

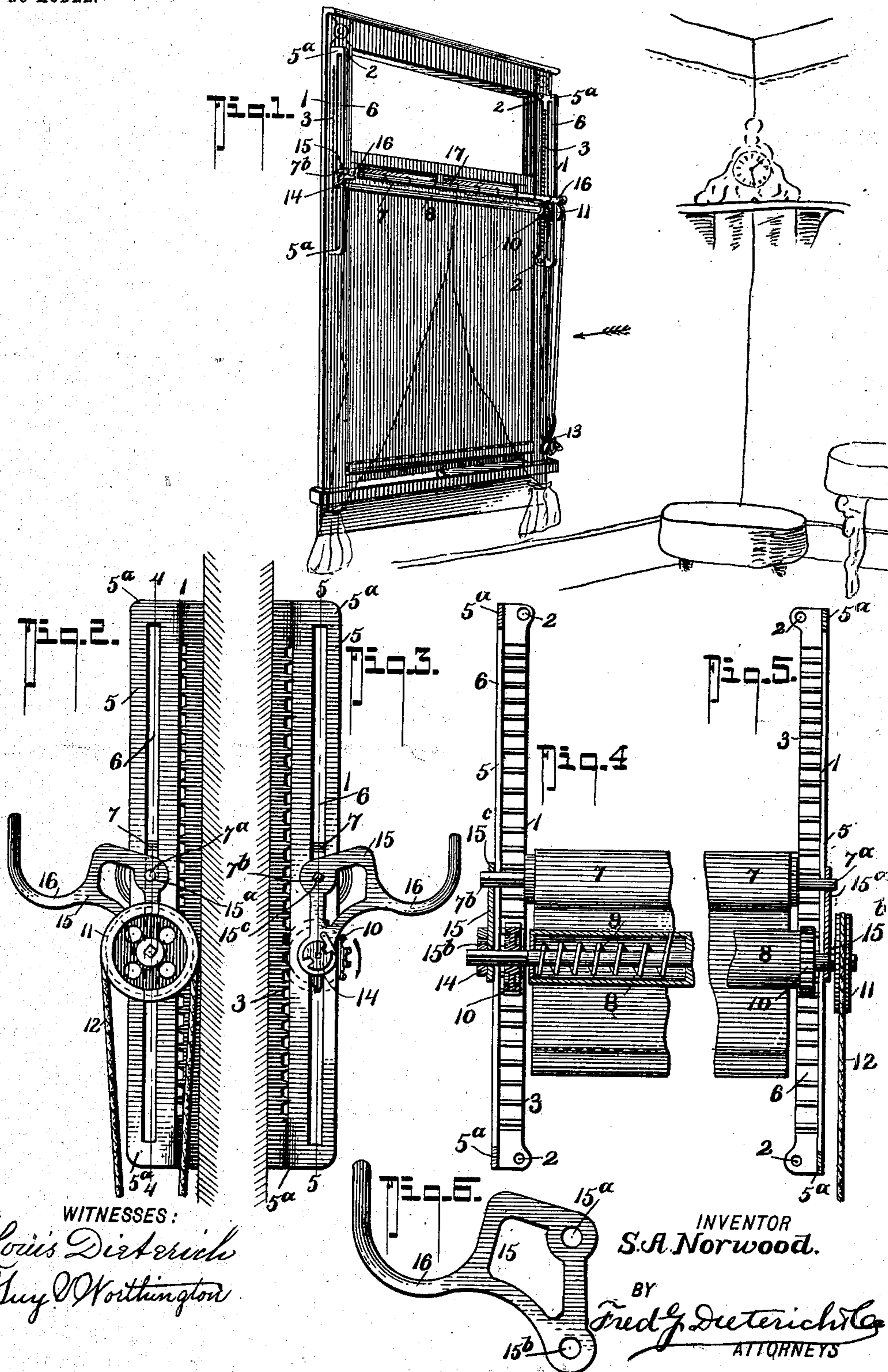
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S. A. NORWOOD.
WINDOW SHADE AND CURTAIN FIXTURE.

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NO MODEL.



WITNESSES:

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WINDOW SHADE AND CURTAIN FIXTURE.

SPECIFICATION forming part of Letters Patent No. 736,334, dated August 11, 1903.

Application filed June 12, 1901. Serial No. 64,306. (No model.)

To all whom it may concern:

Be it known that I, SUSAN A. NORWOOD, residing at Portland, in the county of Multnomah and State of Oregon, have invented certain new and useful Improvements in Window Shade and Curtain Fixtures, of which the following is a specification.

This invention relates to improvements in that class of window shade or curtain fixtures adapted to support a shade in position to be raised or lowered in the usual manner and for adjustment, whereby the shade may be readily lowered from the top for ventilating purposes and quickly returned to its upper or normal position as desired.

Generally my invention comprehends a pair of supporting-brackets, one for each side of the window-frame, upon which an ordinary spring-roller carrying the window-shade is mounted for vertical movement. A supplemental spring-roller is also mounted on the said bracket for vertical movement and has connections with the said bracket, whereby as it is moved vertically in one direction it will be caused to rotate and store up spring-power, suitable operating means, including a pull-cord, pawl, and ratchet devices, being provided for releasing the said supplemental spring-roller, whereby it will be simultaneously rotated in a reverse direction as it moves upward to its normal position, additional means being also provided for joining the shade-roller and the supplemental roller to cause them to move in unison in the opposite vertical directions.

In its other and more subordinate features this invention consists in certain details of construction and peculiar combination of parts, all of which will be hereinafter first described and then specifically pointed out in the appended claims, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of a window with my improvements applied. Fig. 2 is an end view of the same looking in the direction indicated by the arrow in Fig. 1. Fig. 3 is an end elevation viewed from the opposite side. Fig. 4 is a vertical section of one end of my improved device, taken practically on the line 4 4 of Fig. 2. Fig. 5 is a similar view thereof, taken on the line 5 5 of Fig. 3. Fig. 6 is a detail view of one of the combined end bearings and curtain-pole brackets or supports.

My invention in its practical construction comprises in its make-up a pair of brackets 1 1, each having a like construction and consisting of a base portion having fastening-ears 2, whereby said brackets may be readily secured upon the window-casing. The base portion of each bracket is made of suitable length and projected down from the top of the window-casing a distance to provide for sufficient travel of the shade and its roller downward to insure an ample passage between the top of the shade and the window-casing top for ventilation when the said roller, with the shade, is moved down in the manner hereinafter described. The base portion proper of each bracket 1 has a rack-face 3 extending substantially its length, and at the outer edge of the rack portions the brackets have an integral right-angled flange or side member 5, joined at the upper and lower ends with the upper and lower ends of the base portion, as indicated by 5^a, and the said side or flange members 5 have each a vertical slot 6 extending nearly the full height of the brackets, as clearly shown in Figs. 2 and 3.

7 indicates a window-shade roller which is of the common form of spring-rollers, it having the usual round pintle or bearing 7^a at one end, which bearing in my construction is, however, sufficiently long to project through the slot 6 in its adjacent bracket, while the other end of the roller has the usual non-circular spring-connected pintle 7^b, also of sufficient length to extend through and slide in the slot 6 of its adjacent bracket.

8 indicates what I term a "supplemental" spring-roller, which is disposed below the shade-roller and has an internally-held spring 9, wound up as the roller is rotated outward, (which rotation is effected as the said roller is moved downward.) The roller 8 is somewhat shorter than the roller 7 and carries upon each end a pinion 10 10, held to mesh with and travel on the rack-faces of the brackets. One end of the roller 8 (the right end of the drawings) has its bearing of sufficient length to project through the slot 6 of the adjacent bracket 1 and carries at its outer end a pulley 11, over which an operating or pull cord 12 passes, the outer end of which passes over or is made fast upon a suitable hook or guide 13, as shown. The opposite end of the roller 8 has its spring-connected pintle projected

through the slot 6 of its adjacent bracket 1 and carries upon its extreme end a pawl-engaging disk 14, similar in construction to the pawl-disks on the ordinary spring-roller.

15 15 indicate combined brackets and end bearings, one for each main bracket. The bracket 15 at the right or pull end of the improvement has two rounded apertures—the upper one, 15^a, in which the round pintle or bearing end of the shade-roller is journaled, and the lower one, 15^b, in which the round bearing-pintle of the lower roller 8 is journaled. The bearing 15 at the opposite side also has a round lower aperture 15^b for the passage of the adjacent pintle or bearing end of the roller 8, and its upper aperture 15^c is made non-circular to receive the correspondingly-shaped end of the spring-connected pintle of the upper roller 7. Each bracket 15 has an outwardly-extended concaved arm 16, adapted to receive the ends of the curtain-pole 17, as shown in Fig. 1, such arrangement of parts providing for conveniently supporting the lace curtain to move it up and down with the shade-roller.

From the foregoing, taken in connection with the accompanying drawings, it is thought the advantages and operation of my invention are apparent.

To lower the curtain and shade to allow for a free ventilation through the top of the window when the upper sash is lowered, the operator pulls down upon the cord 12, and in doing so the two rollers 8 7, together with the shade and curtain, will be lowered to the position desired and held to any of the adjusted positions by reason of the roller 8 being locked from rotation by the dog 17, carried upon the bracket 15 at the left, which engages with the pawl-disk upon the corresponding pintle end of the said roller 8. To raise or lower the shade, it is only necessary to pull the same down to release its dogs or pawls in the usual manner. To elevate both the shade-roller, the spring-roller, and the curtain, the operator manipulates the cord 12 in a manner to quickly turn the roller 8 to release its pawl-disk from the pawl 17, when the action of the spring within it will cause said roller to rotate inwardly by reason thereof, and the racks and pinions cause such roller with the roller 7 to rise back to their upper or normal position, it being understood the spring and the roller 8 in practice is wound strong enough to hold or run from the bottom to the top of the rack when released.

My invention can be economically manufactured, can be used in connection with any ordinary spring-roller, and can be manipulated by any one and when attached will not mar the appearance of or deface the window-casing.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A curtain-fixture of the character de-

scribed, comprising in combination, two brackets adapted to be secured on the front face of the window-frame, to project outwardly therefrom, each having a vertically-extended rack-face, and a vertical slot parallel with the rack-face, two shade-rollers, arranged in the same vertical plane with their pintles projected through the vertical slots in the end brackets to move freely therein, curtain-pole-supporting members, movable vertically on the outer face of each end bracket, and forming end bearings to receive the pintles of the shade-rollers that project through the slots of the end brackets, gears on one of said roller-pintles, held to mesh with rack-faces of the brackets, a turn-pulley on one of the gear-equipped shade-roller pintle ends, and means for turning said pulley and sustaining it at its different elevations, all being arranged substantially as shown and for the purposes described.

2. The combination with the vertically-slotted end brackets, each bracket having a rack-face; and the shade-roller, said roller having its end pintles projected through the slots in the end brackets; of the spring-roller held parallel with the shade-roller, said spring-roller carrying a pinion meshing with the rack-faces of the brackets and having the pintles at the ends extended through the slots in the said brackets; bearing members supported upon and connecting the pintles of the two rollers; the spring-roller having a ratchet-disk at one end and means for rotating it at the other end; and a pawl operated by the end bearing for the ratchet end of the spring-roller engaging the ratchet of said roller, all being arranged substantially as shown and described.

3. The combination with the brackets having base portions formed with vertically-extending rack-faces, and right-angled extensions slotted vertically; the shade-roller, said roller having its ends passed through and freely movable in the slots of the brackets; of the supplemental spring-actuated roller having its end pintles passed through the slots in the brackets and movable therein; the spring-connected pintle of said roller carrying a ratchet-disk and the pintle on the opposite end of the said roller having a pulley to receive an operating-cord; a bearing member for each end of the fixture, each member having apertures to receive the ends of the pintles on the two rollers and having forwardly-extending portions forming supports for the curtain-pole; and a detent carried upon one of the bearing members adapted to engage the ratchet-disk on the spring-roller, all being arranged substantially as shown and described.

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