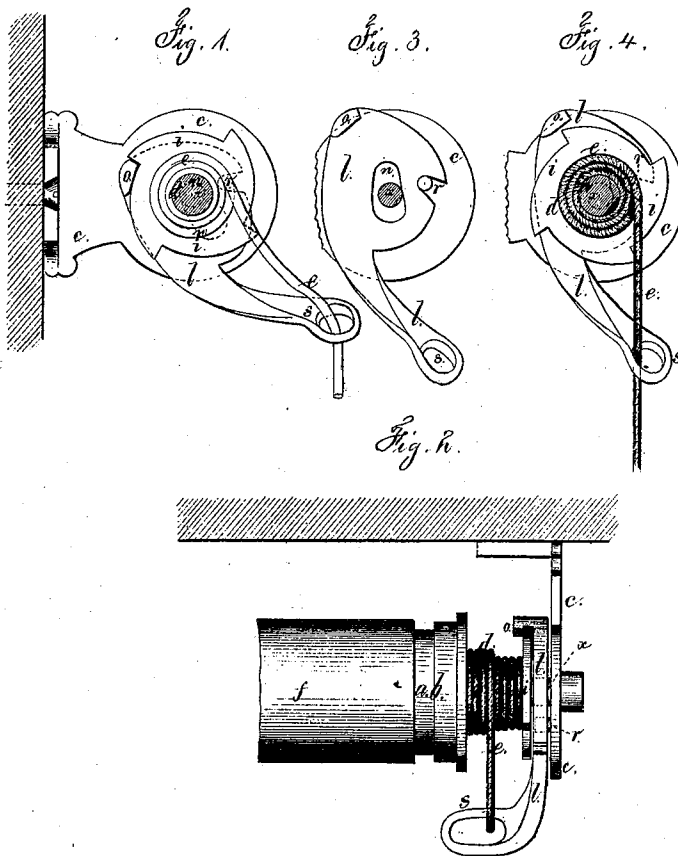


J. G. Brothwell,

Curtain Fixture.

No. 102,800.

Patented Dec. 6. 1870.



Witnesses

Chas. H. Smith
Geo. W. H. Rens

John G. Brothwell

Lemuel W. Correll atty

United States Patent Office.

JOHN G. BROTHWELL, OF WOLCOTTVILLE, CONNECTICUT, ASSIGNOR TO
TURNER, SEYMOUR & JUDDS, OF SAME PLACE.

Letters Patent No. 109,800, dated December 6, 1870.

IMPROVEMENT IN CURTAIN-FIXTURES.

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, JOHN G. BROTHWELL, of Wolcottville, in the county of Litchfield and State of Connecticut, have invented and made an Improvement in Curtain-Fixtures; and the following is declared to be a correct description of the same.

This invention is for sustaining a curtain-roller at any given point, and preventing its unrolling, except as the same may be lowered by the action of a cord that rolls upon a spool as the curtain unrolls, and the reverse.

My improvement relates to a stop-lever, that is so constructed and applied to the curtain-roller that the contact of the ratchet with the stop-lever throws that lever into the ratchet-notches or teeth, and arrests the movement of the curtain. The parts are very simple, easily made, and not liable to get out of order.

In the drawing—

Figure 1 is a section, transversely, of the curtain-roller.

Figure 2 is a plan of the roller-end, bracket, and stop-lever.

Figure 3 is an elevation of the stop-lever, detached in the position it occupies when the curtain is being lowered.

Figure 4 is a section, transversely, of the curtain-roller, with the stop-lever raised to allow the curtain to be rolled or unrolled.

In the drawing the curtain-roller *a*, roller-end *b*, bracket *c*, and spool *d*, for the cord *e*, may be of any usual or desired character, and the curtain *f* is to be so attached that the cord *e* is wound upon the spool as the curtain is allowed to run down, and the reverse, as now usual.

The ratchet-wheel *i* forms one side of the spool *d*, and between that wheel *i* and the bracket *c* the stop-lever *l* is introduced.

This lever *l* is made with the catch-piece or pawl *o* projecting from one side, and with a light arm and ring or loop at *s* for the cord *e*, and the lever is of such a weight on the respective sides of the fulcrum *r*, that

the block *o* will tend to fall into one of the notches of the wheel *i*, and the roller, in turning, as the curtain is lowered, tends to move this end of the lever in the same direction, in consequence of the friction of the wheel *i* against the side of the lever *l*; hence the parts will operate much more reliably than in the curtain-fixtures heretofore made and known as the "pendulum" curtain-fixtures, wherein the cord has to be drawn out from the window to relieve the pawl.

In my fixture the cord *e* simply requires to be drawn down in rolling up the shade or curtain, and held with a sufficient friction, as the shade runs down, so as to keep the stop-lever in the position shown in fig. 3; but as soon as the cord *e* is released the lever *l* falls, and the block *o* takes one of the ratchet-teeth *i* and prevents a further movement of the curtain, and this motion of the lever *l* is accelerated by the friction or contact of the roller-end and wheel *i* with the side of said lever *l*, the two parts moving in the same direction as the pawl *o* falls into place.

The pawl *o* is limited in its movement, and for this purpose an opening is made at *n*, of a size sufficient to allow of the passage of the center or axis, *x*, of the roller, when the lever is in either the position of fig. 1 or fig. 3, hence the movement will be limited by contact with the said center or axis *x*.

The pivot or fulcrum of the lever *l* may be a projection from the bracket *c*, entering a hole in the lever, or the reverse.

I claim as my invention—

The lever *l* and projecting block *o*, arranged to move between the bracket *k* and the wheel *i*, in the manner specified, so that the contact of the wheel *i* with the side of the lever *l* shall tend to move the pawl-block *o* into contact with the ratchet-teeth of the wheel *i*, as and for the purposes set forth.

Signed by me this 20th day of September, 1870.

JOHN G. BROTHWELL.

Witnesses:

J. F. CALHOUN,
GIDEON H. WELCH.