W. E. SKINNER.

CURTAIN-FIXTURES.

No. 183,515. Patented Oct. 24, 1876.

FIG. 1.

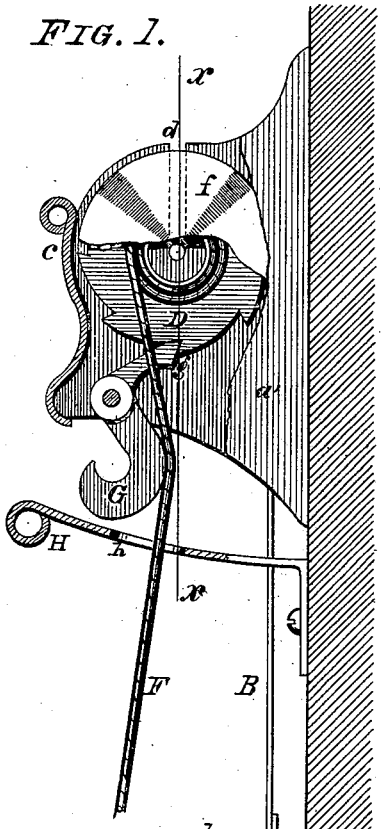


FIG. 2.

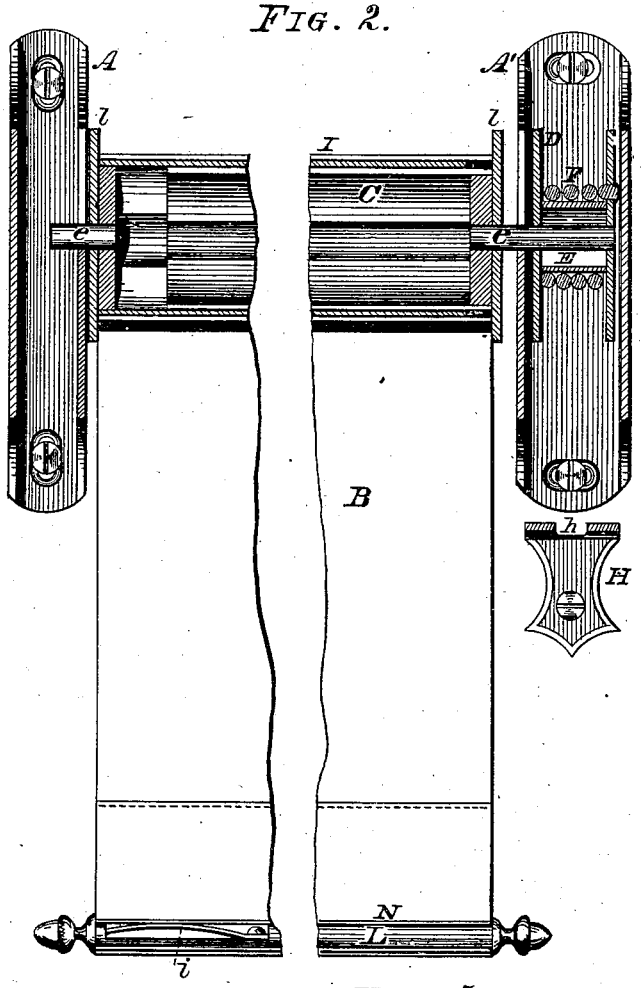


FIG. 4.

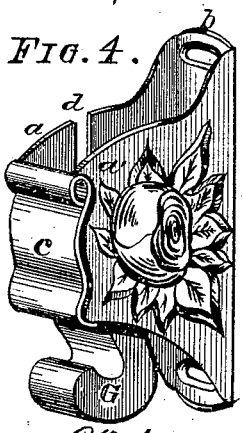


FIG. 3.

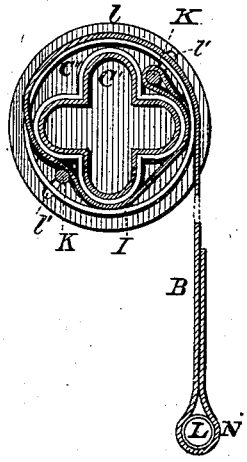
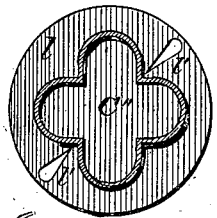


FIG. 5.



Witnesses:

Frank Hirsch

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UNITED STATES PATENT OFFICE.

WILLIAM E. SKINNER, OF MILFORD, MICHIGAN.

IMPROVEMENT IN CURTAIN-FIXTURES.

Specification forming part of Letters Patent No. **183,515**, dated October 24, 1876; application filed May 26, 1876.

To all whom it may concern:

Be it known that I, WILLIAM ELISHA SKINNER, of Milford, in the county of Oakland and State of Michigan, have invented a Curtain-Fixture; and I do hereby declare that the following description, taken in connection with the annexed sheet of drawings, forms a full, clear, and exact specification.

In these drawings, Figure 1 is a side elevation of my improved curtain-fixture, parts being broken to illustrate their general arrangement. Fig. 2 is a sectional front elevation. Fig. 3 is a transverse sectional view; Fig. 4, a perspective view of one of the brackets. Fig. 5 is a plan of the flanges *l* of the curtain-roller.

Like letters of reference indicate corresponding parts in all the figures.

The first part of my invention relates to the arrangement, with a curtain-roller, of a ratchet-wheel, engaging with a gravitation-pawl, operated by the pulley-cord in such manner that the curtain can be raised or lowered by manipulating said cord, which, while operating said curtain, keeps the said gravitation-pawl disengaged.

The second part of my invention relates to the construction of the roller; and it consists in the arrangement of hollow telescoping sections, and a flexible covering for the same, whereby said roller is rendered adjustable in regard to its length. It furthermore consists in an extension device for the slat, whereby the same can be instantly adjusted to any desired width to correspond with the curtain.

In order to enable others skilled in the art to which my invention pertains to make and use the same, I shall proceed to describe its particulars of construction, and thereby refer to the hereinbefore-mentioned drawings, which form a part of this specification, and serve to illustrate my said invention more fully.

A A′ are the two brackets by means of which the curtain B is suspended, in conjunction with the roller C. These brackets I construct of suitable material, sheet metal of proper thickness being preferable on account of its ductility, and because it enables me to cut the blanks forming said brackets by means of suitable dies. They may, however, be cast, and if so produced, answer all purposes as well. Each of the brackets A A′ consists of two sides, *a a′*, jointed to a common base, *b*, and capped with a curved plate, *c*. The side *a* has a slot, *d*, for the passage of the roller-pivots *e*, and the front of the sides *a′* is provided with appropriate ornaments. The space between the two sides of either one of the two brackets contains the operating parts for the curtain-roller, these brackets being made right and left; but the one containing said operating device should be made somewhat wider than the other. This operating device consists of a ratchet-wheel, D, fastened to the pivot *e*, and the cord-drum E, having a flange, *f*, to prevent the cord F from leaving said drum. The ratchet-wheel D engages with a gravitation-pawl, *g*, pivoted below said wheel. The lower extremity G of this pawl is made very heavy to cause it to assume a perpendicular position, and thereby to engage its projection with the ratchet-wheel D.

The operation of the parts thus far described may be stated to be as follows: Previous to placing the curtain-roller into the brackets, the cord F is wound upon the drum E, and passed through the interior of that bracket arranged to receive the operating device. If the curtain-roller is now inserted into the brackets and the roller-cord F pulled, it will cause the lower and heavier part of the gravitation-pawl to move forward, and thereby to disengage its projection *g*, so that the curtain can be rolled up to any desired elevation, and securely held there as soon as the pulley-cord allows the gravitation-pawl to assume its normal position. If it is desired to lower the curtain it must first be caused to ascend, as heretofore described, to disengage the pawl, when it may be lowered by slacking said pulley-cord.

In order to enable the adjustment of the curtain-roller and curtain-bar to any desired width within certain limits, I construct said rollers of sheet metal in sections, sliding over each other. I make these sections, by means of suitable machinery, of round or angular tubes, and corrugate them longitudinally to resemble four segments of a circle, or a quarter-foil, and pass one over the other, both sec-

tions, when drawn out to within a distance of from six to eight inches, being of a length to suit the extreme of ordinary house-windows.

By this arrangement I am enabled to adjust the roller instantaneously to the desired length without cutting or other manipulation.

The arrangement of this roller is plainly illustrated in Fig. 3, where C′ and C″ are the two sections of the roller. In order to secure the curtain to these rollers I provide the end flanges *l l*, to which the sections C′ C″ are permanently attached, with tapering slots *l′*, and stretch cords K K across the roller in the opposite spaces between the corrugations. To one of these cords I attach the curtain, and the other I pass over the curtain after it is wound half around the roller.

In this manner I can securely hold the curtain without the use of tacks, hooks, or other means, which almost invariably destroy the upper end of the same in a short time.

Since the curtain, if passing over the corrugations, would be somewhat kinked or folded, which is objectionable in high-priced curtains, I provide the roller with a covering or jacket, I, made in tube form, of flexible material, such as tin, rubber, paper, oil-cloth, or other suitable material, and slitted longitudinally. This jacket, which is stiff enough to preserve its circularity, I pass over the roller as soon as the curtain is attached, as described, whereby the same will wind upon this interposed jacket, and the above-mentioned objection overcome. This jacket is made in suitable lengths, and it, being flexible and easily cut, may be adjusted to proper size by trimming the ends.

To enable the adjustment of the rods passed into the eyes formed on the lower end of the curtains, I construct the same of a tube, N, closed on one end with a suitably-projecting ornament, and pass a solid bar, L, therein, said bar being also provided with a corresponding ornament. By pulling this rod out of or shifting the same into said tube N, I can instantaneously adjust this curtain-rod to the proper width of the curtain.

To retain the rod L within the tube N I provide its extremity with a spring, *i*, placed into a notch produced by reducing said rod, and acting against the inner surface of said tube. This rod, being heavier than those usually made, keeps the curtain straight better, and also assists in winding up evenly upon the roller.

In order to prevent the curtain-rope from displacement I attach to the window-jamb a guard, H, having a slot-hole, *h*, suitably arranged, and pass the curtain-string through this slot-hole.

The brackets and all its accessories are made in all styles, and, from their particular arrangement, are capable of being highly ornamented, and have, therefore, a very pleasing appearance.

I am aware of the patents to W. Champbell, September 3, 1872, and Stevens and Fay, May 1, 1866, and do not claim such as my invention; but

What I do claim, and desire to secure to me by Letters Patent, is—

1. In a curtain-fixture, the combination, with the toothed periphery of the cord-pulley, of the gravitating-pawl *g*, having the weighted end G, said pawl being pivoted between the walls *a a′* of the bracket, underneath the axis of the curtain-roller, in such a position that the cord depending from the pulley will touch the weighted and curved end of the pawl, and by a direct downward pull release it from the ratchet, as and for the use and purpose set forth.

2. A roller for curtain-fixtures, composed of the sections C′ C″, flanges *l l*, and pivots *e e*, said sections being constructed of metallic tubes having a quarter-foil transverse section, and arranged to slide one into the other for adjustment, substantially as described.

3. A curtain-bar composed of a tube and a solid rod sliding therein, said rod being provided with a spring, *i*, for retaining said pieces in frictional contact, substantially as described.

4. The combination, with the corrugated roller C, composed of sections, of a flexible jacket, I, substantially as described.

5. The combination, with the bracket A′, of the ratchet-wheel D, pulley E, flange F, gravitation-pawl G, and the guard H, substantially as described, for the object mentioned.

6. The combination, with the roller C, composed of metallic sections having a quarter-foil transverse section, of the slotted flanges *l l*, cords K K, and the curtain B, substantially in the manner as and for the use and purpose stated.

In testimony whereof I have hereto set my hand this 20th day of May, 1876, in the presence of two subscribing witnesses.

WM. E. SKINNER.

Witnesses:

EDWIN HUBBELL,

S. H. WILHELM.