

M. DOHERTY.  
Piano-Lid Prop-Sticks.

No. 139,125.

Patented May 20, 1873.

FIG. 1.

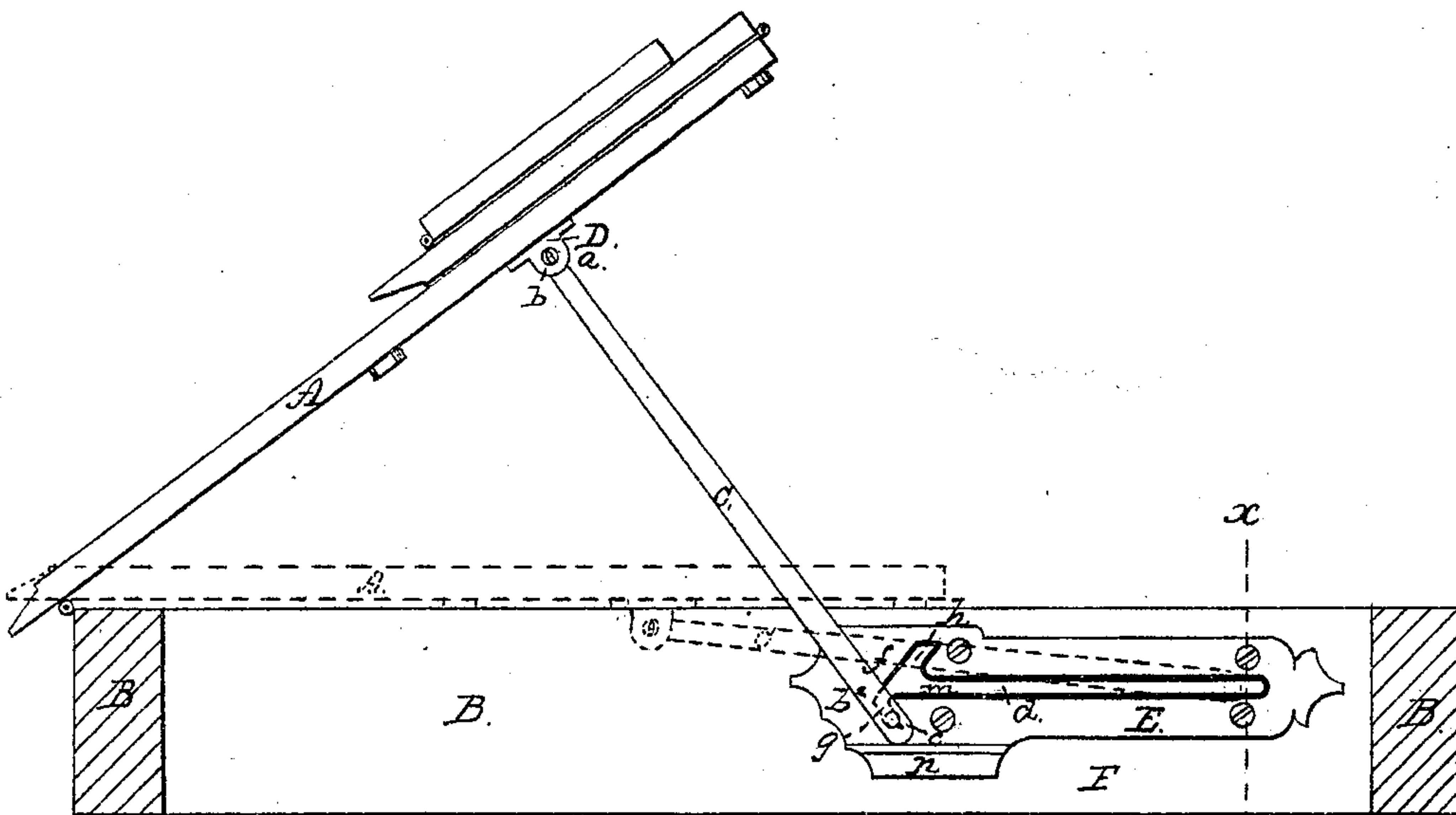


FIG. 2.

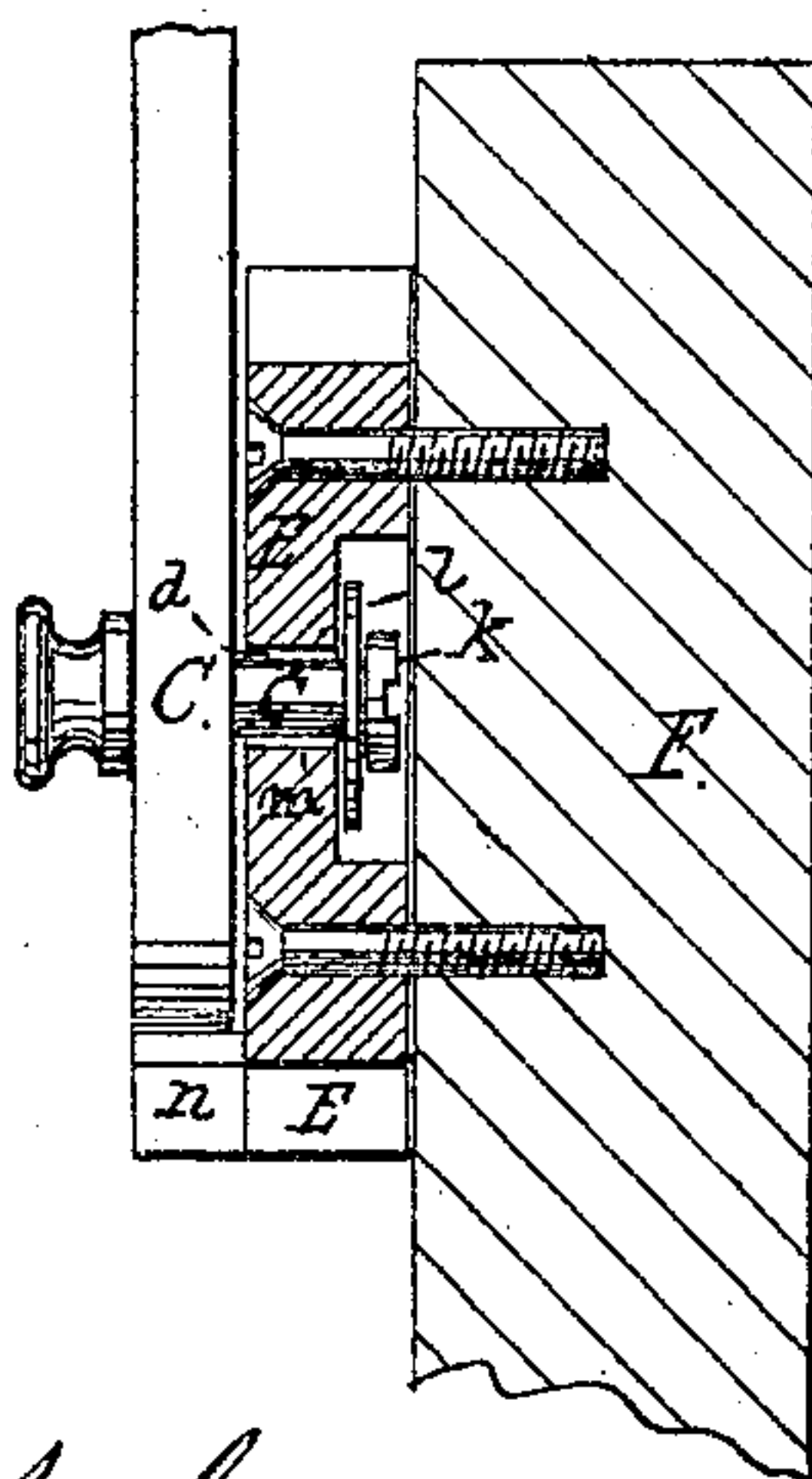
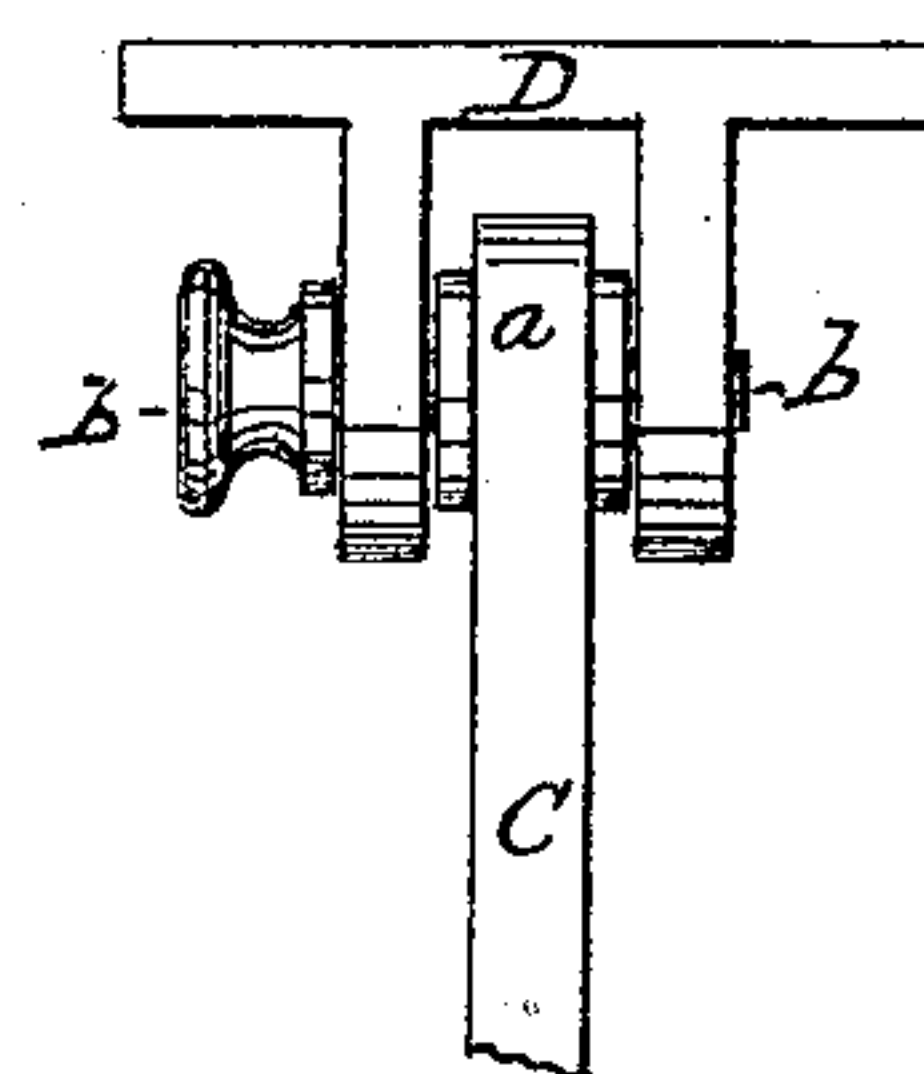


FIG. 3.



WITNESSES.

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# UNITED STATES PATENT OFFICE.

MICHAEL DOHERTY, OF CAMBRIDGEPORT, ASSIGNOR OF ONE-HALF HIS  
RIGHT TO CHARLES SKINNER, OF BOSTON, MASSACHUSETTS.

## IMPROVEMENT IN PIANO-LID PROP-STICKS.

Specification forming part of Letters Patent No. **139,125**, dated May 20, 1873; application filed  
February 6, 1873.

*To all whom it may concern:*

Be it known that I, MICHAEL DOHERTY, of Cambridgeport, in the county of Middlesex and State of Massachusetts, have invented a certain new and useful Improvement in the Arrangement of Prop-Sticks for Piano-Fortes, Organs, &c., and that the following is a full, clear, and exact description of the same, reference being had to the accompanying plate of drawing.

The present invention relates to the prop-sticks for supporting the covers or tops of piano-fortes, organs, &c., in their open and inclined position; and under this invention the prop-sticks are connected to both the cover or top and the body or case of the piano-fortes, &c., in such manner that the raising of the top draws the prop-sticks into their vertical position of support for the top or lid, where they are held against movement; and the lowering of the top properly disposes them within the body or case, to allow the top or lid to shut.

In the accompanying plate of drawing, my invention is illustrated—

Figure 1 being a view in elevation of a prop-stick arranged according thereto; Fig. 2, a section on an enlarged scale in plane of line *x x*, Fig. 1; and Fig. 3, a detail view of connecting device between a prop-stick and the cover or lid.

A, in the drawing, represents the cover or lid, and B the body or case, as ordinarily, of a piano-forte, the lid being hung, as usual, by hinges to the body or case; C, a prop-stick, one to each end of the case B, as ordinarily. The prop-stick C, by one of its ends, *a*, is hung to freely turn upon a pivot or pin, *b*, of the block D, secured to the under side of the top or lid A, and, by its other end, *b*<sup>2</sup>, it is hung loosely on a pin, *c*, that is arranged within a horizontal slot, *d*, of the plate E, secured to the inside face of the end piece F to the case B. The slot *d*, at its inner or rear end *f*, has a downward-projecting notch, *g*, and also an upward-projecting notch, *h*. The center pin *b*, for end *a* of the prop-stick, is adapted to be readily attached to and de-

tached from the block D to disconnect the prop-stick from the top or lid, by constructing it and its seat in the block D to screw the one into the other, and also the pin *c* of the prop-stick is secured against escape from the slot *d* of the case B, in which it travels by the head K and washer *l* upon the inner end of the said pin *c*, the plate E being suitably cut away for their reception, as fully shown in Fig. 2 of the drawing.

Under an arrangement and connection of a prop-stick with the case and top of a piano-forte, as hereinabove described and shown in the drawing, should the top be raised or opened the prop-stick is lifted with it, and running by its pin *c* along the groove or slot *d* of the case, finally drops into the downward-projecting notch *g* of said slot *d*, wherein, resting obviously, the prop-stick cannot move back, and thus the necessary support for the open position of the lid is secured. Should it now be desired to close the lid or case A, lift the same sufficiently to carry the prop-stick pin *c* into the upward-projecting notch *h* of groove *d*, when letting the cover slowly drop, the prop-stick C striking the lower edge *m* of the slot *d*, travels along the same toward its front end, the prop-stick gradually lowering and coming to a horizontal position, or nearly so, as shown by dotted lines, Fig. 1, when the cover is finally closed or shut.

An arrangement of a prop-stick for the cover of a piano-forte, &c., as above described, obviously is automatic in both the opening and closing of the cover, it being intended that the upward notch *h* shall so open into the horizontal slot or groove *d*, that the prop-stick pin *c*, in passing therefrom, shall strike, without fail, on the lower edge *m* of the slot *d* and automatically assume its position within the slot to follow the same in the continued fall of the top or cover. The upward-projecting notch *h* obviously may be dispensed with, but it is deemed best to employ it, and therefore it is not intended to limit the present invention to its use.

To relieve the prop-stick pin *c* of strain when holding the cover or top B open, the slotted



plate E is provided with a shoulder *n* for the lower end of prop-stick to rest upon, as shown in the drawing.

The prop-stick C, in its described connection with top and case, may be reversed—that is, pivoted to the case—and connected through slot to top or cover, but the relative position described is deemed most preferable.

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

1. The prop-stick C, hung by pin *b* to top A,

and connected through pin *c* to a slot or groove, *d*, of case B, having a downward-projecting notch, *g*, the whole substantially as described, for the purpose set forth.

2. In combination with the prop-stick C, the groove *d* provided with the upwardly-projecting notch *h*, substantially as and for the purpose described.

M. DOHERTY.

Witnesses:

EDWIN W. BROWN,  
ALBERT W. BROWN.