## J. C. FORSBERG. WINDOW SHADE HANGER. APPLICATION FILED MAY 26, 1903.

NO MODEL.

2 SHEETS-SHEET 1. Fig. 1.

Witnesses. a.H. Obsahl. Inventor.
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By his Uttorneys

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Fig. 2 Fig.4 Fig. 3 Witnesses a. H. Opsahl. J. C. Forsberg

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## United States Patent Office.

JOHN C. FORSBERG, OF LA CROSSE, WISCONSIN.

## WINDOW-SHADE HANGER.

SPECIFICATION forming part of Letters Patent No. 753,868, dated March 8, 1904.

Application filed May 26, 1903. Serial No. 158,774. (No model.)

To all whom it may concern:

Be it known that I, John C. Forsberg, a citizen of the United States, residing at La Crosse, in the county of La Crosse and State of Wisconsin, have invented certain new and useful Improvements in Window-Shade Hangers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the 10 art to which it appertains to make and use the same.

My present invention relates to adjustable window-shade hangers—to wit, to those of the general character disclosed in the joint appli-15 cation of John C. Forsberg (myself) and Ole Rogan, Serial No. 139,942, filed January 21, 1903—and has for its object to improve the same in the several particulars hereinafter noted.

To the above ends the invention consists of the novel devices and combinations of devices hereinafter described, and defined in the claim.

The invention is illustrated in the accompanying drawings, wherein like characters indi-25 cate like parts throughout the several views.

Figure 1 is a view in elevation looking at a window from the inner side of a building and showing my improved shade-hanger applied thereto. Fig. 2 is a similar view to Fig. 1, 3° but shows the guide-tracks of the hanger applied in a different manner. Fig. 3 is a detail in elevation showing in face view one of the guide-tracks and one of the coöperating roller-supporting heads. Fig. 4 is an edge 35 elevation of the parts shown in Fig. 3, and Fig. 5 is a horizontal section on the line  $x^5 x^5$ of Fig. 3.

The numeral 1 indicates the window-frame, and the numeral 2 the window-sash.

The numeral 3 indicates an ordinary window-shade which is mounted on a roller 4 of ordinary construction having at one end a round trunnion 5 and at its other end a flattened trunnion 6, the latter of which is sub-45 ject to a spring within the roller, which parts are all of ordinary or standard construction.

The numeral 7 indicates channel-like guidetracks, the flanges 7° of which are turned inward to form a sheath having a longitudinal

slot between the inbent flanges. At their 50 lower ends below their inturned flanges 7a the guide-tracks 7 are bent to form transverselyextending cylindrical seats 8 and are further perforated at 9. The upper ends of said tracks 7 are bent U-shaped to afford supports 55 for guide-sheaves 10, and the downturned ends thereof are turned to form cylindrical seats 11, similar to the seats 8 at the lower ends thereof. The said upper ends of the guide-tracks 7 are also provided with perfo- 60 rations 12, which correspond to the perfora-

tions 9 in the lower ends thereof.

The guide-rails 7 are thus adapted to be secured to the flat inside facing of the windowcasing by means of screws 13 passed through 65 the perforations 9 and 12 thereof and screwed into the casings, as shown in Fig. 1, and they are also adapted to be secured to the inner edges of the casing by means of screws 13 passed through the sleeve-like seats 8 and 11 thereof, 70 as shown in Fig. 2. The trunnions of the roller 4 are seated in the projecting flanges of vertically-adjustable supporting-heads 14, that are provided with reversely-bent flat feet 15 and laterally-bent ears 16. The heads 14 are pref- 75 erably formed from flat pieces of metal bent to the form illustrated in the drawings, the feet 15 thereof being formed by slitting the inner edge of the plate and bending the slit sections alternately first in one direction and then in 80 the other, as best shown in Figs. 3 and 5. The feet 15 of the heads 14 work freely in the slotted channel afforded by the back and inturned flanges 7<sup>a</sup> of the guide-track 7. The perforation in one of the heads 14 is made 85 round to fit the round trunnion 5 of the roller 4, while the perforation 17 in the other head 14 is elongated, so as to fit and prevent turning of the flat trunnion 6 of the said roller, as best shown in Fig. 4.

The numeral 18 indicates a draw-cord, which is adapted to be held in various adjustments by a gripping device, shown as consisting of the clamping-plate 19 and a coöperating clamping-lever 20 pivoted thereto. The 95 clamping-plate 19 is shown as secured to one side of the window-frame, and the depending end of the lever 20 is provided with a perfo-

ration through which the lower end of the cord 18 is passed. The upper end of the cord 18 is provided with branch cords 21, the ends of which are attached one to the ear of each head 14. Both branches 21 work over a guide-sheave 10 of the right-hand guide-rail, and the longer of the two branches works also over the guide-sheave 10 of the left-hand rail.

A person wishing to raise or lower the shade bodily first pulls inward on the lower end of the cord 18, so as to release the same by imparting a pivotal movement to the lever 20. Then, of course, by pulling on the cord or releasing the same the curtain is raised or lowered bodily any desired extent at the will of

The device described is of extremely small cost, may be very quickly applied in working position, and is easily operated.

What I claim, and desire to secure by Letters 20 Patent of the United States, is as follows:

The combination with the vertical guides 7 having the inturned flanges 7<sup>a</sup>, bent at both ends to form cylindrical seats, and bent at their upper ends to form **U**-shaped sections, <sup>25</sup> of guide-sheaves 10 journaled in said **U**-shaped sections, guide-heads 14 having laterally-bent feet working in the channels of said guides, and cords attached to said heads and working over said guide-sheaves substantially as de- 3° scribed.

In testimony whereof I affix my signature in

presence of two witnesses.

JOHN C. FORSBERG.

Witnesses:

A. A. ANDERSON, O. H. WESTBERG.