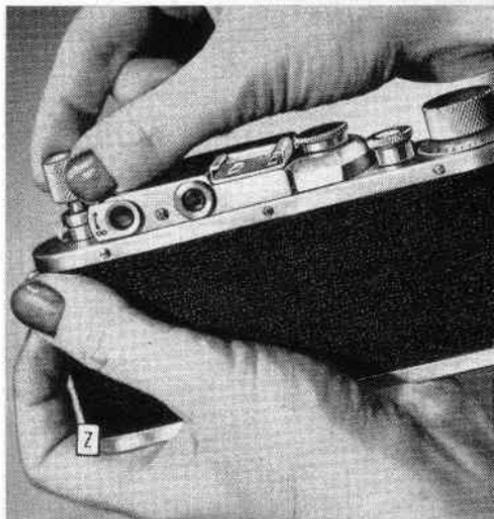


**CAUTION:** Note that while you turn the rewind knob in the direction as indicated by the arrow, the collar around the release button turns. This indicates that the perforations of the film are engaged with the small cogs (Illust. Y). Continue to rewind until a slight pressure is felt. Turn past this and a slight jerk will be the effect as the film is pulled out from under the spring (Illust. V). Immediately after this jerk-like feeling has occurred, the collar will cease to turn. **DO NOT CONTINUE TO TURN THE REWIND KNOB IN THIS CASE, BECAUSE YOU MIGHT PULL THE FILM RIGHT ON INTO THE CARTRIDGE.** In order to re-load camera, the end of film must protrude enough to be able to get a hold on it to re-load it on to take-up spool.

## 15. UNLOADING THE CAMERA

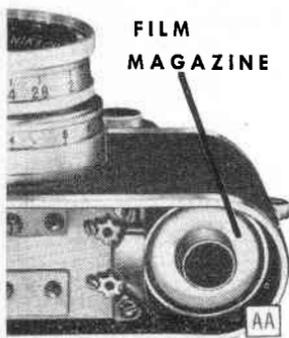
Turn winding knob for your last exposure very cautiously so film will not be forced out of cartridge. If film happens to be forced out, camera must be taken into the darkroom, or you should take it to a local camera shop and have them remove the exposed film and replace it into its cartridge. When the roll is exposed and it is necessary to rewind it into cartridge, be sure speed dials are set on any other speed than T (Time). If camera is set on T, the shutter may remain open and, as the film is rewound it will be re-exposed to light and spoiled by fogging.

1. Push reverse lever from A (Advance) to R (Reverse). Be sure lever is pushed all the way to R. This will automatically uncouple film advance mechanism and shutter gears.
2. Pull up rewind knob (Illust. Z) and turn in direction of arrow to rewind film into its cartridge. Continue to turn this



knob until a slight pressure is felt and then turn past this slight pressure until you feel end of film pull out from under spring of take-up spool. Note that while the rewind knob is being turned, the collar around the depressed release button continues to turn. When this ceases to turn, you know that only a small portion of film remains to be wound back into magazine. Give the knob 2 or 3 more turns so that the film is completely wound back into its magazine.

3. Open the camera as already explained (Illust. T).

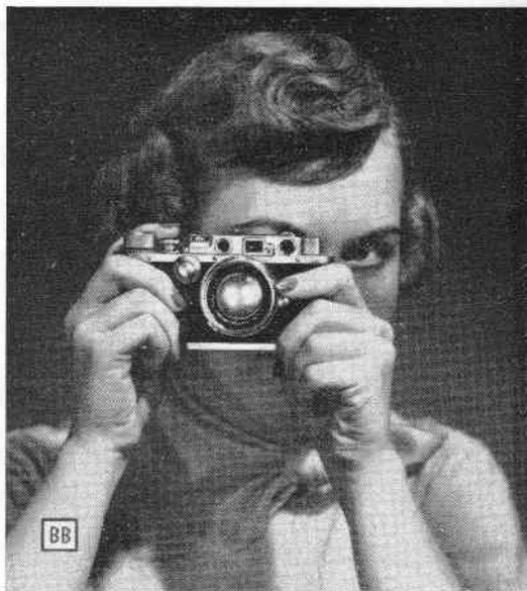


4. Pull out the film magazine (Illust. AA) by firmly grasping center tube in thumb and finger. Protect the loaded magazine from direct light by replacing in container supplied with film.

#### 16. RELEASE BUTTON FOR SHUTTER—

It is advisable to hold camera steady with both hands as illustrated in Illust. BB. Rest camera firmly against cheek and hold it in both hands

so right index finger is ready to press release button. Left index finger should be on knob of lens focusing lever. Release the button by gently pressing the finger, not the entire hand or arm. The secret of clear, sharp, crisp pictures is to avoid movement or shifting of camera at time shutter is released. It is further suggested that a deep breath be taken and held while releasing button. This eliminates any possible movement caused by breathing.





## 17. HORIZONTAL AND VERTICAL PICTURES—

Two forms of pictures can be taken with the TOWER 35 mm camera. A horizontal exposure is taken when camera is held as in Illust. BB. The exposure is vertical when camera is held as in Illust. CC. The right hand should always help support the camera and, at the same time, the right index finger should be in a position to operate the release button. Either the middle or the index finger of the left hand should always operate the focusing lever.

Holding the TOWER 35 mm as described above permits a very rapid change from horizontal to vertical pictures, and vice versa. It also establishes a habit for picture taking because the same set of fingers are used to operate the release button and/or focusing lever in either horizontal or vertical position. Holding the camera in readiness as in Illust. DD while directing or surveying the subject makes it possible to quickly raise the camera to the proper taking position either horizontally or vertically, with the fingers always in the same position.



## ACCESSORIES FOR YOUR



# 35 mm CAMERA

### SUPPLEMENTARY LENSES

There are a number of accessories available for your new TOWER 35 mm Camera. One of the most unique features in the versatility of this camera is the fact that the lenses are interchangeable. The lenses are all standardized and many of the famous Leica lenses will fit the TOWER 35 mm camera, and the NIKKOR lenses will fit many of the Leica cameras.

The interchange of a lens is done easily. All you have to do is screw the lens approximately  $2\frac{1}{2}$  turns in the flange on the camera. The lens should fit moderately tight to bring it into proper position. When changing lenses, the open camera body should be protected from strong sunlight.

All of the NIKKOR lenses for use with the TOWER 35 mm camera are equipped to couple with the rangefinder. The same principle is used for the telephoto or wide angle lenses as is used with the standard 50 mm lenses (Illust. 1).\* Thus, the regular rangefinder is used for all NIKKOR lenses. All NIKKOR accessory lenses come in beautiful, russet-brown plush lined carrying cases (Illust. 2).

**\*NOTE:** On the telephoto lenses focusing is done by turning the knurled focusing ring. There is no focusing lever, as is the case with the standard 50 mm and wide angle lenses.



All NIKKOR lenses are coated on the inside only. It is believed the coating of inside surface only will help prevent scratches. It is evident that if the front element or outside of the lens were coated, this coating would be more subject to scratches than the hard, uncoated outside surface. The coating can be recognized in ordinary light by its reddish-to-blue cast. This coating is fused to

the surface of the lens while under a vacuum.

The coating reduces loss of light due to surface reflection. It has been found that an uncoated lens has a light loss of 30 to 35% because of surface reflection; whereas this light loss is reduced to less than 10% in the case of the NIKKOR coated lens. An uncoated lens has a tendency to scatter the light by internal reflections. This impairs the contrast of the image on the negative. Thus, the coated NIKKOR lenses will produce a more brilliant negative than the uncoated lenses of the same construction.

NIKKOR lenses have been rated by famous technicians as being as good as any ever produced by any lens maker in the world. They are rated so high that leading magazine photographers on the Korean front discarded their other lenses and are using NIKKOR lenses.



## CARE OF NIKKOR LENSES

These lenses, like all high quality optical glass, are susceptible to influences of moisture and, of course, should not be touched with the fingers. Salt from perspiration on fingers not only smears, but has a tendency to corrode the surface. When not in use, the lens should be covered with its lens cap. In the case of demounted lenses, the lens caps for both front and/or rear must be replaced on lens to avoid collection of dirt and dust. Always keep lens in its carrying case when lens is detached from camera. Dirt, dust or finger marks must be removed with the greatest care. Remove any dust by wiping lightly with lens tissue.

## FOCAL LENGTH OF A LENS

It is well to remember that the depth of field of a well-corrected, high speed 50 mm lens at full aperture is comparatively small. As a result, stopping down to increase the depth of field is often necessary. The higher power of these ultra speed lenses should be considered as a reserve to be used only for adverse lighting conditions. One should avoid the use of full aperture unless the depth of field is taken into consideration. If you want to photograph a rose and cause the stem, leaves or back petals to become soft or slightly out of focus, the lens at full aperture is ideal. The same is true in portrait photography. The features of the person might be needle sharp when the high speed lens, for instance the 50 mm f/1.4, is wide open. However, at this opening, the ears and hair might well be out of focus. This is often desirable in portrait photography.

The 50 mm lens is called the standard focal length for the TOWER 35 mm camera. A long focal length lens is popularly termed a telephoto lens. For instance, the 135 mm. lens makes the image appear closer and larger. At the same time, it cuts down on the size of the field covered by the normal 50 mm lens. (See photos at right.)

These illustrations show what the camera taking lens actually sees. With the wide-angle 35 mm lens the angle is much greater than with

the normal 50 mm lens. On the other hand, the angle is much smaller in the case of the 135 mm lens than it is in the case of the 50 mm lens. The 135 mm telephoto lens covers a smaller field, but makes the object larger. (For example: the clock tower fills the frame of the picture more completely than it does when the same photo is made with the 50 mm lens.) For rapid calculation, divide the focal length of the standard 50 mm lens into the focal length of the lens being compared. All distances from camera to subject remaining equal, the result will give a rough estimate of the power of the lens as compared with the 50 mm lens. For example, as in the case of the 135 mm lens, divide the 50 into 135 and you get 2.7. This means that the image will be 2.7 times larger when taken with the 135 mm lens. For all practical purposes, we say that the 135 mm lens gives an image 3 times that of the 50 mm lens. The same is true for the 85 mm lens, although it produces an image 1.7 times larger (85 divided by 50). For all general purposes, it is said to produce an image 2 times larger than the 50 mm. If the telephoto lens were 100 mm the image would then be exactly 2 times larger.

*Photos by George Potts*



**WIDE ANGLE 35 mm LENS**



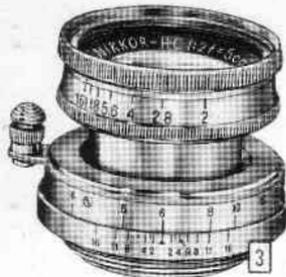
**NORMAL 50 mm LENS**



**TELEPHOTO 85 mm LENS**



**TELEPHOTO 135 mm LENS**



## NIKKOR 50 mm f/2 LENS

The NIKKOR f/2 coated standard six-element 50 mm lens can be used for most general purposes. This includes general outdoor pictures, inside shots taken with photofloods or flash-guns, press work and color pictures indoors or out. Its exceptional quality is the evenness of light distribution over the film frame. The production of brilliant, crisp negatives with needle-sharp images is due to the non-scattering of light, and its highly, precision-ground lens elements. The lens produces the proper tones wherever contrast and brilliance are needed. This lens comes in two types, the collapsible (Illust. 3), and the more recent non-collapsible (Illust. 4). The non-collapsible lens focuses down to 18 inches. (See special note, page 12 on focusing at distances less than 3½ feet.)



## NIKKOR 50 mm f/1.4 HIGH SPEED LENS

The new NIKKOR f/1.4 coated 50 mm lens (Illust. 5) is the latest lens added to the line. It will also focus down to 18 inches. This lens has all the qualities of the NIKKOR f/2 described above and, in addition, it is faster and has 7 elements. It fills the needs of amateur or professional photographers who want speed. It can be used for fast shutter speed in artificial light, such as night club pictures, press, theater or any shot where lighting conditions are not favorable. Its aperture is equipped with click stops that may be set through feeling when photographing under adverse lighting condition. At full aperture the lens is extremely accurate and, of course, the sharpness and depth of focus increase as it is stopped down. We believe this lens has as great a speed and as fine resolving power as any lens now offered to the photographer. The lens is also excellent for general, all-around photographic purposes.



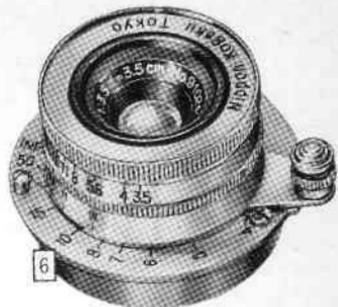
## NIKKOR 35 mm f/3.5 WIDE ANGLE LENS

This lens is a highly precision-ground lens with a much shorter focal length than the standard 50 mm lens. It takes in a much wider field (as indicated in Illust. on page 27.) The angle of field is 30% greater. Photographers use this lens where the distance

between subject and camera is limited and insufficient to show the entire desired subject on the negative. It is excellent for photographing tall buildings or large groups. With such a short focal length lens the depth of field covers a comparatively wide field at fairly wide apertures. For example, with an opening of  $f/6.3$  focused at 23 feet, sharp focus may be obtained on objects from about 10 feet to infinity. This is a universal setting and quick shots can be taken easily when shooting subjects where stopping to focus would be inconvenient. This setting is used for any scene where time does not permit refocusing and resetting of the aperture before each shot. It is especially important to use the universal viewfinder with this lens (Illust. 9).

## NIKKOR 85 mm f/2 TELEPHOTO LENS

This all-purpose, long focal length lens is especially suited for picture taking in a theater. Its longer focal length permits distance shots where a subject would be very small if taken with the standard 50 mm lens. It produces a fairly large image at a considerable distance. Its high speed of  $f/2$  permits short exposures under poor lighting conditions and where the use of flash bulbs is taboo. This lens is excellent as a portrait lens; when opened to its full aperture it produces a pleasing softness. Even distribution of light over the entire negative, and fine definition make this lens outstanding. The universal viewfinder should be used with this lens.



## NIKKOR 135 mm f/3.5 TELEPHOTO LENS

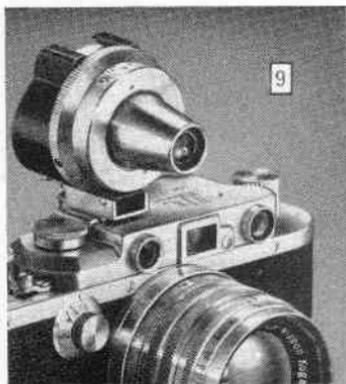
Because of its special optical qualifications, this telephoto lens is especially useful to the more serious photographer. Compared to the standard 50 mm lens, its magnification is 2.7 times larger. It has an angle view of about 19 degrees and can be most profitably used for sport scenes, boat races, etc. taken at great distances. It is also excellent for mountain or animal photography and nature shots in general. This lens is especially suited to detailed architectural subjects and very large portrait heads. Its definition is especially good when stopped down. The lens has high color correction and is recommended for distance shots in color. The earlier NIKKOR lenses had a speed of  $f/4$  when set at full aperture. The  $f/3.5$  is a great improvement for this long focal length lens.



Here again, in order to insure accurate framing, it is important to use the Universal Viewfinder when this lens is brought into operation.

A tripod must always be used whenever you use the 135 mm lens. This lens is too heavy to be supported by the camera and, therefore, lens must be placed on the tripod and the camera attached to the lens.

## UNIVERSAL VIEWFINDER—WHEN TO USE



When using the TOWER 35 mm camera with any lenses other than the standard 50 mm lens, the field covered is either greater (as in the case of the wide angle lens) or smaller (as in the case of the 85 mm or 135 mm telephoto lens). To determine the correct field of view for those wide angle or telephoto lenses, a special viewfinder must be employed. The Universal Viewfinder is especially designed for use with lenses from 35 mm to 135 mm focal length. It can be used with

all focal length lenses produced for the TOWER 35 mm camera, and may also be used on the Leica with any lenses equivalent to the following NIKKOR lenses:

**35 mm wide angle lens**

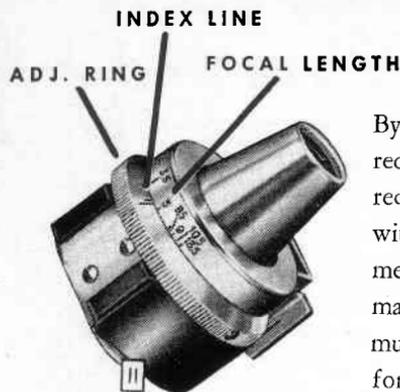
**50 mm standard f/2 or  
f/1.4 lenses**

**85 mm f/2 telephoto lens**

**135 mm f/3.5 telephoto lens**

Universal Viewfinder is calibrated to be used with the 90 mm and 105 mm lenses, as well as the above listed NIKKOR lenses. The Universal Viewfinder attaches to the top of the camera accessory shoe. When this shoe on top of camera is used for another accessory, such as the flashgun, the viewfinder may be attached to camera by means of a clip which fastens to bottom of camera. (Get this clip at any Sears camera department.) The Universal Viewfinder comes in a brown leather case (Illust. 10).





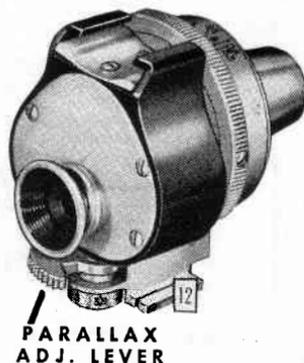
## HOW TO USE

By turning the knurled adjustment ring, the rectangular aperture or field is enlarged or reduced in size to show the image covered with any of the above lenses. The adjustment ring (Illust. 11) bears an indicator mark, commonly called index line, which must be set opposite the proper focal length for lens in use. Adjacent to the longer or main index line is a shorter index line. The

long line is used for distances 30 feet to infinity. The shorter line is used for close-up pictures from 3.5 to 6 feet. For distances between 6 and 30 feet, the knurled adjustment ring is set between the two lines at the desired focal length of the lens being employed.

The Universal Viewfinder is equipped with a knurled adjusting lever (Illust. 12) which is calibrated from 3.5 feet to infinity. This also has an index line just above the calibrated ring. The distance from the subject should be set opposite the index line. The employment of this so-called parallax adjustment insures that an object sighted through the viewfinder and appearing in the center of the desired picture will actually be photographed in the center of the picture.

This accessory prevents the cutting off of heads, or leaving out of pertinent parts of a picture. It should be pointed out that there is little chance of cropping off portions of desired images when the distance from the object to camera is over 12 feet. However, the above compensation is necessary to avoid such cropping when taking pictures closer than 12 feet. The viewfinder works the same either on top or bottom of camera.



## **FEATURE OF VIEWFINDER**

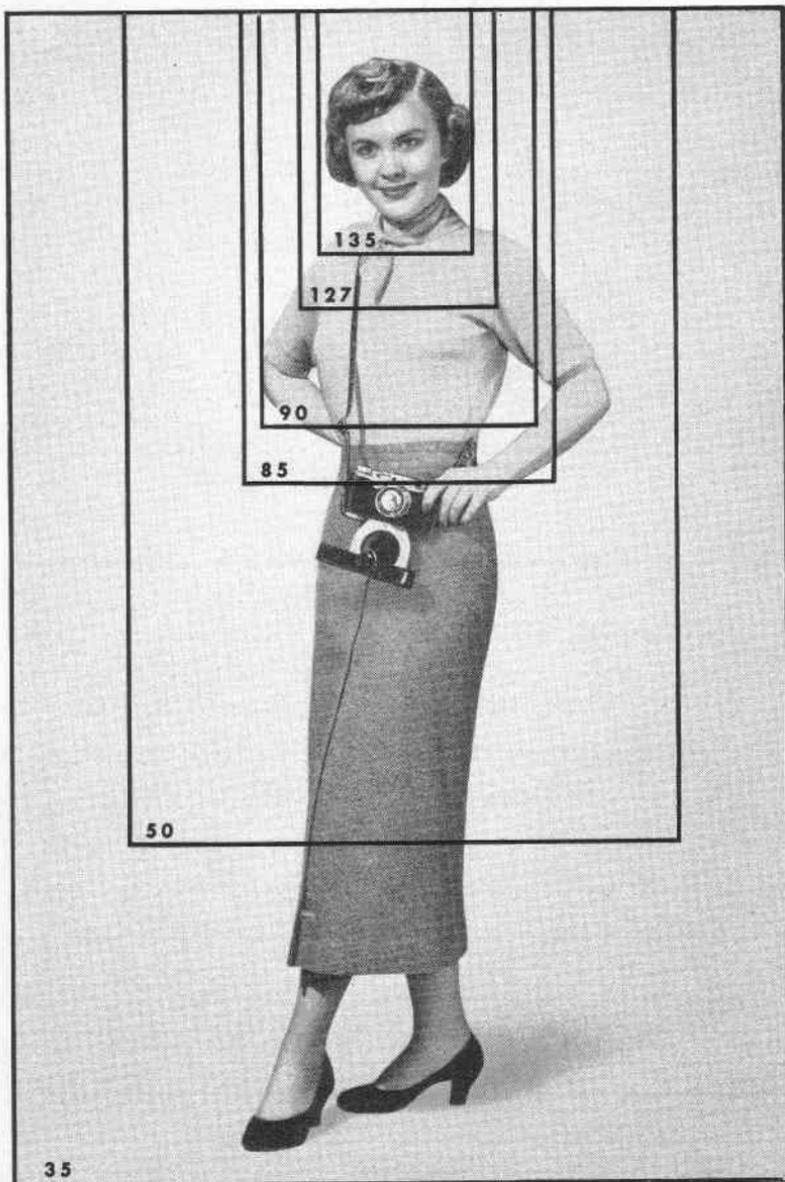
The new Universal Viewfinder is built on the principle of a small periscope. The vision does not go directly through the viewfinder, but the eyepiece is located beneath the direct line of vision. Unlike the earlier viewfinders, the new viewfinder shows the image rightside up and exactly as you would see it with the naked eye, except the image is in miniature. Viewing the image exactly as it is, obviously is a great advantage especially when following moving objects.

The Universal Viewfinder is a must when using any of the NIKKOR lenses other than the standard 50 mm f/2 or f/1.4 lenses.

### **PARALLAX**

The term parallax refers to the adjustment that is made between the scene viewed through the viewfinder and that seen in the camera lens. Because the viewfinder may be higher or lower than the camera lens, compensation must be made for this difference. In focusing at a distance of 12 feet or less, the viewfinder can be tipped up or down to correlate with the camera lens, so the actual picture will not be chopped off at top or bottom.

**COMPARATIVE FIELD COVERED BY  
VARIOUS FOCAL LENGTH LENSES  
*As Seen Through The Universal Viewfinder***



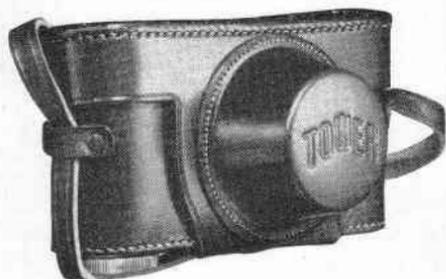


## CAMERA CARRYING CASE

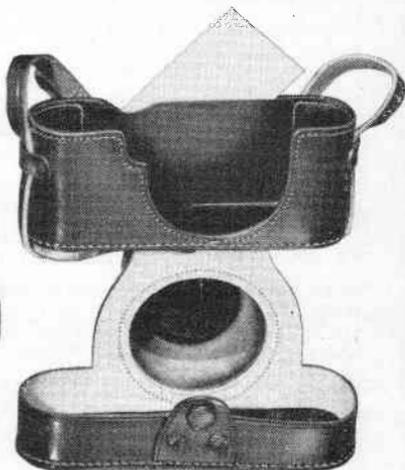
Although the carrying case for the TOWER 35 mm Camera is actually an integral part of the camera, it is considered an accessory. This case is the ever-ready type—that is, the camera can be used, and all adjustments made, without removing camera from case (Illust. 13).

A snap button on the front permits the frontal piece to drop down. The camera is held in the carrying case by a tripod screw. The neck strap can be adjusted to any desired length. ALWAYS keep the neck strap around your neck to eliminate the possibility of dropping your camera.

The case is made of fine russet-brown cowhide, lined at top and bottom with plush or velvet.



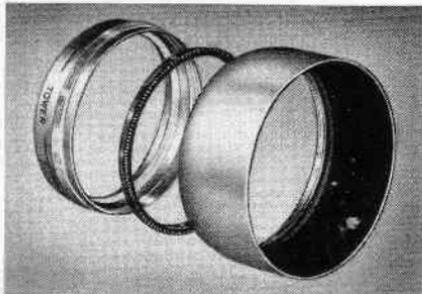
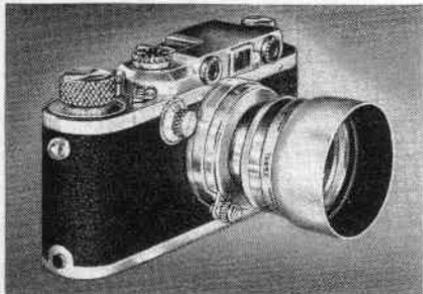
CLOSED



OPEN

## TOWER LENS SHADE AND FILTER HOLDER

TOWER has produced a new adapter ring with retaining ring and lens shade. This filter holder will accommodate any regular Series VI filters (TOWER, EASTMAN, etc.). This unit permits use of the filter alone, and/or with the lens shade, which screws easily onto the adapter ring. (See Illust. below).



Your fine new TOWER 35 mm Camera is extremely versatile. It may be used with a wide variety of special accessories to enable you to take any type of picture you desire. Consult Sears general catalogs or visit the camera department of any large Sears store for additional accessories not mentioned in this booklet.

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Each part of your TOWER Camera has been made with microscopic precision. Special instruments have been made to check and repair working parts of the camera. Sears has established a special repair service with adequate parts and "know-how" for the TOWER 35 mm camera. If your camera needs repair, return it to the store from which you purchased it. If this repair is within the terms of the guarantee, return certificate fully filled out with camera, and repair will be free of charge.