



PICTURES TAKING WITH THE

K O D A K B A N T A M S P E C I A L

Outdoor Exposure Guide

for cameras fitted with the *f.2* Kodak
Anastigmat Ektar Lens

SUBJECT	STOP OPENING	SHUTTER SPEED
Near-by landscapes with little or no sky. Near-by subjects in open field, park or garden. Street scenes.	<i>f.11</i>	1/25
Ordinary landscapes with sky, and a principal object in the foreground.	<i>f.16</i>	1/25
Marine and beach scenes. Extremely distant landscapes. Mountains. Snow scenes without prominent dark objects in the foreground.	<i>f.16</i>	1/50
Portraits in the open shade, not under trees or the roof of a porch. Shaded near-by scenes.	<i>f.5.6</i>	1/25
	<i>f.4</i>	1/50
Narrow and slightly shaded streets.	<i>f.8</i>	1/25
Moving objects: 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.	<i>f.2.8</i>	1/500

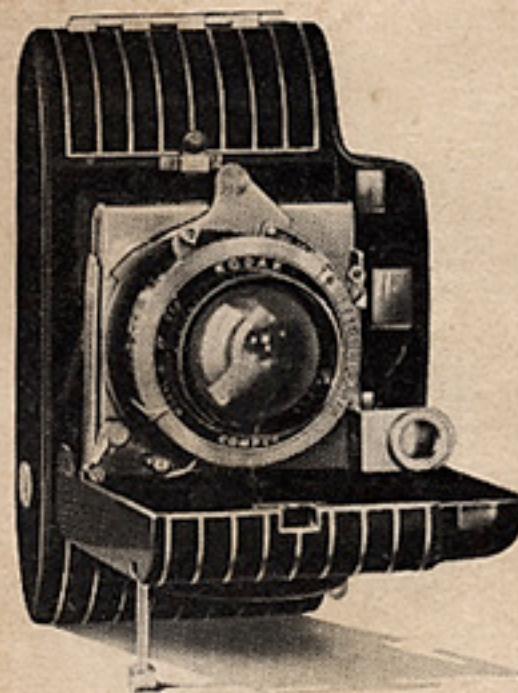
Exposures are for the hours from one hour after sunrise until one hour before sunset on days when the sun is shining. If pictures are made earlier or later, or if it is a *slightly* cloudy or hazy day, use a larger stop opening. The above exposure table is for use with Kodak Panatomic Film. Kodak Super X Panchromatic Film is twice as fast as Kodak Panatomic Film by daylight, if the films are developed in Developer D-76.

Under ordinary outdoor lighting conditions stop opening *f.2* should not be used. Use stop *f.2* when the sky is extremely cloudy, or at dawn and dusk.

Picture taking with the

Kodak Bantam Special

Kodak Anastigmat Ektar Lens *f.2*



EASTMAN KODAK COMPANY
Rochester, N. Y., U. S. A.

IMPORTANT

This manual should be read 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, for an instantaneous or time exposure, whichever is required. Use the correct stop opening and speed. The camera must be focused and an unexposed frame 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 face and when pressing 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 frame of film into position immediately after making an exposure. This prevents making two pictures on the same frame of film.

Keep the lens and inside of camera clean.

Never oil the shutter.

Instructions for making time exposures are included in this manual.

EASTMAN KODAK COMPANY,
ROCHESTER, N. Y.

Picture taking with the

Kodak Bantam Special

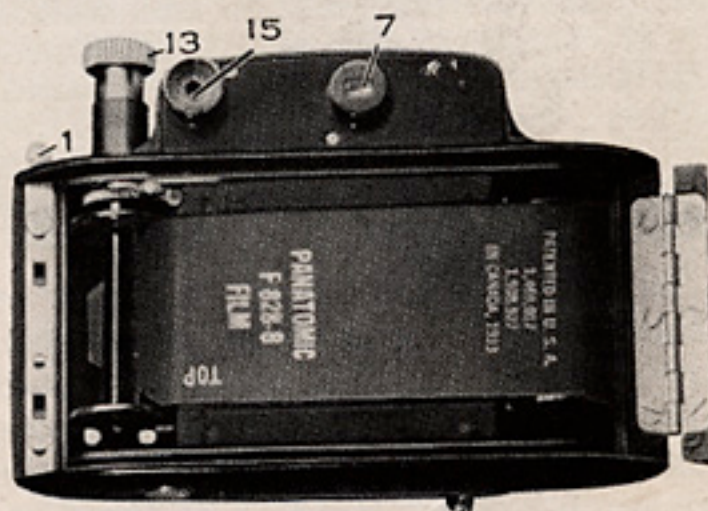
Kodak Anastigmat Ektar Lens *f.2*

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

1. Lock for Back
2. Button for Opening the Front
3. Standard for Vertical Time Exposures
4. Bed
5. Lens
6. Shutter
7. View Finder
8. Range Finder
9. Focusing Knob
10. Focus Pointer
11. Tripod Socket

KEEP the protective paper wound tightly around the film to prevent light striking it. Load and unload the camera in subdued light.

Use Kodak Panatomic Film **F828** or Kodak Super X Panchromatic Film **X828** in this camera. For natural color film positives use Kodachrome Film **K828** or **K828A**.

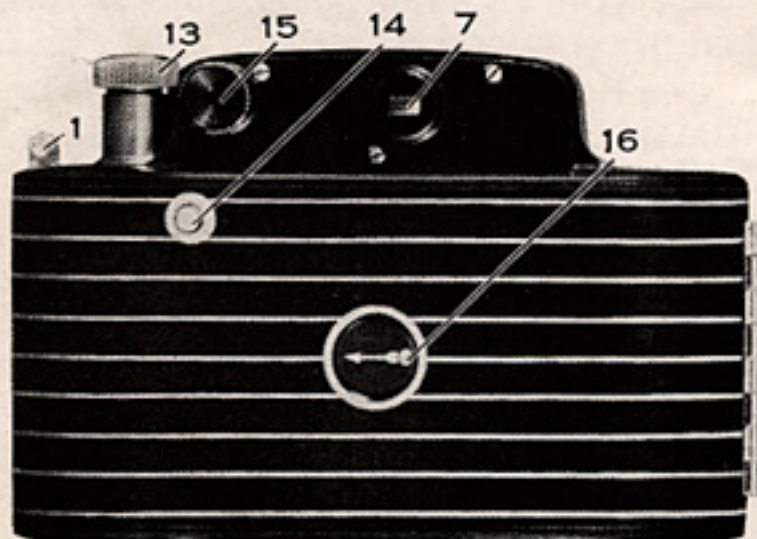


Pull out the locking lever 1 to open the back of the camera.

Place the film in the end opposite the winding knob 13. The film must be placed in the camera so that when the paper is unwound, the green side of

the paper is up and the black side towards the lens.

Thread the paper through the longer slit in the reel, as far as it will go (see illustration, page 3).



Turn the winding knob 13 once or twice to bind the paper on the reel, and be sure that the paper is started straight. (The winding knob can be pulled out to beyond the housing of the camera for easier winding of the film, as shown in the illustration, page 3. Before pushing it in, turn it backward slightly.) Close the back of the camera.

Turn the winding knob 13 until it locks. The first frame of film is now in position. After making the exposure,

press the button 14 while turning the winding knob about a half turn; then release the button 14 and continue winding until the knob locks. The winding knob is locked every time a new frame of film is wound into position for exposure. The successive frames of film will be brought to position automatically by the perforations on the edge of the film. If the slide 16 over the green window on the back of the camera is pushed back while winding the film, you can check the number of exposures that have been made. The window should be uncovered only for this purpose.

OPENING THE KODAK

Press the button 2, page 2, and draw down the bed 4 until it locks.

THE VIEW FINDER

The finder 7, page 4, shows what will appear in the picture, but on a much reduced scale. When composing the picture, the rear of the finder is brought as close to the eye as possible with the camera pressed firmly against the face, see the illustrations on pages 6 and 7. All vertical lines in the subject should

Making a Horizontal Picture



Hold camera firmly against the face.

appear parallel with the vertical lines of the front frame of the finder.

FOCUSING THE KODAK

The Kodak Bantam Special has a Range Finder which is coupled with the lens of the camera. Focusing is

Making a Vertical Picture

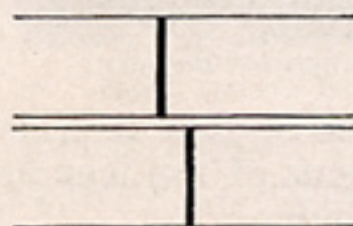


Hold camera firmly against the face.

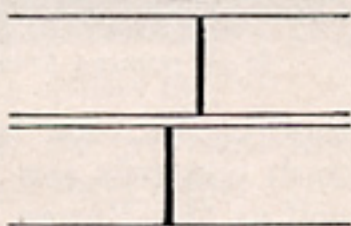
done by moving knob 9, page 2. This knob controls the focus of the lens as well as the Range Finder.

Look through the eyepiece 15, of the Range Finder, page 4, holding the camera as shown on page 10. When focusing with the Range Finder, do not

press the bed of the camera, as this will disturb the operation of the Range Finder. Move the focusing knob while looking at some vertical part of the subject. The selected vertical line will appear broken. The part seen in the upper area will be either to the right or left of the vertical line which is seen in the lower area. (To include these two areas, it may be necessary to tilt the camera slightly.) If the upper line is seen to the left of the lower line,



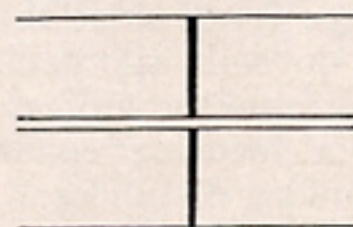
As image will appear when Range Finder is set for a distance nearer than the correct one.



As image will appear when Range Finder is set for a distance beyond the correct one.

raise the focusing knob (when holding the Kodak in the horizontal position), until the line is unbroken. If the upper line is seen to the right of the lower line, push the focusing knob down until the line is continuous.

The eyepiece 15, page 4, is adjustable for different eye accommodations. Focus on an object eight feet away; then turn the eyepiece until the field seen in the Range Finder is clearest. After the eyepiece is properly set, no further adjusting will be necessary. Every user of the camera should make this adjustment before using the Range Finder.



As image will appear when Range Finder is correctly focused.

The Range Finder can be used only on still objects.

The Range Finder can also be used with the camera held vertically. When it is used in this position, focus on some *horizontal line* in the subject, moving the focusing knob to the right or left.



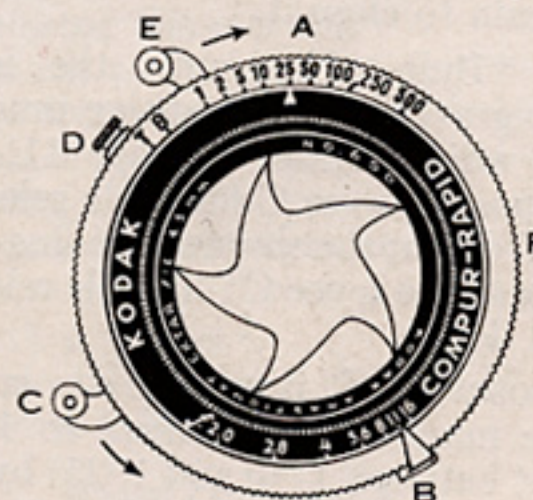
When the line is continuous, the Kodak is in focus. Before making the exposure, check the composition of the picture in the view finder 7, page 4, but since the Kodak is focused, do not approach nearer to or step back from the subject.

The camera has a focusing collar engraved for the following distances: 3, 3.5, 4, 5, 6, 8, 10, 15, 25, 50 feet, and infinity. It is unnecessary to consult this scale when using the Range Finder,

for when the subject is properly focused with the Range Finder, the camera is in focus.

THE SHUTTER

The shutter is marked for exposures of 1 second and 1/2, 1/5, 1/10, 1/25, 1/50, 1/100, 1/250 and 1/500 second, as well as Time and "Bulb" Exposures.



Revolve the knurled collar F on the front of the shutter until the figure representing the time of exposure desired is at the white pointer A.

Before an exposure from 1 to 1/500 second can be made, the shutter must be set by pressing the lever E in the direction of the arrow. The exposure is then made by pressing the exposure lever C, or by the cable release (if one

is screwed into the opening D). Time and "Bulb" Exposures do not require *setting* the shutter.

To make a Time Exposure the letter "T" engraved on the shutter must be at the white pointer A, page 11, and the exposure lever C (or cable release) pressed twice, once to open the shutter, and again to close it.

For "Bulb" Exposures the letter "B" engraved on the shutter must be at the white pointer A, page 11, and the exposure lever C (or cable release), pressed down; the shutter remains open as long as the lever C (or cable release) is held down.

Exposures of intermediate speeds can be made from 1 second to 1/100 (except between 1/10 and 1/25) by setting the shutter between the exposure numbers on the shutter; thus an exposure of 1/75 second is made by turning the knurled collar so that the white pointer A is midway between 1/50 and 1/100. Intermediate exposures cannot be made between 1/100 and 1/250 or between 1/250 and 1/500 second.

Automatic exposures of 1 second, 1/2, 1/5, or 1/10 second must not be

made with the camera held in the hands; a tripod or other firm support must be used for exposures slower than 1/25 second.

Important: *Never oil the shutter.*

Cable Release: A cable release (No. 5) can be used with this Kodak if desired, but it should be removed before closing the camera.

To attach the cable release, remove the screw from the opening D, page 11, and replace it with the cable release. After using the cable release, detach it and replace the screw in the opening. The screw may be loosened and tightened with a thin coin.

A cable release (No. 5) can be obtained from a Kodak dealer.

STOP OPENINGS

Stop openings regulate the amount of light passing through the lens. These openings are enlarged or reduced by moving the lever B, see page 11.

A knowledge of the comparative values of the stop openings is necessary for correctly timing exposures.

The stop openings are marked *f.2*, 2.8, 4, 5.6, 8, 11 and 16.

THE DEPTH OF FOCUS FOR DIFFERENT STOP OPENINGS Table for use with the Kodak Bantam Special

Distance Focused Upon	f.2		f.4		f.8		f.11		f.16	
	Ft.	Inf.	Ft.	Inf.	Ft.	Inf.	Ft.	Inf.	Ft.	Inf.
INF.	65	inf.	32	inf.	16	inf.	12	inf.	8	inf.
50 ft.	28	to	19	to	12½	to	9¾	to	7	to
25 "	18	to	14	to	10	to	8	to	6	to
15 "	12	to	10½	to	8	to	6¾	to	5½	to
10 "	8	to	7½	to	6½	to	5½	to	4½	to
8 "	7½	to	6½	to	5½	to	4½	to	4	to
6 "	5½	to	4½	to	4½	to	3½	to	3½	to
5 "	4	to	3½	to	3½	to	3	to	3	to
4 "	3½	to	3	to	2 ft. 11 in.	to	2 ft. 11 in.	to	2 ft. 11 in.	to
3.5 "	3	to	2½	to	2 ft. 6½ in.	to	2 ft. 6½ in.	to	2 ft. 6½ in.	to
3 "	2 ft. 10½ in.	to	3½	to	2 ft. 6½ in.	to	2 ft. 6½ in.	to	2 ft. 6½ in.	to

The depth of focus is not given for f.2.8 or f.5.6. The depth for these two openings can be estimated by comparison.

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

The largest stop opening is f.2. This opening allows approximately twice as much light to enter the camera as f.2.8. Each smaller opening (larger number) admits half the light of the preceding larger stop opening. Thus, if the correct exposure is 1/100 second at f.5.6, then for the smaller stop openings the exposure should be approximately: f.8 and 1/50; and f.11 and 1/25.

DEPTH OF FOCUS

Depth of focus is the distance from the nearest to the farthest objects that will appear sharp in the negative or print. It depends upon the distance between the subject and lens, the focal length of the lens, and the size of the stop opening used; the smaller the stop opening, the greater the depth of focus or range of sharpness.

See the table on page 14 for the depth of focus or range of sharpness of the Kodak Bantam Special.

HOLD KODAK LEVEL

The Kodak must be held level. If all 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.

HOLD KODAK STEADY

When making instantaneous exposures or snapshots, hold the Kodak firmly against the face, see pages 6 and 7, and when pressing the exposure lever, hold the breath for the instant. If the Kodak is moved during the exposure, the picture will be blurred.

CLOSING THE KODAK

To close the Kodak, first push the focusing knob 9, page 2, *as far as it will go* in the direction of the arrow marked CLOSE; *hold* the knob in this position and then close the bed 4.

REMOVING THE FILM

After the eighth frame of film has been exposed, the button 14, page 4, must be pressed while the winding knob 13 is being turned.

Give the winding knob two complete turns after the end of the paper has passed the green window; then open the back of the Kodak in a subdued light. Unless the film and protective paper are completely wound on the spool before the back of camera is opened, the self-sealing flanges of the spool will not be automatic.

Remove the spool of film by grasping the flange opposite the winding knob and lifting the spool out of the camera.

Important: If the above procedure is followed, the spool of film, when removed from the camera, will be fully wound, and sealed by the special spring flanges of the spool. There is no need to secure the paper with a sticker or rubber band.

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.

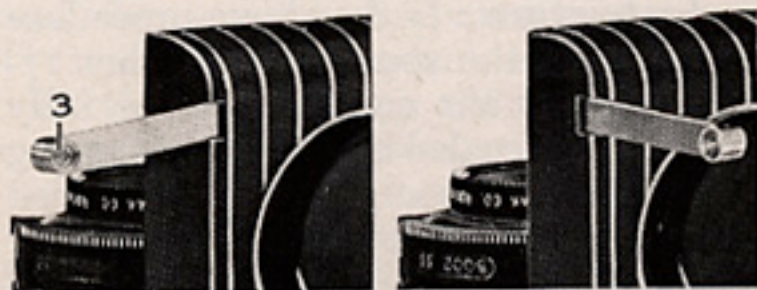
Remove the empty spool and place it in the winding end of the camera, fitting the hole in the end of the spool over the post of winding knob. The Kodak is now ready for reloading.

TIME EXPOSURES—INDOORS

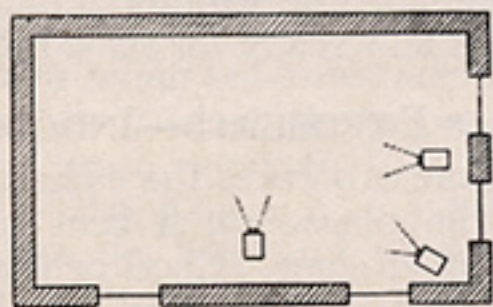
For time exposures the camera must always be placed on a firm support like a table, chair, tripod or Optipod; *never* hold it in the hands. The Kodak has a tripod socket for making horizontal pictures, using a tripod, an Optipod or a Kodapod. The screw 11,

page 2, in the tripod socket can be removed and replaced with a thin coin.

When making a vertical picture, use the standard 3, page 2, for a support.



To use the standard 3 draw it from the camera bed as far as it will come, as shown in the first illustration; then turn it as shown in the second illustration and push it up into the groove on the side wall of the bed. The camera must not be more than two or three inches from the edge of the table.



Place the Kodak 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 may blur the picture.

Adjust the shutter for a time exposure as described on page 12.

To make the exposure, steady the Kodak with one hand and press the exposure lever C, page 11, or the cable release (if the camera is fitted with one), carefully, to open the shutter. Give the proper time (using a watch if more than five seconds). Again press lever C (or cable release). This closes the shutter. The Kodak *must be steady* or the picture will be blurred; *do not hold it in the hands*.

After making an exposure, press the button 14, page 4, and turn the winding knob about a half turn; then release the button and turn the winding knob until it locks.

If no more time exposures are to be made, adjust the shutter for an instantaneous exposure, see page 11.

Exposure Table for Interiors

The table on page 20 gives suitable exposures for various conditions of light when using stop $f.16$.

EXPOSURE TABLE FOR INTERIORS USING STOP *f.16*

	Bright sun	Hazy sun	Cloudy bright	Cloudy dull
White walls and more than one window.	4 secs.	10 secs.	20 secs.	40 secs.
White walls and only one window.	6 secs.	15 secs.	30 secs.	1 min.
Medium colored walls and furnishings and more than one window.	8 secs.	20 secs.	40 secs.	1 min. 20 secs.
Medium colored walls and furnishings and only one window.	12 secs.	30 secs.	1 min.	2 mins.
Dark colored walls and furnishings and more than one window.	20 secs.	40 secs.	1 min. 20 secs.	2 mins. 40 secs.
Dark colored walls and furnishings and only one window.	40 secs.	1 min. 20 secs.	2 mins. 40 secs.	5 mins. 20 secs.

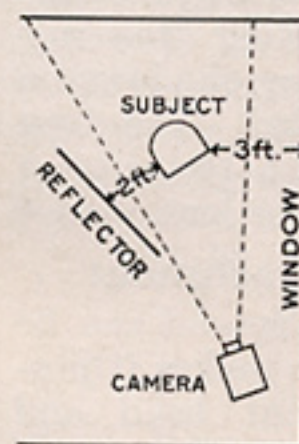
These exposures are for rooms where windows get the direct light from the sky and for hours from three hours after sunrise until three hours before sunset. If earlier or later the exposures must be longer.

With stop *f.2* give one sixty-fourth;
 " " *f.2.8* " one thirty-second;
 " " *f.4* " one-sixteenth;
 " " *f.5.6* " one-eighth;
 " " *f.8* " one-quarter;
 " " *f.11* " one-half

the time given in the table on page 20.

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 Kodak, which should be a little higher than an ordinary table. The subject should look at an object level with the lens or directly at the lens. Compose the picture in the finder. The best portraits are made with the subject three to



four feet from the camera; the Kodak must be focused accordingly. The background should form a contrast with the subject; a light background usually gives a better effect than a dark one. To get a good light on the face, follow the arrangement shown in the diagram. A reflector helps to get detail in the shaded

part of the face. A white towel or tablecloth, 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 as in the diagram on page 21.

If the above suggestion for lighting is followed, an exposure of about $1/25$ second with stop $f.2.8$ will be sufficient on a bright day.

Making Portraits Outdoors

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 $f.4$ and $1/50$ second or $f.5.6$ and $1/25$ second. By following this rule unpleasant and distorting shadows on the face will be avoided. The best results are obtained with the subject three to four feet from the lens.

Kodak Portrait Attachment

The Kodak Bantam Special can be focused at 3 feet, which makes it possible to obtain excellent head and shoulder portraits without the use of the Kodak Portrait Attachment.

By using the Kodak Portrait At-

tachment, large images of flowers and similar "still life" subjects can be obtained. For the best results when making pictures of subjects at short distances, it is advisable to use $f.8$ or a smaller stop opening.

Place the Attachment over the lens and compose the picture in the finder. When making vertical pictures, 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 one of the distances from the Kodak, given in the table below. Measure the distance carefully from the lens to the subject, and move the focusing knob 9, page 2, until the correct figure is at the focus pointer 10, according to the table.

DISTANCE BETWEEN SUBJECT AND LENS		WHEN THE FOCUS POINTER	
MUST BE		IS AT	
1 foot	$9\frac{1}{2}$ inches	3	feet
1 "	11 "	$3\frac{1}{2}$	"
2 feet	1 inch	4	"
2 "	4 inches	5	"
2 "	6 "	6	"
2 "	9 "	8	"

The same exposure is required as without the Attachment.

Use *Kodak Portrait Attachment No. 5* with the Kodak Bantam Special.

To produce a true, soft-focus effect, use the *Kodak Diffusion Portrait Attachment No. 5*.

Kodak Sky and Color Filters

The Kodak Sky Filter should be used for obtaining more detail in clouds, when photographing landscapes. The same exposure should be made when using a Sky Filter as would be required without it.

The Kodak Color Filter is valuable when recording the color *values* in a black-and-white print of clothing, flowers and other colored objects. When using the Color Filter and Kodak Panatomic or Super X Pan. Film, the exposure should be increased about 50%.

Use Kodak Sky Filter, Color Filter, and Pictorial Diffusion Disk No. 5.

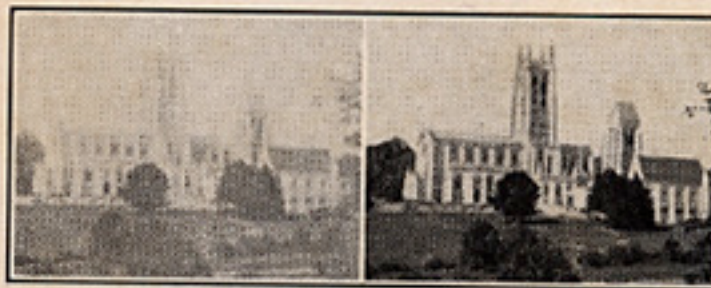
"AT HOME WITH YOUR KODAK" is a booklet containing many diagrams and illustrations showing various lighting effects. It gives suggestions for making pictures in and around the home.

"PICTURE TAKING AT NIGHT" is a booklet that describes in detail the methods of making pictures by elec-

tric light, flash-light exposures, camp-fire scenes, fireworks, lightning, moonlight effects, silhouettes and other novel and unusual pictures.

These two booklets are free, and copies of them will be sent upon request to our Service Department.

CLEAN LENSES



Made with Dirty Lens. Made with Clean Lens.

Lenses should be cleaned as follows:

Open the back of the Kodak, see page 3, then open the front as described on page 5. Wipe the front and back of the lens with a clean handkerchief. Never unscrew the lens.

Keep Dust Out of the Camera

Wipe the inside of the camera and bellows, occasionally, with a slightly damp cloth, especially if the camera has not been used for some time.

EASTMAN KODAK COMPANY,
4-37-KP-8
Printed in U. S. A. ROCHESTER, N. Y.