J. OSBORNE.

ADJUSTABLE WINDOW SHADE HANGER.

APPLICATION FILED MAR. 17, 1908.

919,630. Patented Apr. 27, 1909.

2 SHEETS—SHEET 1.

Fig. 1.

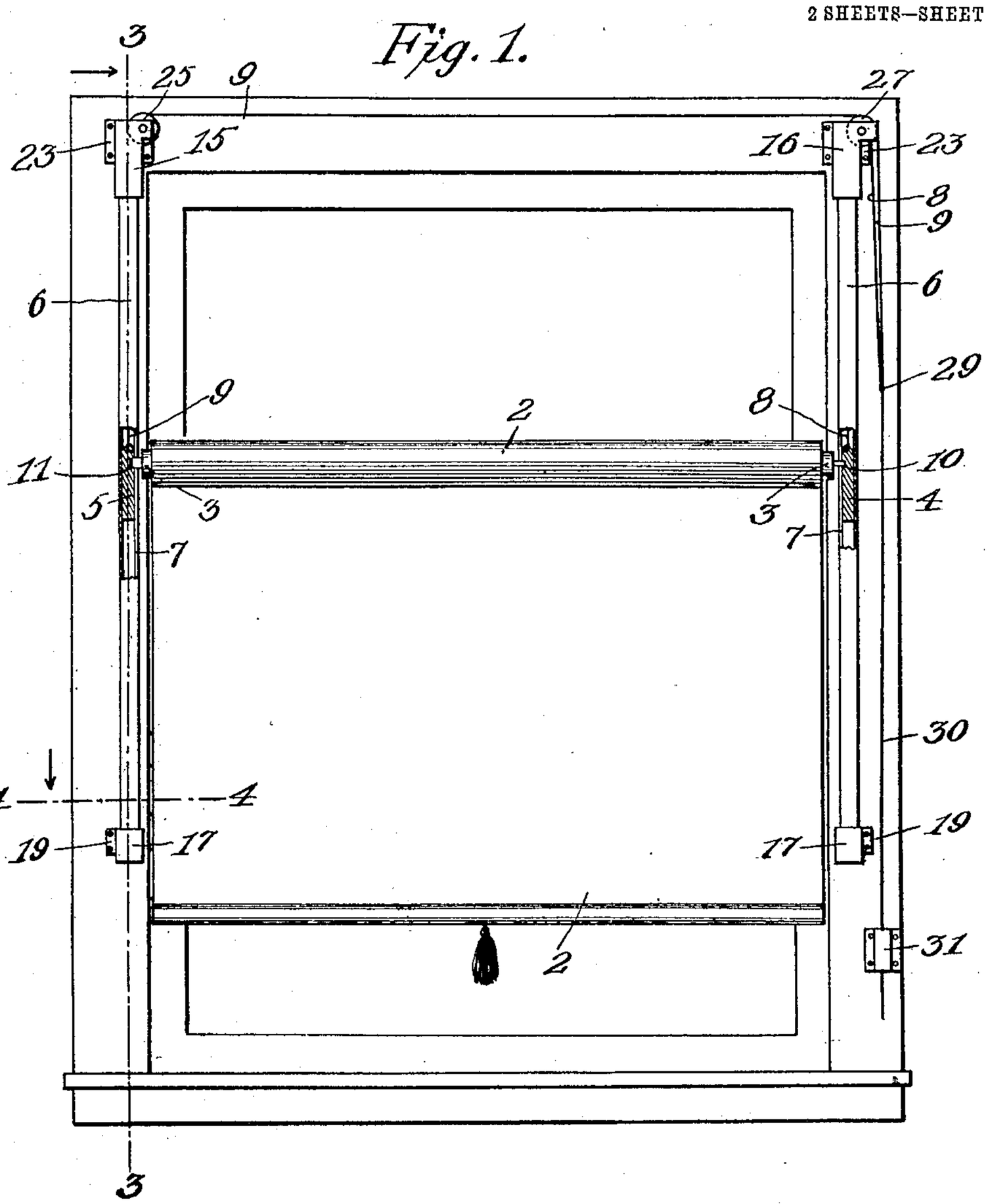
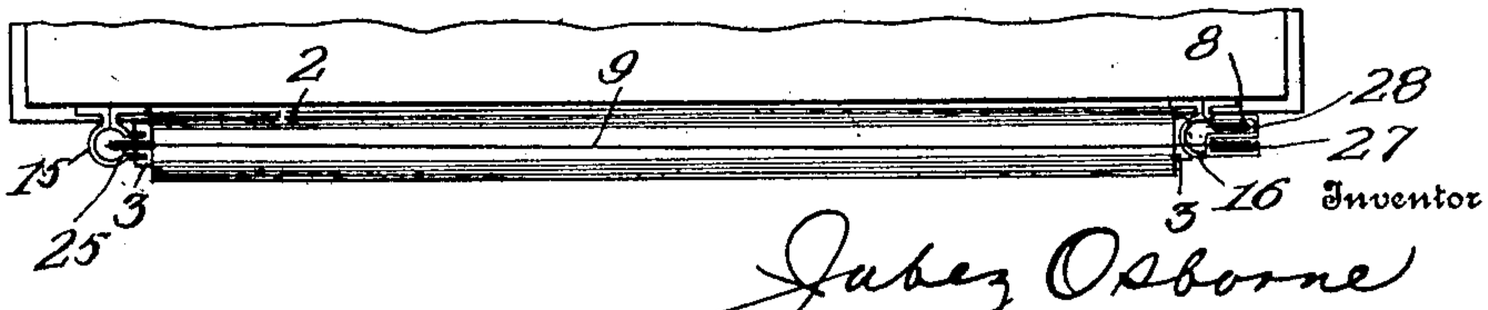


Fig. 2.



Witnesses

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2 SHEETS—SHEET 2.

Fig. 3.

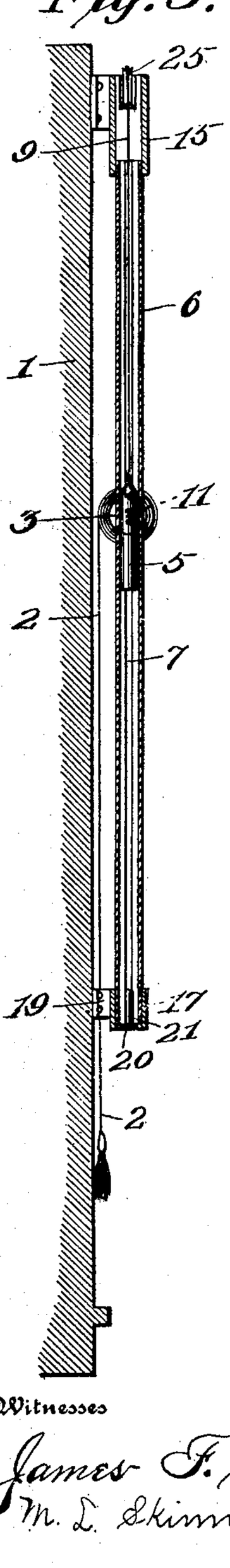


Fig. 4.

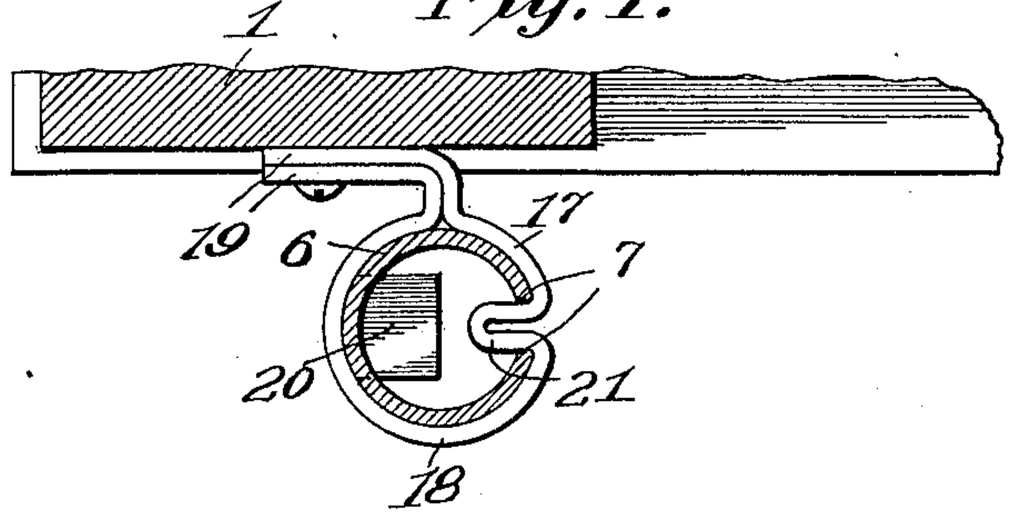


Fig. 5.

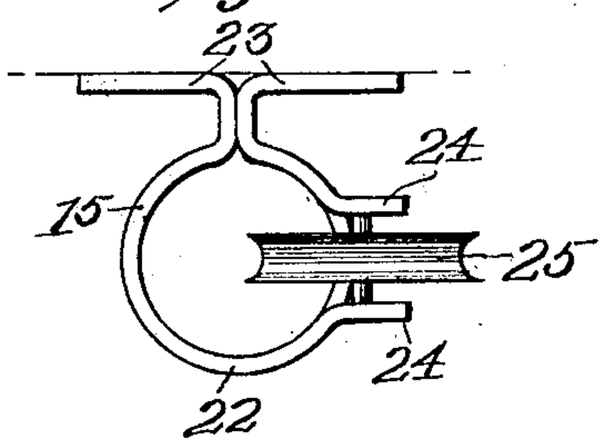


Fig. 6.

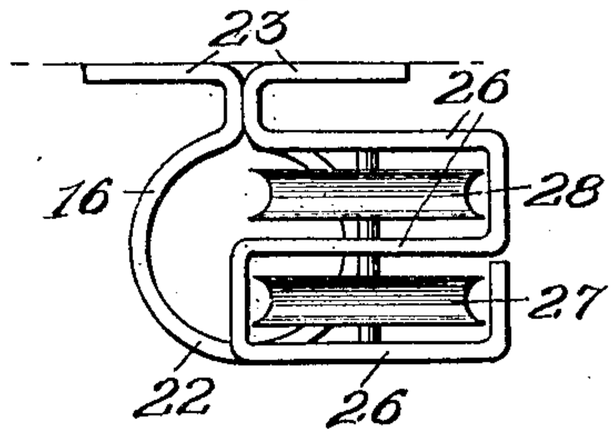


Fig. 7.

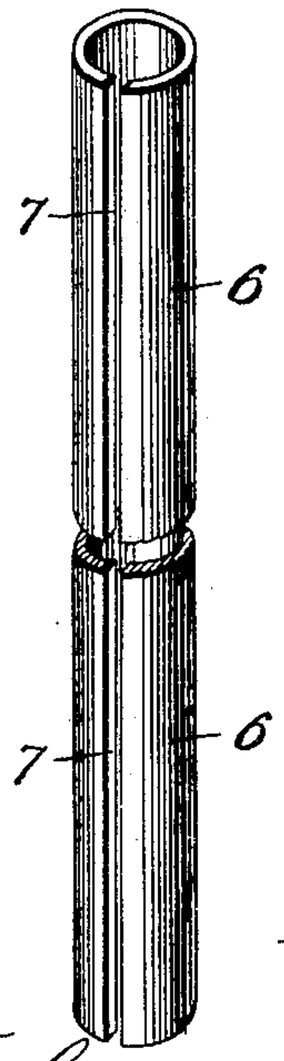


Fig. 8.

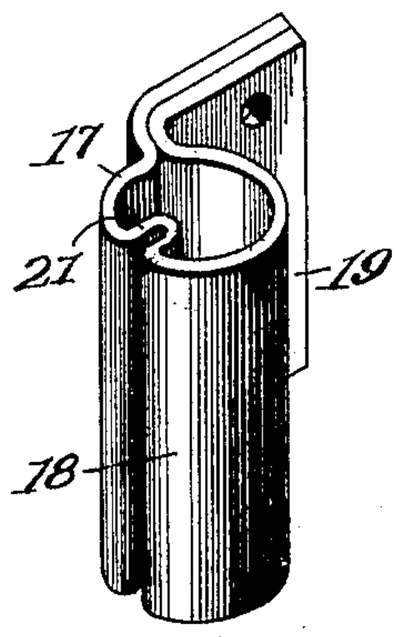


Fig. 9.

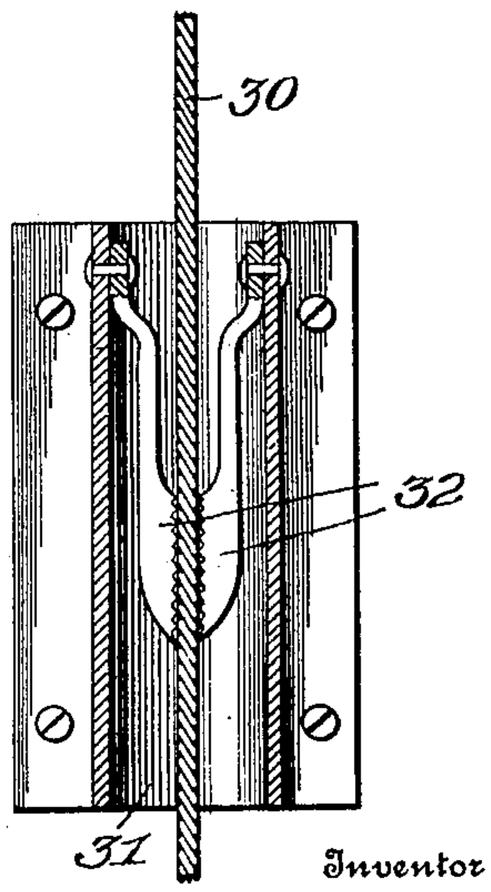
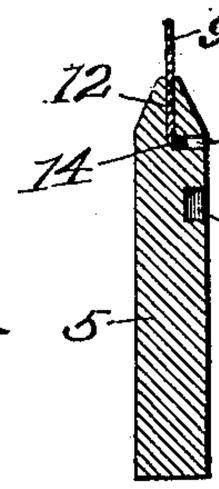


Fig. 10.



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UNITED STATES PATENT OFFICE.

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ADJUSTABLE WINDOW-SHADE HANGER.

No. 919,630. Specification of Letters Patent. Patented April 27, 1909.

Application filed March 17, 1908. Serial No. 421,738.

To all whom it may concern:

Be it known that I, JABEZ OSBORNE, a citizen of the United States, residing at Spokane, in the county of Spokane and State of Washington, have invented certain new and useful Improvements in Adjustable Window-Shade Hangers, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to improvements in window shade hangers and consists of the novel features of construction and the combination and arrangement of parts hereinafter fully described and claimed.

The principal object of the invention is to provide an adjustable hanger of this character which may be positioned at any desired elevation upon the window frame so that the shade will protect any portion of the window and leave the remainder exposed.

Another object of the invention is to provide a hanger of this character which will be simple, practical and inexpensive in construction, easy to apply to the window frame and to be adjusted thereon, and which will effectively support the shade roller.

The above and other objects of the invention are attained in its preferred embodiment illustrated in the accompanying drawings, in which—

Figure 1 is a front elevation, with parts in section, of my improved adjustable shade hanger showing it applied to a window; Fig. 2 is a top plan view of the same; Fig. 3 is a detail vertical section taken on the plane indicated by the line 3—3 in Fig. 1; Fig. 4 is a detail transverse section taken on the plane indicated by the line 4—4 in Fig. 1; Figs. 5 and 6 are detail views of the brackets at the top of the window frame; Fig. 7 is a detail view of one of the slotted guide tubes; Fig. 8 is a detail view of one of the brackets for supporting the guide tubes; Fig. 9 is a detail view of the cord fastener; and Fig. 10 is a section through one of the slides.

In the drawings 1 denotes a window frame and 2 a window shade mounted on the usual spring roller 3.

My improved shade hanger comprises two slides 4, 5 arranged for vertical movement in tubular guides 6 mounted upon the opposite sides of the window frame. The guides are preferably in the form of cylindrical tubes formed in their opposing faces with longitudinal slots 7 to receive the spindles of the shade roller 3. The slides 4, 5 are in the form of solid cylindrical rods adapted to slide freely within the guide tubes and to be adjustably suspended therein by cords 8, 9. In the slide 4 is formed a cylindrical socket 10 for the cylindrical spindle on one end of the roller 3 and in the other slide 5 is formed a rectangular socket 11 for the similarly shaped spindle on said shade roller. The cords 8, 9 are attached to the slide rods by passing their lower ends through vertical openings 12 formed in the tops of said slide rods and then out through transverse openings 13 which intersect the openings 12, said ends of the cords being knotted, as shown at 14, or otherwise enlarged to prevent them from being pulled out of the guide rods, as clearly shown in Fig. 10.

The guide tubes 6 are detachably mounted upon the window frame by engaging their upper ends with bracket members 15, 16 secured at the top of the frame 1 and their lower ends with supporting brackets 17 secured upon the sides of the frame 1 adjacent to its bottom. The brackets 17 are similar and each is preferably formed from a single piece of sheet metal by stamping and bending the same to provide a cylindrical socket portion 18 which receives the lower end of one of the guide tubes 6, superposed attaching flanges 19 formed with alined apertures to receive screws or other fastenings, an inwardly extending tongue or portion 20 disposed at the bottom of the socket 18 and adapted to serve as a stop to limit the downward movement of the guide tube 6 and an inwardly extending tongue or rib 21 formed by crimping the inner face of the cylindrical socket portion 18, said tongue 21 being adapted to project into the groove 7 in the guide tube 6 to prevent the latter from rotating, as will be seen upon reference to Figs. 4 and 7 of the drawings. The bracket members 15, 16 serve not only as holders for the upper ends of the guide tubes 6, but also as supports for guide pulleys over which the cords 8, 9 are passed, and each of said members is preferably formed from a single piece of sheet metal by stamping and bending the same to form a cylindrical socket portion 22 and oppositely projecting attaching flanges 23 apertured to receive screws or similar fastenings by means of which said bracket members may be secured upon the upper portion of the frame 1 with their cylindrical socket portions 22 in vertical alinement with the socket portions 18 of the brackets 17. It

will be noted that the socket portions 22 of the brackets 15, 16 are of greater length than the sockets 18 of the brackets 17 in order that the guide tubes may be readily removed from the window frame without removing any of said brackets. This is accomplished by sliding the guide tubes 6 upwardly into the brackets 15, 16 until the lower ends of said tubes may be swung to one side or away from the brackets 17 so that said tubes may be then lowered to disengage their upper ends from the brackets 15, 16. It will be understood that the socket portions of the upper brackets 15, 16 are of slightly greater diameter than that of the tubes 6 so that the lower ends of said tubes may be swung away from the brackets 17 without the upper ends of the tubes binding in said brackets 15, 16. By reversing the operation above described the guide tubes may be readily replaced in the brackets. This construction therefore permits the guide tubes to be quickly and easily applied to or removed from the window frame without disturbing the brackets. The bracket member 15 has the top of its socket portion cut and bent to form spaced inwardly projecting ears or lugs 24 between which is journaled a guide pulley 25 for the cord 9. The upper portion of the bracket member 16 is also cut and bent to provide spaced parallel portions 26 between which are journaled two guide pulleys 27, 28, the former of which is to receive the cord 8 and the latter of which is to receive the cord 9. The cord 9 extends across the upper portion of the window frame from the pulley 25 to the pulley 28 and the two cords 8, 9 extend downwardly from the pulleys 27, 28 and are united at 29 to a single operating cord 30. It will be seen that when the latter is raised or lowered the slides 4, 5 will be lowered or raised to position the shade roller 3 at any desired elevation upon the window frame so that its shade may protect or cover any portion of the window and leave the remainder exposed. This manner of adjustably mounting the hanger is exceedingly advantageous in offices, schools, etc., and also for the purpose of ventilation.

While I may provide any suitable means for fastening the lower end of the cord 30 so as to hold the slides 4, 5 in an adjusted position, I have shown a holding device or fixture consisting of a tubular casing 31 through which said cord passes and in which are arranged gripping springs 32. The casing 31 is constructed of sheet metal bent to form a cylindrical tube and oppositely projecting attaching flanges.

From the foregoing description taken in connection with the accompanying drawings it is thought that the construction, operation and advantages of the invention will be readily understood without a more extended explanation.

It will be noted that the invention is simple and practical in construction so that it may be produced at a small cost and is easy to apply, adjust and remove. It is also strong and durable and holds the shade roller securely in its adjusted position.

Having thus described my invention what I claim is:

1. The combination with a window frame, of upper and lower brackets secured upon each side of the frame, said brackets being constructed of sheet metal and having tubular body portions and integral attaching flanges, the latter being secured to the frame and said body portions being arranged in vertical alinement, the tubular body portions of the upper brackets being of greater length than the body portions of the lower brackets and being formed with integral bearing ears, pulleys journaled between the latter, longitudinally slotted guide tubes removably arranged in the body portions of the lower and upper brackets and having their slots disposed inwardly or opposite each other, the lower brackets having their body portions formed with tongues to enter the slots in said tubes to prevent the latter from rotating and being also formed with stops to limit the downward movement of said tubes in said brackets, sliding weights arranged in said tubes and formed with sockets to receive the spindles of a shade roller, cords attached to said sliding weights and extending upwardly through the tubes and over said pulleys, the free ends of the cords being united to a single operating cord arranged on one side of the frame, and means for fastening said operating cord to hold the sliding weights in adjusted position, substantially as shown and described.

2. The combination with a window frame, of upper and lower brackets arranged on opposite sides of the same, the lower brackets each being formed of a single piece of sheet metal bent upon itself to provide a tubular body portion and having its ends brought together and apertured to provide an attaching flange, a portion of said tubular body being crimped to provide a longitudinal extending and inwardly projecting tongue, the lower end of said tubular body being further provided with an inwardly projecting stop tongue, longitudinally slotted guide tubes removably arranged in said brackets, the lower ends of said tubes being adapted to enter the tubular body portions of the lower brackets and to rest upon said stop tongues and the slots in said tubes being adapted to receive the inwardly projecting longitudinal tongues in said body portions of the lower brackets, and means in said guide tubes for supporting a shade roller.

3. In a window shade hanger, the bracket 17 formed from a single piece of sheet metal by bending the same upon itself to provide

the tubular body 18 with the inwardly projecting tongue 21 crimped in one side of the same, and the inwardly projecting stop tongue 20 at its bottom, the ends of said plate being brought together and apertured to provide the attaching flange 19, for the purpose set forth.

4. In a window shade hanger, the bracket 15 formed from a single sheet of metal by bending the same upon itself at its center to provide a tubular body 15, the ends of said plate or sheet being brought together and then bent in opposite directions to provide the apertured attaching flanges 23, one end of said tubular body being slit and having the bearing tongues 24 bent outwardly from the same into parallel planes, and the pulley 25 journaled between said bearing tongues.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

JABEZ OSBORNE.

Witnesses:
CHAS. A. MCLEAN,
DWIGHT R. OSTRANDER.