

"Kodak

EASTMAN KODAK COMPANY ROCHESTER, N. Y.

 $Manufacturers\ of$

Kodak Cameras, Kodak Film,

Brownie Cameras, Kodak Film Tanks,

Velox Paper, Solio Paper,
Eastman Royal Bromide Paper, Eastman Standard Bromide Paper, Eastman Velvet Bromide Paper, Eastman Brilliant Velvet Bromide Paper, Eastman Matte-Enamel Bromide Paper, Eastman Enameled Bromide Paper, Kodak Dry Mounting Tissue, Eastman Tested Chemicals,

Tripods and Other Specialties.

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

February, 1925.

Picture taking with the

Nos. 1 and 1A Autographic Kodak Juniors

Kodar Lens

Published by EASTMAN KODAK COMPANY, ROCHESTER, N.Y.

Order Film by Number

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

A 120 is the number of the film for the No. 1 Autographic Kodak Junior.

A 116 is the number of the film for the No. 1A Autographic Kodak Junior.

The number is on the carton, on the cartridge, and on the back of the Kodak.

Autographic film can be used in the earlier models of Kodaks, "N.C." film can be used in Autographic Kodaks, but to get Autographic results Autographic film must be used in an Autographic Kodak.

IMPORTANT

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

Before Loading

BEFORE taking any pictures with either the No. 1 or the No. 1A Autographic Kodak Junior, read the following instructions carefully. Make yourself familiar with the camera, taking especial care to learn how to operate the shutter (see page 11). Work it for both time and instantaneous exposures several times before loading the Kodak with film.

The first and most important thing for the beginner to bear in mind is that the light, which serves to impress 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 the light striking it.

EASTMAN KODAK COMPANY, Rochester, N. Y.

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Loading the Kodak

THE No. 1 or the No. 1A Autographic Kodak Junior can be loaded and unloaded in daylight. These operations should be done in a subdued light, not in bright sunlight. Use film No. A 120 for the No. 1 Autographic Kodak Junior and film No. A 116 for the No. 1A Autographic Kodak Junior.



1. Press the two catches in the sides of camera, Fig. I, and

FIG. I.

remove the back by lifting it outwards and upwards, Fig. II.



FIG. II.



FIG. III.

Drawing Out a Spool Pin.

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.

Draw out the spool pins, Fig. III, and insert the roll of film into the recess, Fig. IV. Be sure to get the word Top, which is printed on the cartridge, on the same side of the camera as the winding key.



FIG. IV.
Inserting the Cartridge.

If the cartridge is inserted wrong way around, the red paper instead of the film will face the lens, resulting in the total loss of the pictures.

- 3. Push back the spool pins, making sure that they enter the holes in the ends of the spool.
- 4. Remove the white band that holds the red paper; pass the paper over the two rollers, unfold the end and thread it into the longer opening in the slit in the reel, as far as it will go, as shown in Fig. V. Be careful that the paper draws straight and true.



FIG. V.
Threading up the Red Paper.

5. Turn the key once or twice—just enough to bind the paper on the reel. See Fig. VI, page 8.



The paper should now be in the position indicated in Fig. VII.



FIG. VII.
Showing position of paper.

6. Replace the back by fitting the flange nearest the handle into the groove next to the winding key; press down the back until the spring catches snap into position.

Handle the back of the Kodak carefully as even a slight bend would make it fit badly, allowing light to get in and ruin the film.

From the time the white band is broken on the fresh roll of film until the back of the camera is once more in place, keep the red paper wound tightly on the roll. If it is allowed to loosen, light will be admitted and the film fogged.

7. Turn the key and watch the little red window. After 15 to 18 turns have been given, a warning hand will appear; then turn slowly until the figure 1 is in the center of the red window.

The film is now in position for the first picture.



Press in the winding key slightly when turning it, so as to make sure that the web on the key stays within the slot in the top of the spool.

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



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

Making the Exposures

BEFORE making an exposure with either the No. 1 or the No. 1A Autographic Kodak Junior, 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.

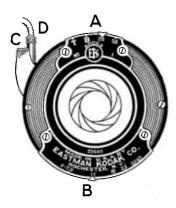
Fourth—An unexposed section of the film turned into position.

Exposures are made by pressing the push-pin of the cable release D or pressing the exposure lever C.

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, therefore, be carefully read, and the shutter operated several times before loading the Kodak with film.



Instantaneous Exposures

First—Move the lever A to 25 or 50 (representing the speeds of the shutter), according to the time of Instantaneous Exposure desired.

Second—Move the lever B to f.11. Lever B controls the iris diaphragm and f.11 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.

For open views, etc., 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 stop f.16 and speed 50.

With light clouds or slightly smoky atmosphere use f.7.9 and speed 25. With heavy clouds do not attempt instantaneous

exposures.

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 Kodak 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 f.7.9,11, 16, 22, 32 or 45. See instructions for the use of the diaphragms or stops given on pages 22 and 23, also the table for making Interior Time Exposures on pages 40 and 41, and the table for Time Exposures Outdoors, page 45.

Third—Press the push-pin. opens the shutter. Time the exposure by a watch. Again press the push-pin. This closes the shutter. The shutter may also be opened by pressing the exposure lever

C and closed by a second pressure, but great care must be taken not to jar the camera.

"Bulb" Exposures

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

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

Second—Move the lever B to f.7.9, 11, 16, 22, 32, or 45. See instructions for the use of the diaphragms or stops given on pages 22 and 23, also the table for making Interior Time Exposures on pages 40 and 41, and the table for Time Exposures Outdoors, page 45.

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, 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

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 the back or over the shoulder of the operator. If it shines directly into the lens it will blur and fog the picture.

Special instructions for making portraits are given on pages 25 and 41.

To Focus the Kodak



FIG. I. Opening the Front.

Press the button, as shown in Fig. I, and pull down the bed of the Kodak.

On the camera bed of the No. 1 Autographic Kodak Junior there is a focusing scale with slots marked 6, 8, 25 and 100 feet. The scale

on the No. 1A Autographic Kodak has slots marked 6, 8, 10, 15, 25 and 100 feet. This is for focusing the camera.

The focusing scales are marked both for feet and for meters and care should be taken not to confuse them.

Press in the spring at the bottom of the front standard and draw out the front to the point on the scale nearest the estimated distance in feet between the Kodak and the *principal object* to be photographed, where the front will lock automatically—Fig. II.



FIG. II.

Drawing out the Front.

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 15 to about 65 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 6 feet can be focused without using a Kodak Portrait Attachment, see pages 43 and 44, 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, f.7.9, and the focus is at six feet; an object six feet distant will be sharp, but objects five and seven and a half feet distant will not be sharp. Stop the lens down to f.16, and objects each side of the exact point of focus will increase in sharp-

f.45

f.32

f.22

f.16

Inf. 30

2222

f.45

ness and the area within which all objects will be sharp is very much increased. Go farther and use stop f.45, and everything from about three feet and threequarters to about thirty feet will be sharp, with the No. 1 Autographic Kodak Junior. With the No. 1A Autographic Kodak Junior, everything from about four feet to about fourteen 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. But it is obvious that with the small stops the exposure must be correspondingly increased.

The tables on page 19 will be a help in finding the depth of focus or range of sharp definition with the Nos. 1 and 1A Autographic Kodak Juniors when they are 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

Kodak Junior Junior to Inf. to Inf. to 36 to 14 f.32Table for use with the No. 1 Autographic Kodak Inf. 18 18 10 No. 1A Autographic 2222 f.22 2222 Table for use with the 2 2222 100 Ft. 25 ". 8 ". 6 ". 19

Infinity. for \$\$\$\$\$\$\$ is the abbreviation 353333 "Inf." in both of the above tables meaning an infinite distance from the lens. 222222 222222 100 Ft. 25 ". 15 ". 10 ". 8 ".

Inf Inf Inf 14 14 14

\$\$\$\$\$\$

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These diagrams show the actual sizes of the stop openings or diaphragms of the shutters used on the Nos. I and 1A Autographic Kodak Juniors when the Kodaks are fitted with the Kodar Lens. They clearly show the relative sizes of the various stop openings and the difference between their areas.

The "f." System

A lens is said to work with a certain "speed;" this means that the lens will give a sharp image from corner to corner of the film, with an opening a certain proportion of its focal length. It should be borne clearly in mind that this speed depends not upon the size of the opening, but upon the size of the opening in proportion to the focal length of the lens (distance from the lens to the film when the Kodak is focused on infinity). The lens that will give sharp images with the largest opening is said to possess the greatest speed.

The proportional size or "value" of the stop opening is designated by "f." and is the quotient obtained by dividing the focal length of the lens by the diameter of the stop.

Taking, for instance, a lens of 8-inch focus with a stop 1-inch in diameter, we find that $8 \div 1 = 8$, hence 8 is the f. value of the stop and would be designated f.8. Suppose the stop is $\frac{1}{4}$ -inch in diameter, we would then have $8 \div \frac{1}{4} = 32$ or $\frac{1}{32}$ of the focal length of the lens, the f. value of the stop, and would be designated f.32.

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 12.

f.7.9—For instantaneous exposures on slightly cloudy or hazy days, use speed 25; also for portraits out-of-doors, when the sun is shining, see page 25, and for portraits indoors, see page 42.

f.11—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 sunshine, use speed 25.

f.16—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 sunshine with clear sky overhead, use speed 25; also for Interior Time Exposures, the time for which is given in the table on pages 40 and 41.

f.22—For instantaneous exposures of extremely distant views, marine, snow

scenes, and clouds, in bright sunshine, use speed 25; also for time exposures.

f.32 and 45—For Time Exposures Outdoors on cloudy days, the time for which is given in the table on page 45. The smaller the stop the sharper the picture, see pages 17, 18 and 19. Total failure will be the result if stops f.32 or f.45 are used for instantaneous exposures.

Throughout this manual all exposures given for out-of-door subjects are for the hours between $2\frac{1}{2}$ hours after sunrise and $2\frac{1}{2}$ hours before sunset. If earlier or later the exposures must be longer. For subjects in the shadow, under porches or under trees, no accurate directions can be given; experience only can teach the proper exposure to give.

How to use the No. 1 or the No. 1A Autographic Kodak Junior as a Fixed Focus Camera

SET THE FOCUS AT 25 FEET.

USE SPEED 25.

SET DIAPHRAGM AT f.11.

By following the above directions these Kodaks can be used as fixed focus cameras with the additional advantage of being instantly convertible to focusing cameras when conditions call for it. It must be remembered, however, that when using them as fixed focus types, it is necessary that the subject be in bright sunlight, to obtain a fully timed exposure.

The range of sharpness when the Kodaks are adjusted as above will be found in the tables on page 19.

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, $3\frac{1}{4} \times 4\frac{1}{4}$ and smaller (equipped with short focus lenses), the lens is immovable, that is, 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 called a fixed focus camera.

Use Stop f.11 and Speed 25

For nearby landscapes showing little or no sky, groups and street scenes, when the subject is in the bright sunlight, use stop f.11 and 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 brightly, the subject should be in the shade of a building or a large tree, but with clear and unobstructed sky overhead—then use stop f.7.9 and speed 25. By following this rule unpleasant and distorting shadows on the face will be avoided.

In views at the seashore and on the water, when the sunlight on the subject is *unusually strong* and there are no heavy shadows, stop f.16 and speed 50 should be used.

For ordinary *landscapes*, in bright sunshine with clear sky overhead, use stop f.16 and speed 25.

If a smaller stop opening than f.16 is used for snapshots, total failure will result, except that f.22 should be used for extremely distant views, marine, snow scenes and clouds, in bright sunshine, using speed 25.

Using the Finder



Holding Kodak in Vertical Position

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



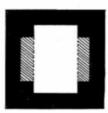
Holding Kodak in Horizontal Position Showing Finder Properly Turned.

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 by changing the

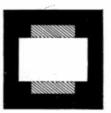
direction of the lens.

It will be noticed that the top of the finder is notched, as shown in Fig. V. This is to enable the one finder to show the correct view when the Kodak is held in either the vertical or horizontal position.

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



View Included when Making a Vertical Picture.



View Included when Making a Horizontal Picture.

FIG. V.

Using the Exposure Lever



FIG. VI.

Fig. VI shows how to hold the camera when making an exposure without the use of the cable release. Hold the bed of the Kodak firmly with the left hand, steady it with the right and with the thumb of the right hand press the exposure lever.

Hold the Kodak Level

The camera 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. VII. Sometimes a tall building can be photographed from a building opposite, at a level with the center of the subject.



FIG. VII.

Effect produced by tilting the Kodak.



IMPORTANT

When making snapshots with any Kodak, hold it firmly against the



body as shown. When pressing the push-pin or the exposure lever, hold the breath for the instant.

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

When making the exposure:

—hold the Kodak steady—hold it level and press the push-pin of the cable release.

The 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

4lb: Brook Trout, E.G.C. 6/23/16

Band Concert, Maplewood PK. 7/3/18

Seonge Edward learns to week, 7/10/16

Empire Atole Express, f.6.3 /200 sec

Moving Day, III Fulton Que. 2/19/16

Flood, Eie, Pa. 8/3/15-6.30 P.M.

 $Autographic\ Records.$

32

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 32, 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, at the time of exposure, of the prevailing conditions, as: Bright light, speed 25, stop f.11, which is easily abbreviated to—B, 25, 11. By keeping such records, the causes of failure, if any, are quickly found. By comparing negatives and records, it will soon be seen 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, lift up the spring-door on the back of the Kodak (Fig. VIII, page 34), and holding



FIG. VIII.

the stylus as upright as possible (Fig. IX), write on the strip of red paper any memorandum desired, such as the title of the picture, the date, or details in regard to the exposure, light, stops, etc.

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



FIG. IX. Position of Stylus when making an Autographic Record.

the sun should not be allowed to shine upon the paper. When the writing is completed it should be exposed to the light as follows:

Expose to the sky, but not to the sun:

INDOORS OUT-OF -DOORS CLOSE TO WINDOW to 5 Secs. 5 to 7 Secs.

BRILLIANT LIGHT 2 to 5 Sees.

DULL LIGHT 5 to 10 Sees. 10 to 15 Secs.

Expose to Artificial Light:

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

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

Close the spring-door 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. X, page 36.) The warning index hand appears only before No. 1 of each roll of film.

Repeat these operations for each picture.



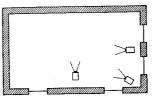
FIG. X. Turning the Film Winding Key.

Important—When you have made the exposure on the last section of the film and have made the autographic record of it, turn the winding key of the Kodak until the letter A appears in the center of the red window. Raise the spring-door and write your name on the red paper, expose it to the sky the same as was done when making the exposure records, then close the spring-door and finish winding 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 Instantaneous Exposures, see pages 15 and 16, and place it in such a position that the finder will include the view desired.



 $Diagram\ showing\ positions\ for\ Kodak.$

The diagram shows the proper 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 down the shades of those that come within range of the lens.

To make a Time Exposure, place the Kodak on some firm support such as a table, chair or tripod, and focus as before described. Be sure, however, if using a

table or chair to place the Kodak not more than two or three inches from the edge, to avoid including part of the table or chair in the picture.

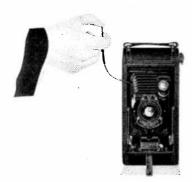


FIG. XI.

For a vertical exposure, raise the support that is used as a name-plate on the bed of the Kodak, and place the Kodak in position as indicated in Fig. XI. The Kodak also has tripod sockets and may be used on a tripod.

To make a horizontal time exposure without a tripod, turn the support that

is on the edge of the bed of the Kodak, then place the Kodak in the position as shown in Fig. XII.



FIG. XII.

Adjust the shutter for a Time Exposure, as described on page 13.

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

Turn the Winding Key: After making the autographic record, turn the next section of film into position, as described on page 35.

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 as described on pages 12 and 13.

Exposure Table for Interiors

The following table gives the approximate time of the exposure required under varying conditions of light, when using stop f.16. If stop f.11 is used give one-half the time; with f.7.9 give one-fourth the time. If stop f.22 is used, give twice the time; with stop f.32 give four times; and if stop f.45 is used, give eight times the exposures given in the table. The smaller the stop the sharper the picture, see pages 17, 18 and 19. Stop f.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. $\begin{array}{c} {\rm MEDIUM\ COLORED\ WALLS\ AND\ HANGINGS\ AND} \\ {\rm MORE\ THAN\ ONE\ WINDOW:} \end{array}$

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.

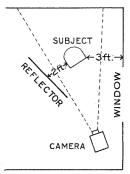
These exposures are for rooms where windows get the direct light from the sky and for hours from three hours after sunrise until three hours before sunset. If earlier or later the time required will be longer.

To Make a Portrait

The subject should be seated in a chair partly facing the light, and the face

turned slightly towards the Kodak which should be a little higher than an ordinary table. The eyes should be centered on an object at the same level with the lens. Compose the picture in the finder. For a three-quarter figure the Kodak should be about six to eight feet from the subject; and for a full-length figure about eight to ten feet. The background should form a contrast with the subject; a light background usually gives a more pleasing effect than a dark one.

When making portraits, the surrounding objects are usually better if they are not clear and sharp, hence we advise the use of stop f.7.9 ordinarily for such work.



To get a good light on the face, follow the arrangement as 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 high piece of furni-

ture will make a suitable reflector; place it at an angle and in the position as indicated in the diagram on page 42.

"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.

Instructions for making portraits outof-doors are given on page 25.

Kodak Portrait Attachment

By using the Kodak Portrait Attachment, large head and shoulder portraits of various sizes can be made.

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

Place the Attachment over the lens. Compose the picture in the finder, then turn the Kodak just a little to the left; as the short distances at which the subject must be from the lens make it necessary to center the subject by eye instead of by the finder. The subject must be at distances from two feet six inches to four feet two inches from the lens. It

must be at one of the exact distances from the lens as given by the figures in the right-hand column of the table, and the focusing indicator must be placed at the point on the focusing scale according to the figure opposite, in the left-hand column.

	H FO ET A			SUE	ВЈЕС	ТМ	IUST BE
6	foot	point	t	2	feet	6	inches
8	"	- "		2		9	u
10	"	"		3	"		
15	"	"		3	"	4	"
25	"	"		3	"	8	u
100	"	"		4	"	2	"

Use Kodak Portrait Attachment No. 8 with the No. 1 Autographic Kodak Junior when it is equipped with the Kodar Lens.

With the No. 1A Autographic Kodak Junior, when it is fitted with the Kodar Lens, use Kodak Portrait Attachment No. 3.

Kodak Diffusion Portrait Attachment

The Kodak Diffusion Portrait Attachment is a supplementary lens used in exactly the same manner as the regular Kodak Portrait Attachment. It produces a true, soft-focus effect free from objectionable "fuzziness" or out-of-focus ap-

pearance. By using this Attachment portraits are made more artistic, due to the softening effect of diffusion.

Use Kodak Diffusion Portrait Attachment No. 8 with the No. 1 Autographic Kodak Junior when it is equipped with the Kodar Lens.

With the No. 1A Autographic Kodak Junior, when it is fitted with the Kodar Lens, use *Kodak Diffusion Portrait Attachment No. 3*.

Time Exposures—Outdoors

With stop f.32 or f.45 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 very short time exposures as described below, use the "Bulb" Exposure, see page 14.

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—From four seconds to eight seconds will be required.

With very heavy clouds, the exposure required will be longer.

This table is for hours from $2\frac{1}{2}$ hours after sunrise until $2\frac{1}{2}$ hours before sunset, and for objects in the open. For other hours or for objects in the shadow, under porches or trees, no accurate directions can be given; experience only can teach the proper exposure to give.

Time 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

By using Eastman Flash Sheets, picture taking at night is very 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 essential extras, although a Kodak Flash Sheet Holder is a great convenience.

With flash sheets there is a minimum of smoke. They are 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 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—The shutter should be adjusted for a Time Exposure, as described on page 13 (stop f.11 must be used), and the Kodak placed on some firm, level support where it will

include the view desired, see pages 37 and 38.

Pin a flash sheet by one corner to a piece of cardboard in an upright position. This cardboard should be tacked to a stepladder or similar object. See diagram. White card-



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board 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 front of 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 from the flash 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 handleit 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.

Taking the Picture

With the Kodak and flash sheet in position and all being ready, open the camera shutter, stand at arm's length from the flash sheet holder, and apply a lighted match from behind through the round opening in the center of the holder.

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 by following the table as given on page 35, and wind a new section of film into place, ready for another picture.

The Flash Sheet

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

When ten feet distant, with light walls and hangings, use one No. 1 sheet; with dark walls and hangings, use one No. 2 sheet.

When fifteen feet distant, 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.

To Make a Portrait—The subject should be seated in a chair partly facing the Kodak, which should be a little higher than an ordinary table, the face turned slightly towards the camera, and the eyes centered on an object at the same level with the lens. The proper distance from the camera to the subject can be found by looking at the image in the finder. For a three-quarter figure this will be about six to eight feet, and for a full-length figure about eight to ten feet. The flash should be at the side of the Kodak away from the face, that is, the subject should not face it, and it should be at about the same height or a little higher than the subject's head.

For use of the Kodak Portrait Attachment, see pages 43 and 44.

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 Kodak. 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.

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 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 will be a help in composing the picture to get the best effect. To make the image visible, the room must be well lighted. The lights may be left on during the exposure, if none of them show in the finder.

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

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 better only when *instantaneous* work is essential.

Closing the Kodak



Closing the Bed of Kodak.

To close the Kodak press the finger grips at the bottom of the standard, and

slide back the front as far as it will go. Place the cable release around the shutter, press down the arm locks on each side of the standard and raise the bed as shown in the illustration, page 52.

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, and that the front standard has been 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 camera, or it may kink.

Removing the Film

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

It is a good plan to reload the camera as soon as an exposed film has been removed, to be ready for the next pictures. Use No. A 120 film for the No. 1 Autographic Kodak Junior and No. A 116 film for the No. 1A Autographic Kodak Junior.

1. When the last section of film has been exposed, make the autographic copy of your name, following instructions on page 36, and give the winding-key about eight half-turns to cover the film with red paper.



FIG. I.
Holding Red Paper Taut While Turning Key.

2. Remove the back as shown on page 5, and holding the paper taut, turn the key until all the paper is on the reel, Fig. I, page 54.

3. Hold the ends of the red paper and the sticker together to prevent paper from loosening on the reel. If the sticker folds under the reel, turn the winding key to bring it up.

4. Draw out the spool pin and winding key, and lift out the roll of film as shown in Fig. II.



FIG. II. Removing the Cartridge of Exposed Film.

- 5. Fold over about half-an-inch at the end of the red paper (to make subsequent breaking of the seal easy), and fasten with the sticker.
- **6.** Wrap up the exposed film immediately to prevent the possibility of light being admitted. It is now ready for developing and printing.
- 7. Take out the empty spool by drawing out the center pins which hold it in place, Fig. III.



FIG. III.

Drawing Out Center Pins to Remove Empty Spool.

8. Slip the empty spool into place at the winding end of camera (this will form a new reel) with the slotted end of the spool next to the winding key. Draw out the key to allow the spool to drop into place, as in Fig. IV, page 57, and fit the web which is attached to key into the slot in the end of spool. Push the



FIG. IV.

Drawing Out Key to Admit New Reel.

center pin into the hole in the opposite end of spool.

9. Load as described on pages 5 to 10 inclusive.

Important

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

"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's 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 so that the red paper is kept within the flanges of the spool.

Clean Lenses

Dirty or dusty lenses will make poor pictures. These pictures illustrate this point clearly. The gray, flat, indistinct picture below was made with a dirty lens, the surfaces of which were covered with an accumulation of dust. The sharp, clear, distinct picture was made by the



DIRTY LENS

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same lens after it had been carefully cleaned.

Lenses should be frequently examined. Open the back of the Kodak (when there is no film in it), then open and draw out the front of the Kodak. Adjust the shutter as when making a Time Exposure, and open the shutter; the largest stop (f.7.9) should be in position. Hold the Kodak so that the front is towards the light, then look through the lens from the back of the Kodak, and if the lens is dirty, it should be wiped, both front and back, with a clean, soft linen 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 cut off 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. If the camera has not been used for some time, this needs special attention.

Finishing the Pictures

HERE 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 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 Film (No. A 120 or A 116) used in the Nos. 1 and 1A Autographic Kodak Juniors, respectively, obtain a 2½-inch Kodak Film Tank. (The films may be developed in the larger tanks, for films of longer spool length—but not so economically.)

The Film (No. A 120) may also be developed in daylight in the "Brownie" Kodak Film Tank.

If dark-room development is preferred, an Eastman A B C 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 pur-

chased 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 Kodak. We are not only willing but are anxious at all times to help solve any problems that may be encountered, either by sending the necessary printed instructions or by individual correspondence, through our Service Department. 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 Kodakand that is, Kodak Service.

EASTMAN KODAK COMPANY, ROCHESTER, N. Y.

PRICE LIST	
Autographic Film Cartridge, A 120, 2½ x 3½, 6 exposures	\$.25
Autographic Film Cartridge, A 116, 2½ x 4¼, 12 exposures	.60 .30
Leather Carrying Case, with strap, for use with the No. 1 Autographic Kodak Junior	3.00
Leather Carrying Case, with strap, for use with the No. 1A Autographic Kodak Junior	3.00
KODAK PORTRAIT ATTACHMENT, No. 8, for use with the No. 1 Autographic Kodak Junior, when it is fitted with	
the Kodar Lens	.75
equipped with the Kodar Lens KODAK DIFFUSION PORTRAIT ATTACH- MENT, No. 8, for use with the No. 1	.75
Autographic Kodak Junior No. 3, for use with the No. 1A Autographic Kodak Junior	1.25
KODAK COLOR FILTER AND KODAK SKY FILTER, No. 8, for use with the No. 1	
Autographic Kodak Junior, each No. 3, for use with the No. 1A Autographic Kodak Junior, each	.75 1.15
KODAK FILM TANK, 2½-inch	5.50 2.75,

Developer Powders for 2½-inch Ko Film Tank, six powders	\$.25
"Brownie" Kodak Film Tank Duplicating Outfit for above Tank	4.00 1.75
Developer Powders for "Brown Kodak Film Tank, six powders.	20
PRINTING OUTFIT, for dark-reddevelopment and printing (4 x smaller), complete	oom 5 or
Kodak Acid Fixing Powder, pound package Half pound Quarter pound	one25
Eastman Special Developer Powder in sealed glass tubes, box of tubes	ers, five
Eastman Hydrochinon Develor Powders, in sealed glass tubes, of five tubes	box
EASTMAN PYRO DEVELOPER POWDE in sealed glass tubes, box of five tu EASTMAN REDUCER AND STÄIN	ers, bes .25
MOVER, box of five tubes	
VELOX RE-DEVELOPER, box of twe	elve
tubes	
THERMOMETER STIRRING ROD	
Kodaloid Printing Mask, No. 3,	for
use with $2\frac{1}{4}$ x $3\frac{1}{4}$ negatives No. 4, for use with $2\frac{1}{2}$ x $4\frac{1}{4}$ negatives	10 ives .10
Velox Paper, $2\frac{1}{4}$ x $3\frac{1}{4}$, one doz. sh $2\frac{1}{2}$ x $4\frac{1}{4}$, one dozen sheets	eets .12
2/2 1 1/4; one dozen sheets	

NT . C . (C 1 1 ' Y/1)	
NEPERA SOLUTION (for developing Velox), 4-ounce bottle	\$.28
VELOX TRANSPARENT WATER COLOR	Φ .40
Stamps, complete booklet of twelve	
colors	.50
VELOX TRANSPARENT WATER COLOR	
STAMP OUTFIT, consisting of Artist's	
Mixing Palette, three special Cam-	
el's Hair Brushes, and one book of	
Velox Transparent Water Color	1.00
Stamps (twelve colors)	1.00
Eastman Flash Sheets, No. 1, half	9.5
dozen No. 2, half dozen	$.35 \\ .56$
No. 3, half dozen	.84
Kodak Flash Sheet Holder	1.25
Kodak Dry Mounting Tissue, 2¼ x	1.20
3½, three dozen sheets	.10
$2\frac{1}{2}$ x $4\frac{1}{4}$, three dozen sheets	.10
EASTMAN FILM DEVELOPING CLIPS	
(nickeled), 3½-inch, per pair	.30
KODAK JUNIOR FILM CLIPS, No. 1, each	.15
KODAK METAL TRIPOD, No. 0	2.75
No. 1	4.50
No. 2	5.00
LEATHER CARRYING CASE, for Kodak	
Metal Tripod, Nos. 0, 1 or 2	2.70
OPTIPOD, for attaching Kodak to a table,	1.05
chair, fence, or any rigid edge	1.25
KODAK DARK-ROOM LAMP, No. 2, 5%-in.	1.25
Eastman Film Negative Album, to hold 100 2 ½x4 ½ or smaller negatives	1.25
noid 100 2/2A1/4 of Smaller negatives	1.20
0.4	

Rhodes Album, flexible leather cover, loose-leaf, 50 black leaves, size 5 x 8 \$ 2.00 Cloth cover, size 5 x 8
Developing, Printing and Enlarging
$\begin{array}{cccccccccccccccccccccccccccccccccccc$
All prints furnished unmounted unless otherwise specified.
Note—When mailing film for development, mark the package plainly with your name and address and write a letter of instructions, with remittance.
8 x 10 or 6 x 10 Bromide Enlargements, mounted on cards, each
On enlargement orders, if, in our opinion, an enlargement will be improved by double mounting, we will do so at an additional charge of 10 cents, or triple mounted at 15 cents.
Alli.co ashicat to ahamas swithout matica

All prices subject to change without notice.

EASTMAN KODAK COMPANY, ROCHESTER, N. Y.

SERVICE DEPARTMENT

Additional Assistance for Making Better Pictures

A LTHOUGH we give in this manual all 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.

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"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 purchased.

EASTMAN KODAK COMPANY.

TO THE EASTMAN KODAK CO., ROCHESTER, NEW YORK:

Accepting your offer, please put my name on the mailing list for "KODAKERY" (with the understanding that there is to be no cost to me), I having bought a

Form No. 856-7.9-25

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