

(No Model.)

G. W. BENNUM.
Curtain Fixture.

No. 236,409.

Patented Jan. 11, 1881.

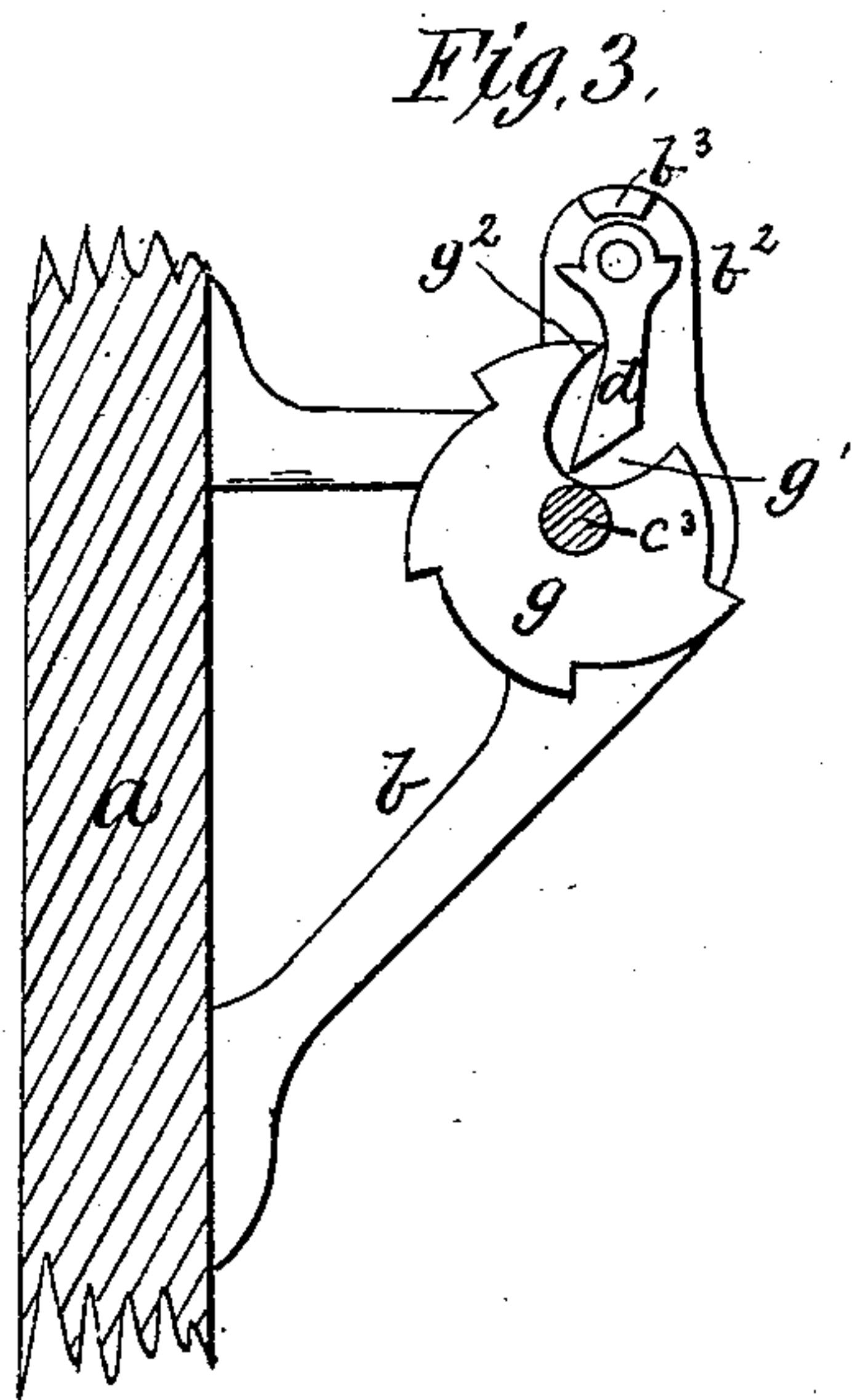
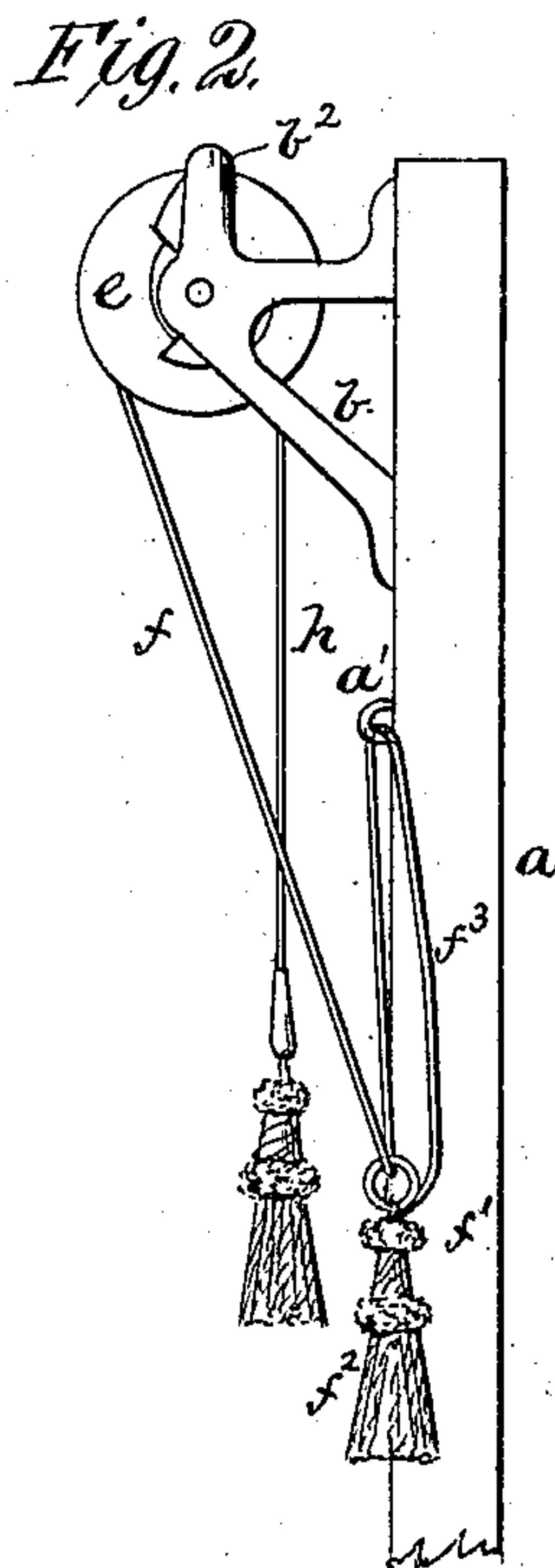
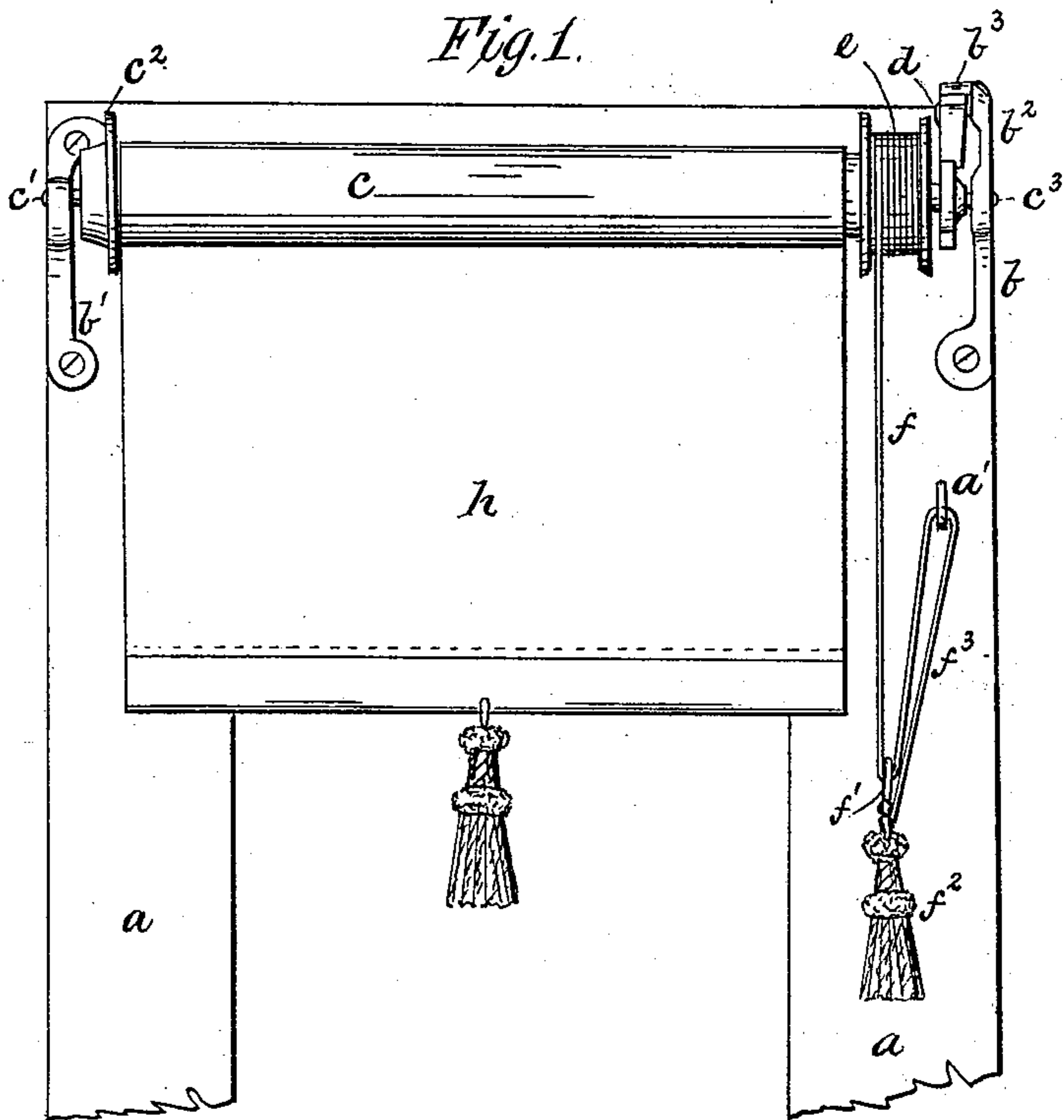
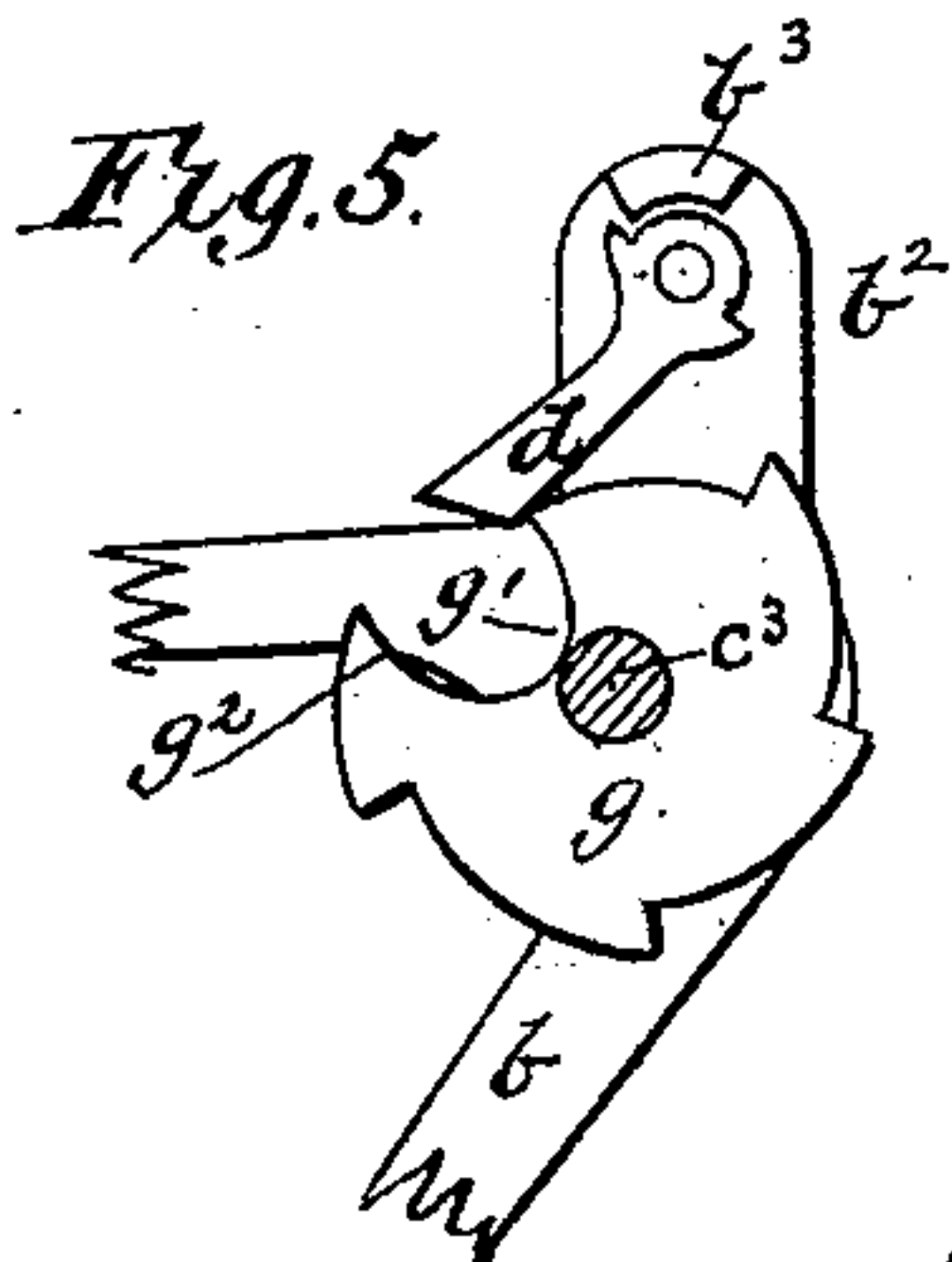
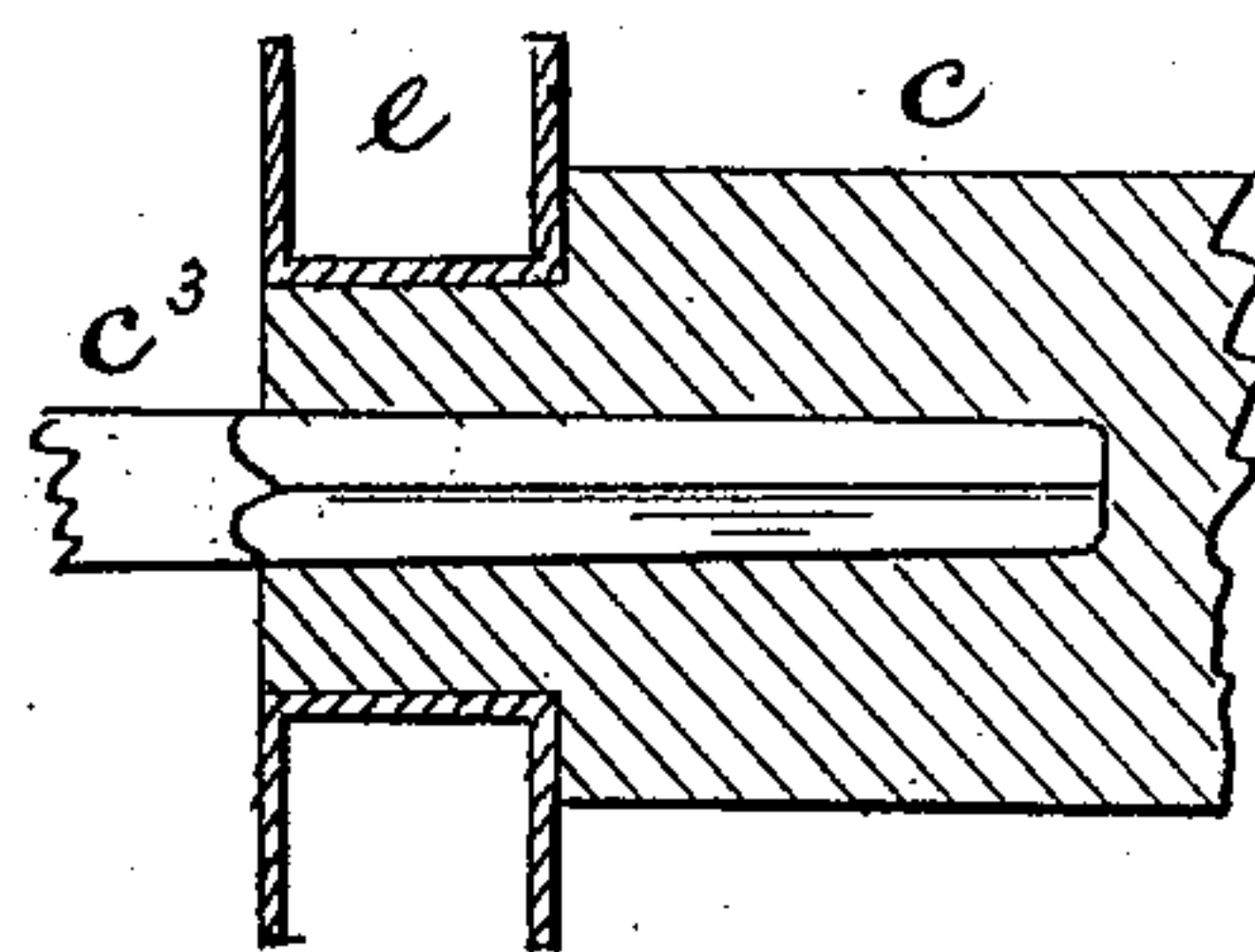
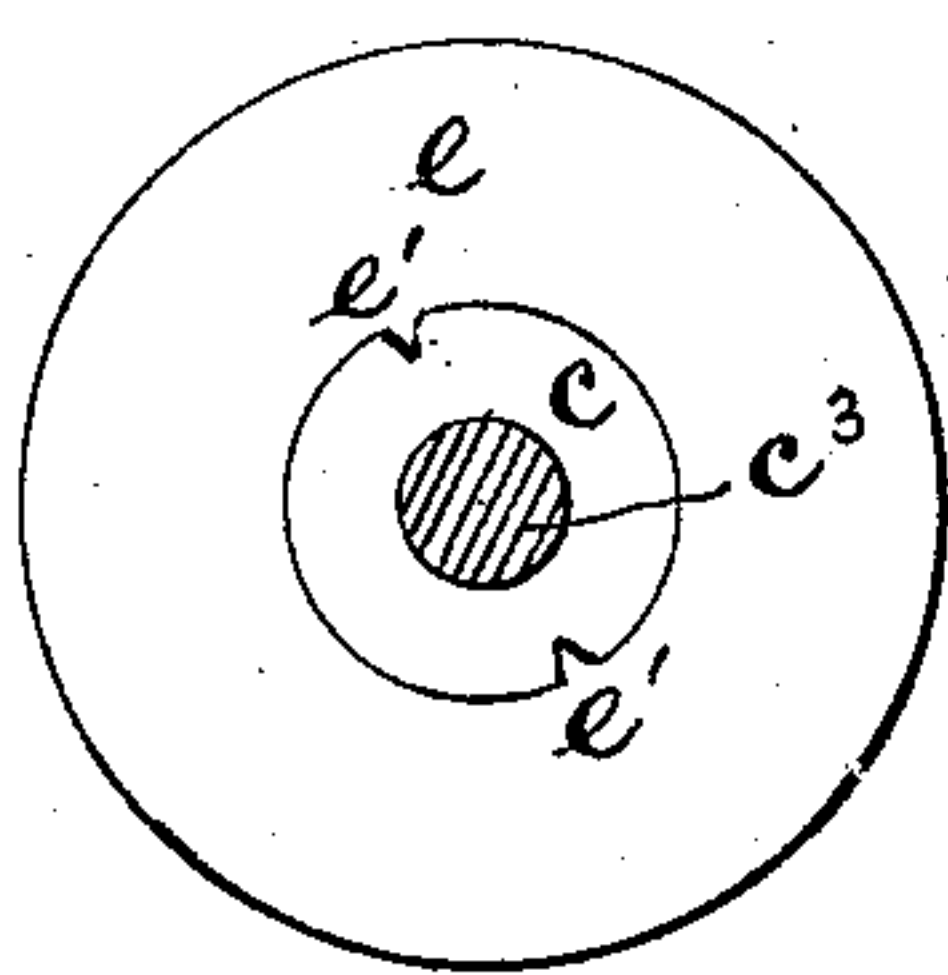


Fig. 4.



Witnesses:

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UNITED STATES PATENT OFFICE.

GEORGE W. BENNUM, OF GEORGETOWN, DELAWARE, ASSIGNOR OF ONE-HALF TO EDWIN R. PAYNTER, OF SAME PLACE.

CURTAIN-FIXTURE.

SPECIFICATION forming part of Letters Patent No. 236,409, dated January 11, 1881.

Application filed November 22, 1880. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. BENNUM, a citizen of the United States, residing at Georgetown, in the county of Sussex and State of Delaware, have invented certain new and useful Improvements in Curtain-Fixtures; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

This invention consists in the peculiar construction of the ratchet-wheel fixed on the end of the roller, and in other improvements, all of which will be hereinafter fully described and claimed.

In the drawings, Figure 1 shows a roller having my improvement attached thereto and mounted on brackets fixed to the window-frame. Fig. 2 is an end view of the same, and Figs. 3, 4, and 5 are detail views.

a is the window-frame, on which are fastened the brackets b b' , in which is mounted the roller c .

The bracket b is constructed with a vertical arm, b^2 , on which is pivoted the pawl d . The arm b^2 is provided with a short horizontal flange or lip, b^3 , which projects over the pivoted end of and serves as a stop to prevent the pawl d from turning over. The pawl d is pivoted to the arm b^2 immediately below the stop b^3 , and so that it will swing freely to and fro, and it has short lateral points or projections, b^4 b^4 , formed on its opposite edges, and arranged to limit its swinging movement by contact with the edges of the stop.

The roller c is supported in the bracket b' by the gudgeon c' , to which is fixed the disk c^2 , which projects beyond the periphery of the roller, as shown. The other end of the roller c is supported on the bracket b by a gudgeon, c^3 , which is driven into the end thereof, as shown in Fig. 4. Over the end of the roller, next the bracket b , there is placed the pulley e , on which the operating-cord f is wound. The pulley has formed on its inner periphery the longitudinal feathers e' e' , which are adapted to enter the wood or to slide into longitudinal

grooves previously prepared in the end of the roller as it is slipped or driven into its place. The feathers lock the pulley and roller firmly together, so that they will revolve simultaneously.

g is a ratchet-wheel of peculiar form fixed on the gudgeon c^3 , between the end of the roller and the bearing in the bracket b . It is made rigid in its position on the gudgeon, so that it will hold the roller in any desired position, and it is arranged so that the end of the pawl d will rest on its periphery and engage with its teeth in manner well known. The ratchet is cut away on one side, so as to provide a recess, g' , which extends nearly to its center of motion. The recess is made deep enough so that the pawl d will drop into it and its point swing to the rear, as shown in Fig. 5. The recess g' is so formed as to provide a point, g^2 , which engages the pawl and greatly facilitates the lifting of the pawl into its place on the periphery of the ratchet.

When the curtain h is being rolled up, the ratchet moves under and is engaged by the pawl, as in the ordinary fixtures. When it is desired to lower the curtain, a slight pull on the cord f will bring the end of the pawl to the recess g' ; then, checking the drawing movement, the pawl drops into the recess, as shown in full lines, Fig. 3; then, releasing the cord f , the curtain will drop down and the movement will reverse the movement of the roller, and will throw the pawl to the rear, as shown in Fig. 5, so that it will not interfere with the ratchet. The curtain being lowered to the desired point, a slight drawing on the cord f will bring the pawl into the recess, and into proper position to engage the teeth and hold the curtain.

The cord is provided with a ring, f' , on its end, to which is fixed the tassel or other suitable device, f^2 . The end of the cord f is carried from the roller through the ring f' , thence through a staple or other loop, a' , fixed to and on the upper part of the casing a , and thence it is brought to and tied in the ring f' , forming a loop, f^3 , as shown. The tassel f^2 serves as a counterbalancing-weight and holds the cord in the looped condition shown in Figs. 1 and 2. The cord looped back in this manner

may be taken up or lengthened as the roller is let down or rolled up, and will always be held out of the way.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a curtain-fixture, a ratchet-wheel for operating the roller, constructed to hold the pawl in position to engage the ratchet-teeth as the curtain is rolled up, and to throw the pawl to the rear and hold it disengaged as the curtain is unrolled, substantially as set forth.

2. In a curtain-fixture, the combination, with the roller and the bracket, of a pawl pivoted to swing to the front or rear of the roller, and a ratchet-wheel constructed to hold the pawl in position to engage the ratchet-teeth as the

curtain is being rolled up, or to throw the pawl to the rear and hold it disengaged from the teeth as the curtain is let down, substantially as set forth.

3. In a curtain-fixture, the combination of the bracket b , having an extension, b^2 , and a stop, b^3 , on its upper end, and a reversible pawl, d , pivoted to the extension below the stop and provided with lateral points b^4 b^4 , substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE W. BENNUM.

Witnesses:

JOHN W. HAMMOND,
GEO. A. JONES.