

No. 652,731.

Patented June 26, 1900.

D. F. McCARTY.
WINDOW SHADE ADJUSTER.

(Application filed Oct. 7, 1898.)

(No Model.)

Fig. 1.

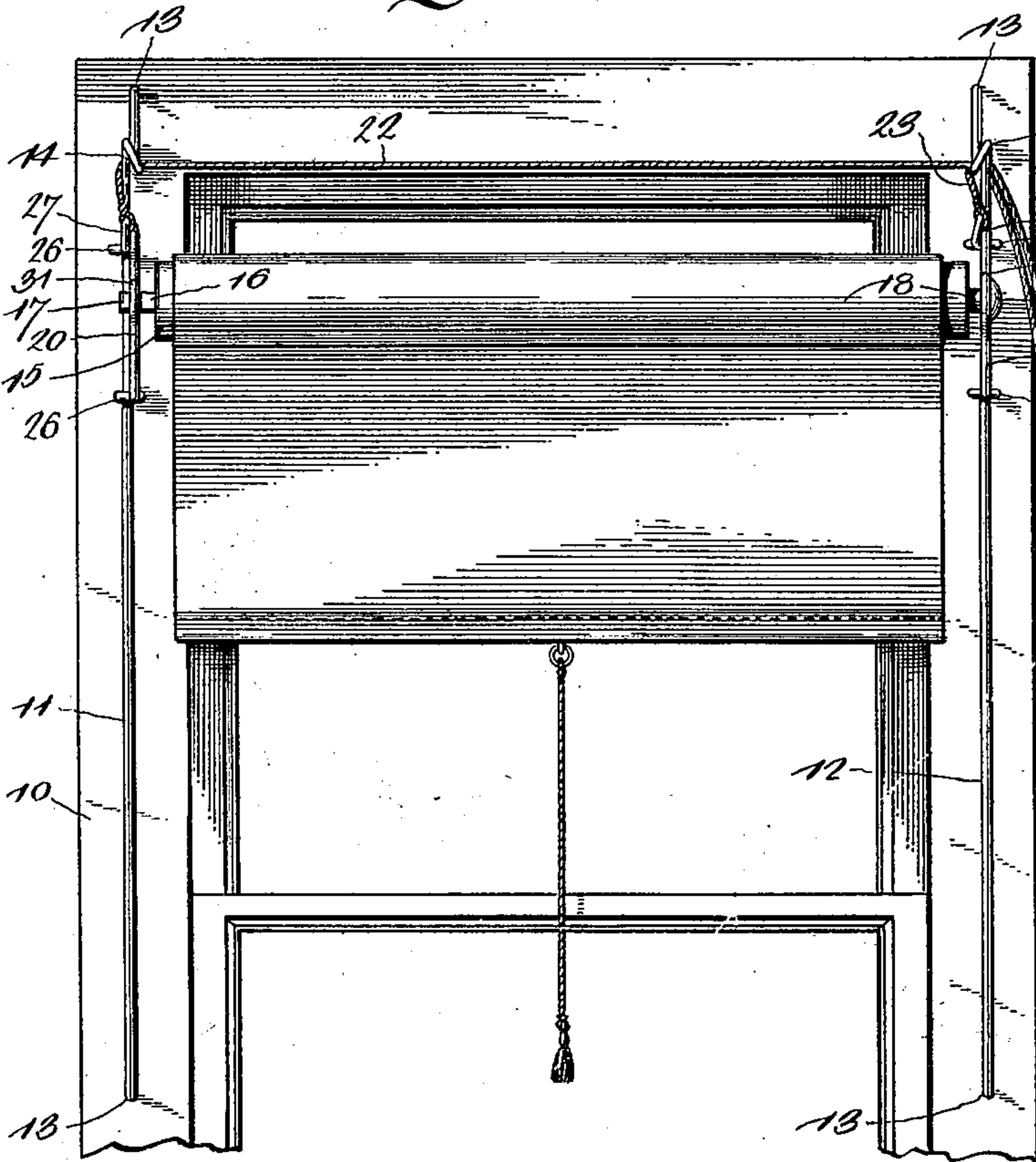


Fig. 2.

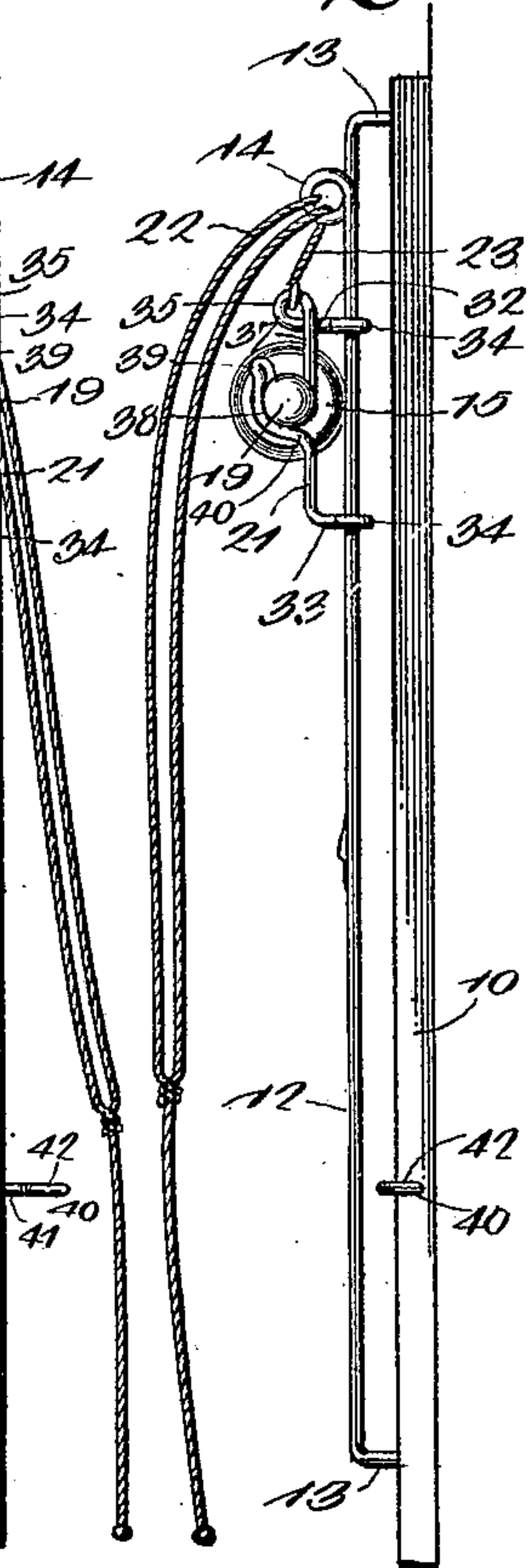


Fig. 3.

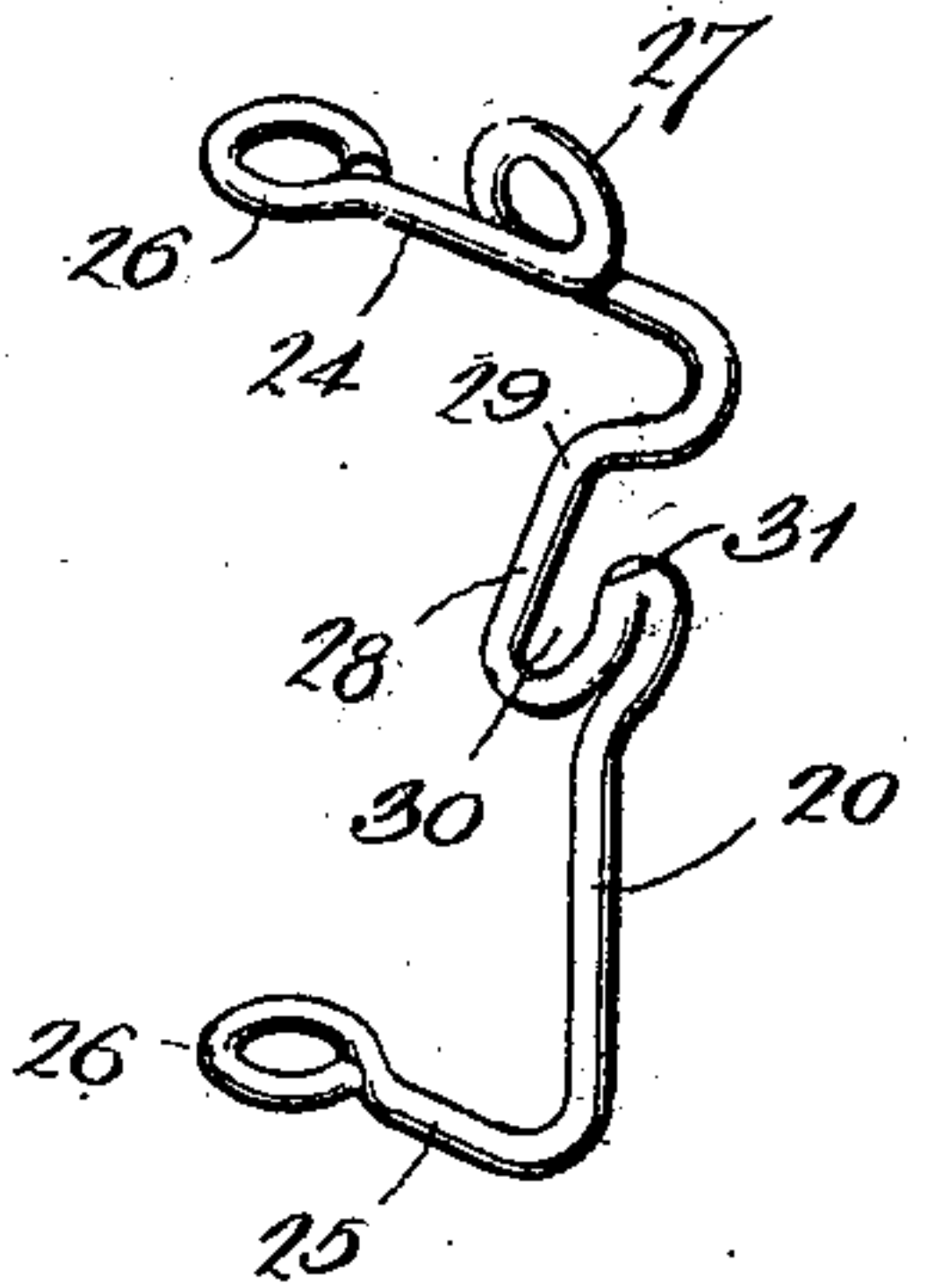
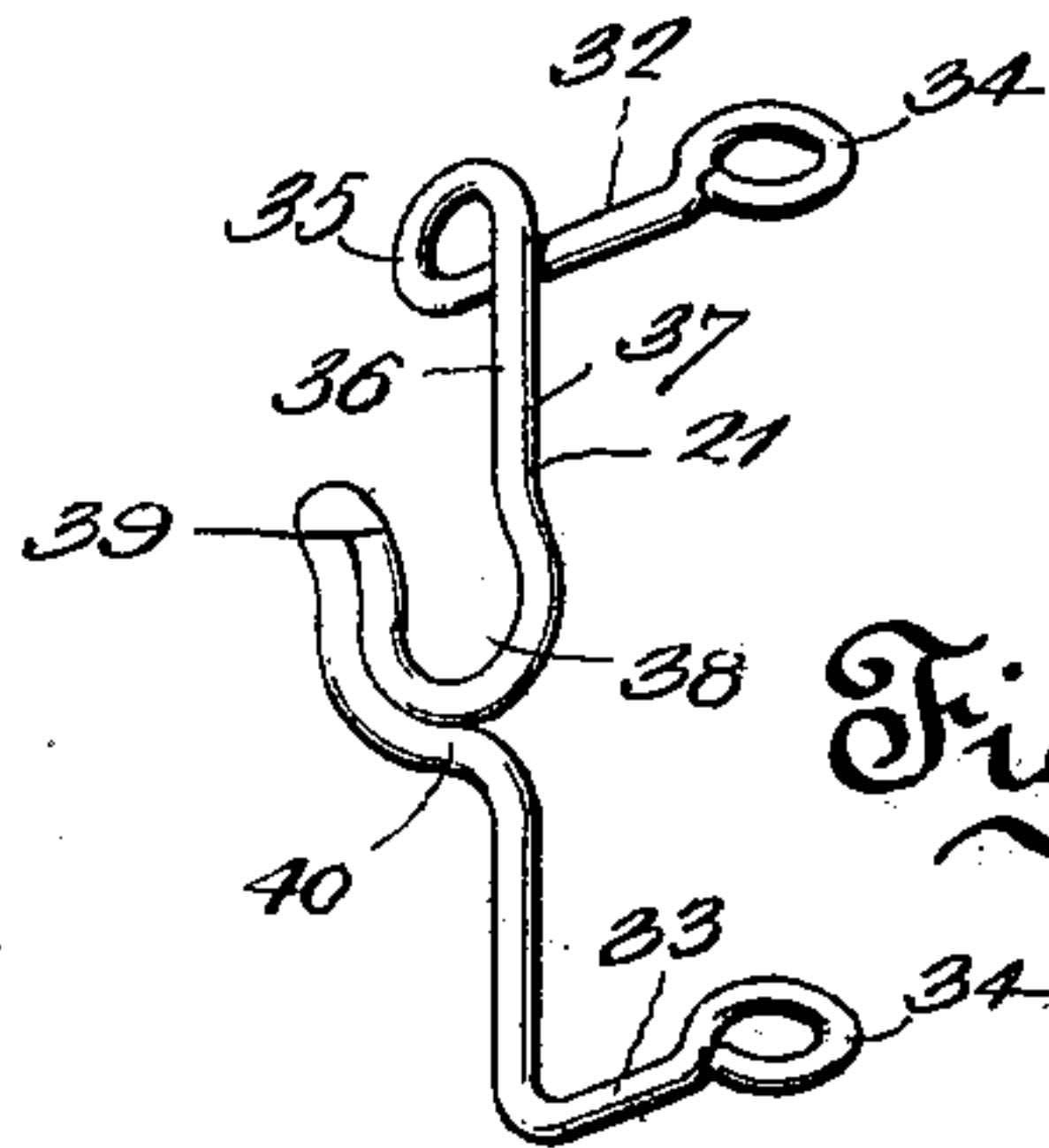


Fig. 4.



Witnesses

J. Frank Culverwell.

By his Attorneys.

H. J. Berukoff

David F. McCarty, Inventor.

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

DAVID FINLEY McCARTY, OF ZANESVILLE, OHIO.

WINDOW-SHADE ADJUSTER.

SPECIFICATION forming part of Letters Patent No. 652,731, dated June 26, 1900.

Application filed October 7, 1898. Serial No. 692,923. (No model.)

To all whom it may concern:

Be it known that I, DAVID FINLEY McCARTY, a citizen of the United States, residing at Zanesville, in the county of Muskingum and State of Ohio, have invented a new and useful Window-Shade Adjuster, of which the following is a specification.

My invention relates to improvements in adjustable window-shade fixtures of that class wherein a pair of brackets are slidably fitted to guide rods or wires and are adjustable simultaneously by a branched cord; and the purpose of the invention is to provide an improved construction of the brackets by which they are adapted to frictionally clamp and retain the shade-roller against accidental separation, and thereby dispense with means for confining the shade-roller journal and its spindle in the brackets.

With these ends in view the invention consists in the novel construction and arrangement which will be hereinafter fully described and claimed.

To enable others to understand the invention, it is illustrated in the accompanying drawings, forming a part of this specification, and in which—

Figure 1 is a front elevation of a shade-fixture embodying my improvement. Fig. 2 is a side elevation. Fig. 3 is a detail perspective view of one of the wire brackets which receives the angular end or tenon of the roller-spindle. Fig. 4 is a perspective view of the other bracket, which is constructed to receive the rounded journal of the shade-roller. Fig. 5 is a detail perspective view of a spring-clamp for holding the adjusting-cord.

Like numerals of reference denote like and corresponding parts in each of the several figures of the drawings.

An ordinary window-casing is indicated by the numeral 10. To opposite sides of this casing is applied the vertical guide rods or wires 11 12, each of which is provided with short arms 13, which are secured firmly to the casing. The guide-rods are further provided with the eyes 14, which are produced by bending or looping the rods or wires upon themselves near the upper ends thereof, and these eyes 14 lie in the same horizontal plane across the head of the casing 10 to provide for the passage therethrough of the adjusting-cord.

My fixture contemplates the employment of an ordinary spring shade-roller 15, which is equipped with a spindle 16, having its angular end 17 arranged to project beyond one end of the roller 15. A cylindrical journal-pin 18 is secured firmly to the opposite end of the shade-roller, and said journal-pin has an enlarged head 19, which prevents endwise movement of the roller and displacement of the journal 18 from its bracket. The protruding end of the spindle and the journal-pin which form parts of the shade-roller 15 are fitted in the slidable brackets 20 21, respectively, and with these brackets are connected the branches 22 23 of the adjusting-cord, said branches being passed through the eyes 14 of the guide rods or wires and united together into a single strand which depends at one side of the window-casing, so as to be within convenient reach of the operator.

The brackets of my invention are peculiarly constructed of spring-wire to retain the spindle and journal of the shade-roller securely in place against accidental disconnection, and each spring-wire bracket is constructed with a yieldable clamp which prevents the part of the shade-roller which is fitted in said bracket from working loose or out of place. The bracket 20, which accommodates the angular end of the roller-spindle, is bent from a single piece of wire to produce the upper arm 24, the lower arm 25, and the inclined shank 28. The arms 24 25 have their free ends bent to produce the eyes 26, by which the bracket may be slidably fitted on one of the guide rods or wires, and the upper arm 24 is furthermore provided with an eye 27, to which may be secured one branch of the adjusting-cord. The inclined shank 28 is bent downward from the arm 24, as at 29, and then this shank is bent in an inclined direction to form the elongated eye 30, after which the wire is bent into the hump 31, which lies opposite to the open end of the eye, and finally the wire is recurved upon itself and extended to join the lower arm 25. The other bracket 21, which receives the rounded and headed journal of the shade-roller, is also bent from a single piece of elastic wire. This bracket 21 has the upper and lower arms 32 33 formed with the guide-eyes 34 to slidably fit upon one of the guide rods

or wires, and the upper arm 32 is looped at 35 to receive one strand of the adjusting-cord. The shank 36, which lies between the arms of the bracket 21, is carried from the upper arm 32 in a straight line at 37 for a suitable distance, and said shank is then curved into the rounded bearing 38, is then bent into the hump 39, which is located opposite to the open part of the rounded bearing, and is finally recurved upon itself, as at 40, before it is joined with the lower arm 33. The hump 31 in the bracket 20 produces a contracted portion at the entrance to the elongated eye 30 of the bracket, and in adjusting the roller to or disconnecting it from the bracket 20 the polygonal end of the spindle is adapted to ride with considerable force or pressure against the hump 31 to expand the bracket sufficiently for the spindle to pass the hump. The hump 31 prevents the end of the spindle from accidental lifting out of the bracket, and the elongated eye 30 of said bracket is adapted to clasp or hug the polygonal end of the roller-spindle, so as to hold the latter firmly in engagement with the bracket. The hump 39 of the other bracket 21, which contains the rounded bearing 38 for the journal of the shade-roller, also serves to partially close the entrance to the bearing 38, so that on the introduction or removal of the roller-journal 18 it is caused to bind against the hump 39 and press the latter to expand the entrance to the bearing 38. The hump at the mouth of the rounded bearing obviates displacement of the roller-journal in an upward direction, and the head of said journal limits the endwise movement of the roller when it is properly fitted to the brackets. To apply the fixture to a window, the brackets 20 21 are fitted to the guide rods or wires 11 12 and the latter are secured firmly to the casing. The shade-roller is fitted to the brackets by forcing the polygonal end of its spindle into the elongated eye of the bracket 20 and the headed journal into the rounded bearing of the bracket 21. The branches of the cord are passed through the eyes 14 of the guide-wires and fastened to the eyes or loops of the roller-brackets, and this branched cord may be adjusted to raise or lower the roller and shade to any desired height to exclude the light or to ventilate the room. The roller has its spindle held or confined against displacement by frictional engagement with the walls of the elongated eye, while the journal of the roller is free to rotate in the rounded bearing 38 below the inward bend or hump 39. The inward bends or humps of the two brackets prevent the spindle and journal of the roller from disconnection from the brackets and

they obviate the employment of devices for holding the roller in place in the brackets.

Changes may be made in the form of some of the parts, while their essential features are retained and the spirit of the invention embodied. Hence I do not desire to be limited to the precise form of all the parts as shown, reserving the right to vary therefrom within the limits of the appended claim.

I employ a clamp 40, which is to be attached to one side of the window-casing in a position convenient to receive the shade-adjusting cord, and this clamp is constructed to frictionally confine the cord within itself, so as to obviate the necessity for tying the cord to or wrapping it around a fastener for the purpose of holding the shade at the desired elevation. As shown by Fig. 5, the clamp is bent preferably from a piece of wire to form a stiff stem 41, and is then bent to form the clasp 42, which lies at right angles to the stem, and has a throat adapted to receive the cord between the members of the clasp. The stem may be fastened to the window-casing in any preferred way, and the clasp stands off or away from the casing, so that the operator may readily thrust the cord into the clasp or withdraw it from said clasp, according as it is desired to adjust or suspend the shade.

Having thus described the invention, what I claim is—

In a window-shade fixture, the combination with guide-rods having their ends bent laterally to form attaching-arms and having their body portions bent intermediate the arms to form eyes, of a bracket for each rod, each of said brackets consisting of a spring-wire bent upon itself to form a spring-hook, one of which hooks is projected inwardly at its extremity to clamp a roller end therebelow, the ends of said wires being extended from the hook in opposite directions and then bent in the same direction to lie parallel and having eyes at their terminals disposed upon their respective guide-rods, the wire of one bracket being bent upon itself to form an eye extending over its hook and adapted to receive a cord, the wire of the other bracket being bent to form an eye lying at the rear of the hook of that bracket, and adapted to receive a cord, and cords connected with the eyes of the brackets and passed through the eyes of their guide-rods.

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

DAVID FINLEY MCCARTY.

Witnesses:

W. R. HUMPHREY,
W. J. MASSEY.