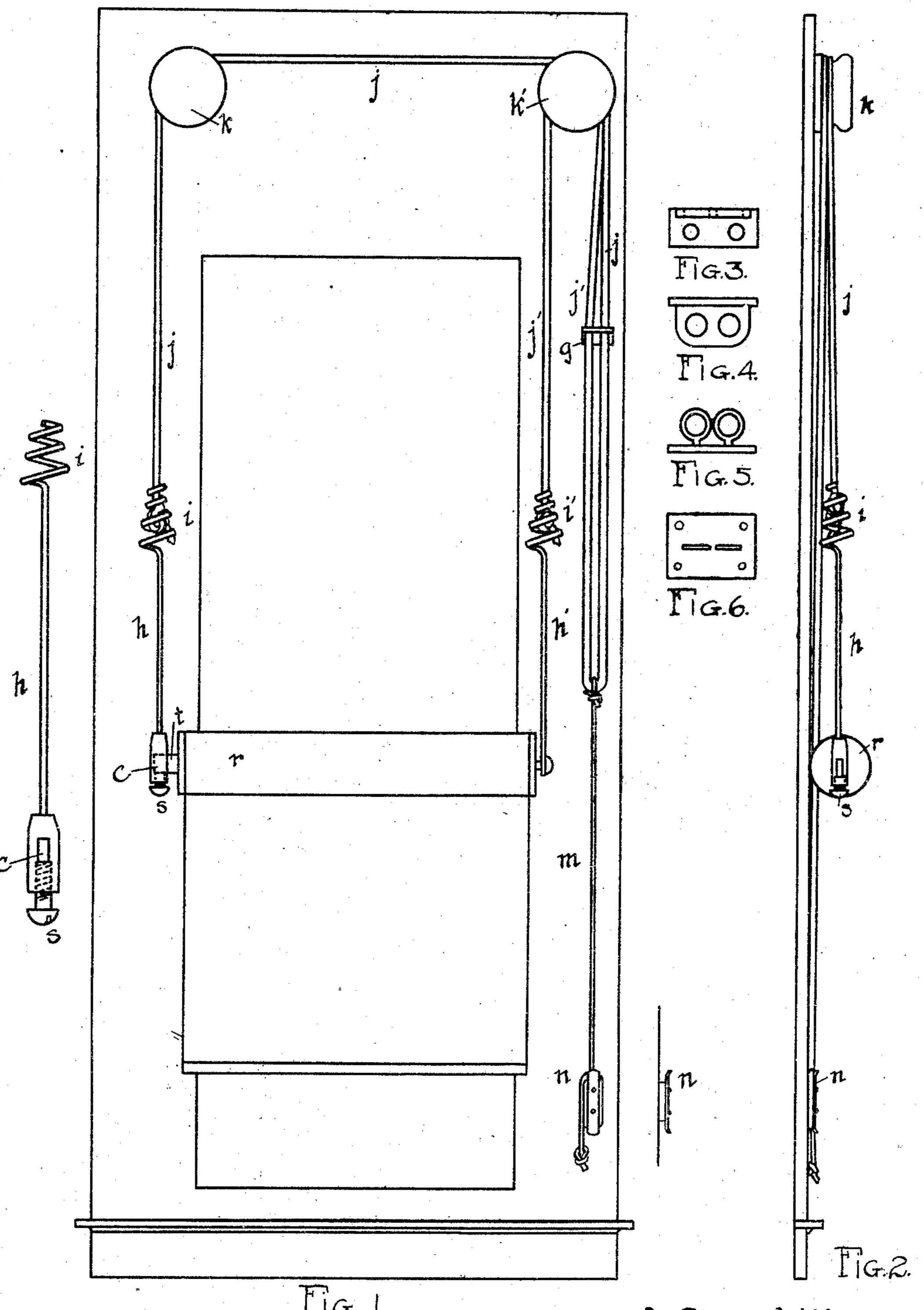
## J. A. CHURCHILL. WINDOW SHADE FIXTURE. APPLICATION FILED FEB. 23, 1909.

927,947.

Patented July 13, 1909.



Ethel G. Ingraham. ONemy Peterson John A. Churchill by Clem. J. Kimball, HIS ATTORNEY.

## UNITED STATES PATENT OFFICE.

JOHN A. CHURCHILL, OF COUNCIL BLUFFS, IOWA.

## WINDOW-SHADE FIXTURE.

No. 927,947.

Specification of Letters Patent.

Patented July 13, 1909.

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To all whom it may concern:

Be it known that I, John A. Churchill, a citizen of the United States, residing at Council Bluffs, in the county of Pottawat-tamie and State of Iowa, have invented a new and useful Improvement in Window-Shade Fixtures, of which the following is a specification.

My invention relates to improvements in adjustable window shade fixtures involving a means to attach the ordinary window shade roller usually operated in connection with a shaft and a spring to the window by means of hangers and cordage, making the same adjustable to be raised or lowered at will.

The objects of my invention are; first, to provide a hanger to be used in conjunction with the ordinary shade roller which may be easily applied thereto and hold the same securely without cutting, drilling or filling; second, to provide such a hanger with a spiral adapted to receive the knotted end of a cord and inclose the same; third, to provide a guide for the cordage to prevent its entanglement; and fourth, to supply a suitable cleat or holder about which the cord connecting the hangers attached to said shade roller is caught or held. I attain these objects by the device illustrated in the accompanying drawing, in which—

Figure 1 is a front elevation of a window frame supplied with the ordinary commercial shade roller and shade to which are applied hangers and cordage; Fig. 2 is a side elevation of the face of such window casing showing the shade roller hangers and cordage in position; Fig. 3 is an enlarged plan view of the guide; Fig. 4 is an end elevation of said guide; Fig. 5 is a modified form of guide and Fig. 6 is a plan of said modified form of guide.

In the drawings the details of the shade and hanger are much enlarged and the window casing is disproportionately reduced for convenience in illustration.

Similar letters refer to similar parts throughout the several views.

To the ordinary commercial shade roller r are attached the hangers h and h'. The hangers h and h' have the spirals i, i', respectively, which inclose the cord j, j'. The cord j passes over the button k and the cord j' over the button k' and pass through the guide g and unite in the cord g. The cleat or catch is spiral i being so arranged with its smallest turn fitting closely about the cord j while its larger or increased turn incloses the knot tied in the end of the cord j. By a reverse motion the cord j can be unscrewed out of the spiral i without untying the knot therein.

In a similar manner the cord j' is applied to 110

n is arranged to receive the cord m and hold the same by being wound underneath the ends thereof at any desired position of the shade roller r. The hanger h' is formed of a single piece of wire and may be attached to 60 the shade roller r by any convenient method, as by a nail or screw passed through a loop therein. The hanger h has formed upon one end a suitable enlargement having therein a slot or mortise c adapted to receive the pro- 65 jecting end of the commercial shade roller ratchet or spring shaft t. Into the end of the enlargement on said hanger is tapped a suitable set-screw s adapted to tighten upon the said shaft t of the shade roller. The opposite 70 end of the hanger h is formed into a decreasing spiral i adapted to receive and inclose the knotted end of a cord. Likewise the hanger h' is provided with a spiral i'. The spirals iand i' engage respectively the cords j and j'. 75 The cords j and j' are formed by doubling back the same cord j, j' over the knob or projection k' and are brought together in the cord m. A suitable cleat n is provided to receive the cord m.

By unloosing the cord m about the cleat n the shade roller r may be lifted or lowered as desired, it being left free to operate by raising or lowering the curtain upon said shade roller r in the ordinary manner. The guide g supports the cord j, j' and holds it in the proper position with respect to the button k' over which the cord j, j' passes doubled and allows any reasonable deflection of the cord m while the shade roller r is being raised or 90 lowered.

In applying the hanger h to the ordinary commercial shade roller r the set-screw s is withdrawn and the shaft t of the shade roller r is passed into the slot or mortise c and the 95 set-screw screwed down upon the shaft t of the shade roller r, in which position the hanger h will be suitably held upon a supporting shaft t of the shade roller r. To attach the knotted cord j to the hanger h, the cord 100 is inserted between the sides of the spiral i and the same turned about the cord j until it incloses the knotted end of the same, the spiral i being so arranged with its smallest turn fitting closely about the cord j while its 105 larger or increased turn incloses the knot tied in the end of the cord j. By a reverse motion the cord j can be unscrewed out of the spiral i without untying the knot therein.

the holder h' in the spiral i'. The guide gmay be of any suitable form, as a perforated plate having eyelets therein or it may consist of independent eyelets arranged to be fas-5 tened to the casing of the window. The cleat n is arranged to receive the cord m so that when wound underneath its opposite ends and between the said ends and the casing the cord m will be held in position.

What I claim is:—

1. In a window shade fixture, a hanger having a slot adapted to receive the shaft of a commercial shade roller and a set-screw therein to hold and engage the same, said 15 hanger having a spiral adapted to receive and inclose a suitable knotted cord.

2. In a window shade fixture, the combination with a shade roller of a hanger having a slot or mortise therein to receive the shaft 20 of said shade roller, a set-screw engaging said shaft and said hanger having a spiral receiv-

ing and inclosing a knotted cord.

3. In a window shade fixture, the combination of a shade roller with a hanger having a slot therein and a set-screw, and a spiral 25 portion adapted to receive and inclose a knotted cord, a knotted cord and a guide to receive said cord.

4. In a window shade fixture, the combination of a shade roller with a hanger having 30 a slot therein and a set-screw, and a spiral portion adapted to receive and inclose a knotted cord, a knotted cord, a guide to receive said cord and a cleat to receive and hold said cord.

## JOHN A. CHURCHILL.

Witnesses: ETHEL G. INGRAHAM, C. C. CLIFTON.