

(No Model.)

T. BEECHER.

FASTENER FOR MEETING RAILS OF SASHES.

No. 375,528.

Patented Dec. 27, 1887.

Fig. 1

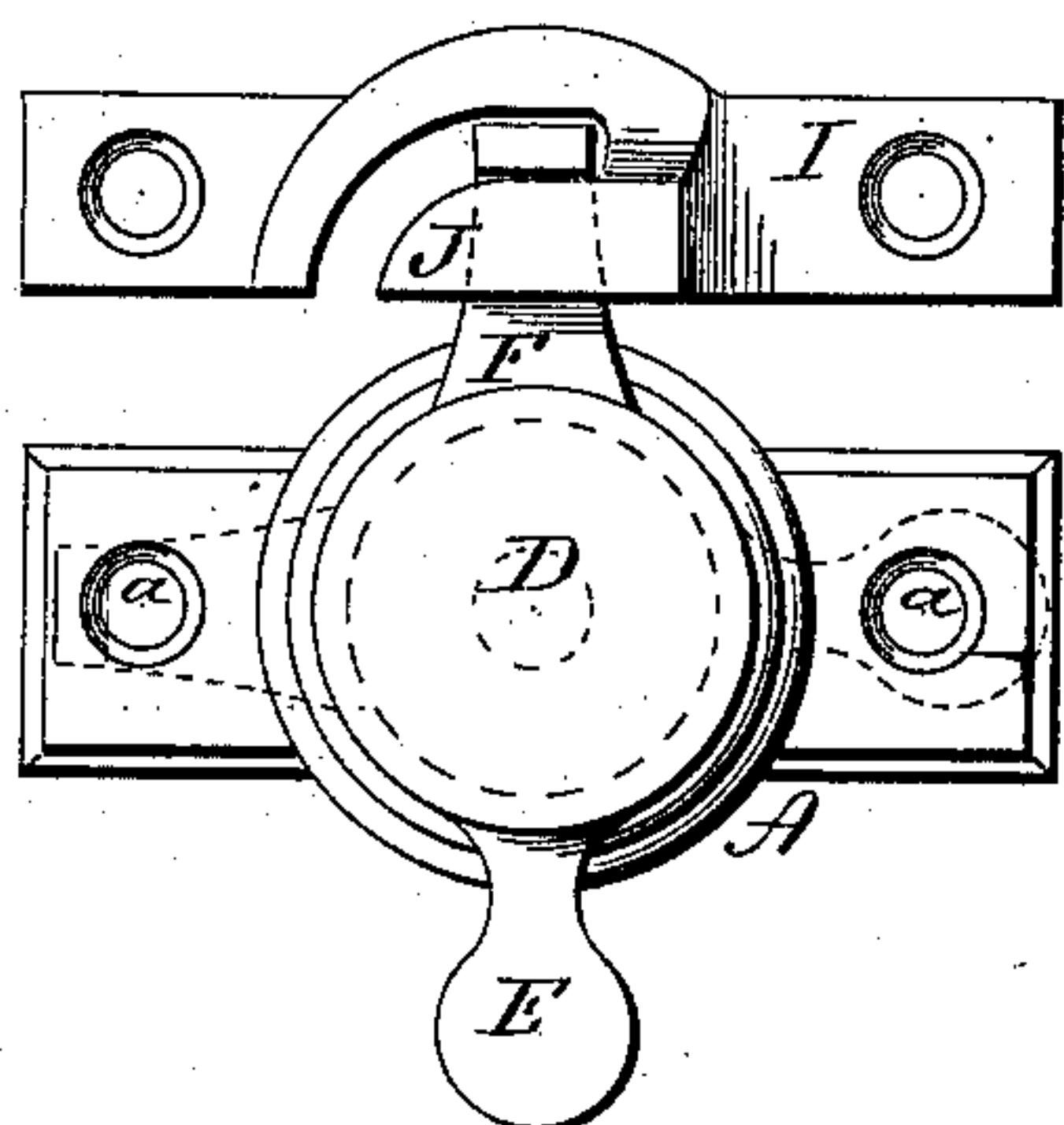


Fig. 2

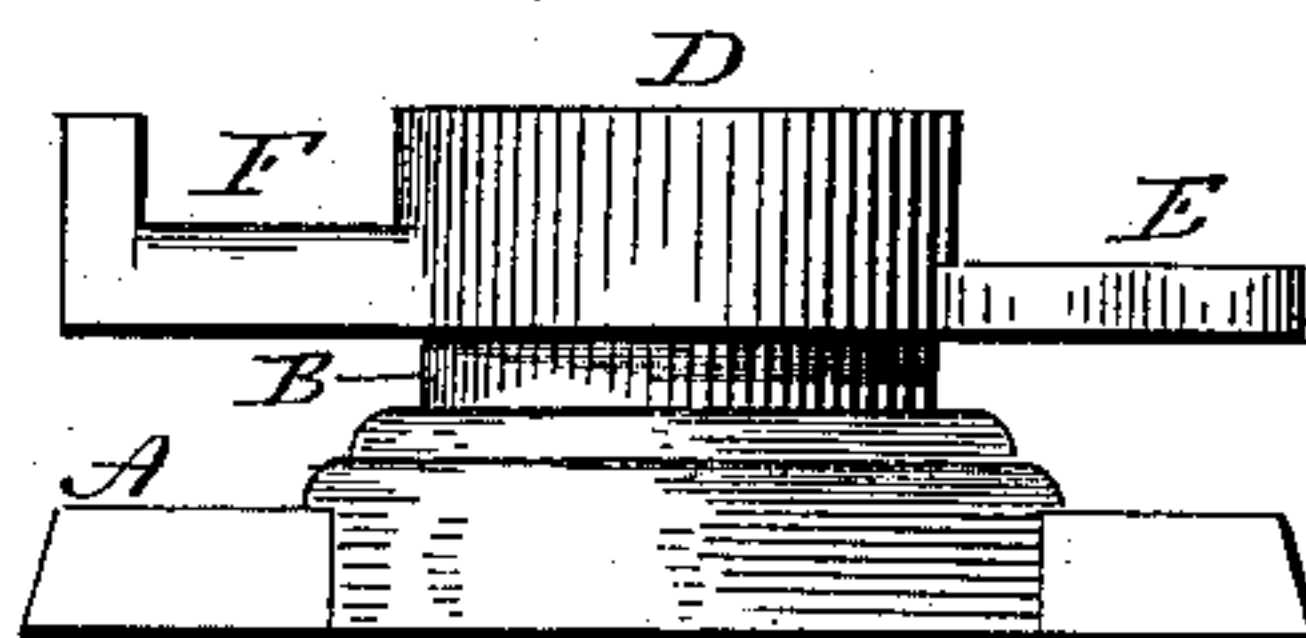


Fig. 3

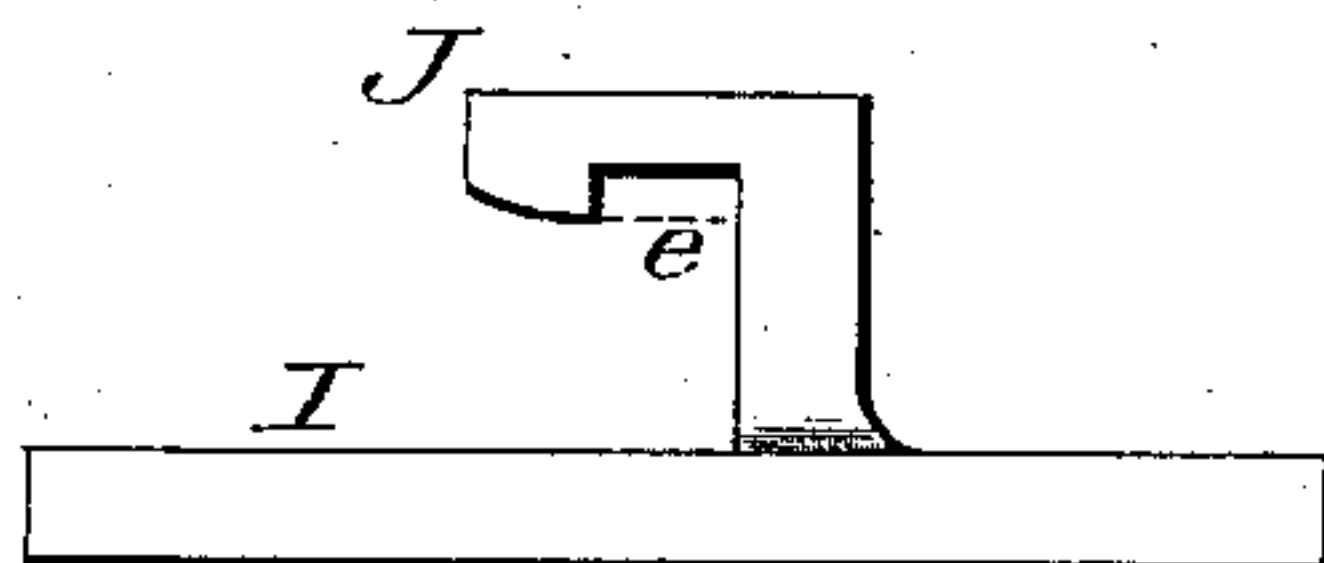


Fig. 4

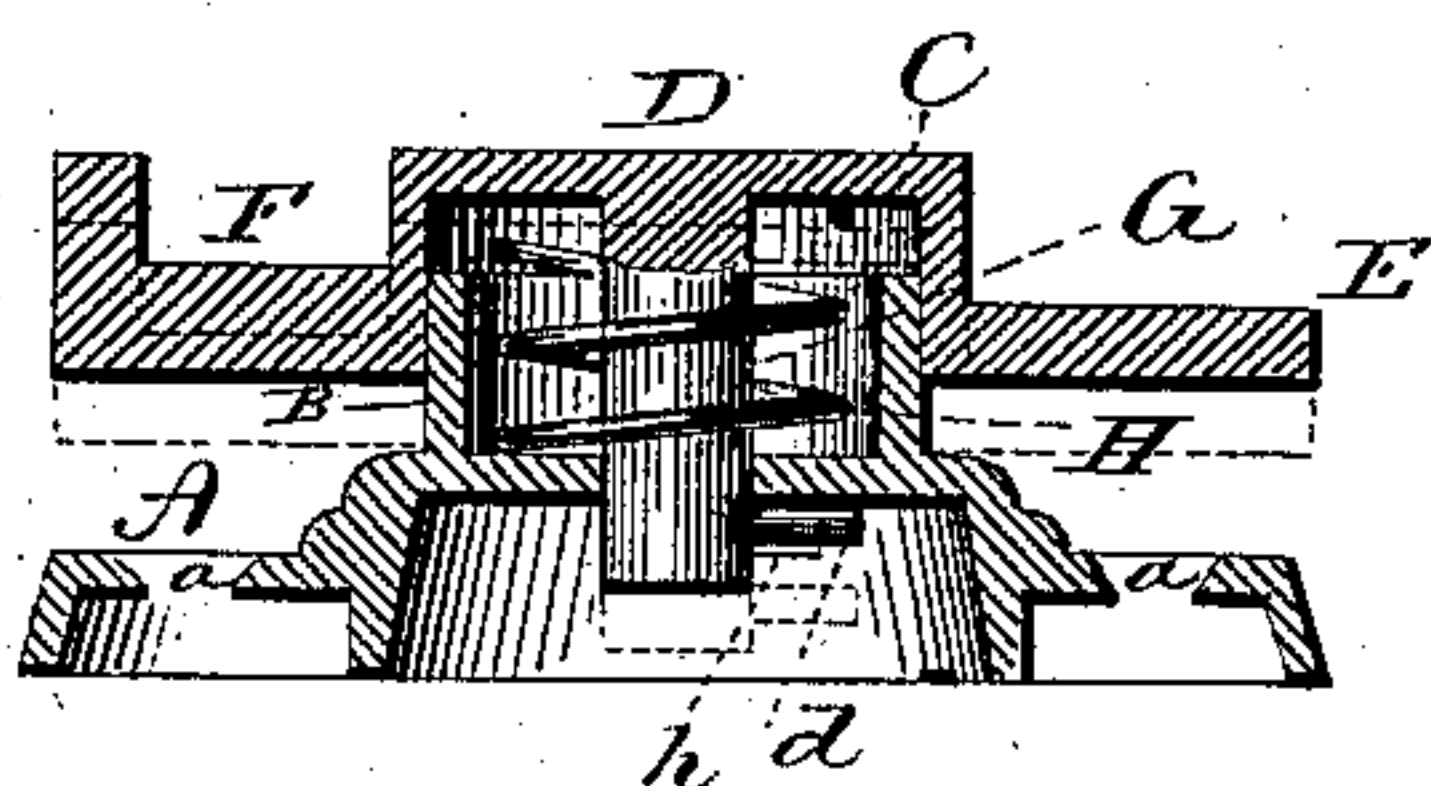


Fig. 5

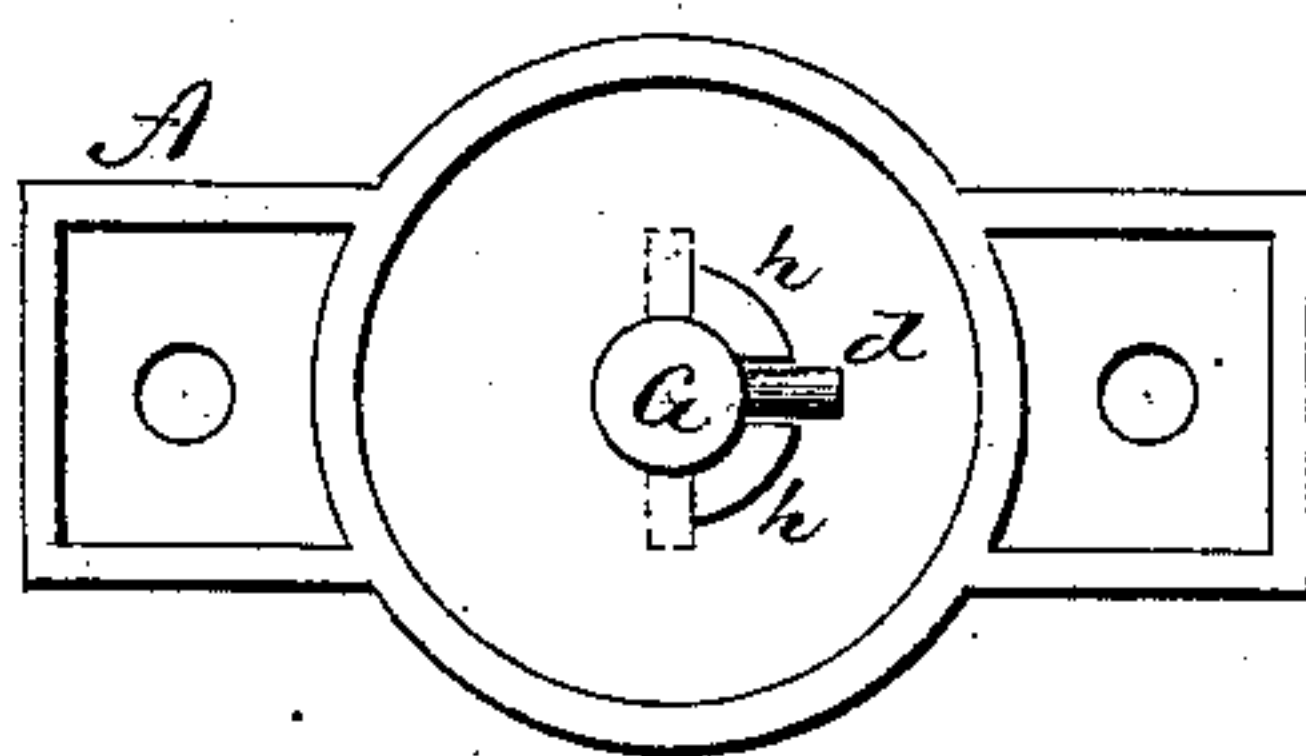


Fig. 7

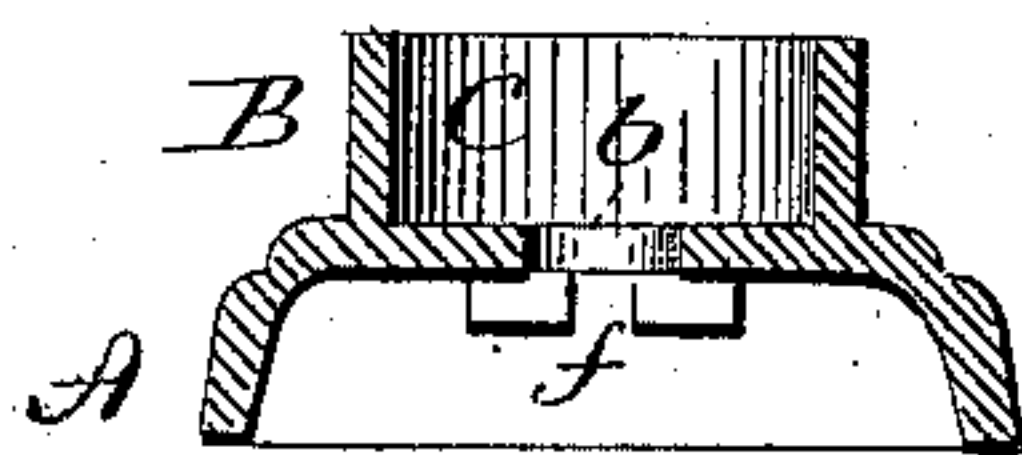


Fig. 6

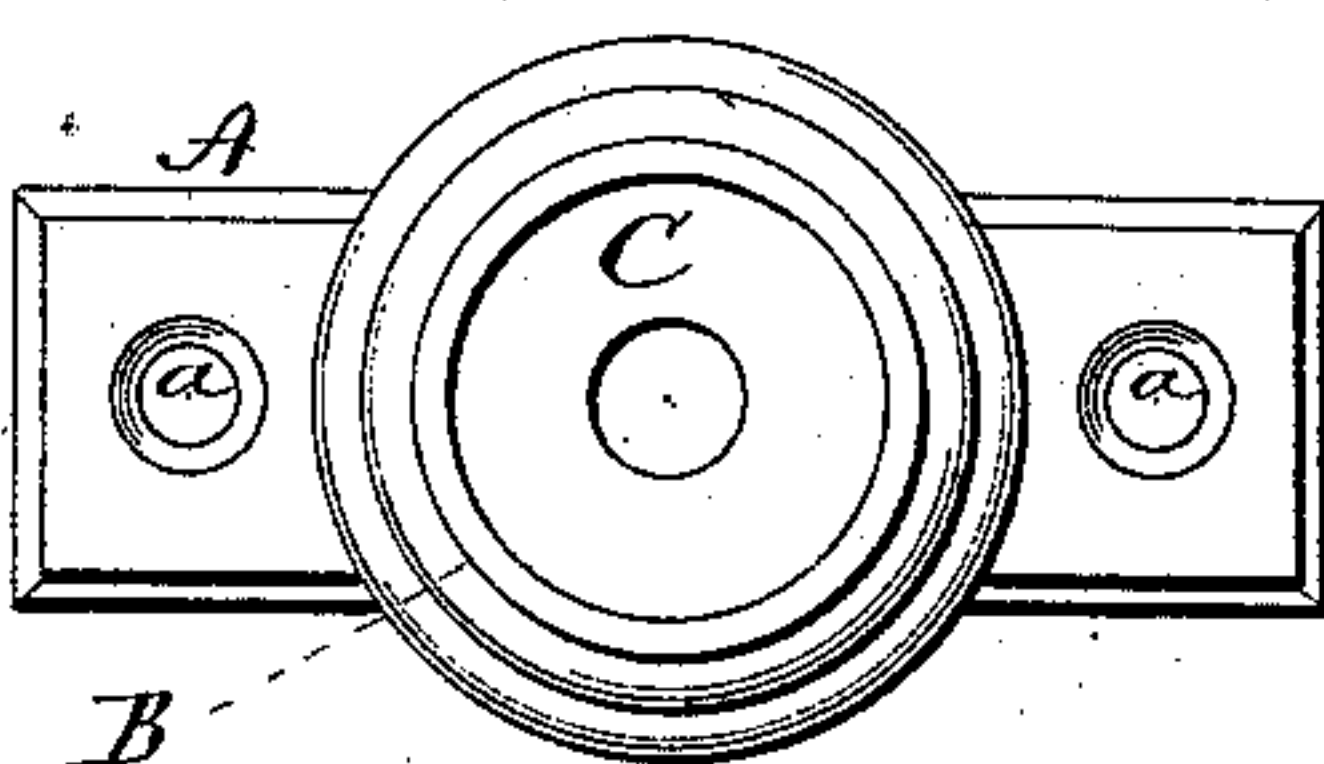


Fig. 8

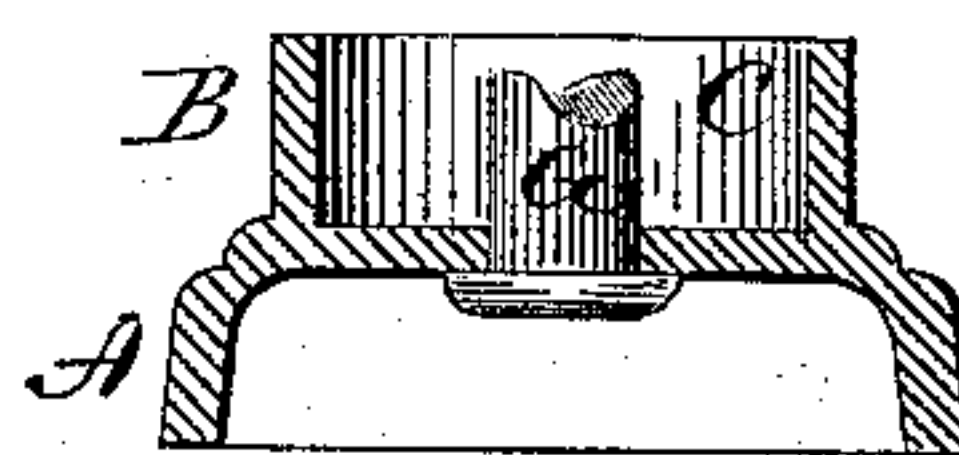
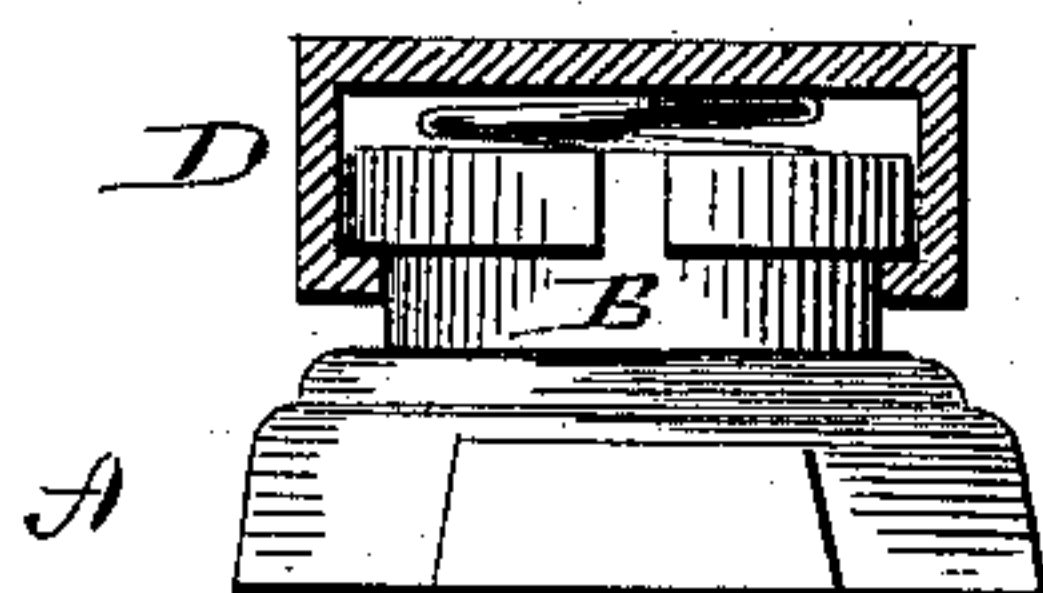


Fig. 9



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UNITED STATES PATENT OFFICE.

THOMAS BEECHER, OF NEW HAVEN, CONNECTICUT, ASSIGNOR TO CHARLES S. MERSICK, OF SAME PLACE.

FASTENER FOR MEETING-RAILS OF SASHES.

SPECIFICATION forming part of Letters Patent No. 375,528, dated December 27, 1887.

Application filed October 17, 1887. Serial No. 252,530. (No model.)

To all whom it may concern:

Be it known that I, THOMAS BEECHER, of New Haven, in the county of New Haven and State of Connecticut, have invented a new Improvement in Sash-Fasteners; and I do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a top view of the fastener in the locked position; Fig. 2, a side view in open position; Fig. 3, a side view of the keeper detached; Fig. 4, a longitudinal central section in open position; Fig. 5, an under side view of base; Fig. 6, a top view of same; Fig. 7, a transverse section of same; Figs. 8 and 9, modifications.

This invention relates to an improvement in that class of sash-fasteners which are adapted to be secured to the meeting-rails of window-sashes, one part of a "turn-button" character on the top of the lower sash, the other part adapted to be secured to the corresponding bottom rail of the upper sash to serve as a keeper with which the turn-button may engage, and so as to prevent the up-and-down movement of either sash, as well as to hold them close together, the object being a simple and effective fastener, which will be automatically locked when in the closed position, so as to prevent its being opened from the outside, and at the same time extremely cheap in construction; and the invention consists in the construction and combination of the parts, as hereinafter fully described, and particularly recited in the claims.

A represents the base for the lever or turn-button portion of the fastener, and is provided with screw-holes *a a* or equivalent means, by which it may be secured upon the top of the lower sash in the usual manner. Upon the top the base is constructed with a vertical central post, B, which presents a cylindrical outer surface, as seen in Fig. 6; but this post B is recessed upon its upper end to form a concentric spring-chamber, C. (See Figs. 4 and 7.) Through the bottom of the chamber C is a concentric hole, *b*. The lever or turn-button is composed of a central hub, D, a little larger

in diameter than the post B on the base, and upon the under side the hub is concentrically recessed, corresponding to the outer cylindrical surface of the post or projection B, and so as to set thereon, as seen in Fig. 4, the post forming a pivot around which the hub may rotate, and at the same time be free for a limited amount of up-and-down movement—that is, in the direction of the axis of the pivot. On one side the hub is constructed with a radially-projecting handle, E, and on the opposite side it is constructed with a radial hook-like projection, F.

Concentrically in the recess in the hub is a downwardly-projecting spindle, G, of a length to extend through the hole *b* in the base. Into the chamber C of the base a helical or other suitable spring, H, is set, resting on the bottom of the chamber C, and upon this spring the hub D rests, as seen in Fig. 4, the spring being sufficient to support the hub normally, so that it may not come to a bearing upon the upper end of the post B, as indicated in Fig. 4.

To hold the hub down upon the spring the spindle G should be enlarged below the hole *b* in the base, as seen in Fig. 8; but I prefer, for reasons which will hereinafter appear, to insert a radial pin, *d*, into the spindle below the hole *b* in the base, and so as to bear upon the under side of the base.

The keeper consists of a base, I, adapted for attachment to the bottom rail of the upper sash in the usual manner, and on this base is a hook, J, (see Figs. 1 and 3,) similar to other keepers in this class of fasteners, and so that when properly applied, as represented in Fig. 1, the hook J is adapted to be engaged by the hook F of the lever. Upon its under side the hook J is constructed with a transverse notch, *e*, (see Fig. 3,) corresponding to the hook F, and so that when the lever is turned to the fully-closed or locking position the hook F may rise into the notch *e* under the action of the spring, and so that the lever cannot be returned or opened without first depressing it, as represented in broken lines, Fig. 4.

The rear face of the hook J is made cam-shaped, as in the usual construction, that the end of the hook F, riding over such cam-shaped surface, may serve to draw the two sashes together in the usual manner for this class of

fasteners; and in order that the lever may be automatically depressed as its hooked end passes under the hook J the under side of the hook J is also made cam-shaped, as seen in Fig. 3, so that as the lever is turned to engage the hook J it is depressed, as seen in broken lines, Fig. 4, in passing under the hook J, and correspondingly compresses the spring H until the end of the lever reaches the notch *e*. Then the spring reacts and raises the lever into the notch *e*, as before described. In disengaging or unlocking, the lever is first depressed by the hand until it is free from the notch *e*, and then it may be rotated to the open position.

To make an additional or auxiliary lock for the lever, and also to lock it in the open position, the pin *d* is introduced into the spindle, and in the base a notch, *f*, is made in the path of the pin *d*, and into which the pin will be drawn when the lever has been turned to bring the notch *f* and pin *d* into line, as represented in Figs. 5 and 7. This notch *f* is in the wide open position indicated in Fig. 4. A similar notch or shoulder, *h*, may be formed at the locked position, with which the pin will engage when in the closed position. In this case the notch *e* may be omitted, as indicated by broken lines Fig. 3; but I prefer the notch *e* in the keeper.

While I prefer the spindle as the best means for holding the hub down upon the spring, it may be omitted and other means substituted, say, as by an annular groove around the post, as seen in Fig. 9, with an opening into it from the top of the post, and the hub constructed with an inward radial projection to pass down through said opening into the groove, as also seen in Fig. 9, this opening being at a point which the projection on the hub is not liable to reach under ordinary usage. I therefore do

not wish to limit my invention to the necessary use of the spindle.

I claim—

1. The combination of the base constructed with the concentrically-recessed cylindrical post B, with the hub D, concentrically recessed upon its under side, corresponding to the cylindrical post B, and so as to rotate around said post as its pivot and also free thereon for a limited amount of vertical movement, the said hub constructed with a radially-projecting engaging-hook, F, and also with a suitable handle, a spring within said post and upon which said hub rests, and the keeper constructed with the hook J and one or more notches with which said lever is adapted to engage, substantially as described.
2. The combination of the base constructed with the concentrically-recessed cylindrical post B, with the hub D, concentrically recessed upon its under side, corresponding to the cylindrical post B, and so as to rotate around said post as its pivot and also free thereon for a limited amount of vertical movement, the said hub constructed with a radially-projecting engaging-hook, F, and also with a suitable handle, and the said hub also constructed with a concentric downwardly-projecting spindle, extending through a corresponding hole, *b*, in the base, and provided with a radially-projecting pin below the base, the base constructed with one or more notches in the path of said pin, a spring within said post and upon which said hub rests, and a keeper with which said hook F is adapted to engage, substantially as described.

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Witnesses:

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