PATENT SPECIFICATION



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383,911

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Complete Accepted: Nov. 24, 1932.

COMPLETE SPECIFICATION.

Improvements in or relating to Photographic Roll Film Cameras.

We, Ernst Leitz G.M.B.H., a Company organised under the laws of Germany, of Optical Works, Wetzlar, Germany, do hereby declare the nature of 5 this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:-

This invention relates to photographic 10 roll film cameras and has for its object to provide a compact and convenient form of winding device especially suited for small cameras.

Hitherto in photographic cameras the 15 take-up reel on to which the film is wound has been provided with a folding key or with a large diameter milled knob but in the case of small cameras there is not sufficient available space to accommodate 20 a knob or key which can be easily manipulated.

According to this invention the winding device is provided with a knob or milled head which can slide in the direction of 25 its axis upon the spool-engaging member into a position clear of the view finders or other fittings which are so close to the knob in its normal or closed position as to prevent the knob being manipulated. 30 In this way the film can be easily wound on after an exposure has been made although the knob is of small diameter, as when the knob is raised it can be easily grasped and manipulated.

One construction according to this invention is illustrated by way of example in the accompanying drawings, in which Figure 1 is a sectional side elevation showing the winding knob in its normal

40 or closed position, and
Figure 2 is a similar view of the knob in its operative or raised position.

In the example shown the winding device comprises a rotary sleeve A fur-45 nished at its lower end with projections A1 to engage the spool and mounted in a tubular bearing B secured to the upper wall of the camera. Mounted to slide within the bore of the sleeve A is the shank C1 of a hollow winding knob C, the outer circumferential surface of which is milled. The shank C¹ is provided with a longitudinal groove or key-way E and this is engaged by a pin or stud D in the head or upper end of the tubular portion A. It is thus possible for the milled head and its shank to be raised from the position shown in Figure 1 into the position shown in Figure 2 but the milled head C cannot be rotated independently of the tubular member A by which the spool is wound. The pin or stud D not only prevents rotation of the milled head and its shank relatively to the spool-engaging member but limits the upward movement of the milled head.

The construction enables the film to be easily wound and the annular form of the knob conveniently houses the head of the tubular member when the parts are

Having now particularly described and ascertained the nature of our said invention and in what manner the same is to be performed, we declare that what we claim is:-

1. A winding device for the spools of roll film cameras comprising a milled head or knob mounted to slide in the direction of its axis upon the spool-engaging member so that it can be raised from the normal or inoperative position into an operative position clear of the camera body and the parts mounted thereon when the film is to be wound on.

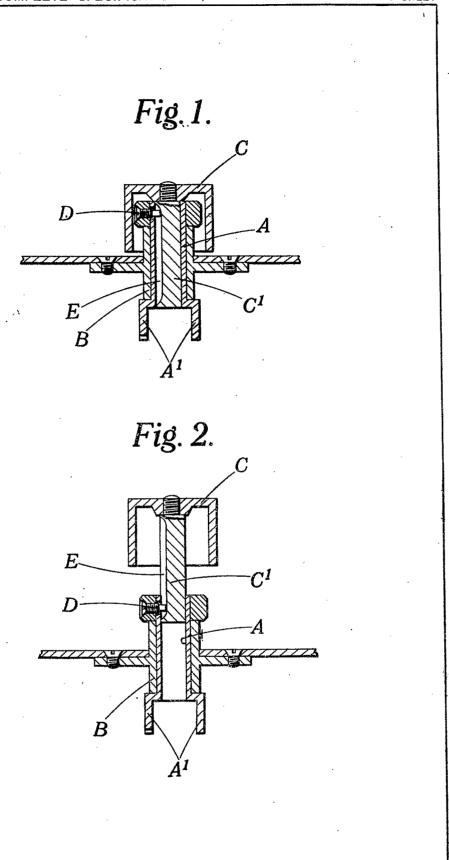
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2. A winding device for the spools of roll film cameras comprising a hollow externally milled knob or head mounted to slide in the direction of its axis upon the spool-engaging member, and a stop to limit the upward axial movement of the knob and to prevent relative rotary movement between the knob and the spoolengaging member.

Dated this 24th day of June, 1932. KILBURN & STRODE, Agents for the Applicants.

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[This Drawing is a full-size reproduction of the Original]



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