

J. SHOREY.

Improvement in Curtain-Fixtures.

No. 132,376.

Patented Oct. 22, 1872.

Fig. 4.

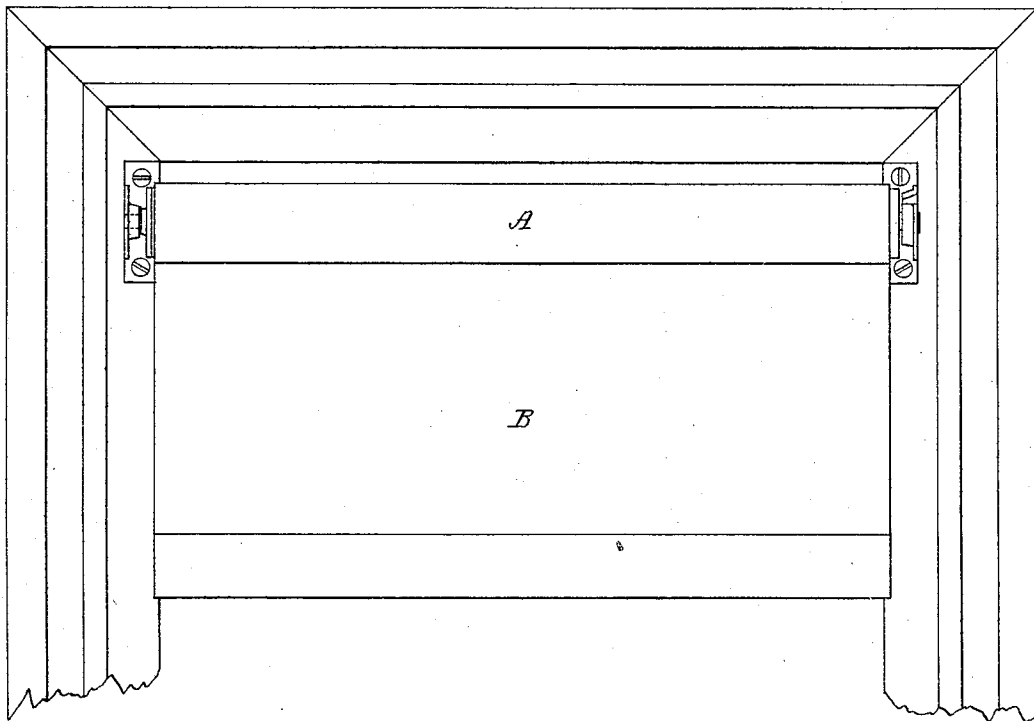


Fig. 1.

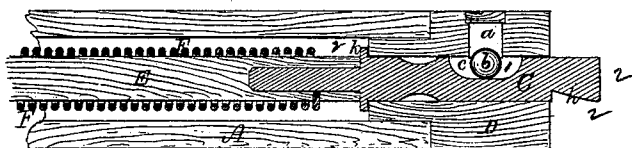


Fig. 2.

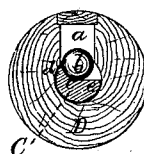


Fig. 3.

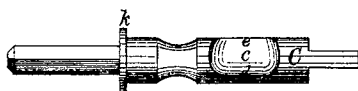


Fig. 5.



Witnesses.

S. N. Piper.

L. N. Hooper.

John Shorey.

by his attorney.

R. L. Endy

UNITED STATES PATENT OFFICE.

JOHN SHOREY, OF LOWELL, MASSACHUSETTS, ASSIGNOR TO HIMSELF AND WILLIAM D. BUTLER, OF SAME PLACE.

IMPROVEMENT IN CURTAIN-FIXTURES.

Specification forming part of Letters Patent No. 132,376, dated October 22, 1872.

To all whom it may concern:

Be it known that I, JOHN SHOREY, of Lowell, of the county of Middlesex and State of Massachusetts, have invented a new and useful Improvement in Curtain-Fixtures; and do hereby declare the same to be fully described in the following specification and represented in the accompanying drawing, of which—

Figure 1 denotes a longitudinal section, and Fig. 2, a transverse section of part of a curtain-roller with my improvement; Fig. 3 is a top view of the spindle separated from the roller or the bearing which is to revolve on such spindle; Fig. 4 is a front view of the curtain, the roller, and the brackets for support of the latter; and Fig. 5 is a side view of the spindle-bracket.

The object of the curtain-fixture is to check the rise or fall of the curtain to any desirable altitude, and it is applicable to curtain-rollers revolved by a cord as well as to those revolved by a spring, for the purpose of winding up the curtain. The said invention consists in the spindle, as made or provided with a hooked or dovetailed head, and with a shoulder, and recessed and provided with a ball, and with a bearing having a chamber to receive such ball, all being as hereinafter described.

In such drawing, A denotes a curtain-roller; and B, a curtain or window shade fixed thereto and wound about it in the usual way. C is a metallic spindle arranged concentrically in a bearing or head, D, and projected into a shaft, E, extending through the curtain-roller, and provided with a helical spring, F, for winding up the roller or revolving it in one direction. One end of the spring is to be fixed to the shaft and the other to the roller. The head or bearing D is tenoned into and cemented or glued to the roller, and has formed within it a chamber, *a*, having a depth a little greater than the diameter of a ball, sphere, or roll, *b*, arranged in such chamber, and also in the cammed recess *c*, formed as shown in the spindle. The part *d* of the bottom of the recess, while the roller is being turned one way, by acting against the ball *b* when it is in the recess, forces such ball

against the side of the chamber and stops revolution of the curtain-roller. The part *e*, however, of the bottom of the recess serves as a cam to throw the ball up into the chamber when the roller is revolved in the opposite way. On turning the roller in one direction, the recess, ball, and chamber will operate to stop it; but on revolving it in the opposite direction they will not stop it, as the ball will be thrown out of the recess and wholly into the chamber.

When the curtain is being drawn down the chambered head turns with the roller on the spindle, which is stationary. The ball will be carried around with the head until the ball may be brought over the cavity in the spindle, when it will drop about half its depth thereon. The upper half being extended up into the chamber in the head will stop the roller from turning back. In order to cause the curtain or shade to be rolled up, it should be pulled downward a little, so as to cause the cam of the recess in the spindle to force the ball up into the chamber. Then, by allowing the spring to act and carry up the curtain quickly, the ball will be maintained in the chamber until the velocity of the curtain-roller becomes retarded sufficiently for the ball to fall down into the recess in the spindle, and, when it does so, the recess, the ball, and the chamber will stop the curtain-roller from turning back.

The advantage of the curtain-fixture is that the ball, or its equivalent rolling body, will roll to position, and thereby act with little friction and wear. It is also concealed from view and protected from dust and lint. It cannot be tampered with, and is not easy to get out of order. By the spindle having a wooden bearing running upon it, little or no noise results while the curtain-roller is in operation.

The spindle is dovetailed or hooked, as shown at *h*, where it rests in the notch *i* of the supporting-bracket. This, with the shoulder *k* of the spindle, prevents the opposite end of the curtain-roller from being forced against the next adjacent bracket so as to work with friction on such.

I make no claim to merely providing the

spindle with a cammed recess, a ball, and the bearing with a chamber to receive the ball, under circumstances as stated.

I claim—

The spindle, as made or provided with the hooked or dovetailed head *h*, and the shoulder *k*, and recessed and provided with the

ball and the bearing, having a chamber, all substantially as specified.

JOHN SHOREY.

Witnesses:

R. H. EDDY,
S. N. PIPER.