How to Use the
SIX-20 and SIX-16
BROWNIES JUNIOR
ACTUAL SIZE of picture (2\(\frac{1}{4}\) x 3\(\frac{1}{4}\) inches) made with the Six-20 Brownie Junior. On the opposite page is shown the actual size of picture (2\(\frac{1}{2}\) x 4\(\frac{1}{4}\) inches) made with the Six-16 Brownie Junior.
PICTURE TAKING IS Easy
WITH THE SIX-20 OR SIX-16
BROWNIE JUNIOR

On the opposite page a Close-Up of the camera shows its simple working parts.

A **Winding Key** for turning a new section of film into position for exposure. It must be drawn out before removing roll holder.

B **Lock for Roll Holder.** To remove the roll holder, lift the catch and draw out roll holder.

C **Time Slide** should be pushed in for snapshots and drawn all the way out for time exposures.

D **Exposure Lever.** The exposure lever is pushed from one end of the slot to the other for a snapshot. For a time exposure, time slide C is drawn out and exposure lever D is pushed twice, see page 19.

E **Slide Controlling Stop Openings.** This must be all the way down for ordinary snapshots and drawn out for distant views in bright sunlight.

F-F **Finders** for locating subjects to be photographed either vertically or horizontally.
The Films to Use and Why

Kodak Verichrome Film—The finest all-purpose film. Has great speed and is well balanced for recording tone values of various colors in a black-and-white print. Its double coating guards against over- and underexposure. 8 exposures. V620, 30 cents; V616, 35 cents.

Kodak Super-XX Panchromatic Film—Snapshots at night can be made with this film, using Photograph Lamps, see page 25. It is not recommended for snapshots in sunlight with these cameras. 8 exposures. XX620, 35 cents; XX616, 40 cents.

Kodak Panatomic-X Film—It records color values correctly in a black-and-white print. It has an especially fine grain enabling the making of enlargements of great size. 8 exposures. FX620, 35 cents; FX616, 40 cents.

Kodak Film (Regular)—The stand-by of millions of amateurs for more than thirty years. A film that has sufficient speed for average use. 8 exposures. 620, 25 cents; 616, 30 cents.
LOADING

FOR best results, load your Brownie Junior with one of the Kodak Films described on page 6. The camera may be loaded in daylight, but not in direct sunlight.

To open the camera, draw out the winding key as far as it will come, see Fig. 1.

Holding the camera against the body, pull out the catch and remove the roll holder, see Fig. 2.

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 is the side with the round opening, directly behind the exposure lever.
Insert the spool of film in the recess opposite the winding side, see Fig. 3. The flanges of the spool are held between the two lugs, roller, and the tension spring. The spool must be inserted so that when the protective paper is drawn off, the colored side will be up and the black side will be toward the inside of the roll holder. If the spool of film is inserted the wrong way, no pictures can be made.

Remove the band that holds the end of the protective paper; then draw the paper over the rollers and across the opening in the back of roll holder, Fig. 4.

Thread the paper through the longer opening of the slit in the reel as far as it will go, see Fig. 5. Give the spool two or three forward turns to bind the paper on the reel, and be sure that the
paper is started straight. Do not unroll too much protective paper or the film will be fogged.

Replace the roll holder in the outside box, so that the round opening, through which the slotted end of the spool is seen, comes next to the winding key.

Push in the roll holder until the catch B, see illustration on page 4, 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.

Press and turn the winding key until a hand appears in the red window; then turn slowly until the figure 1 is in the center of the window.

After each picture turn the key until a new number appears in the red window.
SNAPSHOTS

THE Six-20 and Six-16 Brownies Junior are fixed-focus cameras; therefore, subjects that are about eight feet and farther from the camera will be sharp. For subjects that are closer to the camera than about eight feet, use the Kodak Portrait Attachment, see page 21.

The time slide C should be pushed all the way in, when making instantaneous exposures or snapshots; for time exposures the slide must be drawn out as far as it will come.

The shutter is opened by pushing the exposure lever D (see illustration). Push the lever slowly, 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.

For the best results, snapshots should be made with the subject in the bright sunlight. 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. However, beautiful effects can be obtained by back- or side-lighting. When pointing the camera toward the sun, the
THREE SIMPLE RULES FOR SNAPSHOTs

1. Snapshots should be made with the subject in bright sunshine, or on slightly cloudy or hazy days. The subjects can be in open shade with clear sky overhead.

2. The time slide C must be pushed all the way in.

3. Push the exposure lever D to the other end of the slot until you hear the "click." Keep fingers away from the lens; hold the camera steady.
Unposed snapshots have a natural charm that makes them highly prized.

Choose a pleasing background for your snapshots of people.

Interesting effects can be obtained with backlighting.
lens must be shaded so that the direct sunlight will not strike the lens; the best way to shade the lens is to use a Kodak Adjustable Lens Hood No. 2.

Satisfactory snapshots can often be made when the subjects are in the open shade with clear sky overhead, and even on slightly cloudy days with bright light.

Special instructions for making portraits are given on pages 17 and 20. When using Photoflood or Photoflash bulbs, see pages 25 to 29.

When photographing a moving object, such as a runner, train, or automobile, the subject should be traveling toward or away from the camera.

Snapshots outdoors should be made from one hour after sunrise until one hour before sunset, when using Kodak Verichrome or Panatomic-X Film. If Kodak Film (Regular) is used, snapshots can be made from 2½ hours after sunrise until 2½ hours before sunset. If earlier or later, the exposures must be longer. For a subject under the roof of a porch or under a tree, a time exposure should be made, and the camera must be placed on some steady, firm support—not held in the hands.

When making instantaneous exposures or snapshots, hold the camera firmly against the body and push the exposure lever once as far as it will go, as shown in
Holding camera for a horizontal picture. Example below shows a subject that should be photographed with camera held for a horizontal picture.

Holding camera for a vertical picture. Example below shows a subject that should be photographed with camera held for a vertical picture.

Hold the camera steady, and firmly against the body.
the two illustrations on page 14. When pushing the exposure lever, hold the breath for the instant. If the camera is moved during the exposure, the picture will be blurred. Do not let a finger come in front of the lens.

**STOP OPENINGS**

THE stop openings regulate the amount of light passing through the lens. When slide E 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 E is drawn out as far as it will go, the small stop opening is in position. For ordinary snapshots, both the slides C and E shown in the illustration should be pushed *all the way in.*

See page 16 for the use of the stop openings (diaphragms).

C—Time Slide  
D—Exposure Lever  
E—Stop Opening Slide

This illustration shows the position of slide E when the second or small stop opening is in position.
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, and for near-by subjects at the seashore and on the water. For Interior Time Exposures, see 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 page 24, and for Time Exposures Outdoors on cloudy days, see page 18.

When the small stop opening is used, near-by objects will be sharper.

**THE FINDERS**

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.

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.

If the subject is below normal height, like a child or a dog, the camera should be held down level with the center of the subject.
Keep the lens clean and occasionally wipe out the inside of the camera. To clean the lens, draw out the winding key and remove the roll holder, as described on page 7. Wipe the back of the lens with Lens Cleaning Paper or a clean handkerchief. The glass dust cap on the front of the camera, which prevents dust from entering the shutter and reaching the lens, should also be kept clean. Do not remove the lens or the glass dust cap to clean them.

**PORTRAITS OUTDOORS**

WHEN making snapshot portraits outdoors while the sun is shining, the best results are obtained by placing the subject in the shadow of a building or a large tree, with clear sky overhead. This avoids unpleasant shadows on the face.

If the subject is under a tree, or the roof of a porch, a short time exposure should be made with the camera on some firm support. For detailed instructions on making time exposures, see pages 18 and 19.
TIME EXPOSURES

WHEN the light is not sufficiently bright for making instantaneous exposures or snapshots, as when the subject is under a tree or the roof of a porch, or on dark cloudy days, it will be necessary to make a time exposure. For outdoor subjects, use the small stop opening and make an exposure from one second to about four seconds, depending upon the quality of light.

The camera must always be placed on some solid, firm support—never hold it in the hands, or the picture will be blurred. Do not place the camera more than two or three inches from the edge of the support, or the support will show in the picture. A tripod can be used with a Kodak Tripod Adapter.

When making a time exposure, steady the camera with one hand; if the camera is moved, a blurred picture will result.
A typical set-up for making an exposure, using Photo-flood Lamps and Kodak Handy Reflectors. If camera is loaded with Kodak Super-XX Pan Film, a snapshot can be made, see page 28.

SIMPLE RULES FOR TIME EXPOSURES

1. Place the camera on a solid, firm support, not more than two or three inches from the edge of the support.

2. Draw out the time slide C as far as it will come.

3. Push the exposure lever D slowly to the opposite end of the slot, to open the shutter. After the required time has elapsed, push lever D in the opposite direction or push in slide C to close the shutter.
DAYTIME PORTRAITS INDOORS

TO make an indoor portrait by ordinary daylight, similar to that shown here, have the subject stand or be seated in front of an unshaded window, with the body preferably at a diagonal to the camera.

Place a reflector (a sheet or tablecloth thrown over a screen or chair will do) a few feet from the subject and at the angle shown in the diagram. This is to reflect light to the shaded side of the face.

Draw out the time slide C as far as it will come.

Place the camera on a solid support a little higher than an ordinary table and not more than two or three inches from the edge.
For large, clear portraits at close range

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; then turn the camera a trifle to the left when making either a vertical or a horizontal picture.

The subject must be about 3½ feet from the lens. Measure the distance carefully from the lens to the face.

The same exposure is required as without the Attachment.

Use Kodak Portrait Attachment No. 6A with the Six-20 Brownie Junior, and the No. 7A with the Six-16 Brownie Junior. Price $1.00.
For Artistic Portraits

KODAK DIFFUSION PORTRAIT ATTACHMENT

This Attachment is a supplementary lens used in the same manner as the regular Kodak Portrait Attachment, see page 21. By its use, portraits are made more artistic, due to the softening effect of diffusion. For the Six-20 Brownie Junior, use the Kodak Diffusion Portrait Attachment No. 6A, price $1.75. For the Six-16 Brownie Junior, use the No. 7A, price $2.00.

Locate the subject in the finder. For a full-length figure, the camera should be about 8 feet from the subject. If large portraits are desired (as on page 20), use a Kodak Portrait Attachment, see page 21; the subject should be about 3½ feet from the lens.

When ready to take the picture, push the exposure lever D as far as it will go. After one or two seconds—depending upon the quality of the light—push the exposure lever in the opposite direction to close the shutter.
ROOM INTERIORS BY DAYLIGHT

To photograph an interior by daylight, draw out the time slide C as far as it will come.

Place the camera on a level support in either a vertical or horizontal position, and compose your subject in the finder.

As far as possible, leave the furniture in the room in its usual place, but be sure there are no pieces close to the camera lens.

When ready to take the picture, push the exposure lever D as far as it will go. After the proper time (see page 24), again push the lever D to close the shutter.

After the last time exposure has been made, push back the time slide C as far as it will go, to be ready for snapshots.
Exposures for Interiors by Daylight

FOR an interior with medium-colored walls and furnishings and two windows, with the sun shining—make an exposure of about 8 seconds, with the large stop opening in position. With one window, double the exposure, and if there are more than two windows, halve the exposure.

If the day is cloudy, make an exposure of 16 seconds to 32 seconds.

No definite rule can be given for all interiors because of the great variety of light conditions. It is suggested that a series of exposures be made from about 2 seconds to 32 seconds, using the large stop opening, making each exposure double the previous one.

Interiors by daylight should be made from three hours after sunrise until three hours before sunset; if earlier or later, the exposure must be longer.

The exposures recommended above are for Kodak Film (Regular), Kodak Verichrome, and Panatomic-X Films; with Kodak Super-XX Panchromatic Film, give one-fourth the exposure.

The large stop opening gives the best average results. *Double* the exposures with the small stop opening.
PICTURES AT NIGHT

TO take snapshots or other indoor pictures at night with the Brownie Junior, you need only a roll of Kodak Film, a few Kodak Handy Reflectors, Model B or C, and a few Photosflood or Photoflash bulbs. The bulbs can be screwed into all regular lamp sockets.

**PhotoFLOOD** gives a steady light of great brilliance. Comes in two sizes for the amateur: No. 1 and No. 2. The No. 2 bulb gives twice the light and lasts three times as long.

**PhotoFLASH** gives an instantaneous flash; it is good for one picture. No smoke, no noise. Comes in two sizes for the amateur: No. 11 and No. 21. The No. 11 size is suitable for most indoor shots with a reflector.

SNAPSHOTS WITH PHOTOFLOODS

TO take snapshots at night with the Brownie Junior in rooms with light-colored walls, load the camera with Kodak Super-XX Pan Film. Arrange two bridge
lamps, one on each side of the subject; about five and one-half feet from the subject, see table on page 28.

Replace the regular shades on the lamps with inexpensive Kodak Handy Reflectors, Model B or C, and place a No. 2 Photoflood bulb in each of the lamps.

Compose your picture in the finder and push the exposure lever just as you would to take a snapshot outdoors. The subject must be close to a light-colored background. **CAUTION:** Photoflood Lamps, especially the No. 2 size, become quite hot and should not be kept burning any longer than necessary. Do not permit the bulbs to come in contact with the Kodak Handy Reflectors or the fabric of shades on home lamps.

**TIME EXPOSURES INDOORS WITH PHOTOFLOODS**

TO make time exposures with Photofloods, place the lamps at the distance given in the table on page 28 and load the camera with Kodak Panatomic-X or Verichrome Film. The time slide C must be drawn out as far as it will come. Place the camera on a solid support. Compose the picture in the finder. To make the exposure, push the exposure lever D as far as it will go; then immediately push the exposure lever in the opposite direction to close the shutter.
Snapshots with Photofloods
Subject must be close to a light-colored background. Use two Photofloods in Kodak Handy Reflectors, see table on page 28.

Time Exposures with Photofloods
When the subject is not likely to move, time exposures can be made. Follow exposure table on page 28.

Photoflash Shots
For active subjects taken at night, use a Photoflash bulb in a Kodak Handy Reflector. See exposure table on page 29.
Exposure Table for Two Photoflood Lamps Using the Large Lens Opening

<table>
<thead>
<tr>
<th>Distance Lamps to Subject</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>One No. 1 Lamp and One No. 2 Lamp; or Three No. 1 Lamps</strong></td>
<td></td>
</tr>
<tr>
<td>Super-XX Film</td>
<td>4 ft.</td>
</tr>
<tr>
<td>Panatomic-X Film</td>
<td>7 1/2 ft.</td>
</tr>
<tr>
<td>Verichrome Film</td>
<td>6 1/2 ft.</td>
</tr>
<tr>
<td><strong>Two No. 2 Lamps</strong></td>
<td></td>
</tr>
<tr>
<td>Super-XX Film</td>
<td>5 1/2 ft.</td>
</tr>
<tr>
<td>Panatomic-X Film</td>
<td>9 ft.</td>
</tr>
<tr>
<td>Verichrome Film</td>
<td>7 1/2 ft.</td>
</tr>
</tbody>
</table>

**PhotoFLASH PICTURES**

FOR using the Photoflash bulb, adjust the camera for making time exposures.

Use a Photoflash bulb in any home lamp with the Kodak Handy Reflector or a portable reflector unit having flashlight batteries. To make the exposure, turn out all lights (except a dim light behind camera), direct the Photoflash at subject, open shutter, flash the bulb, and close the shutter. See exposure table on page 29.
Exposure Table for No. 11 or No. 21 Photoflash Lamp Using the Large Lens Opening

<table>
<thead>
<tr>
<th></th>
<th>In Kodak Handy Reflector</th>
<th>In Ordinary Reflector</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Verichrome or Panatomic-X</td>
<td>Super-XX Pan Film</td>
</tr>
<tr>
<td>Distance—Lamp to Subject</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. 11 Lamp</td>
<td>7 ft.</td>
<td>17 ft.</td>
</tr>
<tr>
<td>No. 21 Lamp</td>
<td>11 ft.</td>
<td>25 ft.</td>
</tr>
</tbody>
</table>

**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 7. Hold the ends of the protective paper and the sticker together to prevent paper from loosening, page 30. 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 on page 30.

**IMPORTANT:** After removing the film from the camera, do not wind it tightly with
a twisting motion, or it may become scratched.

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

The film is now ready for development, which should be done as soon as possible. You may have the work done by a photofinisher, or you may do it yourself. Our Service Department will be glad to send you, upon request, complete instructions for developing and printing.

Remove empty spool and place it in the recess on the winding side of the roll holder. The flange on the winding key must fit into the slot in the end of the spool.

Replace the roll holder in the outside box and push in the winding key; turn the key until the flange fits into the slot on end of spool.

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 one of the Kodak Films which are described on page 6.
That Add To Your Picture Making

Kodak Portrait Attachment and Kodak Diffusion Portrait Attachment. See pages 21 and 22.


Kodak Sky Filter—A special disk that fits over the camera lens, half yellow, half clear. Beautifies scenic pictures by causing clouds to show up more clearly against a blue sky. Colored part of disk must be turned to cover the upper half of the lens. Size No. 6A for the Six-20 Brownie Junior, $1.75. Size No. 7A for the Six-16 Brownie Junior, $2.00.

Kodak Negative Album—A transparent envelope album for storing 100 negatives. Protects them from loss and damage. $1.25.

Eastman Albums—Keep your prints in an album—safe from loss and damage. Eastman albums are good-looking and make your prints appear at their best. Many styles to choose from—in a broad range of prices.

Kodak Snap-Stickers—Mount your prints with Kodak Snap-Stickers. Gummed on both sides they are first attached to the print, then to the album page where they hold the picture firmly. In books of 800. 10 cents.
Every Picture Taker Should Read
"HOW TO MAKE GOOD PICTURES"

A PHOTOGRAPHIC "best seller." Explains in nontechnical language every phase of photography in which the amateur is apt to be interested, including methods of making pictures, developing, printing, enlarging, coloring, interior photography, home portraiture, etc. Profusely illustrated. 50 cents at your dealer's.

All prices in this manual are subject to change without notice.

THE SERVICE DEPARTMENT

FOR further information on any photographic subject, do not hesitate to write to our Service Department. There is no charge, no obligation. Address all communications

SERVICE DEPARTMENT

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