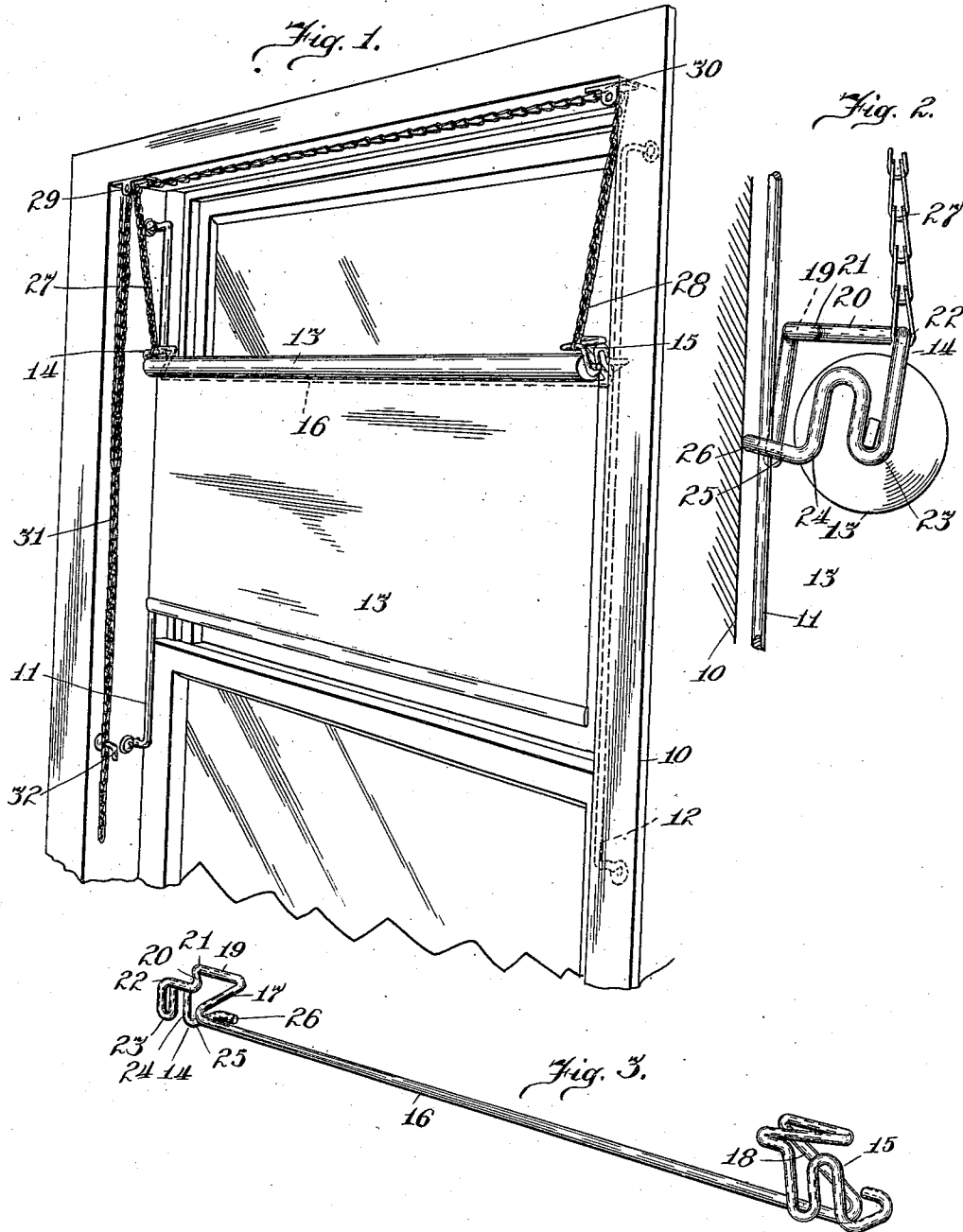


D. H. HARNLY.
ADJUSTABLE WINDOW SHADE.
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991,060.

Patented May 2, 1911.



Witnesses
Milton Lenoir
E. M. Klatches

Inventor
David H. Harnly
By *Gilson & Gilson*
Attorneys

UNITED STATES PATENT OFFICE.

DAVID H. HARNLY, OF AUSTIN, ILLINOIS.

ADJUSTABLE WINDOW-SHADE.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, DAVID H. HARNLY, a citizen of the United States, and resident of Austin, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Adjustable Window-Shades, of which the following is a specification, and which are illustrated in the accompanying drawings, forming a part thereof.

10 The invention relates to that type of adjustable window shades, and the mechanism for controlling the same, wherein the shade roller is supported by cables or chains running over sheaves or rollers at the top of the window casing, and may be bodily raised and lowered.

The object of the invention is to provide a cheap yet efficient carrier for the shade; and the invention consists in the structure hereinafter described and illustrated in the accompanying drawings, in which—

Figure 1 is a detail perspective of a window with the improved shade applied thereto; Fig. 2 is a detail vertical section through one side of the window casing, showing an end elevation of the shade and its carrier; and Fig. 3 is a perspective of the shade carrier.

There is shown in the drawings a window casing 10, to the stile faces of which are applied vertical rods 11, 12, for guiding the shade carrier. The shade is represented at 13, and is of the ordinary spring roller type known to the trade as the "Hartshorn" roller.

35 The carrier for the shade comprises a pair of brackets, generally designated by the numerals 14, 15, the two being preferably wrought of a single piece of wire, the intermediate portion 16 of which serves as means for rigidly uniting the two brackets, and, being bent adjacent its ends, as shown at 17, 18, also provides for an adjustment of the device to adapt it to window openings of various widths. The two brackets being alike but one need be described.

From the upper end of the section 17 of the body portion of the wire of which the carrier is formed, the wire is continued outwardly or substantially parallel with the axis of the shade a short distance, as represented at 19, and then curved forwardly and inwardly a short distance, as shown at 20, thereby forming a shoulder at 21. From the end of the section 20 the wire is again bent outwardly, as shown at 22, and then looped

downward, as shown at 23, to form a seat for the stud of the curtain. From the upper end of the loop 23 the wire is again bent downwardly, as shown at 24, and then backwardly, as shown at 25, and its extreme end is turned inward, as shown at 26.

When the carrier is in position for use the end section 26 lies back of the vertical plane occupied by the central section 16, and also back of the shoulder 21. The section 22 is approximately over the axis of the curtain when the studs of the latter occupy the loops 23. Supporting chains or cables 27, 28, lead from the bracket sections 22 over sheaves located at 29, 30, at the upper corners of the window casing, and thence downwardly at one side of the casing, and preferably being united into a single chain, as shown at 31, which serves as the pull for raising and lowering the shade carrier, any suitable means, such as a hook 32, being fixed to the window casing for engaging the links of the chain to hold the shade in the position to which it may be adjusted. The rods 11, 12, lie between the shoulder 21 and the end section 26 of the wire of which the bracket is made, the one being forward and the other back of the rods.

The shade carrier being suspended from a point approximately in line with the axis of the shade, the carrier will travel freely upon the rods 11, 12, without binding. As the shade in unrolling leaves the roll at its rearward side and the strain of unrolling being back of the point from which the carrier is suspended, it tends to tilt the lower portion of the carrier outwardly, thus binding the shoulder 21 and the section 26 against the rod and firmly holding the carrier against movement, thus overcoming one of the serious objections to adjustable window shades. The connecting member 16 of the carrier being substantially in the same horizontal plane as the axis of the curtain, affords a guide for the free end of the curtain as it is rolled up and a stop for limiting its upward movement when the curtain stick makes contact with it.

The device is not only highly efficient but is very cheap of manufacture, combining few parts and requiring very little labor to work these parts to proper form.

Some of the advantages of the invention might be secured were the carrier to be made out of other material than wire. That is to say, the carrier would come within the scope

of the invention whatever material it might be made of, if the line of support were substantially in the vertical plane of the axis of the shade and the guide-rod were engaged
5 by lugs on the carrier adapted to grip the rod under the influence of the strains incident to unrolling the shade. I prefer a carrier made of wire, however, as being cheap and simple of manufacture, sufficiently
10 rigid, and also as being neat and durable.

I claim as my invention—

1. In an adjustable window shade, in combination, a pair of rigidly united brackets providing sockets for the end studs of a
15 window shade, a support for the brackets applied thereto approximately on the vertical plane of the shade axis, vertical guide-rods, and lugs on the brackets and located

back of the plane of the support and engaging respectively the front face only and rear
20 face only of the rods.

2. In an adjustable window shade, in combination, a pair of brackets wrought of a single piece of wire and having sockets for shade studs, support-attaching members
25 above and in line with the sockets, and guide-rod engaging sections back of the sockets and at different elevations and in different vertical planes, the upper rod-engaging sections being in advance of the lower
30 ones.

DAVID H. HARNLY.

Witnesses:

LOUIS K. GILLSON,
E. M. KLATCHER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
