H. E. SAWYER.

CURTAIN-FIXTURES.

No. 192,019. Patented June 12, 1877.

fig. 1

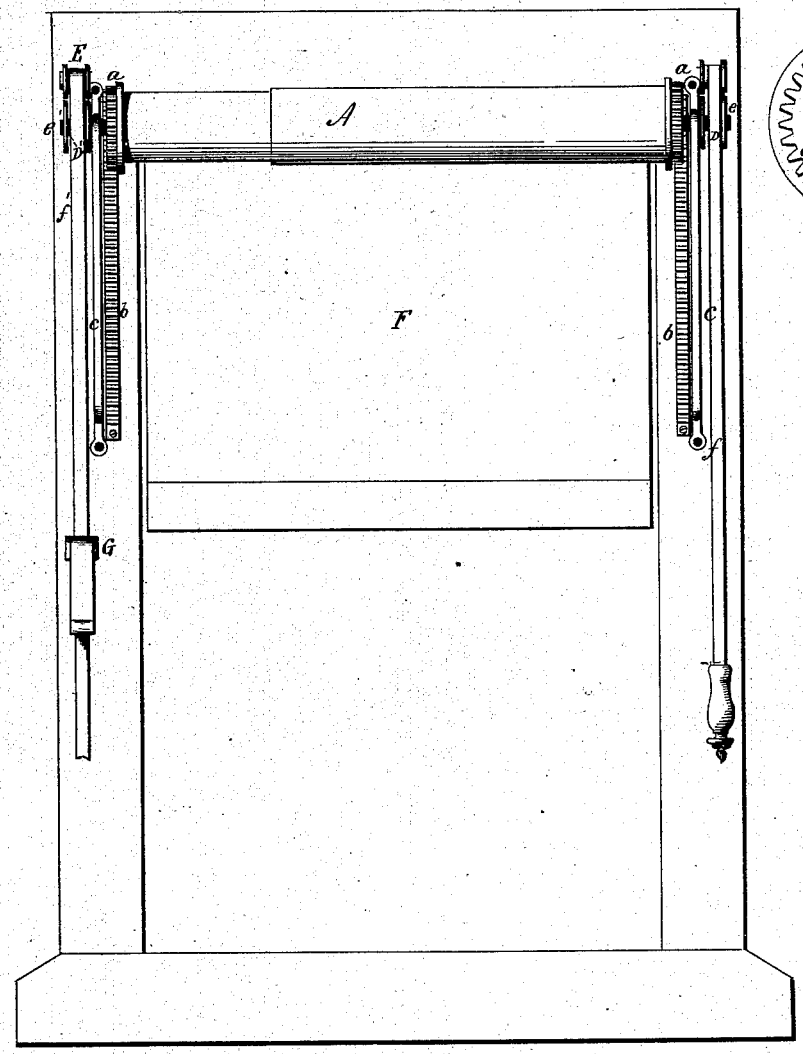


fig. 2

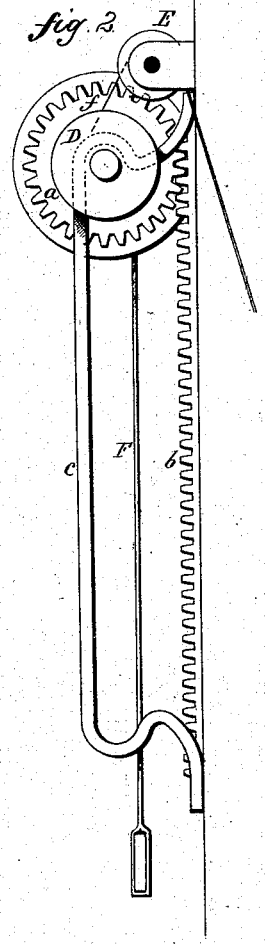


fig. 4

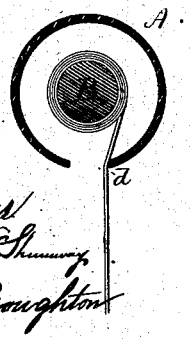
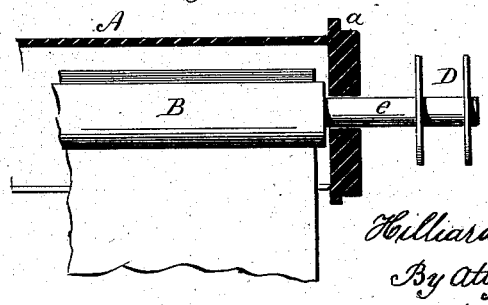


fig. 3



Witnesses/
J. H. Shumway
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Inventor.
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John E. Earle

UNITED STATES PATENT OFFICE.

HILLIARD E. SAWYER, OF SOUTH MERIDEN, CONNECTICUT, ASSIGNOR OF ONE-HALF HIS RIGHT TO DELANCY P. SAWYER, OF SAME PLACE.

IMPROVEMENT IN CURTAIN-FIXTURES.

Specification forming part of Letters Patent No. **192,019**, dated June 12, 1877; application filed March 30, 1877.

To all whom it may concern:

Be it known that I, HILLIARD E. SAWYER, of South Meriden, in the county of New Haven and State of Connecticut, have invented a new Improvement in Curtain-Fixtures; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a front view of the fixture as applied to a window; Fig. 2, a side view enlarged; and in Figs. 3 and 4, detached views.

This invention relates to an improvement in fixtures for hanging and rolling curtains, the object being to make the curtains adjustable relatively to both the top and bottom.

The invention consists in the construction and arrangement of the parts, as hereinafter described, and particularly recited in the claims.

A represents the tube, which may be in two lengths, telescopically, so as to be adjustable to adapt the fixture to different widths of windows. Each end of this tube is provided with a toothed pinion, *a*, and on each of the window-jambs is a correspondingly-toothed rack, *b*, provided with a guide, *c*, parallel to the rack. The tube has a longitudinal slit, *d*. Within the tube is the roll B, from one end of which a bearing-stud or gudgeon, *e*, extends through the pinions, as seen in Fig. 3, and on this is a spool or drum, D. The other end of the roll is supported in a bearing formed in that head of the tube. To that end of the tube there is rigidly fixed a gudgeon, *e'*, and a spool, D', corresponding to the gudgeon and spool at the other end, but each independent of the other, so that the turning of the first spool will turn the roll, and the turning of the second spool will turn the tube.

The upper end of the curtain is passed through the slit *d* in the tube and made fast to the inside roll B. Above the highest point to which the roll is to be raised, and on each jamb, a stationary pulley, E, is arranged in vertical line above the drums D D'. To each of the drums D D' a tape, *f f'*, is attached, and passes up over the pulleys E and down. The tape *f'* is held by any suitable clamping device, G, in the jamb, thus holding the tube at any point to which it may be adjusted, as hereinafter described.

Supposing the roll and its tube to be at the highest elevation, as in Fig. 1, and the curtain F to be down, and it is desired to raise the curtain, it is only necessary to take hold of the tape *f* and draw down thereon, (it being understood that the tape is wound around the drum D;) then the roll will be turned and the curtain wound in like manner as curtains are usually wound by this class of fixtures, and the curtain may be drawn down also in like manner, and rewind the tape *f* upon the roll. But if it be desired to lower the curtain, then free the tape *f'* from the clamp G and slack the tape, which will allow the tube to fall, and the pinions *a*, working in the racks *b*, will cause the tube to revolve and wind the curtain thereon until the required position is attained; then reclamp the tape *f'* to hold it there. In thus falling the tape *f'* will be wound onto the spool D', so that afterward pulling upon the tape will cause the tube to revolve and the pinions to travel up the racks. The guides *c* serve to keep the pinions in connection with the racks.

Instead of the winding device attached to the roll outside the fixture, there may be an internal spring within said roll to cause its revolution to wind the curtain.

By this construction the curtain may be adjusted to any desirable position from the top or bottom. It should be understood, however, that raising the curtain from the bottom should be done before the tube commences to descend.

I do not wish to be understood as broadly claiming a curtain-fixture in which the roll is provided with a pinion at each end to work up and down in a stationary rack; neither a curtain-roller arranged within a slotted tube, upon which the curtain may be wound within the said slot.

I claim—

1. The combination, in a curtain-fixture, of the longitudinally-slotted tube A and a cur-

tain arranged therein through said slot, with means for winding the same, the pinions *a*, stationary racks *b*, and a device for raising or lowering the said tube while in connection with said racks, substantially as described.

2. The combination, in a curtain-fixture, of the slotted tube A, pinions *a*, stationary racks *b*, and a device for raising or lowering the said tube while in connection with said racks, a roll for the curtain within the said tube, and a cord and pulley outside said tube in connection with said roll, for winding the curtain within the tube, substantially as specified.

HILLIARD E. SAWYER.

Witnesses:
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