

(No Model.)

A. SWEETLAND.
CURTAIN FIXTURE.

No. 274,049.

Patented Mar. 13, 1883.

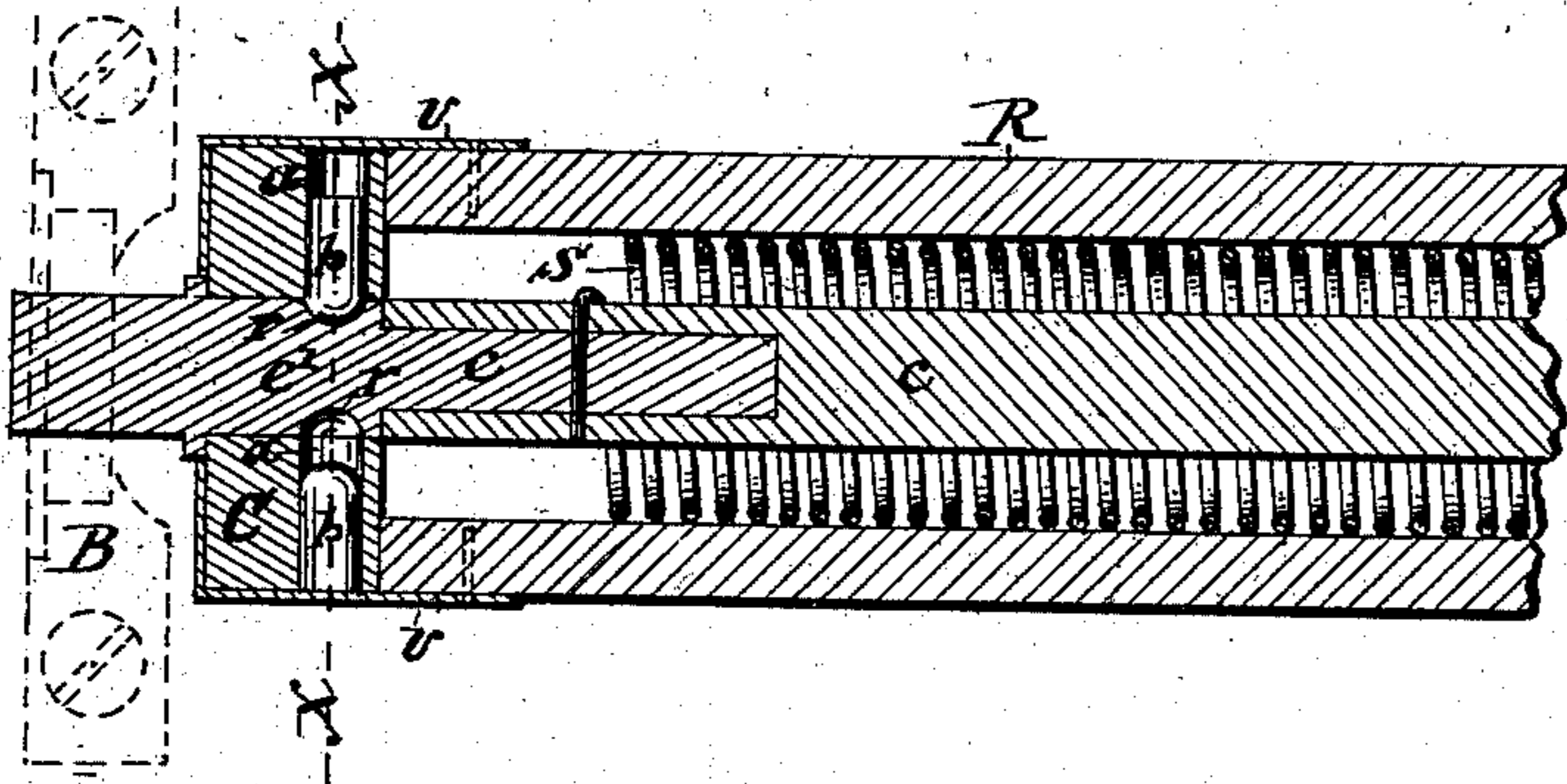


FIG-1-

FIG-2-

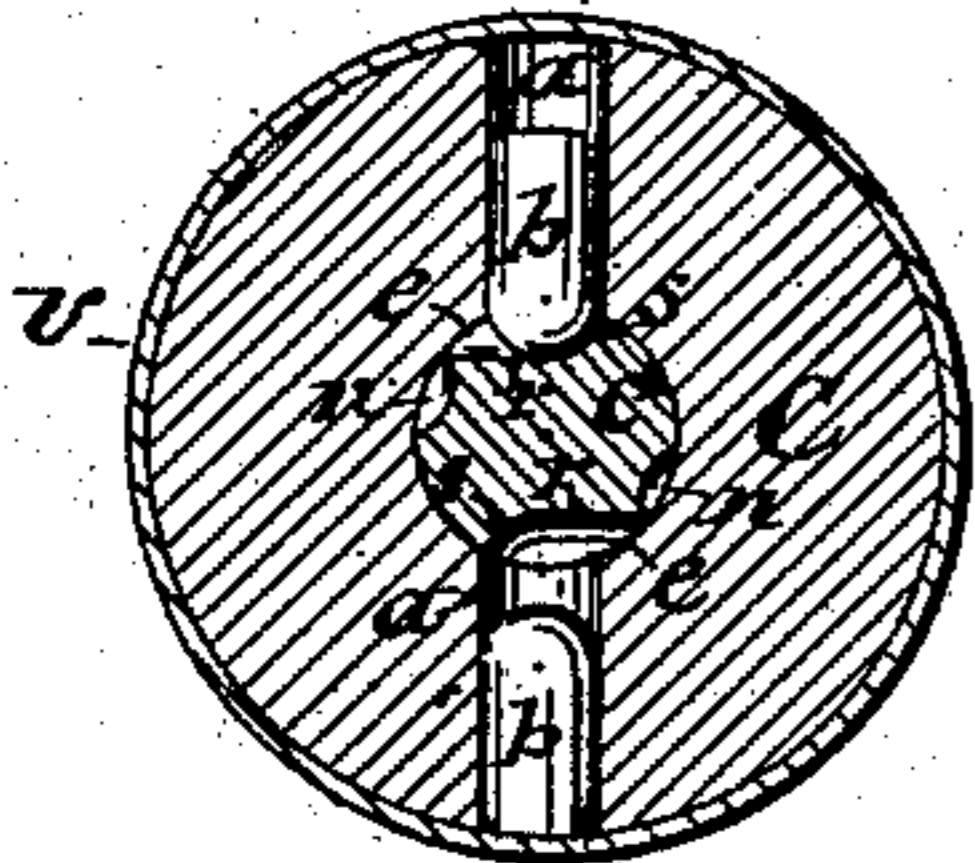
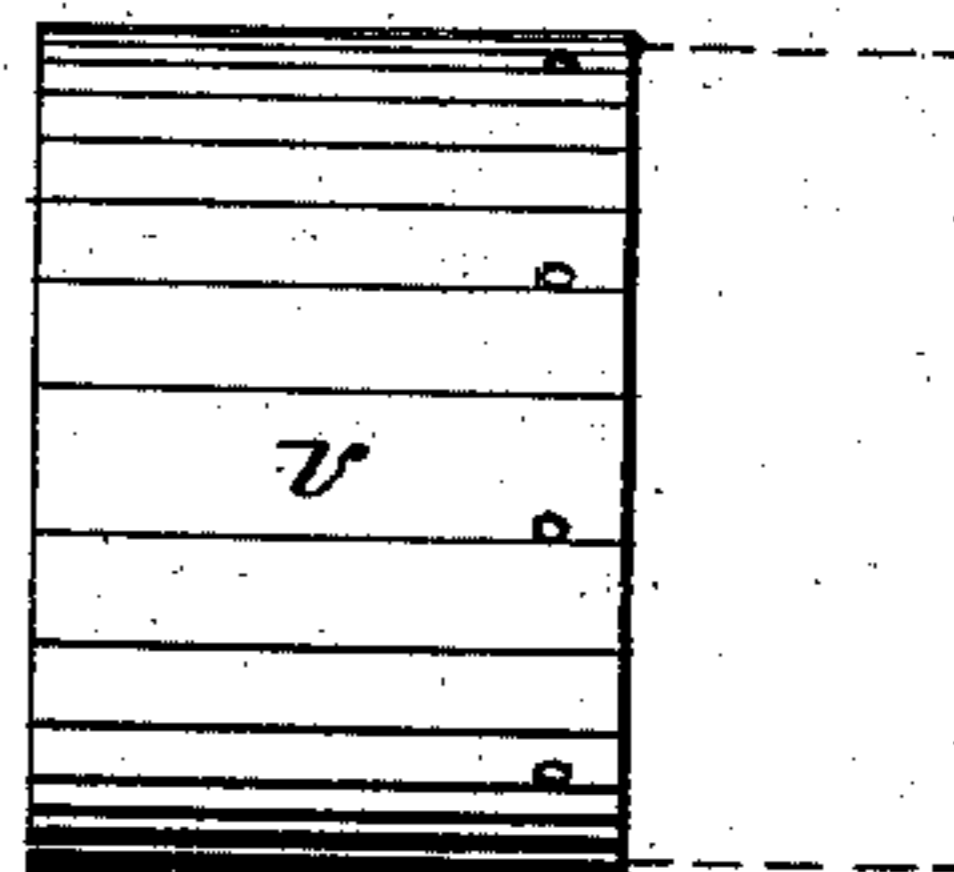


FIG-3-



FIG-4-



WITNESSES—

Geo. B. Raymond.
T. H. Gibbs.

INVENTOR—

Abraham Sweetland
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his Atty.

UNITED STATES PATENT OFFICE.

ALVAH SWEETLAND, OF SYRACUSE, NEW YORK.

CURTAIN-FIXTURE.

SPECIFICATION forming part of Letters Patent No. 274,049, dated March 13, 1883.

Application filed September 9, 1882. (No model.)

To all whom it may concern:

Be it known that I, ALVAH SWEETLAND, of Syracuse, in the county of Onondaga and State of New York, have invented new and useful Improvements in Curtain-Fixtures, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

My invention relates to that class of curtain-fixtures known as "spring-rollers," and has particular reference to the means employed for stopping the rotation of such rollers at desired points at will; and it consists in certain features hereinafter described, and specifically set forth in the claims.

Figure 1 is a longitudinal section; Fig. 2, a transverse section on the line *xx* of Fig. 1; and Figs. 3 and 4 are details, in side elevation, of a spring-roller embodying my invention.

Like letters refer to like parts in all the figures. *R* represents the curtain-roller, provided with an internal spiral spring, *S*, secured at one end to the roller and at the other to the spindle *c*, which is loosely connected to the roller, and prevented from rotating by the bracket *B*. The collar *C* maintains the spindle and roller relatively concentric. All of the above being of usual construction, and operating for well-known purposes, requires no further specific description. The spindle *c* is in this instance provided with main depressions *r* and adjacent auxiliary depressions, *n*, and these are in this instance arranged on opposite sides of the spindle. The collar *C* is diametrically bored, as at *a*, and in this instance at a right angle to the spindle lengthwise, and also in this instance at opposite sides thereof. Within each of the bores *a* is a bolt, *b*, the inner end of which is adapted to fit the main depressions *r* and to ride the auxiliary depressions *n*. In this instance the auxiliary depression *n* is in such close proximity to the main depression as to be almost merged therein, as at *e*, and the main depression *r* is inclined, so as to form an abrupt termination, as at *s*, which merges into the hub *c'* of the spindle, which forms a smooth periphery, upon which the bolt or bolts ride between the depressions.

v represents a metallic cap or ferrule, which, when applied, covers the ends of the bolt-seats or borings *a*, as shown.

In the usual construction of rollers of this

class devices dependent upon centrifugal motion have been employed as stops, and said motion has been governed by the rapidity of ascent or descent given to the curtain. So, in this instance the bolt or bolts *b* are thrown outward by a rapid ascent or descent of the curtain, and by slowing said movements sufficiently said bolts approach the spindle by gravity, and finally become seated in the main depression, thus locking the roller against further motion in one direction, generally that which carries the curtain upward. Hitherto a quite rapid motion has been required to keep the stopping devices away from the spindle and to render them inoperative; but by my device a less rapid motion is required, in and for the reason that the auxiliary depression *n'* gives an outward motion or impulse to the bolt, which is sufficient to carry it over the main depression when it lands upon or returns to the plain portion *c'* of the spindle, to be again acted upon by the auxiliary depression, and this operation takes place with a relatively slow movement of the curtain. Now, it is evident that a single main and a single auxiliary depression and a single bolt will accomplish the objects in view—viz., reduce the hitherto required speed of movement in the curtain to render the stop devices inoperative. So, also, it is evident that the bolt-seats *a* may be bored tangentially to the spindle; and it is also apparent that more than two bolts and two sets of depressions, main and auxiliary, may be employed without a departure from my invention. I therefore do not limit myself in these respects, nor as to the particular formation of the roll-spring or bracket, as my invention is applicable to any and all of the well-known constructions of rollers of this class. Even the well-known pivoted ratchets may be used in connection with my main and auxiliary depressions.

Having described my invention and its operation, what I claim is—

1. A roller-spindle provided with a main and an adjacent auxiliary depression, substantially as and for the purpose set forth.

2. The combination of a roller-spindle having a main and an auxiliary depression and means carried by the roller for locking the same by contact with the main depression, substantially as and for the purpose set forth.

3. A roller-spindle having two or more main

depressions, with adjacent auxiliary depressions separated by a plain surface of said spindle, substantially as shown and described.

4. The combination of the spindle *c*, having
5 the main depression *r* and the auxiliary depression *n*, and the collar *C* and bolts *b*, substantially as shown and described.

5. The combination of the roll *R*, spring *S*,
spindle *c*, having depressions *r n*, collar *C*, bolts
10 *b*, and ferrule *v*, substantially as shown and described.

In testimony whereof I have hereunto signed my name and affixed my seal, in the presence of two attesting witnesses, at Syracuse, in the county of Onondaga, in the State of New York, 15 this 24th day of August, 1882.

ALVAH SWEETLAND. [L. S.]

Witnesses:

F. H. GIBBS,

WM. C. RAYMOND.