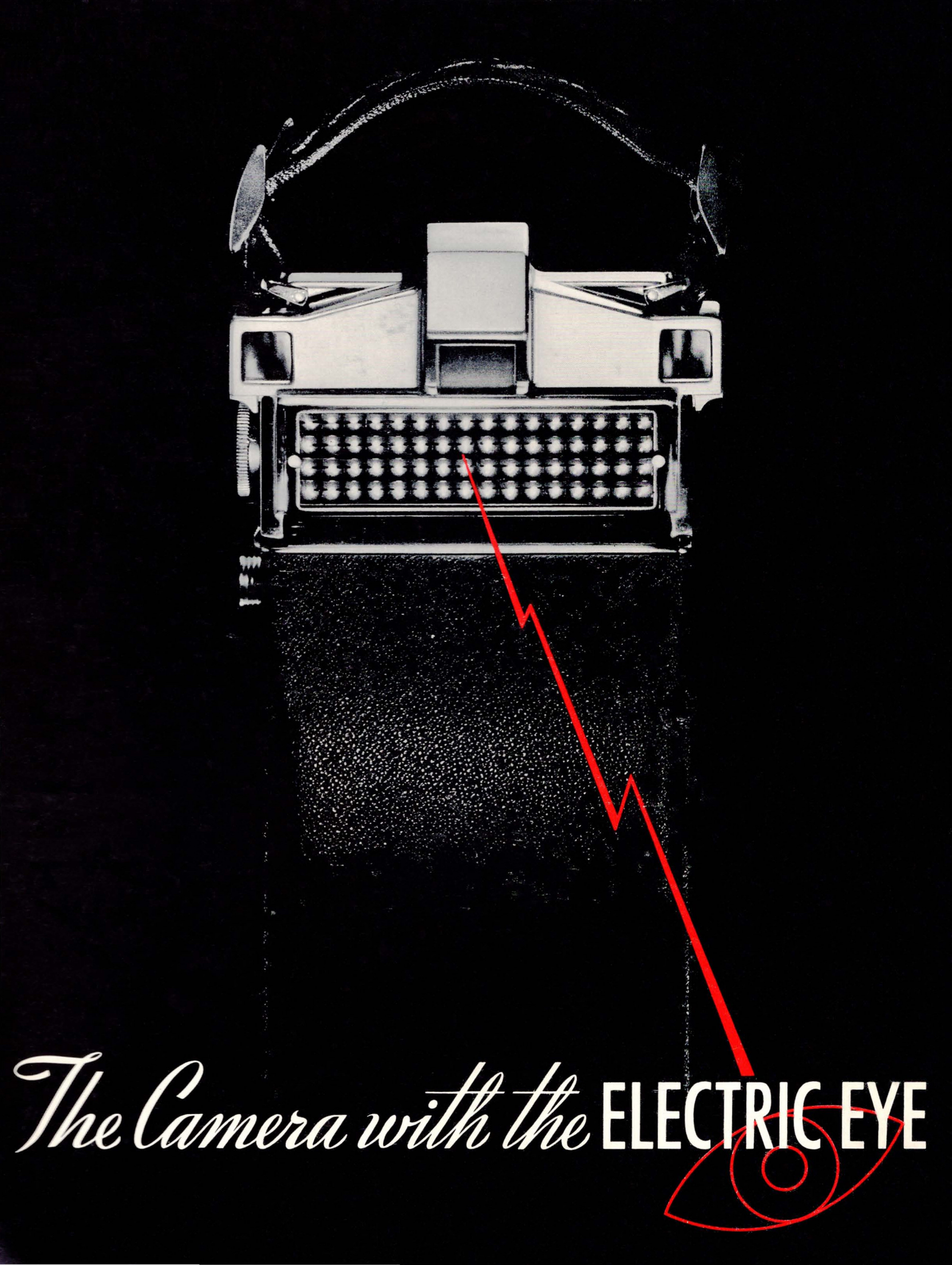

The Camera with the ELECTRIC EYE

Eastman presents

A GREAT NEW CAMERA

THE ultimate ideal in picture-taking equipment has always been a camera that would combine the great scope of a fast lens, speedy shutter, and variable diaphragm with the operating ease of a simple box camera. Heretofore, however, those features that spelled wide picture-taking range necessitated carefully gauged exposure and accurate focusing. The diaphragm had to be set at the proper opening for the light used, the proper shutter speed selected, and the lens accurately adjusted with relation to the distance between camera and subject.

Now, by utilizing two modern marvels . . . the photoelectric cell to control exposure automatically, and a new-type focusing finder to control focusing mechanically . . . Super Kodak Six-20 finally attains the long-sought ideal.

With this revolutionary new camera, beginners in photography can make good pictures throughout the wide scope of a fast *f*/3.5 lens and a 1/200-second shutter. Experts can concentrate their entire attention upon the composition, expression, and lighting of their subjects, and make finer pictures than before. Neither beginner nor expert need concern himself with estimating the light or with guessing the distance to the subject.

Optimum exposure is automatic with Super Kodak Six-20. The photoelectric cell, linked with the diaphragm, automatically measures the light reflected from the subject, and actually presets the diaphragm at the correct aperture for that light and for the shutter speed selected. Each picture is correctly exposed . . . with no attention from the picture taker.

Focusing is simple and positive. Super Kodak Six-20 has a new focusing finder . . . one optical system with a single eyepiece. You look through the finder at the subject, turn the lens until the finder shows the subject in exact focus, and trip the shutter.

Many other advances are embodied in this great new camera. Descriptions of these will be found in this book, together with sample pictures that give some idea of the versatility of Super Kodak Six-20 . . . the first camera with automatic exposure control.


KODAK

To take a picture with

SUPER KODAK SIX-20

SELECT a shutter speed to fit your subject: a low speed if the subject is stationary . . . a high one if it is fast-moving. Look through the focusing finder's eyepiece, and bring your subject into focus by a turn of the lens. Without moving your eye from the finder, watch for the expression or the composition you want. Release the shutter, and your picture is made . . . in sharp focus and with automatically correct exposure. It will have the dimensions of the print reproduced below ($2\frac{1}{4}$ x $3\frac{1}{4}$ inches). If you wish, it can be generously enlarged, as illustrated by some of the Super Kodak Six-20 pictures shown on the following pages.


6

EXPOSURE CONTROL

AS the illustration on the opposite page indicates, a large share of Super Kodak Six-20's operating simplicity is achieved through a highly ingenious exposure-control mechanism . . . the first practical application of a light-measuring cell coupled with a camera diaphragm. This mechanism automatically measures the light . . . determines the proper diaphragm aperture for that light and for the shutter speed selected . . . and actually presets the diaphragm at that opening.

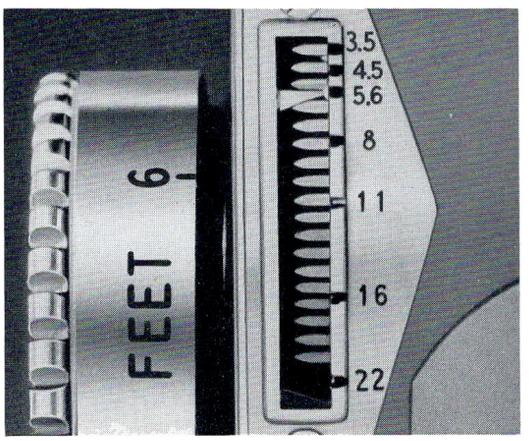
Light reflected from the subject is picked up by the multiple collective lens (1) in front of the photoelectric cell (2). The angle from which this lens receives light duplicates the angle of the camera's main lens.

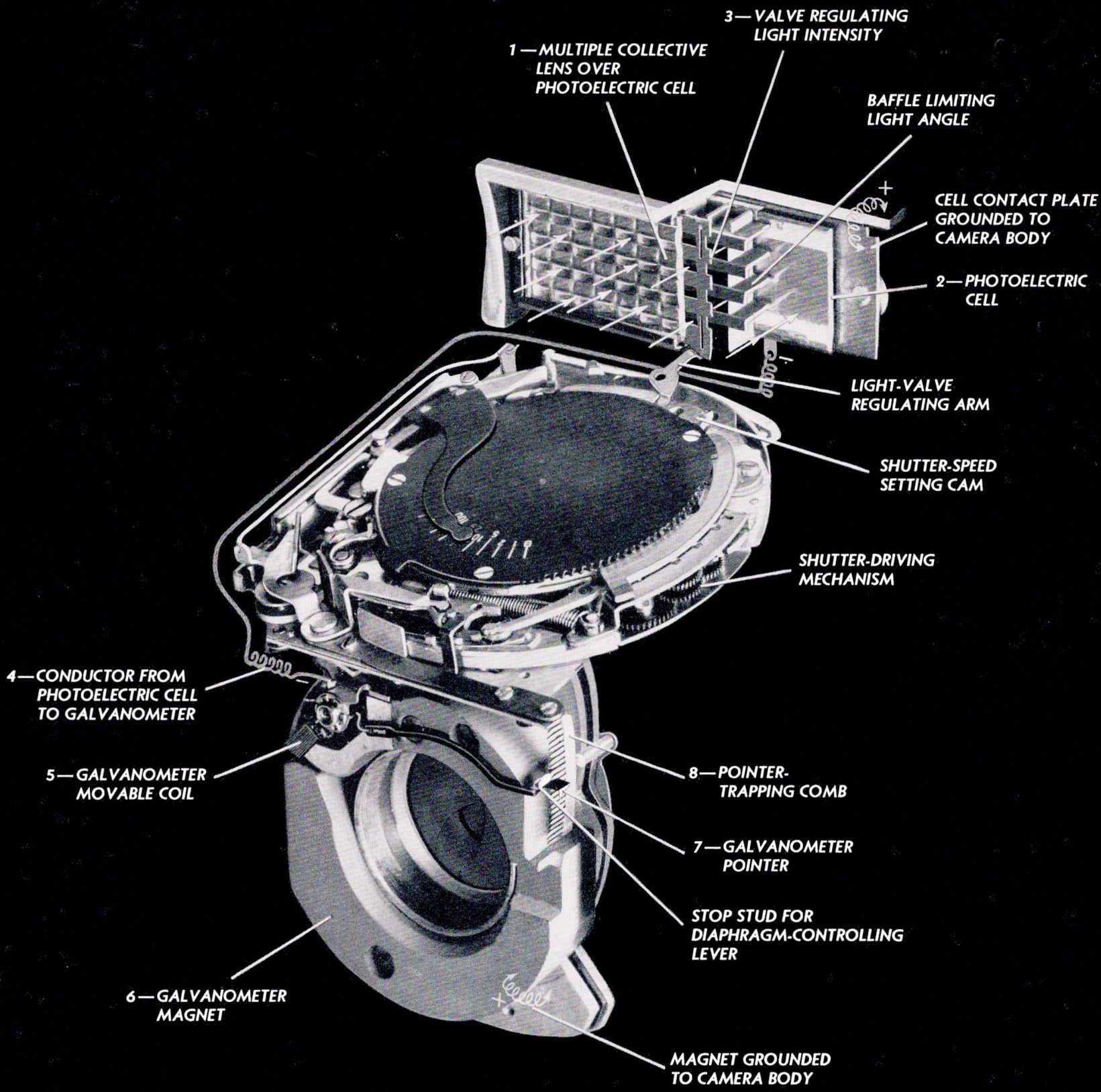
The quantity of light admitted to the cell is governed, through a light valve (3), by the shutter speed selected.

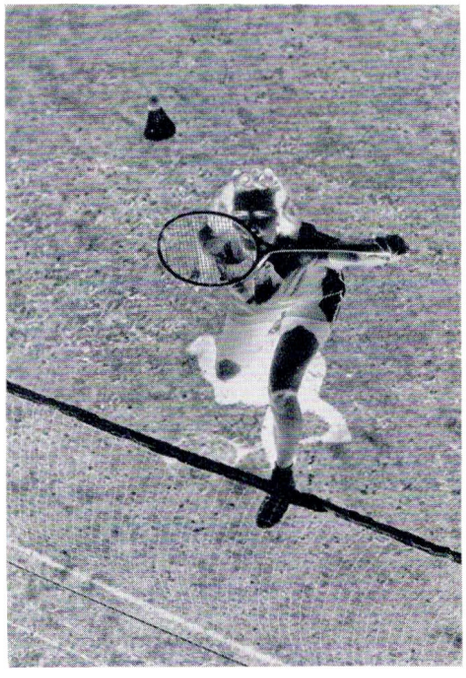
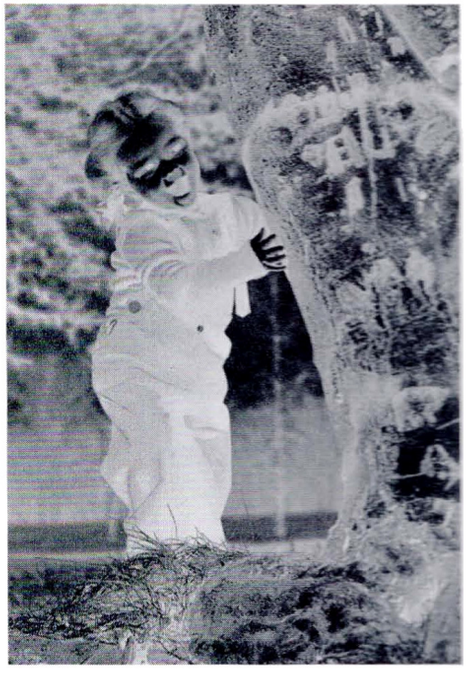
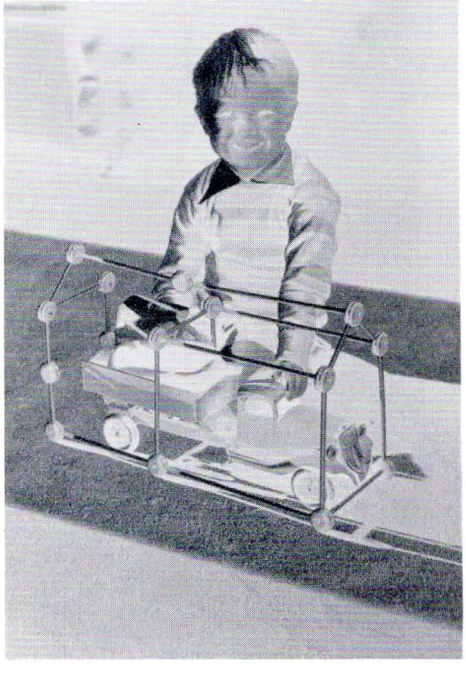
The light reaching the cell creates electrical energy which, transmitted through a suitable conductor (4) to the movable coil (5) of a galvanometer, determines the action of the galvanometer magnet (6) upon this coil. The coil is connected to a pivoted pointer (7), the position of which indicates the aperture at which the picture should be made . . . and shows this aperture on a visible scale (see below).

As the shutter is released, the galvanometer pointer is trapped in the predetermined position by a comb (8), and the diaphragm is closed down to this point. The power for this movement is derived from the shutter mechanism.

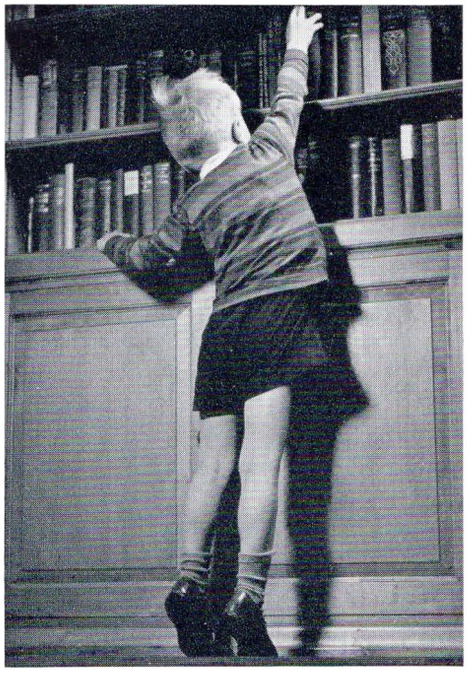
The whole cycle of these actions is carried out automatically. The user simply points Super Kodak Six-20 at his subject and releases the shutter. Exposure for all hand-held shutter speeds (1/25-second and faster) is automatically correct. For slower speeds the diaphragm should be set manually.

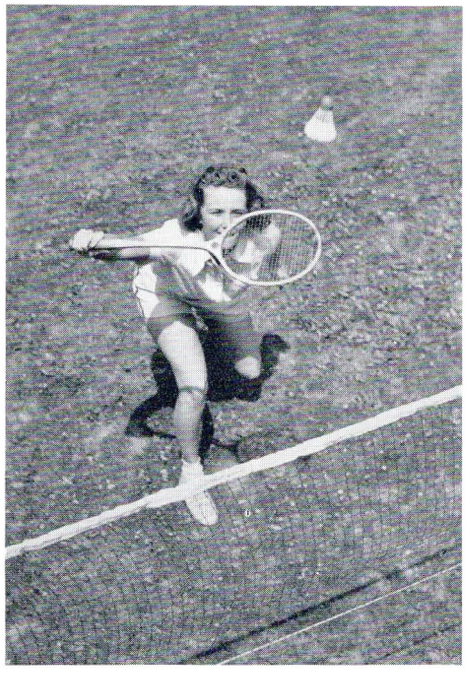


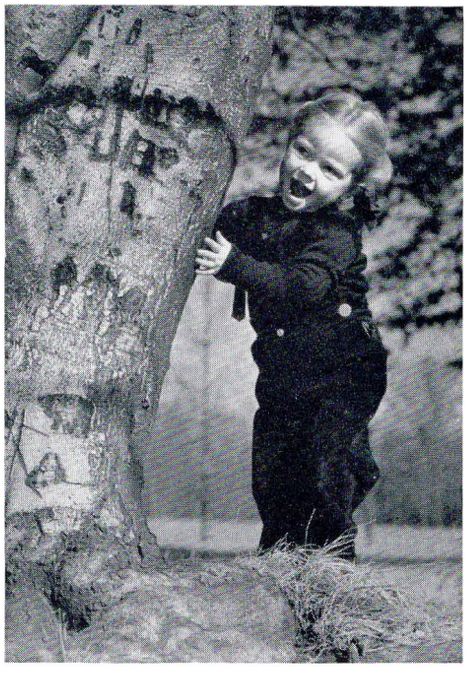

3—VALVE REGULATING LIGHT INTENSITY
1—MULTIPLE COLLECTIVE LENS OVER PHOTOELECTRIC CELL
BAFFLE LIMITING LIGHT ANGLE
CELL CONTACT PLATE GROUNDED TO CAMERA BODY
2—PHOTOELECTRIC CELL
LIGHT-VALVE REGULATING ARM
SHUTTER-SPEED SETTING CAM
SHUTTER-DRIVING MECHANISM
4—CONDUCTOR FROM PHOTOELECTRIC CELL TO GALVANOMETER
5—GALVANOMETER MOVABLE COIL
8—POINTER-TRAPPING COMB
7—GALVANOMETER POINTER
STOP STUD FOR DIAPHRAGM-CONTROLLING LEVER
6—GALVANOMETER MAGNET
MAGNET GROUNDED TO CAMERA BODY

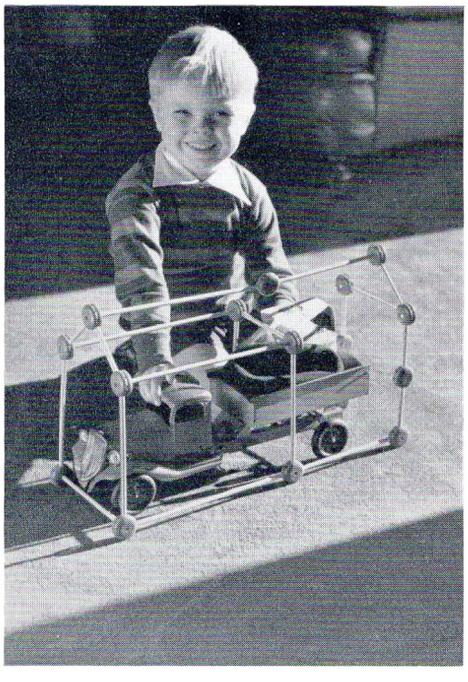





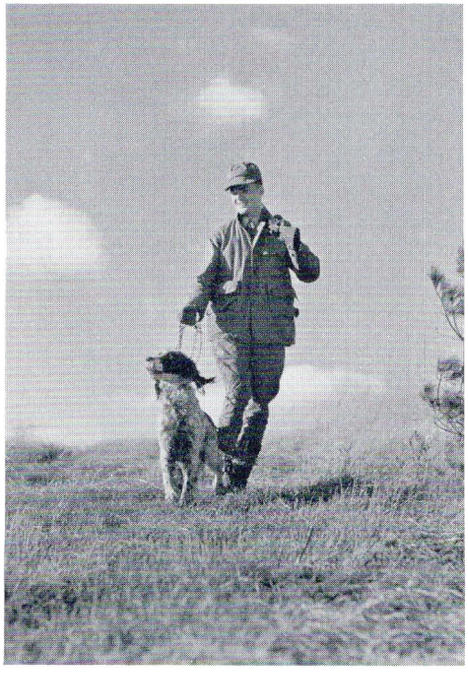
THE specimen Super Kodak Six-20 negatives reproduced above illustrate the uniformly good exposure obtained with its automatic exposure control under widely differing conditions of light and subject movement.











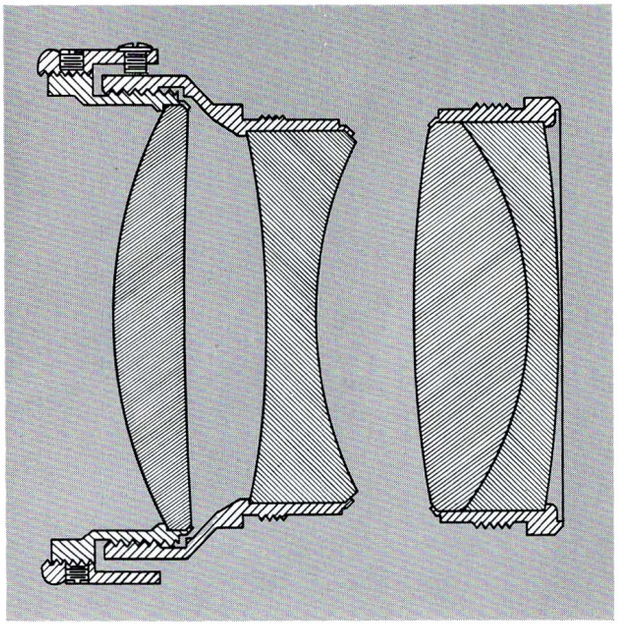
THESE prints were made from the negatives shown on the opposite page. All were printed on the same paper, and given the same printing and development time. They are identically handled straight prints.

LENS

THE taking lens of Super Kodak Six-20 is a Kodak Anastigmat Special . . . which means that it is an objective of high precision. Through a new design, developed especially for use on this camera, it has been given all of the quality for which the Kodak Anastigmat *f*/4.5 is noted; yet it has about twice the speed of that famous lens. Its focal length is 100 millimeters. The front lens mount has an outside diameter of $1\frac{5}{32}$ inches, which adapts it to the use of Series VI Kodak Combination Lens Attachments.

The *f*/3.5 working aperture is unusually large in a lens intended for use on a roll-film camera giving so large a picture area as $2\frac{1}{4}$ x $3\frac{1}{4}$ inches. The axial stellar image produced has a diameter of only 0.0015 inch, and the lens has ample covering power (54°) to give good definition over the entire picture area. In spite of the wide aperture and great covering power, the spherical aberration, coma, and astigmatism have been reduced to a negligible point. The lens is, moreover, completely free from distortion.

The large aperture makes snapshots possible under almost all outdoor conditions. For close-ups the lens may be focused down to four feet by convenient finger-tip turning of the knurled lens mount. The in-and-out movement imparted to the lens in this way is transferred to the objectives of the coupled range finder as previously described.

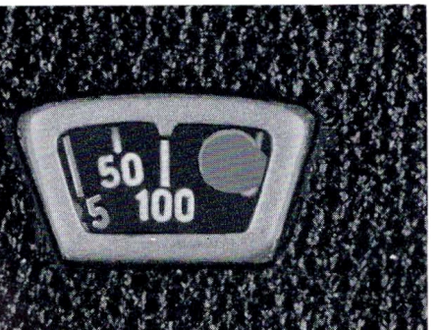


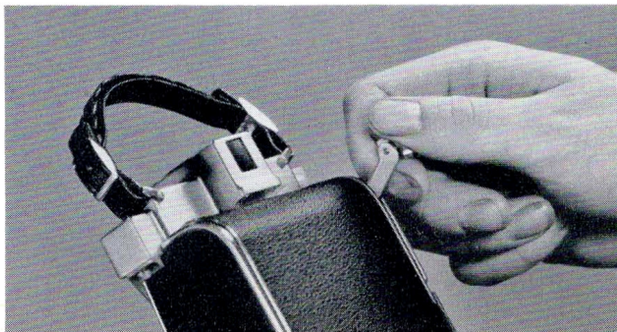
SHUTTER

THE shutter on Super Kodak Six-20 is of the high-precision gear-train retard type. The blade assembly is of the six-leaf variety, which assures maximum efficiency of the between-the-lens shutter. The shutter settings are 1, 1/2, 1/5, 1/10, 1/25, 1/50, 1/100, and 1/200 second, and bulb. The T.B.I. Cable Release No. 1, supplied as an accessory, permits easy making of time exposures. To avoid damage to the camera, no other cable release should be used on Super Kodak Six-20.

The space around the lens generally occupied by the shutter mechanism is devoted to the galvanometer which aids in the automatic selection of the diaphragm opening. Consequently, all of the shutter mechanism except the leaves and controlling lever is located in a housing above the lens. The shutter-speed setting appears on a dial at the top of this housing. When a red signal also appears in the dial window (below, left), it indicates not only that the picture has been taken, but that the shutter should be reset and the film advanced to the next exposure. Both of these purposes are accomplished by the multi-purpose winding lever. The first complete upstroke of the lever, illustrated below, sets the shutter and starts to wind the film, and subsequent strokes complete the film winding. At the beginning of this operation the lever automatically opens the film window, and, when it is completed, closes it. In the meantime the signal in the dial has disappeared, as shown in the center illustration.

Because of this ingenious mechanism the user of Super Kodak Six-20 always knows whether his camera is ready for the next picture. When it is not ready, the mechanism helps him to prepare it in short order. Furthermore, he automatically avoids double exposures, because the shutter cannot be released until the film has been advanced.





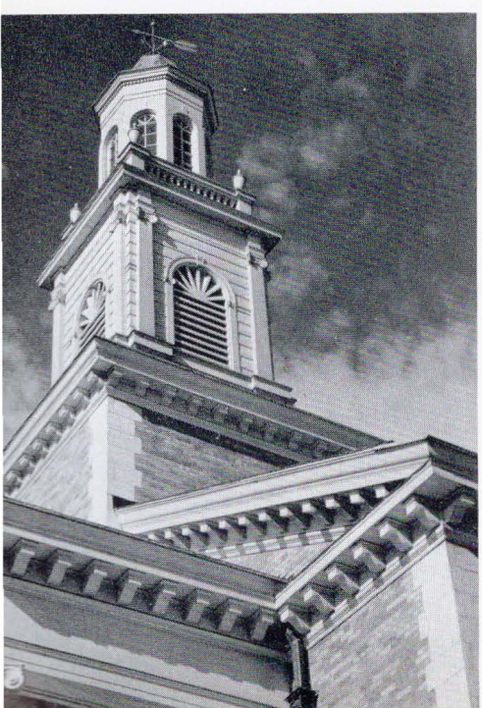
FILMS AND FILTERS

SUPER KODAK SIX-20 is adjusted for proper automatic exposure in daylight with Kodak Verichrome or Kodak Panatomic-X Film. Kodak Super-XX Film may also be used in daylight by setting the diaphragm manually to the second smaller opening than the one indicated on the aperture scale.

Super Kodak Six-20 can be adapted for automatic exposures in artificial light by placing one of two masks over the multiple collective lens. One mask is supplied for Verichrome and Panatomic-X Film, and another for Super-XX. The camera is pointed toward the light source rather than at the subject. The shutter release is drawn back part of the way until the comb traps the galvanometer pointer, thus setting the aperture. The user then moves to the place from which the picture is to be taken.

A second series of masks is supplied for automatic daylight exposures with the more generally used Wratten Filters and Verichrome or Panatomic-X Film. The filter (available in Kodak Combination Lens Attachments) is placed over the main camera lens, the proper mask over the collective lens, and the camera operated as usual. This procedure, as well as possible variations, is explained in the camera instructions.

The versatility of Super Kodak Six-20 can be broadened still further by means of a Kodak Pola-Screen, Type IA. This attachment controls the relative brightness of roofs, walls, and sky, achieves striking night effects with panchromatic films and a red filter, and subdues oblique reflections.




SUPER KODAK
KODAK LENS HOOD