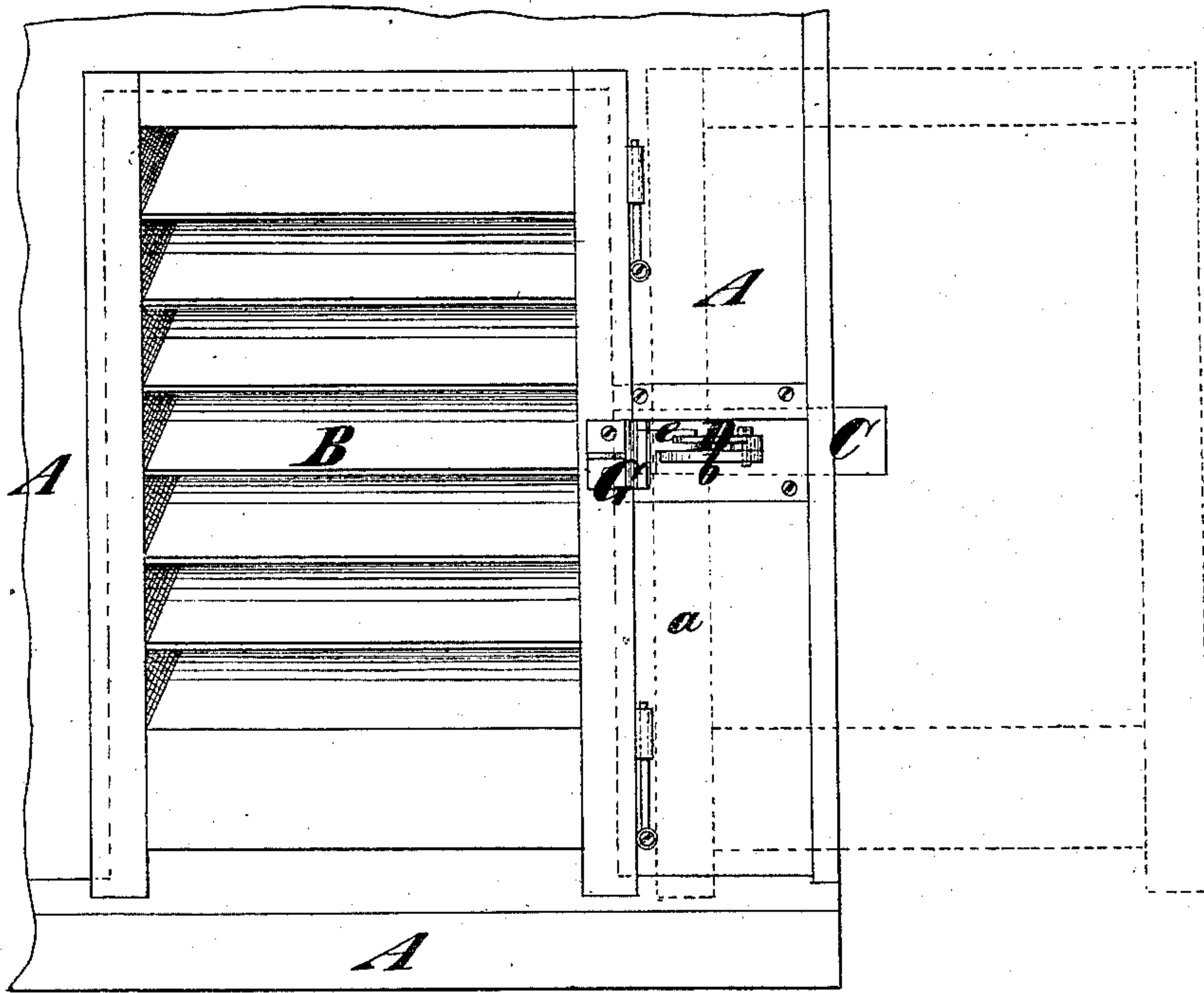


**J. W. JEDKINS.**  
**Shutter-Workers.**

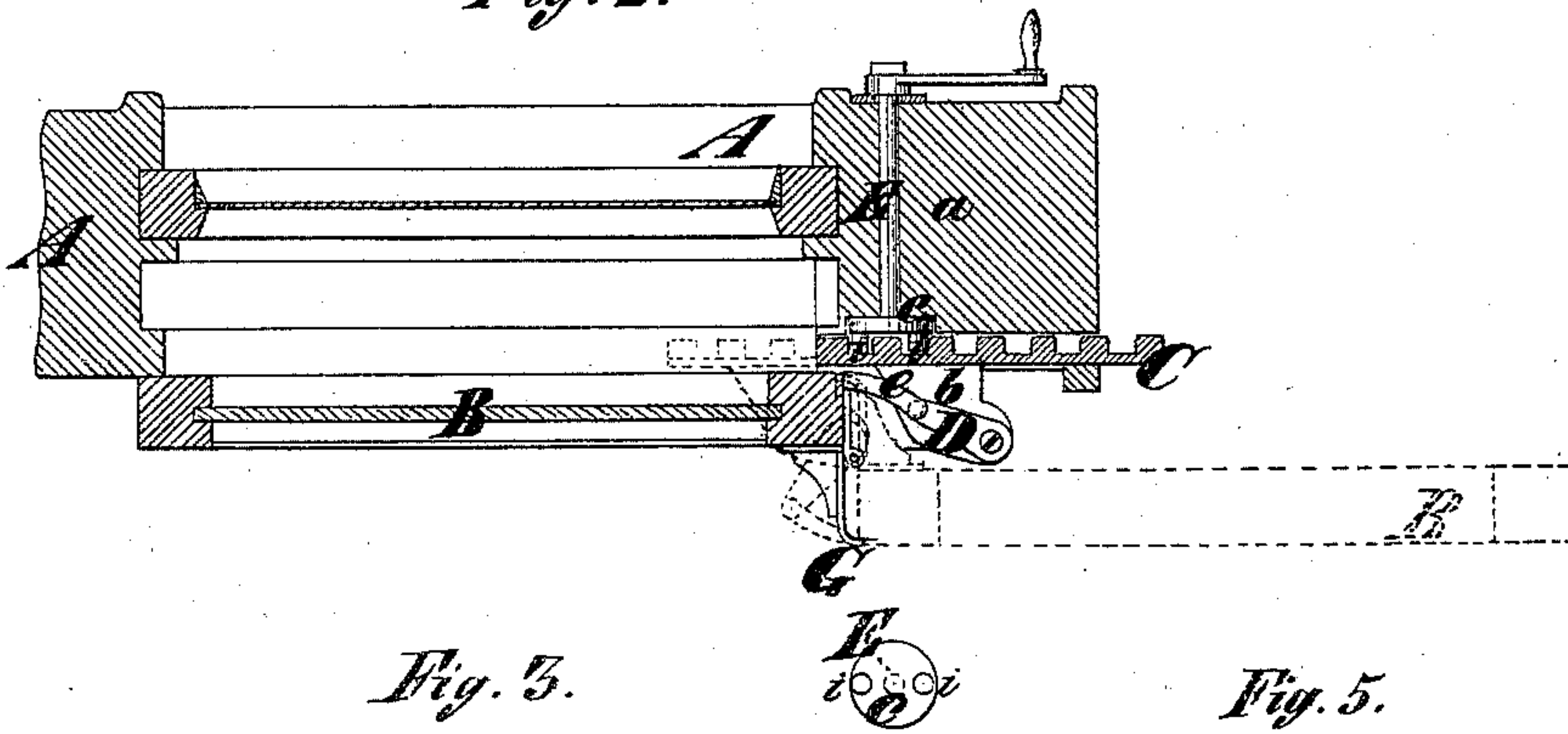
No. 143,159.

Patented September 23, 1873.

*Fig. 1.*



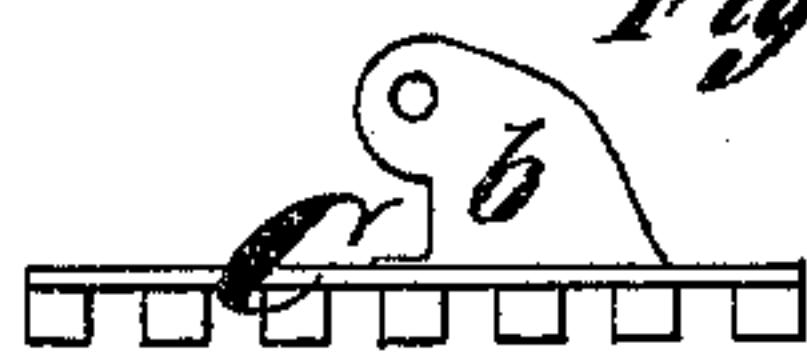
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



*Fig. 5.*



Witnesses:  
*Fred Hammer*  
*Chas. A. Dayton*

*J. W. Jenkins*  
*by his Attorneys*  
*Brown & Allen*

# UNITED STATES PATENT OFFICE.

JAMES W. JEDKINS, OF MONMOUTH, MAINE.

## IMPROVEMENT IN SHUTTER-WORKERS.

Specification forming part of Letters Patent No. **143,159**, dated September 23, 1873; application filed July 2, 1873.

### CASE B.

*To all whom it may concern:*

Be it known that I, JAMES W. JEDKINS, of Monmouth, in the county of Kennebec and State of Maine, have invented a Device for Operating outside Shutters from inside the Windows, of which the following is a specification:

This invention consists in the combination and arrangement of a toothed disk on a horizontal shaft, and a reciprocating rack with its teeth arranged on its inside vertical face to prevent clogging, and a lug on its outer face for connection with the shutter by means of a rod having an arm pivoted thereto, the rack working in a covered recess in the window-jamb with only the lug protruding therefrom, so that by rotating the horizontal shaft the shutter may be opened or closed from the inside.

In the accompanying drawing, Figure 1 is an outside view of a shutter-blind having my invention applied. Fig. 2 is a horizontal section of the same. Fig. 3 is a face view of one of the racks used to operate the shutters. Fig. 4 is a top view of the same; Fig. 5, an edge view thereof; and Fig. 6, an end view of one of the manipulating-shafts.

Similar letters of reference indicate corresponding parts in all the figures.

A represents the frame and sill of a window, and B a shutter applied thereto. This shutter is hinged to the window-frame at the outside front edge, instead of the inner or back edge, so that a push on the latter will swing the shutter open, and a pull will swing it shut. In the outside of the jamb *a*, to which the shutter is so hinged, there is located a toothed rack, C. This rack is arranged to slide back and forth across the jamb *a*, and its teeth are not on one of its edges but on its inside face, as represented in Fig. 2. On its outside there is formed a lug, *b*, which is connected by a rod or lever, D, and curved arm *e*, pivoted thereto with the outside back edge of the adjacent stile of the shutter. In the jamb *a* previously mentioned

there is arranged opposite the lower portion of the rack C a rod or shaft, E, which extends right through, and is furnished inside the window with a crank or handle to facilitate its manipulation, and on its outer end there is a disk, *c*, provided with two pins or teeth, *i i*. These teeth work into the teeth of the rack around their lower edges, and to facilitate this the teeth last mentioned are rounded off. The rotation of the shaft E by this means imparts a reciprocating motion to the rack, causing the latter to slide back and forth across the jamb *a*. There is on the inner stile of the shutter a stop, G, which prevents the shutter from being swung away back against the wall of the building to which it is applied.

To open the shutter, the shaft E is turned in the direction to move the rack toward the opposite jamb of the window-frame, and through the medium of the rod D and arm *e* a push is imparted by it to the back outer edge, and the shutter is caused to swing open on its hinges, as shown in dotted lines in Fig. 2. When desirable to close the shutter, the shaft E is turned in the reverse direction, and the rack being moved back again a pull is exerted on the shutter in such manner as to close it.

This device is not only simple and effective but is withal not liable to get out of order.

What I claim as my invention is—

The combination and arrangement of the toothed disk *c* on the shaft E, the reciprocating rack C, having its teeth arranged on its inside vertical face to prevent clogging, and formed with the lug *b* on its outer face, and the rod D with the arm *e* pivoted thereto and attached to the shutter, the rack C working in a covered recess in the jamb *a* with only the lug *b* protruding therefrom, all as herein shown and described.

JAMES W. JEDKINS.

Witnesses:

AMBROSE BEAL,  
W. H. BOYNTON.