

E. M. Judd,
Sash Fastener.

N^o 30,408.

Patented Oct. 16, 1860.

Fig. 6.



Fig. 4.

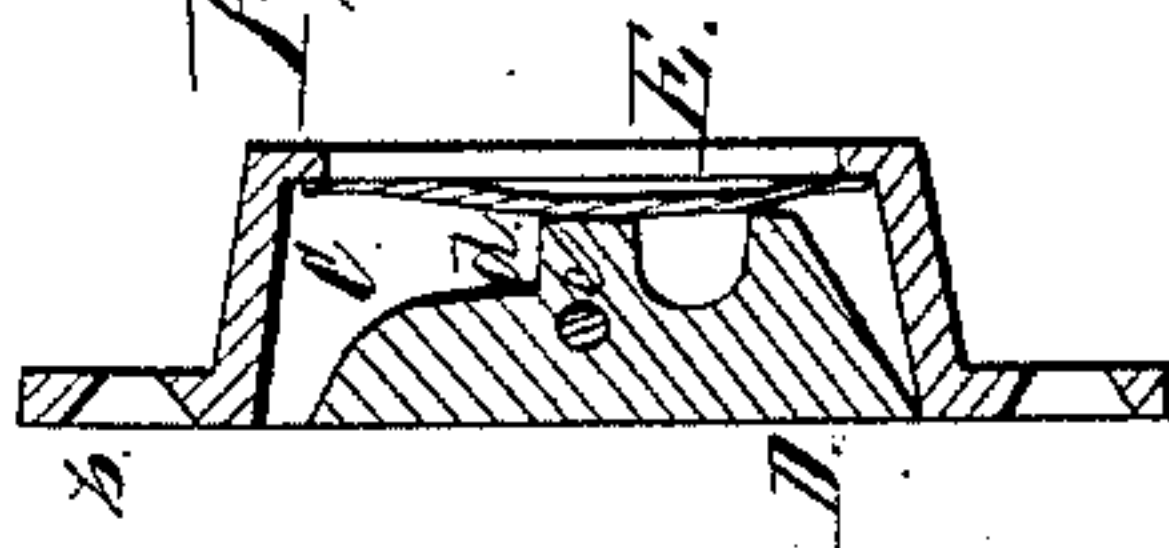


Fig. 5.

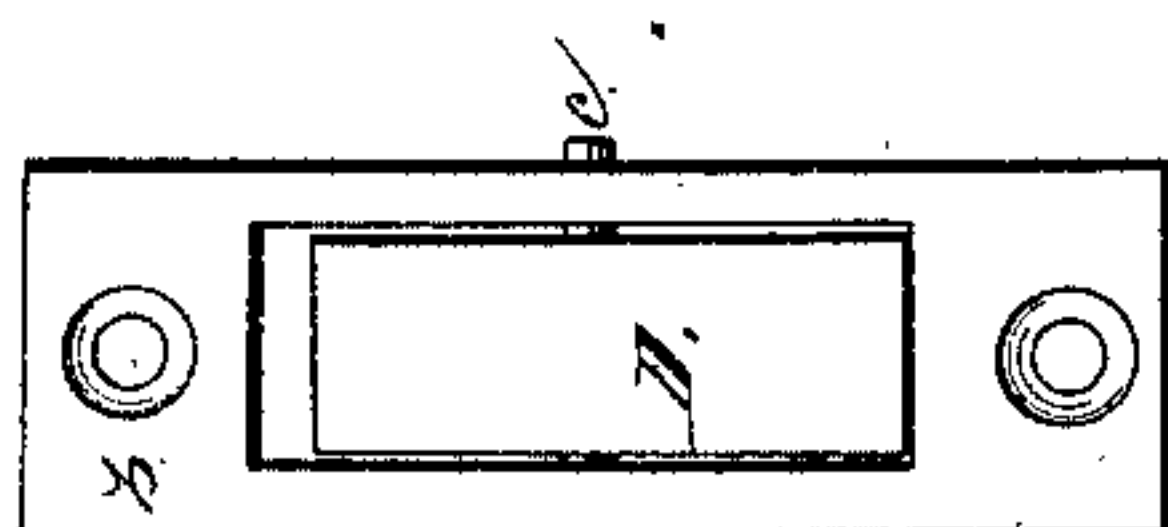


Fig. 3.

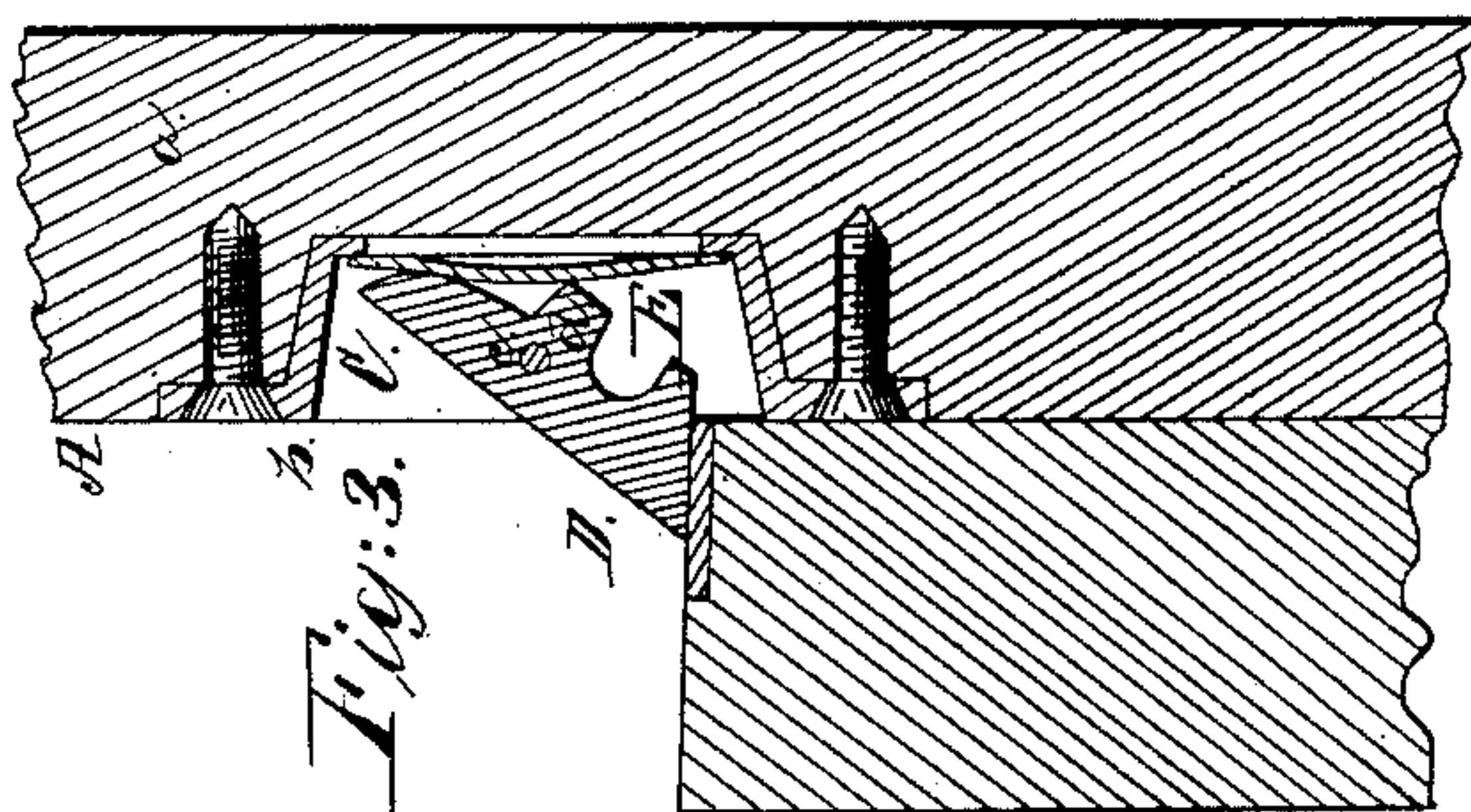


Fig. 2.

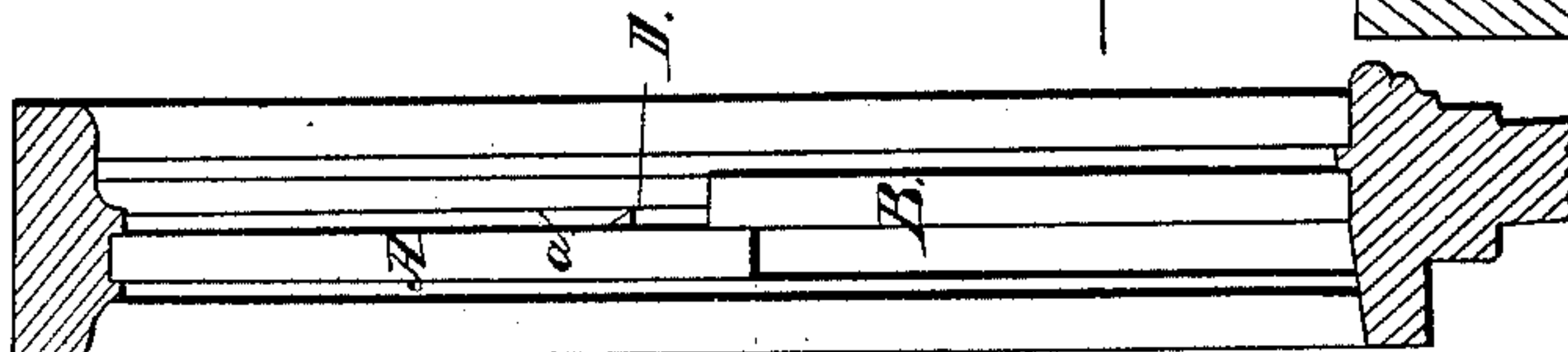
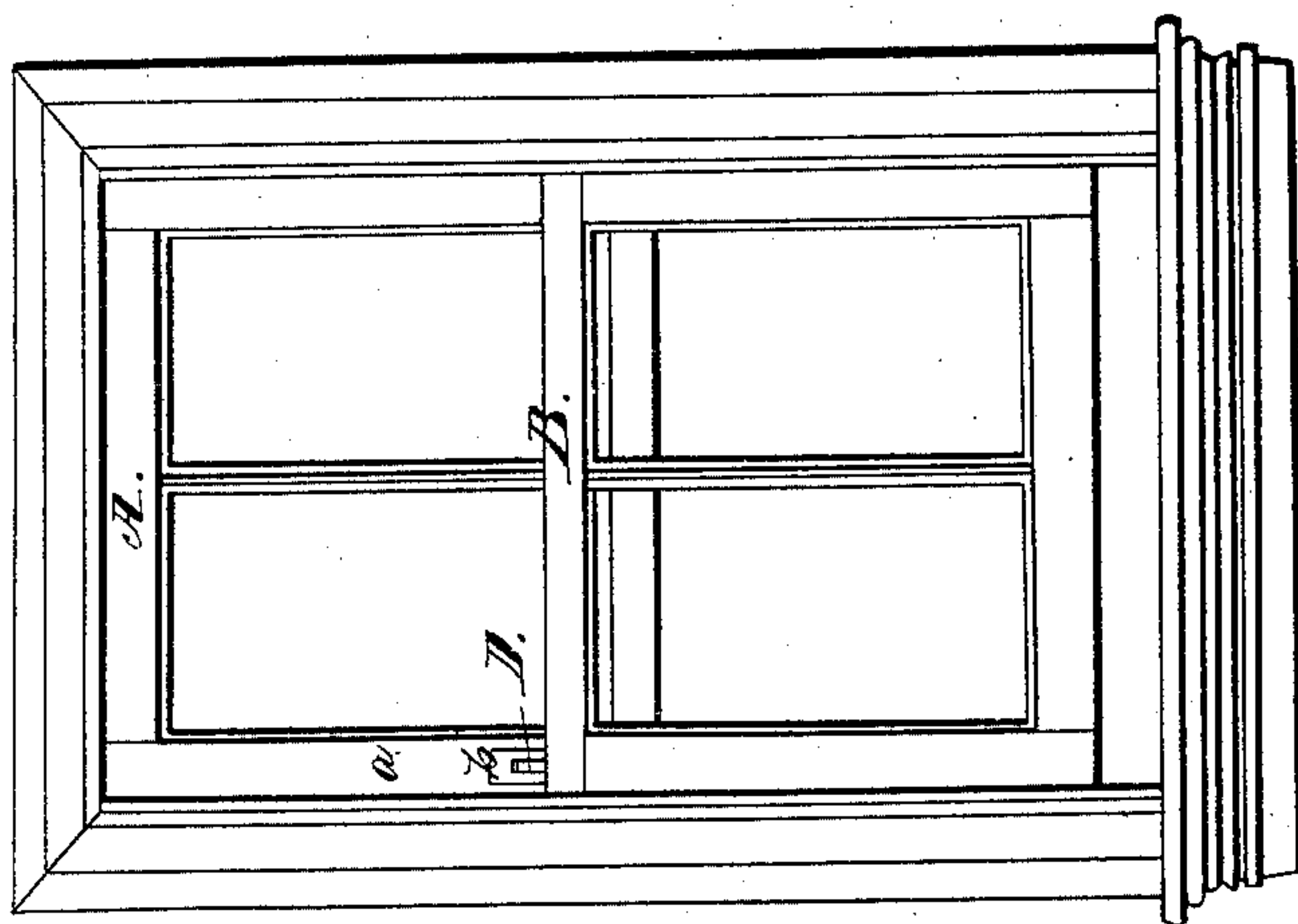


Fig. 1.



Witnesses:

Alexander Adamson
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Inventor:

Edward M. Judd
by his atty
A. Gregory

UNITED STATES PATENT OFFICE.

EDWARD M. JUDD, OF NEW BRITAIN, CONNECTICUT.

WINDOW-FASTENER.

Specification of Letters Patent No. 30,408, dated October 16, 1860.

To all whom it may concern:

Be it known that I, EDWARD M. JUDD, of New Britain, in the county of Hartford and State of Connecticut, have invented a new and useful Improvement in Window-Sash Stops or Fasteners, of which the following, taken in connection with the accompanying drawing, which forms part of this specification, is such a full and clear description as to enable others skilled in contrivances of the class to which this my improvement belongs to make and use the same.

While my improved sash fastener herein described may be used either alone or in concert with an independent fastener to the sashes of a window in their closed condition, the utility and peculiar action of it will be best explained by describing it aloof from any other sash locking device and as employed solely for ventilating purposes to lock the sash or sashes when partly open from being further or wholly opened, and which being the function or use proper of it I term the device a ventilating sash stop or fastener. Thus, it frequently happens, especially in windows having balanced sashes, that there is no express provision or contrivance for securing the one or both sashes from being widely opened when the same have been partly raised or lowered for the purposes of ventilation, as in the case of a bed-room window, for instance, which in warm weather it is often desirable to open at the top or bottom, or both, to a limited extent which should be sufficient to admit of ventilating and cooling the apartment but not enough to allow of a thief or person from the outside entering through said space or opening. Exposure to this last-mentioned danger is doubly conspicuous in the case of balanced sashes when left partly open for the purposes specified, inasmuch as they are easy to work and comparatively noiseless in being raised or lowered. A provision or arrangement then for locking balanced sashes when partly open is a desideratum to supply which in a perfect form or manner requires something more than the mere location for such purpose of a stop or fastener, and many or most of the ordinary sash stops or fasteners for locking sashes when closed would be inapplicable or badly suited for securing the said sashes in a partly open condition. For this there are many reasons. A

stop or fastener to secure the sash or sashes when partly open should be so constructed and operative as, in case of the two sashes of a window being made to slide, to admit of either or both of them being partly opened and so that when the fastener locks the one sash it simultaneously secures the other, alike when one sash is only partly opened as when both are. Again, said stop should form no projection on or from or over the sash when the use of it is not required, so that the same in nowise interrupts the free working of the sashes up and down or against each other. This concealment of it is also necessary to neatness. Neither should it, when not required to lock the sashes, bear with any spring or frictional pressure against the sash it when in duty locks on or over, otherwise the free working of the sashes will be interfered with and objectionable rub and wear take place in sliding one or both sashes to or from their places. Furthermore, a stop or fastener for the purpose described should be simple, quick in its action, easy to operate from the inside, and should be spring bound or held both when in use to establish the lock and when closed or out of use, so that its adjustment in or to both conditions is made secure. All these requirements are fully covered by this my invention, which while it may be described as belonging to the turn-button order of fastenings importantly differs from such contrivances, not excepting those sash stops or fasteners for locking the sashes when closed in which a catch or stop, acted upon by a spring at the back, is let into the one sash and hung on an end pivot thereto and made by its spring, that exerts a constant outward or locking thrust, to shoot or lap over or on the other sash, which character of fastening fails to include the several requirements previously specified, particularly as regards the action of the spring to keep the stop shut and free from frictional pressure or rub on the adjoining sash, and materially differs in construction from that I now proceed to describe.

Referring to the accompanying drawing, Figure 1 represents an ordinary two sash window with my improvement applied to it and showing the lower sash as partly raised. Fig. 2 is a vertical transverse section of said window with both sashes closed. Fig. 3 is a similar section, on an enlarged scale, taken through the stile portion of the sash which

carries my improved stop or fastener and illustrating the latter as locking the sash or sashes when partly open from being further raised or lowered. Fig. 4 is a like section of the stop or fastener detached, and when closed or not used to lock the sash or sashes; and Figs. 5 and 6 are face and side views of the same and case containing or making part of the fastener.

10 In said drawing, the part marked A represents the upper sash, and B the lower one, both of which may be hung to slide in the usual way, and both be balanced, or the one sash only may be made to slide. Where the window does not admit of a central arrangement of the fastener, I embed it in one of the side bars or stiles (a) of one of the sashes, though where only one, say the lower, sash is made to open, it may then be arranged in the window frame, but such disposition of it does not so fully explain its utility as when both sashes are made to open and it is let into the one sash to lock the two sashes when either or both of them are partly open, which latter disposition of the fastener is the arrangement illustrated here.

C is a metal box or case made, say, with a face-plate (b) to secure it by screws to the stile of the sash into which it is sunk by means of a mortise, so as to leave its face-plate flush with the front or face side of the stile. This mortise box or case (C) serves to carry within it the stop or bolt (D) which is hung intermediately of its length or depth by a pivot (c) to the side or sides of said case. Said bolt (D) should lie flush or thereabout, when closed, with the face-plate of the case, as represented in Fig. 4 of the drawing; but, when swung outward or extended to lock the sash or sashes in its or their partly open condition, it is made to assume the position represented in Fig. 3 of the drawing, with its lower end or nose resting on and lapping over the cross rail of the sash adjoining that which carries the fastener, and in this position the bolt locks both sashes.

E, is an elastic bar, plate, or partly-elliptic spring, arranged to act upon the back of the bolt and sustained at its ends by back pieces or lips to the case (C). This spring (E) and the back of the bolt (D) are so constructed and arranged relatively to each

other and the pivot (c) as that the spring is made to perform the double duty of holding the bolt when extended and of securing it when closed, and giving a snap action or lock to both movements of the bolt accordingly as the thumb or finger is applied to press on the upper or lower arms of the intermediately pivoted bolt to reverse its positions as illustrated in Figs. 3 and 4 of the drawing, which figures clearly explain how these actions are or may be secured, by, for instance, forming the bolt with an intermediate jog (d) in its rear, preferably acting in concert with additional points or projections thereon near the extremity of either arm, and which construction of it causes the spring or spring-back (E) of the case to adjust the bolt so that, when closed, its front or opposite finger surfaces lie out of the way and flush with the face plate (b) of the case, also causes said spring to regulate the proper opening of the bolt. Thus, the fastener when closed exerts no rub or objectionable frictional pressure on the adjoining sash in working the sashes up or down nor requires to be held by the finger to open either sash, yet it is spring bound or held in both its open and closed conditions, and serves to lock both sashes alike when one only as when both are partly open.

What I claim as new and useful herein, is—

The combination, with a bolt pivoted intermediately of its length or depth, and mortise box or case for carrying the same and for embedding it as specified, of a spring or spring back plate to the box arranged to act upon the rear of the pivoted bow or bolt by a jog or jogs or their equivalents, to hold or lock the bolt both in its open and closed conditions and so as to cause the spring to adjust the bolt to lie when closed flush or thereabout, at its front or opposite finger surfaces, with the mouth of the mortise or face plate of the box, essentially as herein specified.

In testimony whereof I have hereunto subscribed my name.

E. M. JUDD.

Witnesses:

MORTON JUDD,
A. GREGORY.