

Chauncey Buckley's Improv. Curtain Fixture

116929

fig. 1.

PATENTED JUL 11 1871

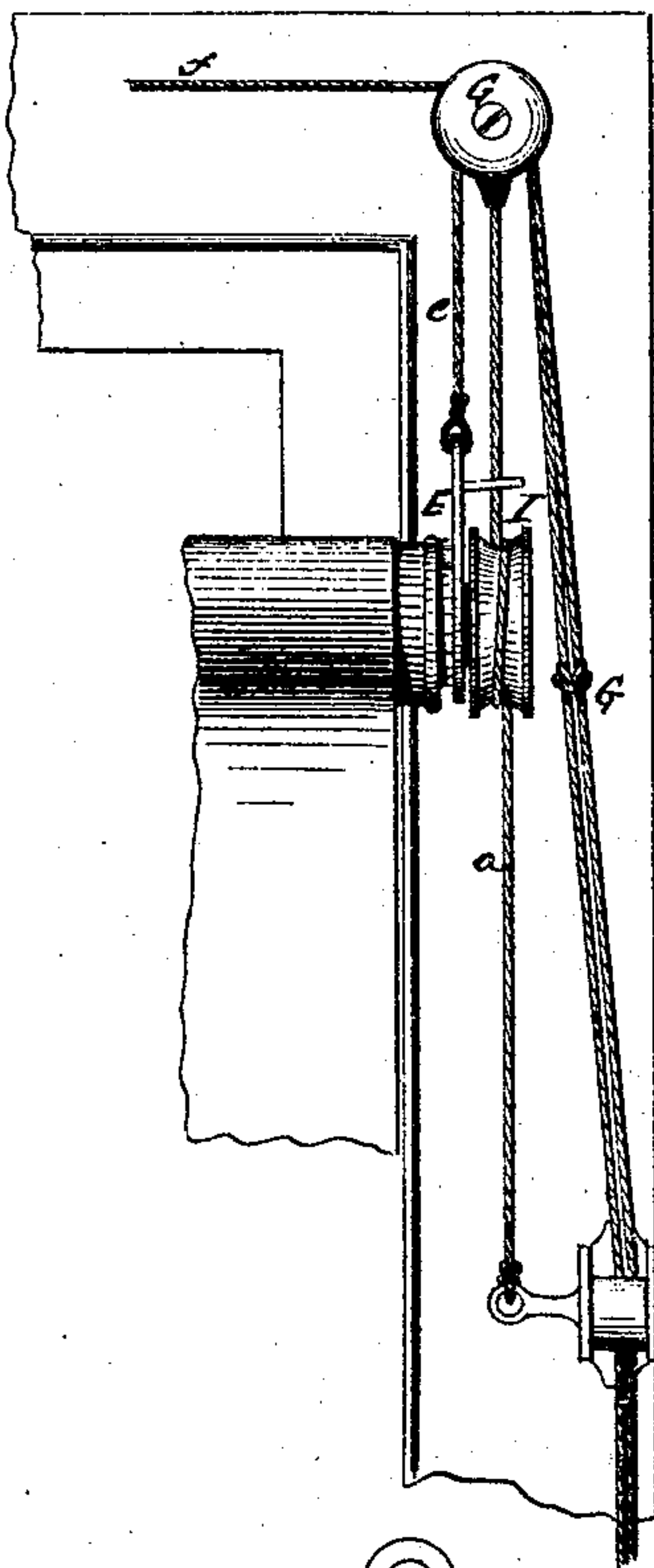


fig. 2.

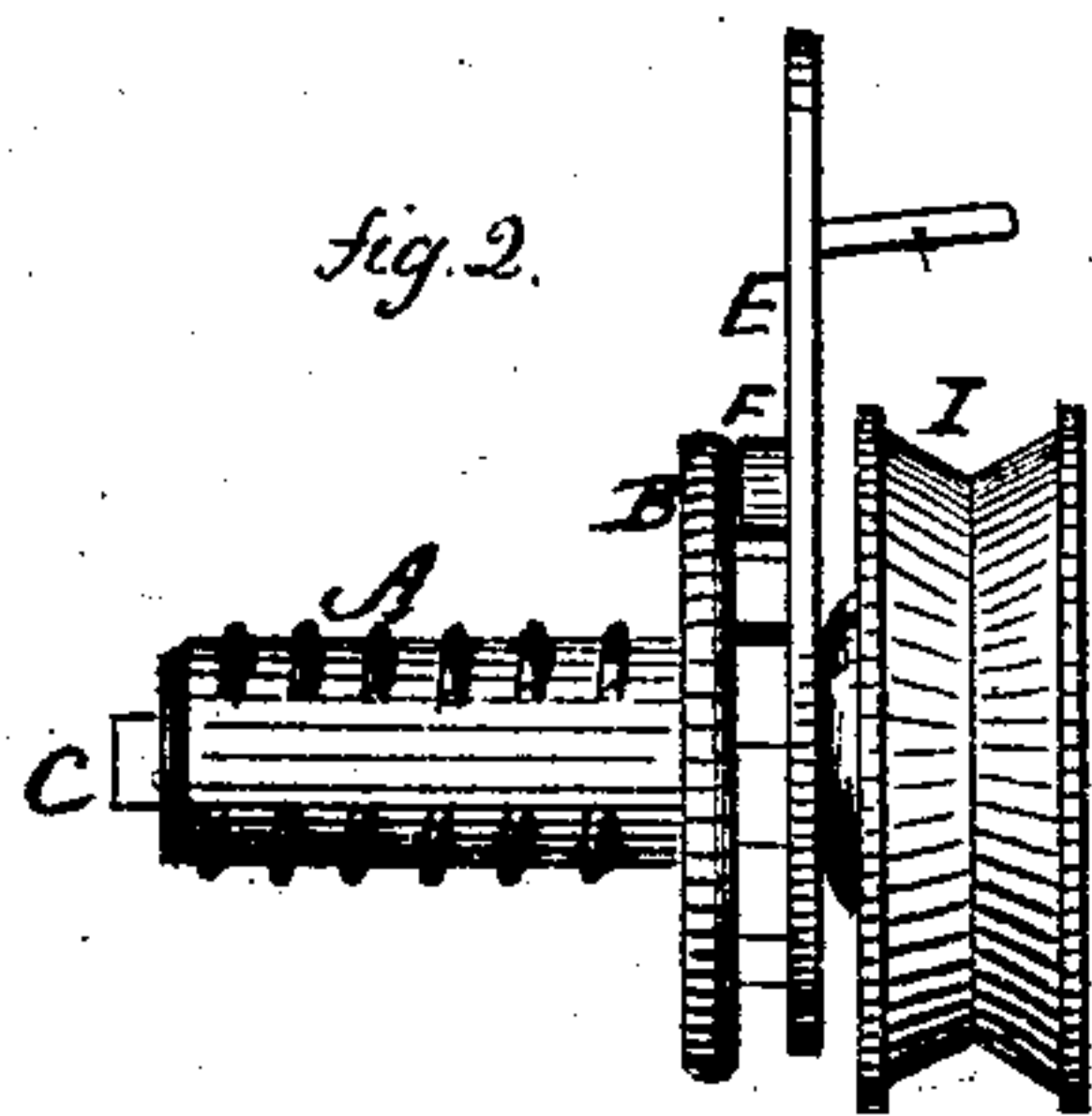


fig. 3.

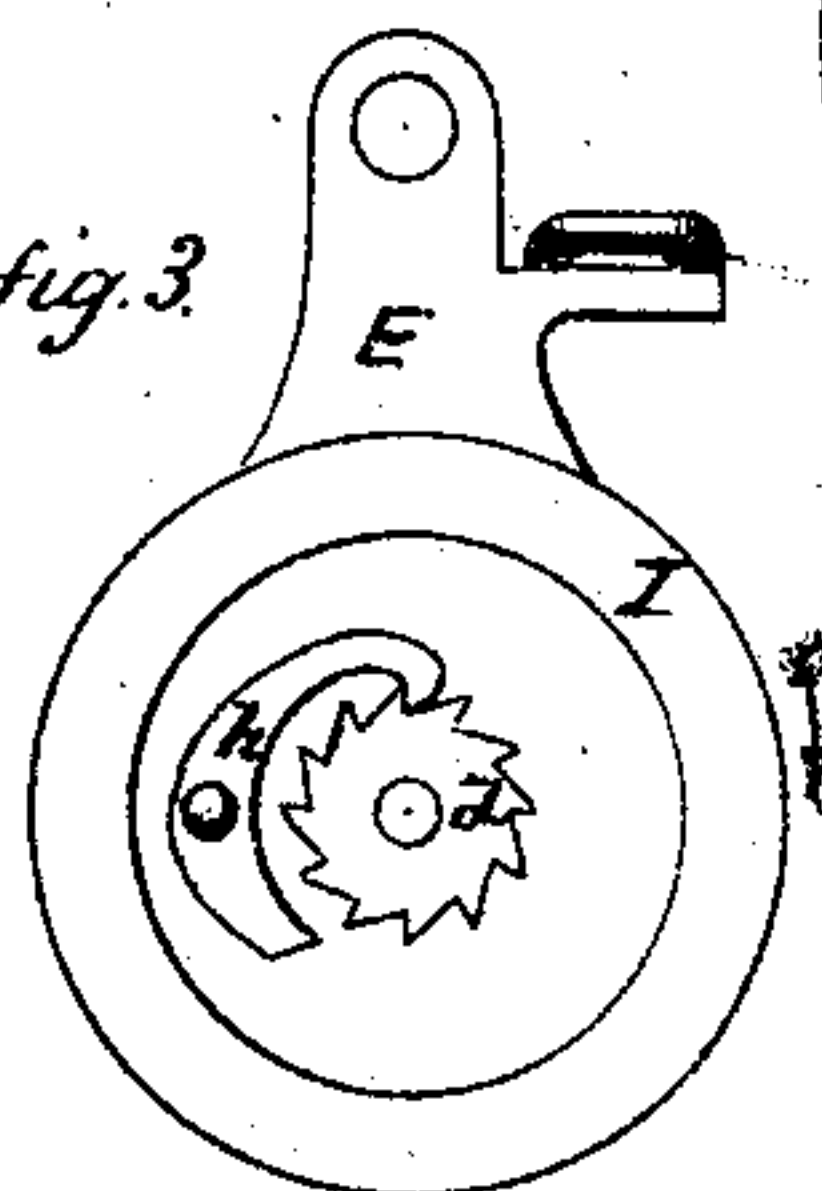


fig. 4.

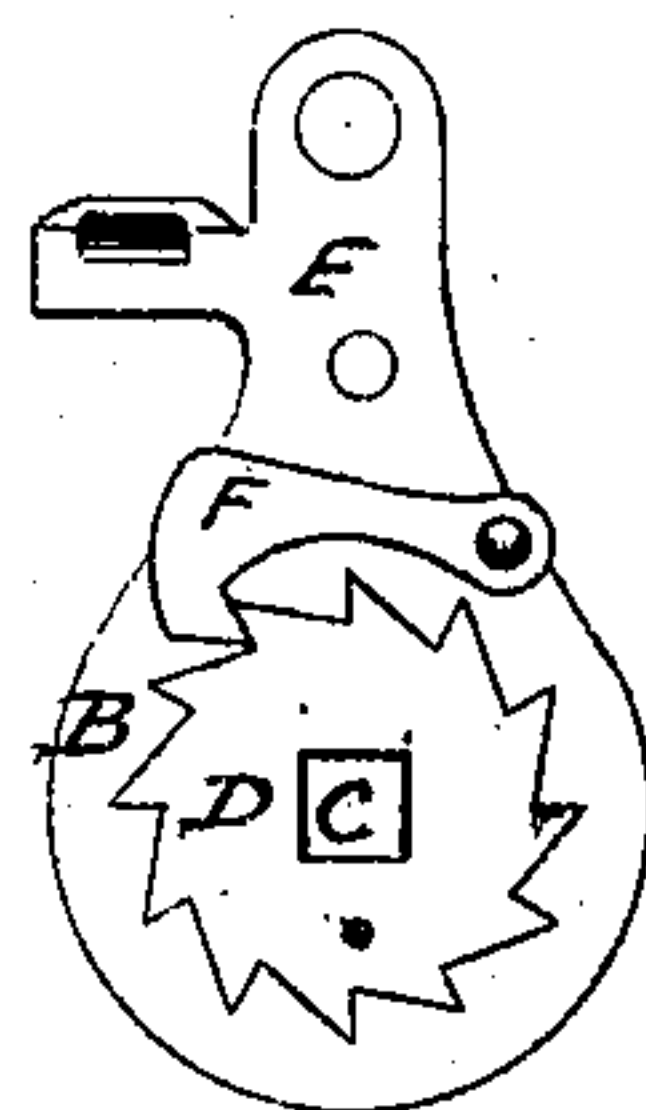
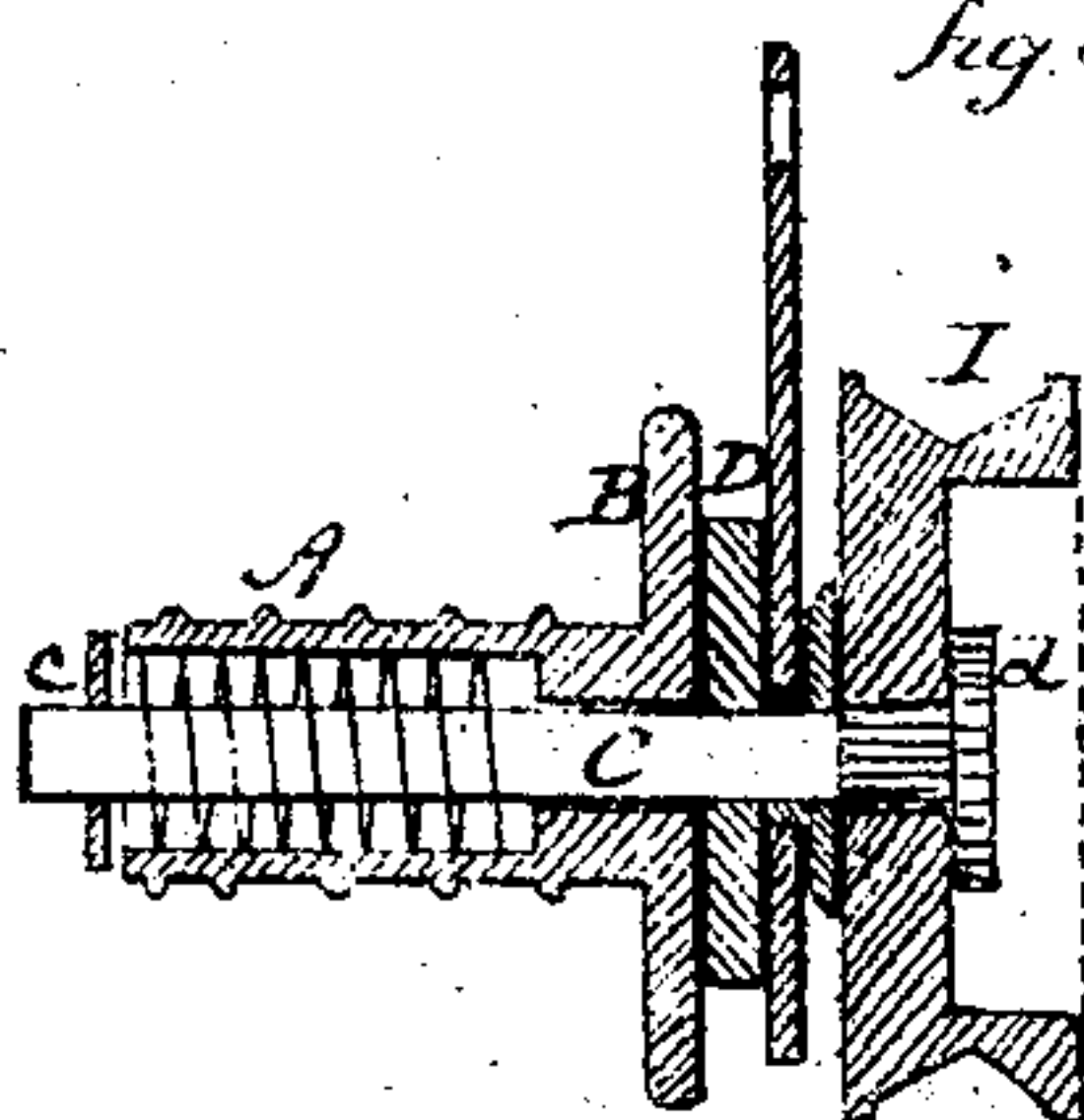


fig. 5.



Witnesses.
A. J. Tiffeta
D. H. Thurman

Chauncey Buckley
Inventor
By his Atty.
J. H. Earle

UNITED STATES PATENT OFFICE.

CHAUNCEY BUCKLEY, OF MERIDEN, CONNECTICUT.

IMPROVEMENT IN CURTAIN-FIXTURES.

Specification forming part of Letters Patent No. 116,929, dated July 11, 1871.

To all whom it may concern:

Be it known that I, CHAUNCEY BUCKLEY, of 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 drawing and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawing constitutes part of this specification, and represents, in—

Figure 1, a portion of the window-frame and curtain-roll, with the device for winding; Fig. 2, a side view of the winding device, detached; Fig. 3, an end view of the same; Fig. 4, an end view showing the lever and ratchet; and in Fig. 5, a longitudinal central section.

This invention relates to an improvement in the curtain-fixture for which Letters Patent were granted to John I. Tay, December 7, 1869; the object of the invention being to avoid the constant friction which in that fixture bears upon the loose pulley, it only being necessary that the pulley be held in winding the curtain. The invention consists in the arrangement of a ratchet upon a spindle which turns with the curtain-roll outside or within the pulley, and provided with a suitable pawl fixed to the pulley, so that turning in one direction the pulley is free and independent of the roll, but running down the pawl engages with the ratchet and practically fixes the pulley to the roll, so that the roll and pulley turn together.

A is a metallic cylinder, by preference threaded, to screw into the end of the curtain-roll, and provided with a collar, B, which sets against the end of the roll when the cylinder has been driven therein. Through the cylinder a shaft, C, is arranged, and within the cylinder a spiral spring or other suitable device is fixed, bearing against a collar or head, *c*, on the shaft, the tendency of which is to draw the shaft into the cylinder. Fixed to the said shaft, outside the collar B, is a ratchet, D, and loosely on the shaft is arranged an arm, E, with a pawl, F, (see Fig. 4,) to engage with the ratchet; the said arm

E employed to support the curtain, and a corresponding arm is arranged at the opposite end of the roll. To each of the said arms a cord, *e* and *f*, extends over a pulley, G, and united together, as seen in Fig. 1, at G', or otherwise, so that a person taking hold of the two cords will raise the curtain alike at both ends. For the purpose of revolving the roll, a loose pulley, I, is arranged outside the arm E, and around this pulley a stationary cord, *a*, is wound once or more, and one end of the said cord secured at the highest desirable point for raising the roll, and the other at the lowest desirable point for lowering the roll, as seen in Fig. 1. Thus far this fixture is substantially the same as in Tay's patent, before referred to. In order that the pulley should engage the roll when running down a friction is applied in the Tay patent, which is constant and requires more or less manipulation to work successfully. To avoid this and make the curtain positively free when the curtain is raised I fix to the shaft C a ratchet, *d*, (see Figs. 3 and 5,) and to the pulley a balanced or other suitable pawl, *h*, so that, running in the direction of the arrow, as seen in Fig. 3—that is, when the roll is raised by the drawing of the cords *e f*—the pawl passes over the ratchet, the pulley being perfectly free, but reversing when the roll is lowered, then the pawl *h* engages with the ratchet *d* and causes the roll to revolve with the pulley as it is lowered. The pawl *h*, if a single pawl, should be balanced, as in Fig. 3, so that in any position either one end or the other will at the proper time engage in the ratchet.

I claim as my invention—

In combination with a fixture substantially as described, having a movement independent of the pulley I, the ratchet *d* arranged to revolve with or fixed to the curtain-roll, and the pawl *h* arranged upon the said pulley to engage the ratchet in one direction and leave the pulley free in the opposite direction, substantially as herein described.

CHAUNCEY BUCKLEY.

Witnesses:

ORVILLE H. PLATT,
JOHN Q. THAYER.