

No. 672,574.

Patented Apr. 23, 1901.

S. SMITH.
WINDOW BLIND.

(Application filed Feb. 19, 1900.)

(No Model.)

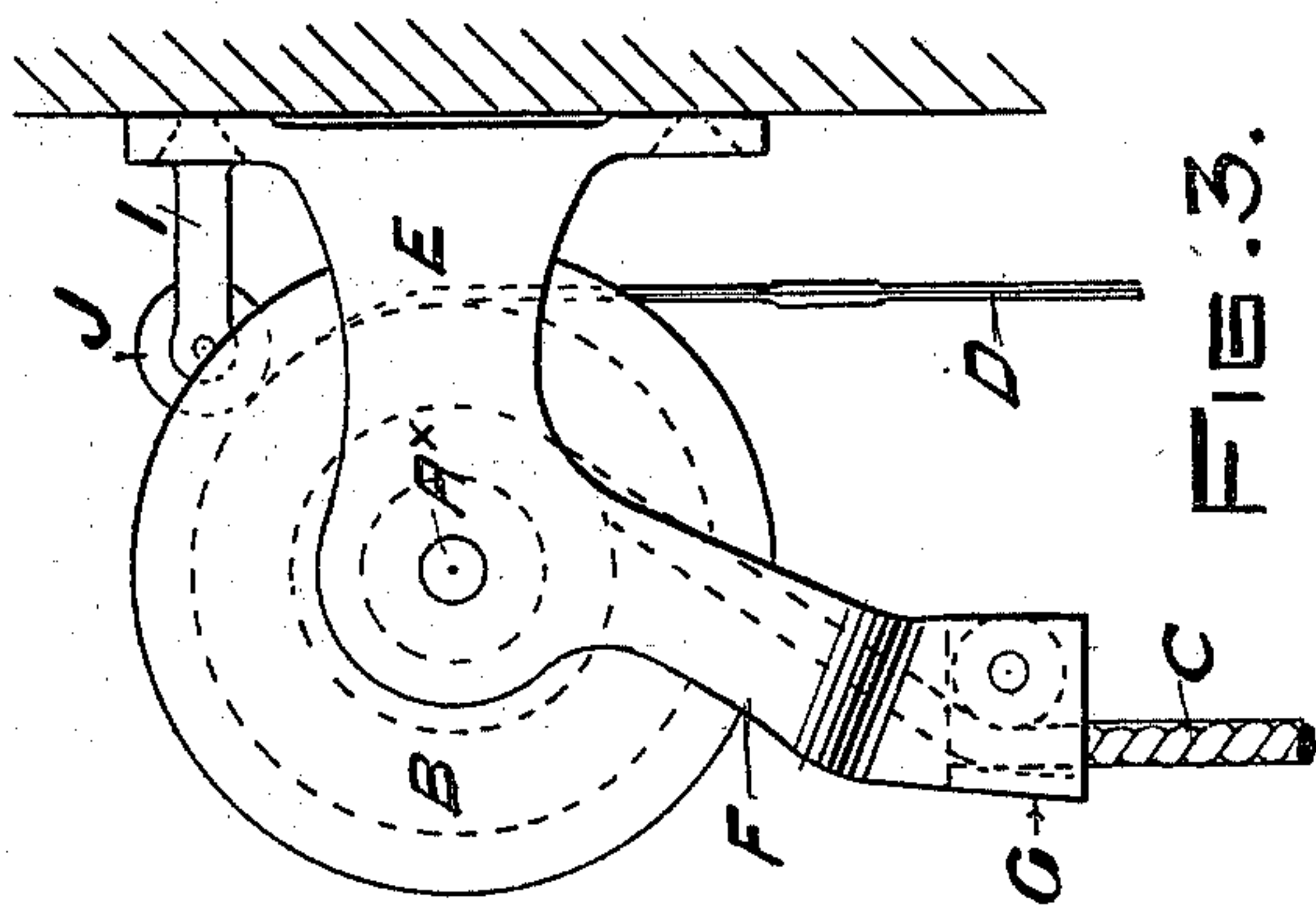


FIG. 3.

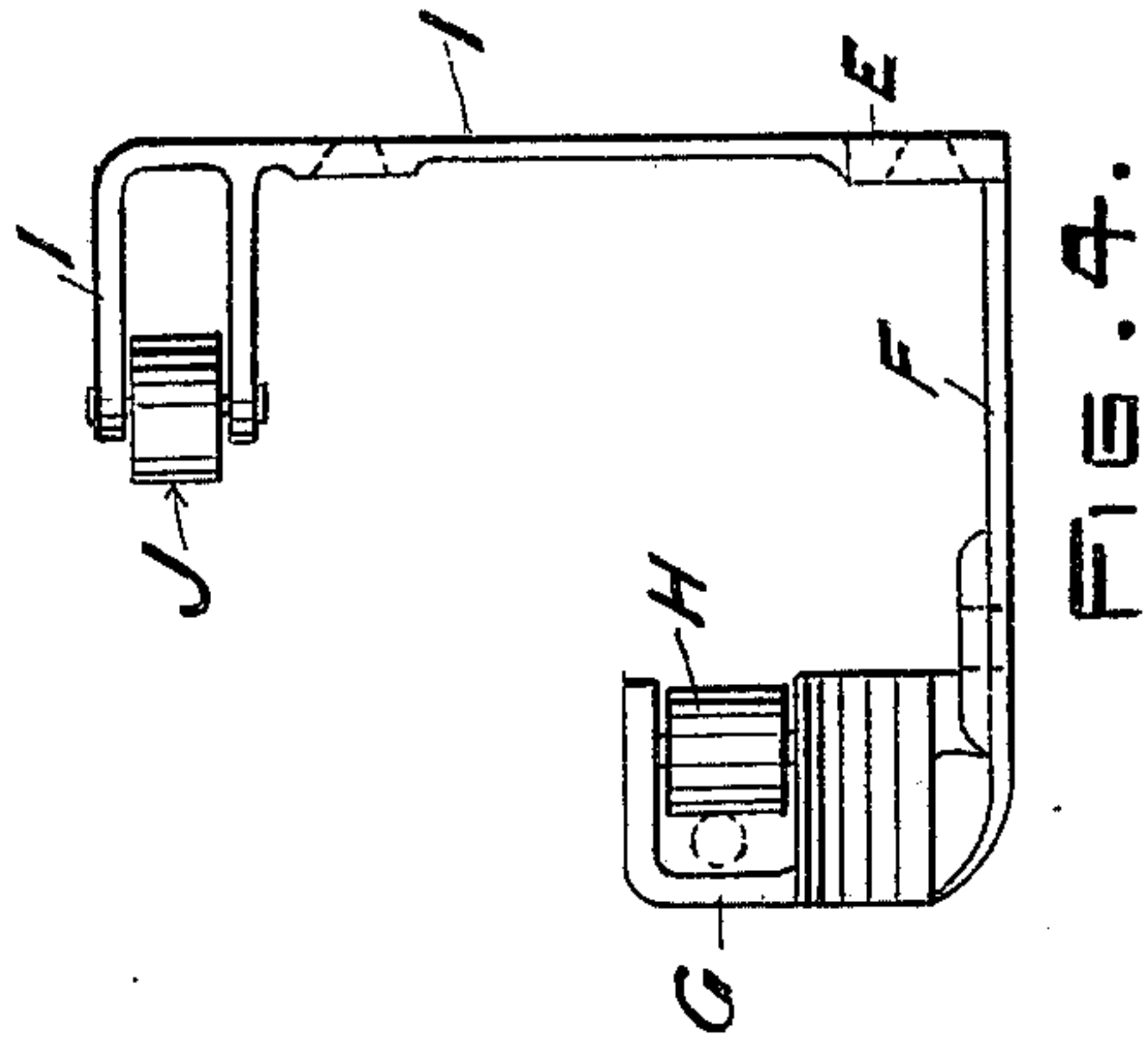


FIG. 4.

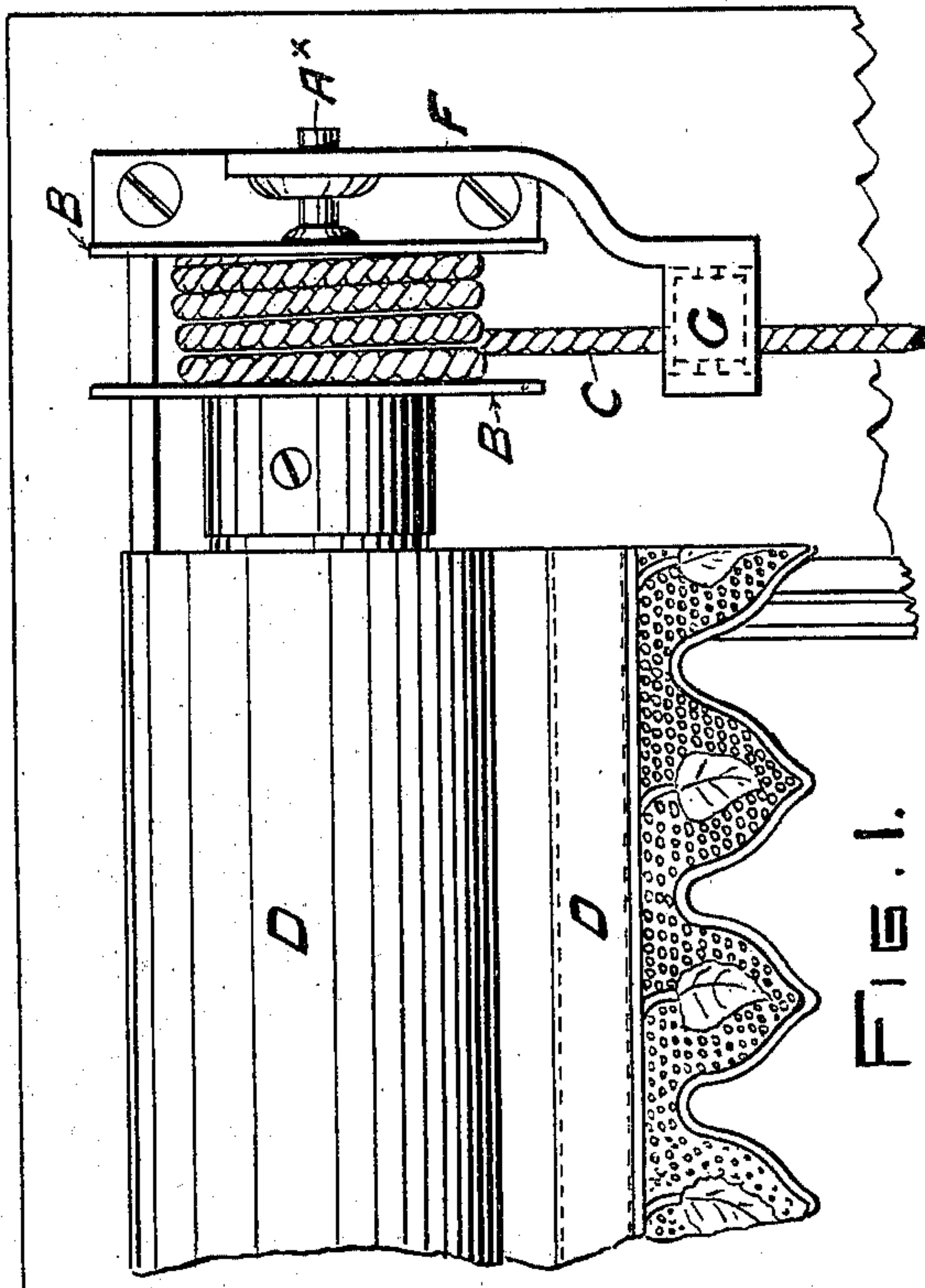


FIG. 1.

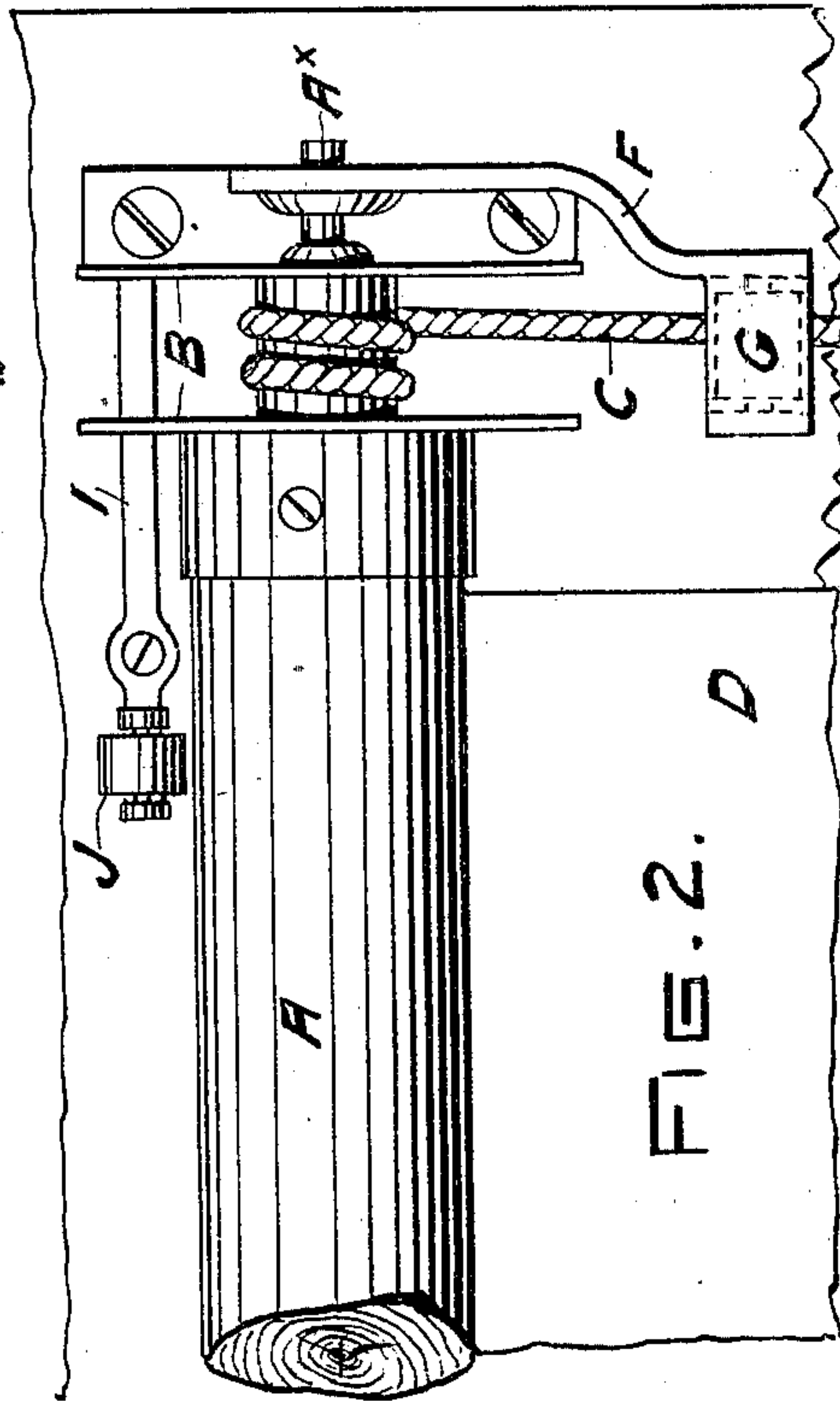


FIG. 2.

WITNESSES:-

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By his ATTORNEY:

UNITED STATES PATENT OFFICE.

SAMUEL SMITH, OF MANCHESTER, ENGLAND.

WINDOW-BLIND.

SPECIFICATION forming part of Letters Patent No. 672,574, dated April 23, 1901.

Application filed February 19, 1900. Serial No. 5,835. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL SMITH, a subject of the Queen of Great Britain and Ireland, and a resident of Upper Chatham street, Chorlton-on-Medlock, Manchester, England, have invented certain new and useful Improvements in Window-Blinds, of which the following is a specification.

This invention relates to spring-roller window-blinds which as at present made and operated are liable to "lock" when fully drawn down, and thereby make it necessary for some one to mount a ladder to unlock the same.

The object of my invention is primarily to provide for the ready unlocking of the rollers.

A further object is to allow the blind to be lowered by a cord at the side of the window instead of by the usual cord or tassel depending from the bottom edge of the blind, which is often inaccessible or is liable to get entangled with center ornaments and often entails stooping to take hold of the same.

Another object is to prevent the blind overrunning itself and of the blind-stick wedging between the roller and the window-frame when allowed to run up without being checked.

The accompanying drawings illustrate my invention in detail, in which—

Figure 1 is a front view of one end of a spring-roller-blind fitting with my invention applied thereto and showing the blind raised. Fig. 2 is a similar view with the blind fully lowered to the position in which it is locked or incapable of being raised by the pulling or jerking of the ordinary cord. Figs. 3 and 4 illustrate end and plan views of the roller-bracket.

According to my invention I apply to the end of the blind-roller A a pulley B, and around such pulley I coil a cord C. This cord extends down to a point near the lower part of the window and upon its being pulled it unrolls itself off the pulley B, and consequently rotates the roller A and unrolls or lowers the blind D. When the blind is lowered to the full extent, as shown in Fig. 2, there still remain one, two, or three coils of the cord C around the pulley B. Hence to release the roller (which requires to be done by a slight rotation of the roller A, but which as heretofore cannot be done by a pull on the blind itself, which hangs direct from

the roller) the cord C is pulled to an extent which serves to further rotate the roller A, and thereby unlock the roller and allow the blind to rise.

The bracket E, which supports the roller-axis A^x, is formed in one piece with an extension F, which latter is formed with a U-shaped part G for the reception of a small antifriction-roller H. The cord C passes over this runner, as illustrated, and the relation of such pulley to the pulley B is such as to act as a guide for the cord, bring the cord to the front, insure of the cord being held on the pulley B, and by reason of the close proximity of its periphery to part G and to the friction of said pulley apply a small drag or friction on the cord, which allows for steady raising or lowering of the blind and prevents the cord overrunning itself on the pulley B. The bracket E is also formed with an extension I, which extends to and terminates at a point opposite to the roller A, where it carries a small rounded projection or a small roller J. When the blind is allowed to rise unchecked by the cord C, there is a tendency for the blind to overrun itself and for its end to go right over the roller; but with the said projection or small roller J arranged as shown such overrunning is prevented, owing to the contact of the roller with the blind just previously to the blind being fully coiled on its roller.

With the extra coil of cord on the pulley B and the roller J it will be seen that I overcome two of the most serious drawbacks to spring-roller blinds as now made and used.

What I claim is—

A bracket for spring-roller window-blinds, comprising a base, a flange extending at right angles from said base with hole for roller-axle, an inclined extension from the said flange the end of which is bifurcated, a small axis across and a small antifriction-roller within the said bifurcated portion, a lateral extension from the said base, a set of lugs on the said lateral extension, an axis between the lugs and a roller on the said axis, as and for the purposes herein set forth.

In witness whereof I have hereunto set my hand in the presence of two witnesses.

SAMUEL SMITH.

Witnesses:

WALTER GUNN,

GEOFFERY ANDREWS.