A. S. & D. W. HAMMOND.
Window Blind Closer.

No. 201,776. **Patented March 26, 1878.**

Fig. 1.

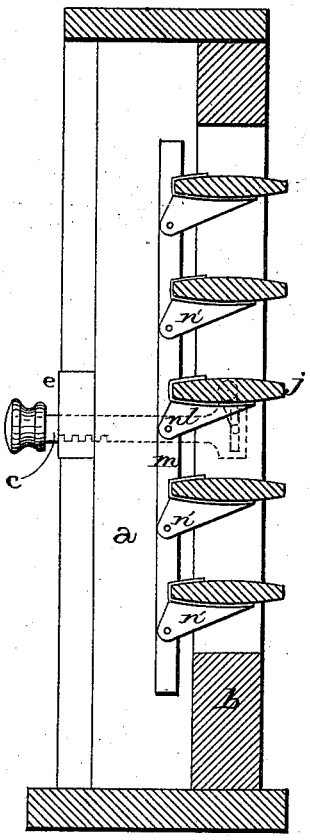


Fig. 2.

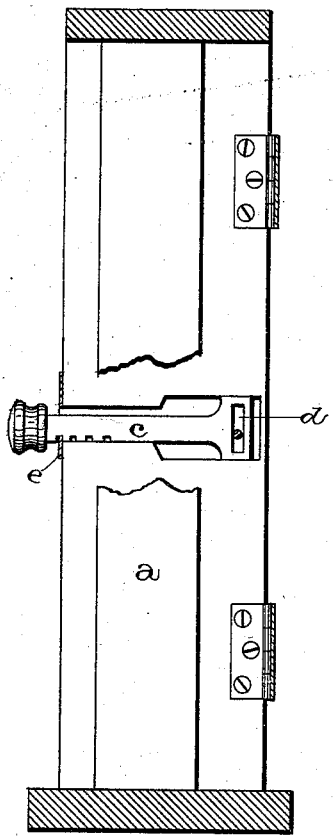


Fig. 5.

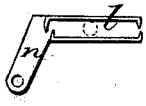
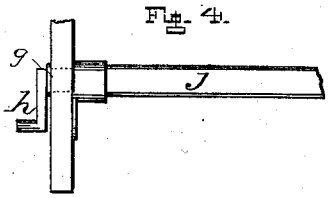


Fig. 6.

Fig. 4.



WITNESSES.

J. W. Garner

W. S. D. Baines

INVENTOR.

A. S. Hammond,
D. W. Hammond,
per
J. A. Lehmann, atty

UNITED STATES PATENT OFFICE.

AUSTIN S. HAMMOND AND DANIEL W. HAMMOND, OF INDEPENDENCE, IOWA.

IMPROVEMENT IN WINDOW-BLIND CLOSERS.

Specification forming part of Letters Patent No. **201,776**, dated March 26, 1878; application filed February 9, 1878.

To all whom it may concern:

Be it known that we, AUSTIN S. HAMMOND and DANIEL W. HAMMOND, of Independence, in the county of Buchanan and State of Iowa, have invented certain new and useful Improvements in Window-Blind Closers; and we 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

Our invention relates to an improvement in window-blind closers; and it consists in the novel combination of a horizontally-moving rod, having a slot in one end, a crank which is connected to one of the slats, and which has its outer end catching in the slot in the end of the rod, and operated by it, as will be hereinafter more fully described and claimed.

The accompanying drawings represent our invention.

a represents a window-frame, and *b* a blind, hinged thereto in the usual manner. Passing horizontally through the window-frame is the rod or lever *c*, which has its inner end made somewhat wider than the other portions, and in this wide end is made the vertical slot *d*. In the lower edge of the rod or lever are made a number of notches, for the purpose of catching over the edge of the plate *e*, and thus locking the lever in any desired position.

Passing horizontally through the rear edge of the blind is the revolving lever *g*, upon the outer end of which is formed a crank, *h*, which crank catches in the slot *d* in the lever *c*, and is operated thereby.

The inner end of the lever or shaft *g* is fastened to one of the slats *j* by means of the fastening *l*. This fastening is made U-shaped, so as to catch over the end of the slat, and has an arm, *n*, projecting outward, for the purpose of attaching the slat to the connecting-rod *m*.

Each one of the other slats has a sheet-metal fastening, *l'*, for attaching it to the connecting-rod, so that when one slat is moved all move together. These fastenings *l'* consist of pieces of sheet metal, which are bent, so as to pass along each side of the slats, and have their ends made sharp and pointed, so that they can be forced entirely through the slat, and then clinched upon the other side.

Projecting outward from the inner side of each fastening *l'* is an arm, *n'*, which connects the blind with the connecting-rod.

By means of a fastener, *l'*, constructed as above described, the slats are held so securely that there is no possibility of the fastener working loose, and the fastenings can be made very rapidly and cheaply.

When it is desired to open the blinds when they are closed, the rod or lever *c* is raised slightly upward, so that it no longer catches in the holding-plate, and is then moved outward to any desired degree. As it moves outward it turns the crank partially around, thereby causing the shaft upon which the crank is formed to turn one of the slats *j*, and this slat communicates the motion from the fasteners and connecting-rod to all the other slats.

For closing the blinds, the rod or lever *c* is drawn inward, thereby reversing the motion of the slats, as already described, and causing them to close together.

By means of the notches in the under side of the lever the slats can be locked in any desired position that may be preferred.

Where it is desired to connect the slats together along the center, instead of at one end, as here shown, the fastenings *l'* will not be used; but clasps *s* will be fastened to the blinds by making the lower edges sink into the sides of the slats, and then a nail or staple may be passed through, so as to hold them more securely in place. The staples upon the inner sides of the connecting-rod will then catch in this clasp.

The shaft having the crank upon one end may be made to connect with the blind, as here shown, or by any other device that may be preferred.

We do not limit ourselves to the precise con-

struction here shown, for the parts may be slightly varied without departing from the spirit of our invention.

Having thus described our invention, we claim—

The combination of the rod or lever *c*, having the slot *d* in its inner end, with the shaft *g* and crank *h*, the inner end of the shaft being fastened to a slat, *j*, substantially as shown.

In testimony that we claim the foregoing we have hereunto set our hands this 2d day of February, 1878.

AUSTIN S. HAMMOND.
DANIEL W. HAMMOND.

Witnesses:
W. G. DONNAN,
JAMES B. DONNAN.