## How to use the

## Ciné-'Kodak'

MODEL BB JUNIOR

(F1.9 or F3.5 LENS)



KODAK HOUSE · KINGSWAY · LONDON · W.C.2

### CINÉ-" KODAGRAPHS"

CINE-"KODAGRAPHS" are 100 foot or 200 foot reels of motion pictures, printed on 16 millimetre Ciné-Kodak Safety Film. They cover a wide range of subjects—comedy, cartoon, travel, documentary and important contemporary events. These pictures can be purchased from Ciné-Kodak Dealers; each is complete in itself, giving you from 4 to 8 minutes professional entertainment on the screen.

It will pay you to watch for new Ciné-"Kodagraphs"; they are issued at frequent intervals and cover most of the outstanding events of each year. They include such subjects as The Grand National; Trooping the Colour and the Royal Air Force Display.

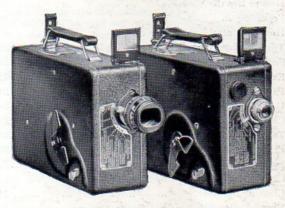
When you have a film show at home, some of these professional pictures, added to your own, will help to vary the programme. Ask your Dealer for them.

## How to use the

# Ciné-'Kodak'

MODEL BB JUNIOR

(F1.9 or F3.5 LENS)



KODAK LTD.

KODAK HOUSE · KINGSWAY · LONDON · W.C.2

#### Contents

Loading the Camera						3
Table of Parts	***					4
Footage Indicator						15
Operation						16
How to Use the View F	inder					18
Focussing						19
How to Control Exposu	ire					20
Tropical Exposures						21
Some Hints on Shootin	g					21
Exposure Guide						23
Panoramic Pictures	***					24
Unloading the Camera						24
Ciné-Kodak Colour File	ter					25
Taking "Kodachrome"	' Picti	ires	***			26
Pictures at Night						28
Some Useful Hints	***		***			30
Care of the Lens					***	30
Cleaning the Gate	***		***	***	***	31
Kodak Titling Service			***			31
Making Titles with the	Ciné-l	Kodak T	Citler			32
Duplicates				'		32

#### Why You Should Read This Booklet

SIMPLE as photography with an ordinary "Kodak" really is, it occasionally happens that good results are not obtained. Our experience has shown that in practically all of these cases the faults would never have occurred if the manuals supplied with the cameras had been read and studied thoroughly before any exposures were made.

Similarly, the user of the Ciné-"Kodak" Junior can make good motion pictures at the very outset if he will read and follow the few simple instructions in this manual. The percentage of properly exposed film that you can make will be in direct proportion to the care with which you follow these directions.

#### Loading the Camera

Load the Ciné-'' Kodak,'' Model BB Junior, with a fifty-foot roll of Ciné-Kodak Film. The hundred-foot roll is too large for this camera.

The Ciné-"Kodak" Junior may be loaded or unloaded in daylight. These operations should be done in a subdued light, never in direct sunlight.

Remove the cover of the Ciné-" Kodak," first unlocking it by pushing the catch in the centre of the door over to the side marked OPEN, then grasp the edges of the cover nearest the lens, and lift it off.

The 25-foot roll of paper you get with the camera is a dummy roll, and is supplied so that you may become thoroughly acquainted with the proper method of threading film in the camera. Try the threading directions first with the dummy roll of paper.

	P	ART			EXPLANATION
1.	Take-up	Spool	***		Takes up the exposed film as it comes from the sprocket.
2.	Take-up	Spind	le,		Rotates the take-up spool and winds up the exposed film.
3.	Catch		111		Fastens door.
4.	Door	***	2275	2015	Separates the supply spool and take-up spool.
5.	Diaphra	gm Le	ver	***	Adjusts the diaphragm openings. Fig 14, page 19.
6.	Lens Ho	od	111		Shields lens from direct rays of sun.
	Leader				Protects unexposed film before loading Fig. 3, page 7.
8.	Pull-dow	n Clay	N'S	***	Draw the film intermittently past the
9.	Supply S	Spool	***		Holds the unexposed film, Fig. 3 page 7.
10.	Supply 5	Spool :	Spindl	е	Furnishes a bearing for supply spool Fig. 3, page 7.
11.	Roller			***	Guide for leader and film as it leaves supply spool.
12.	Sprocke	t			Draws film off the supply spool and feeds it to take-up spool.
	Upper I Lower I				Indicate size and shape of upper and lower loops when threading leader.
15. 16.	Upper S Lower S	prock	et Clar	np np	
17.	Guide	***	***	***	Guides leader and film upwards after leaving sprocket.
18.	Slot				Film passes through slot in gate to position behind lens.
19.	Tension	Lever		***	Keeps tension on film after it is wound on to take-up spool.
20.	Footage Lever	Indie	itor		Indicates how much film remains in camera, Fig. 11, page 15.
21.	Winding	Hand	le	100	For winding motor, Fig. 12, page 16.
22.	Exposur	e Leve	r	***	Controls motor, turns it on or off, Fig 12, page 16.
24. 25.	Direct V	ision I	inder		Locates the subject with camera held
26.	Portrait Lens	Attac	hment		For making "close-ups"—subjects from 2 feet to 5 feet from the lens. Fig. 14 page 19.
	Screws	***			Fastens lens to camera. Fig. 14, page 19.
29.	Serew Post	:::		::}	Hold the gate in position.
30.	Focussin	g Scal	e	***	For focussing camera for different distances.

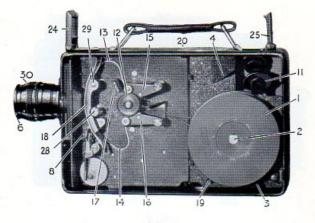
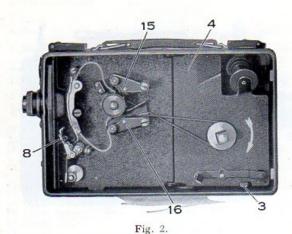


Fig. 1.
The Ciné-" Kodak" with cover removed

After the cover has been removed, the inside of the camera will appear as in Fig. 1.

Before loading the Ciné." Kodak," the pull-down claws 8 must be drawn back and locked in the position shown in Fig. 2, page 6. If the pull-down claws do not lock readily when drawn back, give the winding handle a few turns to increase the tension on the motor. When the pull-down claws are drawn back, they allow the film leader to be slipped into the gate.

Remove the take-up spool 1, lifting it off the spindle 2.



Sprocket Clamps open

Open the upper and lower sprocket clamps, 15 and 16, as shown in Fig. 2, by first pulling the large-headed pins towards you, and then swinging the clamps away from the sprocket.

Press the catch 3, Fig. 2, and open the door 4.

Open the film container and take out the spool of film.

Note: When you use a spool of Ciné-Kodak Film, save the yellow box in which it is packed. This box will serve as a postal container in which to send the film for finishing. Full directions for sending the film to our nearest laboratory are given on pages 24 and 25.

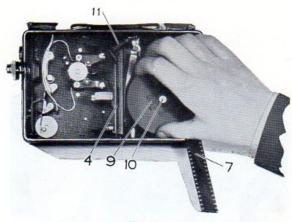


Fig. 3.

Inserting Spool in Camera.

Draw out about two feet of the leader 7, not more.

Insert the spool of film 9, on spindle, as in Fig. 3. Be sure that the spool 9 is properly seated; the end of the spindle should project, slightly, through the hole in the spool. The leader must wind off from the top of spool.

Close the door 4, at the same time thread the leader across the roller in the corner of the door, with the *shiny* side against the roller 11. After closing the door, make sure that the catch is securely fastened. If the catch does not snap into position, it shows that the spool of film is not properly seated.

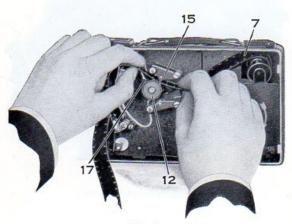


Fig. 4.

Threading Leader.

Thread the leader 7 between the top of sprocket 12 and the upper sprocket clamp 15, and follow the guide 17, as shown in Fig. 4.

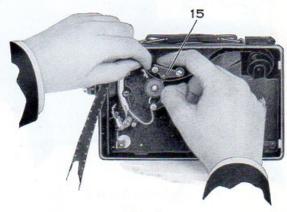
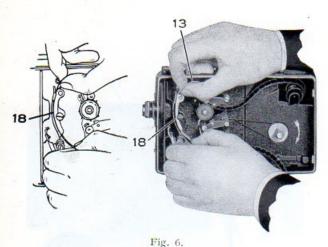


Fig. 5.

Closing Upper Sprocket Clamp.

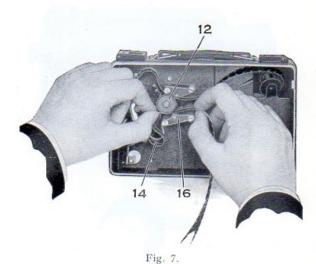
Be sure that the teeth on the sprocket engage the perforations in the leader, then close the upper sprocket clamp 15 by pushing it down, as shown in Fig. 5.



Sliding Leader into Slot.

Form the upper loop 13 and at the same time slide the leader into the slot 18, as indicated in Fig. 6. Be sure that the shiny side of the leader is towards the sprocket, and that the leader is pushed all the way in, so that none of it projects above the edge of the slot.

It is of great importance that the upper and lower loops follow the path indicated by the white lines. These loops prevent undue strain on the pull-down mechanism and tearing of the perforations.



Threading Leader over Lower Sprocket Clamp

Form the lower loop 14 following the white line, and at the same time thread the leader between the sprocket 12 and the lower sprocket clamp 16, Fig. 7.

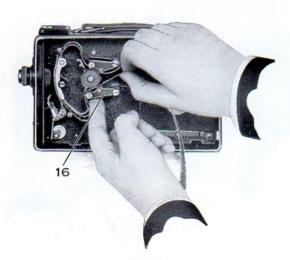
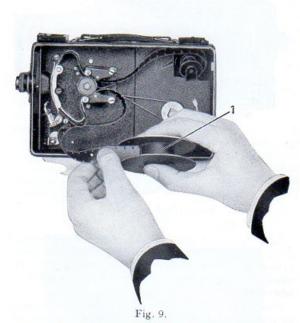


Fig. 8.

Closing Lower Sprocket Clamp.

Be sure that the teeth on the sprocket engage the perforations in the leader, then close the lower sprocket clamp 16 by pushing it up, as shown in Fig. 8.



Threading Leader on to Empty Spool.

Holding the leader in the left hand and the empty spool 1 in the right, with the square hole of the spool towards the camera, thread the end of the film leader into the slot in the core of the spool, as shown in Fig. 9.

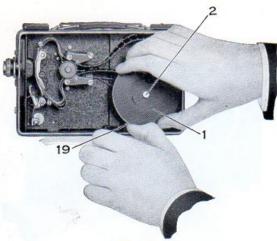


Fig. 10.

Wind up the end of the leader by hand, turning the spool to the right, until it is just long enough to enable the spool 1 to be slipped on the take-up spindle 2, see Fig. 10. The white arrow on the door shows the direction in which the take-up spool turns.

Press down the tension lever 19 when slipping the spool on to the spindle. The end of this lever keeps the film from loosening after it has been exposed and wound on the take-up spool.

If the square opening of the spool does not fit readily over the spindle, *lift* the spool and turn it slightly. The spool must be properly seated.

Note: When winding up the leader, note whether or not it has a tendency to bind between the flanges of the spool. If it binds, the spool has become bent and the flanges should be straightened carefully with the fingers, or a new 50 ft. spool should be obtained. Always keep on hand an empty 50 ft. spool for use as a take-up spool.

Give the winding handle a few turns, and press down the exposure lever 22 to operate the Ciné-"Kodak." Allow the motor to run for only a second or two, and watch the leader, closely. While winding the spring and operating the camera with the cover removed, be careful to hold the camera so that the take-up spool will not come off the spindle. If the leader is running properly, stop the motor and immediately replace the cover and fasten it by pushing the catch in the centre of the cover to the side marked LOCK. (It can readily be seen which way the cover should be put on, because at one end a portion is cut away in order to slip over the lens mount).

The cover should close easily; if it does not, it is because you have not closed the sprocket clamps, or the supply spool or take-up spool is not properly seated. The clamps should be closed, as shown in Fig. 10, page 14. Do not try to force the cover.

#### Footage Indicator

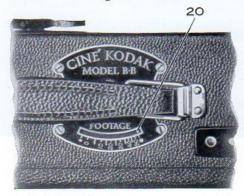
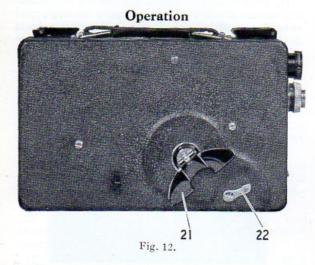


Fig. 11.

The footage indicator (20, Fig. 11) automatically registers the number of feet of unexposed film in the camera. It moves from 50 to 0 as the film is exposed. After the Ciné"Kodak" is loaded, run off 3 feet of film (this takes 8 seconds) before taking any pictures. At this point, due to slight variations in the spooling of the film, the footage indicator may read slightly above or below the 50 mark, but there will still be 50 feet of usable film on the spool.

No exposures should be made on the protective trailer strip at the end of the 50 ft. of film, as this is fogged and will be cut off from the film in the laboratory. The protective leader strip is also removed at this stage.



To wind the motor of the Ciné-"Kodak" Model BB Junior, raise and turn the winding key on the side of the

camera to the left in the direction indicated by the arrows. Give it about 20 half-turns or until the spring is wound tight. Before winding the spring, be sure that the exposure lever 22 is up, as shown in Fig. 12, page 16.

To start the motor after the spring is wound, press the exposure lever about half-way. To stop the motor release the pressure.

Although the spring, when fully wound, will run the motor for about ten to twelve feet of film, it is advisable to wind up the spring after each scene, or after each five to ten feet of film have been exposed. If the motor sounds as if it were slowing down, stop it and rewind the spring.

If you wish to be included in the picture, place the camera on a tripod (it has a socket for this purpose) or on some level, steady, firm support. Press down the exposure lever as far as it will go, when it will lock in position, and you can then step into the picture area. To stop the motor, step out of the picture area, return to the camera and push up the lever.

When the Ciné-" Kodak" is empty and may not be used for a day or so, avoid unnecessary tension on the spring by letting the motor run down.

#### How to Use the View Finder

First lift up the front lens of the finder 24 and the sight 25, Fig. 1, page 3, to the vertical position. Hold the camera firmly against the cheek with elbows braced against the body, then locate the subject by looking through the sight. (One position is shown in Fig. 13.) The camera must be held very steadily.

There are two lines engraved on the front lens of the finder, marked two feet and six feet. These lines are to be used as guides to prevent cutting off part of the upper portion of the picture when making "close-ups."



Fig. 13.

After the subject is properly located in the finder, raise the Ciné-"Kodak" until the top of the subject is just below the engraved line marked with the distance that agrees nearest to the actual distance between the subject and the lens.

#### Focussing

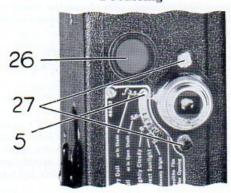


Fig. 14.

The Ciné-"Kodak" Model BB Junior with f.3.5 lens is a fixed focus camera; all objects five feet away and beyond are sharp. For 'close-ups' between two and five feet, slip the Portrait Attachment Lens (26, Fig. 14) over the ordinary lens. (The Portrait Attachment is not supplied with the camera but is obtainable as an accessory, price 3/6.) When you have finished using it, return it to its former position.

The Portrait Attachment must not be used for pictures of subjects beyond five feet from the camera.

The Ciné-"Kodak" Model BB Junior with f.1.9 lens is fitted with a focussing scale on the lens barrel, marked 2, 3, 4, 6, 8, 10, 15, 25, 50 feet and INF. (infinity). To adjust the focus, turn the collar on lens barrel until the figure that corresponds to the actual distance of the subject is at the line engraved on the lens barrel (30, Fig. 1).

The f.1.9 model can be used as a fixed focus camera with lens openings of f.5.6 or smaller, by setting the focus at 25 feet. It will, with these openings, cover sharply all objects from 8 feet to infinity. For objects less than 8 feet distant, the camera must be focussed, even when the small lens openings mentioned above are used.

#### How to Control Exposure

Successful motion pictures are probably more dependent on correct exposure than on any other factor.

With the Ciné-" Kodak" Model BB Junior, exposures are governed by the diaphragm.

The diaphragm, situated between the front and rear components of the lens, is a device which controls the amount of light passing through the lens. When we speak of "diaphragm value or opening" we mean the actual size of the aperture in the diaphragm through which light may pass and reach the film.

The term f.1.9 signifies the largest diaphragm opening, f.2 is slightly smaller than f.1.9, f.2.8 smaller than f.2, and so on to f.16, which is the smallest diaphragm opening. (The term f.3.5 indicates the largest opening of the f.3.5 lens.) The higher the number the smaller the opening. The size of the opening to use depends upon the quantity of light on the subject—the more light the smaller the opening; the less light the larger the opening. To change the size of the diaphragm opening, move the pointer on the front of the camera by revolving the milled collar on the lens barrel until it is at the figure required.

The exposure guide on the diaphragm scale, Figs. 14 and 15, and the exposure table on page 23 are given as guides to correct exposures under various conditions. The object of changing the diaphragm of the lens is to produce a film, which, when projected, shows no appreciable variation in the brightness of the picture on the screen. This is the kind you should learn to make, and it is easy if you will use the exposure guide properly. Do not forget to change

the diaphragm opening before starting to take a distant view after taking a "close-up." A smaller diaphragm opening is used when photographing distant views because more light reaches the film from the distant subject than from one close to you. Since you can change the diaphragm at will, it is possible to take a number of scenes under various light conditions on one roll of film.

When using "Kodachrome" colour film (see page 26) be sure to follow the exposure guide enclosed in each carton of film.

#### Tropical Exposures

When making exposures in tropical countries, follow the guide on page 23, using the April to September exposures, if the scenes contain trees and resemble in character land-scapes of the temperate zone. If the subjects are in sandy deserts, or if there is not a predominance of heavy shadows, use the next smaller diaphragm opening than the one specified in the table. Distant subjects in very bright sunlight require f.16. For "Kodachrome" exposures see the instructions enclosed in the "Kodachrome" carton.

#### Some Hints on Shooting

Experience has shown that usually ten seconds or about four feet of film are sufficient for most scenes in which the action is continuous but not changing in character: For example, a waterfall; a street with the usual traffic; "close-ups" of people who are not acting, etc. Some beginners make the mistake of using too much film in taking one scene with the result that, when the film is projected, the picture becomes tiresome before the scene changes.

It is not advisable to try to keep a subject in motion always in the centre of the finder frame. As long as you can see the subject anywhere in the finder, do not move the camera. If you do attempt to keep the subject always in the centre,



Fig. 15.

the resulting film when projected will be trying to the eyes because of the unsteady background. Stop the motor before moving the camera, except when making panoramic pictures, see page 24.

The most effective pictures are those in which not more than one-third of the picture area consists of sky, sea or very light foreground.

Whenever possible, make your pictures against a solid background, such as trees, shrubs, a hillside or a building. Avoid silhouetting figures against the sky—too much sky under these conditions has a tendency to fog or blur the nearby subjects.

When making a distant view the best effect is obtained by having some nearby object in the foreground.

Be careful when taking pictures near waterfalls, in the rain or where waves are splashing, not to get a drop of water on the lens. Water on the lens will cause blurred pictures.

Steady pictures on the screen can only be secured by keeping the camera steady during the exposure.

pue when used with Ciné-Kodak Panchromatic Film Guide for Ciné-" Kodak "

For

	SUBJECT	TIME	Bright—no clouds over sun	Light clouds over sun	Cloudy
			Diaphragm	Diaphragm	Diaphragm
Y		AprSept.	£.16	m'y	1.8
	Distant Landscapes, Mountains	OctMarch	£111	1.8	1.5.6
B.	Close-ups* of Group A	AprSept.	7.11	1.8	f.5.6
	Open Landscapes, Games, etc., with no heavy shade	OctMarch	1.8	1.5.6	f.3.5
o i	Close-ups* of Group B	AprSept.	f.8	f.5.6	f.3.5
	or trees obstruct part of the light from the sky	OctMarch	1.5.6	f.3.5	f.3.5-f.2.8
D.		AprSept.	1.5.6	7.3.5	f.3.5-f.2.8
	Scenes on snady side of streets Boating scenes out of direct sunlight	OctMarch	1.3.5	1,3.5-1.2.8	£1.9
E.	Close-ups* of Group D	AprSept.	/3.5	1.3.5-1.2.8	f.1.9
	Scenes on heavily shaded streets Scenes on heavily shaded porches	OctMarch	13.5-1.2.8	f.1.9	Too dark

means pictures taken from 2 sunrise until two hours befor oours from two hours after sunrise unt arger diaphrague opening than the one cous or range of sharpness is desired iller and Panchromatic film, see page

#### How to Panoram

It is sometimes necessary to panoram; that is, to move the Ciné-"Kodak" horizontally, when following races and outdoor games, or filming a range of mountains, seashore views, etc.

When panoraming, never swing or turn the camera quickly from one side to the other. Be sure that the camera is level, do not tilt it. Always remember to hold the camera steady.

#### How to Unload the Camera

CAUTION: Before removing the cover to unload the camera, after exposing the entire length of film, run the motor until the pointer of the footage indicator is at the line marked with a dot, following the 0 on the scale. This is necessary so that the exposed film on the take-up spool will be covered by the protecting end. This end is similar to the leader at the other end of the film and enables the camera to be unloaded in daylight. Do not run the motor after all the film and protecting end are on the take-up spool.

When the entire length of film has been wound on the take-up spool and the pointer of the footage indicator is at the line marked with a dot, following the 0 on the scale, open the camera, take out the spool of film and put it back in its container.

The film is now ready for development. Print your name and address plainly in the space provided on the back of the yellow box. Then return the exposed roll of film to your dealer, who will send it to our nearest laboratory for finishing, for which we make no additional charge. If you post the film direct, tie a string round the box; do not seal it in any way. A list of laboratories for processing Ciné-Kodak Film is packed with each spool of film.

When returning the exposed film for development, be sure to replace it in the metal spool container before placing it in the yellow box. If this is not done the film is liable to unwind and it will then be fogged and ruined.

We cannot emphasize too strongly the importance of placing your name and address on the yellow box. This is the only way by which we can tell to whom the film belongs.

Before reloading the Ciné-"Kodak," open the door 4, and remove the empty spool 9 from the spindle 10. Use this spool as a take-up spool. Never use as the take-up spool in the camera the spool or reel that is returned with the finished pictures on it.

#### Ciné-Kodak Panchromatic Film, Ciné-Kodak Super-sensitive Panchromatic Film, and the Ciné-Kodak Colour Filter

Ciné-Kodak Panchromatic Film is sensitive to light of all colours. It reproduces all the colours of the subject in monochrome on the screen, in very nearly their accurate tone relationship one to the other. The result is a black and white picture on the screen of surpassing quality.

Ciné-Kodak Super-sensitive Panchromatic Film is twice as fast as ordinary Panchromatic Film by daylight and four times as fast by electric light. It enables you to make pictures of Indoor Sports, Street Scenes at Night-time, Illuminated Displays, etc.

It is not necessary to use a Ciné-Kodak Colour Filter with Ciné-Kodak Panchromatic or Super-sensitive Panchromatic Film, but an even greater richness and realism in landscape, marine and cloud photography is at once apparent when a filter is used.

It retards the over-active blue-green, blue and violet rays, thus allowing the greens, yellows, oranges and reds time to record on the film. The result is that all the colours of the subject are reproduced in monochrome still more nearly in their true tone relationships, and the pictures are more vivid and realistic in consequence. Ask for Ciné-Kodak Filter No. U11CK3 for the Ciné-"Kodak" Model BB Junior fitted with f.3.5 lens, or No. WCK3 for the f.1.9 lens model.

The Ciné-Kodak Colour Filter is used in front of the camera lens. If using the filter in front of the f.1.9 lens, first remove the lens hood by grasping firmly and drawing it out of the lens mount. Slip the filter over the small end of the filter mount, then into the lens mount, being careful to slide the projecting key into the slot in one side of the lens mount, and push the filter in until it snaps into place. When the Ciné-Kodak Colour Filter is used with the f.3.5 lens, place the filter in position by slipping it over the front end of the f.3.5 lens barrel; bring the wide notch on the filter to the top of the lens barrel, this will leave uncovered the line used for focussing the camera.

#### Filter Factors

When the Colour Filter is in position, and Ciné-Kodak Panchromatic Film is used, four times the normal exposure will be required. This is accomplished by setting the diaphragm lever at the *second* larger opening than would be required without a filter.

When Ciné-Kodak Super Sensitive Panchromatic Film is used, twice the normal exposure will be required when the Colour Filter is in position. That means you use the same exposure as recommended on the exposure guide on the front of the camera, because this film is approximately twice as fast as the ordinary Panchromatic Film to daylight.

### Taking "KODACHROME" Pictures— Movies in Full Colour

It is as easy to film in colour as in black and white, and the results are even more beautiful and thrilling. All you need is a roll of "Kodachrome" Film, (for outdoor shots) or "Kodachrome" Film Type A (for indoor shots with "Photoflood" Lamps) which you can get from any Ciné-Kodak Dealer. Load this into the Ciné-"Kodak" in exactly the same way as black and white Ciné-Kodak Film (see loading instructions, pages 3-15) and you are all ready to shoot.

Entire simplicity and extraordinary beauty are the keynotes of "Kodachrome." No filters are necessary for all ordinary filming, and you can project it on any 16 mm. "Kodascope" or other 16 mm. projector. Again no filter is required—the colour is all in the film—and you can use as large a screen as your projector will fill. "Kodachrome" is a 'direct colour' film; the colour is not broken up by dots or granules, but is absolutely pure and limpid. When the finished film is ready for projecting, there is no grain whatever in it. This explains the astonishing clarity and sharpness of "Kodachrome."

An exposure guide is enclosed in every carton of "Kodachrome" Film; follow it carefully.

There is no need to shoot only in direct sunshine, but naturally your "Kodachrome" movies will be more brilliant and beautiful—because more colourful—if they are taken when the sun is shining.

In general, black and white films are better for rather 'dramatic' lighting (strong blacks and whites, obtained by having the sun at the side of the camera), but with "Kodachrome" film the colours themselves supply sufficient contrasts and therefore ordinary ('flat') lighting is more desirable. Best results are obtained with the sun more or less behind the camera.

For all ordinary daylight subjects no filter is required with "Kodachrome." However, just as in ordinary black and white work the rendering of certain subjects is improved by the use of a filter (see page 25), so "Kodachrome" shots of extremely distant scenes and snow scenes, and shots made at high altitudes, will benefit by the use of a "Kodachrome" Haze Filter. This is a glass filter in a mount; it slips over the lens of the camera but does not make increased exposure necessary, i.e., you shoot in the ordinary way. (On no account use a colour filter intended for black and white film with "Kodachrome").

After exposure "Kodachrome" Film should be handed to your Dealer or posted to Kodak Limited, Kingsway, London, W.C.2. It will be returned to you, post free, ready for showing. As with black and white Ciné-Kodak Film, there is no charge for processing.

# Pictures at Night— Black-and-White and "Kodachrome"— with "Photoflood" Lamps

There is no need for your filming to cease when the sun goes down. It is easy to make movies at home, in the evening, in black-and-white or in colour.

All you need are a few "Photoflood" Lamps in "Kodaflector" Reflectors. The "Photoflood" Lamps plug into the electric light sockets just like ordinary bulbs, but they give out a very much more brilliant light. Their 'life' is about 2 hours (continuous burning time); this is sufficient for exposing many hundreds of feet of film, as the lamps need be switched on only while filming is actually taking place.

The "Kodaflector" Reflectors, which, like the lamps, can be obtained from your Ciné-Kodak Dealer's, enable you to reflect the maximum possible light from the "Photofloods" on to the subject and so ensure well-exposed movies.

For night-time black-and-white movies always load the Ciné-"Kodak" with Ciné-Kodak Super-sensitive Panchromatic film. It is extremely fast and especially sensitive to "Photoflood" illumination.

The distance between camera and subject does not affect the exposure. It is the distance from light to subject that is important.

The most pleasing lighting effects are obtained by arranging the lamps so that both sides of the subject are illuminated, one a little more than the other. A white table-cloth or sheet can be used as a reflector to lighten the shadows. Select a light-coloured background.

The lamps should be higher than the head of the subject and the light directed down by means of "Kodaflectors".

Interesting back-lighting effects can be obtained by using an additional lamp placed behind the subject. One thing is most important; do not let the light from any of the "Photoflood" lamps shine directly into the lens of the camera.

To make pictures in full colour by "Photoflood" light load the Ciné-"Kodak" with "Kodachrome" Film Type A. This is specially colour-balanced to suit the particular kind of light given by "Photofloods", which is richer in red than ordinary daylight. For this reason, regular "Kodachrome" should not be used for night photography unless a special filter is placed over the lens first. Similarly, "Kodachrome" Film Type A should not be used for daylight exposures unless a special filter is employed. Your Ciné-Kodak Dealer will give you details.

An indoor exposure guide is enclosed in every carton of "Kodachrome" Film Type A. Follow this carefully.

#### Some Useful Hints

If the film jams in the camera, it is due to one of the following causes:

- 1. Improper threading of the leader. The teeth on the sprocket were not meshed with the perforations when it was threaded, or it was not pushed all the way into the slot of the gate. Be sure that the leader follows the path of the loops 13 and 14, Fig. 1, page 3.
- 2. Failure of the film to wind up. This is caused by one of the spool flanges being bent, or failure to insert the end of the leader in the slot in the core of the take-up spool; or the roll of film was not properly seated on the spindle.

If the film breaks or jams you have not wasted the entire length of film. In a subdued light, not in direct sunlight, take out the film on the take-up spool and that which is tangled up in the camera. Re-thread the camera with the film instead of the leader, and run the motor for a few seconds to see that the film is threaded properly. Close the camera and run off about ten feet of film. The remaining film can then be used because it will have been protected from the light by the ten feet run off.

#### Take Care of the Lens

The lens of the Ciné-"Kodak" should be kept clean. A dirty lens causes cloudy pictures which lack brilliancy on the screen. If there is any dust or dirt found on the front of the lens it should be cleaned before any more film is used. It is especially important to clean the lens when using the Ciné-"Kodak" at the seashore.

To clean the lens, take a wooden tooth-pick or match, around the end of which you have wound a small piece of

soft linen or cotton cloth, free from lint. Rub the front of the lens gently, taking care that you do not scratch it by too much pressure. Do not moisten the cloth in any way.

#### Cleaning the Gate

The tracks of the gate which guide the film as it passes the lens must be frequently cleaned and polished. If the motor ceases to operate before it has run down, there are probably small pieces of emulsion or some dirt sticking to the tracks of the gate. The gate should be cleaned as follows:

To remove the gate, first draw back the pull-down claws 8, to the position shown in Fig. 2, page 6. With a screw driver remove the screw 28, Fig. 1, page 5. Take hold of the ends of the gate and lift it up to remove it from the post 29. Separate the two parts of the gate and carefully clean and polish the tracks with a slightly moistened cloth. Do not scrape the tracks of the gate with a metallic object.

To replace the gate, first fit the studs on one part into the holes in the other part. Hold the two parts of the gate firmly together and slide it over the post 29, then replace the screw 28, as shown in Fig. 1, page 5. Be sure to tighten the screw. Before replacing the gate, it must be dry.

CAUTION: When removing or replacing the gate be careful not to bend the two small tension springs.

#### Kodak Titling Service

You will probably want titles describing the different scenes in your films when you project them. We can make the titles for you, in black and white or in "Kodachrome." Simply make out the titles you wish to insert in your film and send the list to us. We will make them and send you the proper amount of film with the titles printed on it, which you can then splice into your film in the proper places. (See splicing directions given in the instruction booklet for the "Kodascope.")

#### Making Your Own Titles with the Ciné-Kodak Titler

Title-making is an easy and fascinating branch of movie-making. If you would like to try it, ask your dealer to show you the Ciné-Kodak Titler, an effective little ciné accessory that anyone can use. The Titler consists of a baseboard, a lens standard, and an easel. The titles are typed or written on cards supplied with the Titler, and the cards are centred in the easel. The Ciné-"Kodak" is then placed in position on the Titler and exposures are made in the usual way. Titles can be shot either by daylight or artificial light.

An exposure table supplied with the Titler gives the correct lens aperture to use with Ciné-Kodak Panchromatic and Super-sensitive Panchromatic Film, under different strengths of daylight and artificial light.

#### **Duplicates**

Ciné-Kodak duplicates are indistinguishable in quality from originals. You may have as many duplicates made of your film as you wish.

If you want duplicates of any film which you make, send it to us as promptly as possible, and before the original has had a chance to become damaged from any cause. The best way to order duplicates is to send the original film to us together with your order for duplicates immediately after you have projected it the first time.

"Kodachrome" can be duplicated in black and white only.

Please fill in and post the attached card; no stamp is required.

# CINÉ-"KODAK" and "KODASCOPE" SERVICES

After reading this manual you should have no difficulty in getting first-class pictures with the Ciné"Kodak" Model BB Junior. There are, however, many ways in which we can still further increase the enjoyment you get from home movies; just fill in and post the reply card attached and we will register you as a Ciné-"Kodak" owner, entitled to all Ciné-"Kodak" and "Kodascope" services.

These include "Kodascope" Library Service which enables you to hire professionally made pictures of every kind—Travel, Documentary, Comedy, Cartoon, Drama—printed on 16 mm. film for projection with your own "Kodascope." You will also be sent free copies of the Ciné-"Kodak" News, a journal which contains news and articles of interest to all amateur cinematographers, and announcements of new Ciné-"Kodagraphs" and Library films.