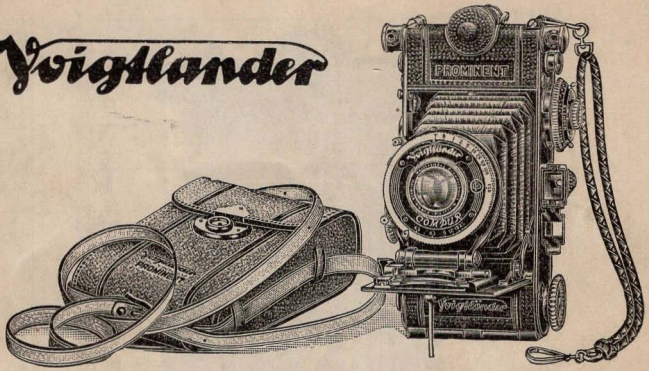
Voigtländer



PROMINENT

Instructions for use

Nr. 3167/233 engl.

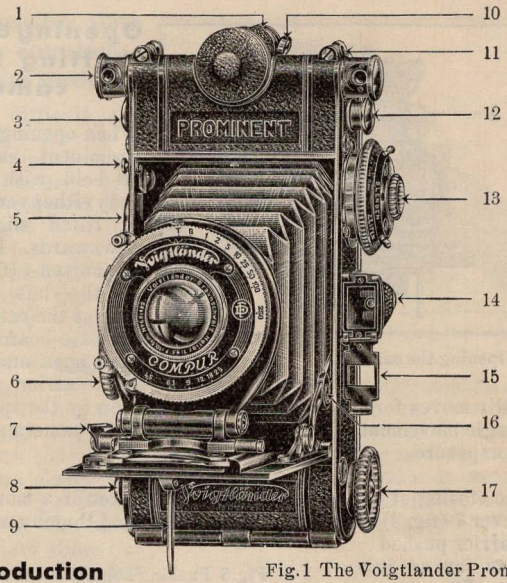


Fig.1 The Voigtlander Prominent

Introduction

The designer of the 'Prominent' Camera has, for the first time, combined in this model all those features which make it an instrument of the greatest precision and at the same time quick and easy to use. The ownership of such a masterpiece is a distinction in itself a distinction which, however, carries with it responsibilities! Before you thoughtlessly twist the knobs and press the levers of your new Prominent, read this booklet which will make you conversant with the various movements necessary for the correct handling of the camera. When you realize how each part of the apparently complicated mechanism is designed to make work with the camera easier, then you will have taken the first step towards becoming a 'Prominent' amateur.

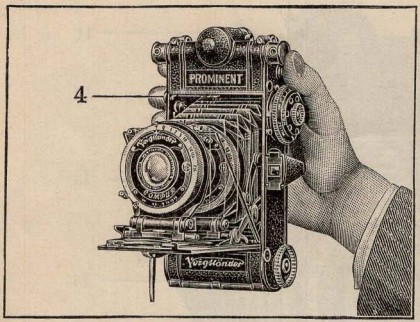


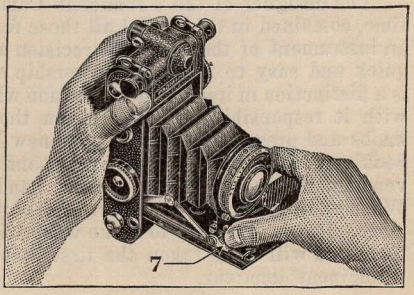
Fig. 2 Opening the camera

Opening and shutting the camera

When opening, the Prominent should be held with the body either vertical or tilted slightly downwards. Press the button 4 (fig. 2) on the left hand side of the camera, the base-board will then open and the lens carrier automatically moves forward to the correct position by the spring. One single movement is thus enough to make the camera ready for an exposure.

The closing of the camera is also the matter of a moment. The lever 7 (fig. 3) is pressed by the right-hand thumb and the lens carrier pushed back as far as it will go. The strut is automatically released and the base-board can be shut without a further movement (fig. 4).

Fig. 3 Pushing home the lens carrier



The new folding lens carrier remains firmly on the base-board when the camera is shut, so that damage need not be feared.

Focussing with the coupled range finder

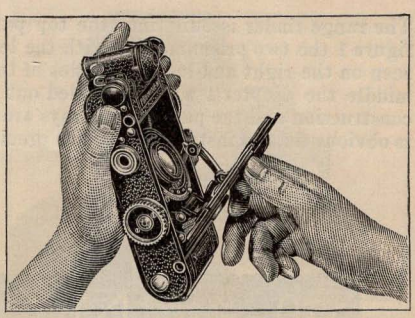
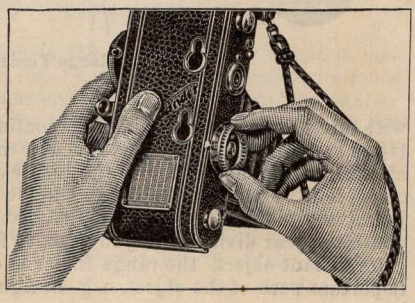


Fig. 4 Closing the base-board

The difficult and lengthy process of focussing becomes a pleasure with the Prominent. The amateur is no longer left to the uncertainties of guessing the distance from the camera to the object, because the focussing knob 6 (fig. 1) is coupled with and operates the optical range finder, thus automatically excluding any possibility of mistake. The mounting of the focussing knob on the side of the camera body (fig. 5) is in itself a completely new departure in camera design. This novel construction makes it possible to focus whilst the camera is still closed, and then, at the correct moment the base-board release button is pressed, the lens standard slides out to the correct position and all is ready for the exposure. On the edge of the focussing knob the distances from three feet to infinity (∞) are engraved. The camera is focussed on the distance which is opposite the pointer on the camera body (fig. 5).

Fig. 5 Turning the focussing knob



The range finder is built into the top part of the camera. In figure 1 the two prism mounts with the lens windows 2 can be seen on the right and left-hand sides of the camera, and in the middle the diopter 1 which is pulled out for use. The optical construction and the paths of the rays are shown in figure 6. It is obvious that an instrument of such precision must be handled

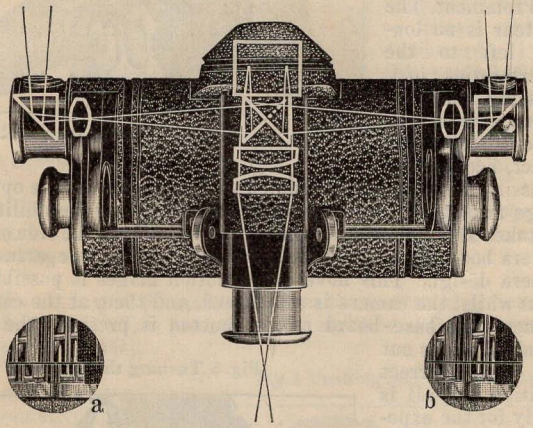


Fig. 6 The Range Finder

with care and consideration if it is to continue working perfectly. If you look through the extended ocular tube (fig.7) you will see an enlarged circular section of the middle of the picture which is cut in half by a horizontal line. The lower half moves in conjunction with the focussing mount so that the two halves of the picture appear divided. If you wish to focus on a nearer or more distant object, the range finder is directed on the most important part of the object, e. g. in figure 6a the wall of the

house. It is now very simple to turn the focussing knob until the top and bottom halves of the picture coincide with one another, as in figure 6b. As soon as this is the case, the camera is automatically, and with great exactitude, focussed on the point in question.

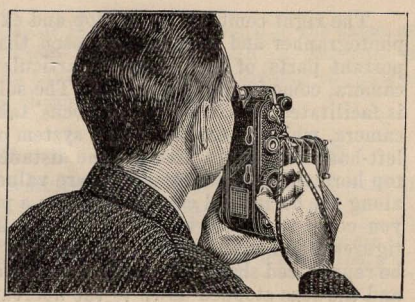


Fig. 7 Focussing with the range finder

Depth of Focus

The Heliar F/4.5 lens is a Voigtlander Anastigmat of world-wide repute which, of course, gives an absolutely sharp image on the film of every object in the focussing plane. All the objects to be included in the picture are, however, seldom in the same plane. If it is necessary that both near and distant objects are sharply defined on the film at the same time, we need 'Depth of Focus' which and this is true for any lens can only be achieved by 'stopping down'

For this reason there is the Iris diaphragm which is controlled by the lever 21 (fig. 8) moving over the aperture scale which is beneath the lens on the Compur Shutter. The smaller the corresponding number the larger the aperture and, for the sake of simplicity, the numbers are so chosen that the next smaller aperture always requires double the exposure of the one immediately preceding it. Thus the smaller the aperture the greater the 'depth of focus' and exposure necessary, from this it will be seen that the amount which you can stop down is controlled to some extent by the length of the exposure which can be given.

The right combination of stop and exposure rests with the photographer and must be so chosen that if possible, all important parts of the picture, particularly those nearer the camera, come in the sharp zone. The solution of this problem is facilitated by the 'Depth of Focus' table on the back of the camera, which is arranged on a system of coordinates. In the left-hand vertical column are the distances in feet, and in the top horizontal column the aperture values. If you now move along the horizontal column opposite a particular distance till you come to the division under a certain aperture value, the figures found here represent the zone in which all objects will be reproduced sharply if the camera is focussed on the distance and the lens stopped down to the aperture in question.

For measuring the depth of focus necessary for any particular picture, you should first direct the range finder on the nearest object which must appear sharp in your picture, and secondly on the object farthest away The distance is, in each case, read off the focussing knob. If, for instance, the reading for the nearest object is 10 feet and for the farthest 16 feet, the depth of focus must extend from 10 to 16 feet. By looking in the table you will find that a 'Depth of Focus' extending from 9' 6" to 16' is achieved by focussing on 12 feet and stopping down to F/8. This would be the correct combination of aperture value and focus for the above example.

"Close-ups" with the Focar lens

The nearest distance at which you can normally focus with the Prominent is 3,5 feet. If you wish to get still nearer to the subject, thus increasing the scale of the picture, you need do nothing more than push a Portrait or Wide-angle Focar lens on to the front cell of the Heliar. The Portrait Focar is for Portraits and still life pictures between 20" and 40" from the lens of the camera, whilst with the Wide-angle Focar lens, pictures of plants, insects, and other small objects on an even greater scale (from 13" to 20" from the lens) can be made.

When using the Focar lenses, the exposure is the same as would be normally used. The focal length of the lens is slightly shortened and thus without lengthening the extension the following close-ups are possible.

Portrait Focar lens No. 52

For Heliar F/4.5 in Prominent Camera

Focussing on	Objects are obtained sharp at
∞	40″
50′	37″
25′	35″
12′	31″
8′	28″
6′	25″
5′	23″
4′	21 1/2″
3,5′	20″

Wide-angle Focar lens No. 30

For Heliar F/4.5 in Prominent Camera

Focussing on	Objects are obtained sharp at
∞	20″
50′	19″
25′	18 1/2″
12′	17 3/4″
8′	16 1/2″
6′	15 3/4″
5′	15″
4′	13 3/4″
3,5′	13″

The Portrait Focar lens can be used at full aperture (F/4.5) for portraits. When using the Wide-angle Focar lens it is however advisable to stop down a little, primarily on account of the "Depth of Focus" The distance meter should not, of course, be used on objects so close to the camera, and it is best to use a measure starting from the Iris diaphragm as the distances must be exact. Close-up Portraits are best taken about three-quarters full face so that the perspective is more natural.

Compur Shutter with delayed-action (fig. 8)

The shutter is surrounded by the revolving ring 23 on which the letter *T* (long time exposure), *B* (short time exposure), and the instantaneous exposures from 1 to $^1/_{250}$th sec. are engraved. The instantaneous speeds are not engraved as fractions, but as whole numbers so that they are easier to read.

Instantaneous exposures. By turning the ring 23, the required speed is brought opposite the pointer above the focussing scale. The speeds from 1 to $^1/_{100}$th sec. are all on the same cam so that the shutter can be set between any two

numbers for speeds such as $^1/_{75}$th which is between $^1/_{50}$th and $^1/_{100}$th sec. The shutter must not, however, be set between $^1/_{100}$th and the highest speed nor between *B* and 1 sec. The shutter is set by pressing the lever 18 to the right (seen from the front) as far as it will go. In the ordinary way it does not matter whether you set the speed or the tension first. It is better, however, when using the highest speed to set the ring before the shutter is tensioned, as setting the ring to this speed after the shutter has been tensioned is rather difficult. The shutter can be released either by pressing the lever 20 or the wire release screwed into the nipple 19.

Time Exposures. The shutter must *not* be tensioned for time exposures, the tensioning lever 18 is locked when the ring is set to *T* and *B*, and if it is forced the shutter will be damaged. If the letter *B* is over the index the shutter will open when pressure is exerted on the wire release or the lever 20 and remains open as long as the pressure is continued. If you wish to expose, for instance, three seconds, you should count as follows, "One little second, Two little seconds, Three little seconds" At "one" press the release and at the end of "Three little seconds" relieve the pressure.

If the letter *T* is over the pointer, the shutter is opened by the first movement of the lever or wire release, and it shut by a second pressure on either of these. This position is used for exposures that will last for minutes (for example, night pictures) and when working with flash-light.

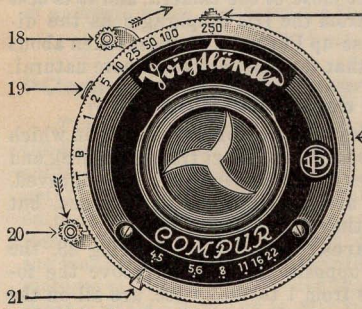


Fig. 8 The Compur Shutter

Delayed-action device. If you wish to take a photo of yourself, the shutter should first be set

and tensioned as above, then the knob 22 on the top of the shutter should be pushed in the direction of the engraved arrow when the lever 1 can be moved further to the right, thereby tensioning the delayed-action device. As with an ordinary exposure either the lever 20 or the wire release is pressed, this set the delayed-action in motion and the shutter will open after an interval of about 12 seconds. The exposure will be that which is indicated on the ring above the index. The delayed-action device cannot be used with the highest speed.

When the delayed-action movement has been released, the shutter is automatically ready for a normal exposure.

The Voigtlander Exposure Meter

On the right-hand side of the camera body you will find the optical exposure meter 13 (fig. 1) always ready for use. This handy little instrument is designed on the principle that the human eye can distinguish finer details the brighter the light. Measurement of the light intensity is, therefore, achieved with the aid of a revolving screen which consists of lines of increasing and decreasing width and intervals.

The Voigtlander exposure meter consists principally of four parts which are indicated by the arrows in figure 9. Firstly there is the middle plate with the film speed values, the three light filters, and nickelled knob 25; secondly, the aperture ring 24 with two small spigots; thirdly, the revolving ring 26 which is connected with the screen and on which the exposures are engraved, and lastly, the ocular 13 with a built-in prism.

In order to determine the correct exposure for any subject you first set one of the light filters opposite the ocular by turning the knob 25; the correct position can be felt. Under normal light conditions, the middle filter should be used. The dark and light filters are provided for very bright (sunlight) and weak (indoors) light conditions, so that the exposure meter is practically universal.

Next comes the setting of the aperture ring which should be turned by means of the two spigots until the red arrow is

exactly opposite the correct film speed in the scale on the middle plate. *In figure 9 for instance, the arrow is opposite 23° Scheiner.* The Scheiner degrees (° Sch.) correspond to the following speeds of Hurter & Driffield (H & D):

5° Sch. = 15 H & D	21° Sch. = 800 H & D
10° Sch. = 50 H & D	23° Sch. = 1300 H & D
15° Sch. = 200 H & D	25° Sch. = 2400 H & D
18° Sch. = 400 H & D	27° Sch. = 3500 H & D
20° Sch. = 600 H & D	30° Sch. = 7500 H & D

The filter and aperture ring do not usually need setting for each exposure.

Whilst looking through the eye piece, the camera should be held so that the lens is pointed towards the ground, and the filter of the exposure meter is directed towards the subject (fig. 10). This vertical position of the camera is very important as by this the eye is protected from stray light.

Now revolve the ring 26 until you can no longer distinguish the lines in the circular field of the eyepiece. If this is not possible, you should bring the darker filter into position. Look at the subject again for a few moments in order to accustom the eye to the light once more. Then, whilst looking again through the eye pice, do not hesitate, but turn the ring back until you can just distinguish the lines on the screen. It takes a little practice to be sure of this, but you will soon get used to it. Having set the screen, the mea-

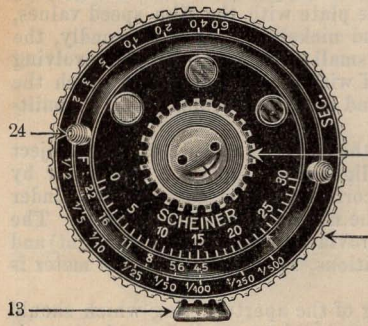


Fig. 9 The Voigtlander Exposure Meter

surement is ended. You can now read off the exposure scale the correct exposure for any stop value. In figure 9 for instance, the exposure is, $^1/_{100}$th sec. for F/4.5. For F/11, the shutter should be set to $^1/_{10}$th sec., i. e. the longer of the two exposures adjacent to the indicator.

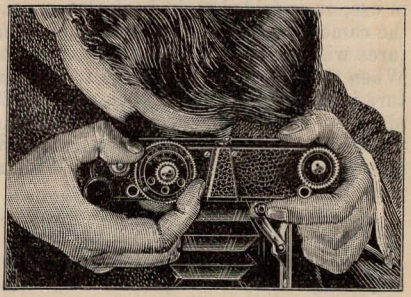


Fig. 10
Holding the camera for using the exposure Meter

As artificial light has a stronger or a weaker influence on the eye than on photographic emulsion, according to its actinic composition, exposures result which differ from one another. For this reason the values found by means of the exposure-meter should be:

doubled on using ordinary half-watt electric bulbs

multiplied by $1^1/_2$ on using the Nitraphot type of bulb

devided by two when using arc light or mercury lamps without special filters which absorb or weaken the short wave band of light.

The Optical Finder

To assist in determining the actual confines of the picture, the Prominent is equipped with a reliable optical finder 14 (fig. 1). If you look through the eye piece of the finder as depicted in figures 11 and 12, you will see a brilliant, sharp, and clearly defined picture of all that will appear on the film. On the front of the finder is a mask 15 (fig. 1) for use with the small picture frame. When using the frame for small pictures you should fold the mask in front of the finder lens; when not

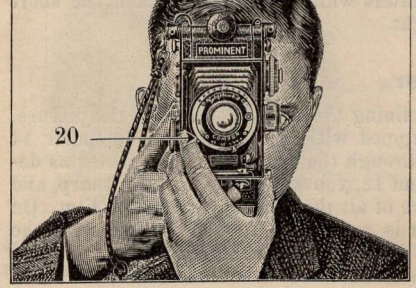
in use, it is folded right back flat on the finder body Since the camera is held at eye level when using the finder, the pictures will be in the perspective to which we are accustomed. When the subject is very close to the camera, the actual picture is slightly displaced, owing to the fact that the finder is placed to the side of the lens. This is known as parallax and must be taken into account particularly when using the small picture frame and the Portrait or Wide-angle Focar lens (see page 19).

Holding the Camera

The holding of the camera plays a large part in the success of your pictures, and as there is not always time to think about this when about to make an exposure, it is a good idea to practise with the camera unloaded until all the necessary movements are entirely subconscious. Whether you are taking full-size pictures ($2^1/_4$"×$3^1/_4$") or small ones ($2^1/_8$"×$1^3/_4$") has very little to do with the holding of the camera. You must, however, remember that when taking a small picture vertically, the camera must be held horizontally and vice-versa, i. e. exactly the opposite of the positions for full-size pictures.

The best way to hold the camera can be seen from figures 7, 11, and 12. Everything that will assist in holding the camera quite still must be taken into consideration as any shake during the exposure results in a double image in the picture. The novel carrying sling of the Prominent is of great assistance in holding the camera if it is

Fig. 11 Holding the Camera, Vertical



released from one hook so that it forms a long sling. The right hand can be kept in the sling during all the preparations for an exposure, as it does not get in the way when focussing, using the exposure meter, or making any other adjustment. When holding the camera horizontally, the sling is most useful when fixed to both hooks (fig. 12). As you are opening the camera and focussing you should take up a firm position. When using the finder the back of the camera is rested against the bridge of the nose and the forehead. The camera must be held so that the side edges are vertical, otherwise everything will be crooked in the picture. Further, when buildings are in the picture, the camera must never be tilted upwards or downwards, as this will result in all the vertical lines running together.

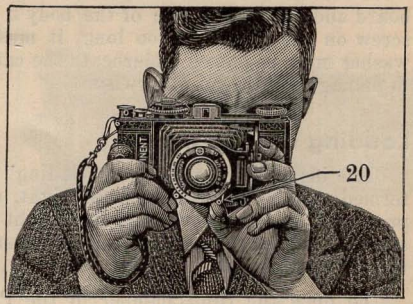


Fig. 12 Holding the Camera, Horizontal

The shutter is most comfortably released with the thumb on the lever 20 (fig. 11 and 12) you must however as with a rifle — find the release position and then press smoothly without a jerk. If you find that you are moving the camera when releasing with this lever, you had better use the wire release which should be held in a gentle curve so that the movement of the hand is not transferred to the camera.

Exposures of $^1/_{25}$ th sec. and shorter can be made quite easily out of the hand. If you have to expose longer, the camera must stand still so that you will either use the leg 9 (fig. 1) to stand the camera on a table or other flat surface, or the camera should be screwed on a tripod. For the latter purpose, two bushes are built into the camera, one in the base-

board and one in the side of the body 5 (fig. 1). Should the screw on the tripod be too long, it must be shortened or a washer must be placed underneath the camera as it is possible to damage the thread otherwise.

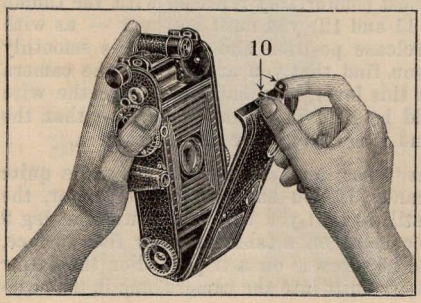
Loading the Prominent

The insertion of a film, or "loading" as this operation is termed, can be undertaken in daylight, as the actual film is protected by many layers of light-tight paper. You will, of course, not load the camera in brilliant sunshine, but at least in your own shadow.

To open the film chamber of the Prominent, hold the camera as depicted in figure 13 and press the two finger grips 10 on each side of the range finder diopter, when the back of the camera will open.

In the lower film chamber next to the hinge, there is on the right-hand side a knob 8 (fig. 14) which when pulled out and turned, remains in this position so that the round pin is withdrawn from the inside of the film chamber. On the left of this film chamber there is a convenient winding knob with a cut-out head 17 (fig. 14). This has on the inside, a key which transfers the movement of the filmkey to the spool. If you pull the knob outwards this key also disappears from the film chamber. It cannot, however, be arrested in this position so you must hold the film key out whilst you insert the empty spool in the film chamber

Fig. 13 Opening the back



(fig. 15). In doing this, you must be careful to see that the end of the spool with the slot in it is toward the film key, also that the film spool is placed in the camera quite parallel. If you now let the knob 8 (fig. 14) spring back into position, and turn the film key a few times to the right, it will automatically find the slot in the film spool.

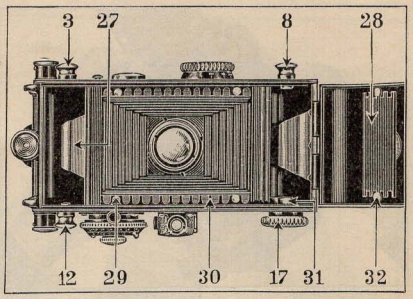
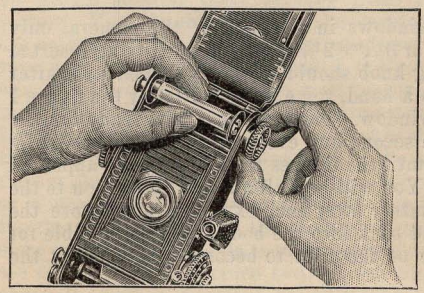


Fig. 14 View of the film chambers

In the top film chamber there are two knobs 3 and 12 (fig. 14) which can be pulled out and arrested by turning slightly. This is where you insert the new full spool so that the point of the red safety paper comes out on the side next to the range finder. When unwinding, this spool will then turn in the same direction, to the right, as the empty spool. Press the spool gently against the spring 27 (fig. 14) and release the knobs, when the pins will engage with the holes in the spool, and hold it firmly Now remove the seal of the new spool with your finger nail, and draw the beginning of the safety paper as far as the lower spool chamber. Insert the point through the long

Fig. 15 Inserting the empty spool



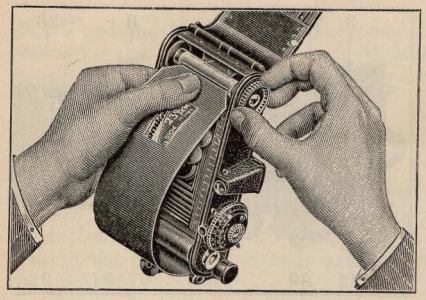


Fig. 16 Fastening the safety paper

slot of the empty spool (fig. 16) and wind the safety paper on to the spool by turning the film key once or twice. The ribbing 30 (fig. 14) on the long sides of the picture window are to prevent the film being sucked outwards by the bellows. You must be careful that the safety paper runs absolutely true, as otherwise the spools will probably jam.

If everything is correct, the back of the camera should be closed, by carefully pressing it home until the spring catches engage.

3 1/4" x 2 1/4" pictures

Of the two red windows in the back of the camera, only the top one is used for 3 1/4" × 2 1/4" exposures. Having inserted the film, the winding knob should be slowly turned until after about 10 to 15 turns a hand, some dots, and lastly the figure 1 appears in the top window The camera is now ready for the first picture; for the second and every other picture, the film key must be turned until the figures from 2 to 8 have appeared in the top window. You will be well advised to turn on to the next number immediately after each exposure, and before the lens carrier is pushed back into the body, as it is possible for the sensitive surface of the film to become scratched by the bellows.

Using the small picture insert

If, instead of 8 $3\frac{1}{4}" \times 2\frac{1}{4}"$ pictures you would like 16 $2\frac{1}{8}" \times 1\frac{3}{4}"$ on the one spool, you must use the small picture frame 28 which is made of spring steel and which, when not in use, is held between the two rivets 32 (fig. 14) on the inside of the camera back.

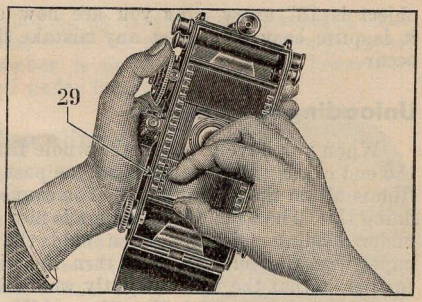


Fig. 17 Inserting the small picture frame

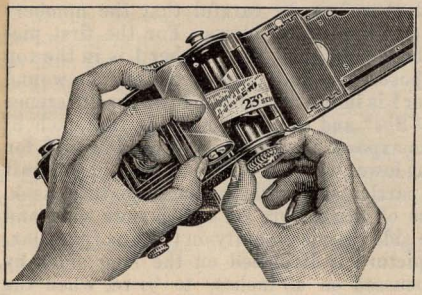
A small depression in the back makes the removal of the mask quite easy. On the long sides of the picture opening, there are four rivets 29 between which the mask can be easily fitted as in figure 17. Which way round the mask is inserted does not matter; you must, however, be careful that the middle rounded notches of the mask come under the rivet and that the edges fit the ribs of the picture opening correctly — When taking pictures with this mask, the strip of film is used with no waste, so that there is very little room between each picture. You should, therefore, be careful that the numbers are accurately placed in the film windows. For the first picture, the film must be wound until the number 1 is in the top window. Having exposed the first picture the film is wound until the same number 1 is in the bottom window The difference between using $3\frac{1}{4}" \times 2\frac{1}{4}"$ and the small size, is that each of the numbers 1 to 8 is exposed first in the top window and for the next picture in the lower window.—When using the Portrait or Wide-angle lens, particularly with the small picture mask, the finder shows less of the picture on the camera side and more on the opposite side than is actually on the film (parallax, see page 14). The picture is displaced on the long sides by about $\frac{1}{6}$ th when focussed on 40 inches, to $\frac{1}{3}$ rd. when the

object is 13" away. As you are now aware of this fact, it is quite easy to correct any mistake that might otherwise occur.

Unloading the Camera

When you have exposed the whole film, wind it on until the end of the safety paper has gone past the window, and the film is all on the bottom spool. You cannot overwind anything doing this. The back of the camera is now opened, as explained under loading (fig. 13), then hold the end of the safety paper with the left hand and turn the winding knob a little further so that the film is tightly wound but not too much, as you might then scratch the film, while a too loosely rolled film lets in the light at the edges. Now pull out the knob 8 and arrest it as described under loading, then take hold of the spool with the tips of the thumb and middle finger (fig. 18), holding the safety paper firmly with the index finger, so that the film cannot unwind. If you now pull out the film winding knob the spool can be removed quite easily from the spool chamber, and the end stuck down with the gummed slip which you will find ready prepared. All this can be done in daylight, but it is naturally better to do it in your own shadow, rather than in direct sunlight. The best way to pack the exposed film (provided you are going to re-load the camera immediately) is to wrap it up in the paper and put it in the carton of the new

Fig. 18 Taking out the exposed film



film. So as to avoid mixing up exposed and unexposed films, you should make some mark on the box. The empty spool in the top film chamber is now placed in the lower film chamber as described under loading.

Voigtlander Yellow Filters

A white heavy sky, black flowers, grey fruit blossom against a dead white sky, pale expressionless eyes and heavy freckles are things that no one wishes to see in their pictures; the colours of nature will have the right tonal values in your pictures only if you use really orthochromatic film. Be sure therefore, that your films have not only "orthochromatic" printed on the box, but really are colour sensitive.

The orthochromatism of the film cannot be fully utilised unless the blue rays are, to a certain extent, cut down by a yellowfilter. Do not use any filter, but see that you have a Voigtlander Yellow Filter, which is in a special mount to fit over the lens of your Prominent.

Using a really orthochromatic film, the "Moment" Filter requires about double the normal exposure, and for a greater degree of colour correction the "Normal" Filter which requires about 5 times the normal exposure should be employed.

To finish

We want you to get the best possible results from your Prominent Camera and this aim can best be achieved step by step. We would therefore advise you to give the developing and printing of your films to your dealer at least at the beginning. The correct development of a film is the most certain test for the mastery of exposure technique. The exposure and we must always remember this is the foundation of the photographic picture. If you have any difficulties, your dealer will be very pleased to help you.

Testing Certificate

The Anastigmat lens Heliar No. 788 128

Aperture 1:4,5 focal length 10,5 cm

fitted to Prominentcamera with Compur shutter

has been thoroughly tested and found accurate in

every respect, it has an actual focus of 104 mm.

Voigtländer & Sohn

Aktiengesellschaft

Braunschweig

Nr. 2025/1032

CERTIFICATE OF TEST

Voigtländer-Cameras are constructed with such precision, of only the finest materials, and have been tested so carefully, that you can always place entire reliance on their quality.

Voigtländer-Lenses are not only engraved "Anastigmat" but they really are what they profess to be in every sense of the name. They render not only sharp definition in the centre, but cover the plate or film with needle-point sharpness right up to the corners.

Voigtländer-Cameras and Voigtländer-Lenses are entirely manufactured and assembled in our own factories and are designed to suit each other. A "Voigtländer" may therefore be regarded as an instrument of the highest grade.

VOIGTLÄNDER & SOHN A.-G.

Lens No. 2276361

Camera and lens tested by

Wachs

Control Department

In the remote case of a complaint being necessary this certificate of test should accompany your letter.