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Outdoor Exposure Guide for the Six-20 and Six-16 Brownie Cameras

SUBJECT	STOP OPENING	SHUTTER SPEED
Landscapes, near-by subjects in open field, park, garden, at the seashore and on the water. Street scenes.	Large	Snapshot
Distant landscapes, marine and beach scenes. Mountains. Snow scenes without prominent dark objects in the foreground.	Small	Snapshot
Portraits in the open shade, not under trees or the roof of a porch. Shaded near-by scenes. Narrow and slightly shaded streets.	Small	Time Exposure of one or two seconds
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.	Large	Snapshot

This exposure table is for the hours from one hour after sunrise until one hour before sunset on days when the sun is shining, with Kodak Verichrome, Super Sensitive Panchromatic and Panatomic Films; if using Kodak N. C. Film, exposures can be made from 2½ hours after sunrise until 2½ hours before sunset.

Kodak Super Sensitive Panchromatic Film is about fifty per cent faster with morning or afternoon light than Kodak Verichrome Film.

Picture taking with the Six-20 and Six-16 Brownie Cameras

Diway Lens



www.orphancameras.com

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



A PRACTICAL book for amateurs. It describes in a simple, understandable way every phase of photography that they are likely to be interested in, such as various methods of making exposures, developing, printing, enlarging, coloring, and other interesting subjects. Profusely illustrated.

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Picture taking with the
**Six-20 and Six-16
Brownie Cameras**

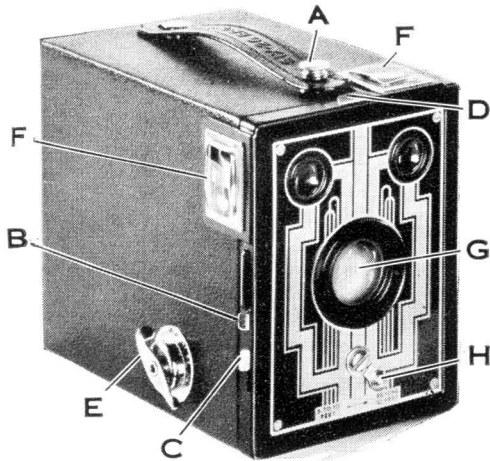
Diway Lens

Published by

EASTMAN KODAK COMPANY

ROCHESTER, N. Y., U. S. A.

THE CAMERA



- | | |
|-------------------------------|--------------------------------------|
| A—Catch for locking
Camera | D—Slide controlling
Stop Openings |
| B—Exposure Slide | E—Winding Key |
| C—Exposure Lever | FF—Finders |
| | G—Lens |
| H—Lever for Changing Lens | |

IMPORTANT

BEFORE loading your camera with film, and before taking any pictures with it, read these instructions carefully. Take especial care to learn how to operate the shutter.

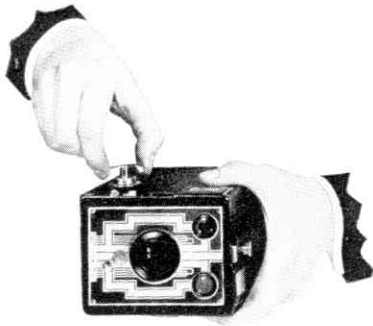
While loading and unloading, be very careful to keep the protective paper wound tightly around the film to prevent light striking it. The camera can be loaded or unloaded in daylight. This should be done in a subdued light, *not* in direct sunlight.

TO LOAD

Use film number:

V 620, SS 620, F 620 or 620 for
the Six-20 Brownie.

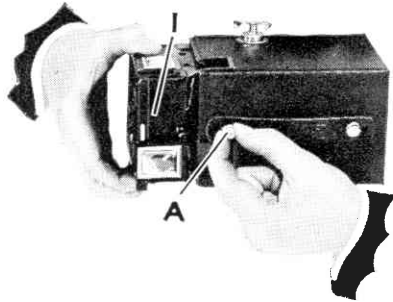
V 616, SS 616, F 616 or 616 for
the Six-16 Brownie.



Draw out the winding key as far as it will come, turning it slightly.

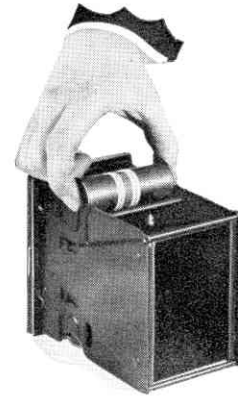
Holding the camera against the body, pull out

the catch A and remove the roll holder I, see illustration.



There is an empty spool in the recess on the winding side of the roll holder; this is to be used as the reel.

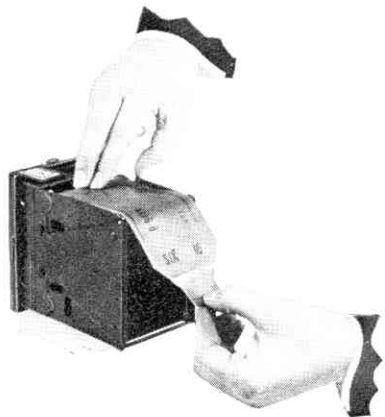
The winding side may always be distinguished by the round opening in the roll holder, directly behind the exposure lever.



Insert the spool of film in the recess opposite the winding side, see illustration. The flanges of the spool are held between the two lugs, roller, and the tension spring.

Important: The word "TOP" which is printed on the protective paper near the top of the spool must

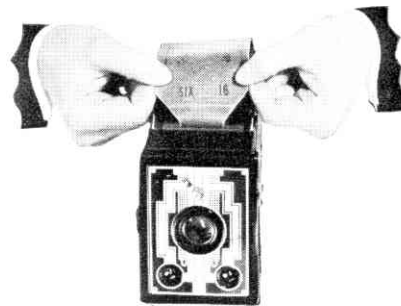
be next to the side of the roll holder, which has the round opening through which the key is inserted in the reel. If the spool of film is inserted the wrong way, the protective paper would come between the lens and the film, and no pictures could be made.



Remove the band that holds the end of the protective paper, and pass the paper *over the rollers* and across the opening in the back of the roll holder.

Thread the paper through the *longer*

opening of the slit in the reel *as far as it will go*. Give the spool two or three forward turns to make the paper hold securely on the spool.



Be sure that the paper is started straight. Do not unroll too much protective paper or the film will be fogged and ruined.

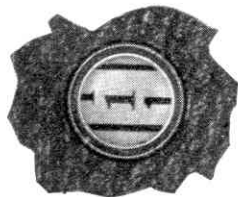
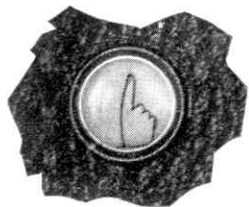
Insert the roll holder in the outside box, so that the slotted end of the spool comes next to the winding key.

Push in the roll holder until the catch A, see illustration on page 2, snaps into position.



Press in and at the same time turn the winding key until the web at the lower end of the key fits into the slot in the spool end.

Turn the key and watch the red window. After a few turns, a warning hand will appear; then turn slowly until the figure 1 is in the center of the window.



Press in the winding key slightly, when turning it.

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

When using Kodak Super Sensitive Panchromatic or Panatomic Film in this camera, it is unnecessary to cover the red window with the adhesive tape included with the film.

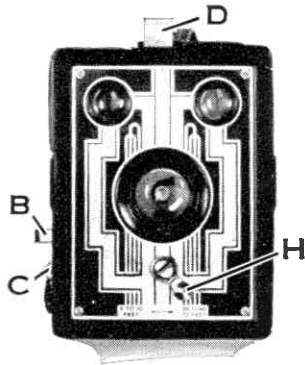
MAKING THE EXPOSURES INSTANTANEOUS EXPOSURES

THE Six-20 and Six-16 Brownie Cameras are fitted with the Diway Lens and subjects ten feet and beyond will be photographed sharply. To photograph subjects five to ten feet from the camera, push the lever H (see page 10) in the direction of the arrow *as far as it will go*, and hold it in this position while the exposure is made.

For subjects that are closer to the camera than about five feet, use the Kodak Portrait Attachment, see page 27.

The shutter of the camera is released by pushing the exposure lever C from one end of slot to the other with the thumb. Push the lever *slowly, in one direction only, and as far as it will go*. If no "click" is heard, no exposure is made.

Do not jerk the lever as any movement of the camera, at the instant of exposure, will blur the picture.



B—Exposure Slide
C—Exposure Lever
D—Stop Opening Slide
H—Lever for Changing Lens

This illustration shows the position of slide D when the second or small stop opening is in position.

When making 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 are given on pages 23 to 28.

Slide B (see illustration) controls the shutter for time and instantaneous or snapshot exposures. For instantaneous exposures or snapshots this slide must be pushed all the way in; it must be drawn out as far as it will come, for time exposures.

Slide D controls the two stop openings.

STOP OPENINGS

The stop openings regulate the amount of light passing through the lens. When slide D, page 10, is all the way in, the large stop opening is in position. *This is the one to use for snapshots of all ordinary subjects.* When slide D is drawn out as far as it will go, the small stop opening is in position, see page 10. For ordinary snapshots both the slides B and D, shown in the illustration on page 10, should be pushed *all the way in*.

The stop openings (diaphragms) should be used as follows:

1. The Large—For snapshots of all ordinary outdoor subjects such as landscapes, groups and street scenes, when the subject is in the bright sunlight; for nearby subjects at the seashore and on the water. For Interior Time Exposures, the time for which is given in the table on page 24.

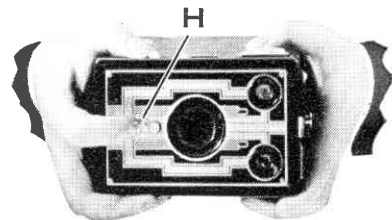
2. The Small—For instantaneous or snapshot exposures of extremely distant views, beach scenes, marines, snow scenes without prominent dark objects in the foreground, and clouds only, in bright sunlight. For Interior Time Exposures, see table on pages 23 and 24, and for Time Exposures Outdoors on cloudy days, see page 29.

When the small stop opening is used, nearby objects will be sharper.

All the exposures given for outdoor subjects are for hours from one hour

after sunrise until one hour before sunset, when using Kodak Verichrome, Super Sensitive Panchromatic or Panatomic Film. If Kodak N. C. Film is used, exposures can be made from $2\frac{1}{2}$ hours after sunrise until $2\frac{1}{2}$ hours before sunset. If earlier or later the exposures must be longer. For a subject in the shade, under the roof of a porch or under a tree, a time exposure must be made, see page 29, and the camera must be placed on some steady, firm support—not held in the hands.

THE FINDERS



Holding lever for changing lens in position for close-up.

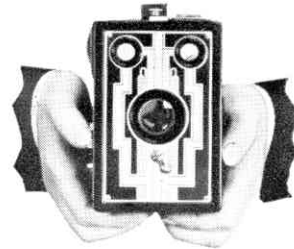


When making instantaneous exposures or snapshots, hold the camera firmly against the body. When pushing the exposure lever, hold the breath for the instant. If the camera is moved during the exposure, the picture will be blurred.

There are two finders, one for horizontal and the other for vertical pictures. Only what is seen in the finder will show in the picture.

For a horizontal picture hold the camera as shown on page 13.

For a vertical picture the camera should be held as in the illustration below.



For photographing a subject five to ten feet from the camera, push the lever H in the direction of the arrow as far as it will go and hold it there, as shown in the illustration on page 13.

Be sure the lever H is pushed *as far*

as it will go and that no part of the hand comes before the lens opening.

Point the camera 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 page 14.

MAKING THE EXPOSURE

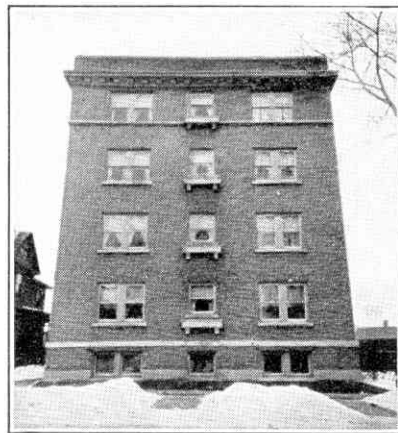
Hold the camera steady and level as shown in the illustration on page 14, and push the exposure lever *once*, as far as it will go. *This makes the exposure.*

Important: The exposure lever must be pushed *slowly* to avoid jarring the camera. If the camera is not held steadily the picture will be blurred.

HOLD CAMERA LEVEL

The camera must be held level. If all of the subject cannot be included

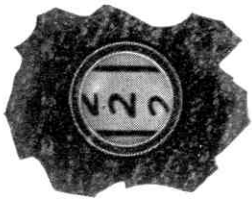
in the finder without tilting the camera upwards, move backwards until it is all included *with the camera held level.*



Effect produced by tilting the camera.

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 the winding key slightly and turn it slowly until No. 2, or the next number, is in the center of the red window.

The warning hand appears only before section No. 1.

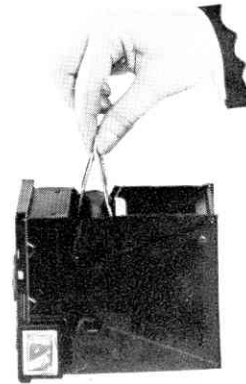
Turn the next section of film into position immediately after making each exposure; this prevents making two pictures on the same section of film.

REMOVING THE FILM

After all the exposures have been made, turn the winding key until the end of the protective paper passes the window. The film is now ready for removal from the camera.

In a subdued light, open the camera and remove the roll holder as shown on page 4. Hold the ends of the protec-

tive paper and the sticker together to prevent paper from loosening. If the sticker has been wound under the roll,



revolve the spool to bring it up. Lift out the roll of exposed film, as shown in the illustration above.

Fold under about half-an-inch of the protective paper, and fasten it with the sticker.

“Cinch” Marks: After removing the film from the camera, do not wind

it tightly with a twisting motion, or the film may be scratched.

Wrap up the exposed film. It is now ready for development. This may be done by a photo finisher, or by yourself. Our Service Department will be glad to send you, upon request, complete instructions for developing and printing.

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.

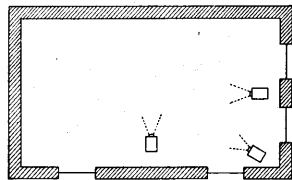
Remove the empty spool and place it in the recess on the winding side of the roll holder. The slotted end of the spool must show through the round opening in the roll holder.

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. For the best results,

your camera should be loaded with Kodak Film.

TIME EXPOSURES—INDOORS

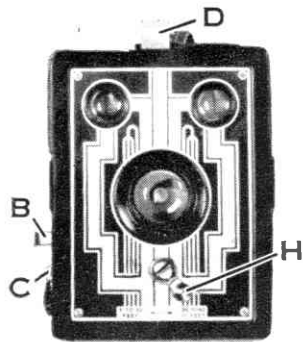
For time exposures the camera must always be placed on a table, chair, or other firm support. The camera must not be more than two or three inches from the edge, to avoid including part of the support in the picture. *Never* hold the camera in the hands.



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

Draw out the exposure slide B as far as it will come, see illustration below. When this slide is drawn out,



B—Exposure Slide
C—Exposure Lever
D—Stop Opening Slide
H—Lever for Changing
Lenses

and the exposure lever C is pushed to the opposite end of the slot, the shutter opens and *remains open* until the lever C is pushed again to its original position.

To make the exposure, steady the camera with one hand and push the lever C *slowly*

to open the shutter; give the proper time (using a watch if more than five seconds), and push the exposure lever C in the opposite direction or push in the slide B, to close the shutter.

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

Exposure Table for Interiors

The table on page 24 gives suitable exposures required for varying conditions of light, when using the large stop opening. When the second or small stop is used, give twice the time of the table. The large stop opening 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

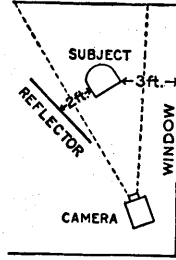
Exposure Table for Interiors using the Large Stop Opening

	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.

look at an object level with the lens or directly at the lens. For a three-quarter figure, the camera should be about eight feet from the subject, and for a full-length figure, about ten feet.

To make portraits, lever H should be pushed in the direction of the arrow *as far as it will go*. If large portraits are desired, use a Kodak Portrait Attachment, see pages 27 and 28. 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 and in the position indicated in the diagram on page 25.

If the above suggestion for lighting is followed, an exposure of about two seconds with the large stop opening would 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. Place the camera on some steady, firm support, use the second or small stop opening, and make a very short time exposure of about one or two seconds. By following this rule, unpleasant and distorting shadows on the face will be avoided.

When the subject is five to ten feet from the camera, the lever H (page 22) must be pushed in the direction of the arrow *as far as it will go*.

Kodak Portrait Attachment

The Kodak Portrait Attachment makes head and shoulder portraits. It can also be used for photographing flowers and similar subjects.

Place the Attachment in front of the lens and compose the picture in the finder. *The subject must be about $3\frac{1}{2}$ feet from the lens.* A larger image can be obtained by having the camera 2 feet 8 inches from the subject, and pushing lever H (page 22) *as far as it will go*, holding it in this position while the exposure is being made. Measure the distance from the lens to the face. The same exposure is required as without the Attachment.

Use *Kodak Portrait Attachment No. 7A* with the Six-20 and the Six-16 Brownie Cameras.

The Kodak Diffusion Portrait Attachment is a supplementary lens used

in the same manner as the regular Kodak Portrait Attachment. It makes portraits more artistic, due to the softening effect of diffusion.

Use the *Kodak Diffusion Portrait Attachment No. 7A* with the Six-20 and Six-16 Brownie Cameras.

“AT HOME WITH YOUR KODAK” is a book 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 book that describes in detail the methods of making pictures by electric light, flash-light exposures, campfire scenes, fireworks, lightning, moonlight effects, silhouettes and other novel and unusual pictures.

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

TIME EXPOSURES—OUTDOORS

When the second or small stop opening is used, the light passing through the lens is so much reduced that short time exposures may be made outdoors.

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

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

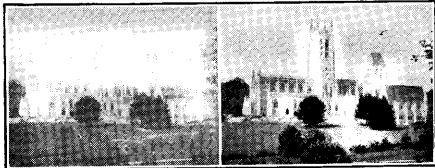
With Sunshine—Time Exposures should not be made.

The camera must be placed on some steady, firm support; do not hold it in the hands or the picture will be blurred.

CLEAN LENSES

The pictures on page 30 show the results of using a dirty and a clean lens.

Lenses should be cleaned as follows: Remove the four screws from the front plate and lift it from the camera; wipe both sides of the lens attached to this plate with Lens Cleaning Paper or a



Made with Dirty Lens. Made with Clean Lens.

clean handkerchief. To clean the rear lens: Draw out the winding key and remove the roll holder as described on page 4. Set the shutter for a time exposure and open it; the large stop opening must be in position; wipe the front and back of this lens with Lens Cleaning Paper or a clean handkerchief.

Keep Dust Out of the Camera

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

EASTMAN KODAK COMPANY,
ROCHESTER, N. Y.

PRICE LIST

KODAK VERICHROME FILM, V 620, for the Six-20 Brownie, $2\frac{1}{4} \times 3\frac{1}{4}$, eight exposures.....	\$.30
KODAK N. C. FILM, 620, $2\frac{1}{4} \times 3\frac{1}{4}$, eight exposures.....	.25
KODAK SUPER SENSITIVE PANCHROMATIC FILM, SS 620, $2\frac{1}{4} \times 3\frac{1}{4}$, eight exposures.....	.35
KODAK PANATOMIC FILM, F 620, $2\frac{1}{4} \times 3\frac{1}{4}$, eight exposures.....	.35
KODAK VERICHROME FILM, V 616, for the Six-16 Brownie, $2\frac{1}{2} \times 4\frac{1}{4}$, eight exposures.....	.35
KODAK N. C. FILM, 616, $2\frac{1}{2} \times 4\frac{1}{4}$, eight exposures.....	.30
KODAK SUPER SENSITIVE PANCHROMATIC FILM, SS 616, $2\frac{1}{2} \times 4\frac{1}{4}$, eight exposures.....	.40
KODAK PANATOMIC FILM, F 616, $2\frac{1}{2} \times 4\frac{1}{4}$, eight exposures.....	.40
KODAK PORTRAIT ATTACHMENT, No. 7A, for the Six-20 and the Six-16 Brownies.....	.75
KODAK DIFFUSION PORTRAIT ATTACHMENT, No. 7A.....	1.50
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Size 7 x 11.....	1.25
“HOW TO MAKE GOOD PICTURES,” an illustrated book of helpful sugges- tions. It describes various methods of making exposures, developing, printing, enlarging, coloring, and other interesting subjects.....	.50

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ROCHESTER, N. Y.

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 a time exposure whichever is required; that the correct stop opening is in position, and an unexposed section of film in place.

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 pushing the exposure lever, hold the breath for the instant. If the camera is moved during the exposure, the picture will be blurred.

When making a close-up between 5 and 10 feet, be sure lever H is pushed in the direction of the arrow *as far as it will go*, and that no part of the hand is in front of the lens.

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

Keep the lens and inside of the camera clean.

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

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