

C. E. Thompson.

Curtain-Fixtures for Carriages &c.  
N<sup>o</sup> 76273 Patented Mar. 31, 1868

Fig. 1.

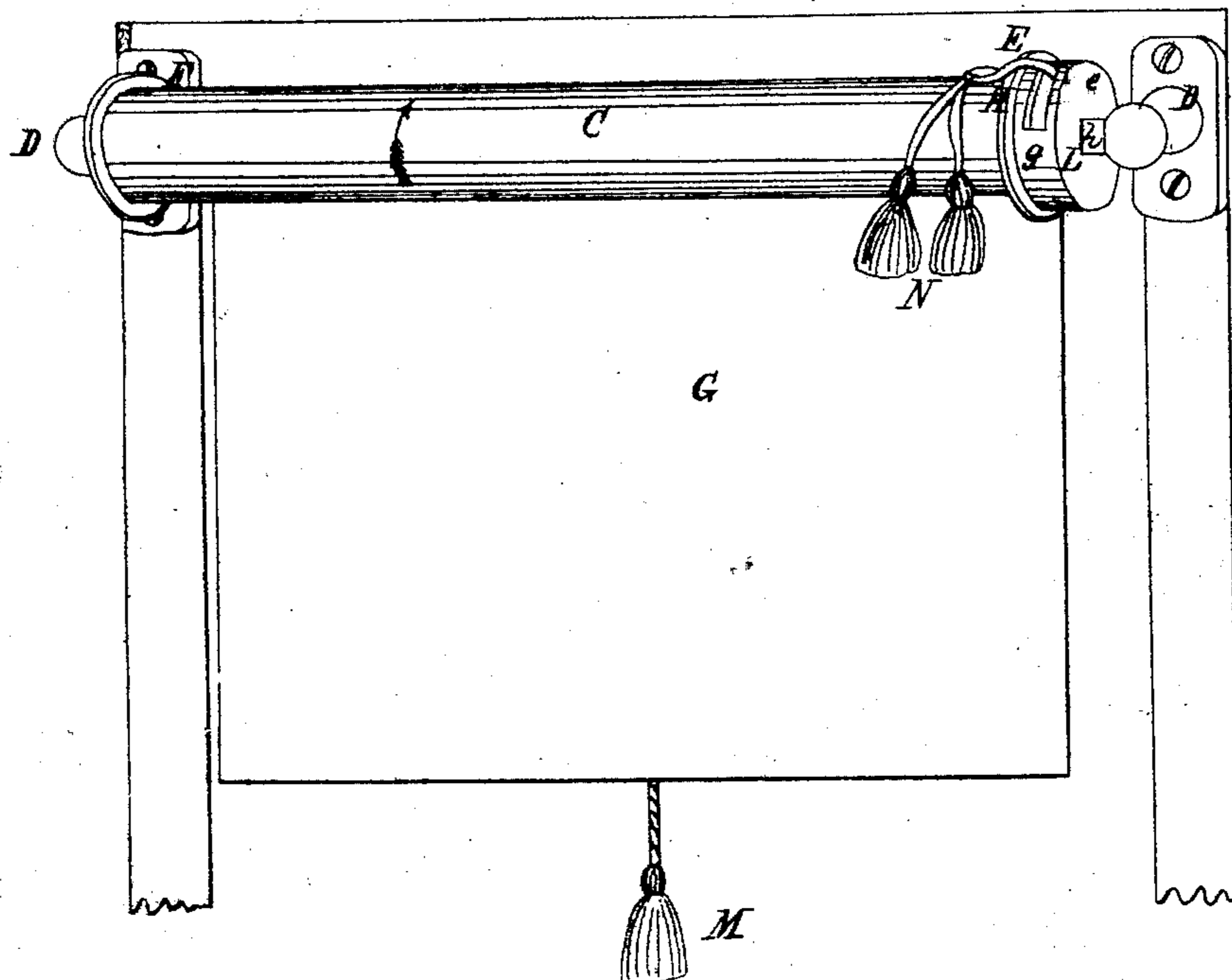


Fig. 2.

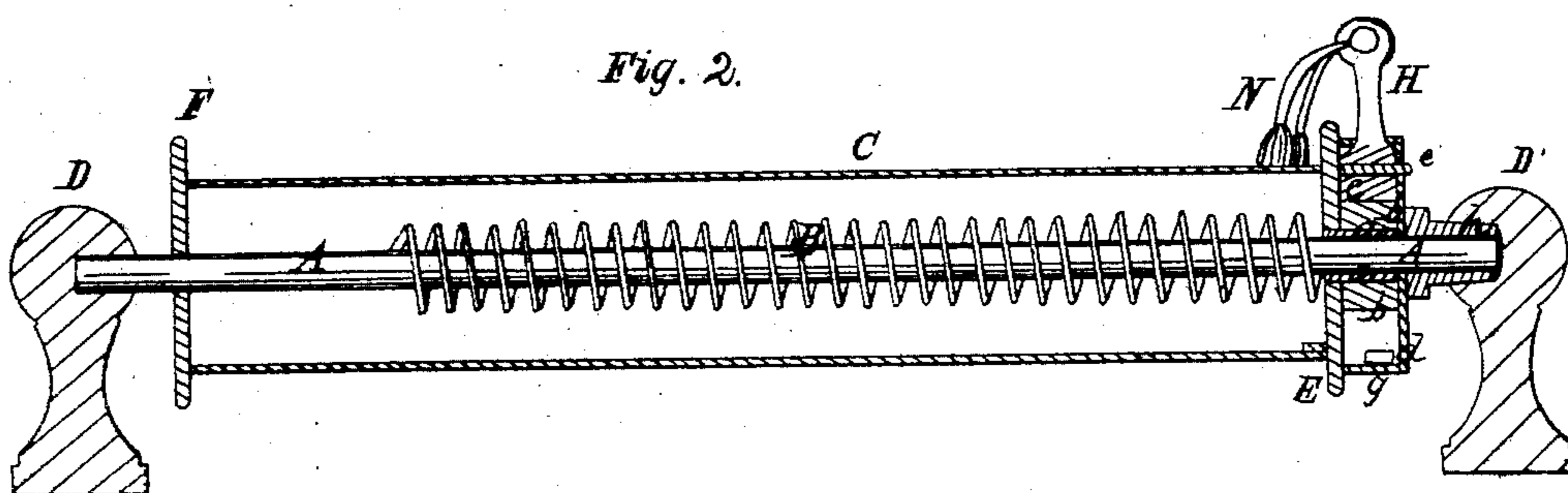


Fig. 3.

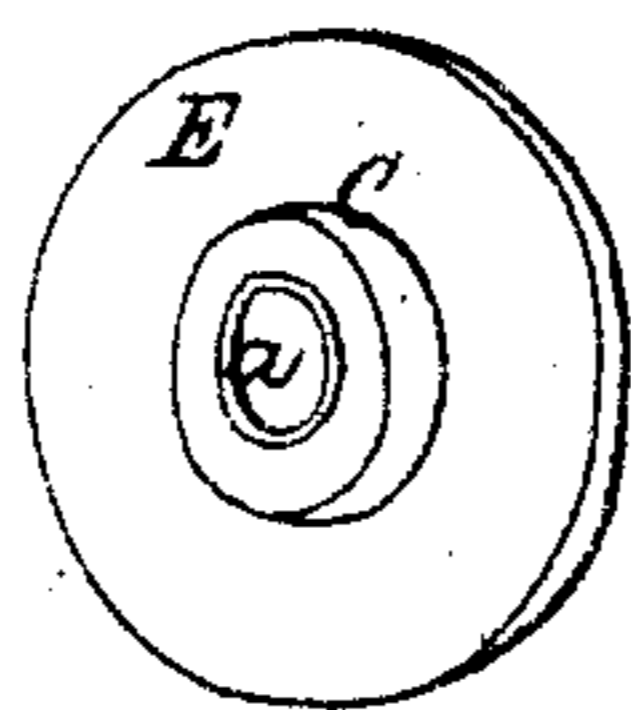
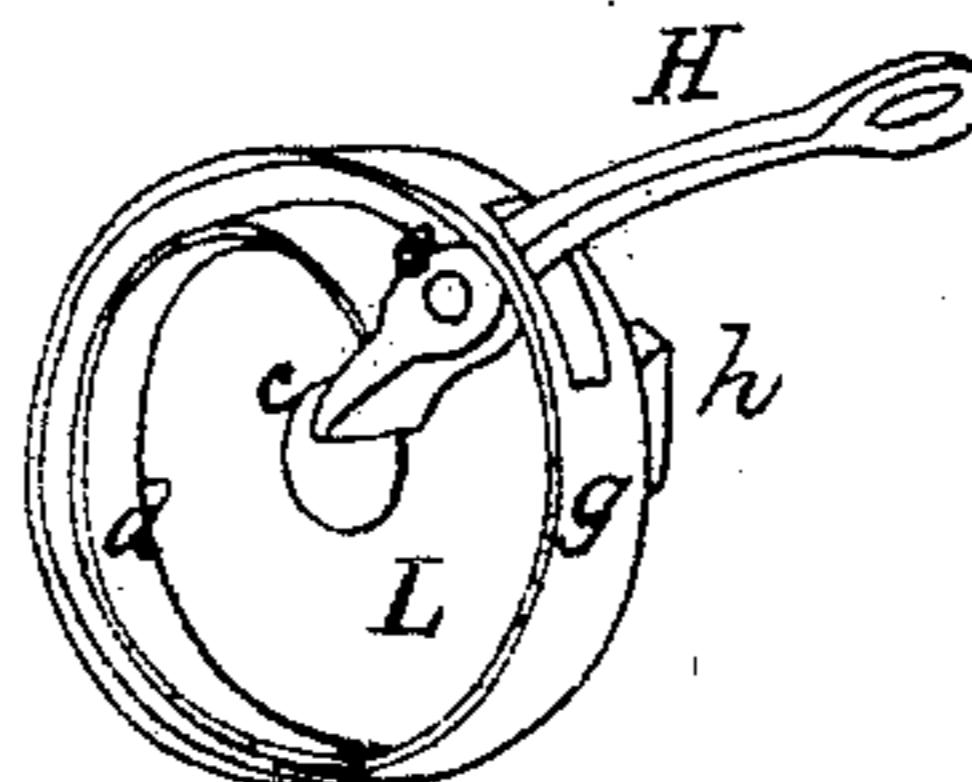


Fig. 4.



WITNESSES.

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CHARLES E. THOMPSON, OF NEW HAVEN, CONNECTICUT.

*Letters Patent No. 76,273, dated March 31, 1868.*

## IMPROVED CURTAIN-FIXTURES FOR CARRIAGES, &c.

The Schedule referred to in these Letters Patent and making part of the same.

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, CHARLES E. THOMPSON, of the city and county of New Haven, in the State of Connecticut, have invented a new and useful Improvement in Curtain-Fixtures for Carriages, &c.; and I do hereby declare that the following is a full, clear, and exact description of the construction, character, and operation of the same, reference being had to the accompanying drawings, which make part of this specification, in which—

Figure 1 is a perspective view of the apparatus when ready for use.

Figure 2 is a section of the same, cut longitudinally through the centre, showing the spiral spring, &c.

Figure 3 is a perspective of the movable head of the binding-collar, or that portion of the collar which contains the piece of India-rubber tubing, which supplies the place of or enables me to dispense with the ratchet-wheel.

Figure 4 is a perspective view of the binding-collar and outward head, showing the binding-lever which holds the curtain at the desired point, and the internal spring which makes the lever effectual.

My improvement consists in using within the collar and on the end of the shaft, a piece of plain India-rubber tubing, sustained by a suitable metallic socket which revolves on the main rod or shaft, and a suitable lever working on a fulcrum-pin within the collar, the inner end of which lever I bevel essentially to a point or edge, and a suitable spring within the collar to act upon and force the inner end or point of the lever against and into the yielding convex surface of the India-rubber tube, so as to stop the curtain at any desired point, while the end of the lever by which it is worked extends outside, so that it may be easily worked by a cord and tassel to release the curtain and allow it to be rolled up by a suitable spring without the use of any ratchet-wheel, or other noisy device, as has heretofore been used on spring-roller curtains.

I make and fit the rod or shaft A, spring B, case or roller C, and knobs or studs D and D', and solder the heads E and F to the ends of the case C in the usual way, as shown in figs. 1 and 2. In the central part of the head E, I fit a metal socket or short tube, as shown at *a*, fig. 3, and indicated at *a a*, fig. 2, which fits so loosely as to run freely on the rod or shaft A, when the case C is being revolved either by the cord or the spring. On the outside of this socket or tube *a*, I fit or stretch a piece of plain India-rubber tubing, as represented at *b*, fig. 3, and indicated in section at *b b*, fig. 2, which will adhere so closely to the socket *a* as not to be moved by the operation of the spring B, or the drawing down of the curtain G, and of a thickness to afford the necessary elasticity for yielding to the point or edge *c* of the lever H *c*, as indicated in fig. 2, so that the case C cannot be revolved but in one way while the inner arm *c* of the lever H is under the influence of the internal spring *d*. I make the binding-lever H *c* to work on a fulcrum-pin, as *e*, figs. 1, 2, and 4, with its inner end bevelled essentially to a point or edge, as shown at *e*, fig. 4, so that it may, by the force of the spring *d*, be caused to press upon and indent the India-rubber tubing, so as to resist the force of the spiral spring B, and thereby cause the curtain G to remain at any point or position which may be desired at any time, and yet, when drawing the curtain down, the point or edge *c* will pass smoothly and silently over the outer surface of the India-rubber tubing without any essential resistance, like that of friction. I make the collar *g* and outer head L substantially as represented in figs. 4 and 1, so that it may contain the socket *a*, India-rubber tubing *b*, inner end *c* of the binding-lever H *c*, and curved spring *d*, all as represented in figs. 4 and 3. And upon the outer surface of the head L, I cast or fit a square projection, as represented at *h*, figs. 1, 2, and 4, to enter the knob or stud D', figs. 1 and 2, to prevent the rod A, collar *g*, and head L from turning when the curtain G is drawn down, so that the act of drawing down the curtain will wind up the spring B, and leave it in such a situation that, when released, it will wind the curtain up as before.

Having made the several parts, as before described, fitted the spiral spring B, attached and wound up the curtain in the usual way, I stretch the piece of India-rubber tubing *b* on to the socket or tube *a*, and put on the collar *g*, raising the point *c* of the binding-lever or trigger until it passes outside of the India-rubber tube *b*, and solder or otherwise secure the projection *h* to the rod A, as indicated at *l*, fig. 2, and insert the ends of the rod into the studs D and D', and screw the studs on to the frame of the coach-door, or any other frame desired, when the whole will be ready for use, as shown in fig. 1. I draw down the curtain G by the tassel M, while the point *c* of the binding-lever or trigger will pass freely over the smooth surface of the tube *b*, but when I

cease to draw it down, the action of the two springs B and *d* will press the point *c* into the yielding convex surface of the India-rubber tupe *b*, and hold it firmly in the desired position against the action of the spring B. And when I desire to roll up the curtain, I pull down the tassels N, which are attached to the outer end H of the binding-lever H *c*, which, by its vibrating on the fulcrum-pin *e*, will raise the inner end *c* from the surface of the India-rubber tube *b*, and allow the spring B to roll up the curtain; all of which is done with entire smoothness, and without the least noise.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination of the metal socket *a* and India-rubber tube *b* with the binding-lever *c* H and the springs *d* and B, when they are constructed, arranged, and fitted for use, substantially as herein described and set forth.

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Witnesses:

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