CINE KODAK MODEL *E**

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The primary consideration in the design of the Cine Kodak Model *E* (Fig. 1) was simplicity of operation and control. To obtain this simplicity, a single-plane film path with the supply reel above and ahead of the take-up was adopted. This retains the easy threading of a vertical camera with the added advantage

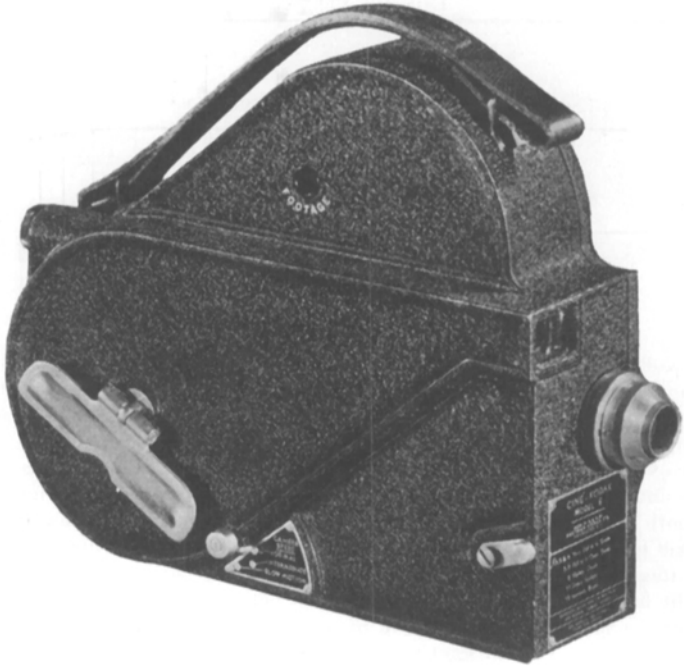

FIG. 1. Cine Kodak model *E*.

of greater stability (Fig. 2). The resulting form resembles the Cine Kodak Special with the 200-ft. film chamber. One of the principle advantages of this shape is the fact that the camera can be used without interference with the brim of a hat.

The mechanism is built as a unit, with all controls mounted on the mechanism

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frame (Fig. 3). The spring motor, which is wound by a large key, pulls about 18 feet of film per wind at $1^1/_2$ feet per revolution. The rotating disk shutter, with a 165-degree opening, is driven by a pair of spiral bevel gears. The pull-down claw is a single formed steel piece driven by an eccentric and guided by a fixed stud with a cam surface on the claw element. The camera operates at three speeds: 16, 32, and 64 pictures per second, controlled by a variable-speed governor running at 2.4 times the speed of the pull-down. The governor weights act upon the disk through a cam surface, so the relation between the weights and the spring changes automatically and correctly with speed. The camera can be

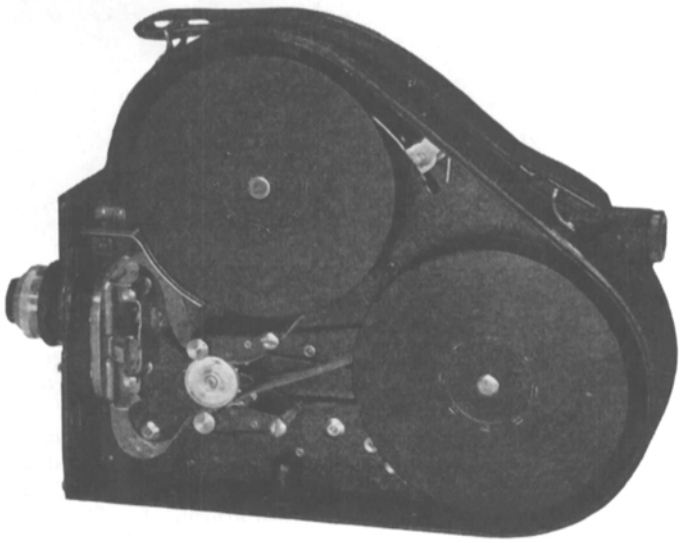

FIG. 2. View showing magazines and film path.

operated with the trigger half-way down, from which position it will return when released, or the trigger can be locked in the running position to allow the operator to get into the picture.

The lens support, shutter housing, and film-track are combined into a unit, rigidly mounted upon the mechanism frame. This makes it possible to disassemble the camera completely without disturbing the focus or the alignment of the lens. Both aperture plate and pressure pad are relieved to avoid damage to the picture area. The pressure pad withdraws the claw from the film path when it is moved back to admit the film. The pressure pad is easily removable to permit cleaning the gate.

Despite the fact that the camera is in the "inexpensive" price group, the same standards of accuracy at important points are maintained in production as with all other Cine Kodaks. All gear centers are bored and reamed in a single substantial fixture. Gears are generated and checked, shafts are turned to a toler-

ance of 0.0005 inch and burnished, and mechanisms are "run in" before final timing and checking.

The case contains the finder and film meters. The finder system is built through the case in such a position as to have extremely short parallax. A feature of the camera is the addition of a supplementary film meter scale adjacent to the field of the finder.

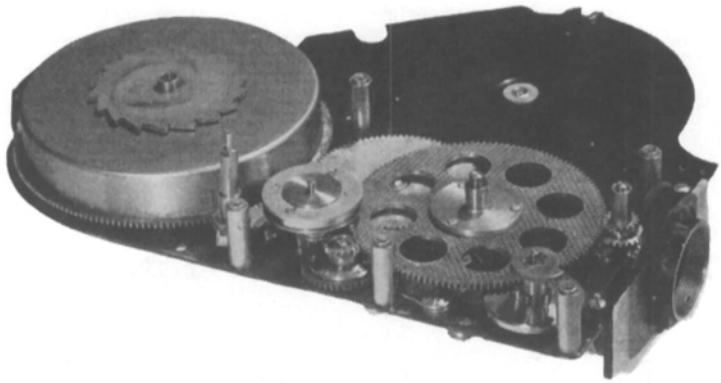

FIG. 3. The mechanism.

Standard equipment is an *f*/3.5 20-mm. fixed-focus Kodak anastigmat lens in a standard threaded mount. Additional external features are the conventional self-setting film meter, a simplified etched exposure guide, tripod nut, and a carrying handle. A safety guard on the cover prevents closing the camera with the sprocket guards open. The camera can be used on the Cine Kodak titler or on a tripod. Without lens the camera is 8 inches long, $6^{3}/_{4}$ inches high, and $2^{1}/_{4}$ thick. It weighs approximately 5 pounds when loaded. It will take standard 50- or 100-ft. 16-mm. reels.

AN AMPLIFIER FOR CAMERA BLIMPS *

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The use of blimps to house motion picture cameras for making sound pictures places a burden upon the cameraman in that he can not be heard outside the blimp when directing the line-up of a scene. This was realized some years ago, and attempts were made at that time to overcome this obstacle. W. Daniels, cameraman at Metro-Goldwyn-Mayer Studios at that time, mounted an amplifier upon the platform of his rotambulator and placed a microphone inside the blimp.

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