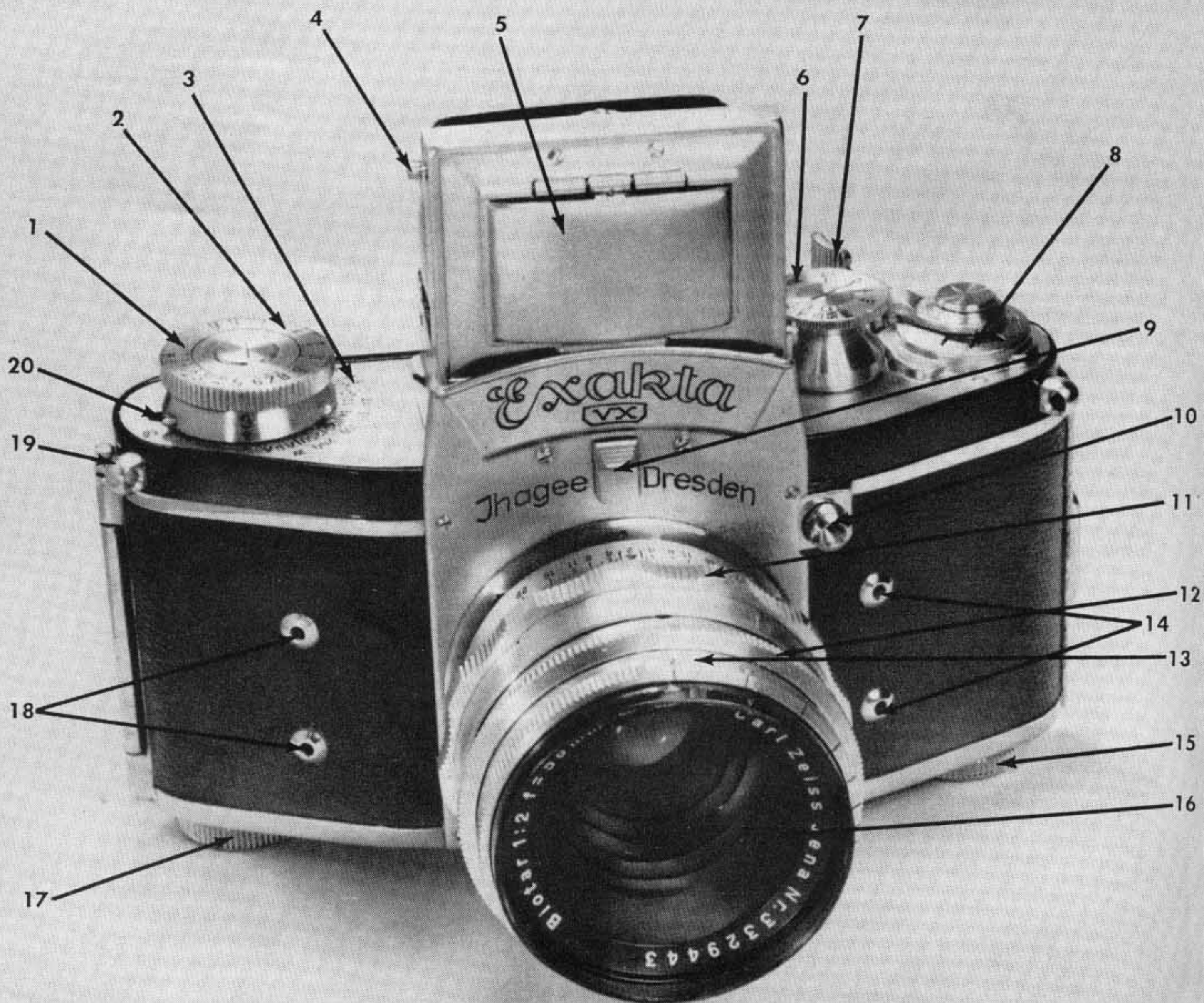


report on the EXAKTA

by HERBERT KEPPLER

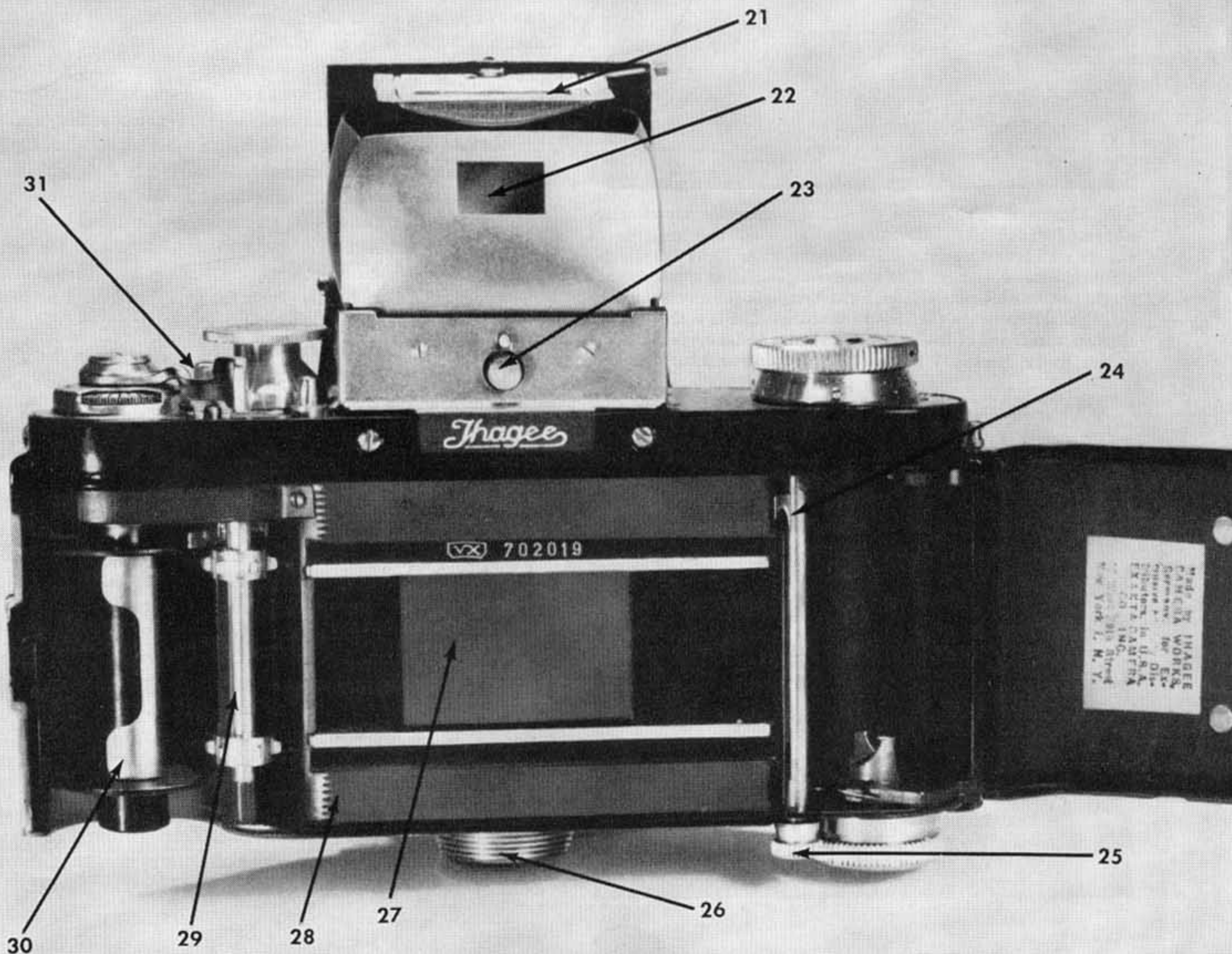
The Ihagee Camera Works, in Dresden, Germany, have been manufacturing Exakta reflex cameras since 1933. The present 35mm Exakta VX closely resembles earlier models but advanced construction features, particularly the fitting of a roof prism viewfinder as an accessory, make what was always regarded as a quality instrument into an amazingly versatile camera and one worth examining. So, for three months MODERN tested Exakta VX 702019 with Biotar f/2 No. 3329442. Taken from stock, the camera was not hand picked. It was returned once to have the shutter adjusted and the back leather re-cemented to the body where it had peeled slightly. These repairs, done speedily, were covered by the camera's one-year guarantee. No other troubles were experienced. After taking nearly 1,000 negatives with the camera under varied conditions and talks with amateur and professional users, here are six pages explaining the camera's features, how the roof prism finder operates and what MODERN editors think about the Exakta camera.

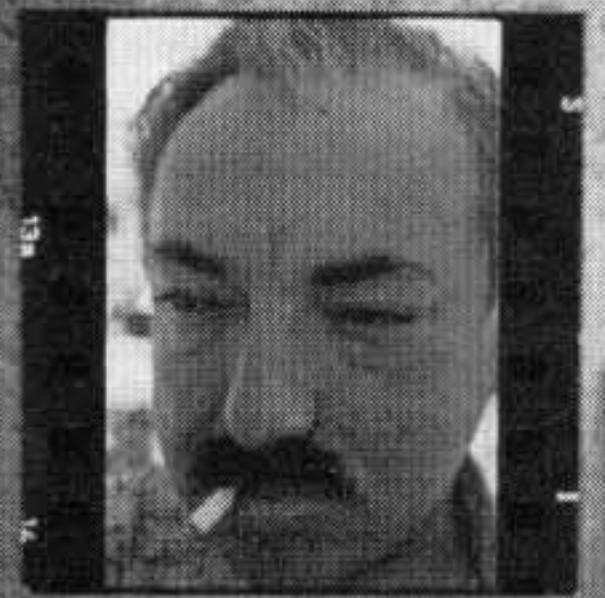
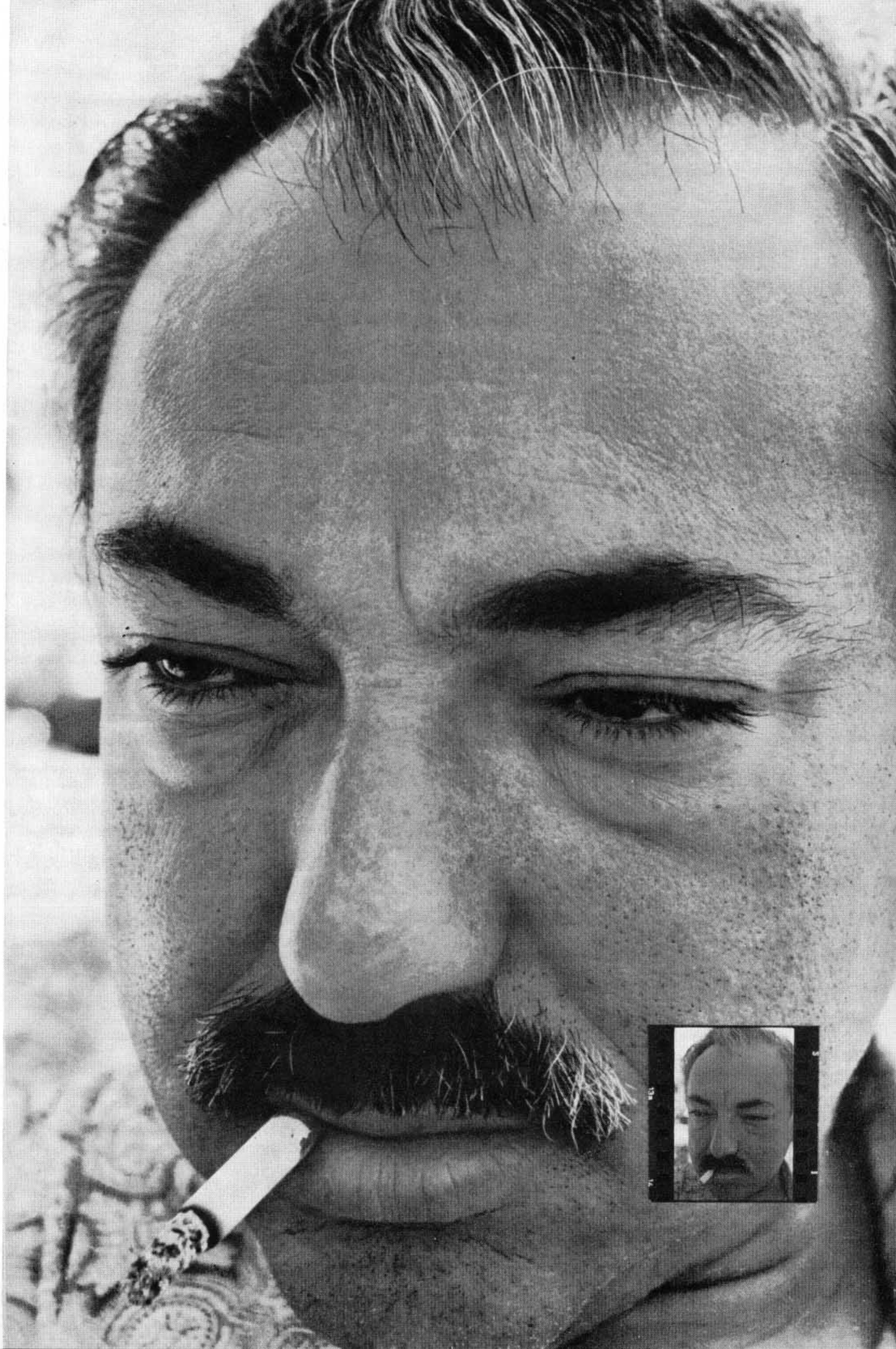


1. Slow speeds in black from 1/5 to 12 sec. 2. Slow speeds in red from 1/5 sec. to 6 sec. operating with 13 sec. delayed action. 3. Film reminder: to tell you whether your camera is loaded with black-and-white or color film and what its ASA or Weston rating is. 4. Lever brings magnifier covering entire ground glass into position. 5. Cover swings up to form front frame of open sportsfinder. 6. Fast speed dial with speeds of 1/25 to 1/1000 sec. 7. Rapid winding lever advances film and cocks shutter with one turn. 8. Exposure counter. 9. Viewfinder release for interchanging Penta Prism (see pages 64 and 65) with waist-level finder. 10. Shutter release into which a cable release can be screwed. 11. Knurled focusing ring. 12. Preset diaphragm control. By pulling this ring back slightly, any lens opening may be preset. You may then focus with the lens wide open. When you are ready to shoot, a twist of this ring will stop the lens down to your previously determined opening. 13. Aperture settings. 14. Contacts for electronic flash units. A special connecting cord must be used. 15. Knob to open camera back. 16. Carl Zeiss Biotar f/2 or Tessar f/2.8 recessed

in lightweight metal bayonet mount. 17. Rewind knob. 18. Flashbulb synchronization contacts. Either the Exakta unit or a special connecting cord to other units must be used. 19. Eyelet for neck strap (one on each end of camera). Directly behind arrowhead is top of pin which, when withdrawn, allows camera back to be removed completely. 20. Camera loading indicator shows revolving cross in small cutout when film is winding properly. 21. Focusing magnifier in position. 22. Rear cutout for sportsfinder. 23. Viewfinder release button. By pressing it, the viewfinder hood springs into position. 24. Film knife. You can cut film if you wish to develop frames you have already shot, or you can cut film after last exposure thus eliminating rewinding (see page 67). 25. Handle of knife blade. 26. Tripod bushing. 27. Cloth focal plane shutter. 28. One-piece camera body casting. 29. Sprocket drive coupled with winding mechanism. 30. Take up spool which can be removed for cartridge to cartridge feed. 31. Rewind lever which must be pulled up while rewinding. This need not be used if cartridge to cartridge feed is employed.

PHOTOS, PAGES 62 TO 65, BENN MITCHELL; PAGE 66, HERBERT KEPPLER

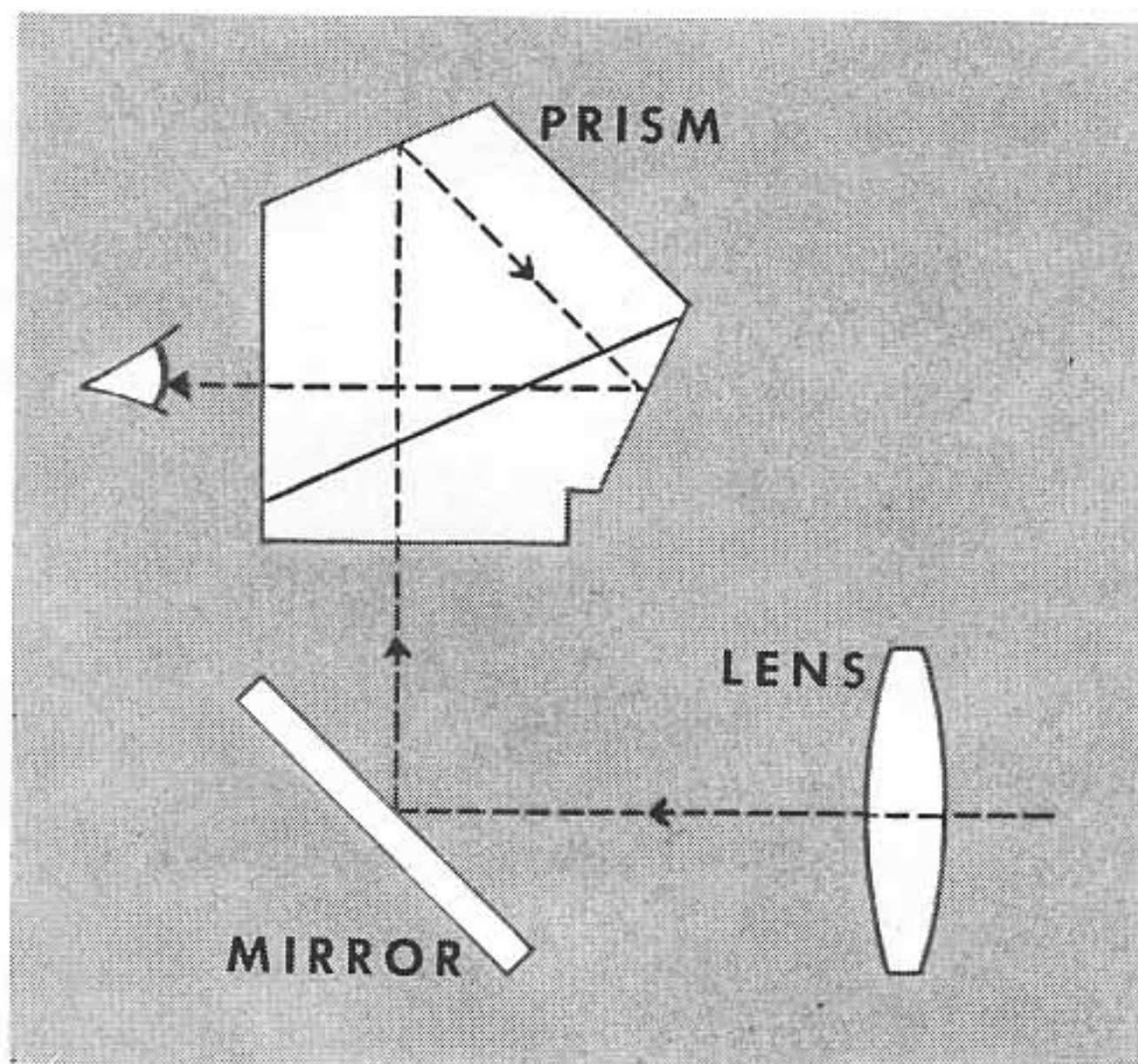




**THE EXAKTA FINDERS:
HOW THE PENTA PRISM ALLOWS
YOU TO SEE THE
ENTIRE SCENE LIFE SIZE.**



The Exakta Penta Prism eye-level prismatic viewfinder, *above*, is instantly interchangeable with the waist-level finder which comes with the camera. After light enters the camera lens, *below*, it hits a mirror placed at a 45 degree angle to the film plane. The light image is then reflected to the Penta Prism. As the image bounces and is reflected off the top and front of the prism, it is enlarged, corrected right to left, and reflected to the eye for focusing and for viewing.



Most 35mm cameras incorporating coupled focusing devices to set the camera-to-subject distances employ rangefinders. You peer through a small peephole and see a small, framed image. When the image is out of focus, the top half of the image is not aligned with the bottom, or you see a double image depending upon the design. By aligning the top with the bottom, or bringing the two images together, the camera is focused. When using other than the standard camera lens, you generally need accessory viewfinders to attach to the camera.

The Exakta, on the other hand, is a reflex camera. A mirror inside the camera body reflects the image formed by the lens onto a ground glass in the hood where it is brought into critical sharpness by focusing the lens. At the moment the shutter release is pressed, the mirror swings out of the way and the focal plane shutter exposes the film. The advantages of this system are numerous. Since you focus and view through the lens, there is no parallax problem. The viewfinder sees the same framing as the picture-taking lens. No accessory viewfinders are necessary if you change to long-focal-length or wide-angle lenses, or do close-ups with supplementary lenses or extension tubes. You always focus with and view the exact image that the negative will record.

The Exakta VX camera allows you to view and focus through the lens by means of two distinctly different types of optical systems which are interchangeable. The camera is equipped with a waist-level finder (pages 62 and 63) when it is bought. This finder has two distinct faults. First, like all waist-level reflex cameras, the image is reversed as in a mirror. This is especially annoying when following action in the viewfinder. Secondly, since the Exakta is a 35mm double-frame camera, the ground-glass, although quite brilliant, is only 1 x 1½ in. This makes accurate focusing difficult and only a little less so if the magnifier above the ground glass is used.

The Penta Prism eye-level prismatic viewfinder, described at *left, below*, more than solves these problems, however. It not only shows you the image without reversing it, but enlarges what you see to an amazing degree. Let's look at the chart, *right*, to see how viewing and focusing through it differs from using a standard ground glass on a 2¼ x 2¼ reflex, or a rangefinder on a 35mm camera. In the left-hand column is a child's block, which in actual measurement is 1½ in. high. At 3 ft., this block looks about the size you see in the left-hand column.

If you are using a 2¼ x 2¼ reflex camera with a 75mm lens, the image of this block on the ground glass will appear exactly as is shown in the top of the second column. The image is much smaller than the block would appear to the naked eye. It is also reversed.

With a conventional single-window rangefinder-viewfinder 35mm camera equipped with a standard 50mm lens (*middle row*), you will see an image much smaller than the block appears to the naked eye.

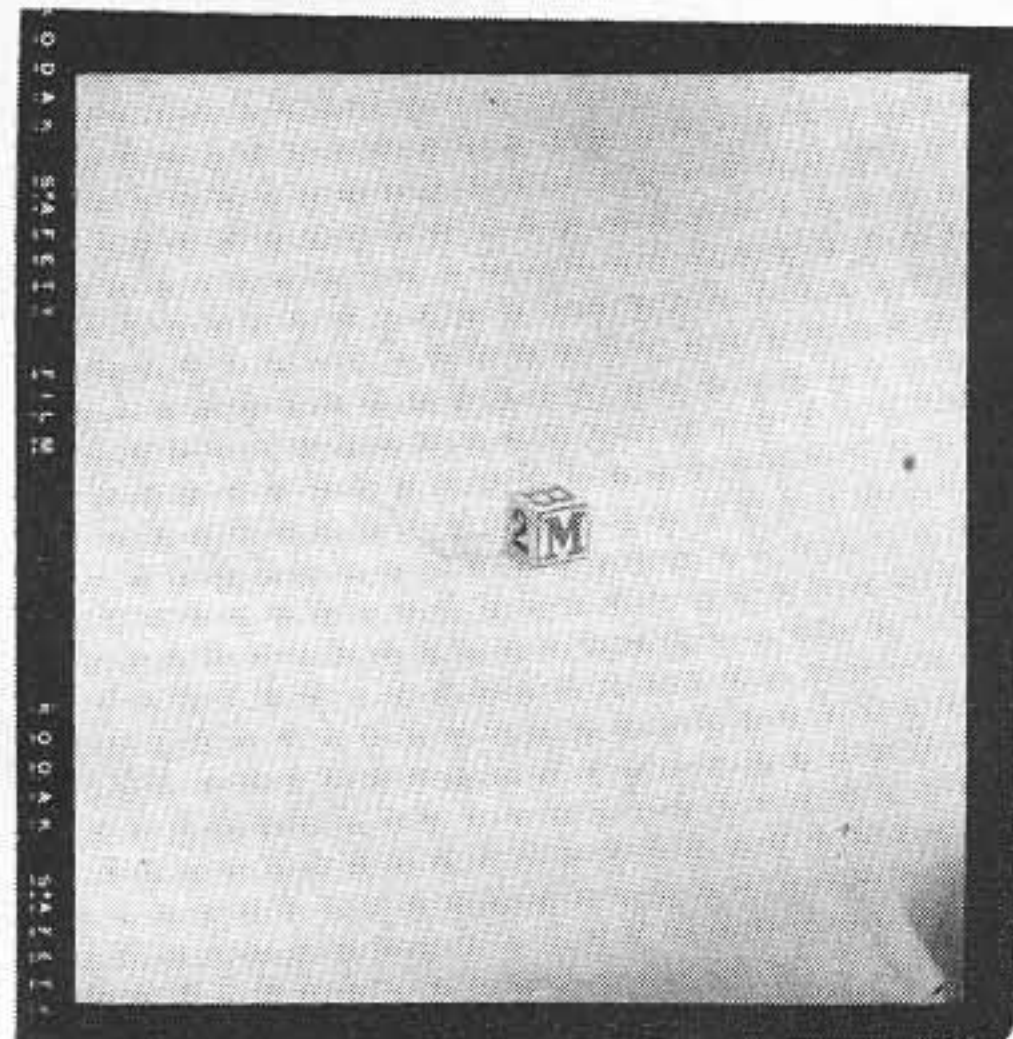
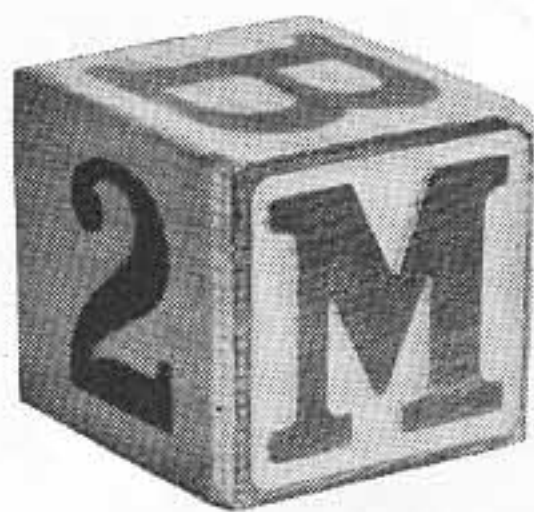
Looking through the large rectangular window at the rear of the Exakta VX Penta Prism, however, the image appears exactly the same size as it does to the naked eye (*bottom row, center*). This applies only when the Exakta VX is fitted with the 58mm Carl Zeiss Biotar f/2 (list price with camera: \$343). The alternate lens, the 50mm Zeiss Tessar f/2.8 (list price with camera: \$269.50),

BLOCK AT 3 FT.

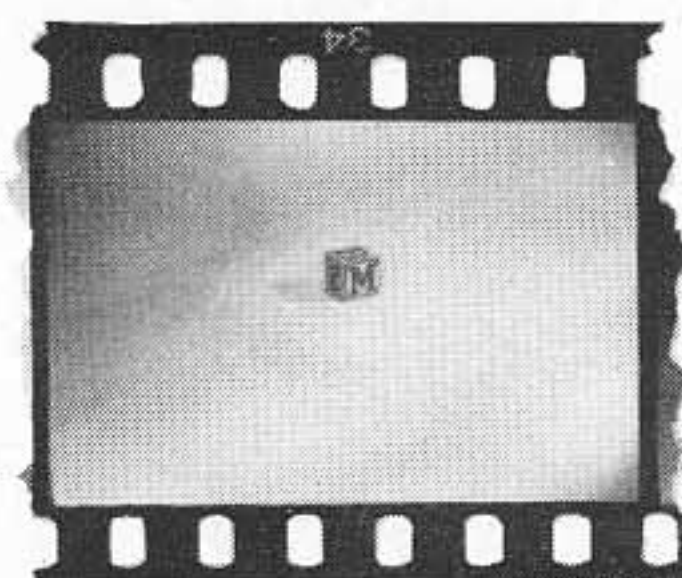
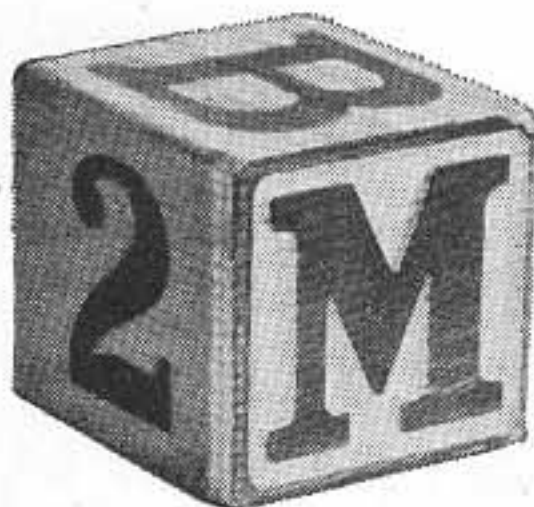
FOCUSING IMAGE

CONTACT PRINT

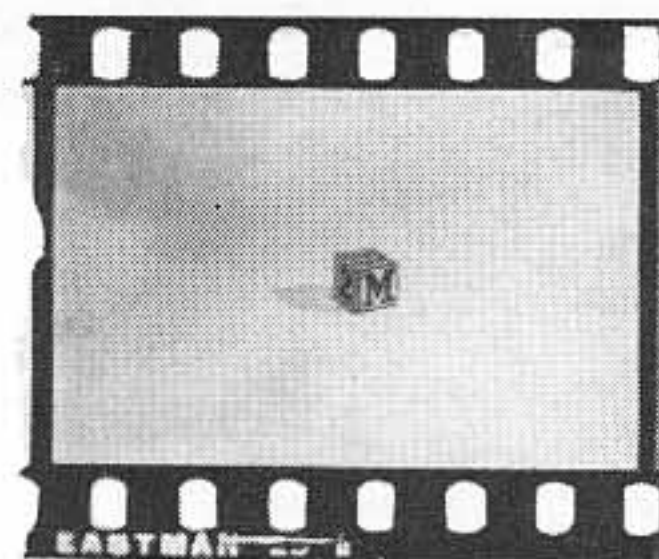
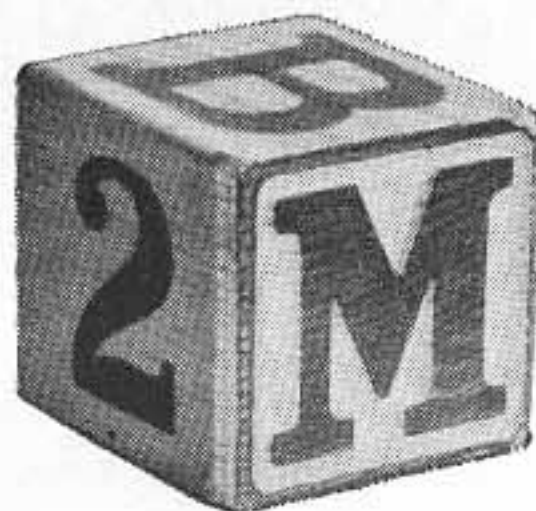
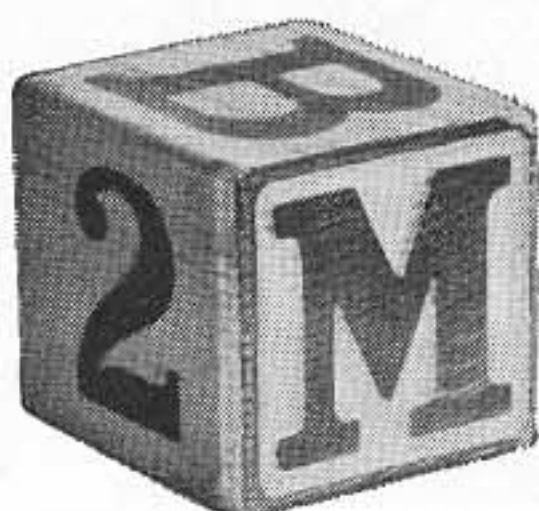
2 1/4 x 2 1/4 REFLEX



35MM RANGEFINDER



EXAKTA VX



shows the image slightly smaller than the Biotar. However, the difference in image size is insignificant.

Since the Penta Prism viewfinder is not only for focusing but also for composing, the effect of seeing the entire frame the same size as it appears to the naked eye is almost unbelievable at first. It's rather like viewing a brilliantly lit store window from across the street at night.

The Penta Prism fitted to the Exakta with either lens has great advantages. First, the image to be focused upon is comfortably large. With its ample focusing screen, the camera owner will have no trouble composing his photograph and studying the effect of light on the subject. It makes taking candid photographs of people or shooting

action enjoyable since you can watch your subject for expression or peak action through the viewfinder as easily as you could see the subject without the camera. Lastly the image is not reversed as is the case on conventional ground glass viewing screens.

The Penta Prism, unfortunately, is available only as an accessory at \$50 and cannot be bought in place of the standard waist-level viewfinder when the camera is purchased new. MODERN agrees with numerous amateur and professional Exakta users who claim that the Penta Prism is a necessity if the full versatility of the camera is to be exploited. Few of them, it was learned, ever used the waist-level finder again after buying the Penta Prism.

AFTER THREE MONTHS OF EXAKTA TESTS, MODERN REPORTS:

Points you will like

Both the f/2 and f/2.8 lenses are sufficiently recessed in their mounts to make an additional sunshade unnecessary. The bayonet mounting of the lenses is firm and allows the lenses to be interchanged quickly. Either lens may be focused as close as 18 in. to the subject without any supplementary equipment (*see photo, left*).

The preset diaphragm allows you to focus the Exakta wide open and shut down to your predetermined stop by a flick of your wrist just before you snap the picture. Most photographers interviewed did not use this device, however, since they had no trouble in focusing at small stops after a bit of practice.

The Exakta VX body construction is a single casting, which assures stronger construction and a more perfect alignment of the lens with the focal plane than on previous models.

The quality of the f/2, 58mm Biotar on MODERN's test Exakta was high. Resolution, even at the edges with the lens wide open, proved unusually good. Other lenses tested on the Exakta, an Angenieux f/2.5, 35mm Retrofocus (wide-angle), an f/1.8, 90mm P1 (telephoto) of the same manufacture, and a Carl Zeiss f/4, 135mm (long focal length) all proved of good quality even when used wide open. The f/2.5 Retrofocus was slightly soft at the edges when wide open, but sharpened satisfactorily when closed to f/3.5. (For lens tests carried out by MODERN, see *Simple Ways to Test Your Lens*, September issue.) The camera's construction allows cartridge to cartridge feed, eliminating rewinding. A knife built into the body cuts the film after the last exposure. You may also cut portions of used film for developing before the entire roll is finished. All operations can be carried out in daylight using standard 35mm cartridges.

The winding mechanism is operated by a lever allowing extremely rapid film advance and shutter wind. The reflex mirror remains in the up position until the shutter is wound. Forgetting to wind the shutter and film is almost impossible. You can't look through the viewfinder until you do.

The rapid interchangeability of the Penta Prism and the waist-level viewfinders enabled the camera to be held above the head to shoot over crowds. Also, to be used in small spaces at waist level where it was impossible to view the scene while keeping the eye behind the camera as was necessary when using the Penta Prism.

Additional lenses and accessories for the Exakta seem endless in number and surprisingly inexpensive when compared to those available for other cameras in this price bracket. The reflex principle of the Exakta made unnecessary many accessories which are a necessity on other cameras for copying or using long or short focal length lenses. Because of the reflex design, the camera has proved excellent for specialized work in the medical, dental, surgical, microscopical and astronomical fields. Equipment is readily available to adapt the camera to such uses.

Points you may not like

More care must be taken with the Exakta than other 35mm cameras. Dust and lint frequently get into the Penta Prism housing and fingerprints get on the bottom of the ground glass. Cleaning is relatively simple, however, since the bottom element of the housing is easily removed. The reflex mirror is extremely delicate since it is front-surface silvered. It must never be touched when changing lenses, or viewfinders.

Focusing at night for flash was difficult with the f/2 lens and would be more so with the f/2.8 which transmits less light. Distance often has to be estimated and set by hand on dark objects at night.

When opening the camera back after rewinding film, the take-up spool is apt to fall out unless the camera is held parallel to the ground or upside down. The tripod socket accommodates European threads. An adapter bushing must be used for American tripods.

The camera is bulky by usual 35mm standards because of its reflex construction (pages 62 and 63 show it in actual size). It is of moderate weight (slightly over 2 lbs.). Its bulkiness makes it slightly difficult to handle at eye level. The shutter release is placed for left-hand operation instead of the more customary right.

When slow speeds are to be used, it is necessary to wind the slow speed dial as well as the standard wind lever, slowing down camera operations.

Since the Exakta VX permits viewing and focusing through the camera's taking lens, the use of filters causes the entire scene to become yellow, green, pink or red, depending on the color and strength of filter used.

Although the camera produces negatives sharp to the edges, the Penta Prism viewing image is not sharp to the edges. Focusing must be done in the finder's central area.

◁ Informal portrait of Victor Keppler taken during MODERN's tests with Exakta VX, f/8, 1/50, Ferrania Superpancro S2 film (equivalent to Super-XX) developed in Promicrol. Camera—subject distance was 18 in. Inset shows contact print.