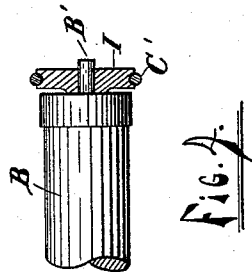
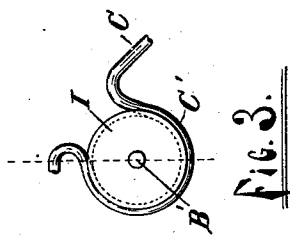
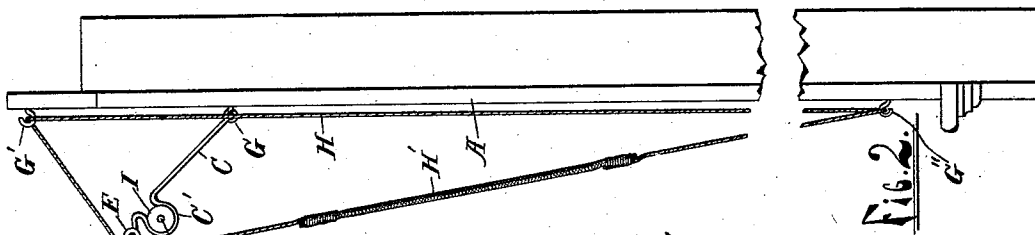
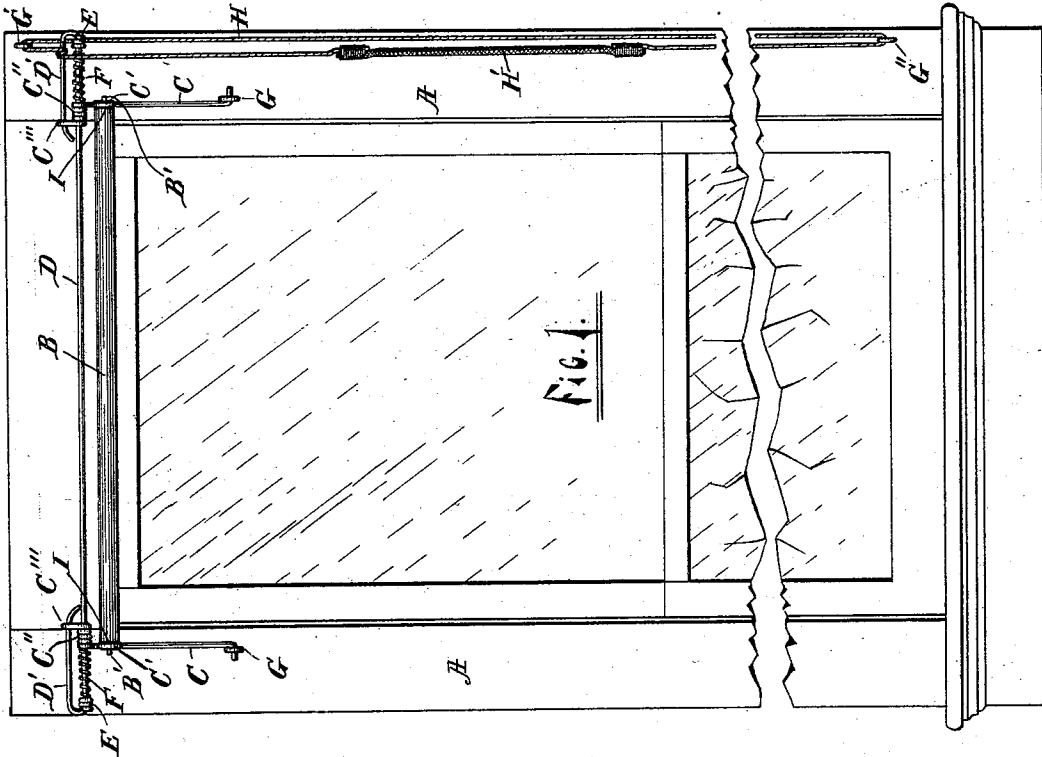


(No Model.)

C. B. CORBIN.
ADJUSTABLE WINDOW SHADE SHIFTER.

No. 522,557.

Patented July 3, 1894.



WITNESSES:

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UNITED STATES PATENT OFFICE.

CHARLES B. CORBIN, OF GRAND RAPIDS, MICHIGAN, ASSIGNOR OF ONE-HALF TO WILLIAM J. CORBIN, OF SAME PLACE.

ADJUSTABLE WINDOW-SHADE SHIFTER.

SPECIFICATION forming part of Letters Patent No. 522,557, dated July 3, 1894.

Application filed October 4, 1893. Serial No. 487,199. (No model.)

To all whom it may concern:

Be it known that I, CHARLES B. CORBIN, a citizen of the United States, residing at Grand Rapids, in the county of Kent and State of Michigan, have invented certain new and useful Improvements in Adjustable Window-Shade Shifters; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an adjustable window shade shifter, and its object is to provide the same with certain new and useful features, hereinafter more fully described and particularly pointed out in the claims, reference being had to the accompanying drawings, in which—

Figure 1 is a front elevation of a device embodying my invention; Fig. 2 a side elevation of the same; Fig. 3 an enlarged side elevation of the bearing for the end of the roll; and Fig. 4 a front view of the same, with the bearing in section.

Like letters refer to like parts in all of the figures.

A represents the casing of the window. G, G, are suitable eyes inserted in said casing at each side of the window and a short distance below the top of the same. Wire arms C are detachably pivoted to said eyes by bending said arms at right angles, and inserting them in the openings of said eyes *m*. At a suitable distance from said pivots to bring the curtain roll B near the top of the window when the arms are vertical, are U shaped loops C', which loops embrace and hold bearing blocks I having peripheral grooves engaged by said loops, and axial openings to receive the bearings B', B' of the curtain roll B. Said arms are extended beyond the loops C' and wound loosely around a rod D extending parallel to the curtain roll and beyond the ends of the same. To hold the arms in the same plane, said rod is provided with return bends D', forming loops or links at each end and in the same plane, across which the arms C are extended and turned around the outer portion of the loop.

E, E, are stops formed of wire coils secured

to the rod D against which stops abut the coiled springs F surrounding the rod D and abutting against the coil C'' of the arms C', C', and pressing said arms toward the ends of the curtain roll to retain the bearing B', B' thereof in place within the blocks I, I, and by yielding to permit of adjustment of the arms along the rod D to fit various lengths of curtain rolls.

To adjust and hold the curtain roll in various positions as the arms C are turned at various angles a hook G' is inserted near the top of the casing and above the described device and another hook G'' is inserted near the bottom of the casing and a cord H is attached to the outer portion of the loop D' and extended upward through the hook G' and thence downward through the hook G'', and thence back to the place of attachment to said loop. Said cord is also provided with an elastic portion H' to maintain strain on said cord to cause sufficient friction on the hooks G', G'' to hold the arms in any position that they may be adjusted and at the same time yield to afford the increased length required as said arms swing outward from the casing, carrying the point of attachment of said cord out of line with the hooks G', G''.

By springing the lower ends of the arms C inward they may be detached from the eyes G, G, and by stretching the part H' of the cord, said cord may be removed from the hooks G', G'', thus detaching the device from the window casing.

What I claim is—

1. In combination with a curtain roll, a rod having loops at each end, arms coiled around both parts of said loops and movable thereon, bearings attached to said arms to support said roll, and means for pivoting said arms to the casing of a window, and means for adjusting and holding said arms, substantially as described.

2. In combination with a curtain roll, a rod having loops at each end and in the same plane, arms secured to both parts of said loops and movable thereon, bearings attached to said rod to support said roll, means for pivoting said arms to the casing of a window, and springs on said rod pressing said arms

toward the ends of said roll, and means for adjusting and holding said arms, substantially as described.

3. In combination with a curtain roll, a rod
5 arranged parallel therewith, arms pivoted to the casing at one end and coiled around said rod and movable thereon, and having intermediate U shaped loops, and bearing blocks
10 having central openings engaging the bearings of said roll, and peripheral grooves engaging said loops, and means for adjusting and holding said arms, substantially as described.

4. In combination with a curtain roll, and
15 arms pivoted to the window casing and supporting said roll, and a rod connecting said arms, a cord having an elastic portion and attached to said rod, said cord also being extended in a closed circuit and running in
20 hooks above and below the plane of said rod, substantially as described.

5. In combination with a curtain roll, a rod
25 arranged parallel with said roll, arms coiled around said rod and movable thereon, bearings attached to said arms and supporting said roll, means for pivoting said arms to the

casing, a cord attached to said rod, having an elastic section, and arranged in a closed circuit, and hooks in the upper and lower part of said casing engaging said cord, substantially as described. 30

6. In combination with a curtain roll, flexible arms supporting said roll and having laterally turned ends engaging eyes attached to the casing, a rod parallel to said roll and having
35 said arms attached, a cord attached to said rod and arranged in a closed circuit and provided with an elastic portion, and hooks detachably engaging said cord, substantially as described. 40

7. As an article of manufacture, the herein described curtain fixture consisting of a rod having loops at each end, arms coiled around both parts of said loops and movable thereon, bearings for the curtain roll attached to said
45 arms, and means for pivoting said arms to the window casing, substantially as described.

CHARLES B. CORBIN.

Witnesses:

E. G. CURTIS,
O. W. PETTIT.