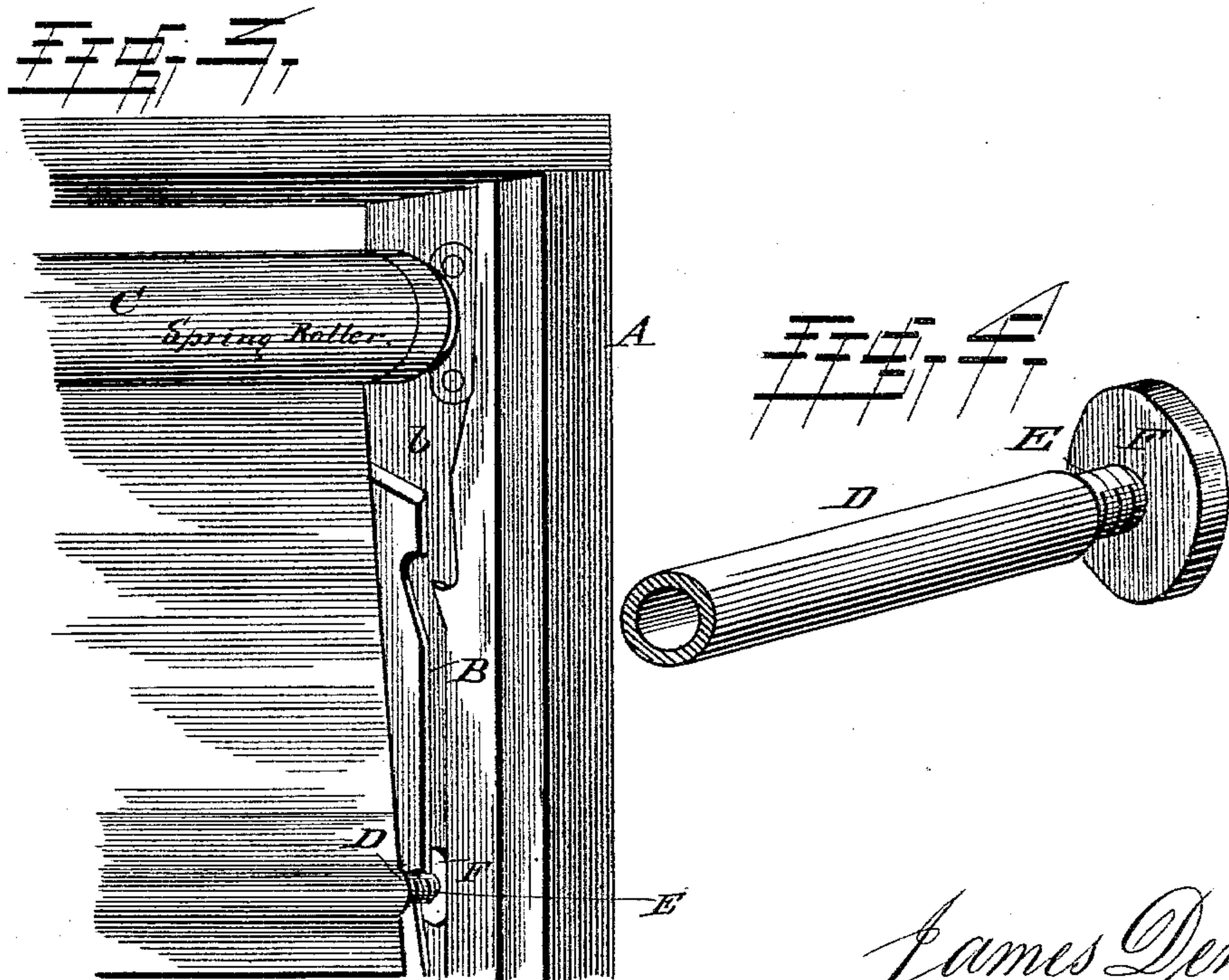
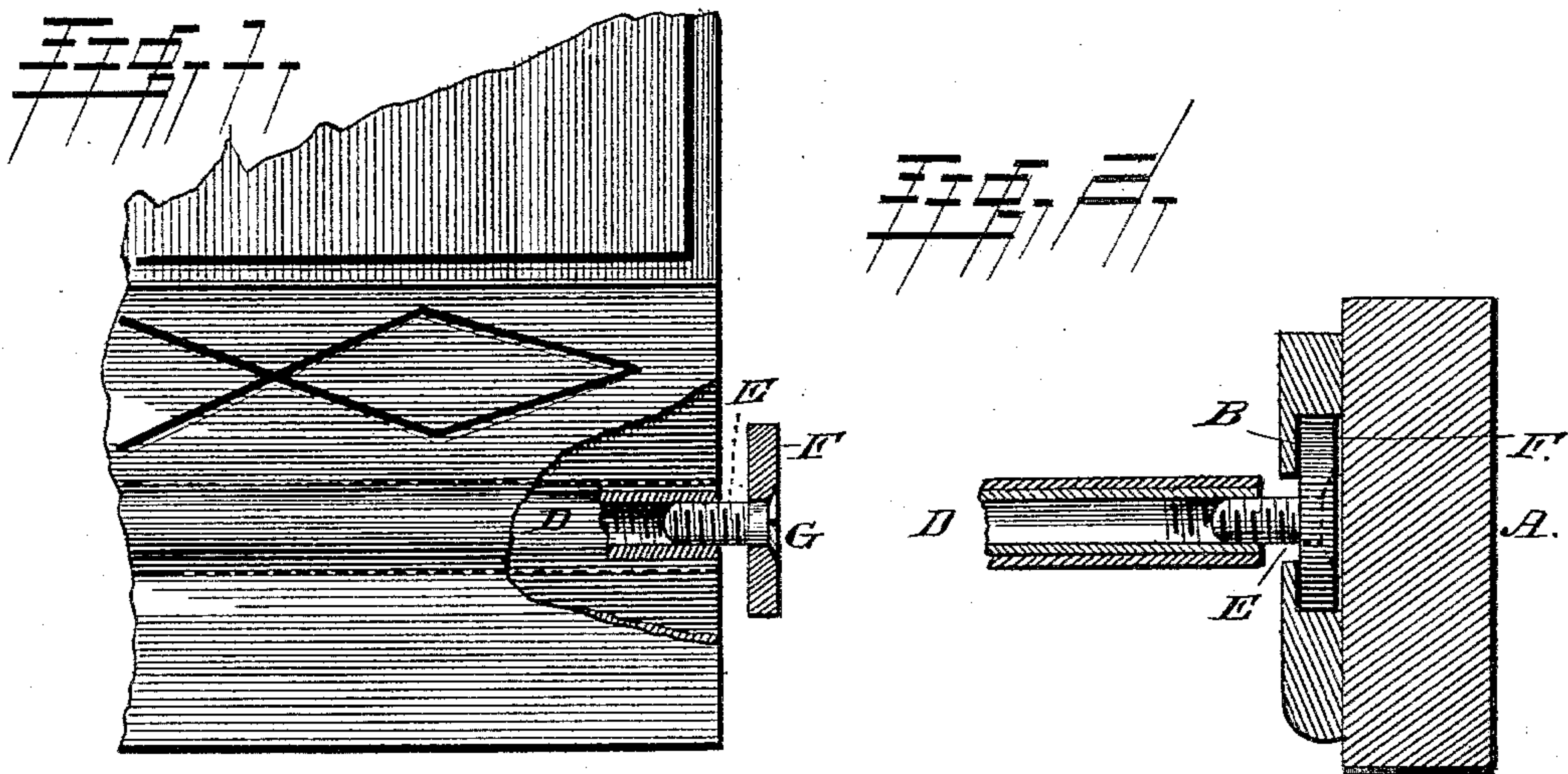


(No Model.)

J. DENVER.
CURTAIN SHADE FIXTURE.

No. 300,311.

Patented June 10, 1884.



WITNESSES:

Fred. L. Dieterich,
Arthur L. Morsell.

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UNITED STATES PATENT OFFICE.

JAMES DENVER, OF NEW HAVEN, CONNECTICUT, ASSIGNOR OF ONE-HALF
TO WILLIAM H. PAULDING, OF PEEKSKILL, NEW YORK.

CURTAIN-SHADE FIXTURE.

SPECIFICATION forming part of Letters Patent No. 300,311, dated June 10, 1884.

Application filed March 18, 1884. (No model.)

To all whom it may concern:

Be it known that I, JAMES DENVER, a citizen of the United States, and a resident of New Haven, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Window-Shade Fixtures; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 represents the lower part of a window-shade provided with my improvement, showing one end of the rod with its friction-roller in section. Fig. 2 is a cross-section through the slotted window-casing, showing the roller in position in its slotted way. Fig. 3 is a perspective view of one side of the casing with part of the shade or curtain, and Fig. 4 is an enlarged perspective view of one end of the rod with its roller.

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

My invention has relation to the fixtures for window-shades or roller-curtains, and is more especially adapted for railway-car windows.

It consists in an improvement upon the window-shade for which Letters Patent of the United States No. 281,128 were granted to William H. Paulding on the 10th day of July, 1883, as will be hereinafter more fully described and claimed.

In the accompanying drawings, A denotes one of the sides of the window-casing, which is grooved longitudinally, as shown at B, said groove being rabbeted or recessed in cross-section, as clearly shown in Fig. 2 of the drawings. The curtain or shade is attached at its upper end to a spring-roller, C, of any desired construction, with or without stops, as desired. When constructed with stops, the rabbeted groove B is made straight; but when the roller is used without the stops, so as to have a constant tendency to draw the shade or curtain up, one side of the groove should be notched or recessed to form ratchets or catches adapted to engage the projecting ends of rod D at the lower end of the shade or cur-

tain, in substantially the same manner as in the curtain-fixture for which Letters Patent of the United States No. 269,703 were granted to Paulding on December 26, 1882. The rod D is by preference tubular, and provided with female screw-threads at opposite ends, adapted to receive screws E, which are inserted through and form the journals for disks or rollers F, the centers of which are countersunk to fit the beveled heads G of the screws. These rollers are of such dimensions that they will fit and run smoothly within the rabbeted slots or guideways B in the casing, and have play enough between the heads of the screws and the ends of the rod to work freely in said slots or ways, so as to prevent rod D from binding in raising or lowering the shade or curtain. By this construction I not only prevent the lower end of the curtain from flapping inside and out when the train is in motion, but I also prevent it from moving sideways within the frame or casing, so that it will at all times move true up and down. The upper part of the casing should be cut away on one side of the rabbeted groove B to form a recess, communicating with said groove, through which the disks or rollers F may be inserted into the rabbeted ways or grooves B.

It is obvious that while this improvement is contemplated more particularly for the windows of railway-cars it may be used with advantage also for the windows of dwellings or other buildings.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

The combination of the spring-roller, the curtain, the rod D, having female screw-recesses at opposite ends, adjustable screws E G, inserted into said recesses, disks or rollers F, and rabbeted grooves or ways B, substantially as and for the purpose herein shown and specified.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

JAMES DENVER.

Witnesses:

GEORGE GREGORY,
LESTER J. BRADLEY.