

# SUPER NETTEL

## speed

Shutter speeds  
up to  $\frac{1}{1000}$  sec.

## sharp focus

Rotating wedge  
distance meter

## sure action

Zeiss Ikon  
precision work





Taken with Tessar  $f/2.8$  lens, focal length  
5 cm. (2") exposure  $\frac{1}{50}$ th second at  $f/8$

Super Nettel — meaning something even better than Nettel. The characteristics and potentialities that have distinguished the well-known Nettel as a sporting and press camera, and have made it justly famous for many years — even these have now been surpassed.

It is interesting to notice the new direction in which photographic apparatus and its construction has veered during the last few years. It happened this way: Formerly the enlarging of negatives was a process used as seldom as possible, in cases where it could not be avoided; nowadays — partly because of refinements in lens production and improved characteristics of the emulsions used — everyone makes small negatives and practically invariably enlarges them. We might almost say that enlarging has changed from a vice to a virtue. But if every negative that is made is to be enlarged later to five, ten, or even twenty diameters, it is clear that in every case they must be made sharp to the limit of sharpness, and that this must be done without special difficulty in handling the camera. This again has made it necessary to construct the camera extremely accurately, for if sharp focus is to be attained in every case, the action of the camera must be precise and rigid.

Thus there is nothing surprising in the fact that the Super Nettel — which has been constructed to take pictures of the very popular  $24 \times 36$  mm. ( $1 \times 1\frac{1}{2}$  inches)

size — shows the same precision construction and optical refinements that are characteristics of German scientific instruments. Some of the men, in fact, who help to build Zeiss Ikon miniature cameras have been recruited from workshops making microscopes and other similar instruments. But the older connoisseurs of cameras have also stood godfather to the Super Nettel—men in whose hearts the tradition of the Nettel, and its focal-plane shutter, are deeply impressed. This type of camera, fitted with a large-aperture Zeiss lens, the quality and accuracy of which can hardly be improved, has been retained, with the addition of a distance meter to improve its versatility and accuracy.

Photography with a miniature camera incorporating a distance meter coupled to the lens has already come as a revelation to many workers. Using the full lens aperture is no longer a risky process, for the necessary needle-sharp focus on the most important subject in the picture is done automatically, and no “stopping-down” is necessary as a precaution. Not only this—the very lack of great depth of focus gives a surprisingly effective result by concentrating attention on the main subject of the picture. We might take as an example several groups of people in an open square. Only one particular group is important to the picture: with a camera that focussed on the ground glass it would not be either an easy or short matter to arrange the focus satisfactorily—but with the rotating wedge distance meter of the Super Nettel focus can be arranged like lightning, and there is no need to think about the result at all.

The distance meter using rotating wedges is only to be found in Zeiss Ikon cameras. It has the special property

of being extremely sensitive optically, though extremely *insensitive* mechanically. Shocks and other external influences do not affect it at all. The Super Nettel is thus the right sort of camera for those who find it impossible to take much care of their "accessories", and sporting motorists, mountaineers, and pressmen will all find it an ideal instrument. If you enquire at your photographic dealer's, they will be very glad to show you the Super Nettel camera and let you examine it personally, for technical circles all agree that it is a surprising instrument. And your dealer will be able to tell you more about it than we can.



Taken with Tessar  $f/2.8$  lens, focal length 5 cm. (2'') exposure  $\frac{1}{50}$ th second at  $f/5.6$

## *The Camera from outside*

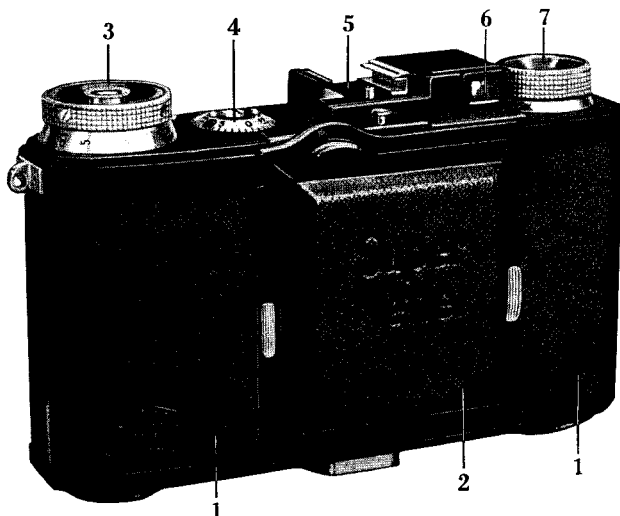


Fig. 1. Front view of the Super Nettel — closed

**Number 1**      *The light metal body*

13.2×7×4.2 cm. ( $5\frac{1}{4}\times 2\frac{3}{4}\times 1\frac{5}{8}$  inches) in size, weighing 600 grams (21 ounces)—so small that it is no trouble to carry about. The camera can always be taken about with one. The slightly flattened corners not only give the camera a graceful appearance, but also make it easier to hold in the hand. The covering of black grained leather gives a smart finish to the camera.

**Number 2**      *The lens baseboard*

This fits tightly against the camera body when closed, and keeps dust and dirt from the inner mechanism, the leather bellows, and the lens itself.

*Number 3      The shutter winding knob*

With this the shutter speed is adjusted. It is not possible to expose one section of the film twice, for as the shutter is wound up the film is wound on to a new section. The next time the shutter is opened—which is done by pressing the spring button in the centre of the winding knob—a new section of film must necessarily be in position.

*Number 4      The picture counter*

Automatically indicates the number of pictures that have been taken. Gives a total of 36 pictures—the number that can be taken without reloading the Super Nettel.

*Number 5      The finder shoe*

This is a special shoe arranged to accommodate certain extra finders necessary in special types of work.

*Number 6      The optical view-finder*

The view-finder is built into the camera body, and gives a very bright upright picture, that is also the right way round.

*Number 7      The film rewinding knob*

It is only on rare occasions, which we will mention later on, that this knob need be used.

It should specially be noticed that none of the external knobs of the camera move or turn during the time the shutter is working, which makes it impossible to touch one of them by accident and affect the working of the shutter.

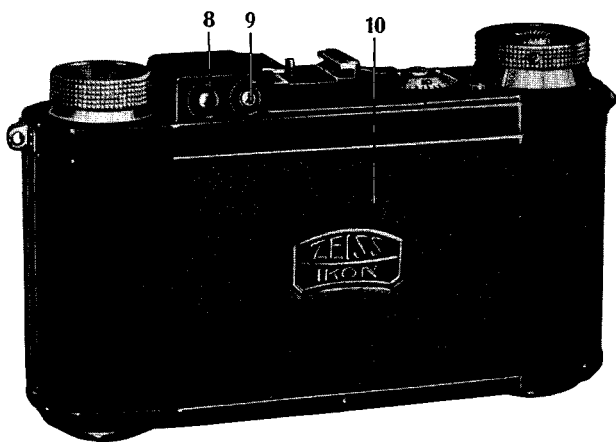


Fig. 2. Back view of the Super Nettel — closed

*Number 8  
and 9*

*The eyepieces*

These are for the view-finder and the distance meter respectively, and are placed near to each other, so that the eye can be changed quickly from one to the other.

*Number 10    The camera back*

To load and unload the camera conveniently, the back is detachable. This makes it possible also to clean the interior of the camera—a matter that must always be attended to in all instruments using perforated film. It is also possible to replace the normal back with a special one taking a plate-holder, so that the Super Nettel may also be used with plates. (See following pages for further information.)





Taken with Tessar  $f/3.5$  lens, focal length  
5 cm. (2") exposure  $\frac{1}{50}$ th second at  $f/4$

## *When the Camera is opened . . .*

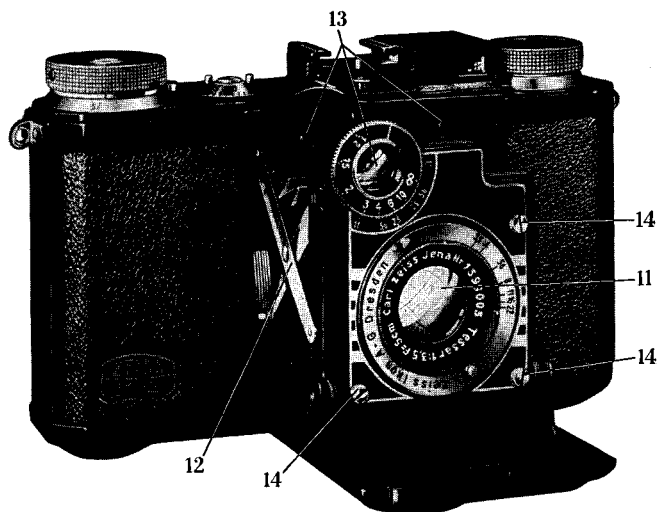


Fig. 3. Front view of the Super Nettel — open

### *Number 11 The lens*

The lens fitted to the camera is of the highest quality, being a Zeiss Triotar or Tessar with a focal length of 5 cm. (2") and a full aperture of either  $f/3.5$  or  $f/2.8$ . It is already well enough known what a Zeiss lens means to a camera, and it is sufficient to note here that with the Tessar  $f/2.8$  pictures can be made in natural colours with the Agfacolor process. (Lenticular film.)

### *Number 12 The struts supporting the lens board*

These are made specially strongly and ri-

gidly, for if the lens board has the least play, or if the lens position is altered, sharp focus would be out of the question. (See next section.) The whole mechanical action of the struts is essentially of the highest precision, particularly in view of the coupled distance meter.

### *Number 13    The rotating wedge distance meter*

Here is one of the most important parts of the camera. This is true not only because the estimation of distances by eye is so much less accurate than distance meters, but also because the meter is built into the camera, and is mechanically coupled to the lens. This means that to focus, the camera is held before the eye—the latter looking through a small eyepiece, in which the object is seen—and the small wheel of the distance meter turned according to the details given in the instruction booklet. The shutter release is then pressed to take the picture. Every movement of the wheel of the distance meter is reproduced by a movement of the lens in its mount, and thus the main object of the picture is focussed sharply. In order to make the operation as convenient and simple as possible, the meter has the famous Zeiss Ikon “gold mirror” which gives extremely bright pictures in the eyepiece, while the actual moving parts are rotating wedges, with which distances very near the camera can also be measured. The question of accurately focussing the camera lens is thus a matter that is dealt with at the works, and the name Zeiss Ikon

assures that this is done as accurately as is humanly possible. A scale is also provided, on which the various distances, and the depth of focus at various lens apertures, can be read directly once the meter has been set.

*Number 14*    *The three studs of the bayonet fitting,*  
on which the tricolour filter is placed when taking Agfacolor photographs, and which is also used to hold the lens hood.



Taken with Tessar  $f/3.5$  lens, focal length 5 cm. (2"), exposure  $\frac{1}{100}$ th second at  $f/8$ , with light yellow filter

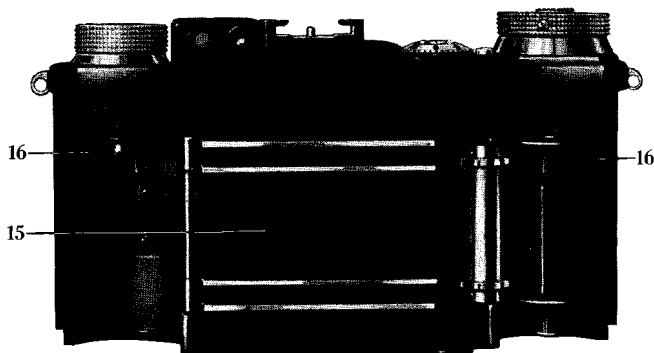


Fig. 4. Rear view of the camera—with back removed

*Number 15    The shutter*

A focal-plane shutter is provided, of the special Zeiss Ikon pattern—completely made of metal, and unaffected by temperature or other climatic changes, while working accurately under all conditions. Instantaneous exposures of  $\frac{1}{5}$  th,  $\frac{1}{10}$  th,  $\frac{1}{25}$  th,  $\frac{1}{50}$  th,  $\frac{1}{100}$  th,  $\frac{1}{200}$  th,  $\frac{1}{500}$  th, and  $\frac{1}{1000}$  th of a second are provided, and time exposures (the shutter opens when the release is pressed, and shuts when the finger is taken from the release) of any duration are also possible. The range of the Super Nettel therefore includes architecture and landscape work as well as sporting pictures involving rapid motion.

*Number 16    The spool-holder*

On the left is the holder for the full, unexposed, spool, and on the right the empty one, on which the film is wound. The arrangement is the same as that of an ordinary

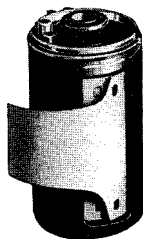
film camera, except for the fact that the Super Nettel uses perforated film. To wind the film correctly a toothed sprocket is fitted (next to the right-hand spool-holder in the picture) into the teeth of which the perforations of the film fit. The film is then led, accurately in position, to the winding spool.

The question of the film used in the camera may be mentioned here. Usually it is most convenient to use (just as with the Contax camera) the normal Contax spool of 36 exposures, since the camera may then be loaded and unloaded in full daylight. Special cassettes, however, can be bought, and loaded from a long strip of film as may be necessary. This loading of the cassette must be done in the dark-room, but if much film is used it comes very considerably cheaper.

There are also various film cartridges on the market, which can be used in the Super Nettel camera, but with which the film must be rewound into the cartridge when it has all been exposed. A rewinding knob, No. 7, is specially provided for this purpose.



Spool for Super Nettel



Cassette for Super Nettel

## *Points not shown in the Pictures are*

*The tripod bush*, situated in the base of the camera, which is used direct for longways pictures. For upright pictures a ball-and-socket joint must be used between camera and tripod.

*The spring pressure plate* in the back of the camera, which holds the film true and flat in the focal plane.

*The thread for screwing-on supplementary lenses and colour filters* (yellow, green, and red filters) in front of the lens itself. These accessories are naturally arranged so that supplementary lenses and filters may be used simultaneously: i.e. for near work a filter can be screwed into the 2 ft. supplementary lens—the latter itself being screwed into the camera lens. The filter mount, in the case of the yellow filters, is arranged so that it is not necessary to remove the filter before closing the camera. The filter is thus left on the front of the lens between exposures.

*Standard accessories* delivered with the camera comprise a flexible shutter release, one empty winding spool, and a black leather strap, which is attached to the rings on the side of the camera body, and is used in carrying the camera.

*Super Nettel camera, and standard accessories:*

No. 536/24 K Super Nettel with 5 cm. (2'') Zeiss Triotar  $f/3.5$ ,  
No. 536/24 L Super Nettel with 5 cm. (2'') Zeiss Tessar  $f/3.5$ ,  
No. 536/24 P Super Nettel with 5 cm. (2'') Zeiss Tessar  $f/2.8$ .

Film for Super Nettel cameras: Zeiss Ikon Contax-Pernox emulsion, orthochromatic  $\frac{14}{10}^{\circ}$  DIN (about  $24^{\circ}$  Scheiner) or panchromatic  $\frac{16}{10}^{\circ}$  DIN ( $26^{\circ}$  Scheiner), nonhalative, and marked with picture numbers along the edge.

No. 541/2 o and p Contax spool for 36 exposures, for daylight loading  
No. 541/5 o and p Cut length of 1.60 metres ( $62\frac{1}{2}$  inches) film for dark-room loading

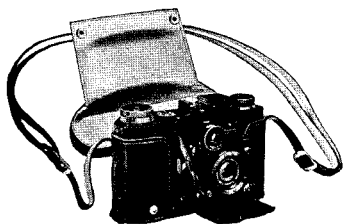
No. 541/8 o and p Stock roll of film, 5 metres (16 feet) in tin box  
No. 541/11 o Stock roll of film, 15 metres (50 feet) in tin box  
No. 541/18 o Stock roll of film, 25 metres (80 feet) in tin box  
No. 541/21 o Stock roll of film, 30 metres (100 feet) in tin box  
No. 540/1 Cassette taking any required length of film up to 1.60 m. ( $62\frac{1}{2}$  inches) for a maximum of 36 exposures





## *Useful Accessories to suit the Super Nettel . . .*

The camera itself is really the foundation of one's photographic equipment, and round it are grouped a whole host of accessories, some of which are intended to simplify the work, while others widen the range of the camera.



Ever ready case

### *1. Leather cases*

Although it is a simple matter either to put the camera in a convenient pocket, or to hand it round one's neck with the sling strap, the use of a case is recommended, since it protects the instrument from accidental injury.

No. 1784/2 Ever ready case, in which the camera remains during use

No. 1784/5 Soft leather pouch, with zipp fastener

No. 1784/1 Stiff brown leather case



Taken with Tessar  $f/2.8$  lens, focal length  
5 cm. (2"), exposure  $\frac{1}{100}$ th second at  $f/8$

## 2. Supplementary lenses for close-up objects

The camera itself will focus on all objects 3 feet and more away, but for shorter distances than this supplementary lenses should be screwed into the lens mount. The coupled distance meter can then *not* be used, and the distance must be measured and the lens focussed by hand.

For distances between 3 and  $1\frac{1}{2}$  feet from the camera:

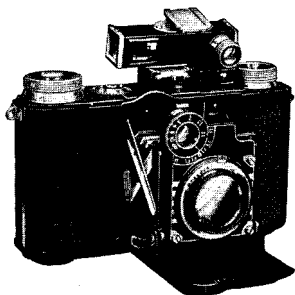
No. 994/1 Zeiss Ikon supplementary lens

$1\times 25.5$  Zeiss Proxar lens

For distances between  $1\frac{1}{2}$  and 1 feet from the camera:

No. 994/2 Zeiss Ikon supplementary lens

$2\times 25.5$  Zeiss Proxar lenses



Super Nettel with the Contameter

In this connection a specially useful accessory should be mentioned. This is the—

*“Contameter”  
near focussing device,*

a special distance meter that is permanently set for distances of 50 cm. (20"), 30 cm. (12"), and 20 cm. (8"). This is fitted into the shoe on top of the camera, and the latter moved toward the object to be photographed until the correct distance is reached. It is really impossible to believe what an astonishing range of new subjects, in particular such things as plants and insects, that the “Contameter” brings with it. A special booklet, with some very unusual pictures, will be sent on request.

No. 1342 “Contameter” near focussing device, for the Super Nettel camera, with focussing prisms set at 50 cm. (20"), 30 cm. (12"), and 20 cm. (8"), together with the necessary supplementary lenses for the camera, in leather case

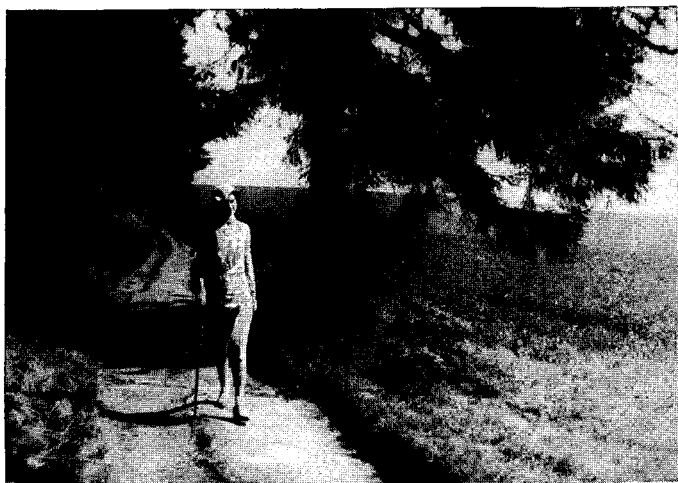
### 3. *Filters for black-and-white, and natural colour pictures*

Although the modern panchromatic films set a new standard in the correct reproduction of colours in monochrome, even with them it is not possible to depress one particular colour in a subject without using a filter. This is particularly the case where distant views, night effects, and other special types of work come into question. The particular filters to use on these special occasions may be seen from the table below, which also gives details of the increase of exposure necessitated by the various types.

For pictures in natural colours with the Agfacolor lenticular film process (this can only be done with the Tessar  $f/2.8$  lens) a special tricolour filter must be used.

No. 536/16 Tricolour filter for the Tessar  $f/2.8$  lens of focal length 5 cm. (2''), in mount

No. 536/15 Filter holder for Agfacolor filter, which is placed on the three studs of the bayonet mount round the camera lens

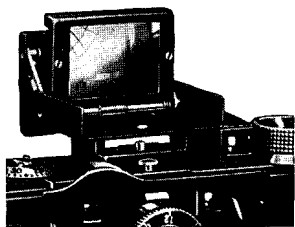


Taken with Tessar  $f/2.8$  lens, focal length 5 cm. (2''), exposure  $\frac{1}{100}$ th second at  $f/5.6$

Code No. and type of filter	Filter colour	Type of exposure	Type of film used	Exposure factor
975/1 G 0	Almost clear glass, but with strong ultra-violet absorption	Mountain photography	Orthochromatic or panchromatic	1×
989/4 G 1	Light yellow	Sporting and fast-mov- ing subjects, also por- traits and landscapes with low sun	Orthochromatic	2×
989/4 G 2	Medium yellow	Landscapes and snow- scapes	Orthochromatic	3×
989/4 G 3	Deep yellow	Landscapes with distant views, snow scenes, and pictures "against the light". Still life, repro- ductions of paintings, and coloured costumes	Orthochromatic	4×
975/2 G 4	Orange	Distant views without foreground, aerial pho- tographs, also for re- productions and when extra contrast is needed	Orthochromatic	5×
975/3 G R 5	Yellow-green	Landscapes without distant objects, and snowscapes	Orthochromatic or panchromatic	2×
975/4 G R 10	Green	Landscapes with distant objects, snow scenes, and "against the light" pictures, also still life, and reproductions of paintings	Panchromatic	3-4×
975/5 R 10	Light red	Distant objects, and night effects	Panchromatic, R-Film, Agfa Rapid 810 pl.	6-8× 6-10× 10-15×
975/6 R 15	Medium red	Distant objects	R-Film	20-25×
975/7 R 20	Deep red	Infra-red work	R-Film, Agfa Rapid 810 pl. Agfa Rapid 855 pl.	20-25× 20-25× 20-25×
975/8 R 30	Black red	Infra-red work	Agfa Rapid 810 pl. Agfa Rapid 855 pl.	500× 200×

#### 4. *Alternative view-finders*

Although the camera has a built-in optical finder, there are certain occasions in which a special finder makes the work a good deal simpler. These alternative finders are pushed into the shoe provided on the top of the camera body.

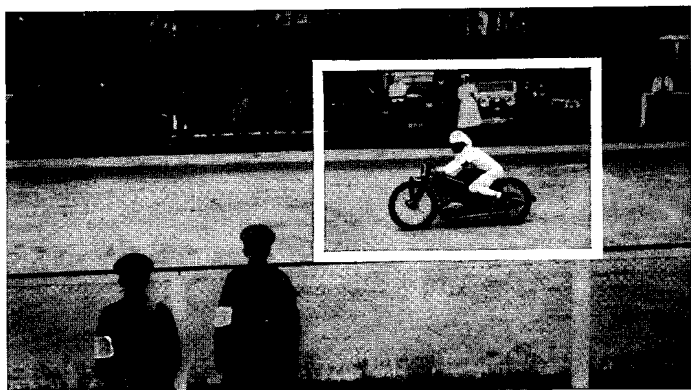


Super Nettel with  
Albada view-finder

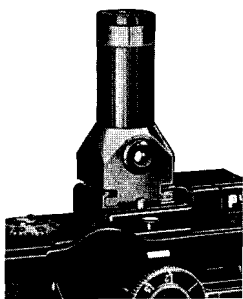
A particularly suitable finder for use with moving objects of all kinds is the Albada finder. This shows the picture the right way up, and right way round, in its natural size, so that moving objects can be observed with both eyes. The field of the finder is considerably larger than that of the real picture, the latter being ringed round

with a sharp white frame so that it cannot possibly be confused. Moving objects can thus be followed into the field of the camera.

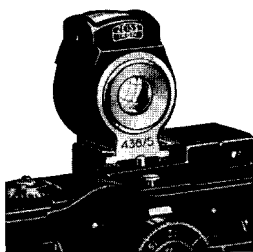
No. 433/24 Albada type view-finder



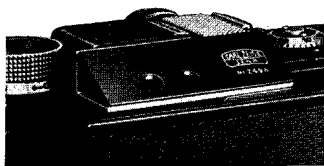
The field of view of the Albada finder



Super Nettel with telescopic waist-level view-finder



Super Nettel with prism view-finder for use from waist level



Super Nettel with angle finder

The waist-level view-finder for the Super Nettel is made in two distinct models, and is specially useful for objects near the ground, such as children and animals.

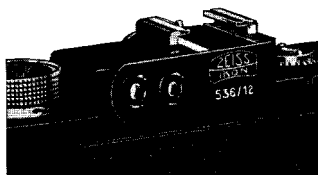
Apart from this, they may be used as angle finders, since one looks at the image at right angles when using them. At times it is more useful to appear to take the photograph in a direction at right angles to the actual direction of the camera.

No. 436/2 Telescopic waist-level view-finder

No. 436/5 Prism view-finder for use from waist level

Another type of special finder is the angle finder, which is a prism arranged in front of the finder and distance meter eyepiece of the camera. These are seen from an angle of  $60^\circ$ . This angle finder is particularly useful for pictures of objects above the photographer (e.g. aeroplanes) since it allows a convenient position for the head without tilting it excessively.

No. 436/6 Angle finder ( $60^\circ$ )



Super Nettel  
with holder for spectacle lenses

### 5. Holder for spectacle lenses

In quite a number of cases photographers who wear glasses have some difficulty in looking through the distance meter, or in sighting the view-finder, because of the fact that they cannot get the eye properly against the eyepieces. For those who

suffer in this way a holder is available for the Super Nettel, which keeps two spectacle lenses in the correct position, just in front of the two eyepieces, so that the photographer can work without his ordinary glasses. The holder is removed quickly for use by other normal-sighted persons.

- No. 536/12 Holder for spectacle lenses, without lenses  
2 spherical lenses for same  
2 cylindrical lenses for same

- No. 536/41 2 spherical lenses in mounts, which may be screwed direct into the eyepieces (where the camera is only used by one person)



Taken with Tessar  $f/3.5$  lens, focal length 5 cm. ( $2''$ ), exposure  $\frac{1}{200}$  th second at  $f/5.6$

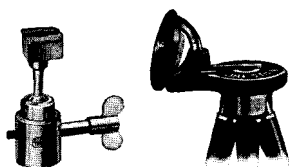
## 6. General Accessories



Spirit Level

A *spirit level*, for use in setting the camera correctly, is arranged to fit in the finder shoe on top of the camera.

No. 888/1 Spirit level



Ball and Socket tripod head

Tilting tripod head

Two *special tripod heads* are available, by means of which the camera may be made to point in any desired direction

No. 1628/10 Ball and Socket tripod head

No. 1630/2 Tilting tripod head



Special flexible shutter release

A special *flexible shutter release* makes it possible to give "time" exposures with the Super Nettel. (The first pressure opens the shutter, and the second closes it.) This is very useful where lengthy exposures have to be given.

No. 1312/24 Special flexible shutter release



"Autex" delayed-action shutter release

The "Autex" *delayed-action shutter release* is useful if the photographer wishes to include himself in the picture.

No. 1394/6 "Autex" delayed-action shutter release



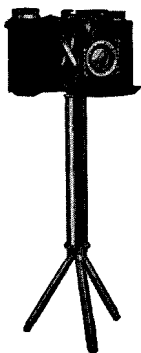
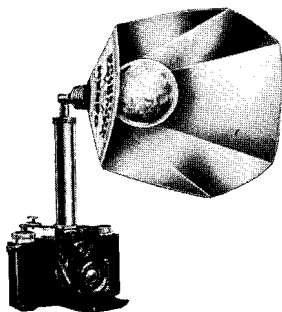
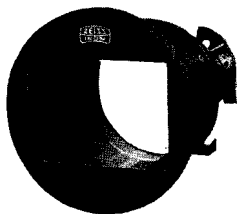


Table tripod



Vacuum flash-bulb release



Lens hood

Most pictures taken with the Super Nettel, will be made with the camera held in the hand. At the same time, there are many occasions on which a *tripod* of some sort is a necessity. Two types of tripod are specially suited to the miniature camera, these being the unipod and the chain tripod, the latter also serving as a table tripod for portrait work.

No. 1624/11 Unipod

No. 1624/10 Chain and table tripod, combined

When using the Super Nettel in conjunction with vacuum flash-bulbs, it is convenient to use the *special vacuum flash-bulb release*, which may be attached to the camera, and which opens the shutter and fires the flash-bulb simultaneously.

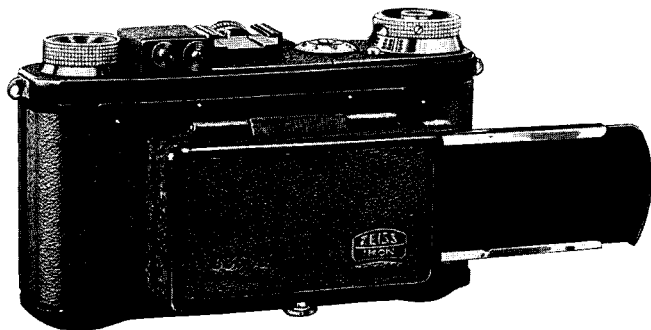
No. 3613/11 Vacuum flash-bulb release, complete with battery

Pictures taken "against the light" necessitate the use of a *lens hood*.

No. 1283/6 Collapsible lens hood with rectangular opening, fits on lens panel by means of bayonet catch arrangement

No. 1283/13 Screw-in lens hood for Tessar

## 7. The plate adapter



Super Nettel with plate adapter fitted

Although the Super Nettel is a roll-film camera, the fact that the camera back is detachable makes it possible to use plates or cut films of the  $3 \times 4.5$  cm. ( $1\frac{1}{8} \times 1\frac{3}{4}$ "') size. It quite frequently happens that only two or three pictures are wanted, and that it is very inconvenient to wait until the whole film has been exposed before they can be developed and examined, or perhaps a special type of emulsion has to be used that cannot be obtained in any other form than plates. In circumstances such as these the plate adapter is a most valuable help.

The normal camera back is merely exchanged for one bearing a plate adapter and dark slide. For focussing the adapter and dark slide are turned on the hinge provided, and a ground-glass screen inserted in the focal plane.

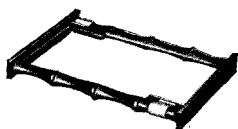
- No. 536/13 Plate adapter with one plate holder
- No. 540/14 Extra plate holders, each
- No. 540/11 Ground-glass screen for focussing
- No. 540/8 Adapter for holding cut films in the plate holders, which may also be used as a gauge for cutting films to the correct size
- No. 542/1 1 dozen plates  $3 \times 4.5$  cm. ( $1\frac{1}{8} \times 1\frac{3}{4}$ "') (Flavirid)
- No. 2006/1 Cutting table for cutting up  $9 \times 12$  cm. ( $3\frac{1}{2} \times 4\frac{3}{4}$ "') or  $6.5 \times 9$  cm. ( $2\frac{1}{2} \times 3\frac{1}{2}$ "') plates to the correct size

## *After the film has been exposed . . .*

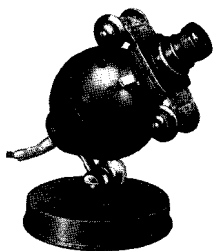
The numerous devices available to increase the range and convenience in use of the Super Nettel do not by any means exhaust the accessories that make for good results. Miniature films must be treated individually, and the methods of ordinary photography cannot be applied to them. A special characteristic of the Zeiss Ikon accessories is that they are all arranged to handle various lengths of film conveniently.



Daylight  
developing tank



Agfacolor  
developing frame



Viewer for negatives

### *1. For developing the negative film*

- No. 5425/1 Daylight developing tank of bakelite, with spiral plate for convenient loading, to take 350 ccm. (12 fluid oz.) of solution
- No. 3649 Concentrated developer solution, to be diluted to the volume of the full tank
- No. 5426/3 Frame for developing Agfacolor films (in a 13×18 cm. — 5×7" — dish)

### *2. For examining the negatives after development*

- No. 1538 Viewer for negatives, including lamp-house for illuminating the negatives and marking device (without lamp)
- No. 1290 Zeiss Ikon magnifying glass for examining negatives in the above viewer
- No. 1538/10 Adapting ring for mounting the magnifier
- No. 1292 Magnifying glass — 6 times (Zeiss)
- No. 1293 Magnifying glass—10 times (Zeiss)
- No. 1538/11 Adapting ring for mounting the above magnifiers
- No. 1557/65 15 watt lamp/110 volts
- No. 1557/66 15 watt lamp/220 volts

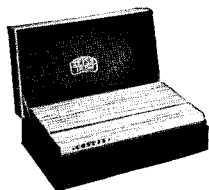


"Liliput" printing frame

### 3. For making contact prints

No. 2643/24 "Liliput" printing frame

No. 2643/25 Paper gauge for cutting up strips of  $9 \times 12$  cm. paper to 6 pieces of  $3 \times 4.5$  cm.



Card board box  
for 50 envelopes for  
36 pictures each

### 4. For storing negatives

No. 3097 Storage box for 43 rolls of film, strongly made of wood, with index

No. 3097/1 The same, but in strong cardboard instead of wood

No. 3097/5 Card board box to take 50 negative envelopes (without envelopes)

Taken with  
Tessar  $f/2.8$  lens, focal  
length 5 cm. (2"), exposure  
 $\frac{1}{25}$ th second  
at full aperture





Helinox enlarger

### 5. For enlarging

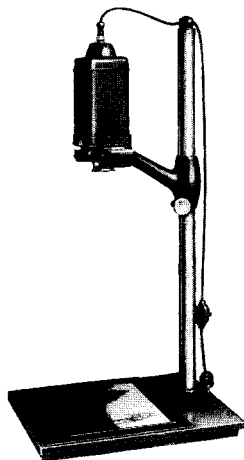
The *Helinox* enlarger has a fixed lens, and gives one degree of enlargement only. The insertion of the negatives is very convenient, while the lens fitted is an anastigmat of aperture  $f/6.3$ . The enlarger uses electric light, but may also be used with daylight if the lamp-house is removed.

No. 1411/6 *Helinox* enlarger, giving enlarged prints of about  $6.5 \times 9$  cm. ( $2\frac{1}{2}'' \times 3\frac{1}{2}''$ )

No. 1411/7 *Helinox* enlarger, giving enlarged prints of about  $9 \times 14$  cm. ( $3\frac{1}{2}'' \times 5\frac{1}{2}''$ )

No. 1557/44 Special lamp, with matt interior surface, 40 watts/110 volts

No. 1557/45 Special lamp, with matt interior surface, 40 watts/220 volts



Magniphot enlarger

The *Magniphot* enlarger is a vertical enlarger giving enlargements of varying degrees (3 times to 30 times linear). The coarse focussing is arranged by raising and lowering the lamp-house, while fine focussing is done by the helical mount on the lens. The illuminant is an opal lamp and a condenser, and the light is thus very even and brilliant. The paper is held on the base-board by special metal frames, which provide automatically a white margin round the enlarged print.

No. 1455/10 *Magniphot* enlarger with special anastigmat lens, but without lamp

No. 1557/49 Opal lamp, 75 watt/110 volts

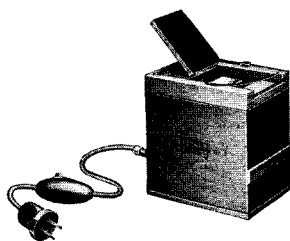
No. 1557/50 Opal lamp, 75 watt/220 volts

## Metal enlarging frames for holding and masking the paper.

Size cm.	Inches	No.	Size cm.	Inches	No.
6.5×9	2 $\frac{1}{2}$ ×3 $\frac{1}{2}$	2674/3	10.5×14.8**	4 $\frac{1}{8}$ ×5 $\frac{3}{4}$	2674/26
6.5×11	2 $\frac{1}{2}$ ×4 $\frac{1}{4}$	2674/15	13 ×18	5 $\frac{1}{8}$ ×7	2674/11
9 ×12	3 $\frac{1}{2}$ ×4 $\frac{3}{4}$	2674/7	18 ×24	7 ×9 $\frac{1}{2}$	2674/20
9 ×12*	3 $\frac{1}{2}$ ×4 $\frac{3}{4}$	2674/31	24 ×36	9 $\frac{1}{2}$ ×14 $\frac{1}{4}$	2674/21
9 ×14	3 $\frac{1}{2}$ ×5 $\frac{1}{2}$	2674/8	8.3×10.8	3 $\frac{1}{4}$ ×4 $\frac{1}{4}$	2674/5
10 ×15	4 ×6	2674/9	12 ×16.5	4 $\frac{3}{4}$ ×6 $\frac{1}{2}$	2674/27

\* Specially masked to give the ratio 2:3 (24×36 mm.) of the original negative

\*\* Large post-card size



Transparency  
printing box

## 6. For making positive transparencies

*Transparency printing boxes* are available, in which the small negatives are automatically printed in the centre of a 5×5 cm. (2×2'') or 6×6 cm. (2 $\frac{3}{8}$ ×2 $\frac{3}{8}$ '') plate.

No. 2660/5 Transparency printing box, for 5×5cm.(2×2'') plates, without lamp

No. 2660 Transparency printing box, for 6×6 cm. (2 $\frac{1}{4}$ ×2 $\frac{1}{4}$ '') plates, without lamp

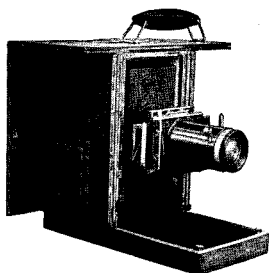
No. 1822/7 Printing lamp, 15 watts/110 volts

No. 1822/8 Printing lamp, 15 watts/220 volts

The various requirements for transparency printing, such as cover glasses, gumstrip, black paper masks, transparency cases, etc., are also available on request.



Taken with Tessar  
f/3.5 lens, focal length  
5 cm. (2''), exposure  
1/100th second at f/16

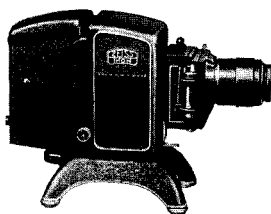


Contabox projector

## 7. For projecting transparencies

The *Contabox*, a simple box-form projector for showing single transparencies and film-strips, gives screen pictures up to 6 feet wide. Please ask for the special folder describing this projector.

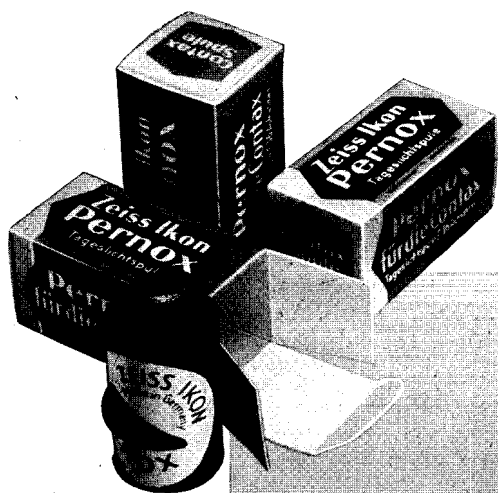
- No. 1425/1 Contabox "A" model with 100 watt/110 volt lamp
- No. 1425/2 Contabox "A" model with 100 watt/220 volt lamp  
(If lamps for 125 volts or 150 volts are required, please say so when ordering)
- No. 1425/3 Contabox "A" model, with 100 watt/30 volt lamp and  
resistance for 110, 125, and 220 volt mains (direct or  
alternating current)
- No. 1425/4 Contabox "A" model, with 100 watt/30 volt lamp and  
transformer for 100, 125, and 220 volt mains (for  
alternating current only)



Large projector  
for transparencies

The *Large Projector* gives extremely brilliant pictures, up to 13 ft. wide, on the screen, and shows colour transparencies up to 3 ft. wide. It is fitted with a projection anastigmat lens of aperture  $f/2.5$  (focal length 10 cm.=4'), and has a 250 watt lamp. A cooling cuvette with a special safety device prevents damage to the films through excessive heating.

- No. 1429/21 Large projector for black-and-white transparencies  
with attachment for projecting colour pictures, with  
250 watt/110 volt lamp
- No. 1429/23 As above, but including resistance for 220 volts
- No. 1429/1 Large projector for black-and-white transparencies  
only, with 250 watt/110 volt lamp
- No. 1429/2 As above, but including resistance for 220 volts
- No. 1557/5 Silver-surface projection screen for showing colour  
pictures, 75×100 cm. (30×40 inches)



C 701 USA.

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