C. BISSMANN.

Spring Shade Roller.

No. 203,404. Patented May 7, 1878.

Fig: 1

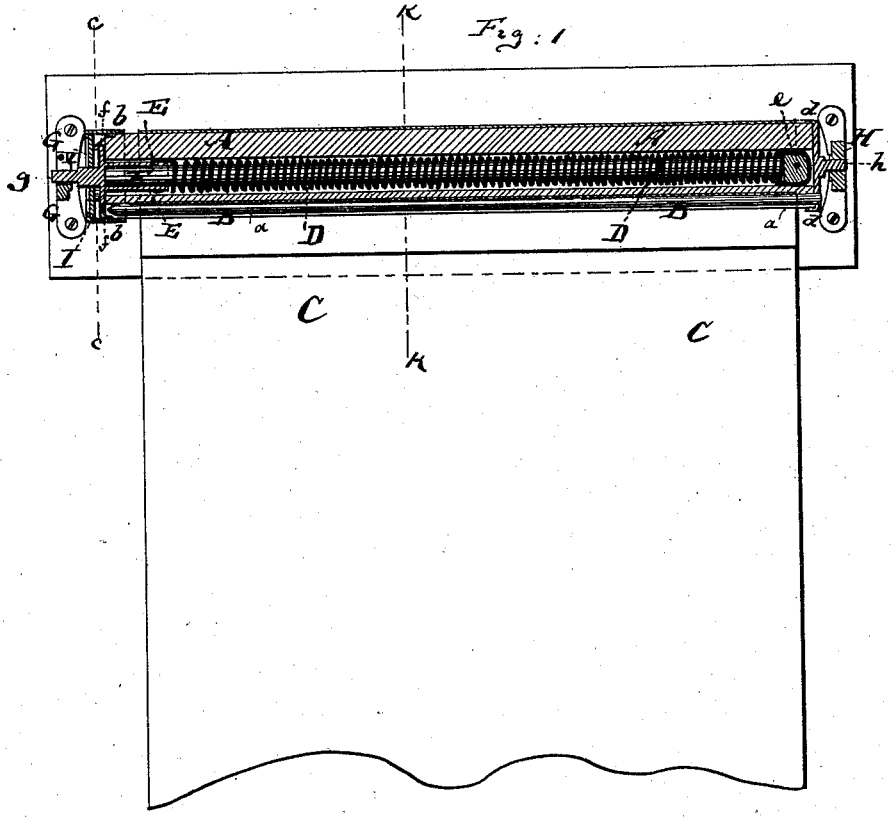


Fig: 2

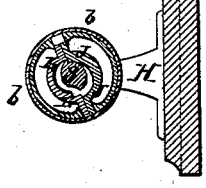


Fig: 3

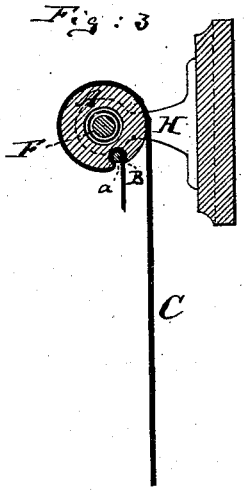
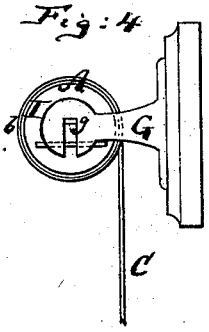


Fig: 4



Witnesses:
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UNITED STATES PATENT OFFICE.

CHRISTIAN BISSMANN, OF NEW YORK, N. Y.

IMPROVEMENT IN SPRING SHADE-ROLLERS.

Specification forming part of Letters Patent No. **203,404**, dated May 7, 1878; application filed June 22, 1877.

To all whom it may concern:

Be it known that I, CHRISTIAN BISSMANN, of New York city, in the county and State of New York, have invented a new and Improved Spring Shade-Roller, of which the following is a specification:

Figure 1 represents a longitudinal central section of my improved spring shade-roller. Fig. 2 is a cross-section of the same on the line *c c*, Fig. 1; Fig. 3, a cross-section of the same on the line *k k*, Fig. 1, and Fig. 4 an end view of the same.

Similar letters of reference indicate corresponding parts in all the figures.

This invention relates to a new construction of mechanism for holding a spring shade-roller in any desired position.

The invention consists, principally, in the use of two separate sliding detents, which are incased in a slotted box or cap attached to the end of the roller, and which engage into one of two notches that are formed in the non-revolving but reversible arbor of the roller.

In the accompanying drawings, the letter A represents a shade-roller of suitable style and construction. Within the roller A, which, for this purpose, is made hollow, as shown, is contained a coiled spring, D, of which one end is attached to a block, *e*, that is secured within the hollow of the roller, near to that end of the same which is embraced by the ring *d*. The other end of the spring D is secured to an arbor, E, which is inserted into the hollow of the roller at that end of the same which is embraced by the ring *b*. The arbor E is or may be hollow, to receive and be connected with the rod F, which extends through the whole length of the spring D as far as the block *e*.

On the arbor E is rigidly secured a projecting flange or collar, *f*, which bears against the end of the shade-roller, and outwardly from this collar projects a pin or gudgeon, *g*, which has its bearings in a bracket, G, that is fastened to the window-frame. The other end of the roller has a round gudgeon, *h*, which is hung in a bracket, H, also fastened to the window-frame. The roller A is capable of revolving on the gudgeon *h* around the rod F; but the gudgeon *g* is flattened or squared, so as not to be capable to turn in the bracket G, as indicated in Fig. 4. A cap, I, is placed over that end of the roller which has the gudgeon *g*, and this cap conceals the collar *f* from view, and is itself embraced by the ring *b*, as clearly shown in Fig. 1. Into this cap I are placed two sliding detents, J and L, which have straight ends but are curved in the middle to embrace the gudgeon *g*, which at this part has two notches formed in it, as indicated in Fig. 2.

The detents J and L have projecting points or prongs on their inner sides, each of such detents having one such projection, the one being diametrically opposite the other, as indicated in Fig. 2. As the roller is revolved in unwinding the shade, that one of the detents whose point is above the gudgeon will, by its weight, tend to carry its point into the notch of the gudgeon directly below, and thereby lock the roller in the desired position; and thus the roller may be arrested in any position by simply slacking its motion, so as to give time to the upper detent to lock into the notch of the gudgeon.

The same effect will be obtained when the shade is wound up—that is to say, during the actual revolving motion the detents will not be able to lock the gudgeon; but as soon as the motion is slackened, that detent which has a projection above the gudgeon will drop into the notch and lock the roller.

The rim of the cap I has slots diametrically opposite each other, to receive the straight ends of the detents and to guide the same in their motion toward and away from the gudgeon, and keep them in place, all as indicated in Fig. 2.

I consider the sliding detents invented by me to be far superior to the vibrating clicks heretofore used in spring shade-rollers, and less liable to get out of order.

It will be seen that, by this construction, the roller is made reversible, so that either notched side of the gudgeon *g* may be above the axis.

I claim as my invention—

The combination of the roller A and its spring D with the arbor E, having a gudgeon, *g*, with two notches or recesses, and with the two separated sliding detents J and L, and slotted cap I, all arranged so that one of the two detents will, by gravity, be locked against the notched gudgeon, substantially as specified.

CHRISTIAN BISSMANN.

Witnesses:

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