

ERNST LEITZ GMBH WETZLAR
GERMANY



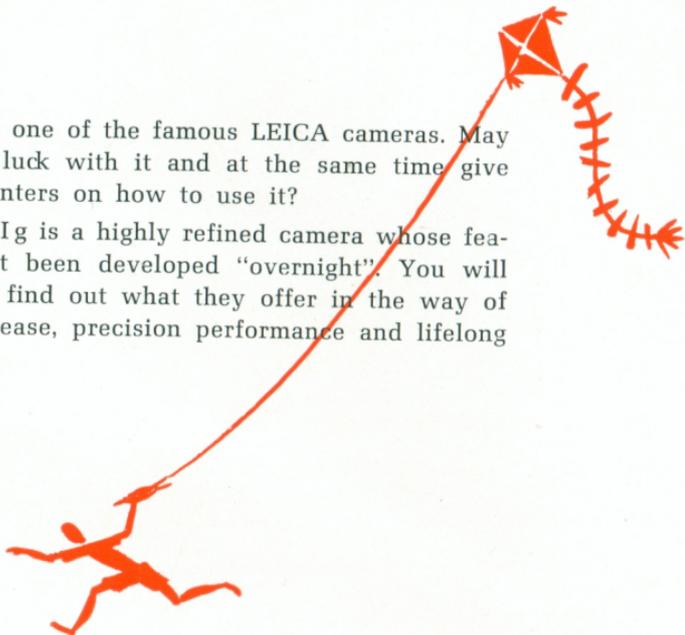
The *Leica* III g
Instruction Book

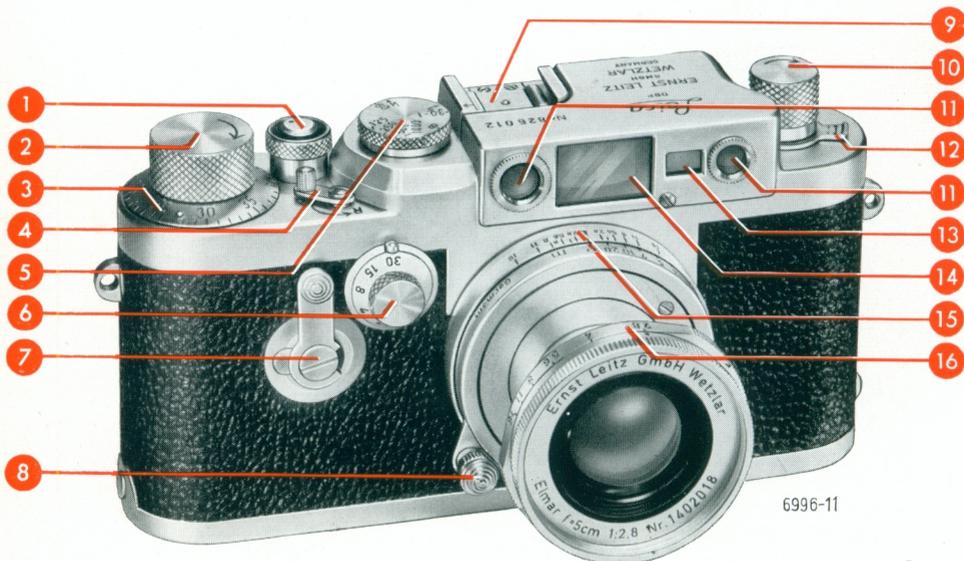
11 - 21/Engl.



You now have one of the famous LEICA cameras. May we wish you luck with it and at the same time give you a few pointers on how to use it?

Your LEICA IIIg is a highly refined camera whose features have not been developed "overnight". You will soon begin to find out what they offer in the way of picture-taking ease, precision performance and lifelong enjoyment.





6996-11

Instructions in

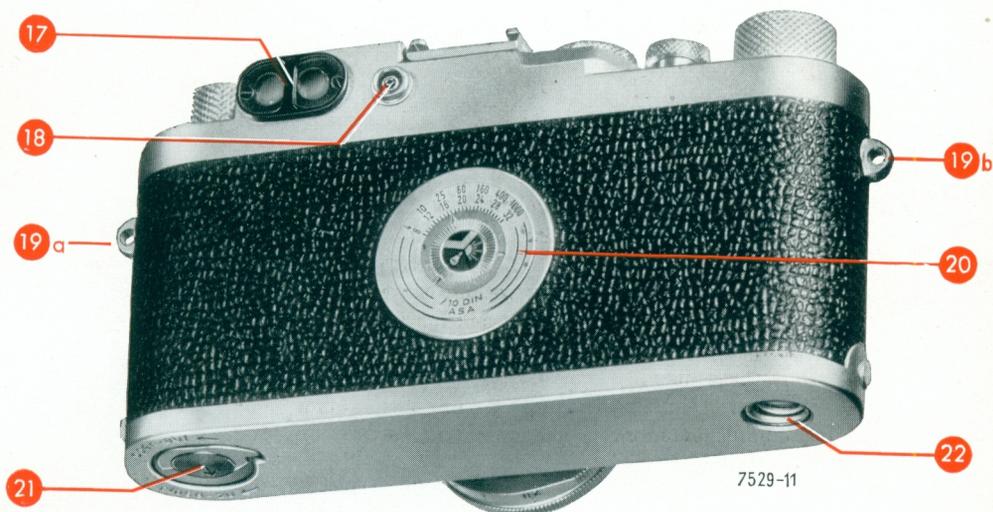
- 1 Shutter Release Button
- 2 Film transport and Shutter Winding Knob
- 3 Exposure Counter
- 4 Reversing Lever (A Film ADVANCE position, B Film REVERSE position)
- 5 Fast Shutter Speed Dial ($\frac{1}{30}$ to $\frac{1}{1000}$ sec. and "Bulb" $\frac{1}{2}$ for synchronizing electronic flash units)
- 6 Slow Shutter Speed Dial ($\frac{1}{30}$ -1 sec. and "time")
- 7 Selftimer
- 8 Focusing Lever with Infinity Catch
- 9 Accessory Shoe for LEICA-METER, etc.
- 10 Rewind Knob
- 11 Rangefinder (two windows)
- 12 Adjustment lever of the Rangefinder Telescope
- 13 Illuminating Window for bright-line Viewfinder Frame
- 14 Viewfinder Window
- 15 Depth of Field scale and distance scale
- 16 Lens Aperture Scale
- 17 Twin Eyepiece of Viewfinder and Rangefinder
- 18 Contact Socket for flash connecting cable
- 19 a, b Eyelets for neck strap
- 20 Film type indicator
- 21 Locking swivel of base plate
- 22 Tripod Socket

A. Taking the picture.

1. Take off lens cap. If you have a collapsible lens, pull out lens barrel and lock it by a short clockwise turn.
2. Turn winding knob clockwise as far as it will go.
3. Set lens stop (16) and shutter speed (5, 6).
4. View subject through the twin eyepiece on the right (viewfinder-eyepiece); compose picture in the bright-line frame.
5. Focus lens through the twin eyepiece on the left until the two images fuse into one. Move your eye to the viewfinder eyepiece at the right and release shutter gently.

B. Changing the Lens.

1. Do not change the lens in direct strong light. Hold the camera against your body.



7529-11

ief

2. Remove the lens by unscrewing it to the left (counter-clockwise).
3. Insert the other lens, turning it clockwise.
4. Protect the detached lens with caps at both ends. (Rear lens caps are available as accessories.)

C. Inserting the Film.

1. Remove baseplate, pull out take-up spool.
2. Push film leader under the spring of take-up spool.
3. Insert film cartridge or magazine (cassette) and take-up spool into camera. See detailed instructions on page 20.
4. Check that sprocket wheel of film transport mechanism properly engages film perforations. Attach baseplate and lock it.

5. Advance unusable film leader twice; turn winding knob as far as it will go and release shutter; turn it again and release it. Set exposure counter (3) to 0, wind shutter once more. The camera is now ready for the first exposure.
6. Set film exposure index and film type reminder disc (20).

D. Unloading the camera.

1. Set reversing lever (4) to "R".
2. Pull out rewind knob (10) and turn it in the direction of the arrow until Film is fully rewound. You will feel a slight resistance when you approach the end and when the film detaches from the take-up spool. Continue with one more turn to rewind the film leader into the magazine.
3. Unlock and detach baseplate. Remove exposed film.



As a LEICA owner you command a universal photographic system which includes scientific and technical photography. Important parts of this system are the LEITZ enlargers and the LEITZ 35 mm still projectors of the PRADO type. Projection of color or black-and-white transparencies is one of the most satisfying ways to enjoy your pictures. Only in a projected image on a large screen will your photographs – especially your color slides – disclose their full beauty. LEITZ projectors are designed and built with the same care given to LEICA cameras. They will faithfully reproduce every subtle detail and color of your transparencies.



A LEICA is a valuable possession all over the world. Make a record of the serial numbers of your camera and lens. In case of loss or theft, send the numbers to us. Through these serial numbers, we have been able to help hundreds of LEICA owners to recover their property. (LEICA owners in the U. S. may register their equipment immediately after purchase at: Registration Dep't., E. Leitz, Inc., 468 Fourth Avenue, New York 16, N. Y.)

YOUR LEICA DEALER:



ERNST LEITZ G M B H W E T Z L A R
GERMANY

U. S. Distributor: E. Leitz, Inc. 468 Fourth Ave, New York 16, N.Y.

11-21/Engl.

Printed in Germany

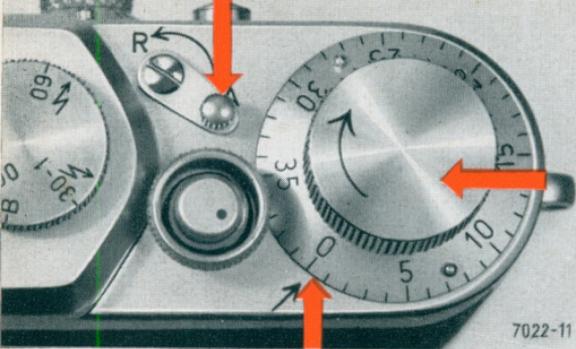
Scharfdruck Wetzlar

III/57/FY

ERNST LEITZ GMBH WETZLAR
GERMANY

Instruction Book for the

Leica III g

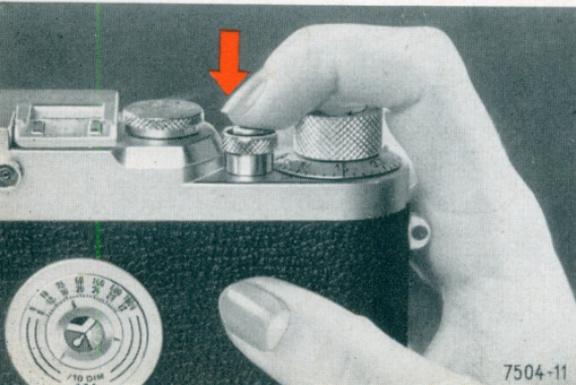


Turn winding knob

(as indicated by arrow) until it stops automatically. This simultaneously winds the shutter and advances the film for the next exposure. Accidental double exposures are impossible. Make sure that the reversing lever (4) is set at **A all the way to the stop**. When the reversing lever is set between A and R, the shutter winding mechanism will remain locked.

The exposure counter,

once set at the start of each roll, automatically records the number of exposures made. After loading the camera set the exposure counter to 0, turning the counting disc counterclockwise (i. e. in the direction opposite to the arrow on the winding knob).

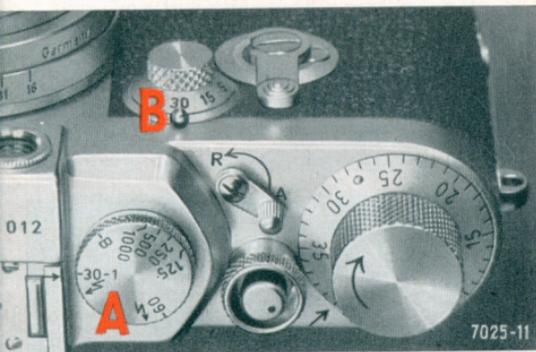


Shutter release button.

Press the button gently and firmly, avoiding any jerky movements. Use your right index finger when you hold the camera horizontally, or your right thumb when taking vertical pictures see page (14/15). Careless release of the shutter will affect the crisp sharpness of your pictures. A cable release may be screwed over the release button when required.

Setting the shutter speed dials.

The LEICA IIIg has two shutter speed dials: the main dial for fast speeds (A) on the top and the slow speed dial (B) on the front of the camera. The range of speeds extends from $\frac{1}{1000}$ of a second to 1 second and time exposures of any desired duration. Remember that as a general rule only the fast speed exposures ($\frac{1}{60}$ to $\frac{1}{1000}$ sec.) are taken by hand. For slow speeds of $\frac{1}{30}$ and longer, place the camera on a rigid tripod to prevent blurred pictures due to camera movement.



The fast shutter speed dial.

The engraved figures represent fractions of one second: $1000 = \frac{1}{1000}$ sec., $125 = \frac{1}{125}$ sec. and so on. Read these figures or set the speed dial **only after the shutter has been wound**. To change the speed, lift the dial, turn it until the desired speed figure falls opposite the arrow and let it snap back into its setting. At the $\frac{1}{1000}$ setting the dial does not snap back all the way but will remain

somewhat higher than at the other speeds. Intermediate speeds cannot be set. Since the fast shutter speed dial rotates when the exposure is made, the arrow will not show the proper speed at which the shutter is set until the shutter has been rewound. Besides the other speeds, the fast shutter speed dial has two lighting bolt marks engraved in red and black. These are for synchronizing electronic flash units and short duration bulbs (see page 24-27).

When set at "B" the shutter will stay open as long as you press the release button down. Speeds of $\frac{1}{30}$ -1 sec. are set at the slow shutter speed dial. To do this, first set the fast speed dial at 30-1 or red \downarrow .

The slow shutter speed dial

adjusts the retarding mechanism (clockwork) which regulates the speeds of $\frac{1}{30}$ –1 sec. When you set the dial at $\frac{1}{30}$, a safety catch holds it in this position. To reset the dial and release this catch, press it down with your fingernail. The figures on the slow speed dial $\frac{1}{30}$, $\frac{1}{15}$, $\frac{1}{8}$, $\frac{1}{4}$, $\frac{1}{2}$ and 1 sec. can be read from above. Unlike the fast speed dial, this dial can be set at speeds between those marked. For instance, for $\frac{3}{4}$ sec. set at halfway between $\frac{1}{2}$ and 1 sec. When set at T the shutter opens when released and will remain open. To close it you have to turn the slow speed dial counterclockwise until you hear the shutter close. (This is important for photomicrography and other special tasks).



Remember: you will get the correct speeds with the slow speed dial only if the fast speed dial (with the shutter wound) is set for $\frac{1}{30}$ th of a second.

The selftimer.

Turn the lever of the selftimer downward to the left until it clicks into its catch. Before you push down the small knob at the side of the lever to release the selftimer, make sure that the shutter is wound. Only then can you release the selftimer.

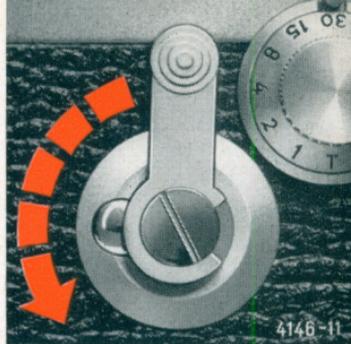
The delay of the timer is about 8–10 seconds. You will have plenty of time to “get into the picture”. If you watch the movement of the selftimer lever, you will be able not only to hear but also to see the moment of exposure. It is reached when the lever points slightly to the left at the top.

Before the selftimer mechanism has run off it can be stopped or rewound. You can release the shutter as usual with the selftimer wound. In order to disengage the selftimer mechanism — and it is advisable to do this — release it when the camera shutter is unwound.

All speeds for 1 to $\frac{1}{1000}$ sec. and time exposures can be made with the selftimer as well as synchronized flash exposures of any kind. See page 24–27 about synchronization.

You can use the selftimer to advantage to prevent camera shake which might otherwise be a problem in taking long exposures when not using a tripod.

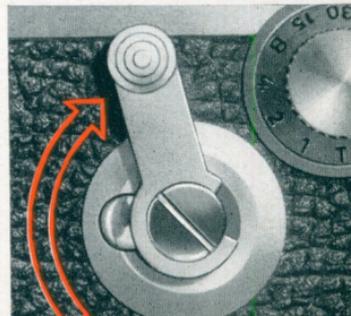
Wind



Release



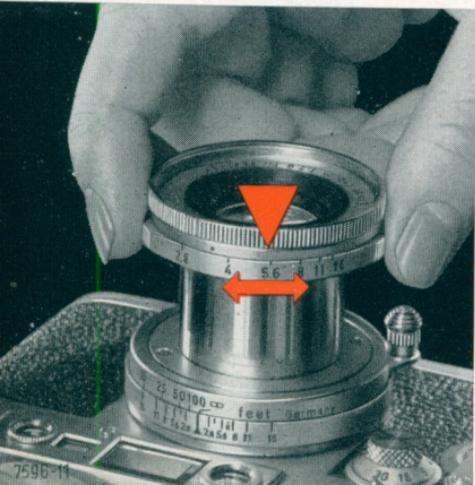
Shutter is released
after 8–10 seconds.





Preparing the lenses for action

The collapsible lenses for the LEICA can be unlocked from the catch at the barrel by a slight counter-clockwise turn and pushed into the camera body for greater carrying ease when not in use. To position the lenses for action pull out the barrel as far as it will go and lock securely by turning clockwise as far as possible.



Iris diaphragm adjustment

In a good light, look through your lens and rotate the aperture ring. You will be able to see through the lens elements how the diaphragm opens and closes. The aperture of "f" numbers 2, 2.8, 4, 5.6, 8, 11, 16, 22, 32 (range of scale depends on the type of lens) are a measure for the amount of light reaching the film at the various lens stops. They are so arranged that light intensity is cut in half each time the lens is stopped down from one figure to the next on the scale. When opening the aperture the light intensity on the film is doubled at each figure.

Please remember: a high figure on the aperture scale means a small stop and vice versa.

Focusing the lens

The standard lenses (of 50 mm. focus) for the LEICA focus from ∞ infinity to 3.5 feet. The focusing lever locks automatically at the infinity ∞ position. To release the lever for focusing at a closer range depress the knob at the end of the lever and move lever counterclockwise.

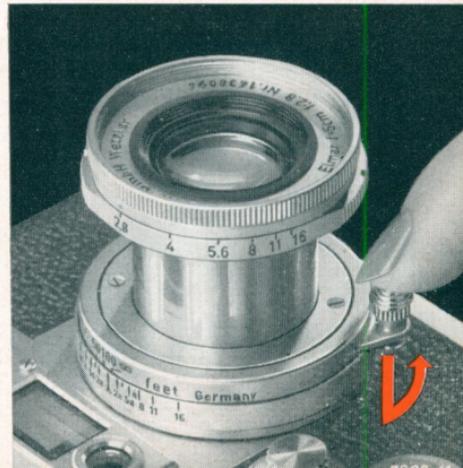


Lens locked at "infinity".

Focusing the lens.

The distance scale

You can conveniently read the distance at which the lens is focused on the distance scale. At the same time you can determine the depth of field for the stop used.



The depth of field scale

Optimum sharpness exists only in the plane to which the lens is actually focused and which is parallel to the film. The decrease of sharpness in front of and behind this plane is, however, gradual. There is a certain depth of field in which subjects are acceptably sharp. The range of this depth of field varies with the focal length of the lens, the distance to which it is focused, and the lens stop used. The smaller the stop, the greater is the depth of field.

If you would like to find out what the depth of field is — no matter at what distance you have focused your lens — look at the depth of field scale of your lens. For example: if your 50 mm. lens is focused at 15' the depth of field will extend from 13' to 18' with the aperture set at 4, and from 10' to 25' with the aperture set at 8.

If you try different settings you will find out the following: The depth of field is considerably smaller at the closer range than it is at longer distances i. e. with the 50 mm. lens stopped down to f/8 focused at 5' from 4' 5" to 5' 9" (see fig. 2) and at 25' from 14' to 100' infinity (see fig. 3).

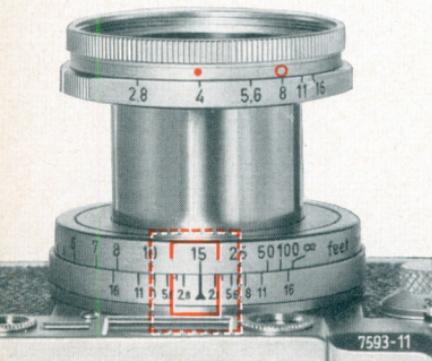


Fig. 1

Zone Focus Settings

with 50 mm. lenses

- Close-up range:** Focus at 10 feet with f/8 aperture. Sharpness extends from 8' ft. to 15' ft.
- Distant range:** Focus at 35 feet with f/8 aperture. Sharpness extends from 17' to infinity ∞ .

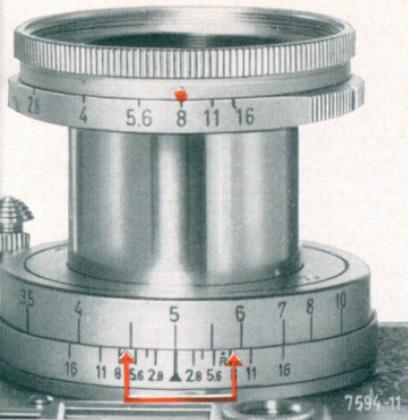


Fig. 2



Fig. 3

General rules for correct use of lens stops

1. The optimum sharpness is always in the plane at which the lens is focused. Always focus on the most important plane of your picture.
2. For long distance views without foreground interest, set lens to infinity (∞) and stop down to $f/5$ or $f/8$.
3. For portraits use your lens at full aperture or only slightly stopped down and focus accurately on the eyes. The subject, thus sharply defined, will tend to stand out. The background will be subdued by diffusion.
4. Most interiors, landscapes with foreground interest and street scenes require an extensive depth of field. Use small apertures. Find the important near and far distance points of your subject (see page 12.) Then set these two distances on the distance scale against the depth of field scale so that they fall as closely as possible between two stop figures of the same value. This stop and the distance setting thus arrived at are the best ones to use.
5. Action shots often do not allow sufficient time for accurate focusing. In such instances use the "Zone Focus Settings".



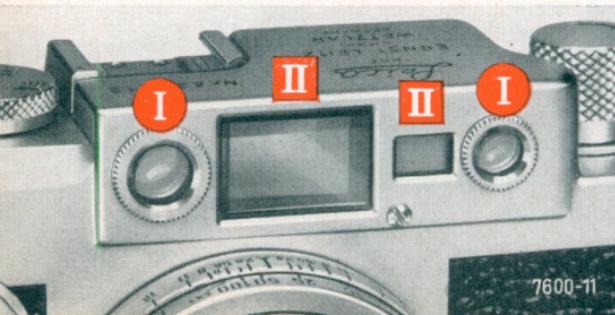
Twin eyepiece for

Rangefinder

Viewfinder

Windows for:

- I** Rangefinder
- II** Viewfinder and bright-line frame



Viewfinder and Rangefinder (Twin Eyepiece)

The twin eyepiece combines the eye lens of the viewfinder and rangefinder. A slight movement of your eye shifts your sight from one to the other. Your eye should be close to the eyepiece; hold the camera against your forehead while shooting.

Important If You Wear Glasses: Correction lenses can be fitted to the twin eyepiece to replace your spectacle lenses. This means you can keep your eye close to the eyepiece and see the entire field of view, even though you normally would need strong glasses. (LEICA correction lenses are made to your prescription for distance glasses).



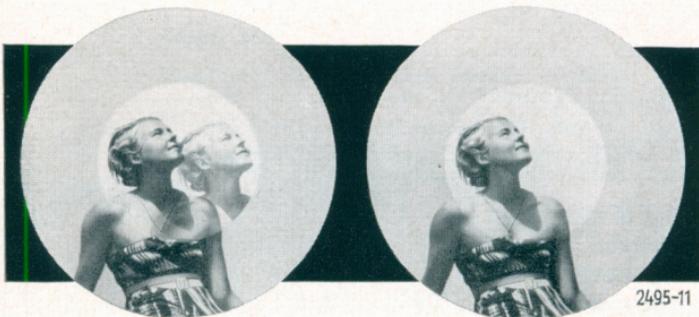
The bright-line viewfinder

When you look through the viewfinder eyepiece at the right you will see the exact field for the standard 50 mm. lenses within a bright-line frame. The four "corners" in the center show the area covered by a 90 mm. lens.

Parallax, which could cause framing errors because of the separation of the optical axes of lens and viewfinder, is automatically compensated for throughout the entire focusing range of both 50 mm. and 90 mm. lenses. Special viewfinders for other lenses with focal lengths up to 135 mm. are available. They fit the shoe on top of the camera (9).

The coupled rangefinder

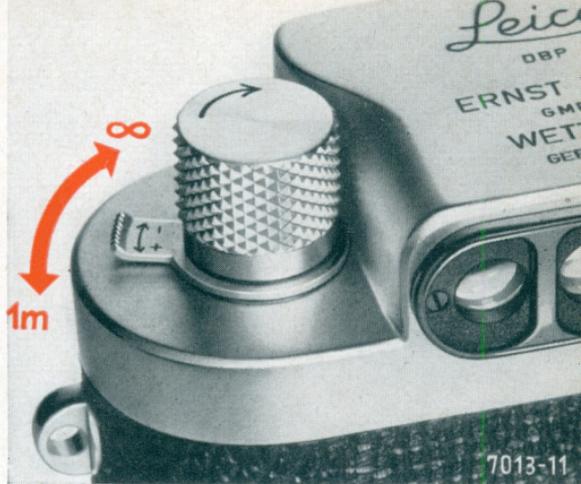
The eye lens at the left of the twin eyepiece is for the rangefinder. The rangefinder couples to the focusing mount of the lens. When you focus the lens, the rangefinder automatically goes into operation. Its accuracy is exceedingly high, since a built-in telescope magnifies the image and makes the subject appear larger than life-size. When the lens is set at infinity, near objects will appear "double" when viewed through the rangefinder. When the lens is set at infinity, near objects will appear "double" when viewed through the rangefinder. When you operate the lens mount the two images will move together. When they are exactly superimposed, the lens is focused at the object which is in the center of the rangefinder field. All screwmounting lenses with a focal length up to 135 mm. lens (except the HEKTOR 125 mm.) couple automatically to the rangefinder when mounted on the camera.



2495-11

A little tip for the beginner:

Since you can use the extreme accuracy of the rangefinder only if you "measure" in the center, we recommend the following method: First, cover the rangefinder window opposite the eyepiece with your left index finger so that you can see only a small circle. Uncover the window. You will now see a double image of the subject within a large circular area. Now operate the focusing mount of your lens until the two images superimpose. This is the proper focus. With this method you aim exactly through the center of the rangefinder. Naturally, as soon as you have become used to proper focusing you can eliminate the practice of covering the opening. When working at short distances it is easiest to focus the lens by scale on the appropriate distance and correct slight differences by approaching or receding from the subject until the rangefinder images merge. Incidentally, if you prefer to use your left eye for viewing rather than your right, this, of course, is possible.



Adjustment of the rangefinder telescope

You can focus the telescope for close-up and distance with the small lever (12). This will also compensate for small eyesight defects between +2 and -4 diopters. Move the lever until best sharpness is obtained.



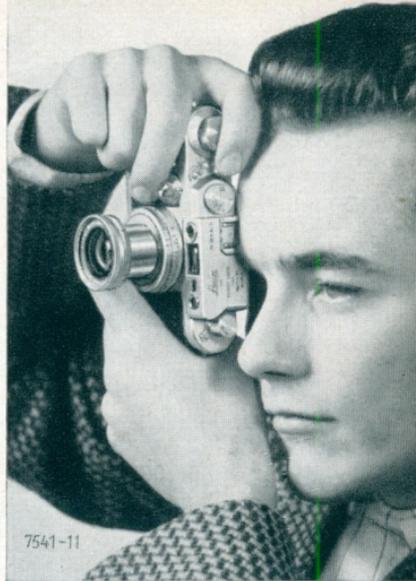
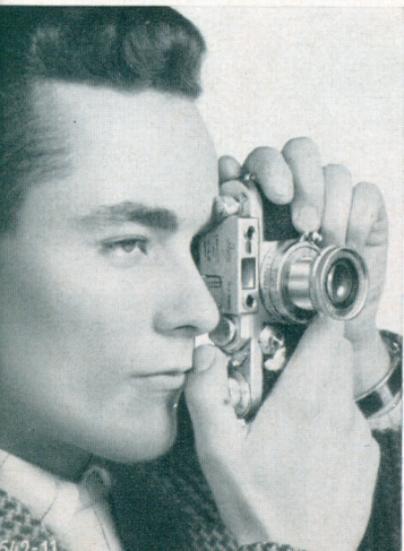
How to hold the camera

Holding the camera properly is your best protection against blurred pictures caused by camera movement during the exposure. Grip the LEICA so that the rounded ends of the baseplate rest in the palms of your hands. Grip it firmly but not so hard that muscle tenseness will make your hands quiver. Keep your eye close to the twin eye lens. Practice a position that gives the camera as much support as possible from your forehead, cheek or nose. Camera, head and hands should form one unit. All this serves to give the camera steady support. It will prevent blurred pictures and you will get the wire sharp pictures which are characteristic of your highly corrected LEICA lenses.

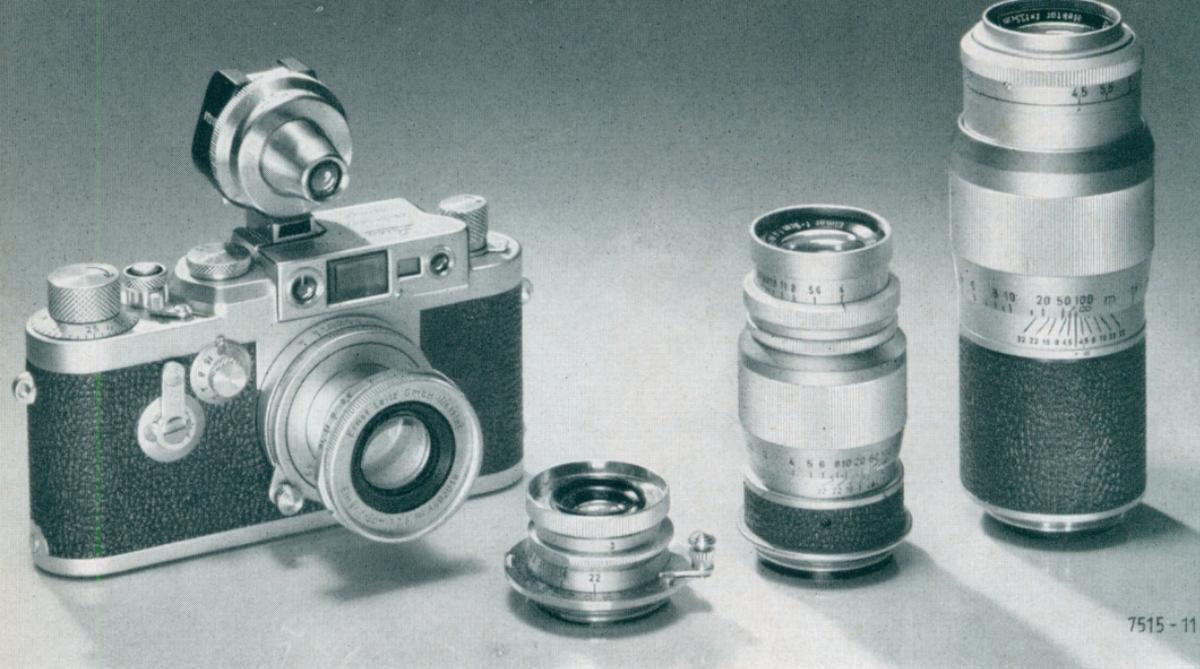
Press the release button gently, but firmly, never jerkily. Move only your index finger and not your whole hand. Start with speeds of $\frac{1}{60}$ sec. and faster; later on, with more practice, you will also be able to shoot at slower speeds by hand.

correctly when shooting

If you want to change from horizontal pictures to vertical, turn the LEICA around the axis of the finder. This will not cause much of a change in the way you hold the camera. Grip the camera the same way as you would when taking horizontal pictures.



For vertical pictures, you can also keep your right hand in the lower position and release the shutter with your thumb. Grip the camera so that the tip of your thumb rests on the release button and the other finger puts counter-pressure against the camera. Your left hand focuses the lens. The top of the camera rests against your forehead. With the camera thus held a very smooth release is possible.



7515 - 11

The interchangeable lenses for the LEICA III g

You may choose among lenses from 28 mm. to 400 mm. in focal length, with apertures as high as $f/1.5$. With these lenses you have complete freedom in selecting the right working distance; you can master subject selection and perspective. All the possibilities of pictorial composition are yours to command.

Each of these lenses brings you all the benefits of advanced optical research and modern production methods:

28 mm. SUMMARON $f/5.6$ - 35 mm. SUMMARON $f/3.5$ - 50 mm. ELMAR $f/2.8$ - 50 mm. ELMAR $f/3.5$ - 50 mm. SUMMICRON $f/2$ - 50 mm. SUMMARIT $f/1.5$ - 85 mm. SUMMAREX $f/1.5$ - 90 mm. ELMAR $f/4$ - 125 mm. HEKTOR $f/2.5$ - 135 mm. HEKTOR $f/4.5$ - 200 mm. TELYT $f/4.5$ and 400 mm. TELYT $f/5$.

Changing the lens

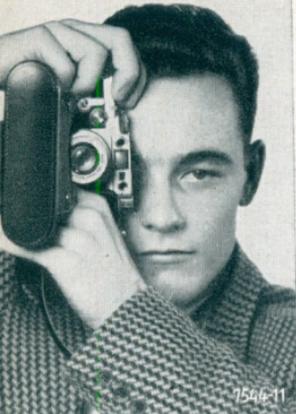
To change the lens hold the camera in your left hand. With your right hand grasp the lens at the focusing ring as close as possible to the camera body. Unscrew it by turning it counterclockwise. Screw the other lens into the camera body by turning it clockwise, tightening it moderately. When changing lenses with an infinity catch at the focusing mount, lock them.

Do not change lenses in direct light. Turn away from the sun and hold the camera against your body. If you store camera and lens separately use protective covers for both.

A highly efficient lens can perform at its best only if its outside surfaces are immaculate. It is more important to protect the surfaces than to clean them frequently. A light yellow filter, (for black-and-white pictures) or a colorless UV filter (for color pictures) which you always leave on the lens, protects the lens from damages (such as that from fine sand when you are at the sea). Remove dust from lens surfaces with a soft camel's hair brush. In emergencies only use a clean linen cloth, which has been previously washed in pure soap. Do not use any other cleaning solution because of possible chemical residues.

Every screw-mounting LEICA lens will fit every LEICA with screw-in lens flange.





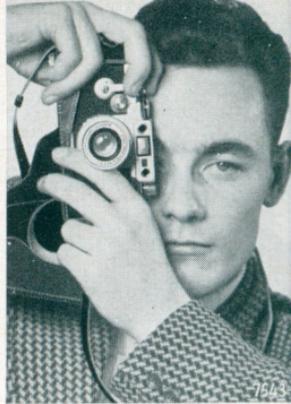
7546-11

Wrong

The eveready case

protects your camera against the weather and possible damage from scratches or blows, yet keeps it ready for instant use. A retaining screw holds the camera securely in the case.

When taking vertical pictures make sure that the top of the Eveready Case does not obstruct the lens. See illustration.



7546-11

Right

Filters

greatly improve the color rendering in black-and-white pictures. A complete range of filters is at your disposal. Cloud effects are best achieved by yellow or orange filters. Polarizing filters are also available for LEICA lenses. Without having adverse color effects, these largely eliminate disturbing glare when you photograph glass, water or polished surfaces like china, enamel or wood. They will also darken the sky in color pictures without harming other color rendition. (In the U. S., various correction and conversion filters are available for use with Anscochrome, Kodachrome and Ektachrome color films).

Lens hoods

are important in making photographs of maximum clarity and brilliance. These are possible only when the front of the lens is protected from strong light coming from outside the actual subject area. Also the lens must be protected from rain or snow; obviously, moisture on the surface will cause



7510-11

image distortions. Therefore, effective lens hoods designed for comfort in carrying and handling are offered for all lenses. *If using the eveready case for the LEICA III g with the SUMMARIT 50 mm. lens f/1.5 (ENSOO) you can carry the lens hood in the case by putting it on the lens reversed.*

LEICA films

Film manufacturers in all parts of the world offer perforated 35 mm. film for the LEICA Camera. You can get it in several forms:

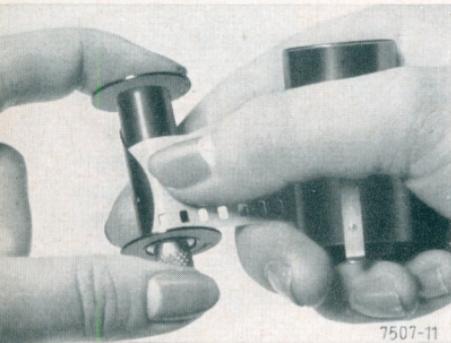
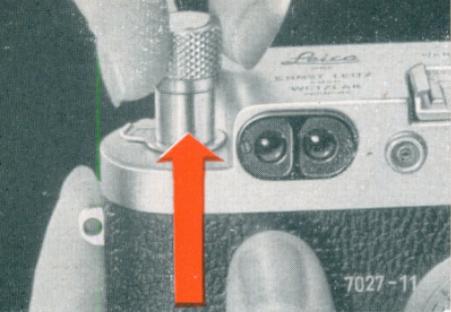
DAYLIGHT CARTRIDGES, containing a length of film for 20 or 36 exposures 24×36 mm. in a lightproof shell, can be loaded into the camera in daylight. (All color films are supplied in this form).

DAYLIGHT SPOOLS offered for the same number of photographs have their length of film wound on to a centre spool and covered with a black paper leader so that they can be placed in the LEICA magazine in daylight. (Not available in the USA).

DARKROOM SPOOLS are ready cut lengths of film which are specially made for LEICA magazines, but which must be loaded into a magazine only in a darkroom. (Not available in the USA).

35 mm. **BULK FILM** (in lengths of 18–200 ft.) preferred by many amateurs and professionals for reasons of economy, must be cut to suit the number of photographs intended and loaded into the LEICA magazine in a darkroom. Special purpose films usually come in this form only. Separate directions contain details on the handling of film magazines.

For general-purpose photography, medium speed films (17/10 DIN = 32 ASA = 24° Weston) are particularly recommended. For poor lighting conditions, the super speed films (25/10 DIN = 200 ASA = 160 Weston) give good results but with somewhat less technical quality than the slower films give.



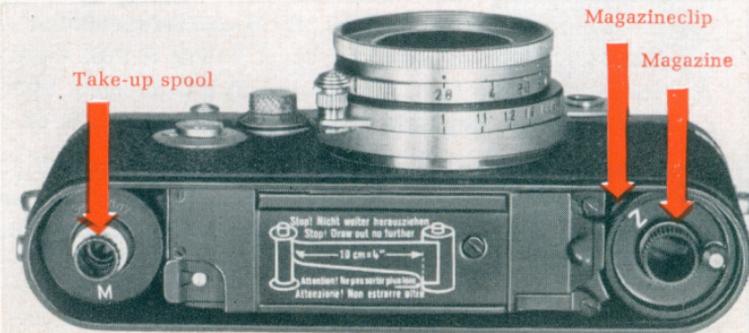
Hold the take-up spool in your left hand and the loaded film cartridge in your right. The knurled head of both spool and cartridge should point downwards. Push the end of the film leader under the flat clip of the take-up spool as far as it will go. The perforated edge of the film should lie flush with the flange adjoining the knob of the spool with the emulsion side face outwards (see illustration).

Loading the LEICA

Daylight cartridges and properly closed film magazines are reasonably lightproof. Nevertheless, avoid direct sunlight or strong artificial light when loading or unloading the camera. Outdoors, load and unload in the shadow of your body. Cartridges or magazines containing sensitive film should never be kept without protection against light for any length of time. Storage in a container is strongly recommended.

Before opening the camera make sure that it is unloaded or that the film is rewound into its cartridge or magazine. Check this by pulling out the rewind knob and turning it in the direction indicated by the arrow. If you feel a resistance, rewind the film and take it out of the camera as described on page 23.

Turn the camera upside down, raise the baseplate locking swivel and turn it from CLOSE to OPEN. Take the baseplate off and put it aside. You can now easily remove the LEICA cartridge (or magazine) and the take-up spool.

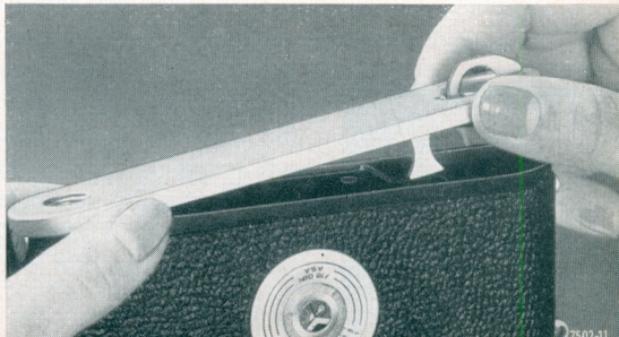
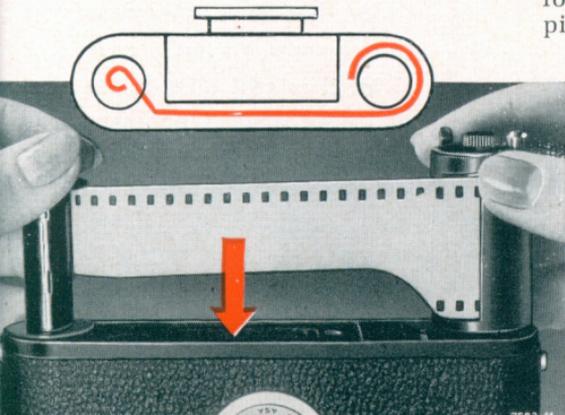


Put the camera in front of you on a table, open side up and with the back towards you. Before inserting a new cartridge, set the reversing lever (4) *all the way against the stop pin at A* (advance). The film transport and shutter winding mechanism will stay locked if you do not set the reversing lever properly. Wind and release the shutter to make sure that it is in order.

Pull out the trimmed leader of the film from the cartridge or magazine just far enough to permit inserting both the cartridge and the spool into the camera. The knurled knobs remain on top and visible, the film slides into the slot along the back of the camera. Make sure that the film is placed as shown in the diagram (below). The matte emulsion side must face outwards. Also make sure that the take-up spool and the cartridge (or magazine) are inserted all the way down. Only then is the film properly positioned in the film gate and the sprocket of the transport roller can engage the film perforations. If the cartridge or magazine does not drop right down give a small turn to rewind knob (10).

Attach the baseplate to the camera body and turn the locking swivel to "close". This closes the camera light tight. To tighten the film for proper transport, pull out the rewind knob and turn it gently in the direction of the arrow until you feel a resistance.

Remember: the visible strip of film between take-up spool and cartridge has been exposed to light. It is, of course, spoiled. Therefore, this short length is no longer useable for pictures and must be moved out of the way



within the closed camera to place an unexposed length of film in position. To do this, transport the film by winding and releasing the shutter. Repeat this and set the exposure counter (3) at 0. After you wind the shutter once more, the exposure counter will point at 1 and the LEICA is ready for the first exposure. When you wind the shutter, always watch the rewind knob.

It must rotate against the direction of the arrow when you wind the film. If it does not, it will be an indication that the film does not feed properly and you should check to see if the camera is properly loaded.

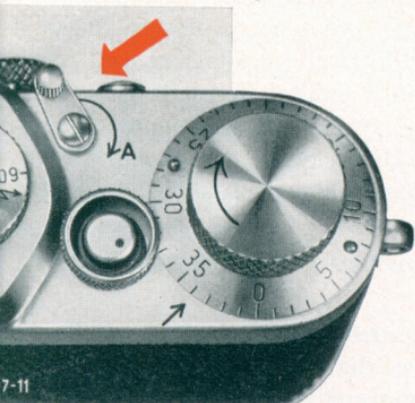
The film type indicator

at the back of the camera adjusts easily when you apply slight finger pressure and rotate it as required. The symbols for black-and-white film, daylight color film (sun in red sector) and color film for artificial light (bulb in red sector) can be so moved that they point to the exposure index (in DIN or ASA) of the film in the camera.



If the film is not properly inserted it could detach from the take-up spool and fail to advance (indicated when the rewind knob does not rotate when you wind the shutter). You must then carefully reload the film by: 1. Setting the reversing lever (4) to R (Reverse). 2. Turning the rewind knob in the direction of the arrow. (But only as long as the release button 1 rotates. Then stop immediately). The film leader has then just passed the release shaft and a short end of it is still outside the cartridge. This is important for reloading. If you should rewind it completely into the cartridge, you would have to work in a darkroom to pull the leader out of the cartridge.

Unloading the camera



When the whole length of the film has been exposed, the winding knob will no longer operate, a signal that the film should be rewound into its cartridge. Set the reversing lever (4) to R, pull out the rewind knob and turn it in the direction of the arrow (without pressing down the release button) until you feel a pronounced resistance.

Continue rewinding to overcome this resistance and for one more turn. The film has now been pulled from the clip of the take-up spool, but a short strip is still outside the cartridge. You can now open the camera (page 21) and remove the cartridge with the exposed film. It is a good practice to mark the leader of an exposed film as such.

If you wish you can expose a roll of film only partly. For example, you can take 11 exposures, rewind them, and reload the camera with a different type of film, color or black-and-white as the case may be. When you reload the first film, proceed as you would with a fresh unexposed roll. Be sure to set the counter at 0, put on the lens cap and wind and release the shutter until the counter registers 12. You are then ready to continue taking pictures on the first film.

With flash

Synchronizing means adjusting the travel of the shutter and the moment of peak light output from the flash bulb to each other so that the shutter exposes the picture at the exact instant when the subject is fully lit. Your LEICA III g is fully synchronized for use with all electronic flash units and flash bulbs. When a shutter speed is set, the flash contact point is also adjusted automatically for the type of flash selected. The enclosed tables "Flash Guide Numbers for the LEICA III g" show the possibilities of the various flash bulbs and their guide numbers when using the LEITZ folding reflectors. Here are some tips on how to use these tables:

1. **Flash bulbs.** (Class M and FP) will synchronize automatically at all shutter speeds which are suitable according to the tables (Fig. 1.)
2. **Electronic Flash Units,** and Class F bulbs are synchronized when the fast shutter speed dial is set at one of the lighting bolt marks \downarrow on the fast shutter speed dial. The black \downarrow gives an exposure time of $1/50$ sec. — the shortest possible speed for use with electronic flash (Fig.2.) The red \downarrow gives $1/30$ sec. Use Class F bulbs with the red \downarrow setting only.

Fig. 1

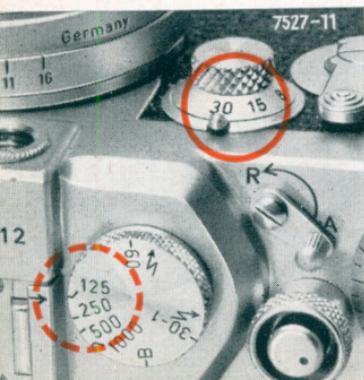


Fig. 2

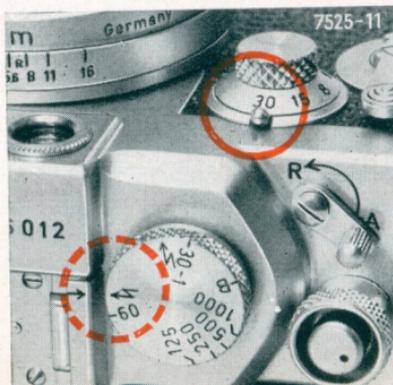
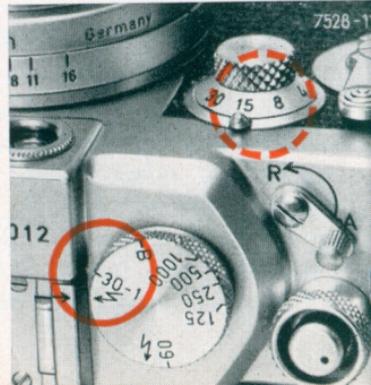


Fig. 3



3. **Slow shutter speeds below $\frac{1}{30}$ in combination with flash bulbs and electronic flash units** are synchronized by setting the fast shutter speed dial at the red $\frac{1}{2}$ and the slow speed dial at the desired speed (Fig. 3.)

4. The setting "B" on the fast shutter speed dial can be used for both flash bulbs and electronic flash units.

For average work

we would like to give you a few more pointers. The LEITZ flash guns with folding reflector will light your subjects very evenly. You will appreciate this — particularly when you use wide angle lenses since an improperly designed reflector could cause a fall-off of light in pictures taken with these lenses.

The Guide Numbers are approximate values. They are valid when you use LEITZ folding reflectors for objects of average brightness where some light is reflected from the ceiling and the walls. But you will have to make exposure allowances in extreme lighting conditions. In large, dark-colored rooms, open up one or two stops. In small, light colored rooms, close down a stop or two.

Pictures so taken can be developed according to a normal formula together with pictures taken in daylight on the same film. Normal development of flash pictures also offers the advantage that the background illumination will be brighter than it would if a higher guide number were used and the film be overdeveloped. This procedure, although sometimes recommended, would merely permit smaller apertures when foreground illumination alone is important.

For Color Films the following rules apply:

For **daylight reversible color films** use only blue flash bulbs or electronic flash.

For **tungsten type reversible color films** (Type A) use amber colored flash bulbs.

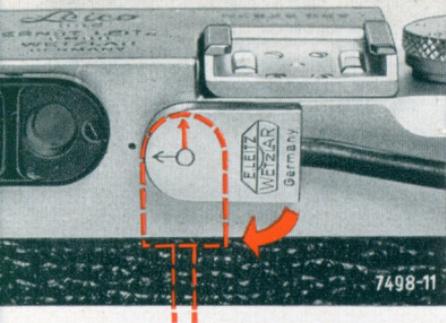
For **reversible color film type F** (for flash) use clear bulbs.

For **negative color films** clear flash bulbs and electronic flash units can be used, since the color correction can be accomplished during the printing process. For daylight pictures with fill-in flash, use blue flash bulbs or electronic flash units. (These films are not generally available for the LEICA in the USA.)

The performance of a given type of flash bulb is the same, regardless of the color of the bulb. However, the guide numbers of colored bulbs are lower because of the filter effect of the color coating.

The **great variety of color films** and the need to expose them correctly makes it impracticable to establish special guide numbers for every film. So, we recommend that you familiarize yourself with the film selected and a certain type of flash bulb. As a guide for using blue bulbs with color films the following hint will be useful: You establish the lens stop using guide numbers in the tables for the clear bulb of the same type, and increase the exposure:

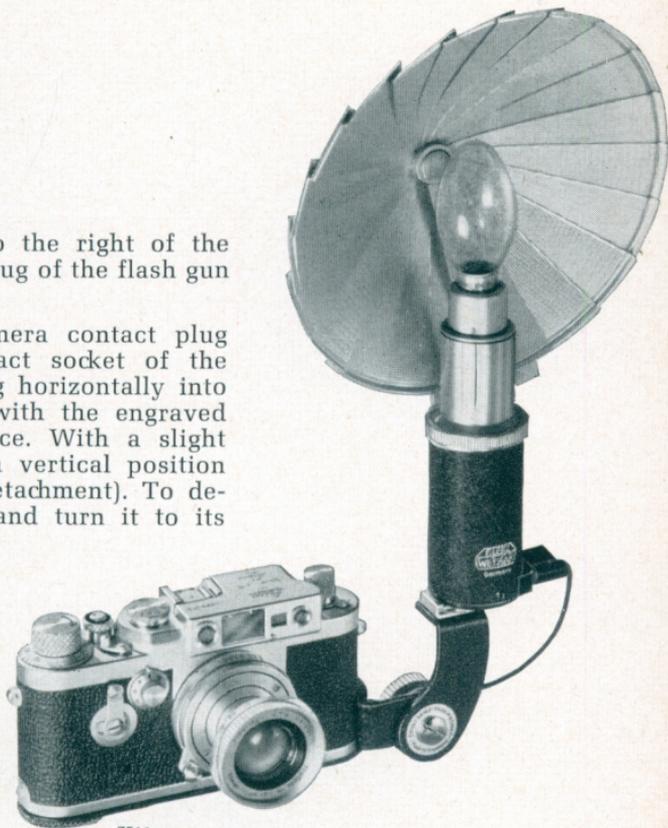
- (a) With daylight reversible color films of 32 ASA rating or 17/10 DIN (EKTACHROME OR ANSCOCHROME) by one stop.
- (b) with daylight reversible color films of 15/10 DIN (AGFACOLOR L-UT) by 2 stops.
- (c) with daylight reversible color films of 10 ASA rating (i. e. KODACHROME K 135) by $2\frac{1}{2}$ stops.



The contact socket (on the back to the right of the twin eyepiece) accepts the contact plug of the flash gun connecting cable.

The connecting cables have a camera contact plug which can be locked to the contact socket of the LEICA III g. Insert this contact plug horizontally into the contact socket of the LEICA, with the engraved arrow pointing at the twin eyepiece. With a slight pressure, lock it by turning it to a vertical position (for protection against accidental detachment). To detach the plug, press it in slightly and turn it to its horizontal position (see also pamphlet on connecting cables for the LEICA [12-13]).

A handy accessory for attaching the flash guns to the camera base-plate is the hinged angle bracket CTOOM.



7516-11

