

ZEISSIKON

# BULLETIN No. 13



PUBLICATIONS FOR OUR BUSINESS FRIENDS ZEISS IKON AG. STUTTGART



# Director Dr. Wohlfahrt is 75 years old

From its beginnings around the turn of the Century to the preeminence which it at present enjoys, the German photographic industry has passed through many stormy periods which were only weathered successfully by the unlimited energy and resourcefulness of its leaders. Director Dr. Wilhelm Wohlfahrt is one of the few surviving men who not only helped the industry rise to its present stature but who still occupies a leading position. For more than 50 vears this photographic pioneer has given everything in his power to spread and better photography for the benefit of all those whose livelihood is connected with it or who find in photography relaxation and self-expression.

Director Dr. Wilhelm Wohlfahrt, who has been a member of the Board of Directors of the ZEISS IKON AG, since the foundation of the

latter celebrated his 75th birthday on the 1. June 1955, which provides a welcome opportunity of telling our readers something about this man and his achievements. It is more than appropriate that this article appears in the "BULLETIN' because, although this is known by very few of our readers, this publication is the "brain child" of Dr. Wohlfahrt himself. 24 years ago, when the first issue of the "BULLETIN" was about to go to press, there was some difficulty in finding a suitable name. Numerous suggestions were put forward, from all parts of the works, but Dr. Wohlfahrt won the day with his insistance that the paper should be called "Die Bruecke" ("the Bridge"), as he wished it to be a real bridge between the works and their consumers and clients everywhere. After all, the world is a large place and not all of our friends can come and visit us as often as we would like to see them. The

next best thing to a personal visit is a journal in which we can keep them informed about the work we have in hand, new developments at home and abroad in both the manufacturing and distributing sides of the business. Since those early days, the "BULLETIN" has become the link between, first Dresden and now Stuttgart, and our clients in the furthest corners of the world. The present editorial staff has good reason to devote this space to Director Dr. Wohlfahrt, who instituted this regular interchange of news and opinion.

This account would not be complete, however, if we omitted to say that the "BULLETIN" is the result of an active partnership of all departments working in close cooperation with the publicity department. This combined effort has always been the basis of our publicity and advertising programme, as instigated by the foresightedness of Dr. Wohlfahrt 24 years ago. He was virtually the only person in the photographic industry to visualise at such an early date the importance which advertising would assume in modern life. When he talks of his first ventures in this field, Dr. Wohlfahrt will proudly display catalogues and brochures which he designed himself at the beginning of his career, and he still maintains that well-produced advertising publications are the best way of propagating knowledge of photography and stepping up sales at the same time. This policy has remained unchanged to this very day and it is no surprise to learn that Dr. Wohlfahrt still takes an active part in everything concerning this department sharing in its successes and disappointments alike and taking a personal interest in every detail of the work. Despite his innumerable other commitments, he also takes a very active part in insuring ZEISS IKON'S contributions to the combined publicity campaigns of the entire German photographic industry.

These are only a few of the reasons for which the staffs of both the publicity department and the "Bulletin" itself have taken the occasion of Dr. Wohlfahrt's 75 th birthday to give the sincerest thanks for the great understanding he has shown them in their performance of their task and together with their heartfelt and warmest congratulations. In these we are convinced that all our readers will join, since they have so often benefited from his advice and assistance.

When we speak of Dr. Wohlfahrt's life and interests, ambitions and achievements it is easy to see that they are all bound up with the quality with which he tackled the problems confronting him; that is to say, the human approach. Everybody who comes into contact with him can immediately feel the friendliness and enthusiasm which he radiates and the sincerity with which he speaks and acts. It is one of his basic principles that honesty and good will can only be expected by those who practise the virtues themselves and that "only those who continually exercise self criticism and strive day and night to deal fairly and honestly will stand a chance in the future". These are the high ideals which have enabled him to realise his most cherished ambition, that of creating a spirit of harmony between the ZEISS IKON AG. and the entire camera industry, this being in his opinion the only basis for productive commercial cooperation and also happy human relationships.

On this day, men and women of every department of the ZEISS IKON AG. unite in wishing Director Dr. Wohlfahrt many more years of successful and rewarding work in his capacity as commercial adviser and member of the Board of Directors of our firm.

#### CONTENTS



Director Dr. Wilhelm Wohlfahrt is 75 years old... Cover page II



### This is what you must know

A Table Copying Unit for the CONTAFLEX	3
New Combination Cases	5
The Miracle of Polarised Light	6
The CONTAX and CONTAFLEX Stereo-System (4)	9
New Accessories for the MOVITRIX	14
A CONTAMETER for the CONTESSA	15
Stop-press News of our Sales Department	16



#### Salesmanship

It's the close-up that matters (CONTAFLEX)	17
Twelve Functions and two Knobs	19
The Reason why I recommend the CONTAX	20
Cameras for the Disabled	24



#### Well advertised is half sold

"Ariane and the	MOVIKON"										25
New Prospectus										2.	26



#### ZEISS IKON FORUM

The Problem of Delivery	27
ZEISS IKON and the Industrial Fair in Hanover	
CONTAFLEX — a comparison of close-up photographs	
Cover page	

Our cover picture shows the Table Copying Unit for the CONTAFLEX, You will find particulars of this practical device on page 3. Cover picture, phot. Zeiss Ikon photo/Scherz.



#### THIS IS WHAT YOU MUST KNOW



# A practical supplement to the CONTAFLEX

#### The Table Copying Unit

Copying is surely a special process in which many amateur photographers have only a limited interest. However, it is not really a lack of interest, but probably rather the shortcomings of the technical accessories which are available to the amateur. For the range of application of this process is extremely wide and versatile and there is hardly an amateur who has not awkwardly tried to copy testimonials and other important documents. There are also the first drawings by our children which we would like to preserve for later days. Frequently, however, there is hardly any room in a modern flat to store large sized objects, but there is always room for a micro-film. Copying can also be a valuable help in business matters, and a home made copy saves time and money, and nobody ever has enough of either.

However, copying is interesting and enjoyable only when the results obtained are worth while. The problems of copying are all technical difficulties, since the process is determined entirely by the original to be copied. The copying unit must be designed so that the picture area and definition can be established exactly, even if the taking distance is very short. This problem is solved by the construction of the CONTAFLEX. There is no finder parallax and it takes only a few seconds to adjust this camera to taking distances down to 6½ ins. (16 cm). Sharp focusing of all originals is secured by means of the two rangefinders of the CONTAFLEX. A special advantage is the excellent definition of the ZEISS TESSAR which is well-known all over the world, for reproductions of this kind call for needle-sharp definition.

Furthermore, good copies are possible only if the focal plane of the camera and the original are absolutely parallel to each other. A normal tripod with a spirit level can be used as an expedient, but working in this way is cumbersome, takes a long time and, in the end, is hardly satisfactory. All this difficulties are eliminated by the table copying unit for the CONTAFLEX. It consists of a column with a table clamp, a



cross joint and a tripod head with extension. The column can easily, but firmly be screwed to a table or a drawing board by means of the clamp. It will always be perpendicular to the table plate and thus to the original to be copied. The cross joint serves to fasten the tripod head at right angles to the column. The tripod head in turn has a cut-out for the small mounting foot in the bottom plate of the CONTAFLEX. When the camera is attached it is automatically placed parallel to the plane of the original and no further adjustment is necessary.

Working with this practical table copying unit is simplicity itself. When the original is very small, proxar lenses should be slipped on the camera lens, and it will then be possible to approach the original down to  $6^{1}/_{4}$  ins. (16 cm). The reduction obtained will then be 1:3.5 and the picture area copied about  $3^{1}/_{4}'' \times 4^{3}/_{4}''$  (8 × 12 cm). Very large originals can also be copied when the camera is turned through  $180^{\circ}$  round the column and the original placed on the floor.

But this is not all. When flowers and plants or other small objects must be photographed it is often necessary to tilt the camera. For this reason the tripod head is designed so that the camera, together with the head, can easily be tilted, as is shown in the illustration above.

Focusing and finding the best framing of the picture is often difficult when the original is fairly large and the picture has to be viewed from above through the viewfinder. For these cases the angle telescope has been designed. It is merely screwed into the ocular of the viewfinder after the small black ring has been unscrewed. The viewfinder image can then be examined at right angles to the taking direction. Focusing is, of course, carried out by means of the two rangefinders.



The table copying unit for the CONTAFLEX has been made up from several parts of the copying units for the CONTAX. Thus it is possible to complete this little device by adding other parts, e. g. the lighting equipment or the baseboard with column, etc.

Table Copying Unit for the CONTAFLEX Order No. 1412

consisting of

Tripod head with extension

Table clamp with column

1 Cross joint

Order No. 861/01

Order No. 1405

Order No. 1408/02

On request:
Angle telescope

Order No. 1253

Order No. 1247/24

#### **New Combination Cases**

Every camera becomes more popular as more accessories for it become available. This is a curious fact which is time and again confirmed by our business friends. Another fact is that many accessories need to be accommodated in such a way that they can be carried along conveniently and safely without impairing the constant readiness of the camera. The pockets of your trousers, briefcases and handbags just will not do. Since our combination cases have proved a great success with our CONTAX, we have decided to supply combination cases also for our other two system cameras, the CONTAFLEX and the MOVIKON 8.

These elegant cases are made of light brown leather and can be carried either by means of a shoulder strap or a handle. In general, these cases are equipped in the same way as our well-known Omnica Combination Case for the CONTAX.

Omnica Combination Case for the CONTAFLEX

Accommodating:

CONTAFLEX I OT II ZEISS IKON TELESKOP 1.7 x STERITAR-A, stereo attachment Attachment bracket

Accessory shoe

2 cassettes

5 filters  $\phi$  S 27

4 PROXAR lenses

1 lens hood  $\phi$  A 28.5

1 CONTAPOL

1 filter for TELESKOP

1 lens hood for TELESKOP 1 filter for STERITAR-A

1 ікорнот.



Accomodating:

MOVIKON 8

MOVITELAR with viewfinder and lens hood

MOVIGONAR with viewfinder and lens hood

- 7 filters (on request for camera or lens attachments)
- 2 films
- 1 ікорнот.

Both combination cases have a large outer pocket, closed by press button, which can accommodate more films and filters, a cable release and other accessories. There is also space enough for a cleaning rag and a note book. The CONTA-



FLEX case, when the CONTAFLEX II is used, can accommodate more films or other accessories, since the IKOPHOT can then be omitted.

## The Miracle of Polarised Light

(From the Works-Magazine of CARL ZEISS, Oberkochen)

Polarisation is one of the most interesting properties of the light, and one of which photographers make amazingly little use. Apparently, the effect of polarisation is only little known since the human eye is unable to discern polarised from normal light without optical aids. The polarising filter ZEISS BERNOTAR has this distinguishing feature which the eye is lacking. People who never have occupied themselves with polarised light almost believe in magic when they see the hitherto unknown effects produced by looking through a BERNOTAR.

#### Royal Visitors

Their Majesties the Shah of Persia and Queen Soraya visited a photo dealer in Duesseldorf on the occasion of their tour through Germany. As can be seen in our picture, Queen Soraya was very interested in the MOVIKON 8 because it is a narrow gauge cine camera which is easy to bandle and its bandsome appearance compels admiration. (phot. Leistenschneider)



It is not so easy to explain in a few paragraphs what polarised light really is and how the effectiveness of the Bernotar is brought about. Anyway, let us try: Every ray of ordinary unpolarised light vibrates in all planes perpendicular to the direction of its propagation, every ray of polarised light, however, vibrates in only one plane. The Bernotar transmits only light vibrating in one plane. Consequently polarised light is more subdued by the Bernotar the more its plane of vibration deviates from that of the Bernotar. By rotating the Bernotar, together with its plane of vibration, the intensity of polarised light passing the Bernotar can be controlled at will. This is impossible with unpolarised light which vibrates in all planes, for it will always be suppressed by about a third by the Bernotar, no matter in which direction the Bernotar is rotated. If the Bernotar meets a mixture of ordinary and polarised light, rotating it can change the mixture ratio of both types of light and thus the physical appearance of the depicted object. For example:

Suppose there is an object which appears to the human eye to be of the same colour and brightness all over, the left half of which, however, radiates polarised light only. When viewed through a BERNOTAR it is possible to make the left side appear brighter or darker than the right one according to the rotation of the BERNOTAR, that is to say, according to the amount of polarised light which passes through the BERNOTAR. Now, what is valid for the human eye is also valid for photography when we use a BERNOTAR in front of our lens.

By the way, polarised light is by no means scarce, for the photographer can find it everywhere. When ordinary light is reflected from non-metallic surfaces the reflected light is polarised. This polarisation, however, is complete only when the light is

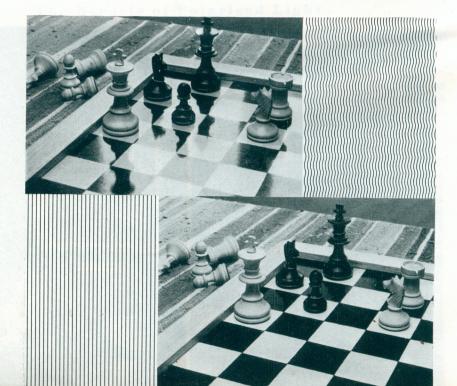




reflected at approx. 35°. Disturbing reflections from any type of surface such as glass, water, shiny paper, varnished objects, polished wood, etc. can be subdued to almost any degree or even eliminated. On the other hand, such reflections and their effect can be intensified if required. Light from the clear blue sky at right angles to the sun is strongly polarised and so is the light of the haze in front on distant horizons. This fact permits us to emphasize, for example, subtle cloud effects or distant mountain chains by means of the BERNOTAR. The scope of the BERNOTAR is tremendous and its application is possible not only outdoors but also for interiors. Since the BERNOTAR is practically neutral in colour, it is suitable not only for blackand-white photography but also for exposures on colour film and for this purpose it is especially useful since it produces more saturated colours of greater luminosity. A high contrast in brightness, with which colour film cannot cope so well as black and white film, can be subdued by the polarising filter without the colours loosing their harmony, as only the range of tone values is slightly shortened. The BERNOTAR enriches the range of colour photographic potentialities in moods and effects to an almost uncanny degree.

These few remarks may be sufficient to make the BERNOTAR still more popular. Photographers who have used a BERNOTAR only once have learned in a few minutes how to employ it and are still surprised and excited by the results obtained. Dr. JUNG

Polarising filters BERNOTAR are available for most ZEISS IKON cameras. In our price list you will find all the information necessary to discover which polarising filter will



fit which camera. For the widely popular reflex camera, the IKOFLEX, the polarising filter attachment IKOPOL is available, which has a filter for the finder lens as well as the taking lens. To facilitate the correct adjustment of the polarising effect, these filters are coupled for simultaneous rotation. For the CONTAFLEX a polarising filter in a special mount is obtainable. It is called CONTAPDL and must be screwed on to the camera lens. Its effect can then be examined in the viewfinder.

For the information of your clientele we supply on request leaflets about the polarising filter ZEISS BERNOTAR.

# The CONTAX and CONTAFLEX Stereo System

(Conclusion)

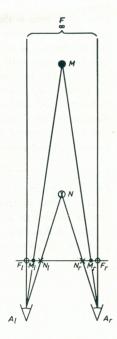
#### III. Stereo Reproduction Apparatus

Fundamentals

In order to obtain an impression of depth from a stereo photograph, the disparate half-images give two slightly different views of the same object, one view (half-image L) being intended for the left eye only  $(A_l)$ , the other (half-image R) only for the right  $(A_r)$ . These half-images must be accurately positioned relative to each other; the correct vertical and lateral alignment and distance between the two halves as well as that from the viewing eye are essential for a realis-

tic 3-D effect. Strictly speaking the picture should be viewed so that every object in them is seen from the same angle as it is seen with the unaided eye in real life.

The position in space of the composite image of an object point, e. g. "M", is determined by the lateral distance between its disparate points  $M_l$  within the left and  $M_r$  within the right half-image. The left eye  $A_l$ , when viewing a stereo picture, is directed to the point  $M_l$  in the left half-image, the right eye  $A_r$  simultaneously being directed to the corresponding point  $M_r$  in the right half-image. The lines of vision  $A_l$   $M_l$  and  $A_r$   $M_r$  are apparently extended until they intersect in point  $M_l$ . This is the position assigned to the point in space  $M_l$  by the visual perception. In the same way, every other point which forms the stereo picture



III. 9. Diagram of the 3-D representation obtained by viewing stereoscopic pictures.

is assigned to apparent positions. The closer any pair of adjacent image points of the half-images  $(N_l,\,N_r)$  are to each other, the closer (N) they appear to the viewer and vice versa. The greatest possible distance between any two half-image points  $(F_l,\,F_r)$  is equal to the interpupillary distance, that is about 65 mm. At the interpupillary distance the lines of vision of the two eyes become parallel and make the point in space (F) concerned appear in infinity. The position of the nearest point (N) is determined by the condition of depth and is automatically fixed in our systems by the corresponding rating of the taking ranges.

These inter-relations are fundamental to the individual viewing of a stereo photograph by one observer as well as to the viewing of a projected stereo picture by several observers, although a "correct" 3-D impression, strictly speaking, can be conveyed only to one individual observer. All the other observers, according to their standpoints, see what is actually a somewhat distorted 3-D picture. These distortions, however, with the exception of extreme cases, are seldom disturbing.

#### Stereo Projection

The projection of our CONTAX and CONTAFLEX stereo pictures is a simple matter. Due to the fact that the half-images are already automatically correctly positioned relative to each other on account of the standard gauge of the film and are also framed precisely by the boundaries of the stereo mask, the conditions governing 3-D viewing are definitely fixed once and for all for whole series of pictures. The depths of field are also determined by the restriction to the various taking ranges.

On the basis of this careful preparation of the pictures themselves, the sole remaining task is to bring the half-images to coincidence on a screen with a form of illumination which ensures that they are seen separately by each eye of the viewer. This, as is well known, is done by a different polarisation of the rays creating the half-images and by the use of polarised spectacles by the audience. The use of polarised light calls for screens with metallic surfaces, the so-called silver screens, to which point we should like to draw special attention. It is advisable to bring to coincidence on the screen the corresponding boundaries of the half-images (left edge of the left half-image and left edge of the right half-image). The lateral distance for these elements is then "zero", which means, that the lines of vision of the observers intersect in the plane of the screen. This transfers the "window-frame" effect to the screen itself and creates the illusion of the 3-D picture proper apparently behind it.

#### Projectors

For the projection of pictures made by the taking apparatus of the CONTAX-CONTAFLEX STEREO SYSTEM we have designed similar additional devices for our basic projectors IKOLUX 250 and 500 as well as for the old AVISO II projector. These accessories are designed so that they can be used for CONTAX or CONTAFLEX stereo pictures by merely reversing the polarisers. This reversal of the polarisers, which is in fact only the

changing-over of their direction of vibration, is necessary. Why? When non-interchanged half-images (CONTAX) are inserted the right way round, the left half-image lies in the left path of rays, while with interchanged half-images (CONTAFLEX), the right half-image lies in the left path of rays and vice versa.

These facts have been shown already in illustrations 4 and 5. The reversal of the polariser has merely the effect of assigning the correct half-image to the left or right eye as required, while employing the same polarising spectacles.

Two stereo attachments are available for the two projectors mentioned above: the stereo head for the IKOLUX 500 and the STERIKON 10 for the IKOLUX 250 and AVISO II.

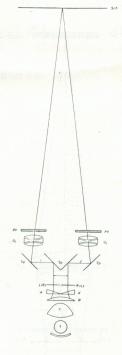
#### The Stereo Head for the IKOLUX 500

The diagram 10 shows the design of this device. The light coming from the projection lamp L is used to illuminate the half-images L and R together by means of the aspherical condenser C and the image-field lens B. The path of rays is then split into two (1, 2) by the mirror system Sp and these two paths are passed through two separate lenses  $O_1$  and  $O_r$ . This makes it possible to utilise the total light intensity passing through each half-image most effectively on the screen Sch. Both lenses can

be adjusted both laterally and vertically. By using the lateral adjustment the coincidence of the edges of the half-images can be adjusted for any projection distance, while the vertical adjustment serves to compensate for slight irregularities in the position of the half-images.

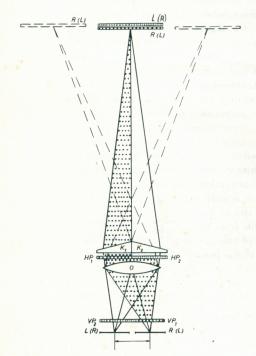
The polarising filters PF in front of the lenses produce the correct degree of polarisation for the left and right half-images. The condenser C and the lamp L shown in the diagram are basic elements of the projector, they are shown only to give a complete survey of the projection system, but do not belong to the stereo head.

The STERIKON 10 for IKOLUX 250 and AVISO II The STERIKON 10 makes it possible to project CONTAX and CONTAFLEX stereo pictures without a special projection lens. In contrast to the stereo head, the STERIKON 10 works in conjunction with the projection lens ( $f=10~{\rm cm}$ ) of the IKOLUX or AVISO II and is simply attached to the front of this lens. As shown in ill. 11 it consists chiefly of two deflecting wedges  $K_1$ ,  $K_2$ , which halve the pupil of the pro-



Ill. 10. Diagram of the optical design and the paths of the light rays in the Stereo Head for the  ${\tt 1KOLUX}$  500.

jection lens. These are achromatic wedges, the deviation values of which must be very thoroughly computed. To each wedge is assigned a polariser HP<sub>1</sub>, HP<sub>2</sub>, the directions of vibration of which are perpendicular to each other. Each half of the lens produces on the screen an enlargement of the relevant half-image, L or R, each of which is only half as bright as that produced by the undivided lens. The wedges K<sub>1</sub>, K2, which deflect the light rays in opposite directions, are computed so that of the four half-images produced, two, one right and one left, coincide. These coincidental images are called the principal images in contrast to the ghost images which are formed beside them. These ghost images would impair the observation of the principal image and for this reason they are masked by the pre-polarisers VP1 and VP2, which are placed immediately in front of the stereo stransparency. In the diagram, ill. 11, it can be seen how the polarised rays penetrating through VP1 can pass unhindered through the principal polariser HP1, acting in the same direction, and also through the wedge K1. These rays form the principal image. The principal polariser HP2, being in opposition, blocks the passage of these rays and prevents them passing through into wedge K2. This prevents the formation of the ghost image to the left of the principal image. The same applies to the light rays penetrating through VP2.



Standard gauge

The Stereoscopes for contax and contaplex Stereo Pictures

The stereoscopes, which are designed for viewing the correctly bound transparencies at the correct interpupillary distance (62 mm), serve to bring the half-images sufficiently close to the eyes and convey them to the eyes individually. In the most simple form, two magnifying glasses and an image carrier are quite sufficient.

Our CONTAX and CONTAFLEX stereo images can also be separated, of course, and mounted at the correct interpupillary distance for viewing through such a simple viewer. However, we are of the opinion that the cumbersome and difficult mounting of miniature stereo pictures should not be tried either by the majority of amateur photographers nor the photofinishers. On the contrary, we see the greatest

III. 11. Diagram of the optical design and the paths of the light rays in the stereo projection attachment STERIKON 10.

advantage of the CONTAX and CONTAFLEX STEREO SYSTEM in the fact that the homologues need not be separated and mounted separately.

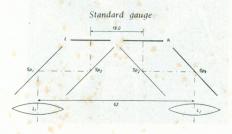
For this reason we are preparing one stereoscope each for the viewing of contax and contaplex pictures. Apart from the purpose of bringing the separate half-images sufficiently close to the eyes, these viewers will have certain other functions. Both devices, the fundamental design of which is shown in illustrations 12 and 13, are constructed so as to convert optically the actual distance between the half-images (standard gauge 19.0 mm) to the apparent interpupillary distance (standard gauge 62 mm). This is carried out by optical means by deflecting the light rays by the mirrors Sp. The picture is viewed through the magnifying glasses L<sub>1</sub> und L<sub>2</sub>. Two mirror surfaces are sufficient for the interchanged half-image of the contaplex stereo pictures; the contax stereo pictures, however, are not interchanged. This entails that the half-images become laterally reversed when they are inserted correctly (left half-image to the left, right one to the right). This lateral reversal is corrected by the introduction of a third mirror surface Sp 3 in the path of both sets of rays of the contax Stereoscope.

Those who approach stereo-photography for the first time may easily become confused by all these laws and principles, as indeed they are somewhat complicated. However, we thought it necessary to give our readers an idea of the design and the interrelations of our stereo system.

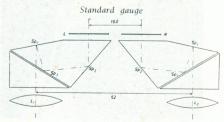
The customers who use one of our stereo systems need by no means be perturbed. The various devices of the system work automatically and in complete accordance with the laws of optics and stereoscopy and ensure, without difficulties, a good 3-D photograph, which is no more difficult to obtain than a normal flat photograph.

Dr. VIERLING

Ill. 12. Diagram of the optical design and the paths of the light rays in the stereoscope for (interchanged) CONTABLEX stereo pictures. (Transparencies laterally correct)



Ill. 13. Diagram of the optical design and the paths of the light rays in the stereoscope for (non-interchanged) CONTAX stereo pictures. (Transparencies laterally reversed)



#### New Accessories for the MOVITRIX

The many potentialities of the titling device MOVITRIX for the MOVIKON 8 can only be indicated in the instructions for its use (MOVIKON SYSTEM). Now many of the MOVIKON owners have designed home made accessories in order to give the titles to their films as much vitality and variety as possible. We have recently introduced several accessories of our own manufacture, since most cine amateurs have neither the time nor the opportunity to make such devices of their own.

There are first and foremost the "title drums" which have the advantage of similar drums that the length of the title is not limited to the circumference of the drum. As is shown in the illustration to the right below, a larger drum is placed in the frame of the MOVITRIX, while a smaller and relatively heavy one underneath keeps the title band as tight as possible so that the title will always cling smoothly to the surface of the upper drum when it is rotated.

The illustration to the left below shows the MOVITRIX with the swivel carriage for "wipes". A wipe usually is used to provide a transition between scenes which are related not so much to each other as to a common idea. It consists of the new scene seemingly pushing the previous scene off the screen. The application of the swivel plate is so simple that even a beginner will get good titles.

Finally we offer a title mask consisting of a transparent plexi-glass plate of the same size as that of the MOVITRIX titles. But this plate is provided with a frame, the outer measurements of which correspond exactly to the image area of the screen image. Amateurs who draw their own titles will find this plate a great help.







These new accessories are not just revolutionary novelties but will, no doubt, add considerably to the popularity of the MOVIKON 8 and its system.

Title drums complete for roll titles Swivel plate, complete for wipes Title mask

Order No. 1426/012 Order No. 1426/013

Order No. 1426/014

#### It's well worth while

#### A CONTAMETER for the CONTESSA

The CONTESSA is no longer in our production plan. However, you should not forget this popular and time-tested miniature camera. Many owners of this camera will be grateful to you if you remind them that there is a near-focusing device for the CONTESSA with which it is possible to take snapshots at a distance of only  $7^3/4$  ins. (20 cm). Amateur circles are, certainly, greatly interested in close-ups nowadays and, since the CONTESSA camera has been sold by our business friends in amazingly large numbers, a special effort to introduce this practical accessory will definitely be worth your while.

This contameter, together with the contameter for the super ikontas I and II has been described in detail in No. 8 of our "BULLETIN", page 7. It consists of a view-rangefinder, which is slipped into the accessory shoe of the contessa, and

the three PROXAR lenses for taking distances of approx. 50, 30 and 20 cm (19³/4″, 11³/4″ and 7³/4″). The view-rangefinder is quickly adjusted to the PROXAR lens in use and it is easy to find the correct taking distance immediately. The picture area required can also be determined in a second, correctly and free from any parallax. The CONTAMETER is supplied complete with a sturdy case under Order No. 441.



# Stop-press news from our Sales Department

**Exhibition Hold-all for the MOVIKON 8:** After the success which our attractive hold-all for the CONTAX and its accessories has enjoyed amongst our customers, we have decided to furnish our narrow gauge cine camera the MOVIKON 8 with an equally good combination case. It contains sufficient room for the camera, the supplementary lenses and the filters and interested dealers will be able to purchase it from us at cost price.

Twin-cable release for PANFLEX-TESSAR: The new PANFLEX-TESSAR for the CONTAX has an automatic pre-set spring diaphragm which can only be released by a special cable release fixed to both the PANFLEX and the PANFLEX-TESSAR. This twin-cable release is sold under Order No. 1551.

**Depth-of-field table for MOVIKON 8:** The instructions for the use of the MOVIKON 8 contain a depth-of-field table based on a circle of confusion of 0.015 mm diameter, while the table published in the instructions for the use of supplementary lenses for the MOVIKON 8 is based on that of 0.01 mm diameter. Queries received by us seem to make it necessary to clear up possible misunderstandings. Both tables are correct. The figures given in the camera instructions are absolutely sufficient for any amateur use. The figures in the instructions for the use of the MOVITELAR and MOVIGONAR take into account much higher demands. In future, however, the instructions for the use of both, camera and supplementary lenses, will contain one and the same depth-of-field table based on a circle of confusion of 0.01 mm diameter. We sincerely hope this will simplify matters.

CONTAFLEX Vane: Lack of space has prevented many of our business friends from making use of our CONTAFLEX Vane as an eye catching window display. In order to find an equally effective remedy we are offering now a small stick-on vane (see illustration) which will help to draw attention to this special camera. It is available on request under Order No. 3154.





# It's the close-up that matters A hint for selling the CONTAFLEX

Between the ashtray and the toothbrush there are many things which are part of our daily life well worth while photographing at as close a range as possible. This gives the amateur the opportunity of testing his camera and becoming familiar with its use at a time when cameras are usually hibernating. In summer time, when the sun shines and all the trees and bushes are green and in blossom, the practice we have had in winter may be turned to good advantage. Almost all amateurs who have once been successful in making close-ups will always try to take as many close-ups as possible, and this is particularly so with colour photographers, for whom the close-up has become almost a fashion.

Photographic dealers should not hesitate to exploit this fact by making a special effort to advertise every device for making close-ups. It is a good plan to make sure, before selling a camera, whether the customer is interested in close-ups, but it is still better to arouse the interest of the customer in close-up work and to offer him a camera which permits taking close-ups with ease. It should be stressed that taking close-ups is the most interesting and worth while type of photography. If successful, the dealer will soon feel the benefit of his persuasion, since the customer will become even more interested in photography and bring more films and negatives for developing and printing.

A camera with supplementary lenses, inch scale and focusing table is not particularly suitable for making close-ups a permanent hobby of its owner. The operation of such an equipment is much too cumbersome and not sufficiently versatile and permits only close-up photography of stationary objects.

This is quite different with the CONTAFLEX. A keen amateur photographer will soon become aware that this camera allows the same freedom of action, no matter whether he wants to take a distant view or a close-up. For the beginner too, advice concerning



the potentialities of the CONTAFLEX, especially for close-ups, is important. A demonstration of the CONTAFLEX will be sufficient to give the customer a clear idea of this matter, while a long explanation about focusing tables, parallax compensation and supplementary lenses would be more than a little boring. The CONTAFLEX, more than any other camera, can be relied upon to arouse the interest of a customer in close-ups.

The unique avantage of the CONTAFLEX with regard to close-ups is chiefly based on the fact that the functions of the viewfinder and measuring system remain the same no matter whether close-up or other photos are taken. It is certainly a remarkable relief to find that only one operation is necessary to convert the CONTAFLEX to a close-up camera, that of slipping a PROXAR lens on the camera lens. There is no removing the camera lens, no addition of special attachments and no re-adjustment of the lens; all these time-wasting operations are not necessary with the CONTAFLEX. This camera is quickly converted to close-up photos. The amateur, who owns a CONTAFLEX will seldom miss a good close-up shot, for he will have the picture in the bag while others are still preparing their cameras.

There are no additional operations when using the CONTAFLEX for close-ups, even the exposure time need not be extended, as it is necessary when using extension tubes. This is the distinct advantage of the CONTAFLEX, for only too often a close-up proves a complete failure because the amateur forgot to take into account the extended exposure time necessary. With the CONTAFLEX there is also no danger of faulty focusing. Should it happen that a wrong Proxar lens is used, which is either too strong or not strong enough, the error will be revealed immediately by examining the finder image. Furthermore, it is important that there is no need to purchase any other special focusing devices, which are necessary with other cameras when close-ups are to be taken, since the CONTAFLEX needs PROXAR lenses only.

The contaflex thus has many advantages for taking close-ups:

- Auxiliary focusing devices can be omitted, since slipping-on PROXAR lenses makes the CONTAFLEX a close-up camera.
- View and rangefinder can be used in the normal way there is no studying of cumbersome tables.
- The viewfinder ocular is used as usual and there are no operations differing from the normal use of the camera.
- The exposure time need not be extended.
- The effect of the PROXAR lens in use is visible immediately. Any mix-up of various PROXAR lenses and, in consequence, faulty focusing or framing of the picture area is excluded.

**EMMERT** 



# Twelve Functions and two Knobs

Our readers will be aware immediately what is meant with this heading. It is an argument frequently used in our leaflets and advertisements, for emphasizing the efficiency of the CONTAFLEX. On the other hand, this argument is ambiguous and many photographic dealers have drawn our attention to this fact. Many customers are afraid that such an accumulation of functions necessitates an extremely complicated mechanism which is susceptible to trouble or even breakdown.

It may well be that some customers have expressed this opinion to their dealer or are about to do so. For this reason we are prepared to give a frank reply to this question. First and foremost, we have asked the advice of our engineers how to show these functions of the camera in a picture to be published in this bulletin. You know from our publications in this journal that it is one single ring only that takes charge of the timely and smooth running of all these functions. Unfortunately this ring is hidden under the scale rings for stops and exposure times, so that it cannot be



photographed. An isolated photograph of this ring, however, would be useless, as it would not show the interrelations and the layman would hardly understand how so simple a device can perform so many functions.

So we went to our repair department and there we were shown carefully compiled statistics which proved that the CONTAFLEX gives as little trouble as all the other ZEISS IKON cameras. All our business friends know that the percentage of repair to ZEISS IKON cameras is very low indeed and that is hardly surprising, since the reputation of ZEISS IKON cameras is based on their excellent workmanship. That there

are a few complaints here and there cannot be denied, after all, our skilled workers are only human and not robots.

But one thing is absolutely clear: the design of the CONTAFLEX is critically analysed to the minutest screw and its very simplicity is the best protection against trouble. Manufacturing the CONTAFLEX is carried out with the well-known ZEISS IKON precision and this means that the argument "twelve functions and two knobs" is a recommendation rather than a cause for anxiety.

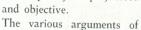
We are grateful, nevertheless, to all photographic dealers who have drawn our attention to the possible misinterpretation of our slogan. In order to assist your sales talks about the contablex we shall omit this slogan in future. wk.

# The Reason why I recommend the CONTAX . . .

When the sales or advertising departments of ZEISS IKON compile a list of the special features of the CONTAX it is obvious that every conscientious photographic dealer will examine this list item by item and give the camera a trial of his own in order to learn all about the CONTAX and to be prepared for any question a would-be customer may ask. That all the collaborators of ZEISS IKON are delighted with the CONTAX can be taken for granted, for no product can be a success on the market until the producer himself is fully convinced of the first class quality of his product. Shoddy goods cannot be sold; this is one of ZEISS IKON'S chief principles.

The letter of a photographic dealer, which we received recently, is, from this point of view, of the greatest importance. If one of your colleagues praises the special features of the CONTAX and gives a precise specification of its advantages in com-

parison with other high precision cameras, it is certainly a valable document, because he is in the favourable position of knowing all these products which he handles almost daily and has certainly examined to the last screw. So it must be assumed that this judgement is completely unprejudiced and objective.



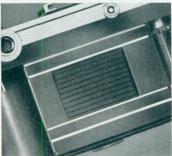


this letter have been made up by us into a summary of 18 features. We do not claim that this summary is complete, but we think that those features mentioned are worth while emphasizing in a sales talk about the CONTAX:

- 1. View-rangefinder with a long base. At short distance it is even possible to focus exactly to a fraction of an inch. As the rangefinder is combined with the viewfinder in a single eyepiece much time is saved and rangefinding can never be forgotten.
- 2. Focusing with the middle finger on the milled edge. Neither the hand nor the eve (see 1) change their position when focusing and releasing the shutter. The CONTAX always lies firmly in both hands.
- 3. All components coupling the rangefinder to the lens are protected from dust and are not accessible even if the lens is removed. The exactitude of the measurement is thus guaranteed.
- 4. All lenses are securely fixed and need not be pulled out and locked. Even the relatively inexpensive TESSAR 1:3.5/50 mm is now available in a non-collapsible mount.













- 5. A wide range of lenses. A lens unique all over the world is the super-wide angle lens Biogon 1:4.5/21 mm with an angle of view of 90° and with an excellent correction of all optical aberrations. Most of the various focal lengths and highest speed lenses have a less expensive counterpart for photographers with a slender purse.
- 6. World famous zeiss lenses, which excel in their definition, colour correction, lack of distortion and unsurpassed illumination of the picture area right up to the edges.
- 7. The Bayonet Mount of the lenses is as old as the CONTAX itself and was in use as far back as the first models, 20 years ago. All former CONTAX lenses can be used with the new CONTAX and all modern CONTAX lenses still fit old CONTAX bodies. The possibility of a rapid exchange of lenses is convenient and the bayonet mount can be kept clean much easier than a thread. This also keeps the interior of the camera clean. When exchanged rapidly the lens will, nevertheless, sit correctly in the camera.
- 8. The blinds of the focal-plane shutter are of metal and therefore insensitive to temperature and moisture. They are always light proof and their useful life is practically unlimited.
- The perpendicular movement of the shutter is particularly advantageous for flashlight synchronisation.
   The connection of all types of flash to one contact only with the automatic regulation of the ignition times is simplicity itself.
- 10. The speed of 1/1250 second may be decisive for sharp definition when sports events are taken.
- 11. All exposure times from "T" to  $^{1/1250}$  second are set by means of one large and handy disc.
- 12. The self-timer has fixed retarding times so that the moment of the shutter release can be determined in advance. The release knob for the self-timer is the same as for the shutter release.
- 13. As the back of the camera is detachable, the loading and cleaning of the CONTAX are easily carried out.

- 14. It is unnecessary to rewind the exposed or partly exposed film. This saves much time.
- 15. The contax cassette, which can also be used for the contaflex is excellently designed so that failures are almost impossible.
- 16. The appearance of the CONTAX is attractive, clear and easy to examine. The chromium-plated parts and the all-metal body covered with black leather add to the elegant appearance.
- 17. The built-in photo-electric exposure meter of the CONTAX III a is harmoniously fitted into the camera body. A guarantee for its efficiency is the fact that ZEISS IKON have made and built-in these instruments for more than 20 years.
- 18. The wide range of accessories for special tasks makes it possible for scientists and technicians to exploit all the advantages of the CONTAX and the CONTAX SYSTEM. Wk.



#### Cameras for the Disabled

It was by mere chance that the newspaper landed in our editorial office, and had it not contained a "human interest" story, to which I am rather addicted, I would not have read it at all. In one of those interviews conducted at random, in which people from various walks of life were asked about their secret ambitions for the "near future", these words caught my eye: . . . what else do I wish for? That I may be able to make still better photographs with my CONTAFLEX. This camera has so many features which make it possible for me to operate it quite successfully despite the fact that I am severely disabled. One of my pictures has even been published in . . ." We were greatly touched by these lines, because they conveyed in simple words the deep pleasure and satisfaction photography can give even to those who have suffered in bodily health and are no longer able to pursue the many pastimes and hobbies open to their more fortunate fellows.

We reasoned that, if one man could overcome his disabilities for the sake of photography it should be possible for many more. We, therefore, got in touch with the writer of these lines and learned that he had lost both his hands in the War. By means of a specially constructed crank for operating the shutter, which his photographic dealer had made for him, he can now operate the CONTAFLEX comfortably. One of his photos, which has been taken in this way, is published below and we are convinced that many amateurs possessing hale and healthy limbs would only be too pleased if their photographs were as good.

It is, of course, impossible to give any specific advice for the way in which our cameras may be adapted for use by people with arm, leg or hand injuries, since this depends on the nature of the disability. People who are forced to use their left hand for operating the camera have often asked us whether it would not be possible to transfer the release button to the left side. Unfortunately, this is impossible, for it would entail the redesigning of the entire mechanism. However, there is an extremely simple solution to the camera problem of the left-handed: turn the camera through 180° so that it is in fact upside down. Then the release button will be easily accessible and after some time the operation of the camera will provide no further difficulties.



phot. Karl Noll

#### WELL ADVERTISED IS HALF SOLD



#### "Ariane and the MOVIKON"

Everybody who is connected with our trade knows what is behind the name MOVIKON: behind the MOVIKON is Ariane. Who Ariane is is shown in the picture below — a charming young girl who loves life and filming with the MOVIKON.

"Ariane and the MOVIKON" is the title of our commercial film which has been seen by many photographic dealers both on the occasion of the CONTAX course and during the dealer's information meeting. Everybody was highly enthusiastic about this film which tells the story of how "boy meets girl" through the assistance of a MOVIKON and, of course, there is a happy ending. Interspersed with the scenes technical information is given explaining the working of camera and its accessories, and when the end of the film has been reached, it is difficult to say which created the greater impression: the film story or the versatility of the MOVIKON.

The film was made by two people who certainly know their jobs. Werner Jacobs was the director and Heinrich Schnackertz the man behind the camera. Both are well-known in Germany for their many feature films. Actually the film is not just another advertising strip, but a gay little feature film with highly amusing dialogue. Moreover, novices as well as old hands in the art of amateur filming will find many suggestions for their own work. Here one can see how scenes are built up, how fades can be incorporated easily into the film and many other things of interest to



all those who find in filming the ideal occupation for their leisure hours. We made this film some time ago with the intention of helping you with your own cine-camera sales. Amateur filming is still in its infancy and its popularity has yet to find a much wider echo. This is where the publicity film comes in, since it will supplement your own efforts. Copies of this film have

already been made available to many of our business friends and have helped to make their film evenings more enjoyable, not only for your established clientele, but also for those who are interested enough to want to know more about filming.

At the same time this film served as a really impression-making advertisement for the MOVIKON 8 Transverse. As more and more interest has been shown, many more copies have been made in German, English and French which are, on request, available for your special cine filming drive.

Should you decide to avail yourself of this offer, we must ask you to let us know your intentions as far as possible ahead, so that we can arrange to meet your request in time for the specified date. Please contact your local ZEISS IKON representative directly, who will get in touch with us in case he cannot let you have one of the copies at his disposal in time.

We have also been approached by customers wanting to buy this film and in such cases our representatives will give all necessary information. The desire to have this film constantly available on the premises is even easier to understand when we tell you that one dealer, who had shown the film during the last year, told us that his cine camera and film sales have greatly increased his total turnover. Moreover, the sales of the MOVIKON 8 were greater than that of any other type of cine camera. "Ariane and the MOVIKON" is sure to help you to win new enthusiasts of amateur cine filming and also of the MOVIKON 8 TRANSVERSE.

MENGEL

#### **New Prospectus**

AMATEUR CATALOGUE: As we are concentrating on the most important types of camera in our production drive, the amateur catalogue now contains less pages naturally. Consequently, this reduces costs and permits a much greater number of catalogues to be printed to the extent that this prospectus could also be used as a hand-out. In this way publicity is given to the whole range of ZEISS IKON cameras which includes the BOX TENGOR as well as the MOVIKON 8 while formerly hand outs were only available for cameras in the lower price bracket. This new amateur catalogue has already been despatched to our customers and copies are still available. We should be obliged, however, if your order for this catalogue does not exceed the number actually needed as we are anxious to ensure a really wide distribution.

Order No. 2020

**CONTAFLEX PROSPECTUS:** This prospectus, which contains descriptions of both contaflex models, is intended to be handed to those costumers who are seriously interested in the CONTAFLEX. The prospectus should be used neither for circular despatch nor as a newspaper supplement. As with the CONTAX prospectus, the number of copies for the CONTAFLEX prospectus is a limited one. We are forced to ask you to take this fact into consideration when you give your order.

Order No. 3036



# The Problem of Delivery

Manufacturers as well as retailers want to get rid of the goods they have manufactured or have in stock as quickly as possible in order to increase the turnover steadily. However, if some product has been a great success and suddenly becomes unavailable because the quantity made has not been sufficient and, it cannot be delivered for some time, all concerned are angry and disappointed and, of course, blame the manufacturer. The manufacturer, however, knows quite well that his product will not sell in the winter as easily as it does in the season and tries to exploit the turn of the market as best as he can. When he is, nevertheless unable to deliver the goods either immediately or at all, he must have very good reasons.

But let us talk of our particular trade. Everybody knows that the development of a camera from the drawing board to the introduction of the new model to the market, takes a long, a very long time in deed. Even at the beginning of this development the capacity of the own manufacturing plant must be taken into account. But that is not all, the manufacturers of shutters, lenses and other components must also be asked whether they are able to deliver their products in time, in the quantities necessary and exactly according to the design. Delivery terms of six months and more must be taken into account for the delivery of the raw material and the components to be built in. Finally the tools necessary must be made and the hundreds of single components, screws, washers, springs, etc. must be manufactured and it takes a long time before all these parts have been made and can be assembled to form the finished product.

But in these post-war times it is hardly ever possible to predict for a year in advance or even longer how great the demand of the photographic market will be for a certain type of camera. Can you blame the manufacturer when he calculates cautiously, despite his optimism?

Our business friends know that we have concentrated our manufacturing capacity on producing the important types of our cameras only in order to devote more time and capacity to our novelties. However, nobody was able to anticipate the tremendous acceptance our novelties have found. It is, therefore, impossible to meet short-termed demands for the time being. We have, of course, increased our production and will further increase it to its limits, but greater quantities call for new tools, new raw materials and more skilled workers. The manufacturers of the important

components are also unable to meet the call for such an increased demand and it will take months to get everything together, which still does not solve the problem of the lack of skilled workers.

We deeply regret not to have been able to meet the urgent demand for our latest novelties despite the general wish for speedy delivery. Every one of our customers may be rest assured that we really do all we can. It would be a mistake to assume that we deliberately keep one customer waiting longer than another.

Furthermore, we wish to discuss another problem frankly. The photographic press and other bodies have blamed the camera industry recently for showing novelties at the PHOTOKINA or advertising them long before they appeared on the market. This is, of course, regrettable, but certainly not done of spite. Frequently new developments in design and suggestions by dealers and amateurs have given rise to improvements or changes, which have delayed the manufacture. However, our business friends will certainly be tolerant if the finished product has improved in quality and versatility.

And yet, we are always asked by a few clients to supply them with at least one model of a camera which is not yet on the market, because, for instance, a customer is going on an exploring expedition. We are unable to meet such a demand because the sales departement can dispose of a product only when the manufacturing plant has started delivery. You know, we don't make single cameras, we produce them in quantity! And, by the way: what would you say when you heard that one of your local colleagues has got a camera for the delivery of which you have already been waiting for so long?

To sum up we would like to say, that ZEISS IKON does everything possible to deliver the goods in such a way as is usual among business friends. We hope that these explanations will have convinced you of the difficulties we are encountering at the moment.

HARZ

#### ZEISS IKON and the Industrial Fair in Hanover

Many visitors who came to Hanover to visit the big Industrial Fair were attracted by the various stands of the ZEISS IKON AG. where they showed great interest in the numerous products displayed to give a comprehensive survey of our vast production scheme. Our sister concern, the Goerz Works, Berlin, had used their representative stand in the "Haus der Elektrotechnik" to show their interesting range of mirror lamps. Through our various publications in the "BULLETIN", our business friends will know that these silvered mirror lamps are made to comply with optical-mathematical computations in order to provide ideal illumination for shop-windows and sales rooms, for laboratories and workshops as well as for large halls, ballrooms, cinemas, theatres and for the flood-lighting of buildings and monuments. Amongst other items there was displayed one of the lamps used to light up the track of the



race course at Hamburg-Farmsen, which is said to be the best illuminated race course in Europe. The picture published below will certainly bear out this verdict, as it was taken on a clear day without additional illumination, using a CONTAX with Sonnar f/1.5 at 1/250 sec.

Besides electric appliances for illumination, the Goerz Works also showed the well-known zeiss ikon safety locks and burglar-proof installations, which are also exhibited twice a year at the Trade Fairs in Cologne by zeiss ikon ag., Goerz Works, Berlin.

The ZEISS IKON OFFICE MACHINERY G. m. b. H. had their own stand in the hall of the "Büro Industrie", where our bookkeeping machines proved to be a great attraction. These highly complex machines, from the Control Machine, model B with its counting mechanism for cash balancing to the Ratiomat D I/8 DD with one counting mechanism and a device for balancing eight columns in duplicate, are all furnished with the time-saving simultaneous keyboard, the effect of which is to obtain higher efficiency without involving additional labour. Special attention was attracted by the variety of models of the duplicating automaton Radiomat D I/8 DD. These special machines are widely used in trade, commerce, industry and banking. Keen interest was also shown in our cameras, which were displayed on the stand of CARL ZEISS, Oberkochen, where the scientific application of the CONTAX and CONTAFLEX systems were demonstrated. Our professional cine equipment was exhibited to experts at two special exhibitions outside the actual salon.

Although the German Industrial Fair at Hanover is, of course, not so important for the photographic trade as the PHOTOKINA, it was still a welcome opportunity for us and our Goerz Works to show our products to the public. The success has proved that ZEISS IKON precision is fully recognised in all fields.





CONTAFLEX
A comparison of close-up
photographs

without a PROXAR lens, distance 80 cm  $(31^{1}/_{2} \text{ ins.})$ 

Particulars to "Close-ups with the CONTAFLEX" (see page 17)



with PROXAR lens, f=1 m, distance 42 cm  $(16^3/4 \text{ ins.})$ 

**◄** with PROXAR lens, f = 0.5 m, distance 30 cm (11 $^{3}$ /<sub>4</sub> ins.)

with PROXAR lens, f = 0.3 m, distance 23 cm  $(9^1)_8$  ins.)



ZEISS





**◄** with PROXAR lens, f = 0.2 m, distance 16 cm  $(6^3/s \text{ ins.})$