

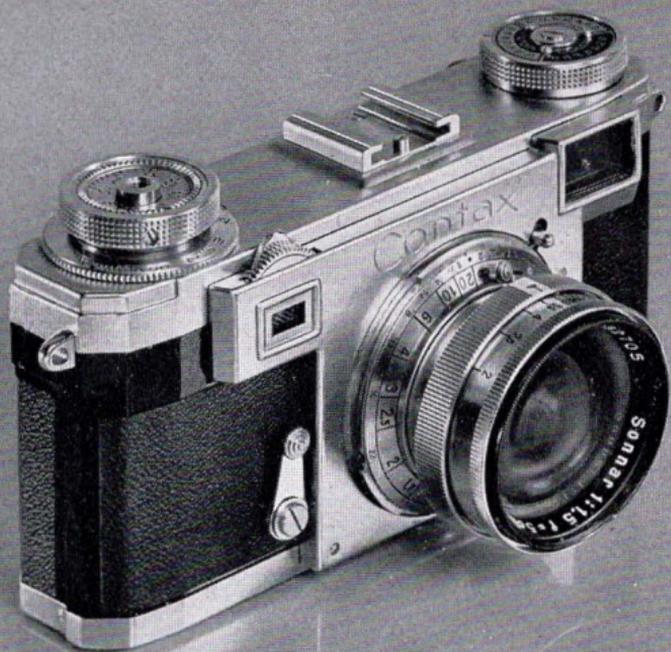
CONTAX

IIa

INSTRUCTION BOOK



ZEISS IKON A.G. STUTTGART

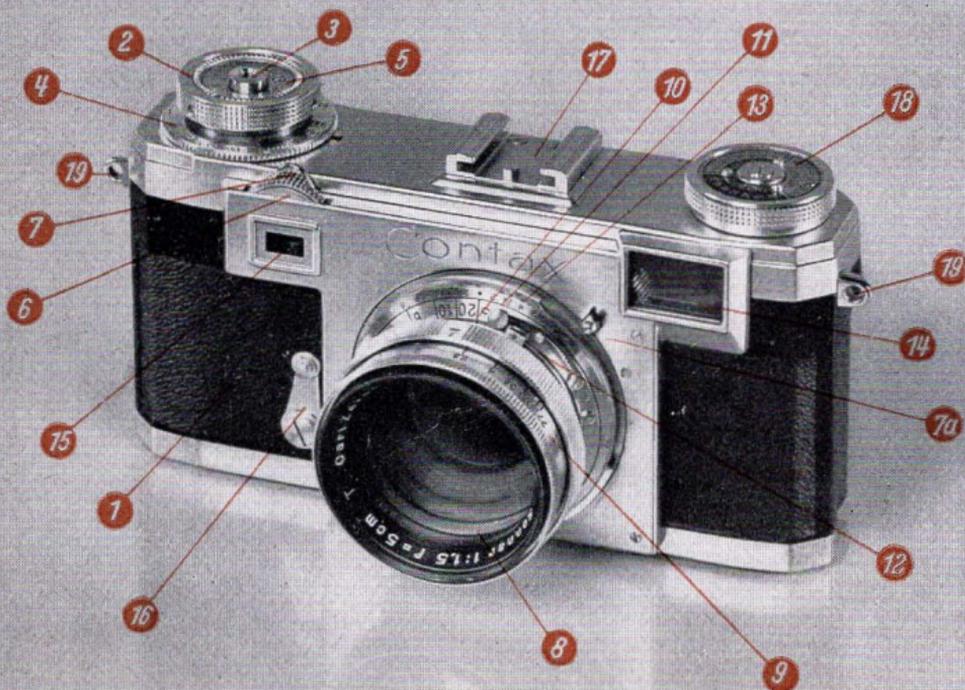


The highly efficient 35 mm camera in all-metal construction is equipped with combined view and rangefinder, all-metal focal-plane shutter, and a choice of incomparable Zeiss lenses which are interchangeable by means of a bayonet-type mount. A wide range of accessories permits the application of the CONTAX in every field of photography. The CONTAX can be loaded with standard 35 mm cartridges of 20 or 36 exposure capacity containing black-and-white or colour film. CONTAX magazines permit the use of ready-cut lengths of film, 5 feet of which furnish 36 exposures.

DESCRIPTION OF PARTS 1

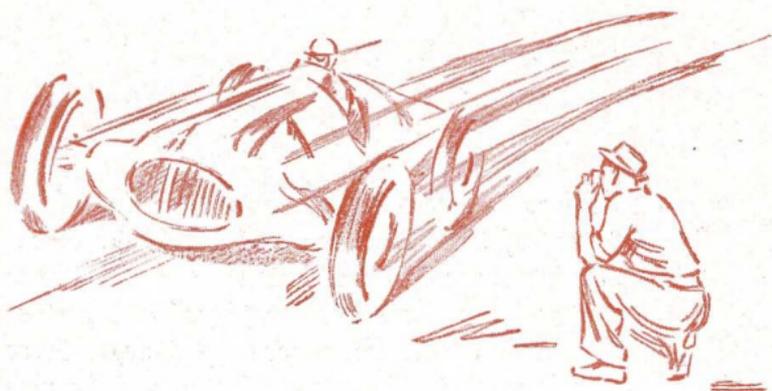
- | | |
|-------------------------------------|---|
| 1 Leather-covered light metal body. | 8 Lens. |
| 2 Winding knob. | 9 Diaphragm ring. |
| 3 Release button. | 10 Distance scale. |
| 4 Setting ring for shutter speeds. | 11 Depth of field scale ring. |
| 5 Counter disc for frame counting. | 12 Spring catch for lens. |
| 6 Focusing wheel. | 13 Outside bayonet mount. |
| 7 Infinity stop for focusing wheel. | 14 First combined view and
rangefinder window. |
| 7a Infinity stop for lens. | |

Description of parts continued on page 30



The CONTAX

manufactured by ZEISS IKON A.G., STUTTGART, is a deluxe precision miniature camera enabling its user to solve almost any photographic task. It will be the steady companion of the scientist, technician, professional as well as advanced amateur photographer. The vast experience and knowledge of the Zeiss Ikon camera technicians have been fully employed in designing the CONTAX. Its dimensions are reduced somewhat compared with the former model and its operation has been further simplified. The scientist will use it daily in his painstaking work; the news photographer and reporter will obtain his pictures with it under the most difficult conditions;



the professional photographer will be delighted with the sharpness and perfection of his CONTAX photos and the amateur photographer will be able to record the most unusual situations. Complete information on these subjects is contained in the comprehensive CONTAX literature and handbooks. The booklet is intended to furnish the owner of the CONTAX with essential and accurate instructions on how to operate his camera.

It is recommended that a thorough study of these directions be made and to practice the various mechanical movements before loading the camera.

THE MAIN FEATURES OF THE CONTAX

The new CONTAX represents a further development of its predecessor models. All the essential advantages of more than 100 000 CONTAX cameras in use have been employed and further new developments have been introduced. Here are a few details of the main features of the new CONTAX:

Die-cast body of light alloy guaranteeing extreme mechanical precision characteristic of ZEISS IKON products.

Combined view and rangefinder permitting sighting and focusing through one eye piece.

Choice of incomparable **Zeiss lenses**, factory-coated and in light-weight mounts especially designed for the CONTAX. All are **interchangeable** by means of their bayonet-type mount, insuring rapid use and precision seating.

All-metal focal plane shutter having speeds from 1 sec. to $\frac{1}{1250}$ sec., and "B" and "T" all of which can be set by means of **one** dial.

35 mm perforated cine film is used which is available in various types such as 35 mm cartridges, daylight loading spools, ready-cut lengths of film, etc.

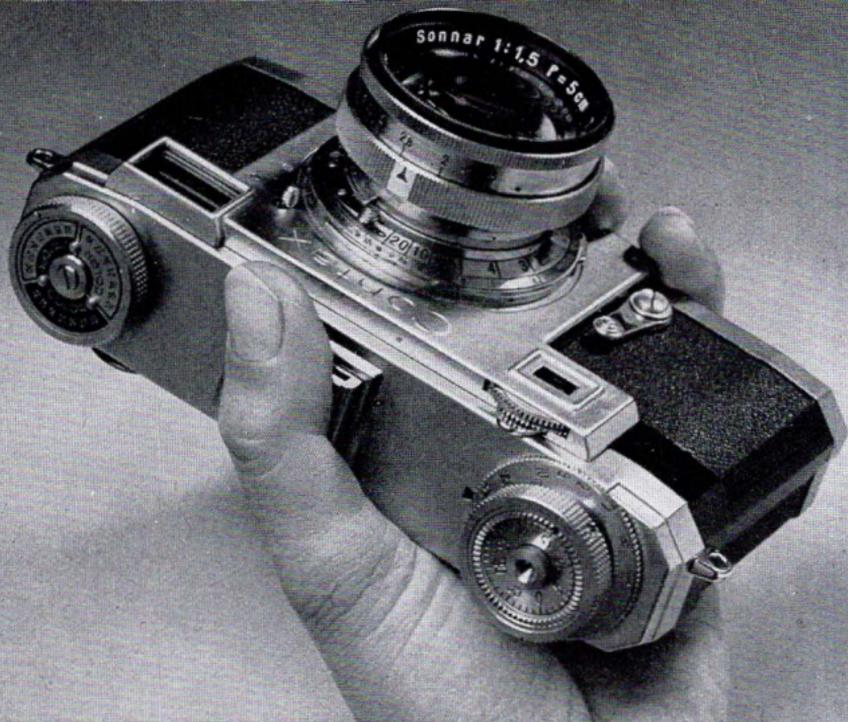
CONTAX cassettes permitting interchangeability of various kinds of 35 mm negative material in daylight without rewinding.

Detachable camera back which is advantageous not only during loading and unloading but also when thoroughly cleaning the camera.

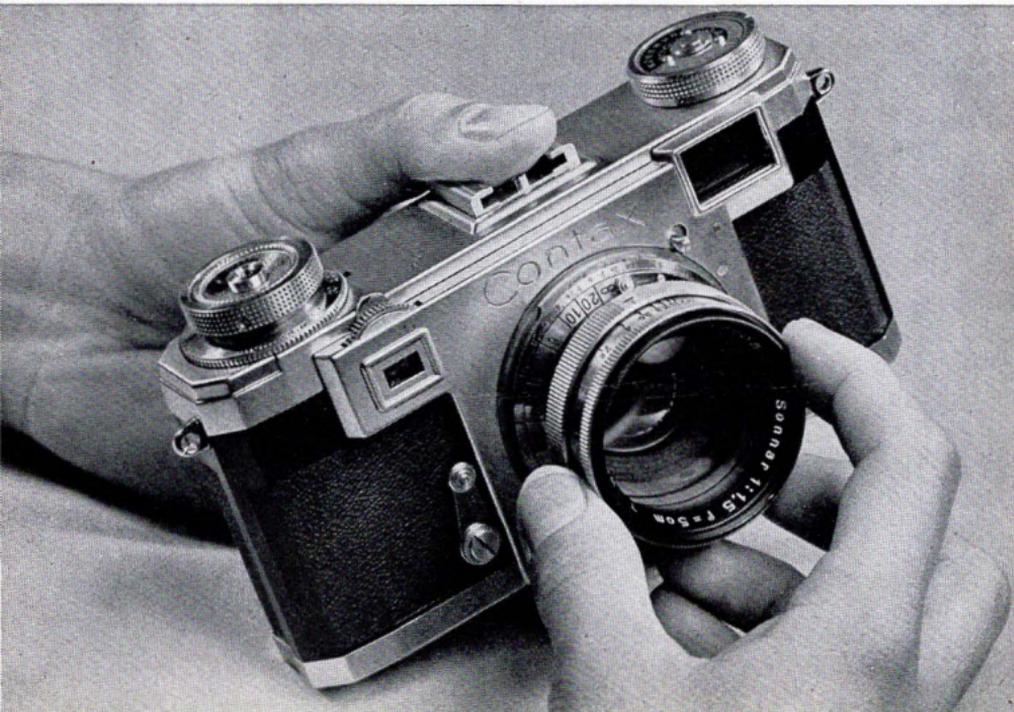
A wide range of **accessories** extremely well designed and easy to use enables the CONTAX owner to cover almost any field such as close-up work, photomicrography and tele-photography as well as reproduction and copying work.

Highest possible precision in its mechanical function and unexcelled quality of its Zeiss lenses make the new CONTAX the top-notch camera, chosen by the professional, scientist and technician, as well as the advanced amateur photographer.





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MANIPULATION OF THE CAMERA

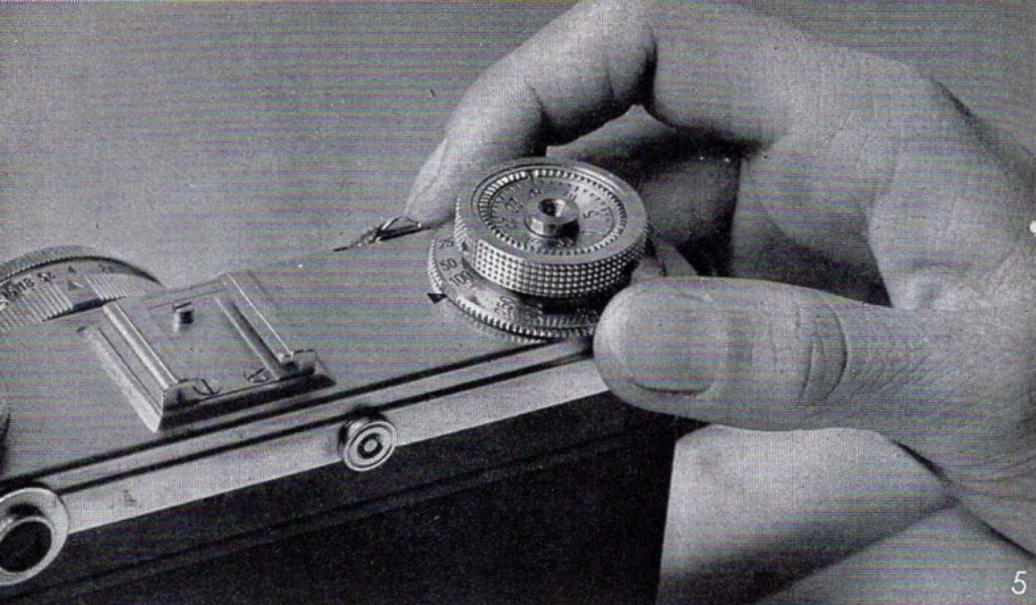
STEP I

PREPARATIONS TO BE MADE BEFORE TAKING THE PICTURE:

Take the camera in the left hand in such a manner that the thumb rests on the view-finder shoe and the other fingers grasp it from underneath.

Then use the thumb and the index finger of the right hand to set the desired diaphragm and shutter speed as well as to wind the shutter itself.

The diaphragm is set by turning diaphragm ring (9).



THE EXPOSURE TIME

is set on ring No. 4. This can be done before or after the shutter is wound. The disc No. 4 is lifted and turned until the desired exposure time is opposite the setting mark. At this point it is dropped into position.

The fact that one ring is used to set all shutter speeds makes the operation of the CONTAX convenient, easy and sure. Setting the shutter speeds and verifying them is at all times possible either before or after winding the shutter.

The engraved numbers on the speed setting ring indicate fractions of a second.

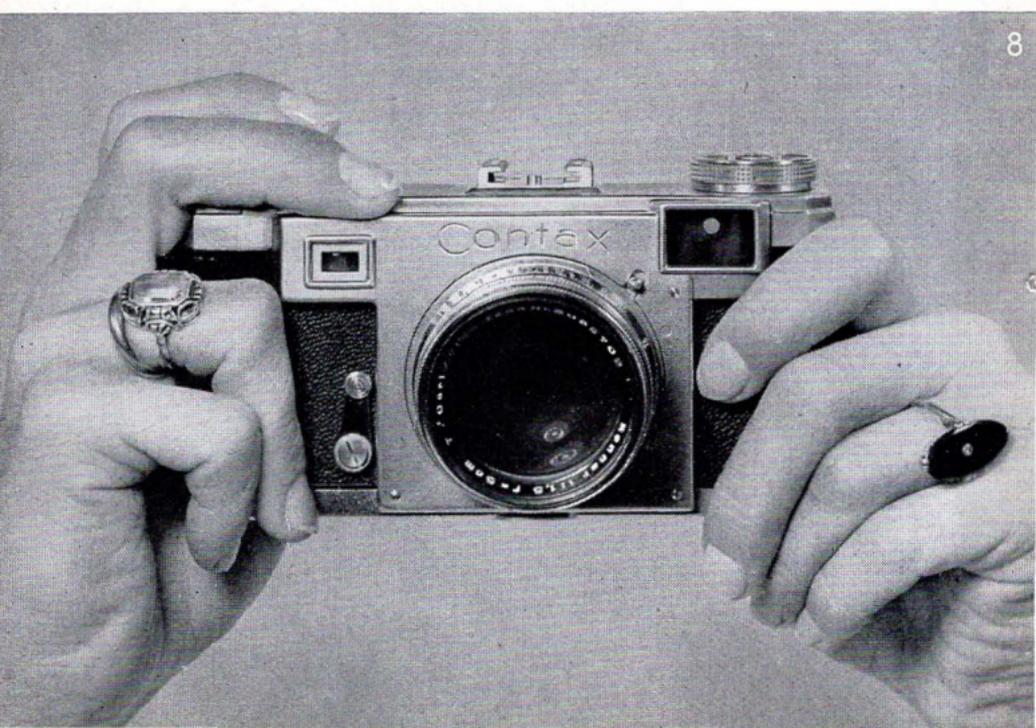
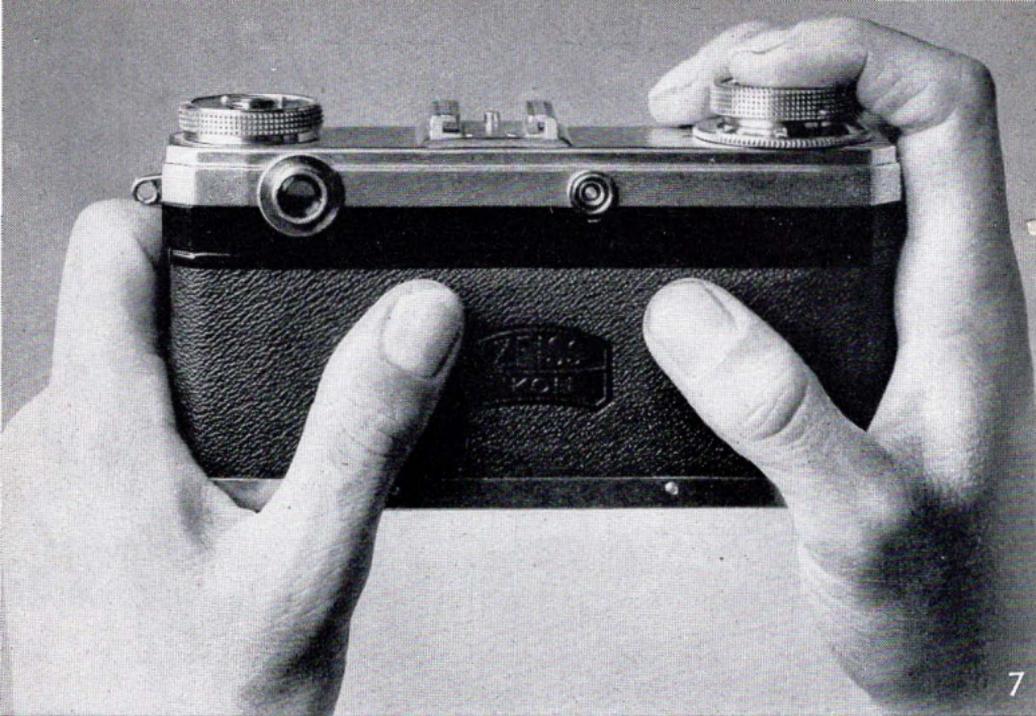
Example: 100 means $\frac{1}{100}$ sec. exposure time.

The CONTAX shutter has a range of speeds from 1 second to $\frac{1}{1250}$ second in addition to "B" and "T". At "B" the shutter is opened by pressing the release button down and is closed by relaxing the pressure upon the release button. At the setting "T" the shutter is opened by pressing the release button down and by turning the shutter speed setting ring slightly in the direction towards "B" it is closed again.

The film and shutter winding mechanism are coupled to advance the film and cock the shutter simultaneously, thereby eliminating the danger of double exposures. The shutter winding knob (2) is turned clockwise until a definite stop is felt.

NOTE: *It is not suggested that thumb and index finger of the right hand wind the shutter in the manner of turning a screw. It is advisable to turn the camera in such a way as to divide the movement between the right and left hand for greater convenience.*





STEP II

MAKING THE EXPOSURE

The shape of the CONTAX and the arrangement of its control are adapted to the human hand and are designed to hold the camera securely. The following description of the manipulation guarantees utmost safety when taking pictures.

THE LEFT HAND

holds the CONTAX from below with the thumb and the index finger.

THE RIGHT HAND

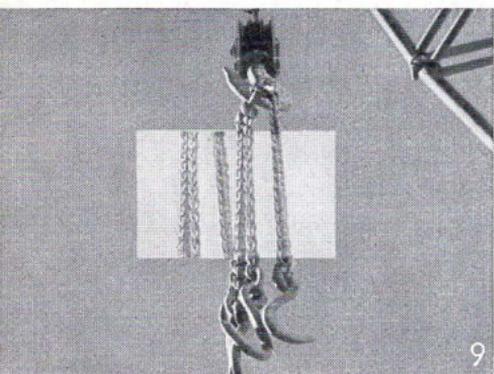
grasps the CONTAX from the side. The middle finger is placed on the focusing wheel and the index finger on the shutter release button. The thumb rests on the back of the camera and the other fingers on the front. The right lower corner of the CONTAX rests in the palm of the right hand.

THE ELBOWS

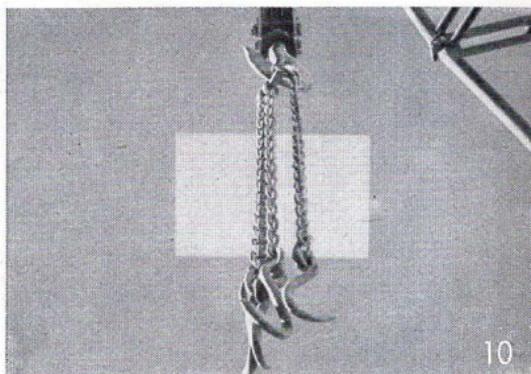
are held at the side of the body for better support.

FOCUSING

By looking through the eyepiece No. 20 of the combined view and rangefinder one will see the viewfinder field for the standard 2 inch lens. In the center of the viewfinder field there is a somewhat lighter and yellowish field in which the object to be photographed usually appears with double contours. By turning the focusing wheel No. 6 with the middle finger of the right hand these contours will come to coincidence which means that the lens is accurately focussed at the distance of the object seen



double contours in combined view and rangefinder field

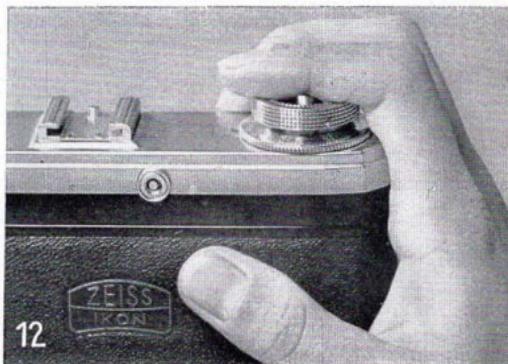
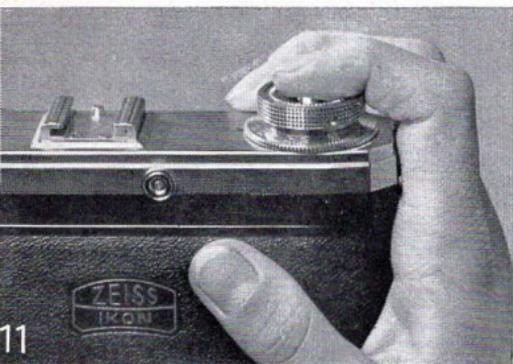


coincidence of contours in combined view and rangefinder field

in the rangefinder portion of the combined view and rangefinder. The focusing wheel operates the rangefinder and the lens focusing mechanism for 2 inch lenses simultaneously. The combined view and rangefinder of the CONTAX permits the control of composition and the accurate checking of the focus at a glance. The other CONTAX lenses which are provided with outside bayonet mount are focussed by turning the lens mount. They are also coupled to the rangefinder with the exception of the long focal length lenses with reflex attachment. (Sonnar $f/2.8$, $7\frac{1}{8}$ " and Sonnar $f/4$, 12" focal length.)

RELEASING THE SHUTTER

By pressing the shutter release button (3) down with the index finger of the right hand, the shutter will be operated and the picture taken. This can either be done with the tip or top joint of the index finger (Illustration No. 12). It has been found by experience that the greatest security in holding the camera steady during the exposure is given when the uppermost joint of



the index finger is pressed downward. (See Illustration No. 11).

If the winding knob has not been turned until a definite stop is felt, it follows that the shutter is not completely wound, and the film not advanced for a full frame; in this position it will be impossible to release the CONTAX focal-plane shutter. Under no circumstances is it possible to make overlaps and double-exposures.

There are no external, rotating shutter parts on the CONTAX which might, if inadvertently touched, interfere with the normal operation of the camera.



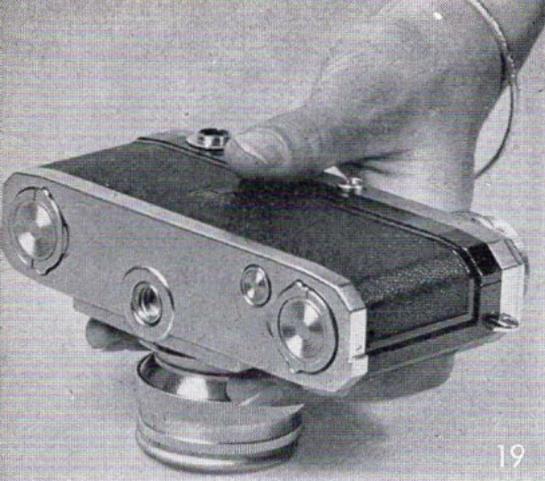
HOLDING THE CONTAX CAMERA

When taking vertical pictures, manipulate as described under Step II. (Pages 12 and 13.) The right hand grasps the camera above and is suitably curved for this purpose. The left hand is used as a support. The same procedure is followed with the right hand below, and the left hand above, if found

more convenient. If the left eye is used for focusing, the right eye can remain open. If the right eye is employed for focusing, the left eye should be closed.

The various ways of sighting and holding the camera are shown in the illustrations. The user of the CONTAX should select the method which suits him best.





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STEP III

LOADING AND THE OPENING

The lens of the **CONTAX** is held between middle and ring finger of the left hand. The top of the camera is next to the chest. The thumb is placed on the back of the camera.

With thumb and index finger of the right hand, turn locks 23 on the bottom, right and left respectively. Now the left thumb can push the back off.

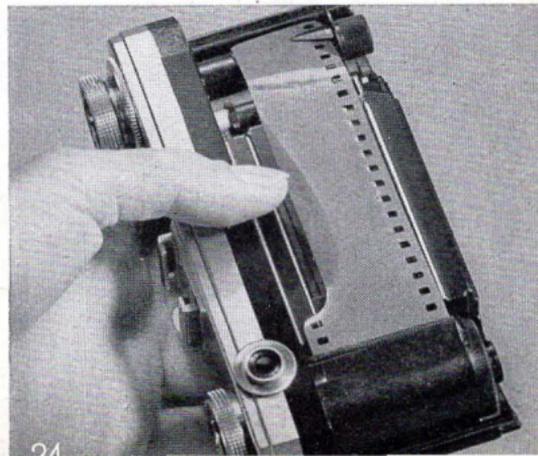
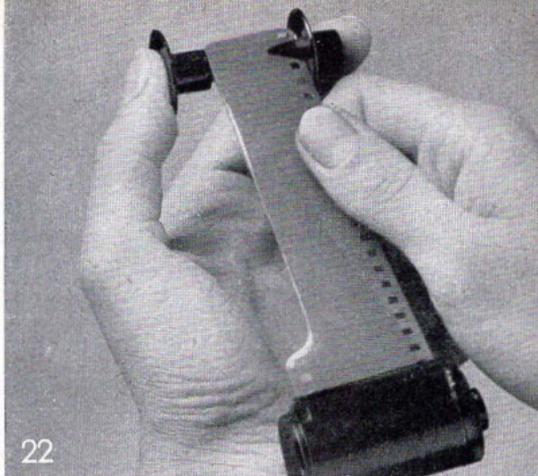
Then the right hand lifts the back away from the housing of the camera.

The open **CONTAX** shows the **all-metal focal plane shutter**, a famous technical achievement.

UNLOADING

THE LOADING

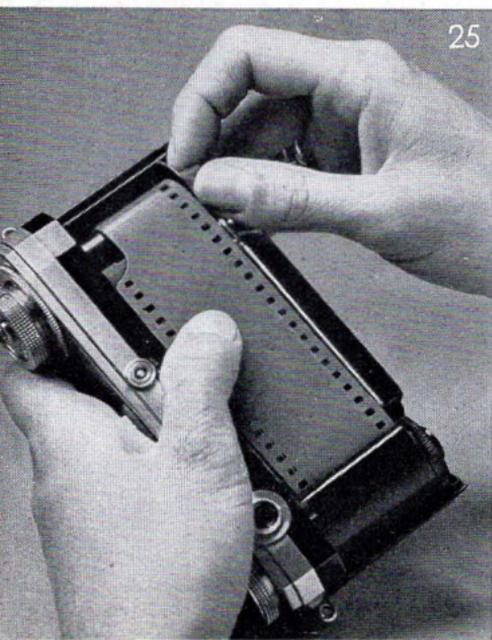
As a first step, attach the beginning of the film to the take-up spool by hooking it to nose underneath the triangular lip of the spool. 35 mm cartridges are supplied by the manufacturer with the beginning of the film ready-cut to proper shape. No special cutting is required on a stock roll of 35 mm film. The cartridge is then placed into the feeding spool chamber in such a way that the rewind prong engages with the hollow end of the cartridge (cassette). The empty spool is fitted into the take-up spool chamber. Now the film is wound



on the take-up spool until its perforation engages the teeth of the sprocket on both sides. Then the back of the camera is replaced, holding the film strip down with the thumb of the left hand. Finally, the back is **slid on** to close the camera completely. Then lock the keys on the under side of the CONTAX and fold them flat. This can only be done when the back is placed correctly on the camera.

After winding and releasing the shutter twice in order to advance the film exposed during loading, the unexposed film will be in the picture field of the CONTAX.

Attention should be given to the rewind knob (18) which should turn in the opposite direction of the arrow engraved on top of housing; this is an indication that the film winds properly. By means of the knurled ring, turn the frame **counting indicator** either left or right to 0. After winding the shutter once more, the CONTAX is ready for the first exposure.





If it is intended to feed the film from a cartridge into a cassette or even from cassette to cassette, then the film should be attached to the core of the cassette on take-up side.

The **CONTAX** cassette consists of two slotted containers and a core. By pressing down a small button the two containers can be turned until their apertures are over each other. In this position the cassette can be pulled apart. The cassette can be loaded with ready-cut lengths of film, day-light loading lengths, or with film from a stock roll of 35 mm film.

Only if it is desired to rewind the film should the end of the film be firmly attached to the core of the feeding cassette. It is not necessary that the leader and the trailer of the film be cut in a certain shape, because it can be hooked on the nose of core.

Ready-cut lengths of 35 mm film have a special cut on the end of the film similar to the shape of a tongue. This is to be attached to the feeding core by threading it through the small slot in the center of the spool, and after having turned it over, it is once again pulled through the same slot, thus securing it tightly on the feeding core.

The core with the film wound on it is placed in the inner container of the cassette and the other container is slid over it, with the leader of the film outside. By turning the con-

THE UNLOADING

Using a 35 mm film cartridge in the feeding chamber and a CONTAX cassette on the take-up side, or two cassettes on both sides, it will not be necessary to rewind the film. In such cases it is possible to change from one kind of film to another by winding and releasing the shutter twice in order to transport the exposed film into the cassette.

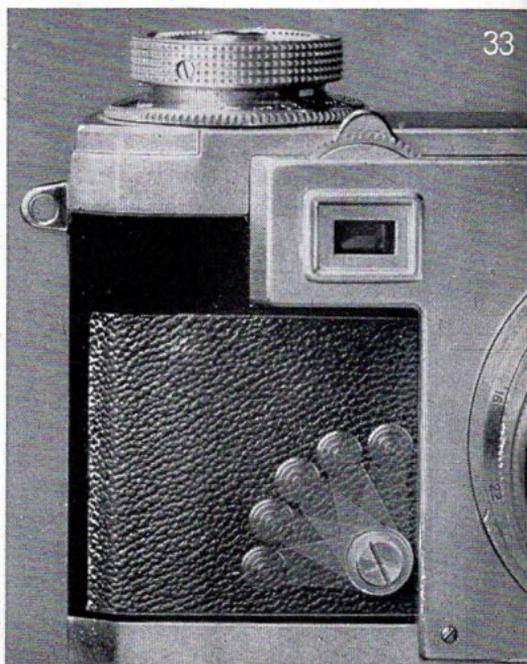
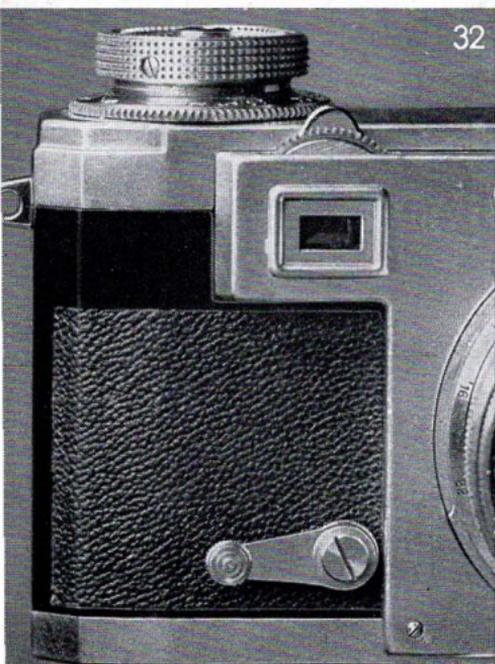
As described under Step III, the CONTAX is then opened and the cartridge or cassette removed.



DELAYED ACTION SHUTTER RELEASE

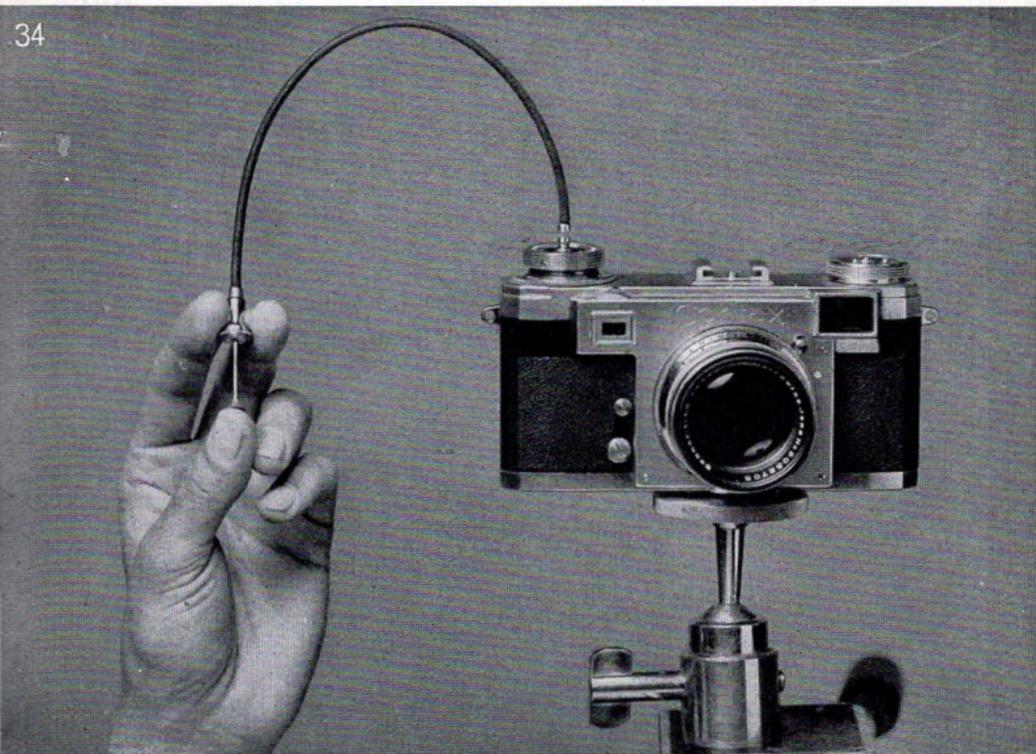
By pressing down lever 16 the delayed action mechanism is wound up. After having wound the shutter also, the self-timer can be set in action by releasing button 3; the shutter will be operated as soon as the delayed action mechanism has run off. If lever 16 is wound up all the way (approximately a 90° turn from its original position) the delay will be approximately 12 seconds. Intermediate settings for a shorter delay can also be made.

If the shutter is not wound when operating the delayed action mechanism it will, of course, not release. The delayed action mechanism cannot be used when shutter is set on "B" or "T" or $1/500$ th or $1/1250$ th second.



TAKING PICTURES WITH THE AID OF A TRIPOD

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A tripod socket (24) is provided on the under side of the CON-TAX to screw it on any standard tripod. It is recommended to use the special locking cable release to be screwed into the thread inside the shutter release button for all pictures taken with the CON-TAX from the tripod.

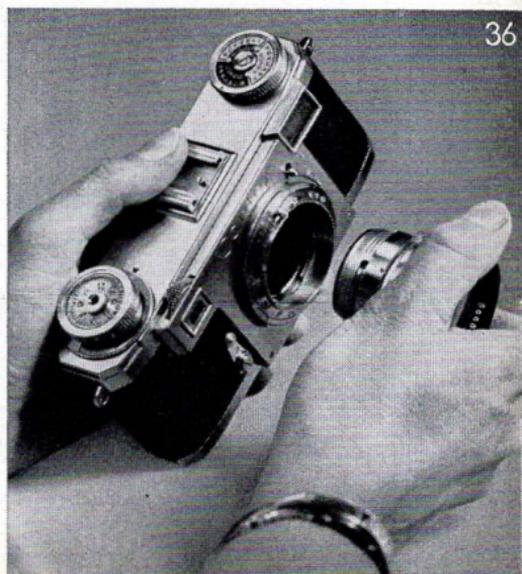
It is important to note that the tripod socket is not mounted on the camera back but is part of the camera body, thus guaranteeing a firm attachment of the camera to the tripod.

WORKING WITH VARIOUS LENSES

The standard lens equipment of the CONTAX is either the Sonnar f/1.5 or f/2 of 2 inch focal length. In their place, **interchangeable lenses** of other focal lengths and largest apertures may be employed. The **focusing head** for close-up photography permits reproductions up to $\frac{1}{2}$ of the natural size, and with the aid of **extension tubes**, close-up objects can be photographed in natural size or directly enlarged on the film. Besides, it is possible to focus on a ground glass screen. The mirror reflex attachments Panflex and **Flectoscope**, the **Universal Reproduction Outfit**, and the optical near-focusing device, Contameter, as well as equipment for **micro-photography**, are further available accessories, the use of which is made possible because the CONTAX has detachable lenses.

CHANGING THE LENSES

The interchangeability of the CONTAX lenses is achieved by the bayonet mounting on the lens and on the front of the



camera. All lenses of 2 inch focal length are to be fitted into the inner bayonet mounting of the camera and all the other lenses in the outer mounting. Changing the lenses is always done when rangefinder and lens focusing mechanism are locked at infinity (Step 1). The lenses having outside bayonet mount have to be set at infinity.

Removing the 2 inch lenses is done by pressing with the left thumb on spring 12. Turn the lens slightly with the right hand in a clockwise direction. This procedure will release it from the helical focusing mount. It may then be carefully lifted from the camera body.

Replacing the 2 inch lens is effected by fitting it into the focusing mount in such a way **that the red dot on the lens mount is opposite the red dot on the camera body.** By turning it to the left (anti-clockwise) the catch spring (12) snaps back into place.

Lenses with outside bayonet mount are placed into the CONTAX by bringing the red dot on the lens opposite the red dot on the camera body. The lens is then turned to the left until a stop is felt by pressing the small catch on the side of the lens. If this is done, the catch will snap into position.

The removal of the lenses with outside bayonet mount follows the same procedure. The side catch must first be released and then the lens is turned until the two red dots are opposite each other. It is recommended for inserting and removing that the lens be grasped with the right hand in such a manner that the top of the right thumb rests on the red dot of the lens. This procedure will aid in interchanging the lenses rapidly, because by bringing the two thumbs together, the most favourable position of lens to camera can be obtained.

The CONTAX lenses are all fitted with the same inner or outer bayonet mounting, permitting their use on different CONTAX bodies. All lenses from earlier CONTAX models, with the exception of the Biogon, can also be fitted to the new CONTAX.

Removal and interchanging of the lenses on the CONTAX may be effected in full daylight without any extra precaution or any spoiling of film.

The unique all-metal focal plane shutter is completely light proof and unaffected by climate and similar adverse influences.

THE VIEWFINDER SHOE

The viewfinder shoe (17) can accommodate special viewfinders needed for interchangeable lenses as well as the optical near-focusing device, the Contameter.

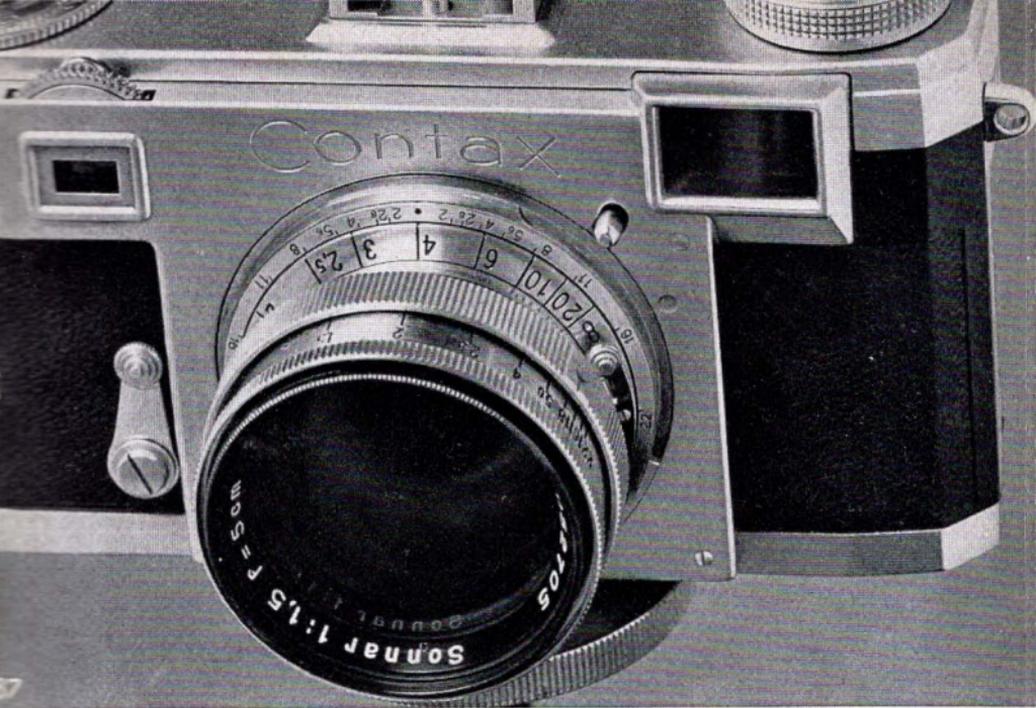
FLASH-SYNCHRONIZATION

The socket (21) for connecting the cord from the flash equipment is located on the back of the CONTAX.

Such equipment makes it possible to take synchronized shots with flash bulbs (Vacu flashes) as well as with electronic flashes. The synchro switch, the intermediary between flash unit and CONTAX, is screwed into the socket (21) for flash synchronization. The synchronization device is equipped with a small pin which, after release of the focal plane shutter, comes out and thereby cuts the current short, just before the first curtain of the focal plane shutter reaches the lower rim of the field of vision. Thus, when applying flash bulbs which have a corresponding ignition delay, the lighting period will be completely utilized during the full aperture of the shutter, provided the shutter is not adjusted to a shorter exposure than $1/25$ sec. When employing electronic flash units, flashlight shots likewise can be taken at $1/25$ sec. For shorter exposures special devices are in course of preparation.

EVEREADY CARRYING CASE

The lined Eveready carrying case, made of top grain cowhide leather, protects the CONTAX while carrying it and also when taking photographs. The CONTAX is held in the case by means of a screw fitted on the case which fastens to the tripod socket on the camera. The CONTAX is ready for action when the lid of the case is opened and all controls can be operated.



DEPTH OF FIELD SCALE

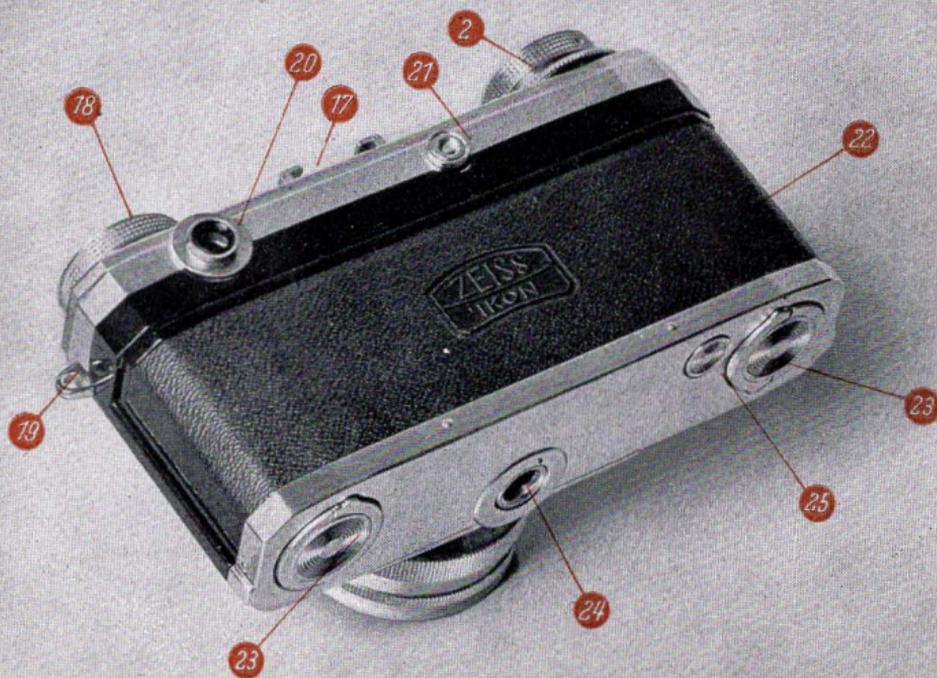
The depth of field which is dependent upon the distance focused at and the lens aperture is of great importance to the photographer. For this purpose the CONTAX has a depth of field scale (11) arranged symmetrically around the focusing mark. It is used in connection with the focusing scale (10), (range 3 feet to infinity), engraved on the helical focusing mount of the CONTAX.

For example: With a lens of 2 inch focal length focused on a distance of 12 feet the depth of field at $f/8$ ranges from 8 feet to 28 feet.

DESCRIPTION OF PARTS 2

- | | |
|--|---|
| 15 Second combined view and rangefinder window. | 20 Eyepiece of combined view and rangefinder. |
| 16 Setting lever for delayed action shutter release. | 21 Socket for connecting flash-gun. |
| 17 Viewfinder shoe. | 22 Detachable back. |
| 18 Rewind knob with "tell-tale" indicator to identify kind of film loaded in camera. | 23 Lock for opening and closing camera. |
| 19 Eyelet for neck strap. | 24 Tripod socket. |
| | 25 Release button for rewinding the film. |

Numbers refer partly to front-view on page 3



HOW TO TAKE CARE OF THE CONTAX

It is advisable to clean the film track, the spool chambers and the back of the CONTAX carefully with a soft hairbrush or a handblower. If the lens surfaces are dirty they should be cleaned with lens tissue paper or with a soft washed-out piece of linen. Dust particles should be removed with a handblower beforehand to avoid scratching of the lens surface. The lens should only be cleaned when absolutely necessary. The external chromium-plated parts of the CONTAX can be cleaned, when required, with a soft piece of linen. As a branded product of highest quality, each CONTAX camera and each CONTAX lens is engraved with a serial number. On the camera, the serial number is engraved on the finder shoe (convenient for customs purposes), and also inside the camera, visible when back is removed. On the lens, the serial number will be found on the front mounting ring.

It is recommended that a record be kept of these serial numbers which may be of valuable aid in tracing a loss or theft.



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