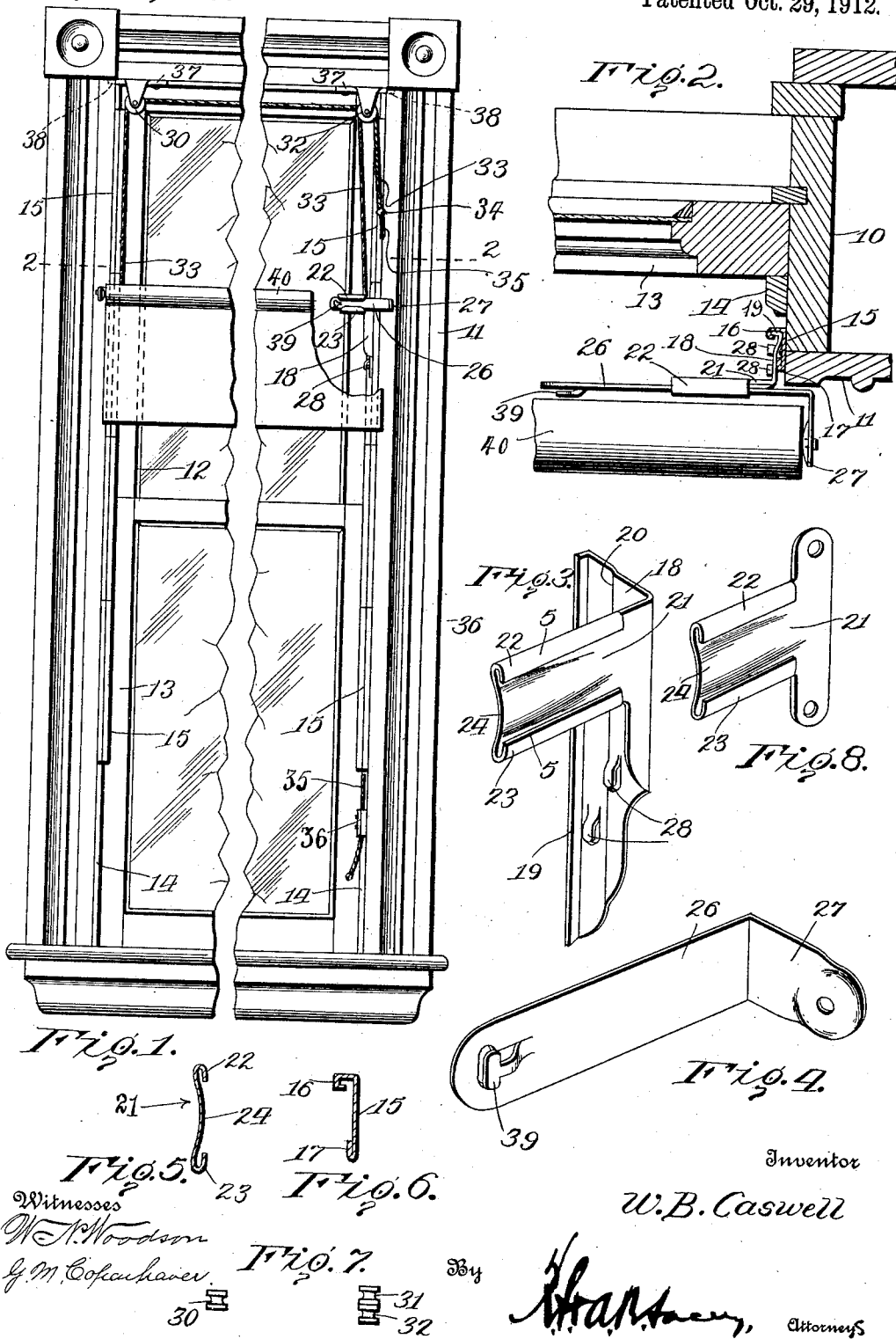


W. B. CASWELL.
WINDOW SHADE HANGER.
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1,043,000.

Patented Oct. 29, 1912.



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UNITED STATES PATENT OFFICE.

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WINDOW-SHADE HANGER.

1,043,000.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, WILLIAM B. CASWELL, citizen of the United States, residing at Newport, in the county of Newport and State of Rhode Island, have invented certain new and useful Improvements in Window-Shade Hangers, of which the following is a specification.

This invention relates to improvements in curtain fixtures, more particularly to the class wherein provision is made for moving a shade roller bodily longitudinally of a window, and has for one of its objects to simplify and improve the construction and increase the efficiency and utility of devices of this character.

Another object of the invention is to provide a device of this character in which the parts are held by friction and adjustable without the employment of screws, bolts, or like devices.

With these and other objects in view the invention consists in certain novel features of construction as hereinafter shown and described and then specifically pointed out in the claims, and in the drawings illustrative of the preferred embodiment of the invention, Figure 1 is a front elevation of a portion of a window with the improvement applied; Fig. 2 is an enlarged section on the line 2—2 of Fig. 1; Fig. 3 is a perspective view of the slidable bracket detached; Fig. 4 is a perspective view of one of the shade roller holders detached; Fig. 5 is a transverse section on the line 5—5 of Fig. 3; Fig. 6 is an enlarged transverse section of one of the guide strips; Fig. 7 represents detail views of the cord pulleys; and Fig. 8 is a detached perspective view, illustrating a modification in the construction.

Corresponding and like parts are referred to in the following description and indicated in all the views of the accompanying drawings by the same reference characters.

The improved device may be applied without material structural changes to window casings and frames of various forms and sizes, but for the purpose of illustration is shown applied to a conventional window frame, in which 10 represents the body or side members of the frame, 11 the casing, 12—13 the sashes, and 14 the inside stops, of the usual construction.

The improved device embraces vertical guide strips 15 connected to the frame at

suitable points, the positions of the strips depending upon the construction of the frame. In some forms of window frames the strips will be attached to the frame members 10 and in others will be attached to the inside stops, but for the purpose of illustration are shown applied to the frame members 10 near their inner edges or next to the casing 11. Each strip is formed in a plurality of sections engaging end to end with the inner edge of each section bent into a longitudinal guideway 16 and with the opposite or outer edge folded upon itself to form a projecting bead or guard rib 17, the latter being designed to hold the slidable bracket away from the face of the plates or strips so that nails or screws having heads thereon may be employed to fasten the strips to the frame, as hereinafter explained. The sectional strips 15 may be arranged to extend for any required length of the frame members 10.

The improved device also embraces a slidable bracket member consisting of a body portion 18 having a flange 19 bent from one edge for slidably engaging in the guideway 16 of the strip 15 and with an intermediate bend or offset 20 to engage over the projecting guard rib 17, as shown in Fig. 2. Projecting laterally from the body 18 is a horizontal portion 21 having inwardly directed guide ribs 22—23 bent from its upper and lower edges with the outer portion curved transversely, as represented at 24 and the remaining portion straight or uncurved to form an uncurved entrance to the socket produced between the guide ribs 22, the object to be hereafter explained. By this arrangement it will be obvious that the guard rib or flange 19 will slidably engage in the guide portion 16 of the strip 15 and by reason of the offset 20 a space is left between the guard rib 17 and the guide rib 16, into which the heads of the screws or nails, by which the strips 15 are secured to the frame, project. Thus the bracket is free to slide vertically over the strip 15 without interfering with the heads of the screws or nails, so that it will not be necessary to countersink the bracket body to receive the heads of the holding devices. This is an important advantage and simplifies the construction and decreases the expense of manufacture and likewise decreases the labor required to attach the strips to the frame.

Another portion of the improved device consists of the holders for the rollers, each comprising a flat uncurved plate 26 for sliding between ribs 22—23 and in engagement with the curved portion 24 of the bracket and with a lateral offset 27 at one end. One of the offsets 27 is provided with a circular aperture to receive the circular journal of the roller, while the offset of the other plate is provided with an open slot to receive the flat or stationary pin of the roller. The plate 26 being constructed flat or initially uncurved will readily enter the straight uncurved entrance of the socket between the ribs 5—5 and then when forced between the guide ribs 22—23 and in contact with the curved portion 24, the metal of which the plates 26 are constructed being slightly bent, a relatively strong friction between the parts will be produced which will be sufficient to hold the plates from displacement when in use, while at the same time will yield when sufficient pressure is applied to enable the terminals 27 to be adjusted to rollers of different lengths. By this simple arrangement the rollers are supported entirely by friction and no necessity exists for bolts, screws, or other similar clamping devices. This is an important feature of applicant's device and simplifies the construction and materially reduces the expense of manufacture.

Formed in the inner end of each of the members 26 is an integral tongue 39 which projects toward the roller represented conventionally at 40 to engage against the curtain material upon the roller and preventing undue friction between the brackets and the stop ribs 17, the journals of the rollers having sufficient play to permit the necessary movement.

Formed in each of the body portions 18 of the bracket are two hooks 28, the hooks being formed by cutting U-shaped clefts in the metal of the plates and pressing the tongues thus released outwardly, as shown. A single guide pulley 30 is connected to the frame above the upper end of the left hand plates 15, and twin pulleys 31—32 are connected above the right hand plates 15 to carry the pull cord 33. The pull cord 33 is knotted at the ends and one knotted end engaged with one of the hooks 28 of the left hand bracket and passed thence over the single pulley 30 and thence over the pulley 31 and doubled on itself, as indicated at 34, and passed over the pulley 32 and then engaged by its other knotted terminal with one of the hooks 28 of the right hand bracket. Another pull cord 35 is connected to the cord 33 at its bend at 34 and held by a suitable catch indicated conventionally at 36. By this means the brackets, together with the shade roller supported thereby, may be adjusted longitudinally of the guide strips

15 and held at any desired point by engaging the cord 35 with the catch device, as will be obvious.

In some constructions of window it may be necessary to place the guide pulleys relatively near the outside stops or even upon the outside stops, or relatively near the outer face of the casings, but by providing two of the hooks 28 spaced apart the cord may be so attached as to be in direct vertical alinement with the cord pulley, as will be obvious.

The guide pulleys 30, 31 and 32 are each connected in a supporting frame or base 37 pointed at one end, as indicated at 38, to enable the pointed end to be driven into the wood of the casing and the opposite end apertured to receive a holding screw or other fastening device. By this means one single screw will be sufficient to hold each of the pulley bases.

Each section of the strips 15 is constructed from a single piece of metal, and each of the brackets including the projection 21 and other parts is pressed out of a single sheet of metal, while the holding devices for the roller are also each pressed from a single piece. The whole device is thus constructed from six parts only besides the guide roller, and may be inexpensively manufactured and of any suitable material, and plated, japanned, galvanized, or otherwise ornamented or protected.

In Fig. 8 is shown the manner of employing the improved bracket when the same is to be attached immovably to a window frame or casing.

When the improved device is to be applied to deep seated windows, it will be obvious that this can be done by simply moving the portion 26 of the holder inwardly to permit the part 27 to be disposed free of the inner face of the frame, but this arrangement is so obvious that it is not deemed necessary to illustrate it.

Having thus described the invention, what is claimed as new is:

1. In a curtain fixture a strip adapted to be attached to a window and provided with a laterally directed guide rib upon one edge and with the other edge folded over to form a guard rib, a bracket comprising a body having a guide flange at one edge for engaging the guide rib of the strip and with an intermediate offset for engaging over the guard rib and spacing the body of the bracket from the strip whereby the heads of the holding devices of the strip are not engaged by the bracket in its movements, and a shade roller support adjustably movable upon the bracket.

2. In a curtain fixture a strip adapted to be attached to a window, a bracket slidable upon said strip and having a lateral projection with the edges turned over to form in-

wardly directed guide ribs, the outer portion of said projection being curved outwardly between the guide ribs and the rear left without the curvature and merging into the curved portion to form a straight entrance portion to the space between the guide ribs, and a shade roller support including a resilient plate initially uncurved and adapted to be forced between the guide ribs at the straight or entrance end and bearing against the outwardly curved portion of the bracket and curved outwardly by contact with the curved portion of the bracket to frictionally support the same.

3. In a curtain fixture a bracket having a lateral projection with the edges of the projection directed inwardly to form outwardly extending guide ribs, the outer portion of said projection being curved outwardly between the guide ribs and the rear portion left uncurved to form a straight entrance to the space between the guide ribs, and a shade roller support including a resilient plate initially uncurved and adapted to be inserted into the straight portion of the

socket and forced into engagement with the curved portion of the same and thereby correspondingly curved and held in position by friction.

4. In a curtain fixture, a bracket having a lateral projection with outwardly extending guide ribs at its edges, said projection being curved outwardly between the guide ribs, and a shade roller support including a resilient plate initially uncurved and engaging between the guide ribs and bearing against the outwardly curving portion of the bracket projection and frictionally supported thereby, said plate having a tongue at its free end directed outwardly for yieldingly engaging against the shade roller, and assisting in maintaining the shade support in position.

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

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Witnesses:

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