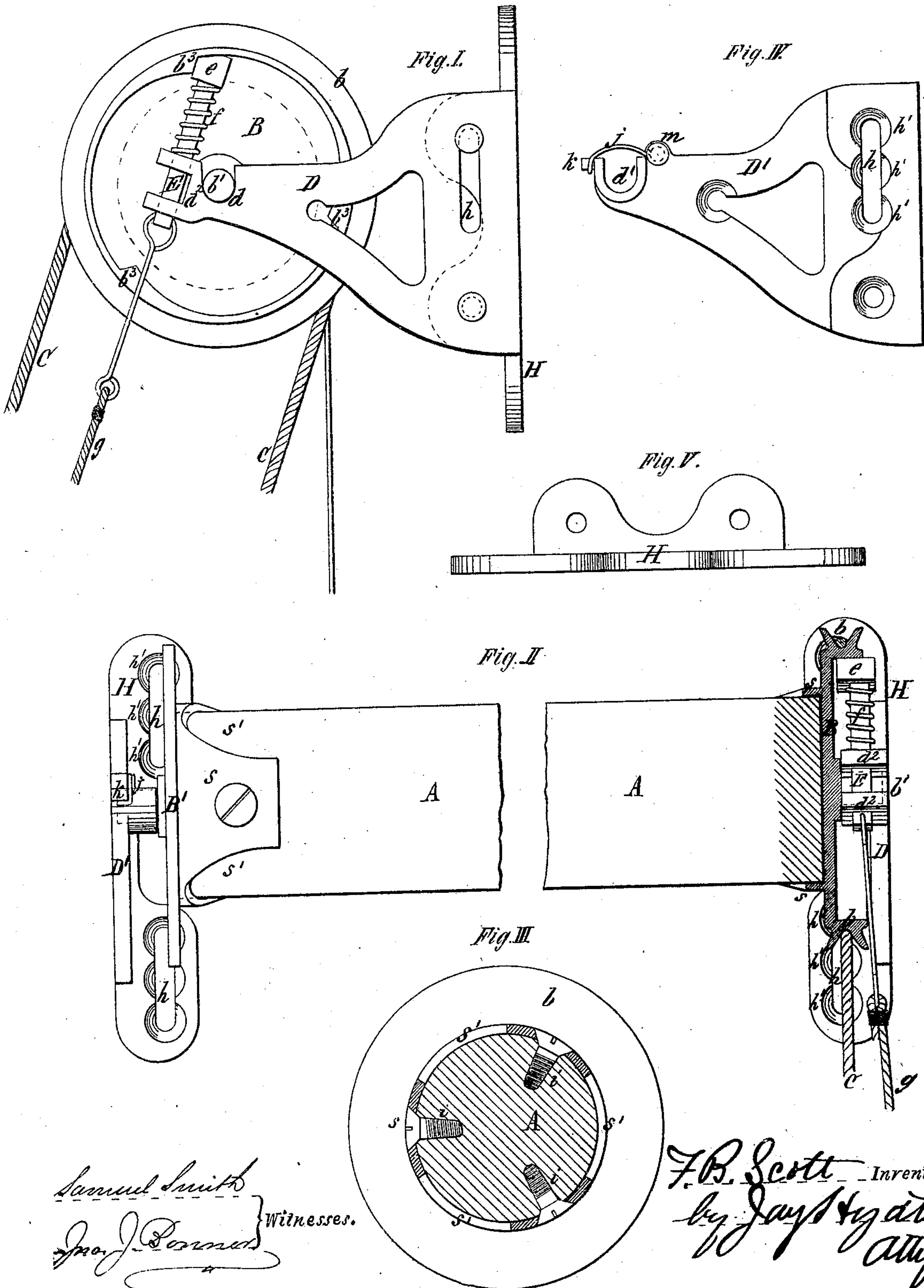


F. B. SCOTT.

Improvement in Curtain Fixtures.

No. 124,088.

Patented Feb. 27, 1872.



Samuel Smith
Jno. J. Dorman
Witnesses.

F. B. Scott Inventor.
by Jay Hyatt
Atty.

UNITED STATES PATENT OFFICE.

FRANCIS B. SCOTT, OF LANCASTER, NEW YORK.

IMPROVEMENT IN CURTAIN-FIXTURES.

Specification forming part of Letters Patent No. 124,088, dated February 27, 1872; antedated February 9, 1872.

SPECIFICATION.

I, FRANCIS B. SCOTT, of the town of Lancaster, county of Erie and State of New York, have invented certain Improvements in Curtain-Fixtures, of which the following is a specification:

My improvements relate more particularly to such fixtures designed for supporting large or heavy window-shades, for which purpose the tension device of the ordinary endless cord is insufficient and not always reliable. My invention consists, first, in the particular construction and arrangement of a sliding spring-pawl, with a bearing at the end of the supporting-bracket, and with ratchets cast in the interior of a flange of one of the end plates attached to the curtain-roller, whereby the roller is securely held against unwinding, while it is readily released for lowering the curtain by pulling on a cord suspended from the said spring-pawl, the curtain being raised and lowered by an endless cord and pulley in the usual manner. Second, in the arrangement of a pulley of a curtain-roller with the ratchets and journal cast therewith in such a manner that said pulley will project outwardly over the ratchets and journals and bearings, so as to economize space, as hereinafter fully described. Third, in the construction and arrangement of a spring-hook with the bracket or bearing at the opposite end of the roller, for holding the end of the latter in its bearing against accidental displacement. Fourth, in the combination and arrangement, with the supporting-bracket of a curtain-roller, of a cast angle-piece or flange capable of being readily secured to the former by rivets or otherwise, so as to enable the said bracket to be attached to the side or to the front of the window-casing, as may be required. Fifth, in the construction and arrangement, in the flange of the supporting-bracket of a curtain-roller, of slots or elongated screw-holes, provided with a series of countersunk recesses for the reception of the screw-heads, to facilitate the adjustment of the bracket on the window-casing, as hereinafter more fully explained.

In the accompanying drawing, Figure I is an end elevation of the roller, showing the bracket-bearing and pulley with ratchets and sliding-pawl. Fig. II is a front sectional elevation of roller and fixture. Fig. III is a cross-section

of a roller, showing the manner of securing the journal-plates to the end of the roller. Fig. IV is a detached view of a supporting-bracket. Fig. V is a detached view of the angle-piece used in connection with the supporting-bracket.

Like letters of reference designate like parts in each of the figures.

A is an ordinary wooden roller, to which the shade is attached, and on which it is rolled in elevating it. B is a plate secured to one end of the rollers, cast with the pulley *b* for the endless cord C, and with the journal *b*¹ and ratchets *b*³. The portion of this plate in which the groove of the pulley *b* is formed projects outward beyond the face of the plate, so as to overlap and inclose the ratchets and journal, as shown in Fig. II. D is a bracket, forming the bearing and support for the end of the roller, to which the plate B is attached. It is formed in two parts—namely, the bracket proper D and the angle-piece or flange H, the latter being arranged at right angles to the former, and secured thereto by rivets or otherwise. Both parts are provided with slots or elongated screw-holes *h* for the passage of the fasteningscrews, which slots are constructed with a series of countersunk recesses, *h'*, for the reception of the screw-heads. In hanging window-shades, especially for large windows, it is essential that the bearings for the end of the roller be nicely adjusted in order that the shade may hang vertically and properly fit the window. To accomplish this the position of one of the bearings or brackets is frequently required to be changed after they have been secured in place, which is sometimes quite difficult, as the new holes for the fasteningscrews are, in such cases, required to be made so close to the former ones as to cause the wood between the holes to break, and thus destroy the bearing or “hold” for the screw-threads, besides involving the labor of taking down the shade, plugging up the old holes, and forming new ones. In adjusting a shade provided with my improved fixtures the brackets are first secured by a single screw, passing through the slots in as nearly the proper position as can be determined by ordinary measurement. If the shade now hangs untrue the fasteningscrew of one or both brackets are slightly loosened so as to withdraw the head from the countersunk re-

cess h' , in which it is fitted, when the bracket can be readily adjusted by sliding it up or down, as required, so as to bring a different recess, h' , to coincide with the screw-head, when, by driving in the screw, the fixture is held in this new position without changing the position of the screw itself. The other screws are now inserted, and the attachment of the fixture is complete. When the bracket is to be fastened to the front face of the window-casing the angle-piece H is riveted to the bracket proper D and the brackets secured in place by screws passed through the holes in the angle-piece. If circumstances do not admit of the bracket being secured to the front of the window-casing, it can be secured to the side thereof by dispensing with the angle-piece H and passing the fastening-screws through the holes formed in the bracket D . By thus forming the supporting-bracket in two parts it is enabled to be secured in place where a bracket of ordinary form could not be used, while it enables the bracket to be cast with all the necessary screw-holes, thereby materially cheapening the cost of its manufacture. E is a bar, fitted so as to slide in a bearing, d^2 , at the end of a bracket, as represented. The upper end of this bar is formed with a head, e , which engages with the ratchet b^3 . Between this head and the bearing d^2 is arranged a reacting spiral spring, f , while to the lower end of the pawl-bar is attached a cord, g , by which it is disengaged from the ratchets in releasing the curtain. B' is a plate, cast with a journal, b^1 , in the ordinary manner. D' is a bracket for supporting this end of the roller, being formed with a notch, d^1 , as a bearing for the journal. j is a spring-hook, pivoted to the bracket at m , made of bent wire, shown in Fig. IV, so as to be capable of being sprung over a projecting lug, k , at the end of the bracket, and thus hold the journal in its bearing after it has been arranged therein. The plates B B' are cast with sockets s to receive the end of the roller. The flanges of these sockets, instead of being made entire, are cast with portions left out, so as to form spaces s' , which expose the wood of the roller and permit the attachment thereto of the curtain by nailing or otherwise, while a shallow socket is left entire at the base, sufficient to receive the end of the roller, and thereby conceal the joint between the latter and the face of the plate.

The socket is secured to the roller by screws i i , as shown. The lower end of the endless cord C is secured in any ordinary manner, so that the curtain may be rolled up or unrolled by pulling on the said cord, the spring-pawl E holding the curtain in whatever position it is adjusted. The curtain is released by pulling the cord attached to the pawl, which disengages it from the ratchets, as heretofore described.

The peculiar construction and arrangement of the pulley, so as to enable the ratchets and journal to be arranged thereon, renders the fixture more compact and enables the curtain to be made of sufficient width to entirely cover the glass, which it is sometimes found quite difficult to accomplish; as, for instance, in windows of stores, where all of the available space is occupied by the glass, leaving only a very narrow space for the sash.

I claim as my invention—

1. The sliding pawl-bar E and reacting spring f , arranged with the bearing d^2 of the bracket D , and with ratchets b^3 of the end plate B of a curtain-roller, substantially as hereinbefore set forth.

2. The construction and arrangement, in the plate B of a curtain-roller, of the pulley b , ratchets b^3 , and journal b^1 , the pulley projecting outwardly over the latter, as hereinbefore set forth.

3. The spring-hook j , constructed and arranged with the journal b^1 , lug k , and bearing d^1 , substantially as and for the purpose hereinbefore set forth.

4. In combination with the bracket D provided with a slot and countersunk recesses h h' , the angle-plate W , also provided with a slot and countersunk recesses h h' , constructed so as to enable the bracket D to be used with or without the angle-plate, according to circumstances, as hereinbefore set forth.

5. The slot H and series of countersunk recesses h h' formed in the flange of the bracket, which supports the end of a window-shade roller, to facilitate the proper adjustment of the shade, as hereinbefore set forth.

FRANCIS B. SCOTT.

Witnesses:

JNO. J. BONNER,
GEO. J. METZGER.