No. 772,408. PATENTED OCT. 18, 1904.

E. E. ELY.

CANE.

APPLICATION FILED DEC. 26, 1903.

NO MODEL.

Fig. 1.

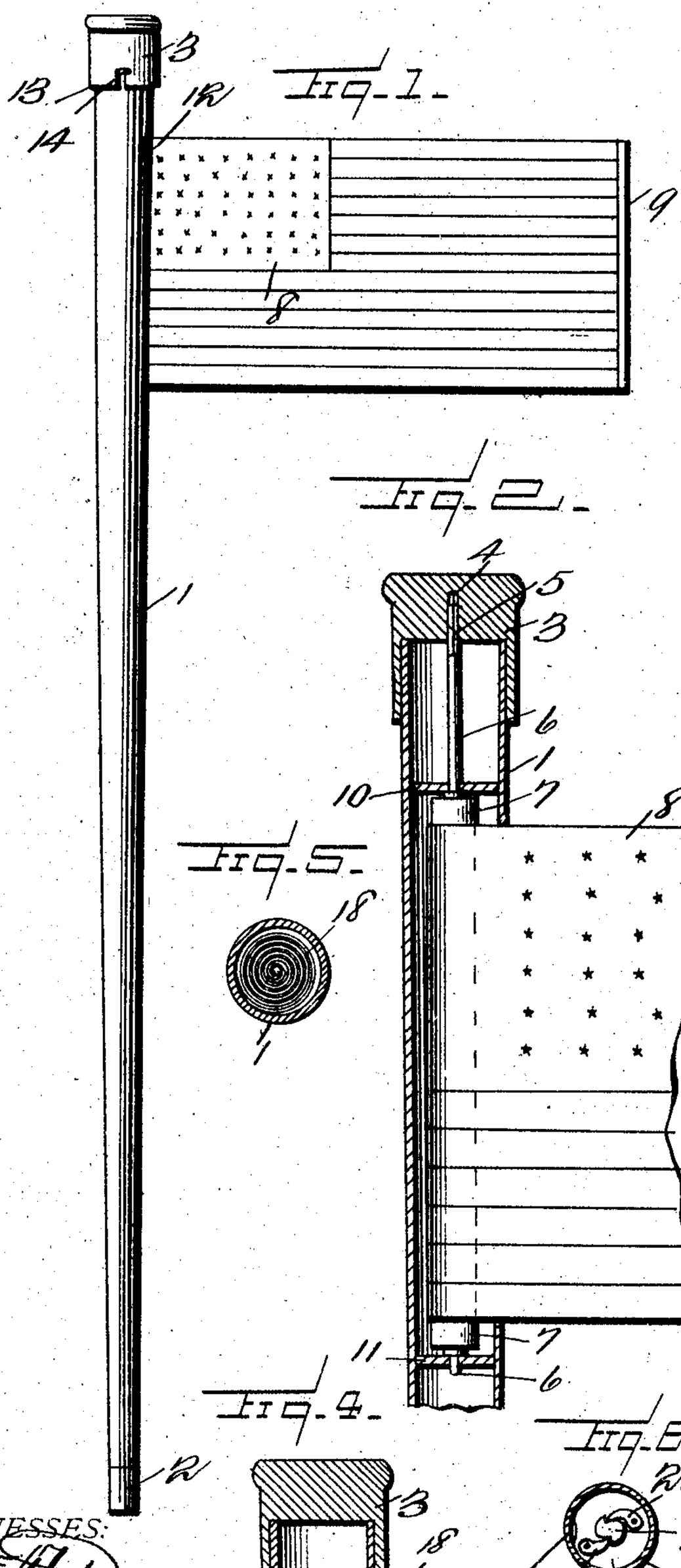

Fig. 3.

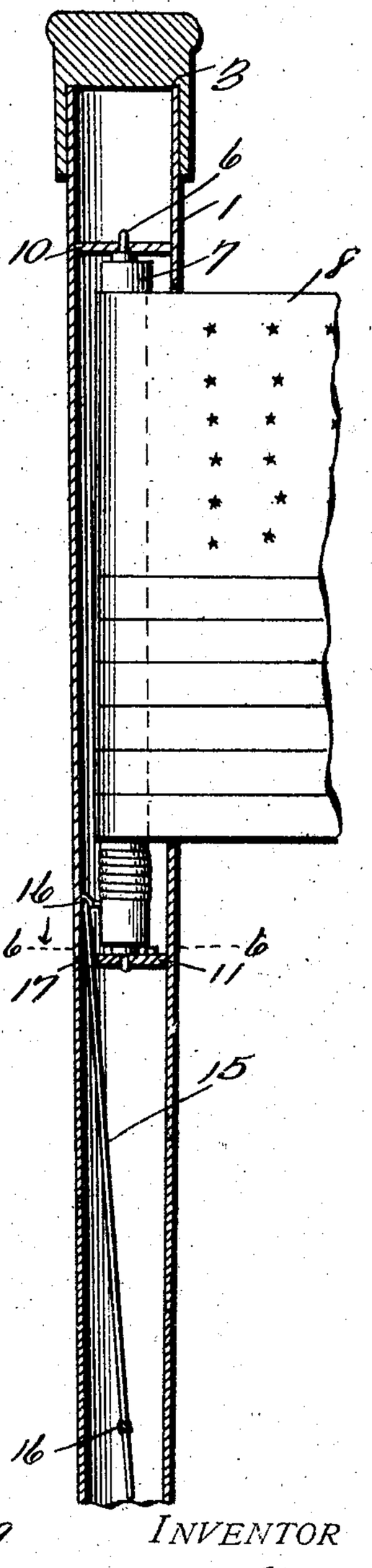

Fig. 2.

Fig. 5.

Fig. 4.

Fig. 6.

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No. 772,408. Patented October 18, 1904.

UNITED STATES PATENT OFFICE.

ERNEST E. ELY, OF MASON CITY, ILLINOIS.

CANE.

SPECIFICATION forming part of Letters Patent No. 772,408, dated October 18, 1904.

Application filed December 26, 1903. Serial No. 186,665. (No model.)

To all whom it may concern:

Be it known that I, ERNEST E. ELY, a citizen of the United States of America, residing at Mason City, in the county of Mason and State of Illinois, have invented certain new and useful Improvements in Novelty Canes, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to certain new and useful improvements in canes and to that class that are particularly designed for and used in displaying emblems, signs, or the like at fairs or parades.

More particularly my invention comprises a cane designed to be used as a holder and a flag or other emblem adapted to be rolled or unrolled therein, and has for its object to provide a device that shall be easily operated and one which at the same time involves a very small number of parts in its construction and cannot readily become out of order.

With these and other objects in view I have constructed the novel device which I will now describe in detail, reference being had to the accompanying drawings, forming a part of this specification, wherein like numerals of reference indicate like parts, in which—

Figure 1 is a plan view showing the device in the form of a cane with the flag unrolled. Fig. 2 is a central longitudinal section, partly broken away, showing the flag carried upon a roller adapted to be wound or unwound by the rotation of the cap placed upon the upper end of the cane. Fig. 3 is a central longitudinal section, partly broken away, representing another modification, the roller in this instance being operated by the tension of an elastic cord. Fig. 4 is a central longitudinal section, partly broken away, representing still another modification in which the means for operating the roller consists of a coil-spring. Fig. 5 is a horizontal cross-sectional view upon the line 5 5 of Fig. 4, showing the coil-spring arranged within the cane; and Fig. 6 is a horizontal cross-sectional view upon the line 6 6 of Fig. 3 looking in the direction of the arrow, showing the arrangement of the pawl-and-ratchet locking mechanism for the roller.

1 represents a cane, hollow either partly or throughout its entire length, provided on its lower end with the usual ferrule 2 and on its upper end with a cap 3, fitting over its outer periphery. In Fig. 2, in which the roller is operated by revolving the cap 3, I have shown the latter provided with a rectangular vertical recess 4, in which the squared end 5 of the shaft 6 is seated. Rigidly mounted upon the shaft 6 is the roller 7, carrying the flag 8, provided on its free end with a rod 9, the said roller 7 being held in a fixed position by means of transverse plates 10 and 11, each of the latter being provided with an aperture at a point central thereof through which the shaft 6 passes. The cane 1 is provided with a longitudinal slot 12 of equal height to and disposed in front of the roller 7, through which the flag 8 passes when being rolled on or unrolled from the said roller. In the construction shown in Figs. 1 and 2 the cap 3 is provided with a bayonet-slot 13, and the cane 1 is provided near its upper end with a pin 14, so that when the cap 3 is placed upon the cane the said pin 14 will form a locking engagement with the bayonet-slot 13. When it is desired to display the flag or other emblem, assuming that the same is concealed within the cane upon the roller 7, the cap 3 is moved first transversely and then vertically until the pin 14 is disengaged from the slot 13, when the said cap is capable of being rotated in the direction necessary to unroll the flag 8, so that the latter may pass through the slot 12 and be displayed to view. When it is desired to wind the flag 8 upon the roller 7 until the former is concealed within the cane, the cap 3 is rotated in the opposite direction, the roller being revolved with the cap owing to the squared head 5 of the shaft 6 being held in a fixed position within the recess 4 of corresponding shape, and hence being rotated with the cap 3. When the flag is entirely concealed within the cane, the cap 3 is rotated until the pin 14 effects a locking engagement with the slot 13. The rod 9 serves to keep the free end of the flag 8 from passing through the

slot 12, thereby preventing the said flag from having its free end lost within the cane as the roller 7 is revolved.

In Fig. 3 the flag 8 is held tightly wound upon the roller 7 by means of an elastic cord 15, which has one of its ends secured at a point near the bottom of the cane and its other end after being passed through guide-staples 16 and a suitable opening 17 in the plate 11 secured to the roller 7. Thus when the flag 8 is unwound and passed through the slot 12 the cord 15 will be wound upon the roller 7 and the tension thereof increased. When this method is used for operating the roller 7, it is necessary to provide other means for locking the roller in a fixed position than that used in the construction illustrated in Figs. 1 and 2. Accordingly I have used a locking mechanism. (Shown in detail in Fig. 6.) Upon that end of the roller 7 adjacent the plate 11 I secure a ratchet-wheel 19 of the form used in an ordinary shade-roller, provided on its periphery with notches 20, and upon the plate 11 are pivotally secured pawls 21, which engage the notches 20 when the roller 7 is rotated slowly, but which remain out of engagement with the notches 20 when the roller 7 is rotated rapidly, the operation being similar to that of the ordinary window-shade roller. When the flag is unwound to a desired extent, it will be kept from winding itself upon the roller 7 by the locking engagement of the pawls 21 with the ratchet-wheel 19. However, a quick jerk upon the flag 8 will serve to release the pawls from engagement with the ratchet-wheel, when the roller will be rapidly revolved in the opposite direction owing to the tension of the elastic cord 15, thereby winding and concealing the flag within the cane.

The modification shown in Fig. 4 differs from the construction illustrated in Fig. 3 in that a coil-spring 18 is substituted for the elastic cord 15, the said spring being located, preferably, above the plate 10 and having one of its ends secured to the cane and the other end to the projecting head of the shaft 6. In this construction when the roller 7 is revolved so as to display the flag the spring 18 will be tightly wound about the shaft 6 and the roller 7 will be locked by the pawl-and-ratchet locking mechanism hereinbefore described. When the pawl has been released in the manner set forth, the roller 7 will be rotated in the opposite direction by the influence of the spring 18, thereby winding and concealing the flag within the cane.

I have described three methods of operating the roller 7, and thus winding or unwinding the flag 8 thereupon; but it is obvious that other mechanisms may be used and various minor changes made without departing from the general spirit of my invention.

The advantages of my improved device will be readily apparent. I have shown it as applied to a cane; but it is obvious that it could be used with any other article of like character. Instead of the flag, as shown in the drawings, advertisements, programs, campaign mottoes, portraits, cartoons, fraternal emblems, and the like may be used, the entire structure being so arranged as to be easily carried about on one's person and to have the flag or emblem carried therein displayed or concealed at will.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a cane, a holder, a roller mounted therein, a flag carried by said roller, a cap fitting over the end of said holder, and having a vertically-disposed rectangular recess, a shaft on which the roller is carried, said shaft having a squared upper end fitting in the rectangular recess of the cap, and means for locking the cap in a fixed position on the holder.

2. In a cane, a holder, a roller mounted therein, a cap covering one end of the said holder, the said cap being formed with a rectangular recess at a point central thereof, the said roller being provided with a shaft having a squared end to fit in said recess, a flag carried by the said roller, the said holder being formed with a longitudinal slot through which the flag is adapted to be wound or unwound, upon the roller, a rod secured to the free end of the said flag, the said cap being formed with a bayonet-slot and the said holder being provided with a pin at a point near its upper end, the said pin being adapted to form a locking engagement with the bayonet-slot to secure the cap in fixed position.

In testimony whereof I affix my signature in the presence of two witnesses.

ERNEST E. ELY.

Witnesses:
G. W. ELLSBERRY,
JOHN J. SHANNON.