DIRECTIONS FOR OPERATING

FOLMER & SCHWING

AERO CAMERA Model B

FOLMER & SCHWING DEPARTMENT
EASTMAN KODAK COMPANY
ROCHESTER, N. Y., U. S. A.

DIRECTIONS FOR OPERATING

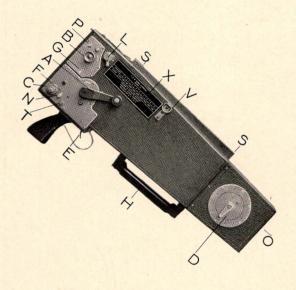
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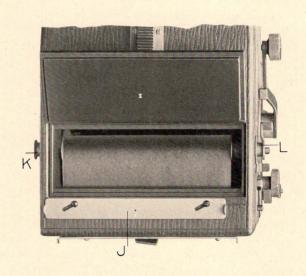
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HE F. & S. AERO CAMERA is handled in practically the same manner as a gun. Grasping the under support H of the camera with one hand, and the pistol grip with the other hand, the instrument is aimed at the object by means of the front and rear gun sights SS. The exposure is made by pulling the trigger E with the index finger. The shutter is re-set, and the film automatically advanced for the next exposure, by swinging lever A down to the full stop T. This operation can be rapidly repeated until 12 exposures have been made, when the exposed roll of film is rewound upon the original spool, removed from the camera, and replaced by a new roll of film.

The Focal Plane Shutter, built into the camera, consists of a curtain with a single exposing aperture. This curtain operates as closely as possible to the surface of the film when in position for exposure. The duration of exposure is regulated by varying the rapidity of the movement of the curtain aperture across the exposure plane. The shutter is capable of a range in speed of ½120 to ½35 part of a second.

The shutter should be set to operate at a speed that will obviate blurring of the subject in the



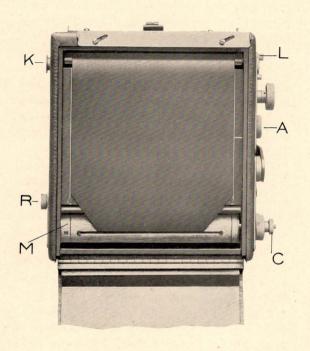
negative, due to the vibration and rapid movement of the Aeroplane, and render photographic records of the terrain with clearness and detail, when maneuvering at high altitude.

Shutter Speeds used under varying conditions of altitude, movement, or atmosphere, may be the result of actual experience in service. A shutter speed of ½95 part of a second has been proven by actual test, sufficiently high to arrest movement when the Aeroplane is traveling at 80 or 90 miles per hour at an elevation of 3500 feet.

The lens fitted to the camera is unalterably set at a point that includes all objects located beyond 750 feet within the area of definition. The diaphragm system of the lens is conveniently controlled from outside the instrument by means of the dial and pointer D.

As a protection against exposure of the lens to fog or mist, often resulting in impairment of the photographic record, a safety shutter is located in the front aperture O of the camera, directly in front of the lens. This safety shutter is automatically opened and closed with the same action of the trigger E that releases the shutter.

Midway between the front and the back ends of the camera body, strap rings V are located to



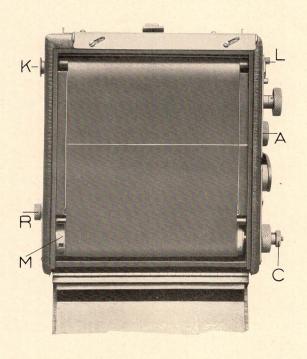
accommodate shoulder straps for supporting the camera, allowing the operator free use of his hands in an emergency.

The Shutter Speed Plate X, attached to each camera, gives the approximate shutter speeds, in fractional parts of seconds, obtainable with the curtain aperture and the tension numbers 1 to 10.

LOADING
THE CAMERA
Slide the lock J, on top of camera to the left, and open door I of film compartment; draw out spool center K, and re-wind crank L; place the roll of film in compartment with the SLOTTED END toward the re-wind crank L; depress the roll of film, now resting on the tension springs, until the spool center K and re-wind crank L can be pressed into engagement with the ends of the spool.

Open back door of camera; break the white paper seal on the roll of film, and pass end of black paper through the aperture over the curtain, and down over the rollers, into slot in roller M, carefully centering the paper between the lines on each side of the exposure diaphragm, and on ends of roller M.

Turn the outer milled head C, of the clutch, to the RIGHT until it is in firm engagement with the inner, larger milled head. Then turn the *locked*



clutch C to the LEFT, winding the black paper upon the roller M, adjusting the paper so that it runs perfectly true between the side lines, until the white line on black paper is in alignment with the short, scribed line at the right of the exposure diaphragm, before closing hinged back of camera.

Turn white line on button R to "ON," which locks roller M so that it will turn only in one



direction. Close and lock door I, and back of camera. The retard R is set at "ON" in order to lock the roller M which should remain locked to prevent

rebound of film on roller M after each exposure.

Pull down lever A—AS FAR AS IT WILL GO, to the stop T, and release the shutter by pulling trigger E. Repeat this operation 5 times which will wind off the protective black paper, and advance the film into position for the first exposure.

IMPORTANT

When roller M is operated by means of the milled head C or the lever A, it should be noted that re-wind crank L rotates, otherwise film is not spooling on roller



M, indicating that clutch C has not been locked.

Set the tally F by turning button N, in either direction, until O is registered at aperture F. When the camera is operated, the number of exposures made will be automatically registered at F.

SETTING THE SHUTTER The shutter is set by pulling lever A down as far as it will go—to the stop T.

SPEED OF SHUTTER The speed of shutter is regulated by turning button B to the left until the tension num-

ber indicated on the Shutter Speed Plate, for a certain exposure, is registered at G. If a higher tension number than required is registered at G, the tension can be lowered to the desired number by pressing escapement P back and forth.

MAKING THE EXPOSURE

After the camera has been loaded, the film advanced into position, tension, and lens stop

set at the proper number, the camera is aimed and the exposure made by pulling trigger E, in the same manner as a gun is fired. The trigger action automatically opens the front shutter just before the shutter curtain is released. When pressure on the trigger is released, the front shutter automatically closes.

CHANGING THE FILM

The film is advanced into position for the next exposure with the same action of lever A that sets the shutter.

TO REMOVE FILM FROM CAMERA

Hold re-wind crank Land unlock clutch by turning small button C to the left:

turn the white line on button R to "OFF." which permits rewinding of exposed film upon original spool, by turning crank L to the right, in direction of the arrow. Care should be exercised to fully rewind exposed film and black paper upon the original spool, which can be readily noted when clutch C ceases to revolve. The door I may be opened and exposed roll of film removed, by drawing out spool centers K and L, and properly sealed.

The F. & S. Aero Parachute, to which one or more exposed rolls of film, or messages, may be attached by means of a sealed metal tube, and dropped from the Aeroplane, obviates the necessity of making a landing in order to accomplish delivery of such information.

The exposed roll of film is replaced, locked and sealed, in its original metal container, which is then attached to a Parachute and thrown out from the Aeroplane.