

# Instructions for use

## Voigtländer - Bessa

with optical finder

Adjust focus (front lens), shutter and aperture as usual. Set shutter (not necessary for Singlo).

View picture in one of the two finders.

Press camera firmly against face or body. Stand steady and release shutter by baseboard trigger release *l*.

Close camera; Press back the catch *e* in Bessa F/3,5, F/4,5, F/6,3 with delayed-action release; lift struts by button *k* in Bessa F/7,7 and F/6,3 without delayed action release. Raise baseboard.

Close optical finder by **simply closing the cover**. Now insert film.

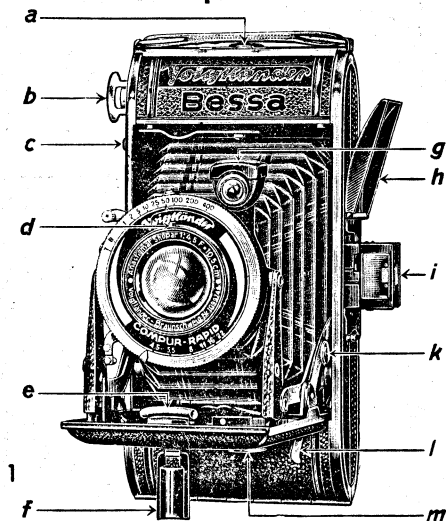
Press button *a* to one side and open out back of camera.

Insert empty spool in top chamber with slot facing key, film in lower chamber. The metal protecting covers must be opened out in both chambers.

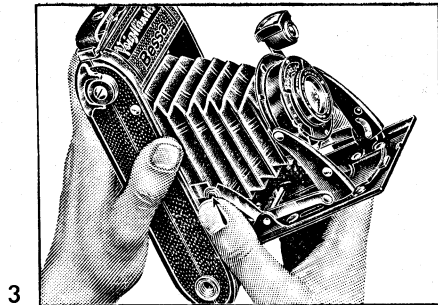
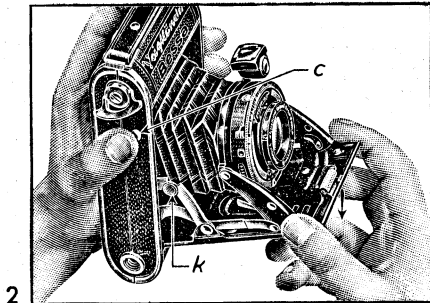
Pull out paper band (black side downwards) and thread tongue in slot in empty spool. Turn film key several times (must be pressed right in).

N. B. — Protecting paper must not wind unevenly at edge but must run evenly between the flanges of the empty spool.

Close camera, turn film to 1, take pictures.



- a) Back-panel catch
- b) Film winding-key
- c) Baseboard catch
- d) Focussing scale
- e) Automatic side struts release (not in Bessa F/7,7 and F/6,3 without delayed-action release)
- f) Baseboard support
- g) Brilliant finder
- h) Cover for optical finder
- i) Optical direct vision finder
- j) Side strut joint for closing baseboard in Bessa F/7,7 and F/6,3 without delayed-action release
- k) Trigger release under the baseboard
- l) Tripod screw-bush



### 1. Opening (Fig. 2)

Press the button *c* and evenly pull down the open end of the baseboard until the struts snap in at *k*. Do not pull with too much or one-sided force.

### and closing

In the case of the Bessa with Voigtar F/3,5, Skopar and Voigtar F/4,5 and Voigtar F/6,3, with delayed-action release: press the catch *e* in the direction of the camera body.

In the case of the Bessa with Voigtar F/7,7 and F/6,3 without delayed-action release: Hold the baseboard from below (fig. 3) **and lift struts** at the red buttons. **Do not press inwards**. The baseboard can now be closed without effort.

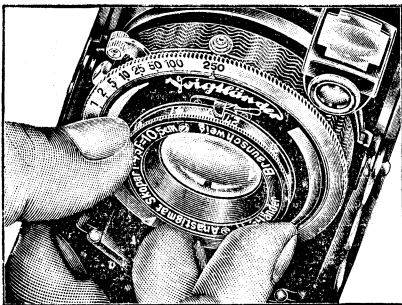
### ALTHOUGH

it is easy to operate — without first studying these instructions no attempt should be made to use this new Bessa. Otherwise something might suddenly go wrong — usually too late.

### In a precision instrument

such as the Bessa there are refinements of all kinds with which the user must make himself familiar. The following pages do not, therefore, apply only to the beginner. It need hardly be said that the more the camera is mastered, the better will be the results obtained.

Until section 7 (Loading the Bessa) practice with an empty camera:



4

## 2. Adjust the focus

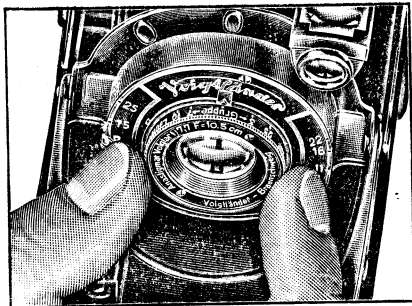
**Bessa F/3,5 and F/4,5:** The feet focussing scale is engraved round the edge of the front lens mount. Turn the front lens by the milled ring and set the focus against the mark, as shown in fig. 4.  $\infty$  = infinity, i. e. anything over 100 feet.

Snapshot adjustments are:  $\Delta$  at 12 feet and  $\bigcirc$  at 50 feet. If you use as small an aperture as F/8 — as you can almost always do with the highly sensitive Voigtländer film — the sharp zone will extend from 8 feet to 16 feet with focus set at  $\Delta$ , 20 feet to  $\infty$  with focus set at  $\bigcirc$ .

The following rule should therefore be noted:

- ! For snapshots close up, set at  $\Delta$ .
  - For snapshots at 20 feet or longer range, set at  $\bigcirc$ .
- Use an aperture of F/8.

4



5

Hyperfocal chart (at the back of the camera):

If you set the focus to a certain range, say 25 feet, then not only that point, but a certain zone will be sharp. At 25 feet and F/4,5, for example, everything between 19 feet and 36 feet will be sharp. This zone increases as the aperture diminishes. At 25 feet and F/11, it extends from 14 feet to 102 feet.

To read the depth-of-focus table, find the aperture in the left vertical column (e. g. F/8) and on the corresponding horizontal line there appears under each distance marking, the various distances covering the zone of sharpness (depth-of-focus) e. g., at F/8 when the lens is focussed at 6 feet, everything is sharp between 5 feet and 7 feet.

5

**Bessa F/6,3 and F/7,7.** Turn the front lens mount by the milled ring, as in fig. 5, until the red dot under the word indicating the required focus (landscapes, groups, portraits) or the distance in feet is beneath the indicating mark. The distinguishing words greatly facilitate focussing:

Portraits: sharpness extends from 5 feet to 8 feet.

Groups: sharpness extends from 10 feet to 23 feet.

Landscapes: sharpness extends from 35 feet to infinity.

N. B. — When the word "Portraits" is set, the lens is focussed on 5 feet, while at "Landscape" it is focussed up to infinity, so do not strain it by trying to turn the front lens farther on.

### 3. Stop Adjustment

You already know that the diaphragm increases the depth of focus, while at the same time it reduces the lens aperture and thus lengthens the exposure time. (The smaller the stop [aperture], the higher the stop number.) The stop numbers of the Bessa are calculated in such a way that each smaller stop requires double the time of exposure of the preceding one.

Exceptions:

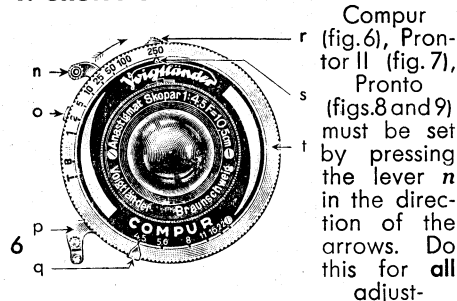
Changing from F/3,5 to F/5,6 —  
2½ times as long.

Changing from F/4,5 to F/5,6 —  
1½ times as long.

Changing from F/7,7 to F/11 —  
2½ times as long.

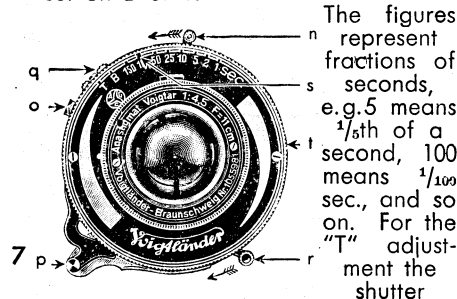
The stop lever is denoted by *q* in figs. 6 to 11.

### 4. Shutters :



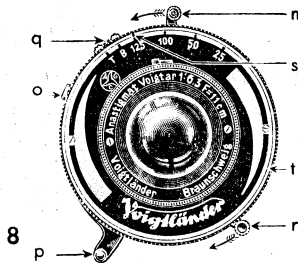
Compur (fig. 6), Prontor II (fig. 7), Prontor (figs. 8 and 9) must be set by pressing the lever *n* in the direction of the arrows. Do this for all adjust-

ments with the Prontor and Pronto, but with the Compur only when not set on B or T.



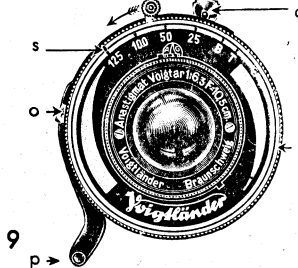
The figures represent fractions of seconds, e.g. 5 means 1/5th of a second, 100 means 1/100 sec., and so on. For the "T" adjust- ment the shutter

opens when the trigger is first pressed and closes when it is pressed a second time. For the "B" adjustment, however, the shutter remains open as long as the pressure on the release is maintained. The various markings are set opposite the mark *s* by revolving the milled ring *t*. All shutters are released by pressing down the trigger *l*



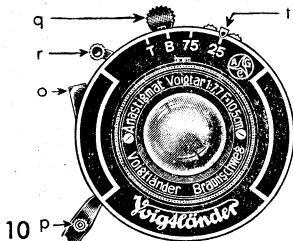
(figs. 1, 12, 13 and 15), which operates the release lever *p*. For further particulars see pages 7 and 8.

When adjusting and setting at the maximum speed of the Compur, some resistance



*q* is encountered, due to the engagement of a powerful spring. Turn the milled ring gently past the tension.

**Singlo with and without delayed-action release** (figs. 10 and 11). The indicator *t* is set to the desired time and the shutter is released by pressing down the release trigger *l*.  $25 = \frac{1}{25}$ ,  $75 = \frac{1}{75}$  sec. At *T* the shutter opens on the first pressure and closes on the second, while at *B* it remains open as long as pressure is maintained, immediately closing when pressure is relaxed.



**For all shutters:** If necessary, adjustment is possible between the times indicated, e. g. between  $\frac{1}{50}$  and  $\frac{1}{100}$  sec. =  $\frac{1}{75}$  sec. **Exception:** In the case of the Compur, do not set between the maximum speeds.



If absolutely necessary, the shutters can also be readjusted **after** setting. An exception here again is the maximum speed of the Compur.

## 5. Delayed action-release

**Compur:** Adjust and set lever as usual, then push button 6 r back and again set lever 6 n.

**Pronto and Prontor II:** Adjust speed and set shutter as usual. Push lever 7 r (or 8 r as the case may be) in the direction of the arrow.

**Singlo:** Push lever 10 r upwards, after setting to  $\frac{1}{25}$  or  $\frac{1}{75}$ .

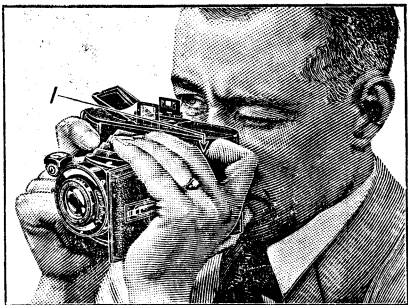
**For all shutters:** Release in the usual manner. The shutter operates only after the delayed-action mechanism has run down, so that you have about 10 seconds to return to your position. A slight click indicates that the shutter has been operated.

For B and T and the maximum speed of the Compur the delayed-action release must not be used.

## 6. Finder and release

When the camera is opened, the **optical finder** springs up into position. Use it for preference, since shots at eye level will then have the most natural perspective.

Hold the camera as in figs. 12 and 13, i. e. press it firmly against the face and look through the rear lens of the finder. The front lens indicates the exact angle of view. The **whole** rim of this lens must therefore be visible.



12

For pictures in the half-size,  $2\frac{1}{4} \times 1\frac{5}{8}$  in., bring up the small side mask into the frame; this mask is hinged to the front portion of the finder.

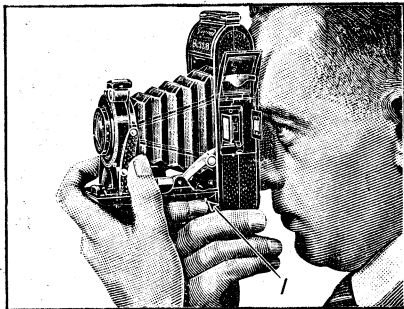
Close the finder by simply pushing down the cover, **do not touch the lenses.**

It is very important to become accustomed to holding the camera correctly. A little practice will soon determine the best position; figs. 12 and 13 can only suggest how the camera should be held.

The essentially practical trigger release on the baseboard, ensuring certain release without vibration, will be found very helpful.

To avoid shaky pictures, press down the trigger until it encounters a slight resistance, i. e. be "ready to

13



fire" as with a rifle, hold your breath and evenly pull back the trigger. Practice this until it goes smoothly, and in time you will be able to take  $\frac{1}{5}$  sec. and even  $\frac{1}{2}$  sec. exposures by hand.

When using the **Brilliant Finder**, hold the camera against your chest and look down vertically into the finder. Fig. 14 shows the limits for upright and horizontal pictures.

For exposures with the camera in the horizontal position, turn the finder round. Operate the baseboard trigger release with the index finger of the right hand (fig. 15) for upright pictures, and with the thumb of the left hand for horizontal pictures.

**For both finders:** Do not incline the camera forwards or backwards, as otherwise "falling lines" will result,

14

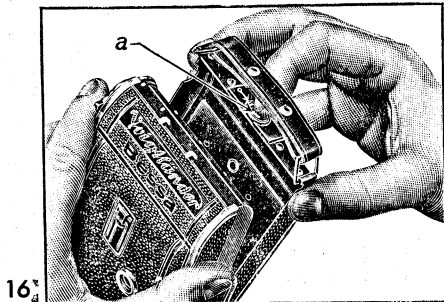


and do not hold the camera obliquely, or the world will seem to be on an inclined plane. (There are of course some cases where this may be intended.)

15



So far you have been practising with an unloaded camera, and now we come to the



16

## 7. Loading of the Bessa

Any  $3\frac{1}{4} \times 2\frac{1}{4}$  in. film, on wooden or metal spools, can be used. The film is inserted in the camera in weak daylight or (when in the open) in the shade.

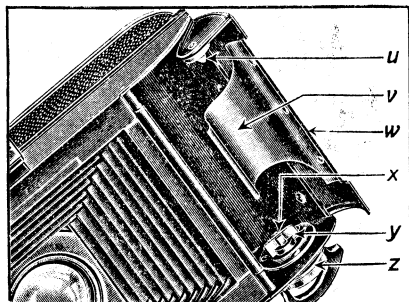
The loading is simple:

1. Open the back of the camera after pushing sideways the button 16 a.

2. Open out the film protecting covers at the top (17 w) and the bottom.

3. Put the empty spool in the top film chamber, after pulling out the film winding-key 1 and 19b as far as it will go. The slot in the spool must face the key, while the other end engages on the pin 17 u.

4. Replace the top film protecting cover, push in the film winding-key and turn until the catch 17 x or 17 y



17

engages the slot, when the spool will turn with the key.

5. Place the new film spool in the lower film chamber; do **not** tear off the paper band until this is done. Hold the protecting paper firmly and swing in the metal cover.

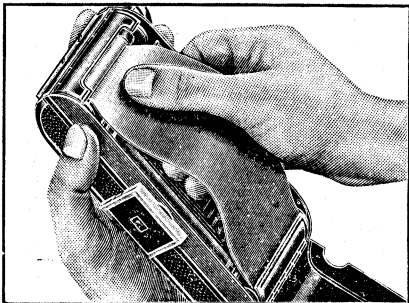
6. Pull out the protecting paper (fig. 18) and insert the point into the wide slot in the empty spool. The red (or green) side of the paper must lie uppermost.

7. Press the film key firmly inwards and turn three or four times until sure that the paper is being moved on. It must run exactly between the flanges of the empty spool and must not overlap on either side. If necessary straighten it by pressure with a moistened finger (fig. 19).

8. Close the back of the camera. **The round aperture at the top must**



18



engage in the groove 17 z on the film key.

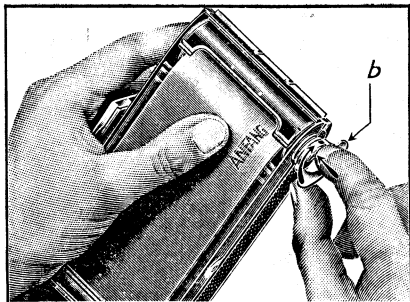
Take special care when a metal spool with a thin core is in the top chamber. If the back does not close smoothly, something has been done incorrectly, so do not use force!

9. Open the film windows by turning the milled knob between the windows to the right.

10. Wind the film key evenly until you see in the lower red film window, first several hands, then several dots and finally the number 1. Stop winding when the number 1 stays in the middle of the window.

11. When using panchromatic film (Voigtländer Bessapan), the film windows — after the winding has been done properly so that the correct film-number can be seen in the

19



window — are to be closed again by turning the milled knob to the left until the back stop.

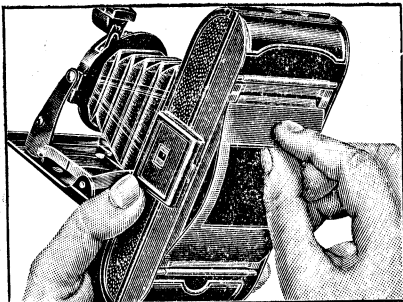
## 8. Small size picture device

enables 16 small pictures size  $2\frac{1}{4} \times 1\frac{5}{8}$  in. to be taken. Fig. 20 clearly shows how the grooved tongue must be inserted in the picture frame.

First insert the mask at the bottom, then bend gently and let it spring in at the top. It must then lie absolutely flat and be secure both at the top and the bottom.

**N. B.** — Above all see that the tongues of the mask are actually in the picture frame and not by mistake behind one of the rollers.

The optical finder also has a mask for small size pictures, mounted on



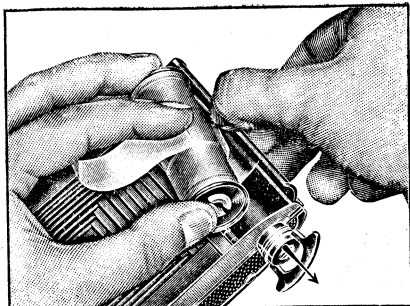
20

the front lens portion. This must be raised for all small size exposures. In the Brilliant finder, the four corners projecting into the field of view indicate to some extent the outline of the half-size picture, but it is better to use the optical finder.

## 9. The film transport

For the first exposure (either  $3\frac{3}{4} \times 2\frac{1}{4}$  in. or  $2\frac{3}{4} \times 1\frac{5}{8}$  in.) the figure "1" must be beneath the lower film window. For  $3\frac{3}{4} \times 2\frac{1}{4}$  in. exposures the figures 1 to 8 are set in succession in the lower window.

By means of a special device, the small picture mask also exposes the upper window. In order to divide the film, each figure is set once in the lower, and once in the upper window, i. e., first exposure "1" below, second



21

exposure "1" above; third exposure "2" below, fourth exposure "2" above, and so on.

**N. B.** — Get used to turning on immediately after every exposure, as otherwise double exposures will be frequent.

After making the last exposure, turn on until the protective paper is not visible in the lower film window. Open the back of the camera, hold the end of the paper securely and carefully turn on the film key a short distance. The film will thus be wound tightly; loosely wound films are susceptible to light, while on the other hand films wound too tightly will become scratched.

Now pull out the film key, and swing out the metal protecting cover with the full spool. Remove the full

spool. Hold it securely to prevent it from unwinding (fig. 21), fold over the end of the paper and secure it with the gummed strip.

## 10. Close-ups

An interesting sphere, embracing pictures of flowers and small animals, large portraits and reproductions. You will need the Focar lenses described below, which are simply placed over the lens. The focussing scale distances are then changed as follows:

a) **Skopar F/4,5, Voigtar F/4,5 and F/3,5** (Portrait-Focar lens 65 and Near-Focar 36).

by focussing on	the actual distance becomes:	
	Portr.-Focar 65	Near-Focar 36
∞	40 inches	20 inches
50 feet	37 "	19 "
25 "	35 "	18½ "
12 "	32 "	18 "
8 "	29 "	16½ "
6 "	26 "	16 "
5 "	24 "	15 "
only for F/4,5 { 4 "	22 "	14 "
{ 3,5 "	20 "	13 "

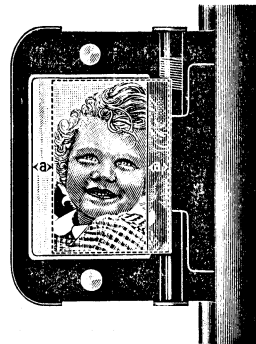
b) **Voigtar F/6,3** in Pronto shutter with delayed-action release (Portrait-Focar 66 and Near-Focar 35).

c) **Voigtar F/6,3** in Pronto shutter without delayed-action release and **Voigtar F/7,7** (Portrait-Focar 67 and Near-Focar 30).

by focussing on	the actual distance becomes:	
	Portrait-Focar 66 and 67	Near-Focar 30 and 35
Landscapes ∞	40 inches	20 inches
35 feet	36 "	19 "
23 feet	35 "	18½ "
Groups	32 "	18 "
10 feet	30 "	17 "
8 feet	28 "	16½ "
Portraits	26 "	16 "

Adhere **accurately** to the distance, measuring from the lens. For portraits, reduce the aperture to F/6,3 and for reproductions to F/12,5. The time of exposure remains the same as when working

without a Focar lens, i.e. it needs merely be lengthened in proportion to the aperture. When using lenses, the view finder does not give any more the exact size of the actual picture. As figure 22 shows, the actual picture will be displaced towards the camera-edge by  $\frac{1}{8}$ " (distance between camera and object not under 20") or by  $\frac{1}{4}$ " (distance between camera and



object not under 13") of the view finder field.

Portraits are best taken slightly in profile to get them as clear and natural as possible.

## 11. Yellow Filter

Yellow filters are indispensable for obtaining attractive landscapes, since they bring clouds into view. As a general rule, coloured objects should not be taken without yellow filters, since only with their use can the colour values of the various shades be correctly reproduced.

Voigtländer filters are ground as carefully as lenses from spectroscopically tested glass. They are firmly mounted on the camera lens mounts.

The times of exposure are lengthened as follows:

Films	Density "Moment"	Density "Normal"
Illustra	2X	4X
Bessapan	1,5X	3X

## 12. The Voigtländer Finder Magnifier

enlarges the small image of the reflex finder three times and shields the finder from confusing reflections. It

is merely placed on the finder and held close to the eye.

The magnifier can be focussed for long or short-sighted eyes. Magnifier No.6 also contains a mask for the small size pictures.

## The correct time of exposure

If you use a film with an extensive latitude of exposure, such as Voigtländer films you need not be unduly concerned at calculating exposures. With every Bessa fitted with a 4,5 or 3,5 lens a Voigtländer exposure calculator is supplied. Spare calculators can be bought also at your dealer's.

The Voigtländer films "Illustra" and "Bessapan" give great security against wrong exposure, as these double coated films have an extensive latitude for over-exposure, and above all they impart brilliance and tone richness to your pictures. "Illustra" is a highly sensitive Ortho film giving brilliant results, while "Bessapan" is a pan-chromatic stock of excellent quality, suitable for all types of picture, but particularly for exposures in artificial light.

**A SHORT LESSON** for "old hands". It is best to practice the first section with an empty camera.

Press button *c* to open the camera. Pull baseboard right down until struts snap in with a "click". The optical finder opens automatically.