## H. L. WERNE. Curtain Roller and Bracket.

No. 208,130.

Patented Sept. 17, 1878.

Fig. 1.

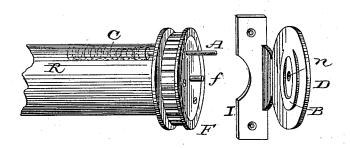
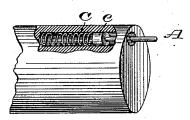
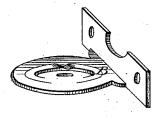
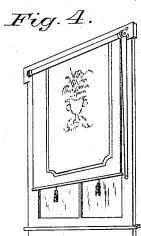


Fig. 2.

Fig. 3.







Inventor!
Henry J. Herry.

Witnesses:
Am Stout
James Folgerald

## UNITED STATES PATENT OFFICE.

HENRY L. WERNE, OF LOUISVILLE, KENTUCKY.

## IMPROVEMENT IN CURTAIN-ROLLERS AND BRACKETS.

Specification forming part of Letters Patent No. 208,130, dated September 17, 1878; application filed August 2, 1878.

To all whom it may concern:

Be it known that I, HENRY L. WERNE, of the city of Louisville, county of Jefferson, and State of Kentucky, have invented certain Improvements in Curtain-Fixtures, of which the

following is a specification:

My invention consists, in the first place, in the construction of a metal disk provided with a flange, by means of which it may be fastened by screws to the window-facing, and in providing the inner face of the disk next the cord-pulley on the curtain-roller with elevations and depressions, which run around in a circle parallel with the periphery of the disk, to be acted upon and traveled over by the outer end of the rod or pin extending out from the end of the roller and through a hole in the cord-pulley; and, in the second place, in the combination of that pin and a spring, against which it is seated in the interior of the roller itself, and the cord-pulley, the object of the combination being that the said pin shall bear against its track on the face of the disk constantly with as much force as shall be necessary to keep the roller from turning under the weight of the roller and curtain alone, but at the same time allow it to turn upon the application of force when it is desired to roll up or unroll the curtain.

The object in view in devising the disk and the said combination of parts, aside from their cheapness, simplicity, and durability, is to have the curtain to move up and down without noise and without any jumping or jerking action, and this object has been accomplished.

My said invention will be more fully described with reference to the accompanying

drawings, in which-

Figure 1 represents a perspective of the disk before mentioned, and also one end of a curtain-roller with a fast cord-pulley mounted thereon; Fig. 2, the like view of the end of a roller without the cord-pulley, showing the spring seated therein and the friction-pin before mentioned; Fig. 3, another like view

of the disk, showing the track on its face for the end of the pin to travel over; and Fig. 4, a like view of a curtain with my fixtures mounted, and showing also how the fixtures may be operated by an endless cord, and the cord held taut by being placed over a loose pulley attached to the facing below.

pulley attached to the facing below.

In the drawings, D is the disk; I, its flange; B, the track for the end of the spring-rod; n, the hole for the journal f. R is the roller; C, the spring seated therein; A, the pin, and e the collar thereon to limit its action. The lower loose pulley is not essentially necessary, as the endless cord may simply hang over the cord-pulley F, and the roller may be turned by pulling with one hand and holding the cord down upon its pulley with the other.

The whole fixture occupies but little space, and is so simple that it may be operated by a

child.

The depressions in the track B are to have the useful effect of catches or notches; but as the elevations and depressions are without angles or corners the end of the pin A can be moved out of or into a depression without any perceptible jar or jump, and with a slight force.

What I claim as my invention, and desire

to secure by Letters Patent, is-

1. The disk D, having the raised and undulating track B, provided with gradual elevations, whereby friction of the pin f thereupon may be increased and diminished at different points in its circuit around the face of the disk, and act as notches, but without noise or jarring or jumping action, substantially as and for the purpose described.

2. The combination of the pin A, having collar e, and the spring C seated within the roller R, substantially as and for the purpose

described and set forth.

HENRY L. WERNE.

Witnesses:

Jos. CLEMENT, CARL JOHNSTON.