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C. A. BORNMAN, JR

WINDING KEY FOR CAMERAS

Filed April 5, 1924

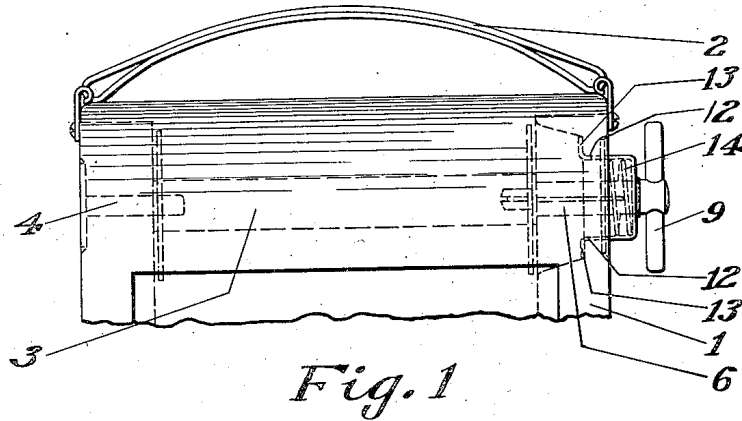


Fig. 1

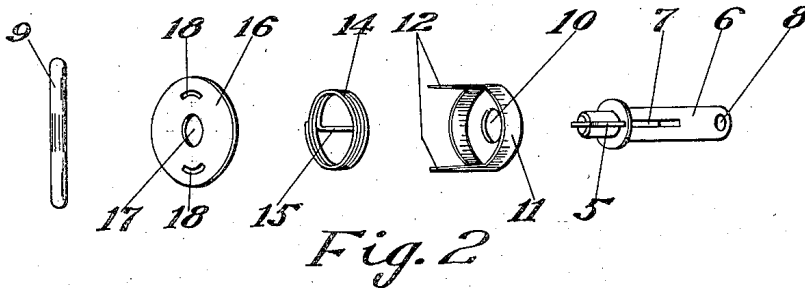


Fig. 2

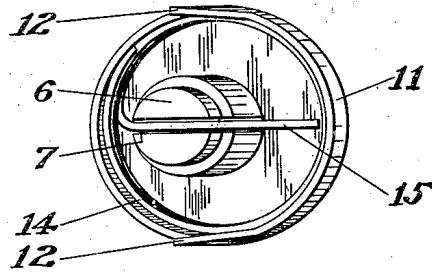


Fig. 3

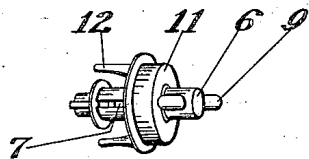


Fig. 4

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WINDING KEY FOR CAMERAS.

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To all whom it may concern:

Be it known that I, CARL A. BORNMANN, Jr., a citizen of the United States, and a resident of the city of Binghamton, county of Broome, and State of New York, have invented a new and useful Improvement in a Winding Key for Cameras, of which the following is a description, reference being had to the accompanying drawing, which forms a part of this application.

My invention relates to cameras and particularly to a novel type of winding key for the same.

The principal object of my invention is to provide such a key of the lock type which is positive in operation, simple in construction and of few parts, rendering the same inexpensive to manufacture.

More specifically it is my object to utilize a spring coil of a character which will permit ready turning of the key stem in one direction but which effectually locks the same against rotation in the opposite direction.

Other objects and advantages in details of construction and operation will be apparent as the description proceeds, reference being had to the accompanying drawing where like reference numerals indicate like parts.

In the drawing:—

Figure 1 is a front view of the top portion of a camera showing my improved winding key in position and ready for operation.

Figure 2 is an exploded view showing clearly in perspective the various parts or elements which go to make up the key.

Figure 3 is a detailed perspective view of the key housing showing clearly the position and operation of the lock spring therein.

Figure 4 is a perspective view of the assembled key.

Reference numeral 1 indicates a camera of conventional type, in this case a folding camera to which my improved key may be applied. It will be understood, however, that this key is equally adaptable for use on cameras of the box type as well. Number 2 indicates the usual carrying handle on the camera and 3 refers to a film spool supported in the camera by the pin journal 4 and the key web 5. These parts are all of

conventional design and require no detailed explanation.

My improved key comprises the stem 6 which is circular in form and is slotted as at 7 thru a portion of its length. An opening 8 near one end thereof accommodates the finger piece 9 by means of which the stem may be rotated. The stem 6 passes thru an opening 10 in the top of the housing 11 which is circular in form and is provided with prongs 12 by means of which the key is fastened to the camera 1. This method of securing the key is clearly shown in dotted lines in Fig. 1 where the prongs 12 are illustrated as being driven thru the side wall of the camera and turned outwardly as at 13.

Fitting within the housing 11 is a tightly coiled spring 14 the inner end of which is straightened at right angles across the opening formed by the coils, as at 15. This end 15 of the spring engages in the slot 7 of the stem as clearly shown in Fig. 3 and permits the stem to be readily pulled outwardly for disengaging the web 5 from the usual slot in the end of the spool 3, or pushed in for the purpose of engaging the same. The cover plate 16 provided with a small opening 17, permitting passage of the stem 6, and oppositely disposed slots 18 permitting the passage of the prongs 12, fits over the housing 11 thus holding spring in place within said housing.

From the foregoing description it will be readily understood that with the parts in assembled position the stem 6 upon being turned in one direction (to the left in Fig. 3) freely rotates, turning the coil spring 14 with it due to the engagement of the end 15 of the spring in the slot 7 of the stem. The stem is permitted to turn freely in this direction because no strain is placed upon the coil 14, it simply turning idly within the housing 11. Turning of the stem in the opposite direction is prevented, however, by the action of the slotted portion 7 tending to unwind the coil 14 thereby causing the same to bind tightly against the inner wall of the housing 11.

It will be obvious from this description that I have devised a winding key for cameras which consists of few parts, is simple and easy of operation and assembly and which is decidedly practical and effective

for the purpose described. Of course my invention is susceptible to many variations in design and construction without departing from the scope and spirit thereof. I do not
5 limit myself therefore to the exact form shown other than by the appended claim. housing, securing prongs integral therewith, a slotted stem extending thru said housing,¹⁰ a coil spring therein the inner end of which engages within said slot, and a cover plate apertured to accommodate the securing prongs and the stem.

I claim:

A winding key for cameras comprising a

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