No. 889,860. PATENTED JUNE 2, 1908.

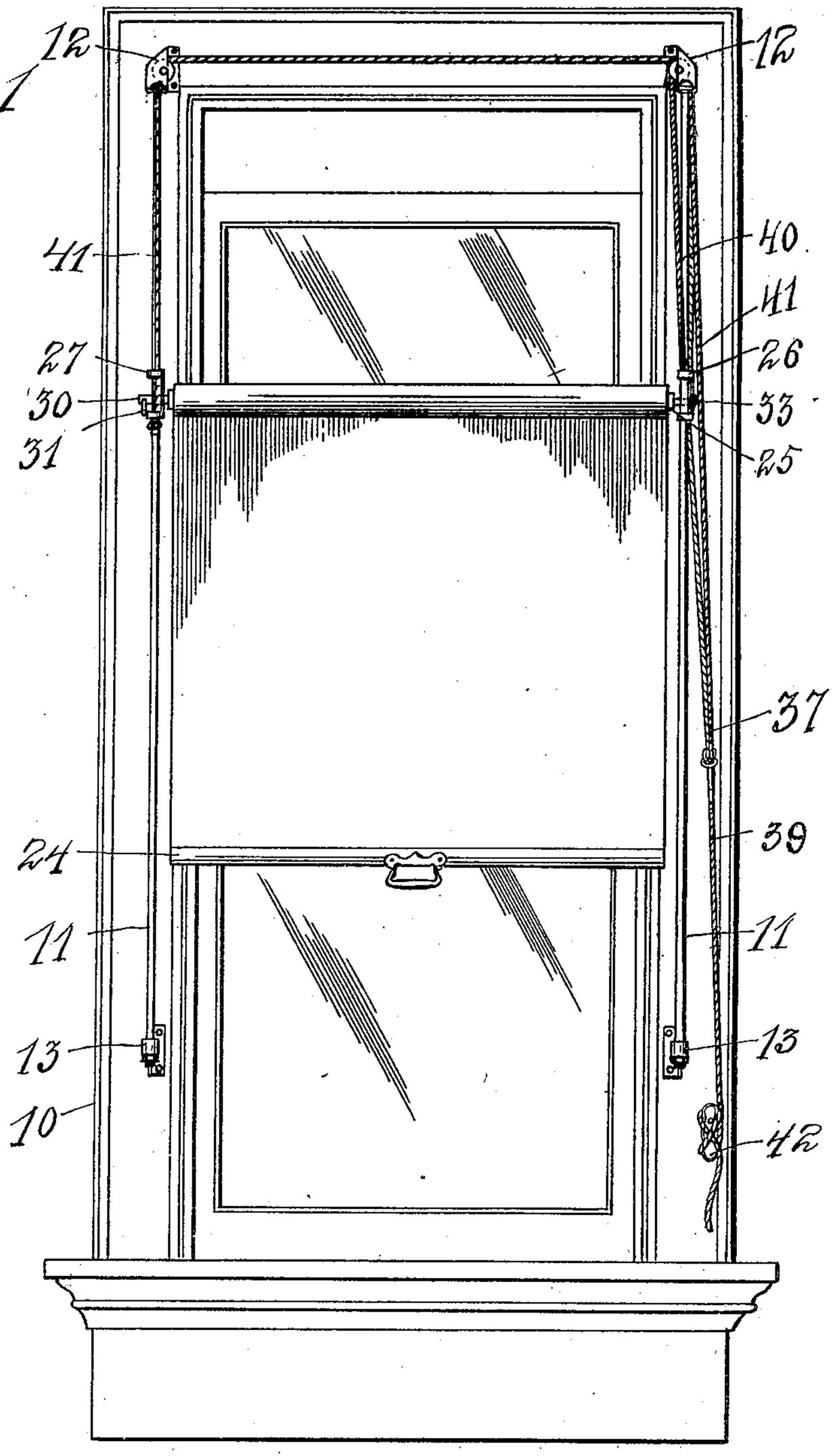
I. S. SHERWIN.

WINDOW SHADE HOLDER.

APPLICATION FILED MAY 31, 1907.

2 SHEETS—SHEET 1.

Fig 1



Witnesses

I. A. Elsworth.

A. W. Littell

Inventor

Isaac S. Sherwin

By I. Arthur Baldwin.

Attorney

No. 889,860. PATENTED JUNE 2, 1908.

I. S. SHERWIN.

WINDOW SHADE HOLDER.

APPLICATION FILED MAY 31, 1907.

2 SHEETS—SHEET 2.

Fig 2

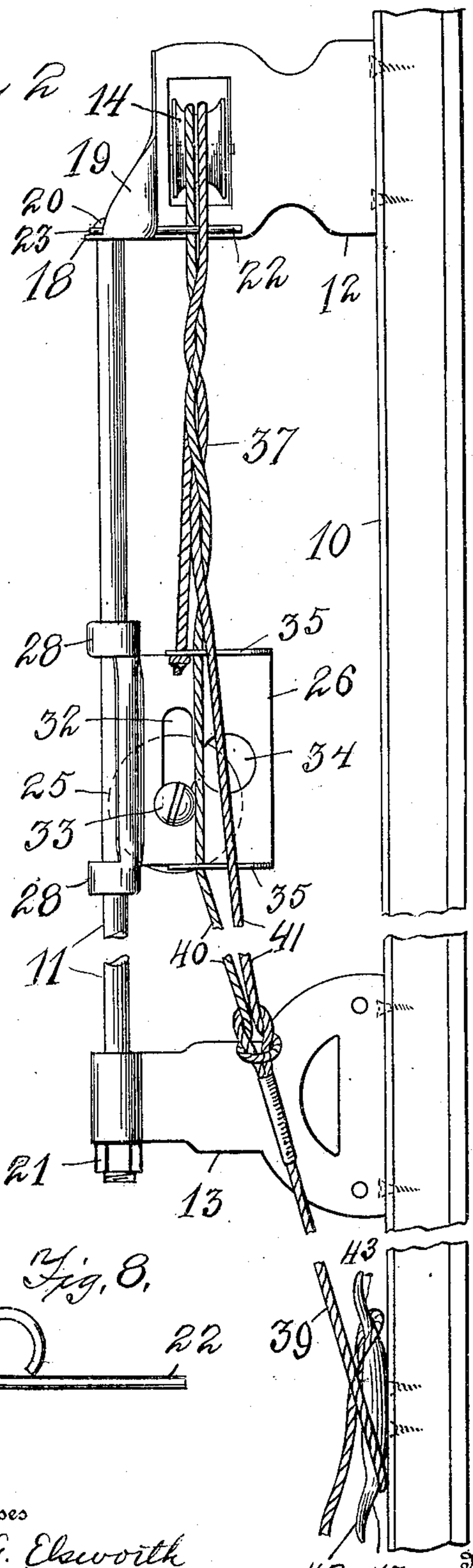


Fig. 3.

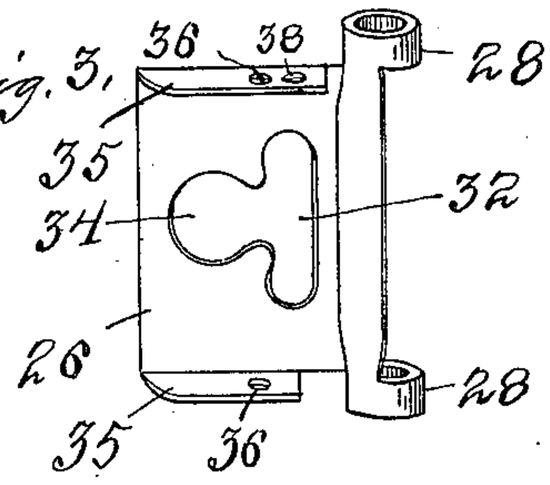


Fig 4

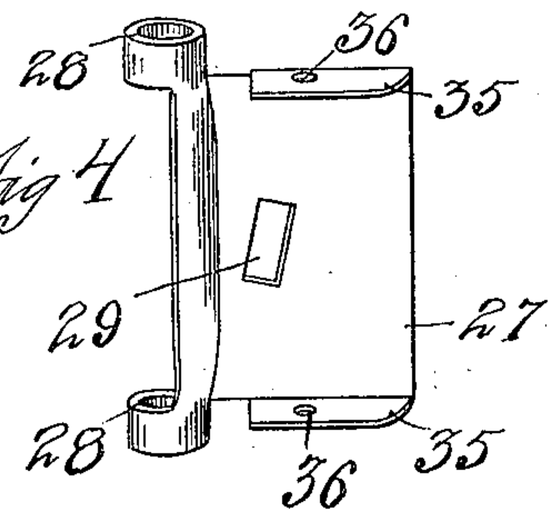


Fig. 5

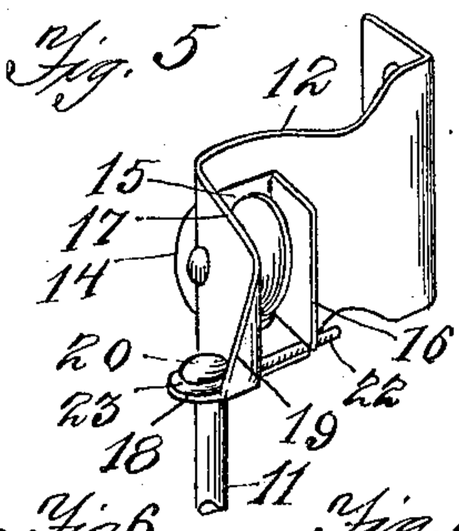


Fig. 6.

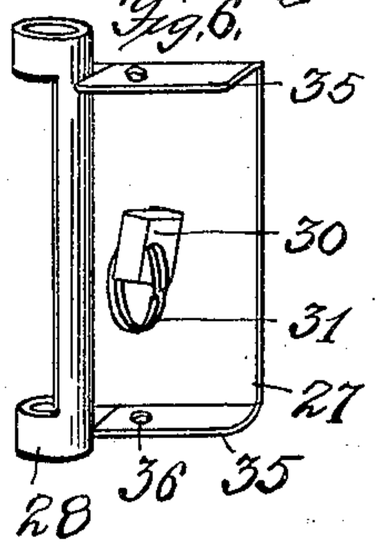


Fig. 7.

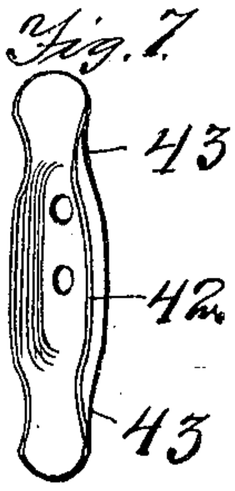


Fig. 8.

Witnesses

S. G. Elsworth

A. W. Pettit

Inventor

Isaac S. Sherwin

By S. Arthur Baldwin.

Attorney

UNITED STATES PATENT OFFICE.

ISAAC S. SHERWIN, OF PITTSBURG, PENNSYLVANIA.

WINDOW-SHADE HOLDER.

No. 889,860. Specification of Letters Patent. Patented June 2, 1908.

Application filed May 31, 1907. Serial No. 376,611.

To all whom it may concern:

Be it known that I, ISAAC S. SHERWIN, a citizen of the United States, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented new and useful Improvements in Window-Shade Holders, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

The invention relates to devices for adjustably supporting both the window shade and the shade roller at different elevations on the window frame so that the roller and shade may be adjusted at any desired height as to the window and the admission of light may thus be perfectly controlled.

The present construction is an improvement upon the construction shown in my Letters Patent No. 778,079 bearing date Dec. 20th, 1904; the matter hereinafter claimed is shown and described in divisional application, Serial Number 421,984.

The object of this improvement is to provide means for simplifying my former construction and adding thereto certain novel features which will be fully described in this specification and pointed out in the claims.

In the drawings, Figure 1 is a front elevation of a window frame provided with my improved window shade holder supporting a shade and roller mid-way of the frame. Fig. 2 is an enlarged side elevation of the same showing the improved arrangement of the cord and sliding fixtures, the central portion being broken away. Figs. 3 and 4 are perspective views of the sliding fixtures for supporting the respective ends of the shade roller on the side rods. Fig. 5 is a perspective view of the pulley bracket supporting the upper ends of the side rods. Fig. 6 is a perspective view of the sliding fixture and spur in the end of the shade roller showing the means of locking said spur in the fixture. Fig. 7 is a perspective view of the cleat or button for holding the lower end of the cord on the window casing. Fig. 8 is a detail of the separating pin for the cord.

Similar numerals refer to corresponding parts in the several views.

The numeral 10 indicates the window frame on which shade-roller-supporting rods 11 are vertically attached at each side in suitable brackets 12 at the top and 13 at the bottom. The metal rod 11 is inserted through suitable apertures in brackets 12 and 13 and is provided with a head 20 at the upper end and a thread and adjusting nut 21 at the lower end beneath lower bracket 13 so that the nut may be screwed tightly against the bracket 13 thereby holding the rod taut as it draws on upper bracket 12.

The brackets 12 are preferably struck out of sheet metal with an angular base through which suitable screws are inserted to hold the bracket on the casing 10. A pulley 14 is mounted in the opening 15 in the outer end formed by striking up the flange 16 therefrom to hold the side of the roller toward the casing, and bending the end in a parallel flange 17 on the outer end of the bracket 12. The lower edge of outer flange 17 is turned outwardly in a projection 18 the projection being strengthened by means of connecting support 19 which forms with projection 18 a hooded recess for the head 20 of rod 11, the rod extending down through a hole in projection 18.

A second hole is provided in the side flange 17 in the rear side of said hood and adjacent to head 20 through which a cord separating pin 22 is removably inserted, the rod 11 being inserted through the turned end 23 of pin 22 and when drawn down by the nut 21 on the lower end below lower bracket 13, the pin 22 is held firmly in place and extends out stiffly in the path of the double operating cords as hereinafter described. Pin 22 is only needed on the bracket 12 at the right side of the window. The left upper bracket 12 is formed the same as the bracket 12 on the right side, except that the pulley arrangement is turned in the opposite direction thereby making the two brackets adaptable to the right and left sides and turning the attaching flange inwardly on each bracket.

The window shade 24 is supported on spring roller 25 on fixtures 26 and 27, which fixtures are formed as shown in Figs. 3 and 4, and are slidably mounted on rods 11 through the tubular ends 28 on the upper and lower sides of said fixtures. The arrangement of the tubular ends 28 allow the fixtures to slide easily upon rods 11. Fixture 27 is made with a rectangular opening 29 to receive the squared spur 30 in the end of the spring roller 25; said spur 30 being inserted through hole 29 and a locking ring 31 is inserted through a hole in the end of spur 30 to lock the shade roller so that it cannot be with-

drawn endwise from fixture 27 without the removal of the spring locking ring 31.

Fixture 26 has a vertical closed slot 32 therein to receive the screw head 33 in the opposite end of shade roller 25 from that in which the spur 30 is inserted. The head of screw 33 is inserted through a recessed opening 34 in the side of slot 32 and is locked in slot 32 in the following manner. Flanges 35 are turned on the upper and under edges of fixture 26 and holes 36 are provided in said flanges through which the operator cord 40 slidably works. It is apparent that when the cord 40 is inserted through openings 36 it will draw across the mouth of the recess 34 through which the head of screw 33 is admitted to slot 32 the cord 37 will close said recess so that the screw 33 is locked within slot 32. It is apparent that the cord may easily be raised when loosened and screw 32 may then be admitted to recess 34 and removed from the fixture. Fixture 27 also has similar flanges 35 with holes 36 through which the end of the cord is inserted, the cord being knotted below fixture 27 as shown in Fig. 1.

The elevating cord is divided into two parts, a single strand or pull cord 39 and a double portion 37. My improved button or locking cleat 42 for the cord is pressed out of sheet metal with rounded ends 43 adjacent to the casing so as to easily compress the cord upon the casing. It is found that when drawn taut one turn about this form of a cleat holds the cord secure. It is also found that two screws are necessary to hold cleat 42 firmly in position so that the cleat cannot turn or give when the cord is pinched between the cleat and the casing.

The upper portion 37 of the elevating cord is attached to the single strand 39 by means of a hoop in the upper end of strand 39 and the doubled end of the part 37. Part 37 is doubled in order to provide the two strands 40 and 41 which are arranged as follows: Strand 40 passes through openings 36 in fixture 26 as above described and over pulley 14 in bracket 12 and then returns to bracket 26 attaching through hole 38 and ending in a knot on the under side of flange 35. The other strand 41 of part 37 of the elevating cord extends directly over pulley 14 alongside of strand 40 and across the window casing to the opposite bracket 12 and roller 14 and to the opposite fixture 27 on the opposite end of spring roller 25 from fixture 26, passing through flanges 35 and ending in a knot below the fixture as above described.

It is now apparent that both the fixtures 26 and 27 may be raised or lowered by means of the pull cord. The weight of the window shade and spring roller is sufficient to cause the same to drop down to any desired elevation when the cord is released and in order to elevate the shade, it is only necessary to pull downward upon the cord 39, thereby raising the two fixtures 26 and 27 with an exactly equal draw from the double cord.

It is found that the double strands 40 and 41 are apt to twist around one another as they work back and forth particularly when the window shade is dropped to the lower portion of the window and there is considerable length of the cords adjacent to one another. Accordingly the separating pin 22 is provided just beneath roller 14 as above described and strand 40 is placed upon one side and strand 41 on the other side of said pin thereby separating the two in their twisted condition and allowing the two cords to pass freely over the roller and separate on the opposite side of the roller. Without separating pin 22 the cord 41 was often drawn down toward fixture 26 by cord 40 and the draw of the two cords was uneven upon the opposite end of the window shade and consequently the window shade was drawn out of line with one end higher than the other. It is therefore obvious that pin 22 performs an exceedingly important office in separating the cords so that they may always draw evenly on the fixtures 26 and 27.

It will be seen that the form of the brackets and fixtures is such that they can all be struck from the sheet steel by means of suitable dies and their cost thus reduced to the minimum while their durability and strength are greatly increased.

I claim as new:—

1. A shade fixture bracket provided with a shade-cord pulley, and a cord separator arranged to extend between the shade cords to prevent twisted cords running on the pulley.

2. A shade fixture bracket having an attaching base or foot at one end, a projection at the opposite end of the bracket for supporting one end of a guide rod, said bracket having an opening and provided with laterally extending flanges forming the side walls of the opening, and a pulley in said opening and supported by said flanges, the flanges extending beyond the pulley to form guards at both ends thereof.

3. A shade fixture bracket having an attaching base or foot, said bracket having an opening and provided with laterally extending flanges forming side walls for said opening, a pulley in said opening supported by said flanges, the flanges extending beyond the pulley to form guards at both ends thereof, and a cord separator constructed to extend between the cords for preventing twisted cords running on the pulley.

4. A shade fixture bracket having an attaching base or foot at one end, said bracket having an opening and provided with laterally extending flanges forming side walls for said opening, a shade-cord pulley supported by said walls, the walls extending beyond the pulley to form guards at both ends thereof to

prevent shade-cords leaving the pulley, a cord separator extending through one of said walls and constructed to extend across the path of and between the cords, and a projection on one end of the bracket for supporting a guide rod.

5. A shade fixture bracket having an attaching base or foot at one end, an opening in the body of the bracket having laterally extending side walls, a pulley supported by said walls and the walls extending beyond the pulley to form guards at both ends thereof to prevent the cords leaving the pulley, a projection on one end of the bracket, a guide rod extending through said projection, and a cord separator engaging the rod and extending through one side wall and across the path of the cords.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ISAAC S. SHERWIN.

Witnesses:
I. A. ELSWORTH,
A. L. FURLOW.