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ASAHI OPTICAL CO., LTD.

980.Maenochō, Shimura, Itabashi-ku, Tokyo, Japan.

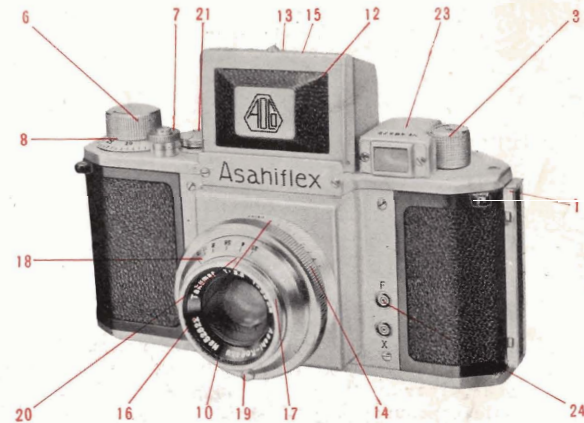
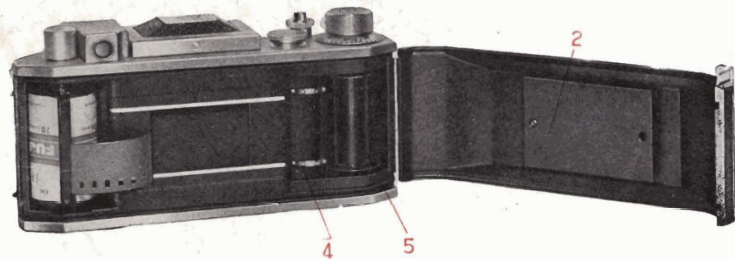
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# How to use **Asahiflex**



Donated to [www.orphancameras.com](http://www.orphancameras.com)

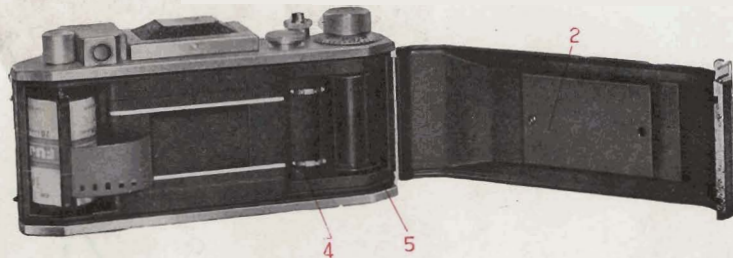
- |                   |                          |                              |
|-------------------|--------------------------|------------------------------|
| ① Rear cover lock | ⑦ Shutter release button | ⑬ Hood lock                  |
| ② Rear cover      | ⑧ Exposure counting dial | ⑭ Lens barrel                |
| ③ Rewinding knob  | ⑨ Rewinding clutch       | ⑮ Magnifier                  |
| ④ Sprocket        | ⑩ Taking lens            | ⑯ Distance scale, index mark |
| ⑤ Take-up spool   | ⑪ Lens cap               | ⑰ Diaphragm ring             |
| ⑥ Winding knob    | ⑫ Reflex finder hood     | ⑱ Aperture index mark        |



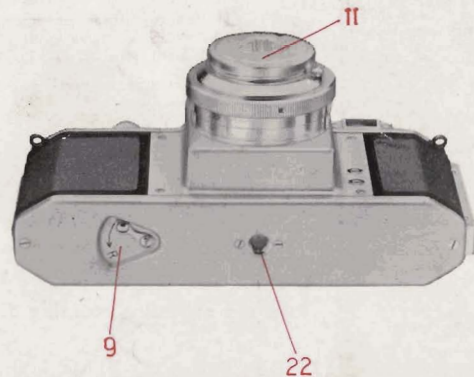
## Asahiflex Model II

With Takumar 3.5/50mm

- |                   |                          |                               |
|-------------------|--------------------------|-------------------------------|
| 1 Rear-cover lock | 7 Shutter release button | 11 Hood lock                  |
| 2 Rear-cover      | 8 Exposure counting dial | 12 Lens barrel                |
| 3 Rewinding knob  | 9 Rewinding clutch       | 13 Magnifier                  |
| 4 Sprocket        | 10 Taking lens           | 14 Distance scale, index mark |
| 5 Take-up spool   | 11 Lens cap              | 15 Diaphragm ring             |
| 6 Winding knob    | 12 Reflex finder hood    | 16 Aperture index mark        |



- |                                 |
|---------------------------------|
| 17 Pre-set aperture lever       |
| 18 Pre-set aperture index mark  |
| 19 Shutter speed dial           |
| 20 Tripod socket                |
| 21 Eye-level optical viewfinder |
| 22 Flash cable socket           |





# Asahiflex Model II

With Takumar 3.5/50mm



with Takumar 2.4 /58mm

14 17 19



**Type** Single - lens reflex

**Film** 35 mm film (Daylight loading cartridge used)

**Picture size** 24 mm × 36 mm (Leica size). 20 or 36 exposures.

**Standard lens** 1 "Takumar" 50 mm 1:3.5 (Helicoid lens barrel, with pre-set aperture ring)  
 2 "Takumar" 58 mm 1:2.4 (Helicoid lens barrel, with pre-set aperture ring)

**Shutter** Focal-plane shutter.  
 Speed range : B,  $\frac{1}{25}$ ,  $\frac{1}{50}$ ,  $\frac{1}{100}$ ,  $\frac{1}{200}$ ,  $\frac{1}{500}$

**Mirror** Quick-return mechanism

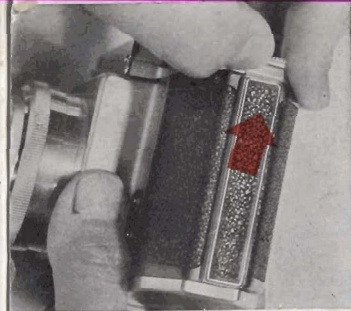
**Focusing** The focusing is secured by turning the lens barrel with observing the image produced on the ground glass by means of the mirror.  
 Focusing range (when extension tube not used)  
 2.4/58 mm ... from 2 ft. to infinity  
 3.5/50 mm ... from 2.5 ft. to infinity

**Finder** In addition to the reflex view-finder, eye-level finder is equipped.

**Synchronizer** Two terminal sockets "X" and "F" of European type

**Double exposure prevention** Double exposure can be prevented as the shutter and the film are wound up simultaneously. Special device is made on to the camera to prevent from being exposed while the winding up. (However, if desired, double exposure may be made by using the lever "R".)

**Lens interchange** "Screw-in" type

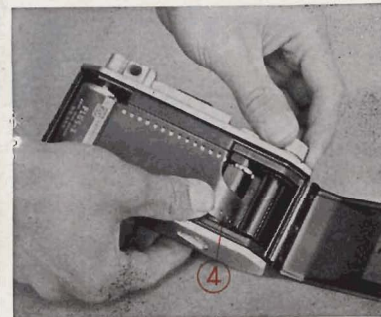


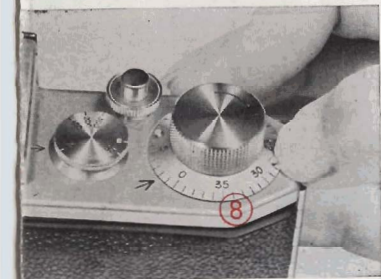
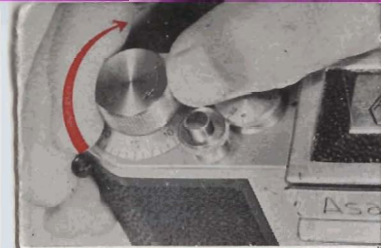
## I How to load film (Daylight loading cartridge)

First, open the rear cover<sup>②</sup> by pulling the rear-cover lock<sup>①</sup> all the way out. Then pull out the rewinding knob<sup>③</sup> and place the cartridge in the camera.

After placing the cartridge in the camera, draw

out a few inches of the film and insert the film leader into the slot of the take-up spool<sup>⑤</sup> making sure that the sprockets<sup>④</sup> properly catch the perfora-





tions of the film. Turn the winding knob⑥ in the direction of the arrow to ascertain that the film is properly wound onto the take-up spool. Close the rear cover② and push down the rear-cover lock①.

Now your camera is loaded, but, while you were loading the film, some length of the film was probably exposed to light.

For the purpose of advancing this exposed section of the film, turn the winding knob⑥ until it will go no further; then press the shutter release button and give the winding knob⑥ another full turn. Repeat this operation twice.

In this way, any exposed is wound onto the take up spool and your camera is ready for the first exposure. However, before taking the first shot, turn the exposure counting dial⑧ located at the

base of the winding knob⑥ and adjust the figure 1 on the dial directly opposite the index mark.

## II How to unload film

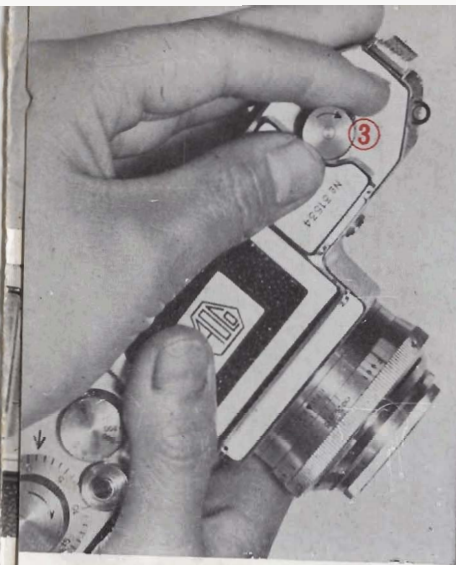
After the last exposure, push the rewinding clutch⑨ located on the bottom of the camera to the position "R"

When the rewinding clutch⑨ is set to the position "R," the sprockets are freed from the film.

Then lift the rewinding knob③ and turn it in the direction indicated by the arrow. By doing this, the exposed film which is wound onto the take-up spool⑤ is returned to the cartridge.

When the exposed film is returned to the cartridge, open the rear cover and remove the cartridge from the camera. (As soon





as the film leader of the exposed film is pulled out of the slot of the take-up spool ⑤, the rewinding knob ③ will turn more freely indicating that the entire film has re-wound.

After removing the cartridge from the camera, place it in a container to prevent the film from being exposed to light. Do not load or remove the film in direct sunlight.

### III How to take pictures

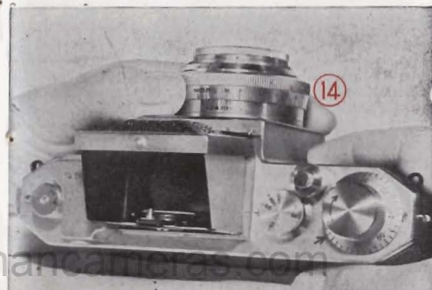
#### I Focusing

Remove the lens cap ⑩ from the lens ⑪ and open the view-finder hood ⑫ by pushing up the hood lock ⑬. (To close the hood, fold the four sides down in the following order; rear, left, right and front).

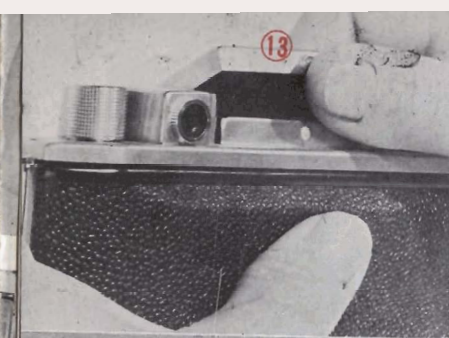
The image formed by the lens ⑩ is reflected by a mirror set at an angle of 45° and is reproduced on the focusing glass. This image is identical with that which will be produced on the film.

To focus, turn the lens barrel ④ while observing the image produced on the focusing glass.

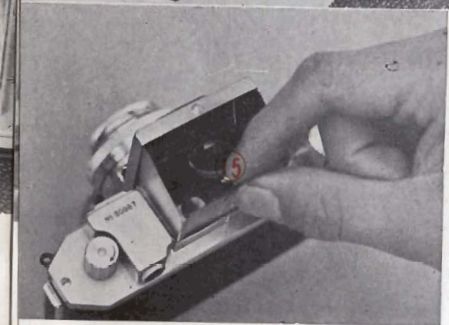
When a clear image is produced on the focusing glass, it will mean that an accurate focus has been secured on the film plane.







In order to ensure accurate focusing, a magnifier<sup>13</sup> is attached to the viewfinder hood. The magnifier will be set parallel to the focusing glass if the lug is pulled up. Place your eye as close to the magnifier as possible.



Because the accurately focused image produced on the focusing glass is identical with that which is produced on the film, you can determine the result beforehand.

## 2. Distance scale and depth of field.

The distance to the subject is shown by the figures 2.5, 3, 5, 7, 10, 15, 25, 50 and imprinted on the lens barrel (see Photo).

When a clear image is produced on the focusing glass, the distance to the subject will be indicated by the index mark<sup>16</sup>.



The figure 3.5, 8 and 11 on both sides of the index mark<sup>16</sup> indicate lens aperture. Any type of lens has a depth of focusing field. By depth of focusing field is meant that an accurate focus is secured at a certain range in the foreground and background when the lens is focused on an object.

When the opening is decreased (or, in other words, when the iris diaphragm scale is adjusted to a larger figure), the depth of focusing field increases.

When the diaphragm ring is set at 3.5, 8 and 11 the depth of focusing

field is shown by the figures on both sides of the index mark<sup>⑯</sup>. For instance, when the figure 15 on the distance scale is adjusted directly opposite the index mark and the diaphragm ring is set at 11, these figures will indicate that the depth of focusing field ranges from 10 ft to infinity and that focus can be secured on any subject within that range.



2.4 / 58mm

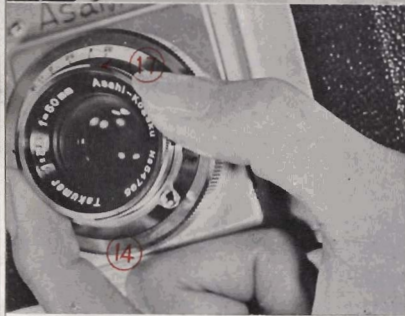
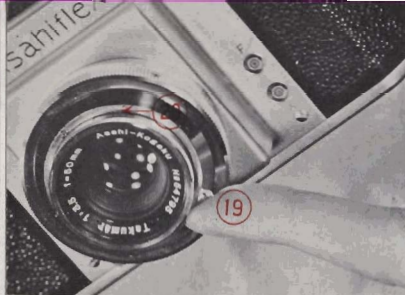
### 3. Lens opening

After an accurate focus is secured, determine the lens opening. The diaphragm ring<sup>⑰</sup> is located at the foremost section of the lens barrel<sup>⑭</sup>. Adjust the figures 3.5, 4, 5, 5.6, 8, 11 or 16 imprinted on this ring directly opposite the index mark<sup>⑱</sup> in accordance with the existing light condition.

Besides its relation to the depth of focus, the lens opening is an important factor in determining the exposure time. The diaphragm ring of the ASAHI FLEX has been so designed that the amount of light admitted decreases by approximately half whenever it is moved to a larger figure.

### 4. How to use the pre-set aperture lever.

The advantageous feature of a single-lens reflex camera is the fact that the actual result can be determined while securing the focus (Even the exact degree of blur of the background can be seen beforehand). Nevertheless, when the diaphragm ring is set at the desired lens aperture, the image produced on the focusing glass is sometimes too dark. Thus, it is sometimes extremely difficult to secure accurate focus. In such instances, the diaphragm is usually fully opened while securing focus. However, this gives rise to inconvenience owing to the fact that the diaphragm must be adjusted after securing focus.



How to use the pre-set  
aperture ring ①.....②

The pre-set aperture ring has been designed in order to eliminate this inconvenience. By setting the pre-set aperture ring beforehand, the diaphragm can be left wide open while securing focus. After accurate focus is secured, and before pressing the shutter, give the diaphragm ring ① a turn and the ring will stop automatically at the desired lens opening.

The pre-set aperture ring is operated in one of the following two ways:

① Catch the pre-set aperture lever ① with your fingertips and adjust the red line to the desired figure (for instance, 5.6). Leave the diaphragm wide open (or in other words, at the figure 3.5) while securing focus. Before pressing the shutter release, turn the iris diaphragm ring a turn and it will stop at the desired aperture.

② Hold the iris diaphragm ring as shown in the photo and adjust it to the desired figure (for instance, 5.6). The pre-set aperture ring will move simultaneously and stop at the figure 5.6.

The focusing operation can be conducted with the iris diaphragm set at the desired opening. However, if the image on the focusing glass is too dark, the lens aperture can be opened fully; and, **before pressing the shutter release button**, give the ring a turn and it will stop at the desired opening.

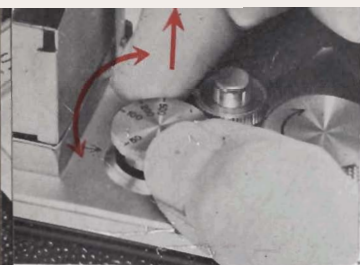
When returning the pre-set aperture ring to its normal position however, always use the lever.

## 5. Shutter speed

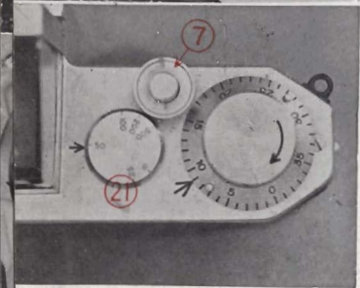
The ASAHI-FLEX is equipped with a focal plane shutter with speeds of B,  $\frac{1}{25}$ ,  $\frac{1}{50}$ ,  $\frac{1}{100}$  to  $\frac{1}{500}$  sec. These figures are imprinted on the shutter speed dial ②. To adjust the shutter speed, simply set the desired figure directly opposite the index mark.

To adjust the shutter speed, lift the shutter speed dial ② and turn it until the desired figure is directly opposite the shutter speed index mark. When the shutter speed dial ② is set at B (Bulb), the shutter opens during the time the shutter release button is pressed. Thus, when it is adjusted to B, it is advisable to use a tripod in order to prevent the camera from moving. The tripod should be secured into the tripod mount (22).

To make time (T) exposures, unscrew the ring around the shutter release



⑰ and mount a cable release equipped with a time exposure lock attachment.



Do not stone the camera with the shutter wound. After you have taken the desired number of pictures, put the lens-cap on the lens and press the shutter release. Later, when you wish to make an exposure, set the rewinding clutch⑨ located on the bottom of the camera to the position "R", and then turn winding knob. By doing so, the shutter alone will be wound and the film will not advance. Then, return the rewinding clutch to the original position. In this way, the shutter can be wound without wasting any film.

## 6 . Composition

After accurate focus is secured, and lens opening and shutter speed are properly adjusted, compose the subject by carefully observing the image on the focusing glass.

When taking snapshots or pictures of moving objects, use the eye-level viewfinder⑳. In this case, determine the distance to the subject beforehand, by utilizing the reflex viewfinder or the distance scale⑱.

The eye-level viewfinder⑳ also is handy in case composition of subject with the reflex viewfinder is difficult for instance, when taking shots while holding the camera vertically.





Press the camera close to your cheek to prevent moving and press the shutter release while placing your eye as close to the magnifier as possible.



After securing accurate focus by utilizing the magnifier, fold the magnifier and compose the subject while holding the camera at the height of your chest.



## 7. Exposure

To make exposure, press the shutter release ⑦ gently while holding the camera firmly. By doing so, the reflector-mirror and which produces the image on the focusing glass flips up by means of a spring, and during this short interval, the shutter operates and the film is exposed.

When the shutter release

Determine the distance beforehand and compose the subject through the eye-level viewfinder.

⑦ is pressed, the shutter speed dial ② rotates; therefore, do not touch this dial when making the exposure.

When the shutter button is released, the reflector-mirror returns to its original position, thus enabling you to ascertain the result, or to compose the next picture.

## 8 Winding of film

To advance the exposed part of the film, turn the winding knob ⑥ in the



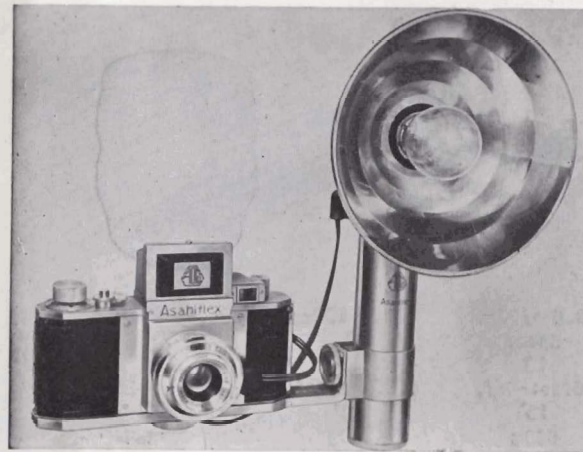
direction of the arrow, until it goes no further. This operation will also set the shutter for the next exposure. The simultaneous winding of the film and shutter prevents double exposures. When the winding knob is given a full turn, the exposure counting dial® automatically registers the advance by showing one graduation.

Determine the distance beforehand and hold the camera against your forehead as shown in the photo and compose the subject through the eye-level viewfinder. This is the best way of holding the camera when making exposure from such a position.

## 9. Flash synchronization

When the special ASAHIFLLEX synchro-flash unit is plugged into the flash cable sockets, it will synchronize accurately with all shutter speeds.

Consequently, the ASAHIFLLEX is capable of making excellent exposures indoors or even at night at ordinary shutter speeds



	Time-Lag	Light
Terminal "F"	$15 \pm 2 \frac{7}{8}$	FPclass bulb
" " "X"	0	Strobo-Light

Always use focal plane shutter flash-bulbs for (FP)

## Takumar Lenses

Besides the standard lens, the following types of lenses are interchangeable with the Takumar lenses for the ASAHIFLEX. All of them are superior coated lenses and all are equipped with pre-set aperture ring except the 500mm lens.



Lens ..... f 3.5 135mm  
 Lens elements .. 5pcs.  
 Min.aperture ... 16  
 Distance scale .. 6feet~inf.  
 Angle of view ... 18°  
 Weight ..... 500g



f 3.5 100mm  
 3  
 16  
 4.5feet~inf.  
 24°  
 280g



f 1.9 83mm  
 7  
 16  
 3.5feet~inf.  
 29°  
 440g



f 2.4 58mm  
 5  
 24  
 2 feet~inf.  
 41°  
 200g



f 3.5 50mm  
 4  
 16  
 2.5feet~inf.  
 46°  
 180g



f 5 500mm  
 2  
 16  
 32 feet~inf.  
 5°  
 2,850g

### Remarks

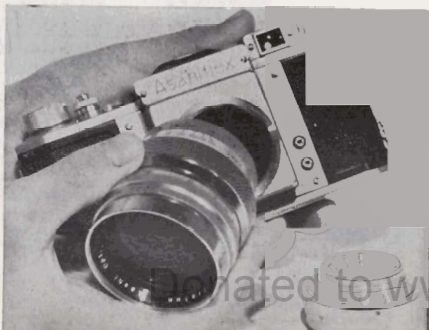
1. Keep the camera away from dust and moisture.
2. The dirt on the lens have to be removed with well washed bleached cloth.  
 The dust on the mirror must be cleared off with feather or spray.

## 10. Interchanging lenses

Because the lens barrel is screwed onto the camera body, lenses can be interchanged without the least difficulty.

No matter what type of lens is used, an accurate image will be produced on the focusing glass. Thus, photographing with any of the large number of lenses available can be effected with the greatest of ease.

Do not interchange lenses in direct sunlight.



## 11. Close-up photography and copying

Because the image seen on the focusing glass of the ASAHIFLEX is formed by the taking lens and reflected by a mirror, there is absolutely no need of making parallax adjustment.

Therefore, the ASAHIFLEX is particularly suitable for close-up photography and copying.

When taking pictures of subjects closer than 2.5 feet, dismount the lens barrel and insert the extension tube between the camera body and the lens barrel. There are four types of extension tube. No. 1 ring is for photographing a subject at a distance of 40cm to 70cm. If the Nos. 1, 2 and 4 are used, the size of the image produced on the film will be identical with the actual size of the subject.





## Special ASAHIFLEX copying kit



As in the case of close-up photography, use the appropriate extension tube in copying. In order to give an even lighting to the subject to be copied, it is advisable to utilize the special ASAHIFLEX copying kit. By using it, reproduction of documents, old photos, paintings, etc., can be easily affected. Thus, it can be used very effectively particularly in schools, factories and laboratories.

The portable case of this kit can be used as the mat. All you have to do is to attach the stand and pantagraph to the portable case. Because this pantagraph enables you to lower or raise the camera with one hand, focusing as well as composition is greatly facilitated.

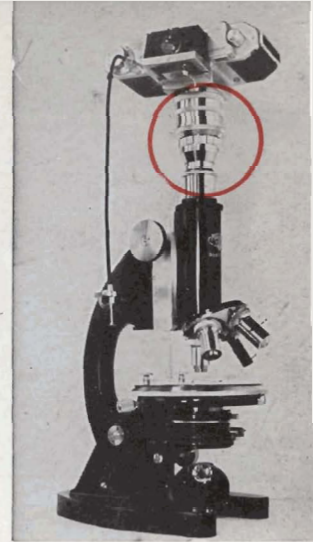
Moreover, owing to the fact that the camera mount can be adjusted to any angle, this kit can be readily used for photographing small objects at close range.

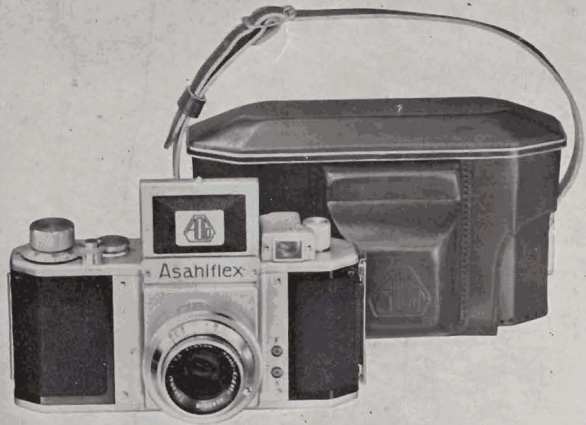
Extension tube attached to the standard 50mm lens will produce the following results.

Extension tube No	Distance from the subject to the film plane	
	Minimum	Maximum
No. 1	40.9 cm	70.1 cm
2	31.8	40.9
3	24.7	27.2
4	21.1	22.0

The ASAHIFLEX can also be used with excellent results in photomicrography, special photography and astronomical photography.

For photomicrography, a photomicrographic attachment is available.





*As ASAHIFLEX serves as varied types of camera.*

*Snap-shots for fun;*

*Close up picture taking;*

*Copying;*

*Micro-photograph;*

*Astrophotograph; etc.*

*All of the above mentioned can be performed  
through use of simple attachments.*

### Attention !

- (1) The speed adjusting dial may be turned either way to the right or the left. Keep in mind that the speeds arranged before winding up of the shutter can not be the same as those wanted for.
- (2) Accurate speed may not be obtained if the finger is touched on the speed adjusting dial when exposing film.
- (3) Leaving the camera for a long time with the shutter wound up has to be avoided as much as possible.
- (4) Do not wind the winding knob while pressing the shutter button as it may cause damage on the camera.