## R. J. BETTS.

## WINDOW SHADE FIXTURE.

No. 378,079.
Patented Feb. 21, 1888.


WITNES历E厅. hillbsepowell. Camid Yedc.


# United States Patent Office. 

## ROBERT J. BETTS, OF MILTON, DELAWARE, ASSIGNOR OF ONE-HALF TO THOMAS A. CONNOLLY, OF WASHINGTON, DISTRICT OF COLUMBIA.

# WINDOW-SHADE FIXTURE. 

SPECIFICATION forming part of Letters Patent No. 378,079, dated February 21, 1888.
Application filed May 26, 1887. Serial No. 239,431. (No model')

To ail whom it maty concerra:
Be it known that I, Robert J. Betts, a citizen of the United States, residing at Milton, in the county of Sussex and State of Delaware, ments in Window-Shade Fixtures; and I do hereby declare the following to be a full, clear, and exact description of the invention, reference being had to the accompanying draw-which-
Figure 1 is a perspective, partly broken away, showing my invention. Fig. 2 is a perspective of roller and cord. Fig. 3 is a verti15 cal sectional view of the bracket and roller.

My invention has relation to shade-fixtures, and has for its object to provide a construction whereby, by the employment of a single cord in connection with a peculiarly-constructed bracket, a shade may be rolled up and down and held in any desired position.

- My invention consists in the peculiar construction and combination of parts, hereinafter fully described and specifically claimed.

Referring to the accompanying drawings, A represents the top piece of a window-frame to which my invention is applied.
$B$ represents a shade-roller, and C a shade attached thereto.
$D$ and $E$ are brackets in which the roller $B$ has its bearings, said brackets being secured to the frame-piece A. The bracket D may have any suitable bearing for the reception of the end of the roller B, or for a journal or pintra, in the end of said roller. I have illus trated said bracket $D$ as having a vertical slot, $d$, which is open at the top, but closed at the bottom, the journal or pintle being designed to rest upon the bottom of said slot. The bracket $E$ affords a bearing for the opposite end, $b^{\prime}$, of the roller B. Said bracket is formed with a vertical slot, F. Said slot is elongated and tapering, being widest at its top and narrowing as it descends. When the end $b^{\prime}$ of $F$ roller $B$ is in the lower portion of the slot F , it fills said lower portion and wedges or binds between the sides of the slot; but wihen it is in the upper portion of the latter it is free to revolve therein, there being ample space so left for that purpose.

G represents a cord which passes through
an opening, $f$, in the front of the bracket $E$, thence around the end $b^{\prime}$ of the roller, and thence through another opening, $f^{\prime}$, in said bracket $E$, passing thence downwardly back of the bracket $\mathbf{E}$ or between it and the board A, as shown, a slot or recess, $f^{2}$, being made in the back of the bracket for the passage of said cord.

In operation the cord is pulled by one of 60 its ends or pendants to revolve the roller in one direction, and is pulled by the other end or pendant to revolve said roller in the reverse direction. When the cord is so drawn upon or pulled, it in the first place elevates the 5 end of the roller out of the lower portion of the slot and then rotates the roller in the direction of the draft. Theshade may be wound on the roller either in front of the latter, as illustrated in the drawings, or back of the same, and in either case the cord will operate in the same way. Upon cessation of draft on the cord G the end of the roller will drop down in the lower portion of the slot $F$ and bind therein, the shade remaining at any position to which it has been adjusted. *
The construction described is very simple and comparatively inexpensive, while at the same time it is very effective and durable.

The brackets may be made either of wood or 80 of metal, and may be readily applied by unskilfull hands to the purpose for which they are designed. The threading of the cord throngh the openings $f f^{\prime}$ and its winding around the end of the roller may also be 85 readily done without difficulty or special skill.

If the shade should be heavy or weighted, the cord may be passed twice around the end of the roller in order to secure a better hold thereon; but if ordinary light shades be used it will be sufficient to have the cord pass once around the roller.
It will be noted that the cord passes directly around the end of the roller, and hence that no metallic pulley is required, thus permitting the fixture to be constructed at very slight expense.

What I claim as my invention is as follows:

1. A shade-fixture bracket, E, having a vertical conoidic slot, F, in its side, said slot ta- Iow pering as it descends, substantially as shown and described.
2. The combination, with shade roller $B$ and bracket E , having slot F and openings $f f^{\prime}$ above the roller $B$, of the cord $G$, passing through said openings and around the roller, 5 whereby a pull on the cord will raise the end of the roller, substantially as shown and described.
3. In window shades and fixtures, the combination, with the shade-roller and shade, of ro the cord $G$, passing over the end of the roller and through an opening or openings above the roller in one of the brackets, the end of
the roller fitting in a conoidic slot in the side of the bracket, and thereby preventing the roller from being turned by the pull of the 15 shade-weight.

In testimony that I claim the foregoing I have hereunto set my hand this 30th day of April, 1886.

ROBERT J. BETTS.
Witnesses:
R. Dale Sparhawk, Will H. Powell.

