

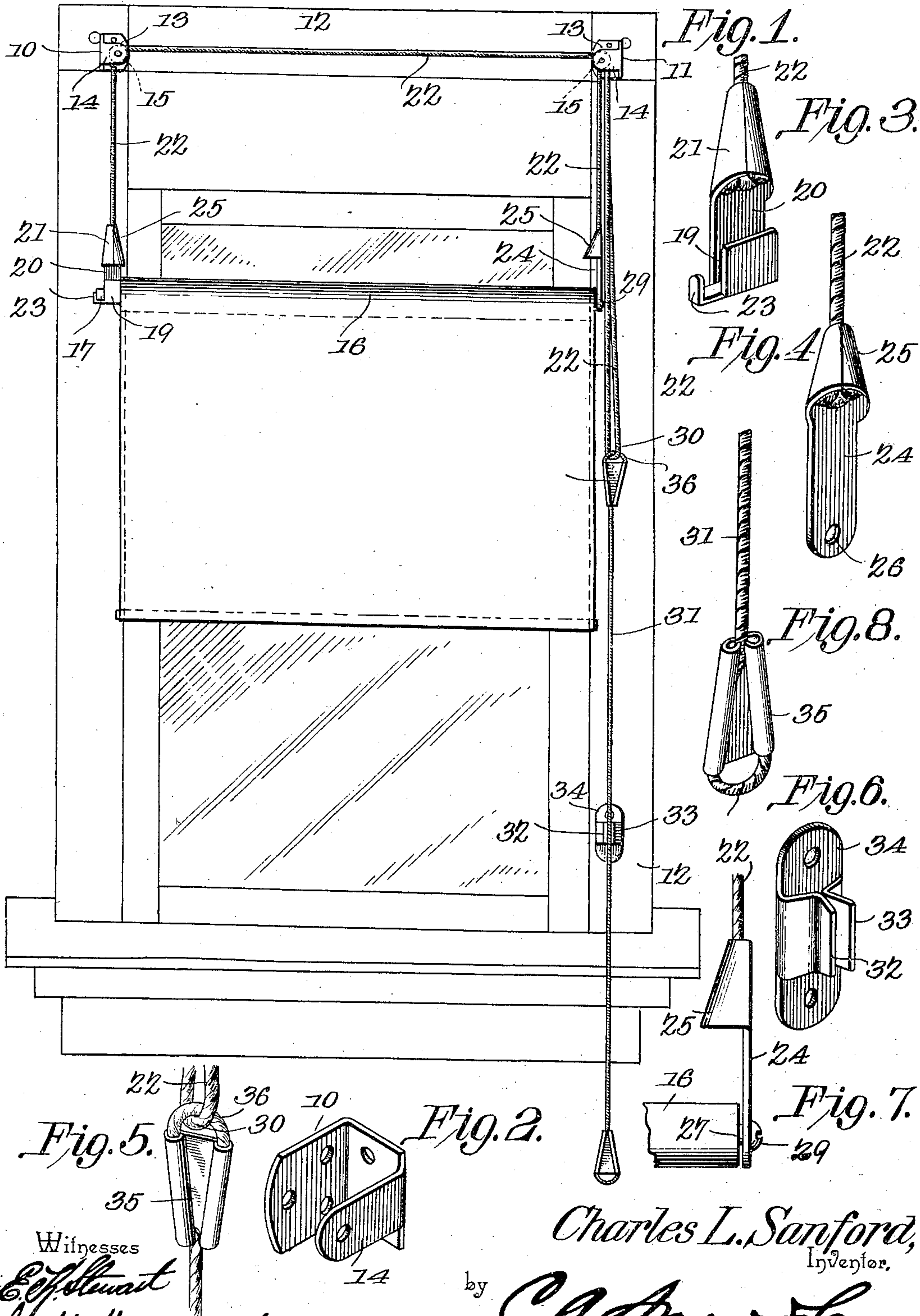
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C. L. SANFORD.
SHADE ROLLER HANGER AND ADJUSTER.

APPLICATION FILED MAR. 1, 1904.

NO MODEL.



Witnesses
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UNITED STATES PATENT OFFICE.

CHARLES L. SANFORD, OF BELLAIRE, OHIO.

SHADE-ROLLER HANGER AND ADJUSTER.

SPECIFICATION forming part of Letters Patent No. 768,696, dated August 30, 1904.

Application filed March 1, 1904. Serial No. 196,020. (No model.)

To all whom it may concern:

Be it known that I, CHARLES L. SANFORD, a citizen of the United States, residing at Bellaire, in the county of Belmont and State of Ohio, have invented a new and useful Shade-Roller Hanger and Adjuster, of which the following is a specification.

This invention relates to devices for suspending and adjusting curtain-shade rollers, and has for its object to simplify and improve the construction of means whereby the roller may be quickly adjusted to any desired position longitudinally of the window.

With these and other objects in view, which will appear as the nature of the invention is better understood, the same consists in certain novel features of construction as hereinafter fully described and claimed.

In the accompanying drawings, forming a part of this specification, and in which corresponding parts are denoted by like designating characters, is illustrated the preferred form of the embodiment of the invention capable of carrying the same into practical operation, it being understood that the invention is not necessarily limited thereto, as various changes in the shape, proportions, and general assemblage of the parts may be resorted to without departing from the principle of the invention or sacrificing any of its advantages, and the right is therefore reserved of making all the changes and modifications which fairly fall within the scope of the invention and the claims made therefor.

In the drawings thus employed, Figure 1 is a front elevation of a window-frame with the improvement applied to its curtain-roller. Fig. 2 is an enlarged perspective view of one of the pulley-brackets. Figs. 3 and 4 are enlarged perspective views of curtain-roller brackets detached. Fig. 5 is an enlarged perspective view of the pull-cord clip. Fig. 6 is an enlarged perspective view of the pull-cord clamp. Fig. 7 is a detail elevation of the right-hand hanger and illustrating the manner of connecting the same with the shade-roller. Fig. 8 is a detail perspective view of the lower end of the pull-cord, showing the hand-piece provided thereon.

The improved device may be attached to

any of the various forms of window casings and frames and adapted for the suspension of any of the various forms of spring shade-rollers and comprises a pair of brackets 10 11 for attachment at opposite sides of the window-opening at or near the top and constructed for attachment either inside or outside of the frame or casing 12.

The brackets are formed precisely alike, except that one, preferably the right-hand one, is provided with two of the cord-pulleys 15, and are constructed of sheet metal pressed or bent into the required shape with right-angled faces or side walls, both of which are perforated for the holding-screws to enable them to be attached to the outer or inner face of the casing or frame 12, as may be preferred.

It is a common practice to provide duplicate sets of brackets for curtain-rollers, one set for supporting the rollers between the inner faces of the frame and the other set for supporting them upon the outer face of the casing, and in the improved device herein shown and described the brackets 10 11 provide for thus supporting the roller either exteriorly or interiorly of the casing or frame and with but one set of the brackets, thereby effecting a material saving in the expense and in the bulkiness of the parts of the device.

One of the side walls of the brackets 10 and 11 is perforated also to form a bearing for one end of the roller-shaft 13, while the other end of the shaft is supported by a perforated ear 14, extending from the other side member of the bracket. The shaft 13 thus provides means for the support of the cord-pulleys 15, as will be obvious.

The curtain-roller is represented at 16, having at one end the usual flat stud 17 extending from its spring. At the spring end the stud 17 is supported from rotation by a rectangular recess 19 in a hanger 20, the upper end of the hanger being formed into a conical socket 21 for retaining the lower end of a cord 22, the cord having a knot in its end to prevent its being drawn through the socket. The portion 19 is provided with a longitudinally extended and upturned portion 23 to prevent end thrust of the roller 16. The hanger 24 at the other end of the roller

16 is provided with a socket 25, similar to the socket 21 of the hanger 20 and adapted to receive and support the other end of the cord 22 by a knot in the cord. The lower end of the hanger 24 is provided with a perforation 26, corresponding to the shank 27 of a pin or screw carried by the roller 16 and having an enlarged head 29 outside the hanger. The member 27 will preferably be an ordinary round-headed wood-screw, as shown, inserted through the perforation 26 centrally into the end of the roller 16, the stud-plate usually employed having been detached. By this means a very effective and easily-applied bearing is provided for the roller, which not only permits its free rotation, but also holds it from longitudinal movement.

The cord 22 is passed over the single pulley 15 in the left-hand bracket 10 and thence over the double pulleys in the right-hand bracket 11, thereby forming a loop 30, at which point the draw-cord 31 is attached. At its lower portion the draw-cord is passed between the resilient sides 32 33 of a clamp-bracket 34, which press it with sufficient force to produce the requisite tension to hold the curtain-roller at any desired point, and thus enable the curtain to cover any desired portion of the window, as will be obvious.

The means whereby the draw-cord is connected to the loop 30 consists of a sheet-metal plate 35, having its edges rolled inwardly and preferably converging downwardly, one end of the draw-cord being pinched within one of the rolled sides and the body of the cord passed through the other rolled side, with the loop 36 thus formed engaging the loop 30 of the suspension-cord 22 and slidable or automatically adjustable therein. By this simple arrangement it is obvious the curtain-roller may be easily maintained in a horizontal or level position.

The whole device is very simple in construction, efficient in operation, and will not re-

quire more than ordinary skill and intelligence to either install or operate it and by means of which the curtain may be positioned upon the window to permit ventilation or light above or below it and to any desired extent or to wholly close or wholly uncover the window-opening, as may be required. The whole action may be accomplished by merely operating the one draw-cord 31.

The metal portions of the improved device are all of sheet metal stamped and pressed into the required shape or form and may thus be cheaply manufactured and of ample strength to withstand the strains to which they will be subjected.

The lower terminal of the draw-cord 31 may be supplied with one of the clips 35, as illustrated in Fig. 8, to constitute a knob or hand-piece for engagement by the operator in manipulating the cord.

Having thus described the invention, what is claimed is—

The combination with a frame, of guide members connected therewith, a supporting-cord extended over the guide members, hangers carried by said cord, and a shade-roller sustained by the hangers, one of said hangers comprising a sheet-metal body having a pair of opposed portions folded toward each other to produce a cord-receiving thimble, the end of the body beneath the thimble being folded back upon itself to receive the shade-roller pintle, and a laterally-projecting portion formed upon the body and having its outer terminal upturned to produce a stop for receiving end thrust of the pintle.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

CHARLES L. SANFORD.

Witnesses:

ROBT. WHITE,
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