

(No Model.)

E. T. BURROWES.
HOLDING MECHANISM FOR SPRING ACTUATED SHADES.
No. 501,674.
Patented July 18, 1893.

Fig. 1.

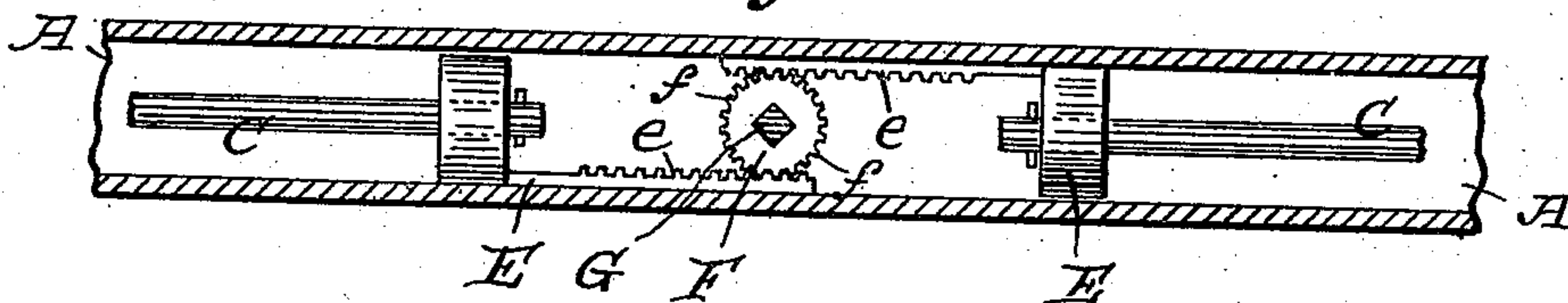


Fig. 2.

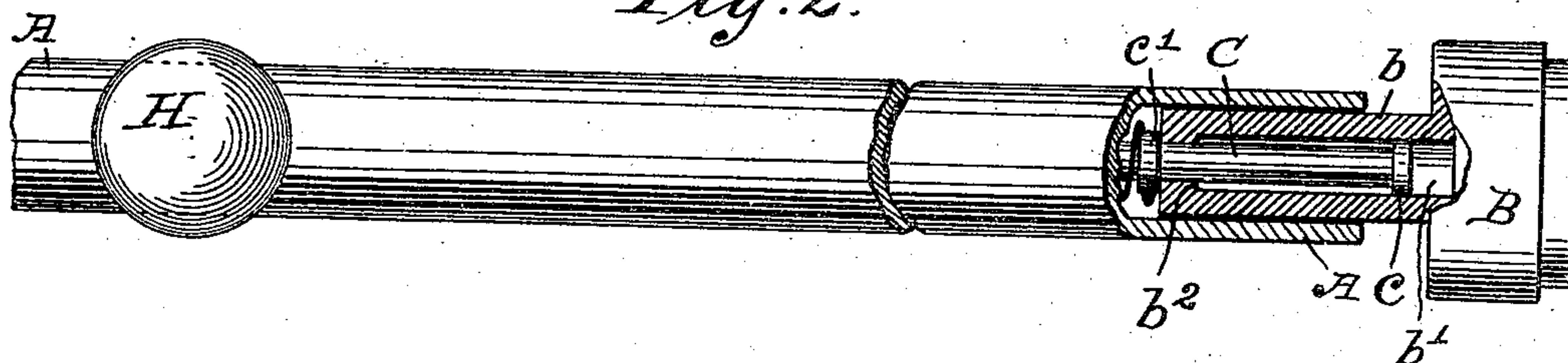


Fig. 3.

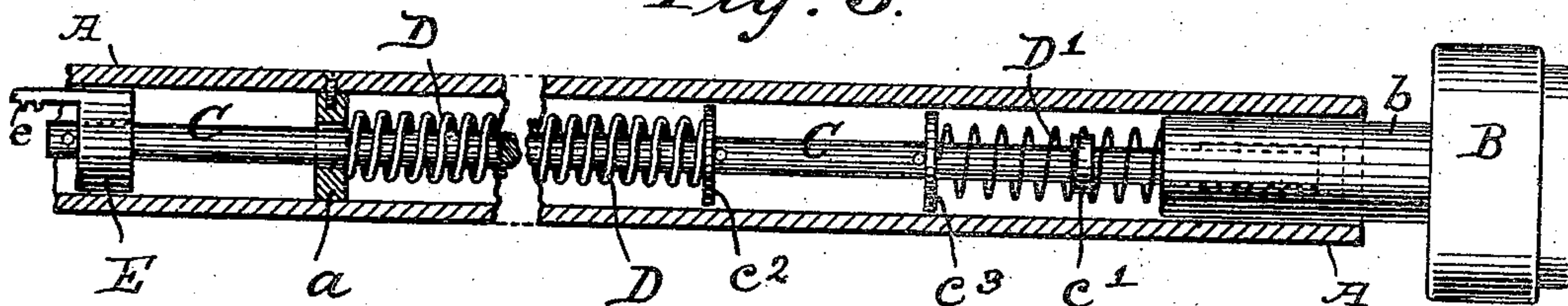
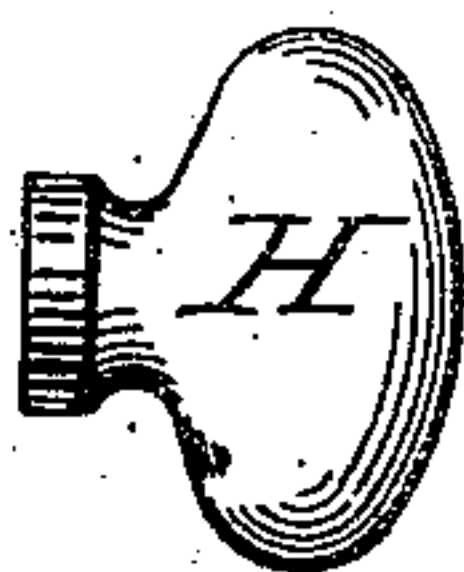


Fig. 4.



Witnesses
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EDWARD T. BURROWES, OF PORTLAND, MAINE.

HOLDING MECHANISM FOR SPRING-ACTUATED SHADES.

SPECIFICATION forming part of Letters Patent No. 501,674, dated July 18, 1893.

Application filed February 15, 1893. Serial No. 462,436. (No model.)

To all whom it may concern:

Be it known that I, EDWARD T. BURROWES, a citizen of the United States, residing at Portland, in the county of Cumberland and State of Maine, have invented certain new and useful Improvements in Holding Mechanism for Spring-Actuated Shades; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to frictional holding mechanism for window shades, of the character shown in the United States patents to Hall, No. 453,409, dated June 2, 1891, and No. 483,490, dated September 27, 1892, and the patent to myself, No. 476,783, dated June 14, 1892.

The most essential features of the invention are certain novel mechanisms operating to release the frictional holding device, and a novel feature connected with the friction tip or head, all of which will be fully set forth in the following specification and claims, and clearly illustrated in the accompanying drawings, forming a part of the same, of which—

Figure 1. is a sectional elevation showing my improved releasing mechanism for the frictional shade holding mechanism, Fig. 2. being a broken elevation of a portion of a shade stick containing my improvements, and showing one of the friction tips or heads, and my improved actuating knob for releasing the friction tips from contact with a window frame. Fig. 3. is a sectional elevation showing a portion of a shade stick, a portion of a spring actuated rod, the main actuating spring, my improved auxiliary spring, and the friction tip as when ready for use. Fig. 4. represents my improved actuating knob as when detached.

Similar letters denote corresponding parts.

Referring to the details of the drawings by letter, A, denotes a shade stick, and, B, is a friction tip whose especial novelty consists in the manner in which it is mounted upon the spring actuated rod C, to wit: The oblong tip or head B, is rigidly secured to a piston or stem b , to avoid the liability of the head being lost out of the end of the stick in case of its becoming loosened from the window frame as would be the case with my former patent.

The stem is perforated at b' , so as to loosely fit the rod C, which extends through said stem and is mounted rotatively therein, and also longitudinally to a limited extent., i. e., the said rod C is slightly expanded or headed at its outer end as at c , and said enlarged portion is made an easy fit for the main portion of the perforation b' , of said stem b , which has at its inner end a shoulder b^2 , fitting more closely the main portion of said rod C, and preventing its removal therefrom, and its movement in the opposite direction is limited by contact with an enlarged or expanded portion c' , of said rod C. The ordinary helical spring D, is mounted on the rod, expanding its force between the collar c^2 , of said rod and a suitable stop or washer a , secured on the shade stick A, for forcing said rod normally outward, and an auxiliary spring D', operates between a stop or collar c^3 , secured to said rod C, and my improved swivel friction tip or head B. This auxiliary spring D', is not intended to add to the frictional power of the head B, against the window frame,—the longitudinal movement of said head upon the spring actuated rod C, being provided merely to prevent the accidental displacement of said head from a window frame, while the pressure of said rod is withdrawn, and the said spring D', is designed to exert only sufficient force upon said head B, to insure its contact with a window frame at all times. The opposite or inner end of either spring actuated rod C, is loosely attached to a rack E, having spur teeth e which mesh with the spur teeth f , of a pinion F, mounted on a shaft G, to the outer end of which is attached an actuating knob H. By rotating this knob, the spring actuated rods are easily drawn inward or toward the center of a shade stick, and thus the pressure of the shoulder or expanded portion c' , of the rod C, is removed from the stem b , of the tip or head B, permitting the ready adjustment of a shade, while the said friction head B, still has the appearance of holding the shade, by reason of the auxiliary spring D'.

Having described my improvements, what I claim is—

1. The combination with the spring actuated rods of the longitudinally and rotatively movable friction heads permanently secured

thereto, and the auxiliary springs for holding said heads normally extended upon said rods.

2. The combination, with a shade stick, the outer end of which is hollow and provided with a stop, of a longitudinally movable rod in the stick, the outer end of which is provided with a head longitudinally movable thereon, and the inner end is provided with means for moving the rod longitudinally, a stop on the rod between the stop in the stick and the head on the rod, a spring on the rod between the two stops and an auxiliary spring on the rod between the stop on the rod and the head.

3. The combination with a shade stick, the outer end of which is provided with a longitudinally movable hollow stem, the bottom or inner end of which is perforated and the outer end is provided with a friction head, of a longitudinally movable rod within the stick, the outer end of which is passed through the perforation in the stem and enlarged and fitted

in the hollow of the stem, a stop on the rod to limit the inward movement of the head, and a spring on the rod adapted to engage with the bottom of the stem and force it outward, and means for moving the rod within the stick.

4. The combination with a shade stick, each end of which is provided with a friction head, rods in the stick, the outer ends of which, each engages loosely with the head at that end, said head being longitudinally movable relatively to the rod, a stop on each rod, a spring on each rod, one end of which engages with the stop and the other end engages with the head, and means for moving the rods.

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

EDWARD T. BURROWES.

Witnesses:

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DAVID W. SNOW.