

**Features of the new Model
10 Standard and 2A
Folding Blank-Eye
Camera Special**

Feature	Model 10	Model 2A
1. 1/2" x 3 1/2" lens	Yes	Yes
2. 1/2" x 3 1/2" lens	Yes	Yes
3. 1/2" x 3 1/2" lens	Yes	Yes
4. 1/2" x 3 1/2" lens	Yes	Yes
5. 1/2" x 3 1/2" lens	Yes	Yes
6. 1/2" x 3 1/2" lens	Yes	Yes
7. 1/2" x 3 1/2" lens	Yes	Yes
8. 1/2" x 3 1/2" lens	Yes	Yes
9. 1/2" x 3 1/2" lens	Yes	Yes
10. 1/2" x 3 1/2" lens	Yes	Yes
11. 1/2" x 3 1/2" lens	Yes	Yes
12. 1/2" x 3 1/2" lens	Yes	Yes
13. 1/2" x 3 1/2" lens	Yes	Yes
14. 1/2" x 3 1/2" lens	Yes	Yes
15. 1/2" x 3 1/2" lens	Yes	Yes
16. 1/2" x 3 1/2" lens	Yes	Yes
17. 1/2" x 3 1/2" lens	Yes	Yes
18. 1/2" x 3 1/2" lens	Yes	Yes
19. 1/2" x 3 1/2" lens	Yes	Yes
20. 1/2" x 3 1/2" lens	Yes	Yes

**Features of the
New 1 and 2A
Folding Blank-Eye
Camera Special**

Each Model from \$10.00



**STANDARD, MODEL 10, MODEL 2A
FOLDING BLANK-EYE
CAMERA SPECIAL**

Picture taking with the
Nos. 2 and 2 A
Folding Hawk-Eye
Cameras Special

Kodak Assignat Lens f5.3

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

120 is the number of the film for the No. 2 Folding Hawk-Eye Camera Special.

116 is the number of the film for the No. 2A Folding Hawk-Eye Camera Special.

Load your Hawk-Eye with Kodak Film.

Look for this Trade Mark on the box:



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

Before Loading

The Nos. 2 and 2A Folding Hawk-Eye Cameras are alike except that the No. 2A makes a larger picture. Throughout this book whatever is written applies to either camera except in the matter of film, picture sizes, diaphragm scales and some accessories.

Before taking any pictures with your camera, read the following instructions carefully. Make yourself familiar with the camera, taking especial care to learn how to operate the shutter (see page 12). Work it for instantaneous, time and "bulb" exposures several times before loading the camera with film.

The first thing to remember 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 the light striking it.

CONTENTS

Loading the Camera	5
Making the Exposures	11
Opening the Front	11
Opening the Shutter	12
Instantaneous Exposures	16
Focusing	18
Diaphragm	23
Using the Finder	29
Time Exposures—Interiors	36
To Make a Portrait	40
Time Exposures—Outdoors	45
Flash-light Exposures	47
Closing the Camera	48
Removing the Film	50
Finishing the Pictures	55

Loading the Camera

THE Nos. 2 and 2A Folding Hawk-Eye Camera Special can be loaded or unloaded in daylight. Do

this in a subdued light, not in direct sunlight. Use film No. 120 for the

No. 2 Hawk-Eye Camera and film No. 116 for the No. 2A Hawk-Eye Camera.



Fig. 1

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



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. 2

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 larger 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 that it does not loosen up on the full spool, see Fig. 4.



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, page 8.

Important: The empty spool or reel must be placed in the winding key end of the camera with its slotted end towards the winding key. The word "TOP" printed on the red paper must be towards the winding key.



Fig. 3

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



Fig. 4

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

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

6. After the camera is loaded, replace the front, first inserting the end opposite the lock; the edge of the box must fit into the groove on this end of the front. Press the end on which the lock is fastened into place and push over the lock, making sure that it is fastened securely.

From the time the hand 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 admitted and the film ruined.



7. Turn the key and watch the red window. After a few turns, a winding hand will appear, then turn slowly

until the figure 1 is in the center of the window, as shown in the illustration on page 9.

Press in 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 exposure. After each exposure be sure to wind the film, bringing the next number into position. This prevents making two pictures on the same section of film.

Making the Exposure

BEFORE 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 correct stop opening.

Third—The camera focused.

Fourth—An unexposed section of film turned into position.

Exposures are made by pressing the push-pin of the cable release D or pressing the exposure lever C, shown in diagram of shutter on page 13.

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

Opening the Front

Press the spring lock with the thumb, to open the front of the camera, Fig. 1, page 12, then push down the bed of the camera. Draw out the lens standard by the knob on the slide plate, Fig. 2, page 19.



Fig. 1. Operating the Shutter.

Operating the Shutter

Familiarity with the shutter is necessary for successful picture-taking with any camera. Read the following directions carefully and operate the shutter several times before loading the camera with film.

Instantaneous Exposures

"Snapshots"

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



Second—Move the lever B to *f.11*. Lever B controls the iris diaphragm and *f.11* is the proper opening for ordinary outdoor pictures, such as street scenes, nearby views, etc., when the subject is in bright sunlight, using speed 25. See instructions for using the diaphragm or stop openings on pages 25, 26 and 27.

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 letter "T" (time). This adjusts the shutter for Time Exposures.

Second—Move the lever B to *f.8, 8, 11, 16, 22 or 32* (or *f.45* with the No. 2A Folding Hawk-Eye Camera), depending on the time of the exposure and the nature of the subject. See instructions for using the diaphragm or stop openings given on pages 23, 26 and 27, also the table for making Interior Time Exposures on pages 40 and 41 and the table for Time Exposures Outdoors, page 46.

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

"Bulb" Exposures

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

Second—Move the lever B to *f.8, 8, 11, 16, 22 or 32* (or *f.45* with the No. 2A Folding Hawk-Eye Camera). See instructions for using the diaphragm or stop openings given on pages 23, 26 and 27, also the table for making Interior Time Exposures on pages 40 and 41 and the table for Time Exposures Outdoors, page 46.

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 never be made with the camera 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: *Never oil the shutter.*

In case of accident, return the camera 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 the shoulder. If it shines directly into the lens it will blur and fog the picture.

Special instructions for making portraits indoors are given on page 40.

Use Stop *f*.11 and Speed 25

for all ordinary outdoor pictures, 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 opening is used for ordinary snapshots, the light will be so much reduced that it will not make a satisfactory picture.

On cloudy days; during rain in the middle of the day; and early or late on clear days (one hour after sunrise or one hour before sunset), use stop *f*.8.3 and speed 25.

When making portraits outdoors, 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—use stop *f*.8.3 and speed 25. By following this rule unpleasant and distorting shadows on the face will be avoided.

Kodak Self Timer:

There are many occasions when the photographer would like to be included in the picture. This can easily be done by using a Kodak Self Timer, an accessory that can be used with any camera fitted with a cable release.



Kodak
Self Timer.

Attached to the cable release, the Kodak Self Timer can be so adjusted that it will "press the button" from half a second to one minute after it has been released. The Kodak Self Timer is intended for making automatic exposures only, that is, exposures made with a single pressure on the push-pin of the cable release. Time or "Bulb" Exposures cannot be made with it.

For moving objects, the subject must be in the bright sunlight, use stop $f/8.3$ and speed 50. When photographing a moving object such as a runner, train or an automobile, the subject should be traveling towards or away from the camera at an angle of about 45 degrees.

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 $f/16$ and speed 50 should be used.

For ordinary landscapes, in bright sunlight with clear sky overhead, use stop $f/16$ and speed 25.

Stop $f/22$ and speed 25 should be used for extremely distant views, marines, snow scenes and clouds only, in bright sunlight.

If a smaller stop opening than $f/22$ is used for snapshots, failure will result.

To Focus the Camera

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

camera. The scale is also marked for meters and care should be taken not to confuse the figures.



Fig. 2
Drawing Out the Lens Standard.

Draw out the lens standard by the knob on the slide plate, as far as it will come, where it will lock automatically, Fig. 2. The camera is now in focus for anything 100 feet or beyond.

To adjust the focus for subjects at distances nearer than 100 feet, 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 nearest to the distance in feet, between the camera and the principal object to be photographed.

The distance between the subject and camera can be estimated without measuring, when the subject is beyond fifteen feet; for instance, if the focus is set at 25 feet (the usual distance for ordinary street scenes) the sharpest part of the picture will be the objects at that distance from the camera, but everything about 17 to about 50 feet will be in good focus.

For ordinary street pictures 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 43 and 44, or a small stop opening, see the tables on page 22.

What Depth of Focus Means

If the lens is used with the largest stop opening, $f/6.3$, and the focus is at six feet; an object six feet distant will be sharp, but objects five and one-quarter feet and seven feet distant will not be sharp. Use a smaller stop opening, $f/16$, 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 the smallest stop opening, $f/32$ on the No. 2 Folding Hawk-Eye Camera Special, or $f/45$ on the No. 2A Folding Hawk-Eye Camera Special, and everything from about four feet to about fourteen feet will be sharp.

It will thus be seen that the smaller the stop opening 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 focussed upon. It is obvious that with the small stop openings the exposure must be correspondingly increased.

The Depth of Focus for Different Stop Openings

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. 2 Folding Hawk-Eye Camera Special

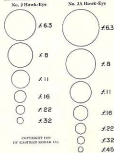
Distance Feet	f/3.3	f/3	f/2.8	f/2.5	f/2.2	f/2	f/1.8	f/1.6	f/1.4	f/1.3
40	to inf.	to inf.	to inf.	to inf.	to inf.	to inf.	to inf.	to inf.	to inf.	to inf.
30	to inf.	to inf.	to inf.	to inf.	to inf.	to inf.	to inf.	to inf.	to inf.	to inf.
20	to inf.	to inf.	to inf.	to inf.	to inf.	to inf.	to inf.	to inf.	to inf.	to inf.
10	to inf.	to inf.	to inf.	to inf.	to inf.	to inf.	to inf.	to inf.	to inf.	to inf.
5	to inf.	to inf.	to inf.	to inf.	to inf.	to inf.	to inf.	to inf.	to inf.	to inf.

Table for use with the No. 2A Folding Hawk-Eye Camera Special

Distance Feet	f/3.3	f/3	f/2.8	f/2.5	f/2.2	f/2	f/1.8	f/1.6	f/1.4	f/1.3
40	to inf.	to inf.	to inf.	to inf.	to inf.	to inf.	to inf.	to inf.	to inf.	to inf.
30	to inf.	to inf.	to inf.	to inf.	to inf.	to inf.	to inf.	to inf.	to inf.	to inf.
20	to inf.	to inf.	to inf.	to inf.	to inf.	to inf.	to inf.	to inf.	to inf.	to inf.
10	to inf.	to inf.	to inf.	to inf.	to inf.	to inf.	to inf.	to inf.	to inf.	to inf.
5	to inf.	to inf.	to inf.	to inf.	to inf.	to inf.	to inf.	to inf.	to inf.	to inf.

"Inf." is the abbreviation for infinity—meaning an unlimited distance from the lens.

No. 2 and 2A Folding Hawk-Eye Camera Special



These circles are the same size as the diaphragm or stop openings of the shutters on the Nos. 2 and 2A Folding Hawk-Eye Camera Special. They clearly show the relative sizes of the stop openings and how their areas differ.

The tables on page 22 give the depth of focus or range of sharp definition with the Nos. 2 and 2A Folding Hawk-Eye Cameras Special, when focused with different stop openings.

The "f." System

A lens is said to work at 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. The focal length of a lens is the distance between the lens and the film when the camera is focused for 100 feet. 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. The lens that will give sharp images with the largest opening is said to have the greatest "speed."

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

Taking, for instance, a lens of 8-inch focal length with a stop opening one 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 $\frac{1}{2}$ inch in diameter, we would then have $8 \div \frac{1}{2} = 16$ or $\frac{1}{32}$ of the focal length of the lens, the f. value of the stop opening, and known as *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 13.

f/4.3—For rapidly moving objects in bright sunlight, use speed 50. For cloudy days and during rain in the middle of the day, use speed 25. For exposures early or late on a clear day (one hour after sunrise or one hour before sunset), use speed 25. For portraits outdoors, when the sun is shining, see page 17, and for portraits indoors, see page 42. When using stop *f*/6.3 and the distance between the

subject and camera is ten feet or less, the distance must be accurately measured as the depth of focus is limited, see table on page 22.

f.8—For instantaneous exposures on slightly cloudy or hazy days, use speed 25. For scenes on narrow and slightly shaded streets, use speed 25.

f.11—For all ordinary outdoor pictures, such as nearby landscapes showing little or no sky, groups and street scenes, when the subject is in bright sunlight, 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 sunlight, with clear sky overhead, use speed 25; also for Interior Time Exposures, the time for which is given in the table on page 41.

f.22—For instantaneous exposures of extremely distant landscapes, mountains, snow scenes and clouds only, in bright sunlight, use speed 25; also for Time Exposures.

f.32 (and f.45 on No. 2A Folding Hawk-Eye Camera)—For Time Exposures Outdoors on cloudy days, the exposures for which are given in the table on page 46. For Interior Time Exposures, see pages 40 and 41. *Never* for instantaneous exposures.

The smaller the stop the greater the depth of focus, see pages 21, 22 and 23.

Failure will result, if stops *f.32* or *f.45* are used for instantaneous exposures.

Throughout this manual all exposures given for outdoor 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. With stop *f.32* satisfactory results can be obtained early or late on clear days (one hour after sunrise or one hour before sunset), using speed 25. For subjects in the shadow, under porches or under trees, no definite directions can be given; experience only can teach the correct exposure.

How to Use the No. 2 or the No. 2A Folding Hawk-Eye Camera Special as a Fixed Focus Camera

SET THE FOCUS AT 25 FEET.

SET THE DIAPHRAGM AT $f/11$.

USE SPEED 25.

By following the above directions your Hawk-Eye can be used as a fixed focus camera, with the additional advantage of being instantly convertible to a focusing camera when conditions call for it. It must be remembered, however, that when using the camera as a fixed focus type, subjects that are nearby, must be in bright sunlight, to obtain fully exposed negatives.

The range of sharpness when your Hawk-Eye is adjusted as a fixed focus camera will be found in the table on page 22.

Explanation: A lens is often spoken of as a "fixed focus" lens. 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 lenses of short focal length), the lens can be set at a distance that is a compromise, as

to its focus, between far and near points. A camera with a lens so focused, and used with a relatively small stop opening, is called a fixed focus camera.

Using the Finder

The finder shows what will appear in the picture, but on a much reduced scale.

Point the lens at the subject to be photographed and looking into the finder from directly over the center of it, include what you want and compose the picture by turning to the right or left, see illustration on page 32.

It will be noticed that the top of the finder is notched, as shown below.



Finder installed when Making a Vertical Picture.



Finder installed when Making a Horizontal Picture.

This enables the one finder to serve when the camera is held in either the vertical or the horizontal position.



Fig. 4
*Holding Camera in
Vertical Position.*

Only what is seen in that part of the finder represented by the white area of the diagrams on page 29, will be included in the picture.



Fig. 5
*Holding Camera in Horizontal Position,
Showing Finder Properly Focused.*

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

Using the Exposure Lever



Fig. 6

Fig. 6 shows how to make a vertical picture without using the cable release. Hold the body of the camera firmly with the left hand, steady it with the right and press the exposure lever with the thumb of the right hand.

Hold the Camera Level

The camera must be held level. If all of the subject cannot be included in the finder without tilting the lens



When making instantaneous exposures of snapshots with any camera, hold it firmly against the body and when pressing the push-pin or the exposure lever, hold the breath for the instant. If the camera is moved during the exposure, the picture will be blurred.

upwards, move backwards until it is all included with the camera held level.



Fig. 7
Effect Produced by Tilting the Camera.

Tilting the camera to bring in the top of a tall building produces the distorted effect shown above. Sometimes a tall building can be photographed from a building opposite at a level with its center.

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

Turn a new section of film into position: Press in slightly on the winding key and turn it slowly, three or four times, until the next number appears in the red window. Do this after each exposure. The warning hand appears only before No. 1 of each roll of film.

Kodak Sky Filter: This accessory is for obtaining more detail in the clouds when photographing landscapes. The upper half of the filter is stained a yellow color which reduces the brightness of the sky and equalizes the exposure, the colorless lower half permits a normal exposure for the foreground. The same exposure should be made with the Kodak Sky Filter in position as would be required without it.

Use Kodak Sky Filter No. 8 with the Nos. 2 and 2A Folding Hawk-Eye Cameras Special, fitted with the Kodak Anastigmat Lens *f*.6.3.

Kodak Color Filter: This attachment is especially valuable in outdoor photography, and for all subjects containing colors that act slowly on the sensitive film. It is helpful in clearing haze when photographing extremely distant landscapes; also for recording the correct color values in a black and white print, of flowers, fruit and other colored objects. When using the Kodak Color Filter make an exposure about seven times longer than would be required without it.

Use Kodak Color Filter No. 8 with the Nos. 2 and 2A Folding Hawk-Eye Cameras Special, fitted with the Kodak Anastigmat Lens *f*.6.3.

Kodak Pictorial Diffusion Disk: When this attachment is slipped over the camera lens it gives the pictures a pleasing degree of softness without loss of brilliancy. It does not increase the exposure nor change the focus, it merely softens the lines of the picture. It is particularly adapted for landscape work.

Use Kodak Pictorial Diffusion Disk No. 8 with the Nos. 2 and 2A Folding

Hawk-Eye Camera *Special*, fitted with the Kodak Anastigmat Lens *f*8.3.

Time Exposures—Interiors

Place the camera on a table, chair, tripod, Optipod, or other firm support. If a support other than a tripod or an Optipod is used, the camera must not be more than two or three inches from the edge, to avoid including part of the support in the picture. The camera has tripod sockets for use with a tripod or an Optipod.



Diagram showing positions for camera.

The camera should be placed in such a position that the finder will include the view desired. The diagram above shows three positions for the camera. It should not be pointed directly at a window, as the glare of light will blur



Fig. 2

the picture. If all the windows cannot be avoided, draw the shades of those within range of the lens.



Fig. 3

For a vertical picture raise the name-plate on the bed and place the camera on a table or chair as shown in Fig. 8, page 37.

To make a horizontal picture without a tripod, turn the support on the bed of the camera behind the focusing screw, and place the camera in the position as in Fig. 9, page 37.

Focus the camera as described on pages 18, 19 and 20.

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 13 and 14.

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: Press in the winding key and turn it until the next number appears in the center of the red window.

THE CAMERA 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 pages 12 and 13.

Optipod: A small, light, convenient accessory that can often be used in place of a tripod, or together with a tripod. The Optipod is a combined tripod head and felt-protected clamp which may be attached to the edge of a table, chair, or other suitable object, see Fig. 10.



Fig. 10

The ball and socket joint on the Optipod permits tilting the camera to almost any angle. This feature is especially desirable if the Optipod is used with a tripod, for photographing objects at close range and at an angle from the camera, that would make the use of a tripod impossible without this tilting device.

The Optigod is very compact, slipping readily into the pocket and may be carried without inconvenience.

Exposure Table for Interiors

The table on page 41 gives suitable exposures required for varying conditions of light, when using stop *f.16*. If stop *f.11* is used, give one-half the time; with stop *f.8* give one-fourth the time; and with stop *f.6.3* give one-sixth 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 opening the greater the depth of focus or range of sharpness, see pages 21, 22 and 23. Stop *f.16* gives the best average results for Interiors.

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 towards the camera which should be a little higher than an ordinary table. The subject should

EXPOSURE TABLE FOR INTERIORS

	Depth in feet	Light in foot-candles	Shutter speed	Shutter speed
White walls and more than one window.	4 feet.	10 foot-c.	20 sec.	40 sec.
White walls and only one window.	6 feet.	15 foot-c.	30 sec.	1 min.
Medium colored walls and hangings and more than one window.	8 feet.	20 foot-c.	40 sec.	1 min. 20 sec.
Medium colored walls and hangings and only one window.	12 feet.	30 foot-c.	1 min.	2 min.
Dark colored walls and hangings and more than one window.	20 feet.	40 foot-c.	2 min.	2 min. 40 sec.
Dark colored walls and hangings and only one window.	40 feet.	1 min. 20 sec.	2 min. 40 sec.	3 min. 20 sec.

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

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 camera 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 surrounding objects are not quite so sharp and clear as the face. This effect is obtained by using the largest stop opening, *f*8.3. The distance between the subject and the lens must be carefully measured, see Depth of Focus Tables on page 22.



get detail in the shaded part of the face. A white towel or table-cloth held by an assistant or thrown over a screen or other high piece of furniture will make a suitable reflector; it should be at an angle and in the position indicated in the diagram.

"How to Make Good Pictures," a book containing many diagrams and illustrations showing various lighting effects, can be obtained from a Kodak dealer.

Instructions for making portraits outdoors are given on page 17.

Kodak Portrait Attachment

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

Place the Attachment over the lens and compose the picture in the finder. Turn the camera 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 one of the distances from the camera, given in the table below. 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	Focusing Indicator Must Be Set At
2 feet 6 inches.....	6 feet
2 " 9 "	4 "
3 "	19 "
3 " 4 "	15 "
3 " 8 "	22 "
4 " 2 "	100 "

When making portraits, the most pleasing results are obtained with the subject four feet two inches from the lens and the focusing indicator set at 100 feet. 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 Nos. 2 and 2A Folding Hawk-Eye Cameras Special, fitted with the Kodak Anastigmat Lens *f.8.3*.

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 Nos. 2 and 2A Folding Hawk-Eyes, when fitted with the Kodak Anastigmat Lens *f.6.3*.

Time Exposures—Outdoors

When the smaller stop-openings (*f.32* or *f.45*) are used, the light passing through the lens is so much reduced that time exposures outdoors may be made the same as for interiors, but the exposures must be much shorter.

For very short time exposures as described on page 46, see the "Bulb" Exposure, see pages 14 and 15.

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 correct exposure to give.

Never make Time or "Snub" Exposures with the camera held in the hands. Place it upon some firm support, such as a tripod, Kodapod, or table.

Kodapod: An accessory that takes the place of a tripod when a tree, fence or similar rough object/breast at hand. Its toothed jaws grip the wood



Fig. 11

firmly, see Fig. 11. By means of a clamping screw, the camera may be adjusted to the vertical or horizontal position. The Kodapod can be used with any camera that has a standard tripod socket. It is small and may be carried easily in the pocket.

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 other self-burning flash mediums, 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 must have the shades drawn to prevent the blurring of the picture.

Evening parties, groups around a dinner or card table or an individual may be easily photographed by using flash sheets, providing souvenirs of many occasions, which, but for the flash-light, would be impossible.

"Picture Taking at Night," a booklet that gives full information regarding flash-light photography, and other ways to make pictures at night, will be sent free upon request to the Service Department, Eastman Kodak Company, Rochester, N. Y.

Closing the Camera

To close the camera, first see that the focus indicator is at the 100-foot mark on the scale, then release the spring catch on the lower part of the lens standard, from the slot on the bed of the camera, and slide back the lens standard 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 shown in the illustration, Fig. 12, page 49.

Caution: Before closing the bed of the camera, make sure that the finder



Fig. 12
Closing the Bed of Camera.

is in the position for making a vertical picture or in the upright position. The lens standard must be pushed back as far as it will go.

If the finder and lens 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 camera can be loaded or unloaded in daylight. This should be done in a subdued light, not in direct sunlight.

1. When the last section of film has been exposed, 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 3.



Fig. 1

Holding red paper taut while turning key.

3. Holding the paper taut, Fig. 1, turn the key until all but about an

inch of the paper is on the reel.

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.



Fig. 2

Removing the roll of exposed film.

5. Draw out the winding key to release the spool, and remove the roll of film, as in Fig. 2.

6. Fold under about half-an-inch of the red paper, and fasten it with the sticker. The fold under makes the breaking of the seal easier, when ready to develop the film.

7. Remove the empty spool and place it in the winding end of the camera.

8. Replace the front of the camera as described on page 9.

The exposed film, now ready for development, should be wrapped up to keep light from reaching it.

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.

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 film No. 120 for the No. 2 Folding Hawk-Eye Camera Special, and film No. 116 for the No. 2A Folding Hawk-Eye Camera Special. Load the camera as described on pages 5 to 10 inclusive.

"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. This might injure the negatives, as the surfaces rub together, making fine parallel scratches. Do not "crack" 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 clearly. The gray, flat, indistinct picture was made with a dirty lens, the surfaces of which were covered



Made with Dirty Lens.

Made with Clean Lens.

with dust. The sharp, clear and distinct picture was made with the same lens after it had been carefully cleaned.

Lenses should be frequently examined. Remove the front of the camera as described and shown in Figs. 1 and 2 on page 5 (when there is no film in it), then open the front and draw out the lens standard, see pages 11, 12 and 19. Adjust the shutter for a Time Exposure and open it; the largest stop opening, *f*6.3, should be in position. Hold the camera towards the light, look through the lens from the back, and if dirty, wipe it front and back 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 dust, dirt or moisture, a great deal of light will be held back and the picture will be gray and flat.

Keep Dust Out of the Camera

The inside of the camera and bellows should be wiped 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. Those who wish to do their own developing and printing will find equally full directions with the Kodak Film Tanks (see developing in daylight), or with the Outfits for tray or dark-room use.

To develop film, No. 120, used in the No. 2 Folding Hawk-Eye Camera Special, obtain a 2½-inch Kodak Film Tank. To develop film, No. 114, used in the No. 2A Folding Hawk-Eye Camera Special, obtain a 2½-inch Kodak Film Tank.

These two sizes of film may be developed in the larger tanks, but not so economically.

If the dark-room method of development is preferred, an Eastman A.B.C. or 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, whether a tank or outfit is purchased or not.

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

We never lose interest in the owner of a Hawk-Eye. 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 or Hawk-Eye Camera.

EASTMAN KODAK COMPANY,
ROCHESTER, N. Y.

PRICE LIST

KODAK FILM CAMERAS, No. 12B, for No. 2 Folding Hawk-Eye Camera Special, $2\frac{1}{4} \times 3\frac{1}{4}$, six exposures.....	\$.25
KODAK FILM CAMERAS, No. 11B, for No. 2A Folding Hawk-Eye Camera Special, $2\frac{1}{4} \times 4\frac{1}{4}$, twelve exposures.....	.60
Six exposures.....	.20
LEATHER CAMERINO CASE, with strap, for the No. 2 Folding Hawk-Eye Camera Special.....	2.50
LEATHER CAMERINO CASE, with strap, for the No. 2A Folding Hawk-Eye Camera Special.....	3.00
KODAK PORTABLE ATTACHMENT No. 4, for the Nos. 2 and 2A Folding Hawk-Eye Cameras Special, when fitted with the Kodak Anastigmat Lens f/8.3	.75
KODAK DIFFUSION PORTRAIT ATTACH- MENT No. 6.....	1.50
KODAK SOFT FILTER, No. 6.....	1.25
KODAK COLORED FILTER, No. 6.....	1.25
KODAK PICTORIAL DIFFUSION DARK, No. 6.....	2.50
KODAK METAL TRIP, No. 6.....	2.75
No. 1.....	4.50
No. 2.....	3.00
LEATHER CAMERINO CASE, for Kodak Metal Trip, Nos. 6, 1 or 2.....	2.75
KODAK SELF TRIP fits on the slide release and automatically presses the pinhole, enabling the photog- rapher to be included.....	1.25

Picture taking with the

OPENER, for attaching cameras to the edge of a table, chair, fence, etc.	\$1.25
KODAKON, for attaching cameras to a tree, fence or similar rough surface	1.75
KODAK FILM TANK, 2 1/4-INCH.	4.50
DEVELOPER POWDERS, for 2 1/4-inch Kodak Film Tank, six powders.	.50
KODAK FILM TANK, 3 1/4-INCH.	5.50
DEVELOPER POWDERS, for 3 1/4-inch Kodak Film Tank, six powders.	.75
EASTMAN A B C DEVELOPING AND PRINTING OUTLET for dark-room development and printing (4x6 or smaller), complete.	2.00
EASTMAN SA DEVELOPING AND PRINTING OUTLET for dark-room development and printing (3 1/4 x 5 1/4 or smaller), complete.	2.00
KODAK AND FIXING POWDER, one-pound.	.25
Half-pound.	.15
Quarter-pound.	.09
EASTMAN SPECIAL DEVELOPER POWDERS, box of five tubes.	.25
EASTMAN HYDROCHLORIC DEVELOPER POWDERS, box of five tubes.	.35
EASTMAN FINE DEVELOPER POWDERS, box of five tubes.	.34
TRICHOCHLORIC STIRRING ROD.	1.25

Nos. 2 and 2A Folding Hawk-Eye Cameras Special

KODAKON PRINTING MANS, No. 3, for use with 2 1/4 x 3 1/4 negatives.	\$.10
No. 4, for use with 2 1/4 x 4 1/4 negatives.	.10
VELOX PAPER, 2 1/4 x 3 1/4, one dozen sheets.	.12
2 1/4 x 4 1/4, one dozen sheets.	.15
NEPHELA SOLUTION (for developing Velox) four-ounce bottle.	.25
VELOX RE-DEVELOPER, package of twelve tubes.	1.05
VELOX TRANSPARENT WATER COLOR STRIPS, booklet of twelve colors.	.50
VELOX WATER COLOR OUTLINE, consisting of Artist's Mixing Palette, three Cameo's Hair Brushes and one book of Velox Transparent Water Color Strips (twelve colors)	1.00
SOLAR PAPER, 2 1/4 x 3 1/4, two dozen sheets.	.20
2 1/4 x 4 1/4, two dozen sheets.	.25
COMBINED TONING AND FIXING SOLUTION FOR SOLAR, eight-ounce bottle	.50
Four-ounce bottle.	.20
EASTMAN REDUCER AND STAIN REMOVER, box of five tubes.	.50
EASTMAN FLASH SHEETS, No. 1, half-dozen.	.35
No. 2, half-dozen.	.25
No. 3, half-dozen.	.34

KODAK FLASH SHEET HOLDER.....	\$1.25
KODAK DRY MEASURING TISSUE, $2\frac{1}{4} \times 3\frac{1}{4}$ or $2\frac{1}{4} \times 4\frac{1}{4}$, three dozen sheets.....	.30
EASTMAN FILM DEVELOPING CUP, $3\frac{1}{4}$ -inch, per pair.....	.20
KODAK JUNIOR FILM CLIP, each.....	.15
KODAK DARK-ROOM LAMP, oil.....	1.50
KODAK SAFELIGHT LAMP, or electric dark-room lamp.....	3.50
TRAYS, EASTMAN ENAMEL, size 4 x 8, each.....	.65
EASTMAN VISIBLE GRADUATE, eight-ounce.....	.30
EASTMAN PRINTING FRAME, $2\frac{1}{4} \times 4\frac{1}{4}$	.40
KODAK PHOTO BATTERY ROLL, for drying prints.....	1.50
KODAK NEGATIVE ALBUM, to hold 100 $2\frac{1}{4} \times 3\frac{1}{4}$ or smaller negatives....	1.25
KODAK NEGATIVE ALBUM, to hold $2\frac{1}{4} \times 4\frac{1}{4}$ or smaller negatives....	1.25
KODAK TRIMMING BOARD No. 1, capacity 5 x 5 inches.....	.75
KODAK PRINT ROLLER, double, 4-inch.....	1.00
FLATBED PRINT ROLLER, single, 4-inch....	.25
BALANC MOUNTS, for prints $2\frac{1}{4} \times 3\frac{1}{4}$, per 50.....	1.50
For prints $2\frac{1}{4} \times 4\frac{1}{4}$, per 50.....	1.40

BLINDER ALBUM, flexible leather cover, loose-leaf, 50 black leaves, size 7 x 11.....	\$2.50
Cloth cover, size 7 x 11.....	1.25
"How to Make Good Pictures," an illustrated book including many helpful suggestions.....	.20

Developing, Printing and Enlarging

Developing Film, $2\frac{1}{4} \times 3\frac{1}{4}$, six-exposure cartridge.....	\$.35
Developing Film, $2\frac{1}{4} \times 4\frac{1}{4}$, twelve-exposure cartridge.....	.35
Six-exposure cartridge.....	.20
Velox Prints, $2\frac{1}{4} \times 3\frac{1}{4}$ or $2\frac{1}{4} \times 4\frac{1}{4}$, unmounted, each.....	.55
Velox Prints, mounted, each.....	.60
<i>Prints unmounted unless otherwise specified.</i>	

When making files for developing, printing or enlarging, mark the package plainly with your name and address, and write a letter of instruction, with acquaintance.

Reproduce Enlargements, mounted on cards:	
3 x 10 or 5 x 10, each.....	\$1.00
10 x 12 or 7 x 12, each.....	1.40
11 x 14 or 8 x 14, each.....	1.75

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.

SERVICE DEPARTMENT

ADDITIONAL ASSISTANCE FOR MAKING BETTER PICTURES

ALTHOUGH we give in this manual the essential directions for using the camera in its simplicity, 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.

IMPORTANT

Read this manual thoroughly before you make any pictures.

While loading and unloading the camera, be very careful to keep the protective paper wound tightly around the film to prevent light striking it.

Before making an exposure be sure that the shutter is adjusted properly, using the correct stop opening and speed. The camera must be focused and an unexposed section of film in position.

The sun must be behind your back or over the shoulder. If the sun shines directly into the lens it will blur and fog the picture.

Hold the camera level.

Hold the camera steady when making instantaneous exposures or snapshots. The camera should be held firmly against the body and when pressing the push-pin or the exposure lever, hold the breath for the instant. If the camera is moved during the exposure, the picture will be blurred.

Turn a new section of film into position immediately after making an exposure. This prevents making two pictures on the same section of film.

Keep the lens and inside of the camera clean.

Never oil the shutter.

Instructions for making time exposures, indoors and outdoors, are included in this manual.

EASTMAN KODAK COMPANY
ROCHESTER, N. Y.