Exposure has been made, adjust the shutter for an Instantaneous Exposure, see page 11.

Exposure Table for Interiors

The following table gives the approximate exposures required under varying conditions of light, when using stop No. 2. If stop No. 1 is used, give one-half the time. If stop No. 3 is used, give twice the time; and with stop No. 4 give four times the exposures given in the table. The smaller the stop the sharper the picture, see pages 17, 18 and 19. Stop No. 2 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.

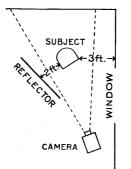
These exposures are for rooms where windows get the direct light from the sky, and for the hours from three hours after sunrise until three hours before sunset. If earlier or later the exposures must be longer.

To Make a Portrait

The subject should be seated in a chair partly facing the light with the body turned slightly away from, and the face turned to-

wards the Kodak, which should be a little higher than an ordinary table. The subject should look at an object level with the lens or directly at the lens. Compose the picture in the finder. For a three-quarter figure the Kodak should be about eight feet from the subject and for a full-length figure about ten feet. The background should form a contrast with the subject; a light background usually gives a better effect than a dark one.

When making portraits, more pleasing results are obtained if the background and



the background and the surrounding objects are not quite so sharp and clear as the face. This effect is obtained by using stop No. 1.

To get a good light on the face, follow the arrangement shown in the diagram. The reflector helps to get detail in the shaded part

of the face. A white towel or sheet thrown over a screen or other high piece of furniture will make a suitable reflector; place it at an angle and in the position indicated in the diagram.

"At Home with the Kodak," a booklet containing many diagrams and illustrations showing various lighting effects, can be had free from your dealer or from us.

When making portraits out-of-doors, with the sun shining brightly, the subject should be in the shadow of a building or a large tree, but with clear and unobstructed sky overhead. Place the camera on a tripod or some other steady, firm support, use stop No. 3 or No. 4, and make a "Bulb" Exposure of about one or two seconds. By following this rule unpleasant and distorting shadows on the face will be avoided.

Kodak Portrait Attachment

The Kodak Portrait Attachment is an extra lens, which, when slipped over the regular lens makes large head and shoulder portraits.

Place the Attachment over the lens and compose the picture in the finder.

The subject must be at one of the distances from the camera, given in the table on page 39.

Measure the distance carefully from the lens to the face, and place the focusing indicator on the scale according to the table:

DISTANCE BETWEEN SUBJECT AND LENS MUST BE				THE FOCUSING INDICATOR MUST BE SET AT					
	$\frac{2}{2}$	feet "	6 9	inch "	es		6 f 8 10	eet "	
	3	· u	4	· u			15	u	
	$\frac{3}{4}$	"	8	и	• • • •	• • • • •	$\frac{25}{50}$	u	
	1	"	2	"	• • • •		100	u	

When making portraits, the most pleasing results are obtained with the subject four feet or four feet two inches from the lens and the focusing indicator set at 50 or 100 feet respectively. The Attachment can also be used for making pictures of flowers and similar subjects, the shorter distances will then be found more satisfactory.

The exposure when using the Attachment is the same as without it.

Use Kodak Portrait Attachment No. 6 with the No. 2C or the No. 3A Pocket Kodak.

Kodak Diffusion Portrait Attachment

The Kodak Diffusion Portrait Attachment is a supplementary lens used in the same manner as the regular Kodak Portrait Attachment. It produces a true, soft-focus effect free from objectionable "fuzziness" or out-of-focus appearance. By using this Attachment, portraits are made more artistic, due to the softening effect of diffusion.

Use Kodak Diffusion Portrait Attachment No. 6 with the No. 2C or the No. 3A Pocket Kodak.

Time Exposures—Outdoors

When the smallest stop (No. 4) is used, the light passing through the lens is so much reduced that time exposures out-of-doors may be made the same as interiors, but the exposures must be much shorter.

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

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

With Light Clouds—From one to three seconds will be sufficient.

With Heavy Clouds—Four seconds to eight seconds will be required.

These exposures are for hours from two and a half hours after sunrise until two and a half hours before sunset, and for subjects in the open. For other hours or for subjects in the shadow, under porches or under trees, the lighting conditions vary so greatly that no definite instructions can be given; experience only can teach the proper exposure to give.

Time and "Bulb" Exposures must not be made with the Kodak held in the hands. Always place it upon some firm support, such as a tripod, table or chair.

Flash-light Exposures

Eastman Flash Sheets make picture-taking at night easy. A package of flash sheets, a piece of cardboard, a pin, a split stick about two feet long and a match complete the list of necessary extras, although a Kodak Flash Sheet Holder is a great convenience.

With flash sheets there is little smoke. They are safer than any other self-burning flash medium, besides giving a softer light that is less trying to the eyes.

Flash sheets make possible the photographing of many interiors that could not be taken otherwise, either for 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 using flash sheets, providing souvenirs of many occasions, which, but for the flash-light, would be impossible.

Preparation for the Flash

Adjust the shutter for a Time Exposure, as described on page 12 (stop No. 1 must be

used). Place the Kodak on some firm, level support where it will include the view desired, see pages 32 and 33.

Pin a flash sheet by one corner to a piece of cardboard. This cardboard should be fastened to a step-ladder or similar object. See diagram.



White cardboard should be used; this acts as a reflector and increases the light on the subject.

The flash sheet should be placed two feet behind and two or three feet to one side of the camera. If it is in front, or on a line with the Kodak, the light from the flash would strike the lens and blur the picture. It should be placed at one side as well as behind, so as to throw a shadow and give a little relief in the lighting. The flash should be a little higher than the camera. An extra piece of cardboard, a foot square or larger, placed under the flash sheet will prevent any sparks doing damage. By using the Kodak Flash Sheet Holder this is taken care of, and we strongly advise its use.

Kodak Flash Sheet Holder



The holder offers a most effective method of burning flash sheets. It can be held in the hand, or by unscrewing the handle it can be used on a tripod. It must be held at arm's length and with the flash sheet facing the subject.

Place the flash sheet in position and press the center of it into the hole in the back of the holder, forcing a part of it through the hole. Make the sheet secure by pressing it against the notched edge of the hole.

The Flash Sheet

The size of the sheet required, depends upon the distance of the object farthest from the camera, and the color of the walls and hangings:

With the subject ten feet away, with light walls and hangings, use one No. 1 sheet; with dark walls and hangings, use one No. 2 sheet.

With the subject fifteen feet away, with light walls and hangings, use one No. 2 sheet; with dark walls and hangings, use one No. 3 sheet.

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

Taking the Picture

With the Kodak and flash sheet in position and all being ready, open the camera shutter, and with the holder at arm's length

apply a lighted match from behind, through the round opening.

If the Kodak Flash Sheet Holder is not used, the match must be held in a split stick at least two feet long.

There will be a bright flash which makes the picture. Close the shutter, make the autographic record, following the table given on page 30, and wind a new section of film into place, ready for the next picture.

To Make a Portrait—The subject should be seated in a chair partly facing the camera, which should be a little higher than an ordinary table. The face should be turned towards the camera, and the subject should look at an object level with the lens or directly at the lens.

Find the distance the subject should be from the camera by looking in the finder. For a three-quarter figure this will be about 8 feet; for a full-length figure about 10 feet.

The flash should be at the side of the camera away from the face, that is, the subject should not face it, and it should be slightly higher than the subject's head.

For large head and shoulder portraits use the Kodak Portrait Attachment, see pages 38 and 39.



Making a Portrait by Flash-light.

To Make a Group—Half the group should be seated and the other half standing behind them. Arrange the chairs at an equal distance from the camera. Any number of chairs may be used, but none of the subjects should be seated on the floor because the perspective would be too violent and the result would not be pleasing.

Backgrounds—When making single portraits or groups, care should be taken to have a suitable background against which the figures will show in relief; a light back-

ground is better than a dark one, and often a single figure or two will show up well against a curtain. For larger groups a medium light wall will be suitable.

Compose the group for the best effect, then look in the finder to see that all are in the picture. To make the image visible in the finder, the room must be well lighted. Any lights that do not show in the finder may be left on during the exposure.

Eastman Flash Sheets burn more slowly than flash powders, producing a much softer light and are better for portraits. The subject should be warned not to move, as the picture is not taken *instantaneously*; the flash lasts about one second.

Eastman Flash Cartridges

Eastman Flash Cartridges may be substituted for the sheets if desired. We recommend the sheets as more convenient, cheaper and capable of producing the best results. The cartridges are recommended only for *instantaneous* work.

Closing the Kodak

To close the Kodak, first see that the focus indicator is at the 100-foot mark on the scale, then release the spring catch on

Picture taking with the

the lower part of the front standard, from the slot on the bed of the Kodak, and slide back the front as far as it will go.

Place the cable release around the shutter, press the arm locks at each side of the standard and raise the bed as in Fig. 13.



Fig. 13 Closing the Bed of Kodak.

Caution: Before closing the bed of the camera, make sure that the finder is in the position for making a vertical exposure or in the upright position. The front standard must be pushed back as far as it will go.

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

Do not make too sharp a bend in the cable release, when closing the Kodak, or it may kink. 48

Removing the Film

THE Kodak can be loaded or unloaded I in daylight. This should be done in a subdued light, not in direct sunlight.

- 1. When the last section of film has been exposed, make the autographic copy of your name, following instructions on page 31, and give the winding key about twelve turns to cover the film with the red paper.
- 2. Remove the front of the camera as described on page 5.
- 3. Holding the paper taut, turn the key until all but about an inch of the paper is on the reel, Fig. 1.



Fig. 1 Holding red paper taut while turning key.

- 4. Hold the ends of the red paper and the sticker together, to prevent the paper from loosening. If the sticker folds under the reel, turn the winding key to bring it up.
- **5.** Draw out the winding key to release the spool, and lift out the roll of film, Fig. 2.



Fig. 2
Lifting out roll of exposed film.

- **6.** Fold under about half-an-inch of the red paper, and fasten with the sticker. Folding under the end of the paper makes the breaking of the seal easy, when ready to develop the film.
- 7. Wrap up the exposed film immediately to prevent the possibility of light being admitted. It is now ready for developing and printing.

- 8. Remove the empty spool and place it in the winding end of the camera.
- **9.** Replace the front of the Kodak as described on pages 8 and 9.

It is a good plan to reload the Kodak as soon as an exposed film has been removed, to be ready for the next pictures. Use film No. A 130 for the No. 2C Pocket Kodak, and film No. A 122 for the No. 3A Pocket Kodak. Load the Kodak as described on pages 5 to 9 inclusive.

Important: Film should be developed as soon as possible after exposure. The quality of the image on all sensitized products is retained by prompt development after exposure.

Load your Kodak 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, there is an inclination to take the cartridge in the hand and wind it as closely as possible, "cinching" it tightly with a twisting motion. There is nothing more likely to injure the negatives than this tight drawing of the film, as it rubs the surface, making fine parallel scratches running lengthwise of the film, which, in some cases, will ruin the negatives. Do not "cinch" the cartridge. It simply needs to be wound tightly enough to keep the red paper within the flanges of the spool.

Clean Lenses

Dirty or dusty lenses make poor pictures. The pictures below illustrate this point clearly. The gray, flat, indistinct picture



Made with Dirty Lens.

Made with Clean Lens.

was made with a dirty lens, the surfaces of which were covered with an accumulation of dust. The sharp, clear, distinct picture was made with the same lens after it had been carefully cleaned.

Lenses should be frequently examined. Remove the front of the Kodak as described and shown in Figs. 1 and 2 on page 5 (when there is no film in it) then open and draw out the front as in Figs. 1 and 2 on pages 15 and 16. Adjust the shutter for a Time Exposure and open it; the largest stop (No. 1) should be in position. Hold the Kodak with the front towards the light, then look through the lens from the back and if it is dirty, wipe the front and back of the lens with a clean handkerchief.

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 hold back a great deal of light and make the picture gray and flat.

Keep Dust Out of the Camera

It is advisable to wipe out the inside of camera and bellows occasionally with a slightly damp cloth, especially if the camera has not been used for some time.

Finishing the Pictures

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

The instructions in this booklet are ample for the handling of the camera under practically all conditions. Similarly, those who wish to do their own developing and printing will find equally full directions accompanying the Kodak Film Tanks (for developing in daylight), or our Outfits for tray or dark-room use.

To develop films, Nos. A 130 and A 122, used in the Nos. 2C and 3A Pocket Kodaks, respectively, obtain a 3½-inch Kodak Film Tank. These films may be developed in the larger Tanks, but not so economically.

If dark-room development is preferred, an Eastman 3A Developing and Printing Outfit should be obtained.

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

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

We never lose interest in the purchaser of a Kodak. We are not only willing, but are anxious at all times to help solve any problems that may arise, either by sending the necessary printed instructions or by individual correspondence, through our Service Department. Making use of the knowledge of our experts places you under no obligation. Kodak Service is free—and goes with the purchase of every Kodak.

EASTMAN KODAK COMPANY, Rochester, N. Y.

Picture taking with the

PRICE LIST	
AUTOGRAPHIC FILM CARTRIDGE, No. A 130, for the No. 2C Pocket Kodak, 2½ x 4½, ten exposures	.75 .45
AUTOGRAPHIC FILM CARTRIDGE, No. A 122, for the No. 3A Pocket Kodak, 3½ x 5½, ten exposures.	.90 .55
LEATHER CARRYING CASE, with strap, for the No. 2C Pocket Kodak	3.25
LEATHER CARRYING CASE, with strap, for the No. 3A Pocket Kodak	3.75
Kodak Portrait Attachment, No. 6, for the No. 2C or the No. 3A Pocket Kodak.	.75
KODAK DIFFUSION PORTRAIT ATTACHMENT, No. 6, for the No. 2C or the No. 3A Pocket Kodak	1.50
KODAK COLOR FILTER AND KODAK SKY FILTER, No. 6, for the No. 2C or the No. 3A Pocket Kodak, each	1.15
Kodak Film Tank, $3\frac{1}{2}$ -inch Duplicating Outfit for above Tank	$6.50 \\ 3.25$
DEVELOPER POWDERS for 3½-inch Kodak Film Tank, six powders	.25
Eastman 3A Developing and Printing Outfit, for dark-room development and printing $(3\frac{1}{4} \times 5\frac{1}{2})$ or smaller), complete.	2.00

KODAK ACID FIXING POWDER, one pound Half pound Quarter pound	.15
	.10
Velox Paper, $2\frac{7}{8}$ x $4\frac{7}{8}$, one dozen sheets.	.20
$3\frac{1}{4} \times 5\frac{1}{2}$, one dozen sheets	.20
Nepera Solution, for developing Velox, four-ounce bottle	.28
KODALOID PRINTING MASK, No. 8C. for	
2½ x 4½ negatives	.15
No. 8, for $3\frac{1}{4} \times 5\frac{1}{2}$ negatives	.15
VELOX TRANSPARENT WATER COLOR STAMPS, complete booklet of twelve colors	.50
VELOX WATER COLOR OUTFIT, consisting of Artist's Mixing Palette, three special Camel's Hair Brushes, and one book of Velox Transparent Water Color Stamps (twelve colors)	1.00
EASTMAN REDUCER AND STAIN REMOVER, package of five tubes	.50
Velox Re-developer, package of twelve tubes	1.08
Solio Paper, 21/8 x 41/8, two dozen sheets	.25
$3\frac{1}{4} \times 5\frac{1}{2}$, two dozen sheets	.30
COMBINED TONING AND FIXING SOLUTION	
FOR SOLIO, eight-ounce bottle	.50
Four-ounce bottle	.30
EASTMAN PYRO DEVELOPER POWDERS, box of five tubes	.25

Eastman Hydrochinon Developer Powders, box of five tubes	\$ 30
Eastman Special Developer Powders, box of five tubes	.35
Eastman Pyro Developer Powders, six powders	.25
THERMOMETER STIRRING ROD	1.25
KODAK DARK-ROOM LAMP, oil, 5/8-inch wick	1.25
Brownie Safelight Lamp, an electric dark-room lamp	1.75
EASTMAN FLASH SHEETS, No. 1, half-dozen	.35 .56 .84
KODAK FLASH SHEET HOLDER	1.25
Eastman Film Developing Clips, 3½-inch, per pair	.30
KODAK JUNIOR FILM CLIPS, No. 1, each	.15
KODAK TRIMMING BOARD, 7-inch	1.00
KODAK METAL TRIPOD, No. 0	2.75 4.50 5.00
LEATHER CARRYING CASE, for Kodak Metal Tripod Nos. 0, 1 or 2	2.70
FLEXO TRIPOD	2.00
OPTIPOD, for attaching camera to the edge of a table, chair, fence, etc	1.25
Kodapod, for attaching camera to a tree, fence or similar rough surface	1.75

KODAK NEGATIVE ALBUM to hold $100 \ 3\frac{1}{4} \ x \ 5\frac{1}{2}$ or smaller negatives \$	1.50
Kodak Dry Mounting Tissue, 2½ x 4½, three dozen sheets	.10 .10
KODAK PHOTO BLOTTER ROLL, for drying prints	1.50
Baltic Mounts for prints 2\% x 4\%, per 50 For prints 3\% x 5\%, per 50	1.55 1.70
Rhodes Album, flexible leather cover, looseleaf, with 50 black leaves, size 7 x 11 Cloth cover	2.75 1.25
KODAK PRINT ROLLER, double, 6-inch	1.00
FLEXO PRINT ROLLER, single, 4-inch	.35
"How to Make Good Pictures," an illustrated book for the amateur, that includes many helpful suggestions	.50
Developing, Printing and Enlarging	
Developing Film, 2½ x 4½ or 3½ x 5½, ten-exposure cartridge\$ Six-exposure cartridge	.40 .25
Velox Prints, 2½ x 4½ or 3½ x 5½, unmounted, each	.09
Mounted, each	.12
All prints unmounted unless otherwise specifie	d.

When mailing film for developing, printing or enlarging, mark the package plainly with your name and address, and write a letter of instructions, with remittance.

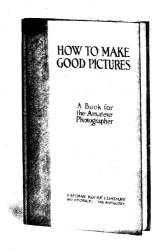
www.orphancameras.com

Bromide	Enlargements, mounted on car	rds:	
6 x 10,	each	\$ 1.00)
7 x 12,	each	1.40)
8 x 14,	each	1.75	j

On enlargement orders, if, in our opinion, an enlargement will be improved by double mounting, we will do so at an additional charge of ten cents.

All prices subject to change without notice.

EASTMAN KODAK COMPANY, Rochester, N. Y.



APRACTICAL book for the amateur. It describes in a simple, understandable way every phase of photography that the amateur is likely to be interested in, such as various methods of making exposures, developing, printing, enlarging, making lantern slides, coloring, etc. Profusely illustrated.

EASTMAN KODAK COMPANY,
At your dealer's ROCHESTER, N. Y.

SERVICE DEPARTMENT

Additional Assistance for Making Better Pictures

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

The Service Department is at their service, your service.

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

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

Address all Communications

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



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

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

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

EASTMAN KODAK COMPANY ROCHESTER, N. Y.