(No Model.)

E. H. BOWER.

CURTAIN ROLLER.

No. 302,379. Patented July 22, 1884.

Fig. 1

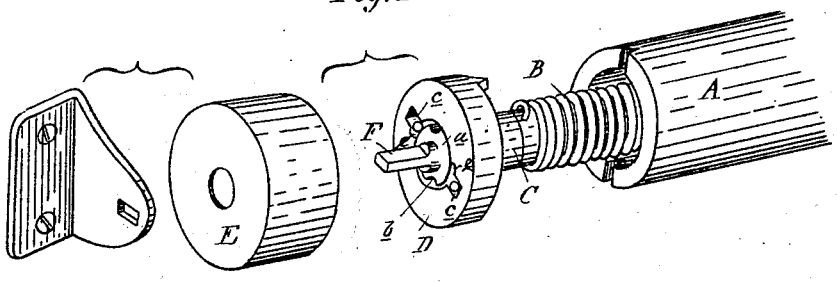


Fig. 2

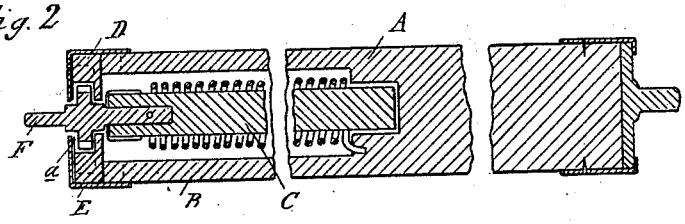
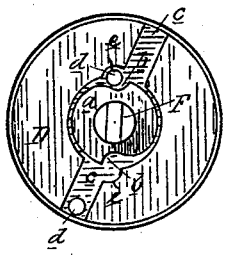


Fig. 3



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ELIAS H. BOWER, OF SAGINAW, MICHIGAN.

CURTAIN-ROLLER.

SPECIFICATION forming part of Letters Patent No. 302,379, dated July 22, 1884.

Application filed March 5, 1884. (No model.)

To all whom it may concern:

Be it known that I, ELIAS H. BOWER, of Saginaw city, in the county of Saginaw and State of Michigan, have invented new and useful Improvements in Curtain-Rollers; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to certain new and useful improvements in the construction of spring curtain-rollers; and the invention consists in the peculiar construction and arrangement of the parts and the various combinations of the parts, all as more fully hereinafter set forth and claimed.

Figure 1 is a perspective view showing parts detached. Fig. 2 is a central longitudinal section. Fig. 3 is an end view with the retaining-cap removed.

In the accompanying drawings, which form a part of this specification, A represents a hollow roller, within which I secure a spring, B, with its spindle C, in the manner usually employed in this class of rollers.

D is a disk, which is held to its proper place by means of a retaining-cap, E, through both of which the pivot-spindle F passes, and is driven into the spring-spindle C, or otherwise properly secured thereto. This pivot-spindle F is provided with an annular flange, *a*, in the periphery of which is formed one or more notches, *b*. The outer face of the disk D has formed in it one or more radial slots or grooves, *c*, in which are formed one or more notches, *e*, and in which is placed a suitable metallic ball, *d*, retained in place by the retaining-cap E. The opposite end of the roller is provided with a suitable pivot. The outer end of the pivot-spindle F is flattened, so as to engage with a suitable bracket that will prevent the rotating of the spindle, and in such manner as to bring one of the notches *b* of the flange *a* vertically above the pivot.

It will be observed that as the curtain-roller is rotated slowly, bringing the slot and ball over the notch in the spindle, the ball will fall into such notch and lock the parts to that position, while if it be rotated rapidly the centrifugal force is sufficient to prevent this engagement of the parts and allow the curtain to be adjusted, as may be desired. It will also be seen that the roller may be removed at any time from the brackets without danger of the spring unrolling or unwinding.

I am aware that spring curtain-rollers have heretofore been provided with a ball adapted to engage with a notch or a cam projection on the pivot-spindle, and therefore do not claim, broadly, the use of a ball in a curtain-roller, for holding the same at any desired position.

What I claim as my invention is—

The combination of the spindle F, having annular flanges *a*, provided with notches *b*, the disk D, having radial slots *c* and notches *e*, the ball *d*, placed in said radial slots, and the retaining-cap E, for retaining the disks D and ball *d* in place, substantially as described.

ELIAS H. BOWER.

Witnesses:

BENJAMIN GEER,

GEO. R. STARK.