

W. S. HOW.

Fasteners for Meeting-Rails of Sashes.

No. 157,830.

Patented Dec. 15, 1874.

FIG. 1.

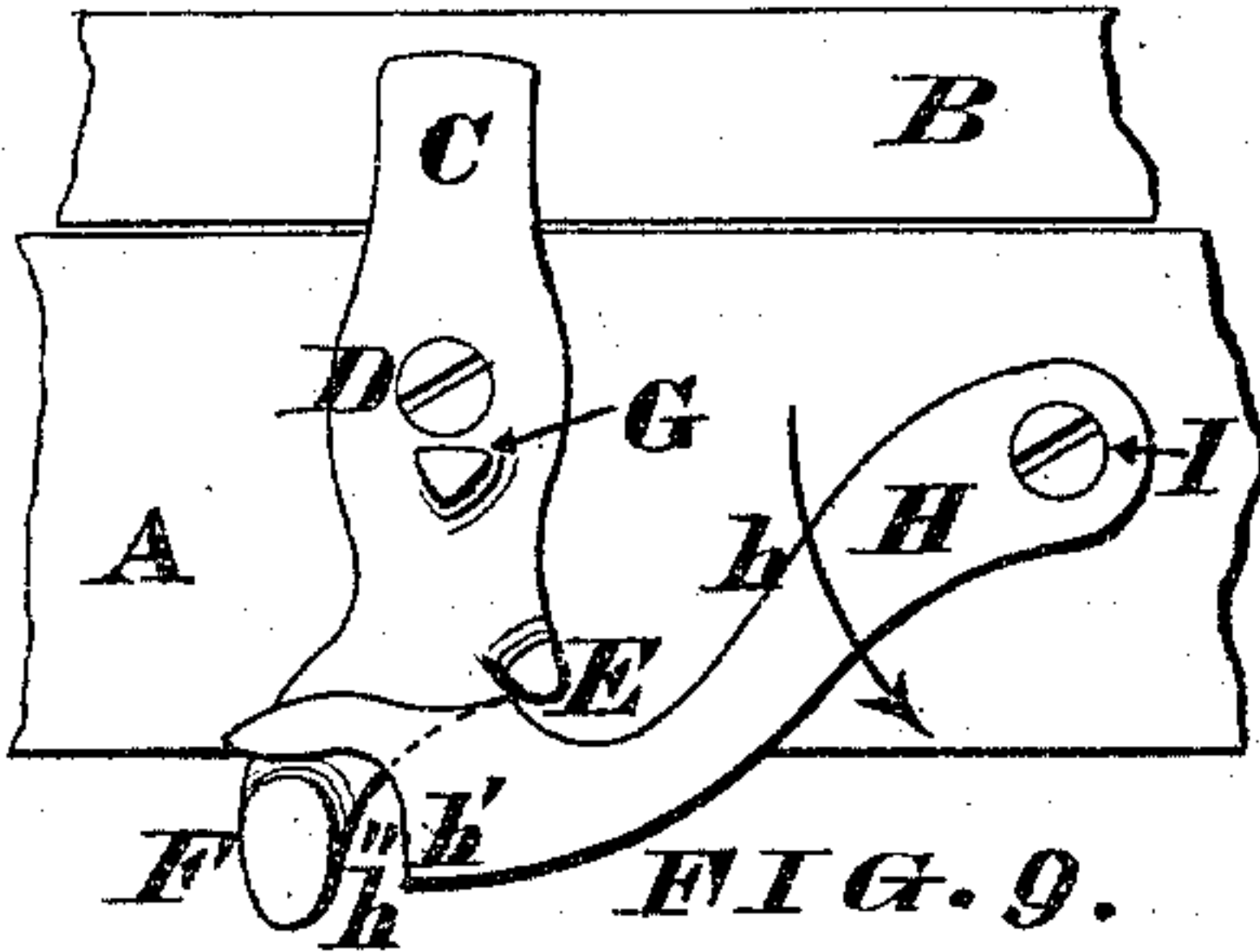


FIG. 2.

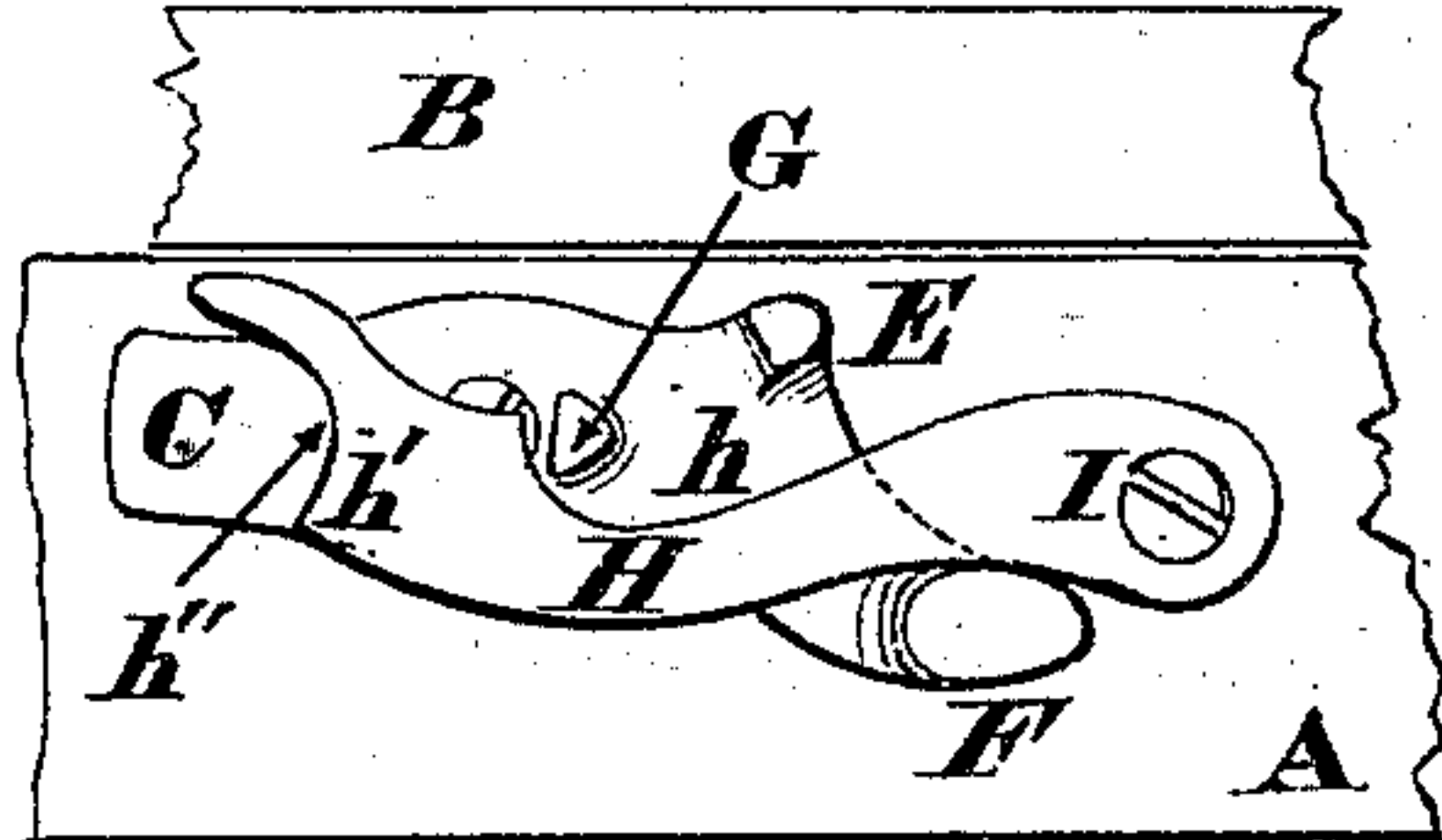


FIG. 12.

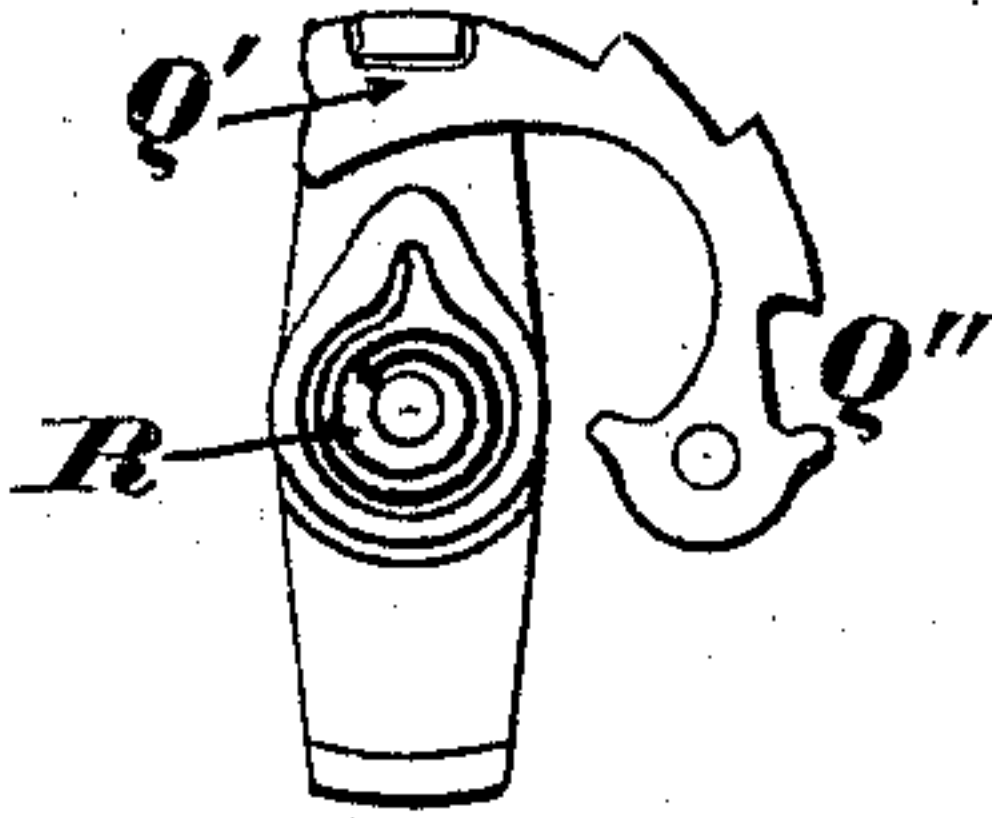


FIG. 9.

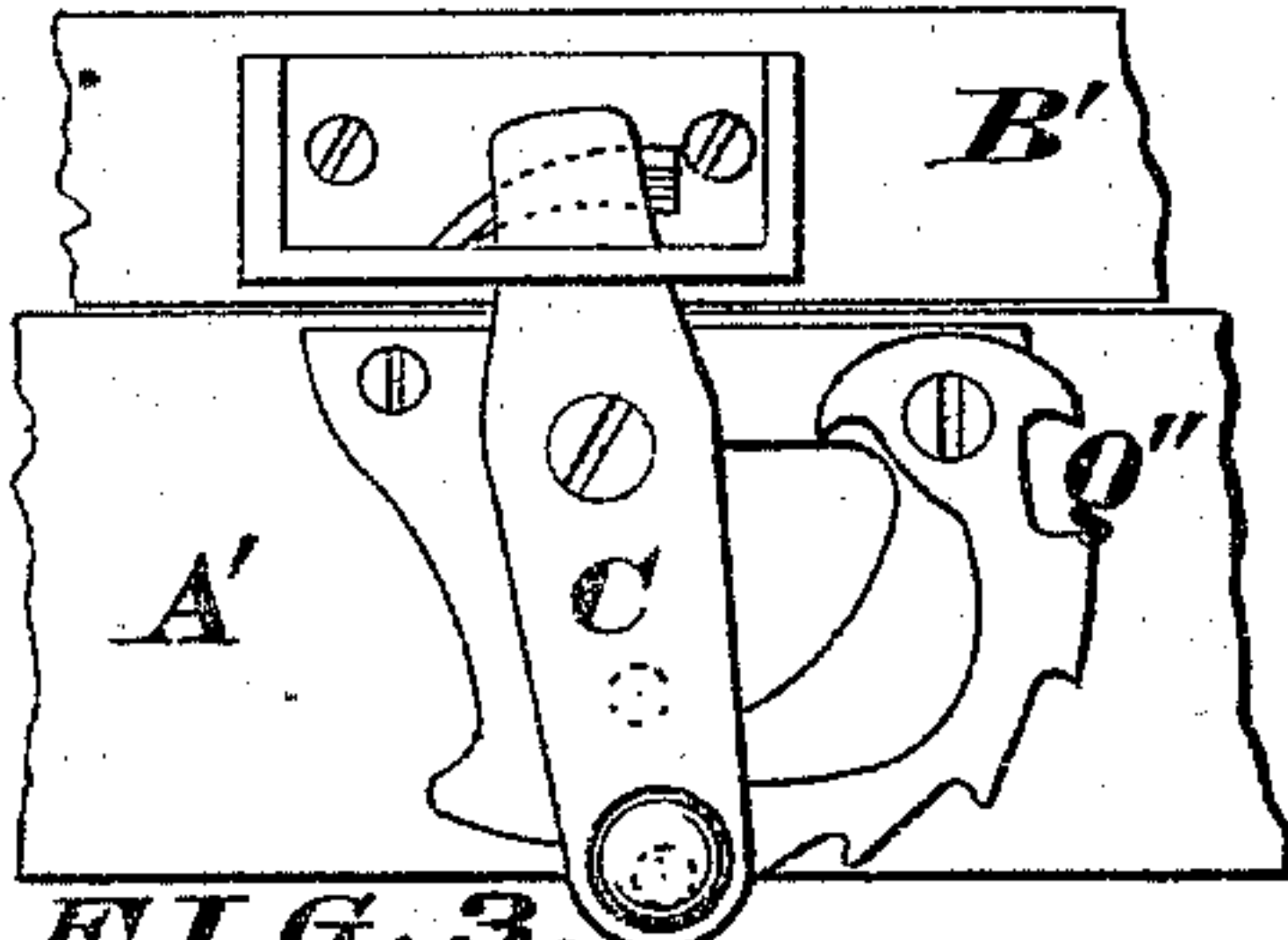


FIG. 10.

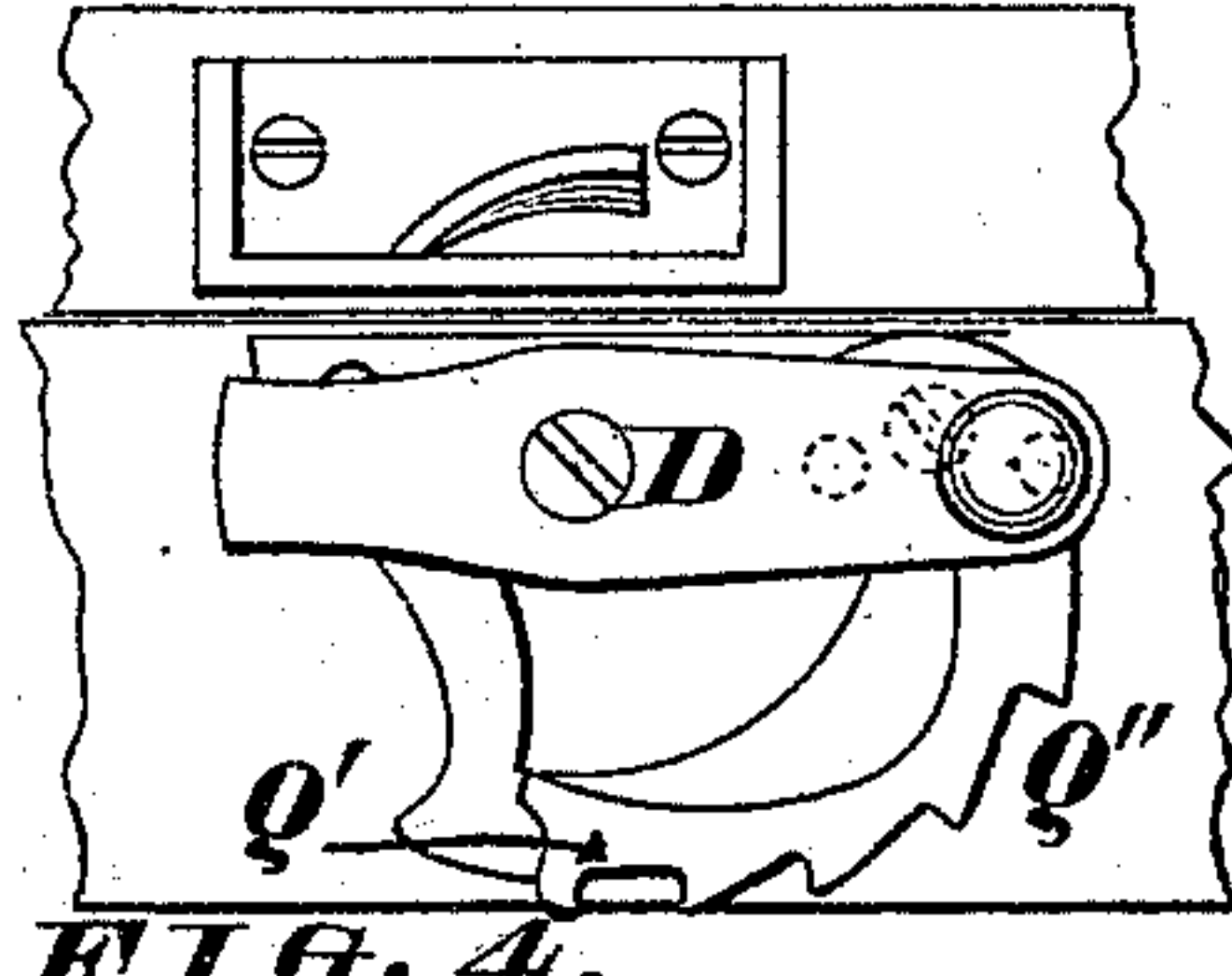


FIG. 11.

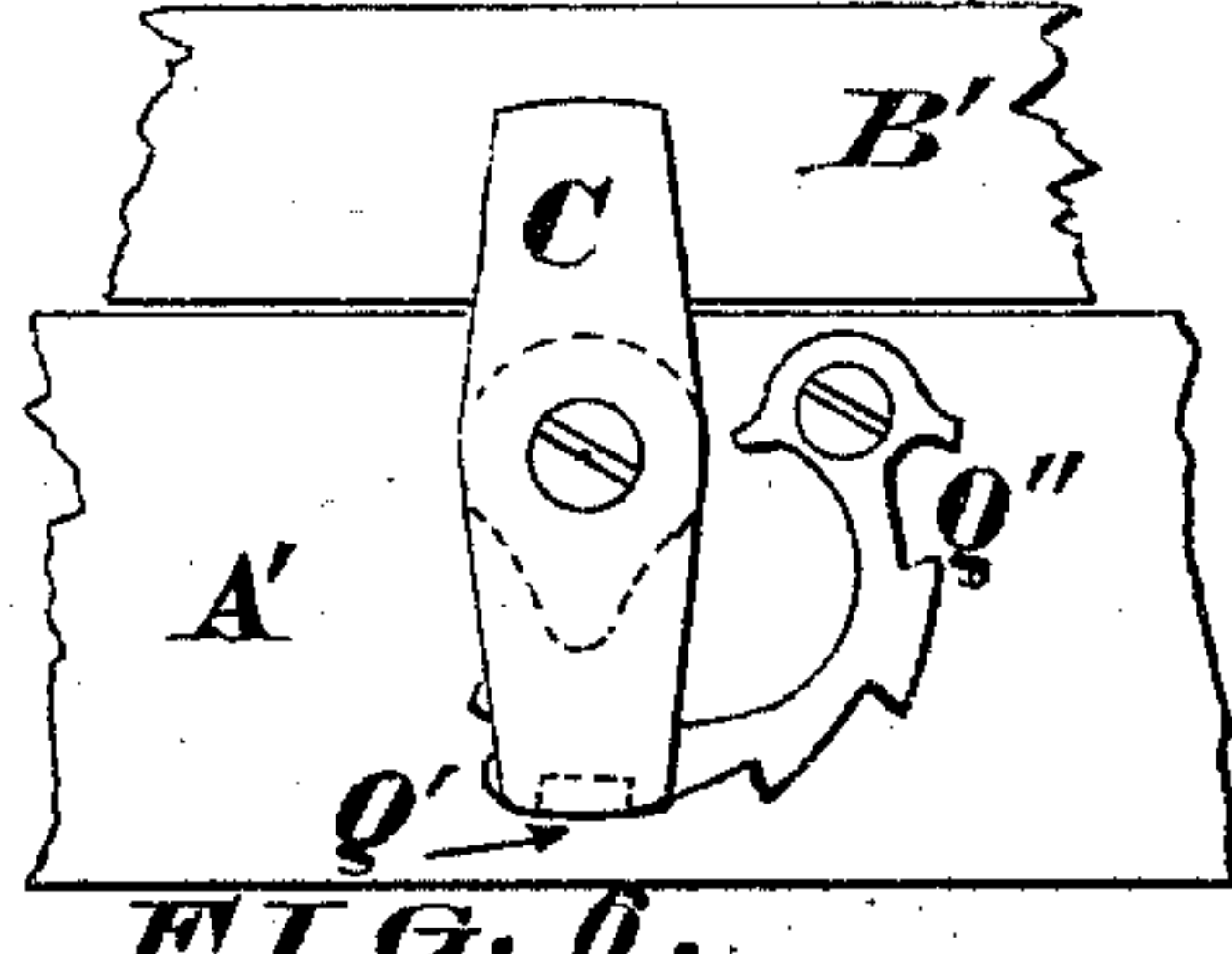


FIG. 3.

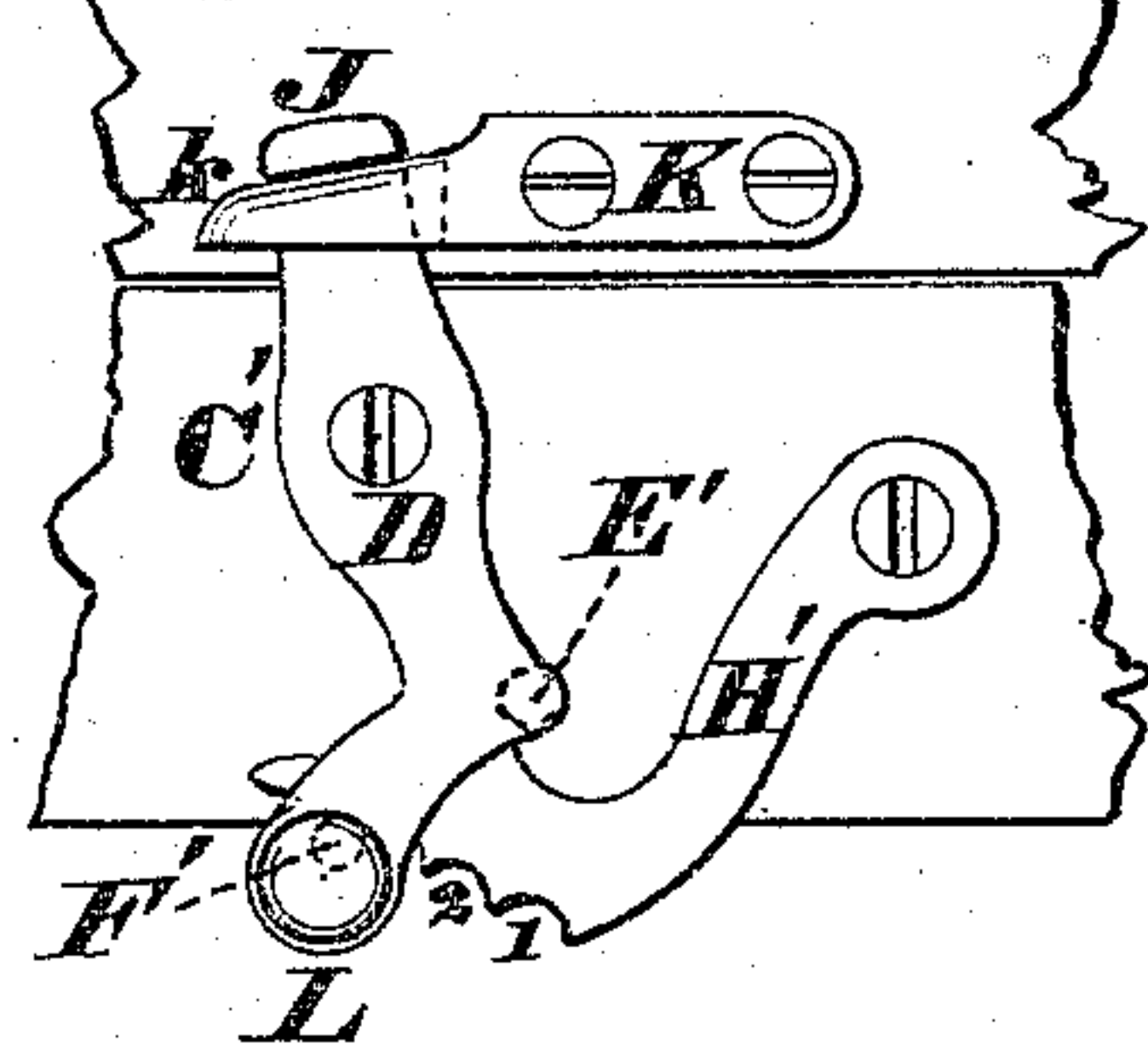


FIG. 4.

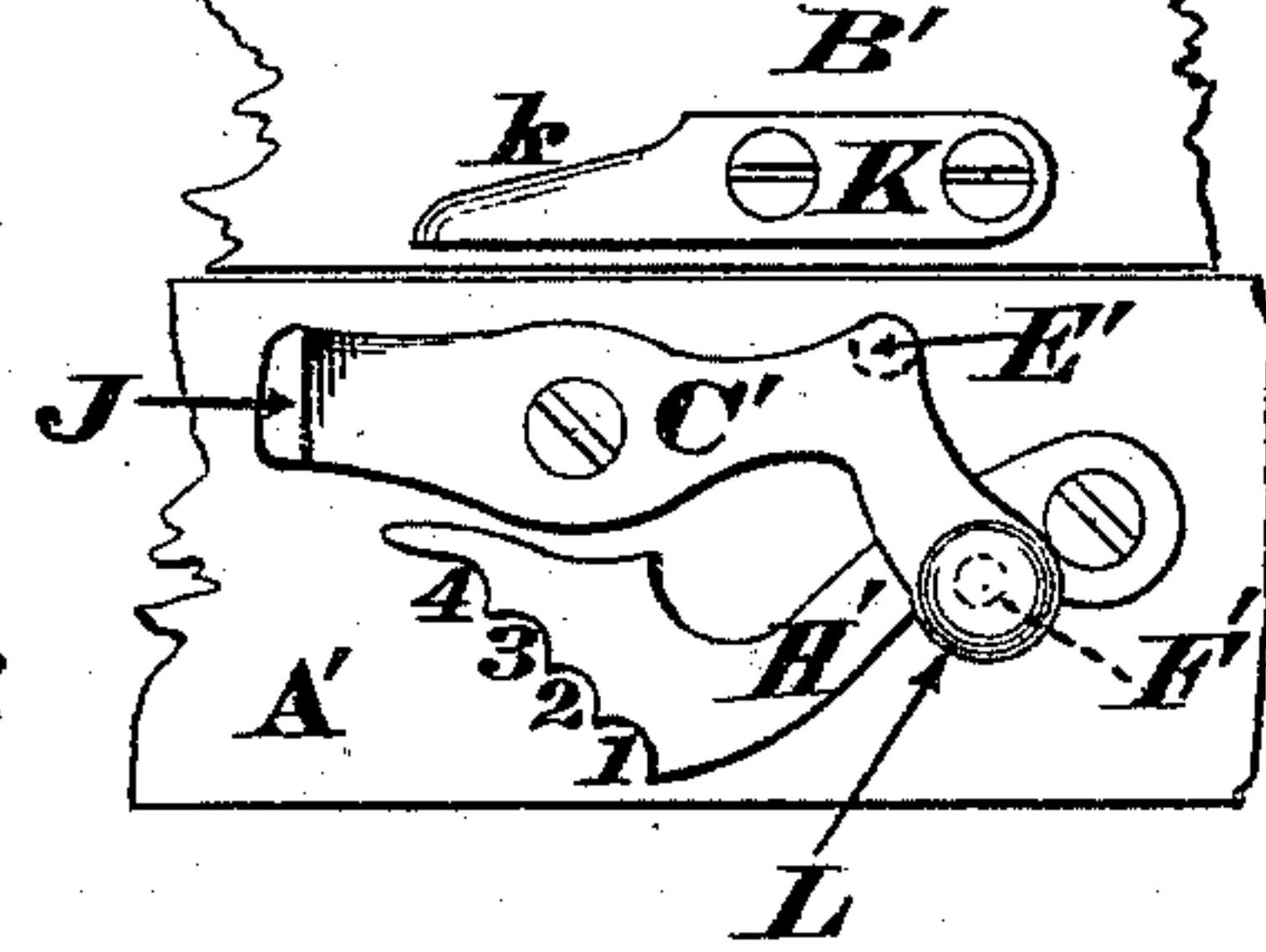


FIG. 6.

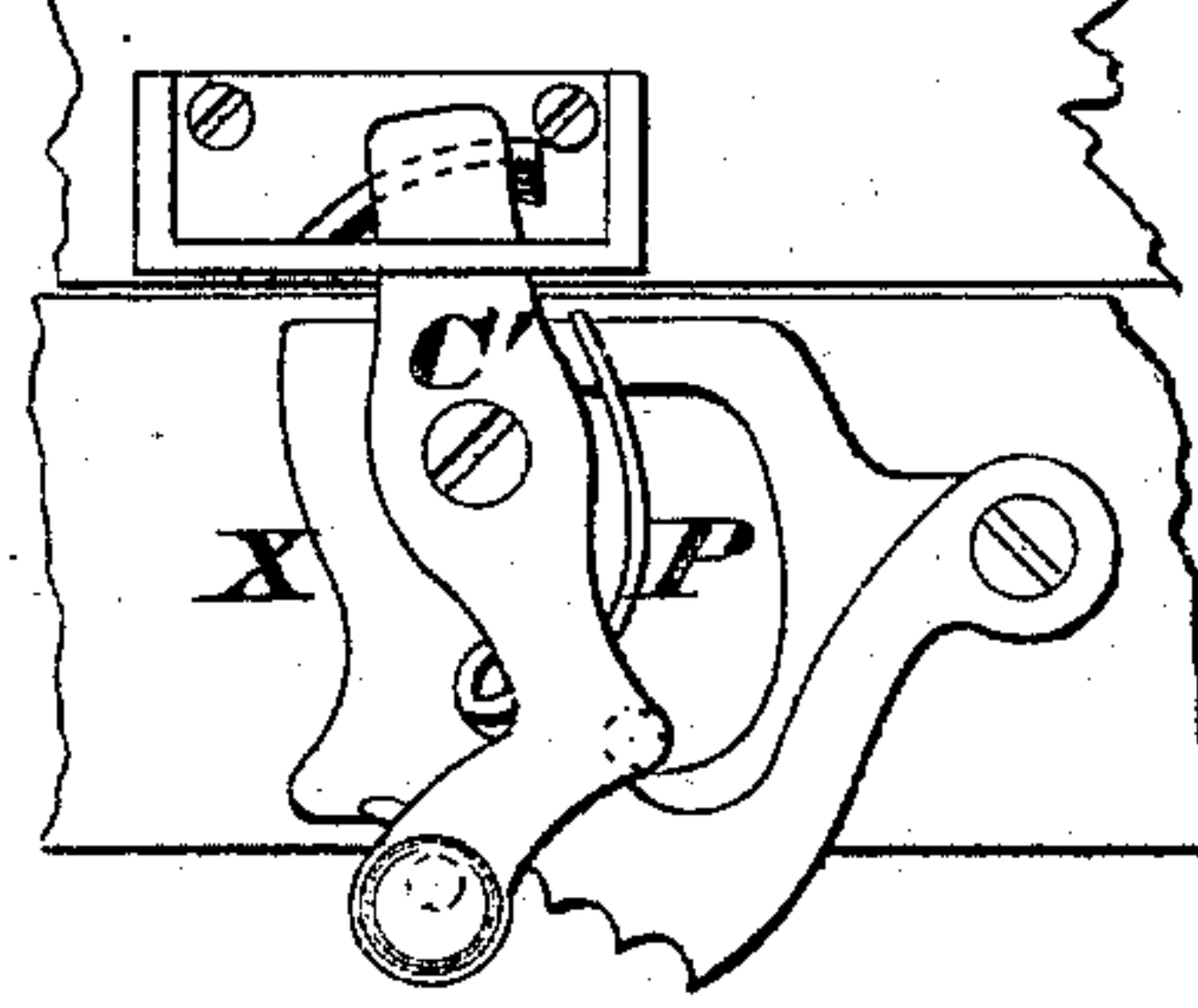


FIG. 8.

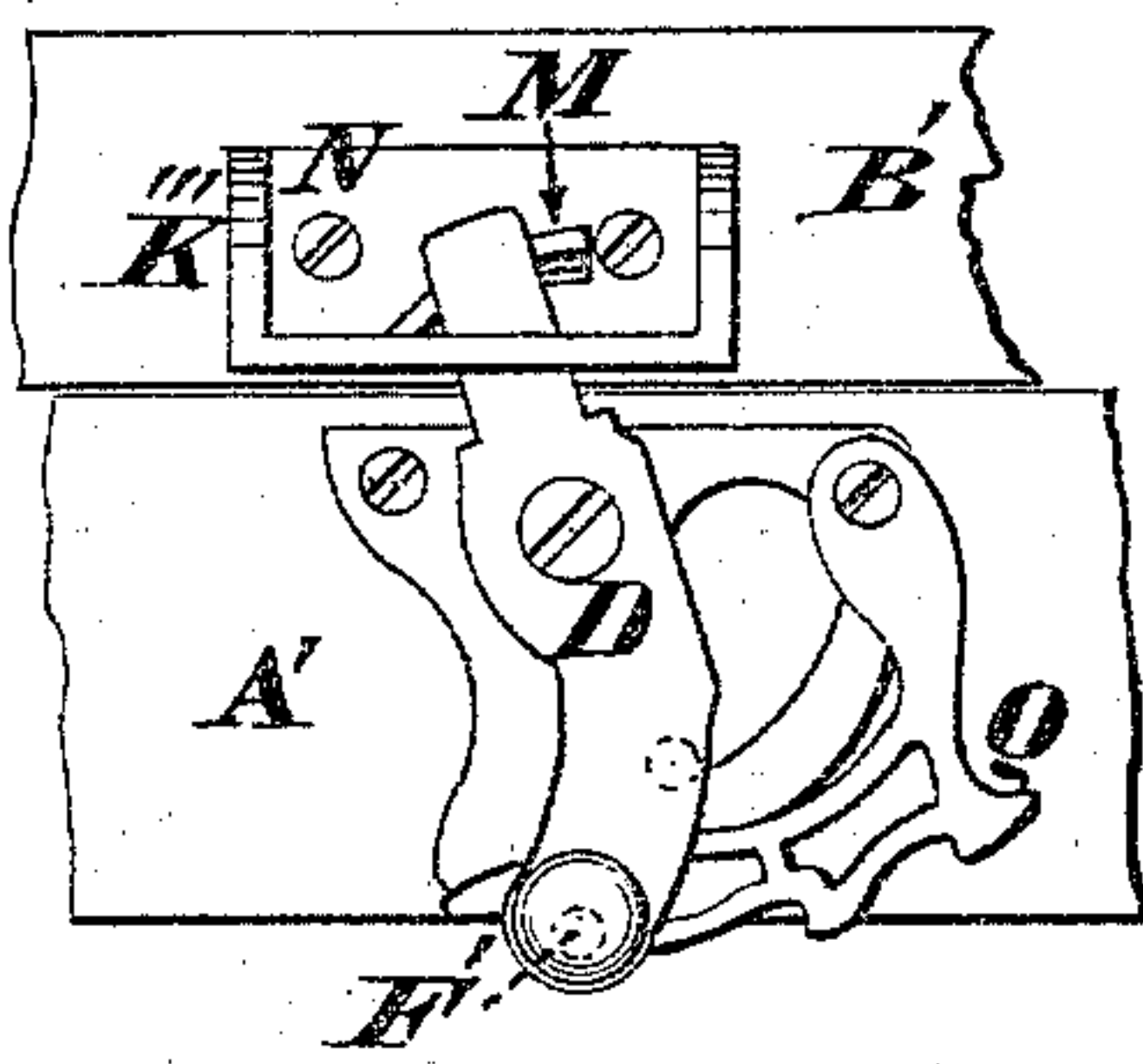


FIG. 5.

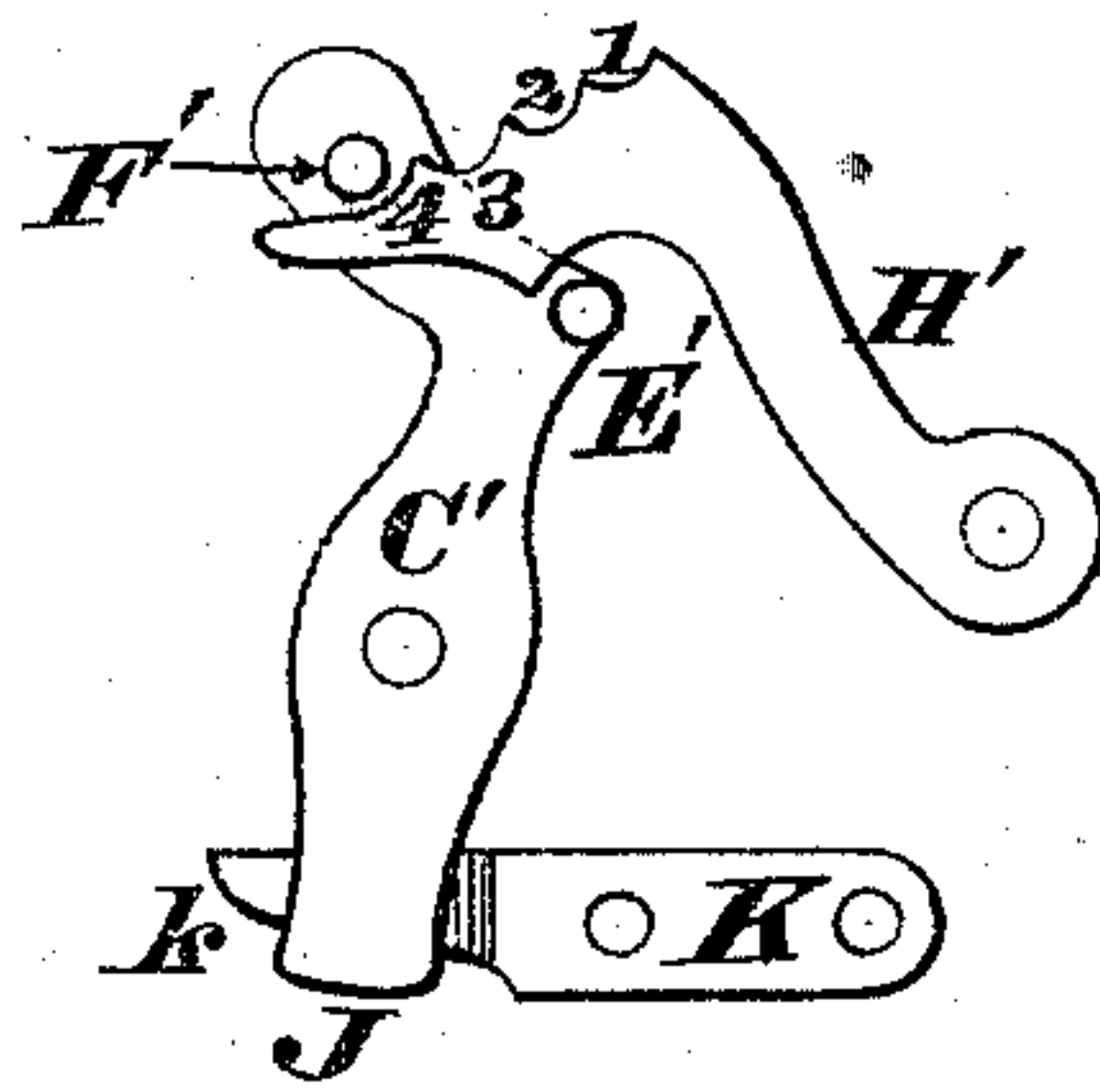


FIG. 7.

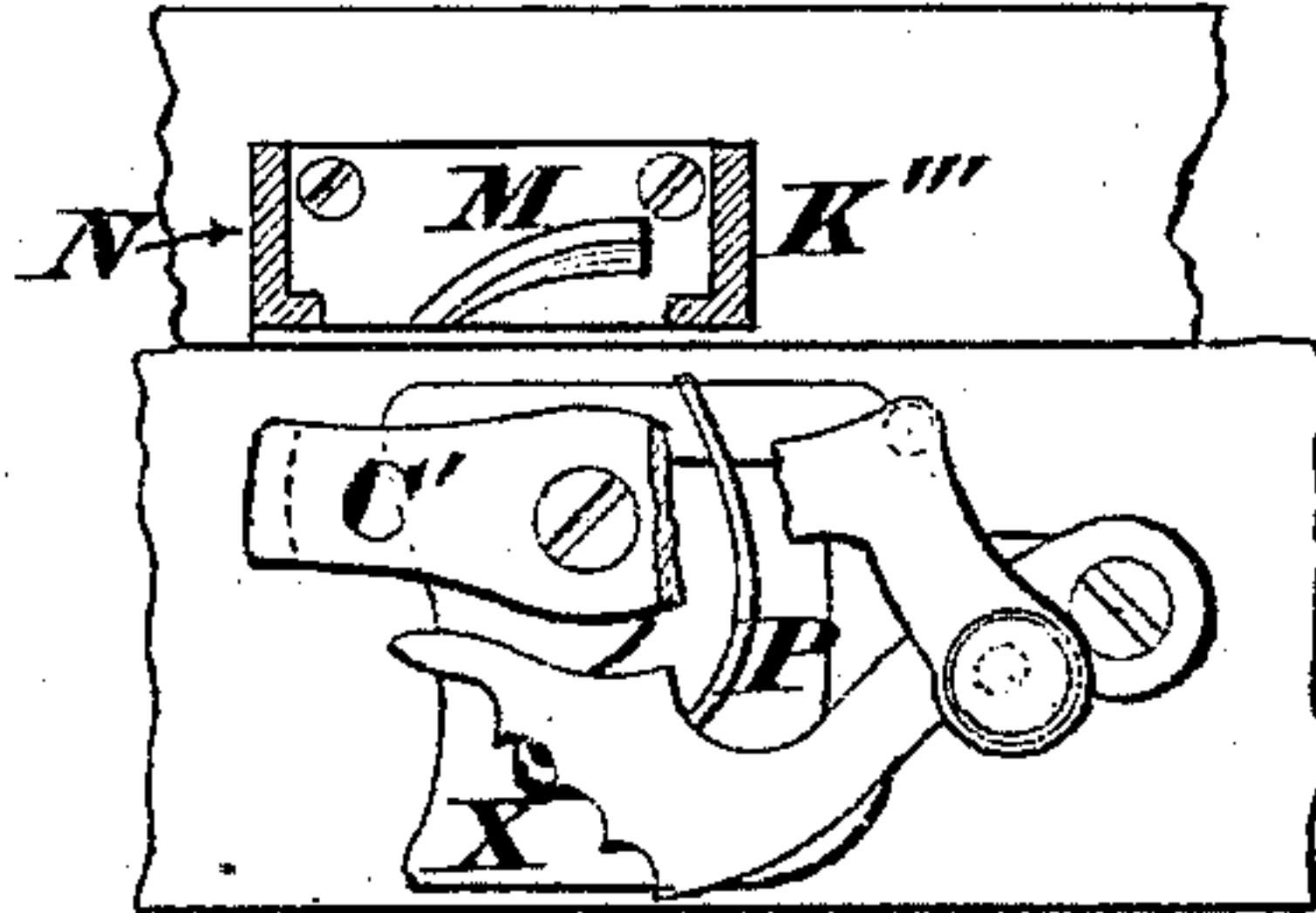


FIG. 15.

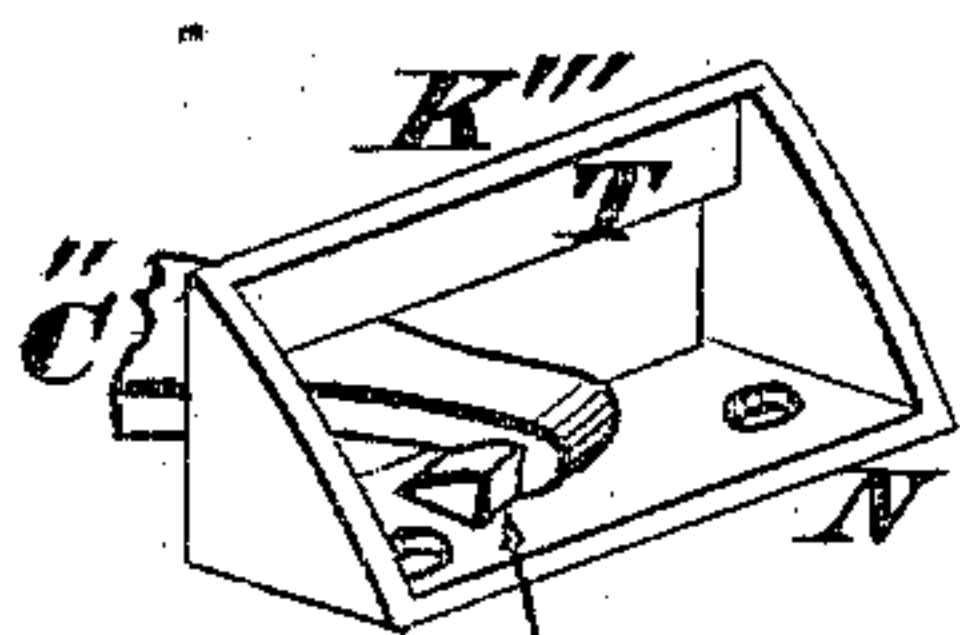


FIG. 13.

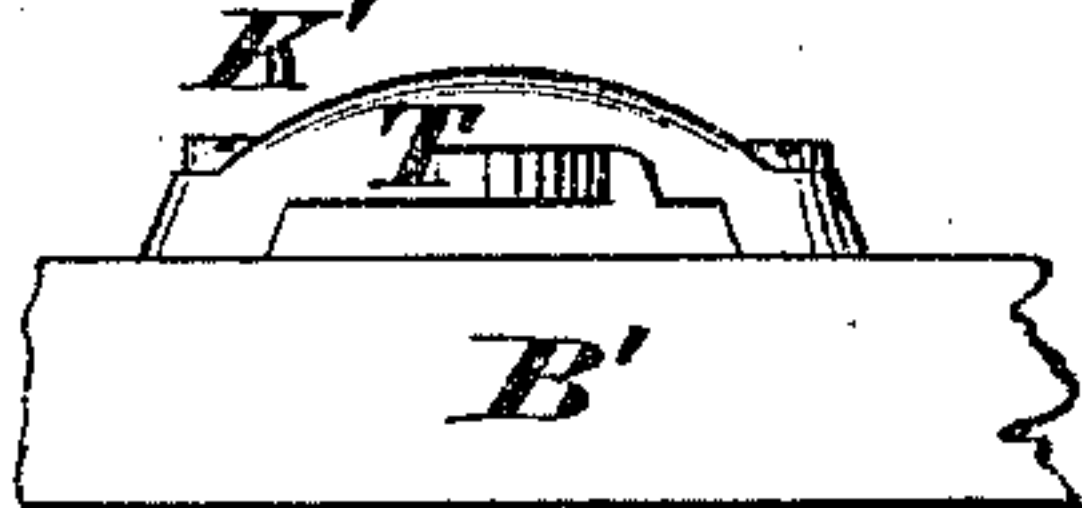
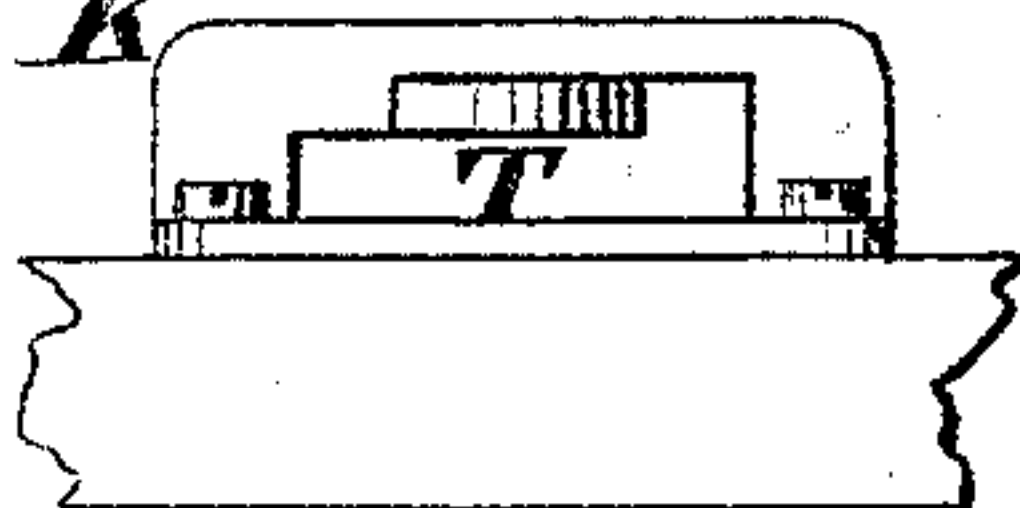


FIG. 14.



Attest
Henry Tanner
O. H. Dought

Witnesses How
By Hughes & Co. Att'ys

UNITED STATES PATENT OFFICE.

WOODBURY STORER HOW, OF CINCINNATI, OHIO.

IMPROVEMENT IN FASTENERS FOR MEETING-RAILS OF SASHES.

Specification forming part of Letters Patent No. **157,830**, dated December 15, 1874; application filed December 18, 1873.

To all whom it may concern:

Be it known that I, WOODBURY STORER HOW, of Cincinnati, Hamilton county, Ohio, have invented certain new and useful Improvements in Window and Door Buttons, of which the following is a specification:

My invention consists essentially of a latch or button having one or more projections which, by engaging in a pivoted arm or tumbler suitably notched for that purpose, is securely retained in locking or effective condition; and my invention in its more elaborate forms comprehends a catch or striker, under or behind which the heel of the button engages, and other features hereinafter set forth.

In the accompanying drawings, Figures 1 and 2 represent, in the locked and unlocked conditions respectively, my button and tumbler in their simplest form. Figs. 3 and 4 represent the locked and the unlocked conditions of a slightly more elaborate form of my device, coupled with an engaging catch for the heel of the button, and also additional engagements in the tumbler. Fig. 5 is an under-side view of the same parts in the locked condition. Figs. 6 and 7 show in the locked and unlocked conditions substantially the same device, but with the addition of base-plates for the catch and button, the catch being of a novel or a different form, and the button being provided with a spring. Fig. 8 shows the same device, having a slightly different form of tumbler. Figs. 9 and 10 show in the locked and unlocked conditions substantially the same device, but comprising a slight modification of my tumbler. Figs. 11 and 12 show by a top and an inverted view the locked condition of the same tumbler applied to a simple spring-button. Figs. 13, 14, and 15 show modifications of my catch.

A and B may represent, respectively, portions of a door-jamb, and of the corresponding door, and A' and B' may similarly represent portions of the meeting-rails of a common sash-window. My button C is pivoted at D to the door-jamb A, and has projecting from its upper surface three studs, E F G. My tumbler H is pivoted to the door-jamb at I. The shape of this tumbler is such that stud E in the act of locking impinges against

the concave edge *h* of the tumbler, pushes it outward, as per strong arrow, until it reaches the position shown in Fig. 1. By this time, the stud F having passed the salient angle *h'* of the tumbler, the button is effectually locked, because any retrograde motion of it without manipulating the tumbler inevitably brings the said stud F against the end *h''* of the tumbler, and arrests its further motion. This effectually prevents the release of the button by any clandestine effort—as, for example, by means of a thin blade inserted from without between the two members A and B, nevertheless the button may be easily unlocked by any person on the inner side, who shall just move the tumbler in the contrary direction of the arrow, and simultaneously with this movement push back the button to the position shown in Fig. 2. In this position the use of the stud G is seen, its office being to limit the backward movement of the parts. The stud F also serves as a handle. C' and H', (see Figs. 3, 4, and 5,) show modifications of my button and tumbler adapted for use as sash-fastening. In this form the stud E' for moving the tumbler, and the stud F' for interlocking therewith, are both on the under side of the button, which latter has on its upper side a knob or handle, L, and a lip, J, which latter engages behind the sloping surface, *k*, of a catch, K, so as to draw the two rails together, and close the joint between them. The tumbler H' has in this representation several locking-shoulders or notches, 1 2 3 4, to effect the locking when the button is by carelessness or obstruction left partially turned.

The form shown in Figs. 6 and 7 is slightly elaborated from the last named in the following particulars: It may also have a spring, P, to retain C' in either or both positions. In this form the button and tumbler, instead of being pivoted directly to the sash, are pivoted to a base-plate, X, which itself is secured by means of wood-screws to the sash. These screws may, however, as in the present illustration, also do duty as pivots.

Instead of the spring P a tusk or projection, Q, (see Fig. 8,) may be employed, in conjunction with the stud F', to hold the tumbler securely to its unlocked position, or this office

may be served by two tusks, Q' Q'', adapted to coact with both studs E' and F'. (See Figs. 9, 10, 11, and 12.)

The button shown in Figs. 11 and 12 may have a curved or volute spring, R, for the purpose of throwing it into the locked condition whenever released.

The catch K' is an improvement on the common catch K by my device of the bridge T, from wherein is given greater resistance to detaching force in all directions. K' is for use directly upon the sash, in conjunction with C' H'. Catch K'' has a base-plate for use with C H X. The catch K''' has a cam-plate, M, which projects from a base, N, said cam-plate serving the same purpose as the incline k in the preceding illustration. It has, also, my bridge or bar T, under which the heel of the button engages in the locked condition.

The tusks or projections Q Q' Q'' are represented as modifications of the indentations in the tumbler, and are not separately claimed as new, the intention being to adapt the shape

of the indentations or projections to the purpose for which they are desired.

I claim as new and of my invention—

1. The combination of a studded button, C, and a pivoted tumbler, H, formed and operating substantially as set forth.

2. The combination of a studded button and a pivoted tumbler, having notches or indentations with any suitable catch, operating substantially as set forth.

3. The combination of a studded button and pivoted tumbler, having indentations with the bridged catch K''' having a cam-plate, M, constructed and operating substantially as set forth.

4. The combination of the button C'' and catch K''', substantially as set forth.

In testimony of which invention I hereunto set my hand.

WOODBURY STORER HOW.

Attest:

S. B. SPEAR,

GEO. H. KNIGHT.