## J. Mc Mackin, Shutter Worker. Patented Aug 4, 1857.

## UNITED STATES PATENT OFFICE.

JAMES McMACKIN, OF NEW YORK, N. Y.

## DEVICE FOR OPERATING WINDOW-BLINDS.

Specification of Letters Patent No. 17,938, dated August 4, 1857.

To all whom it may concern:

Be it known that I, James McMackin, have invented a new and improved device 5 to be applied to window shutters and blinds whereby the same may be opened and closed from the inner side of the window without raising the sash; and I do hereby declare that the following is a full, clear, and exact 10 description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1, is an inner side view of a blind attached to a window casing and having my 15 improvement applied to it. Fig. 2, is a transverse vertical section of ditto, taken in the line (x) (x) Fig. 1. Fig. 3, is a horizontal section of ditto, taken in the line (y)

(y) Fig. 1.

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

My invention consists in attaching a jointed bar to the lower end of the blind or shutter and provided with a sliding 25 catch as will be hereinafter fully shown and described, whereby the window or blind may be opened and closed from the inner side of the window, and secured in either an open or closed state, without rais-30 ing the sash, and the device, whether the blind or shutter be opened or closed fully concealed from view, and inclosed within the sill of the casing.

To enable those skilled in the art to fully 35 understand and construct my invention, I

will proceed to describe it.

A represents a window blind which is attached to the casing B by hinges C in the usual manner.

40 D represents the sill of the window casing.

E represents a jointed bar. This bar is formed of three pieces (a) (b) (c) connected together by joints (d), see more par-45 ticularly Fig. 3. The outer end of the outermost piece (a) of the bar E is pivoted to The blind is shown in an open state in red the lower end of the blind near its lower hinge. The bar E passes through a mortise (e) made transversely through the sill D.

The innermost piece (c) of the bar E is somewhat larger than either of the other pieces and has a sliding plate (f) upon it. This plate (f) is secured to the piece (c)by screws (g) which pass into the piece 55 (c) through slots in the plate. The end of the plate (f) is bent downward at a right '

angle as shown at (h) Fig. 2, and the opposite end is slotted longitudinally for a short of the city, county, and State of New York, | distance as shown at (i) Fig. 3. The inner part of the piece (b) of the bar E has a 60 gain or recess (j) cut out at each side so as to leave a ledge (k) corresponding in proportions to the slot (i).

> In the inner side of the sill D a longitudinal recess (l) is made. This recess is 65 encompassed by a metallic plate (m) and a metal cover (n) is pivoted at one end to the

sill D, as shown at (o).

When the blind is in a closed state as shown in Figs. 1 and 2, in black, the part 70 (c) of the bar E is fitted within the recess (1) as shown by the dotted line in Figs. 1 and 3. The blind is opened by raising the cover (n) drawing out from the recess (l)the piece (c) of the bar E, and turning 75 it in line with the pieces (a) (b) see Fig. 2, and then pressing the bar E outward or toward the blind. The blind by this means will be forced open and the outermost piece (a) will be allowed to turn on its pivot (d) 80 so that the blind may be turned against the side of the building—the piece (b) however is prevented from working on its pivot (d') which connects it with piece (c) on account of the slide (f) the slot (i) of 85 which is shoved on the projection (k) at the time the bar E is shoved forward to open the blind, it being understood that the hand is applied to the slide (f) both in opening and closing the blind. The plate (f) there- 90 fore is in effect, or practically a catch or fastening preventing the blind from swinging to a certain extent which it would do provided the connection or joint (d') of the pieces (b) (c) were not made rigid.

As the bar E is drawn inward the plate (f) of course is drawn back and the slot (i)drawn off from the ledge (k), and when the bar E is drawn fully back, and the blind A closed the piece (c) is turned within the 100 recess (l) and the cover (n) closed over it.

in Fig. 3.

The cover (n) is closed over the recess (l)when the blind is both in an open and closed 105 state. This is quite necessary for in winter much cold would enter an apartment through the mortise (e).

This device operates the blind quickly and a person may open or close it equally 110 as quick as by applying the hand directly

to it.

Having thus described my invention what I claim as new and desire to secure by Letters Patent, is—

The bar É constructed of three pieces (a) 5 (b) (c) provided with the fastening formed of the slotted plate (f) on the piece (c) and the ledge (k) on the piece (b), the bar E

being applied to the blind A and fitted within the sill D substantially as shown for the purpose set forth.

JAMES McMACKIN.

Witnesses:

MICH. HUGHES, JAMES F. BUCKLEY.