

(No Model.)

J. A. PAINE.

FASTENER FOR MEETING RAILS OF SASHES.

No. 308,517.

Patented Nov. 25, 1884.

Fig. 1.

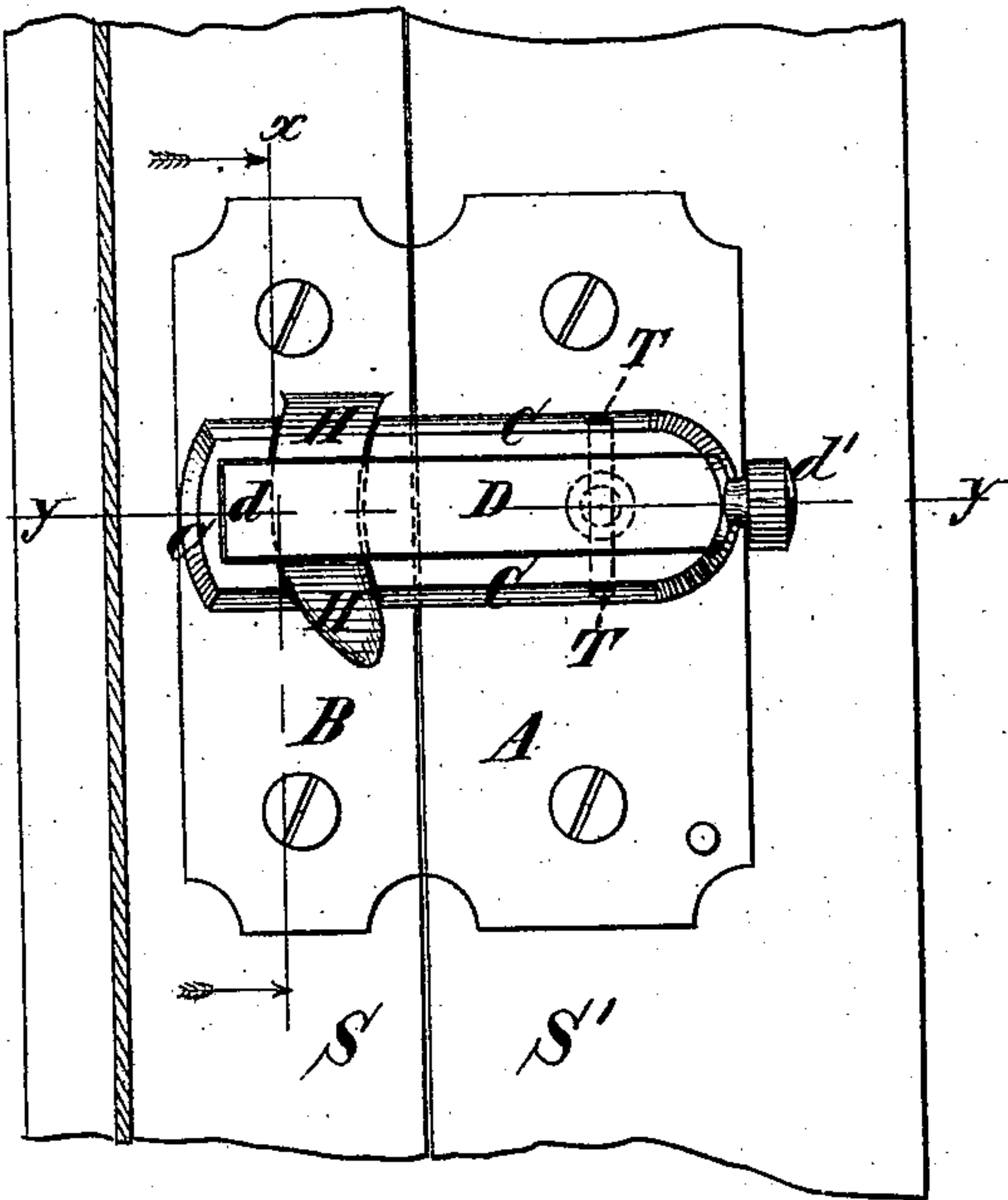


Fig. 2.

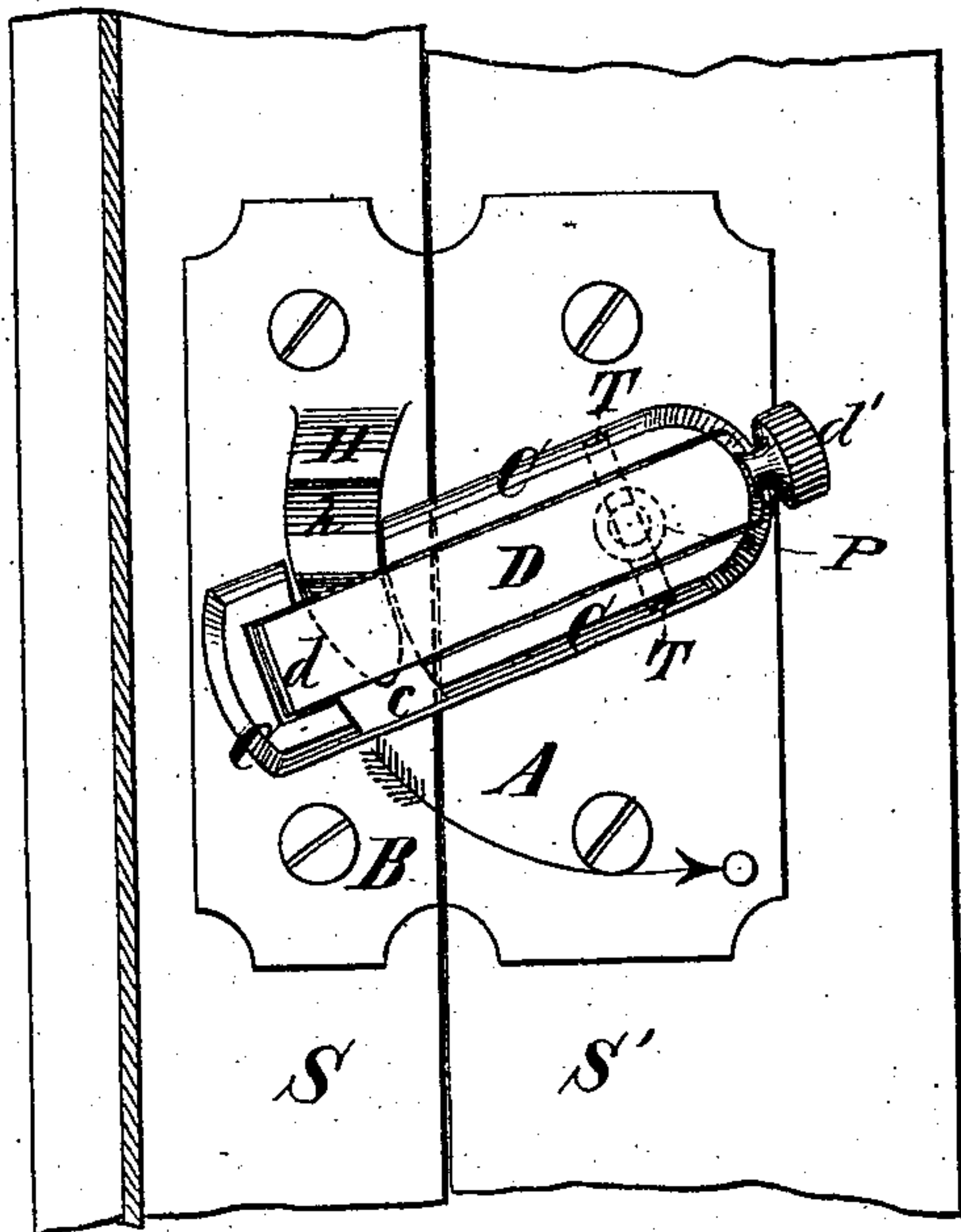


Fig. 3.

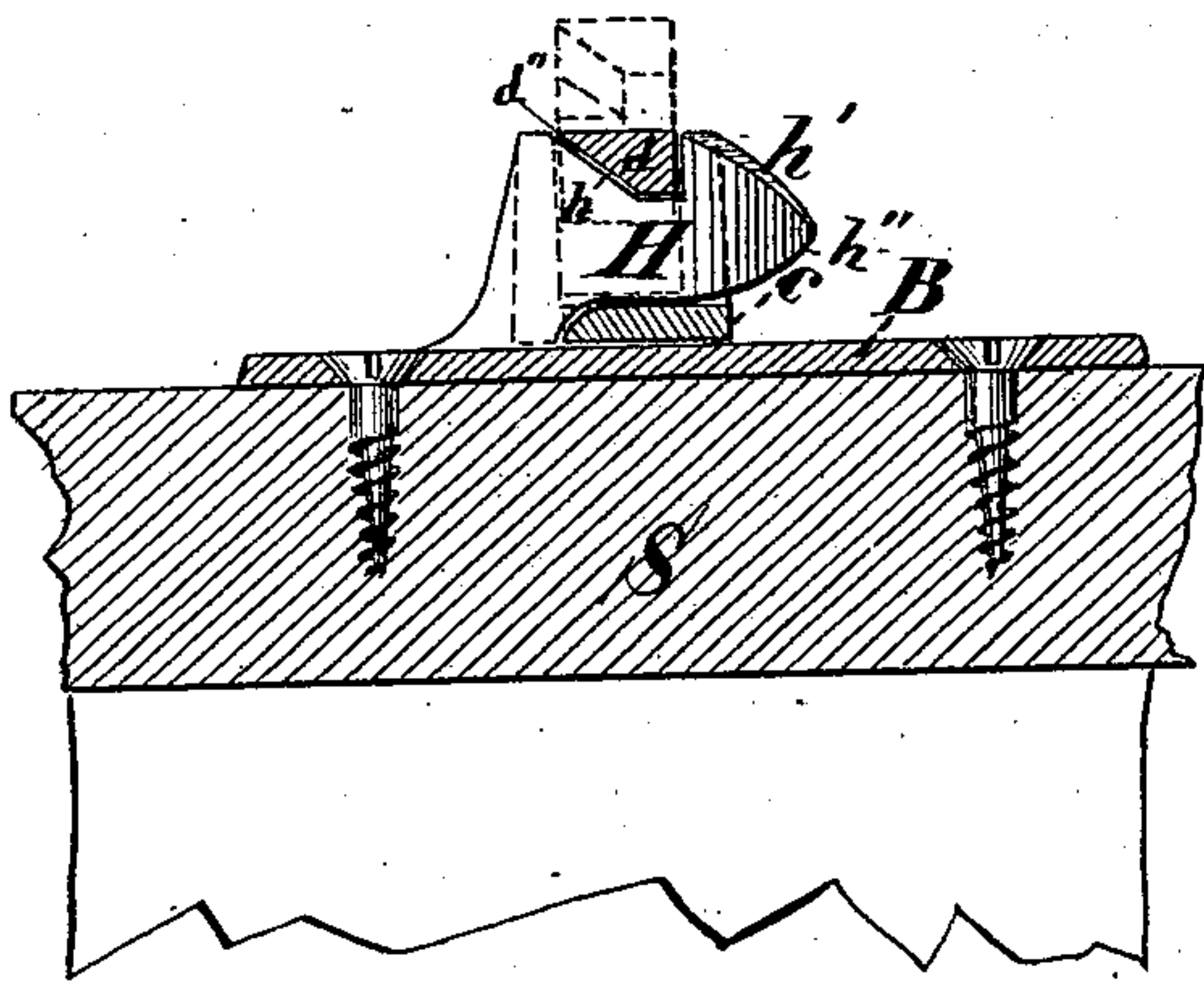


Fig. 4.

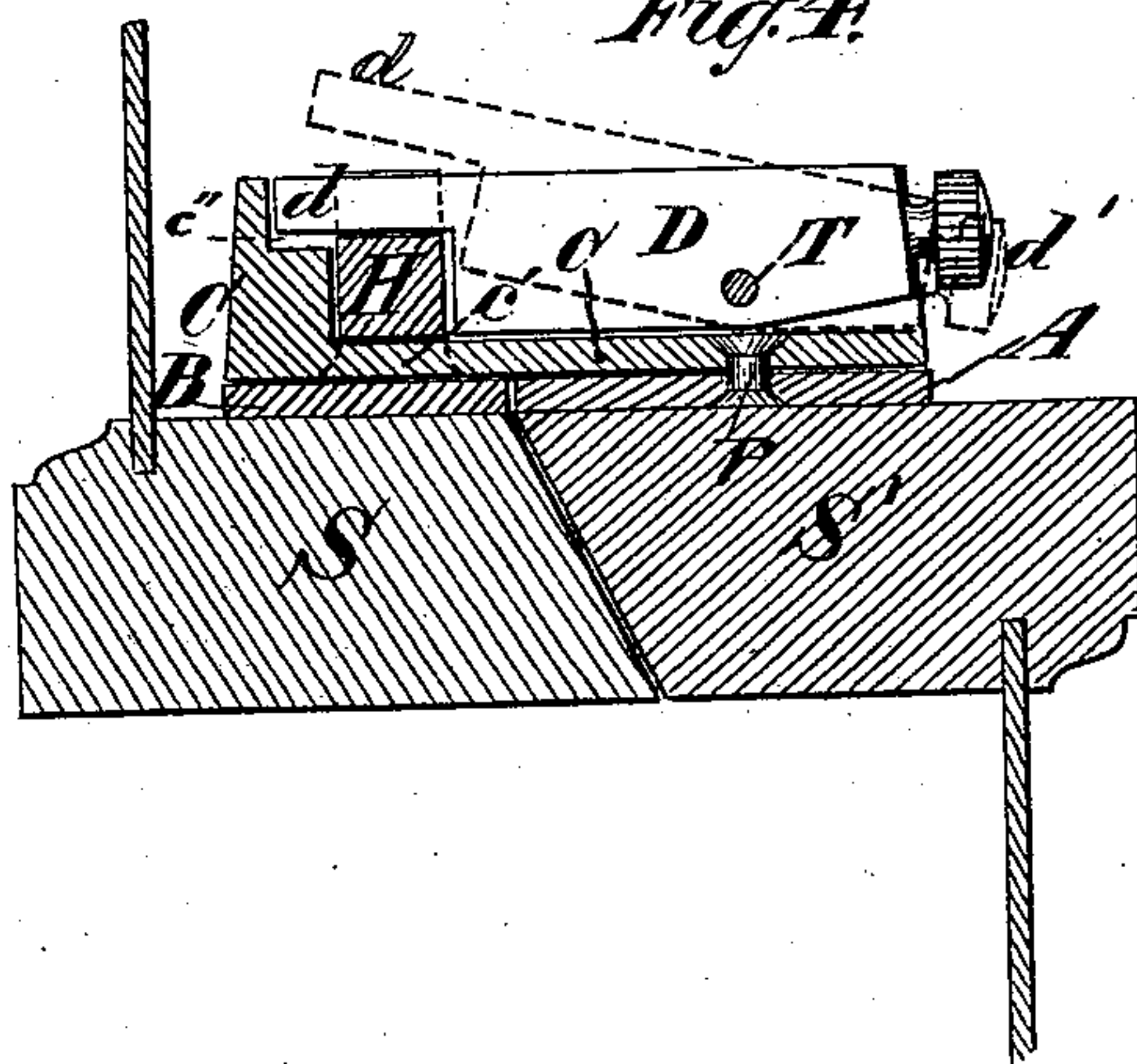
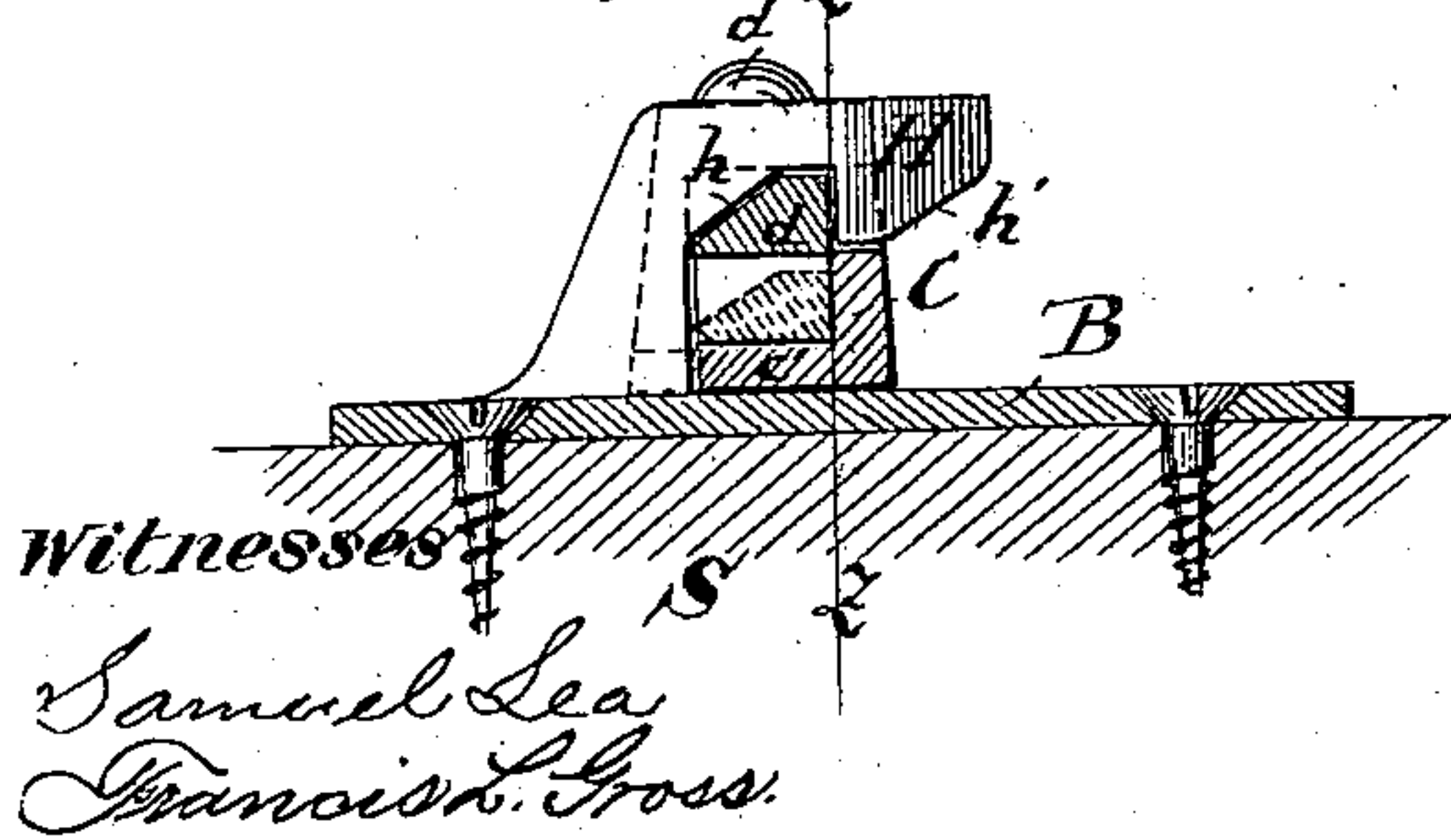


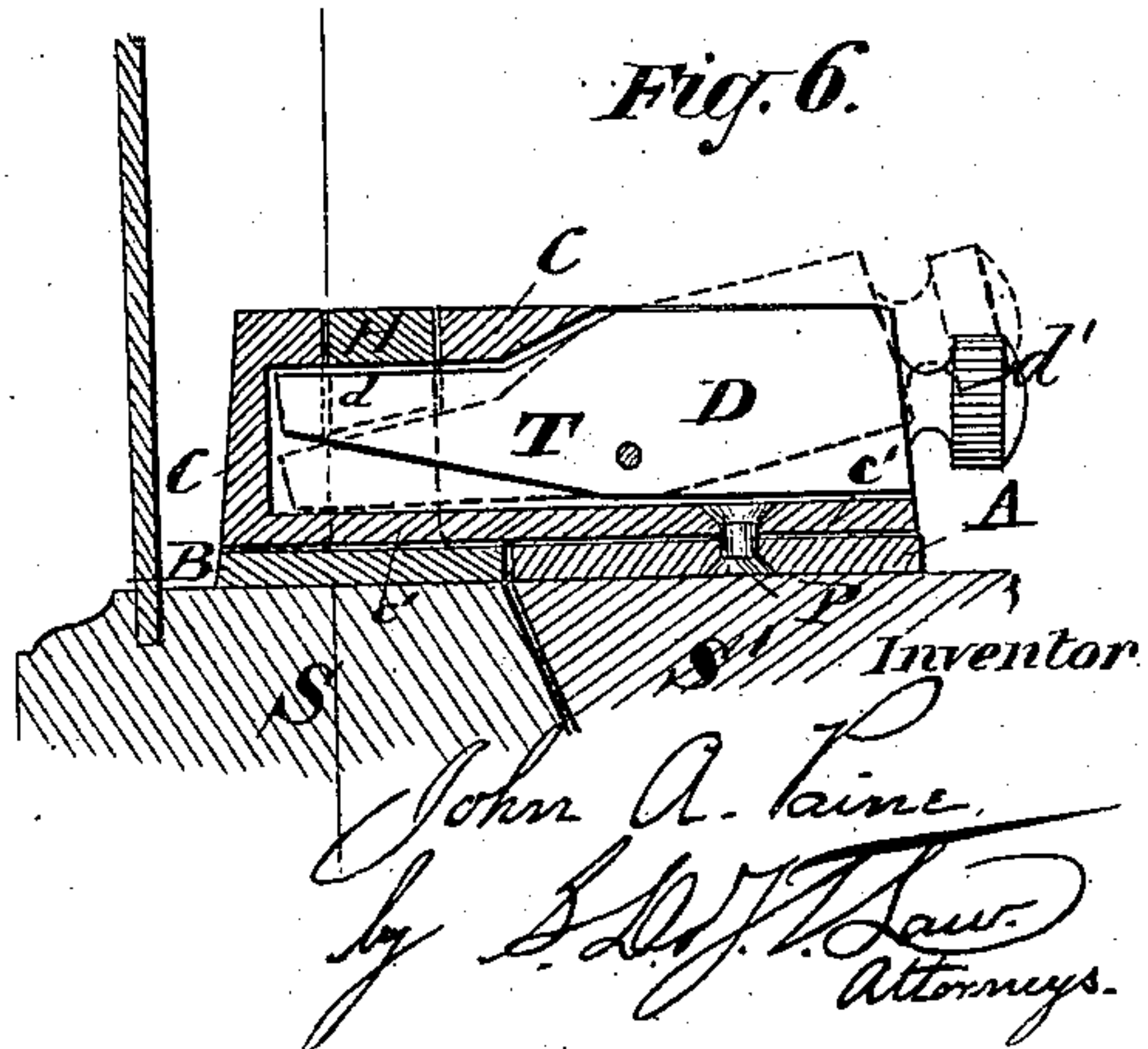
Fig. 5.



Witnesses

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Fig. 6.



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UNITED STATES PATENT OFFICE.

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FASTENER FOR MEETING-RAILS OF SASHES.

SPECIFICATION forming part of Letters Patent No. 308,517, dated November 25, 1884.

Application filed April 23, 1884. (No model.)

To all whom it may concern:

Be it known that I, JOHN A. PAINE, residing in Tarrytown, Westchester county, in the State of New York, have invented a new and useful

5 Improvement in Locks for Window-Sash, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making a part of this specification.

10 My invention is an improvement in fastenings for window-sash, and is designed to produce a lock or fastening that will hold the upper and lower sash tightly together, and at the same time secure them so the window cannot

15 be opened from the outside.

In the drawings illustrating my invention, Figure 1 is a top view of the fastening in a locked position on the window-sash SS' , S' being the upper rail of the lower sash, and S the 20 bottom rail of the upper sash. Fig. 2 is the same as Fig. 1, showing the fastening on the lower sash, S' , turned as in locking or unlocking the same. Fig. 3 is a sectional view of Fig. 1 through the line xx , showing the hook 25 or catch on the upper sash. Fig. 4 is a sectional view of Fig. 1 through the line yy , showing the bolt in a locked position, and also, in dotted lines, when raised to allow the fastening to be turned back. Fig. 5 is a sectional 30 end view of the modified form of lock shown in Fig. 6. Fig. 6 is a sectional side view of a modified form of the fastening, showing the bolt in a locked position, and, in dotted lines, when lowered to allow the fastening to be 35 turned.

My invention is to be used on window-sash that move up and down, and where the window is fastened by securing the one sash to the other. In most of the fastenings heretofore 40 used in such construction of windows it is possible by inserting a thin strip of metal—as a knife-blade—between the upper and lower sash from the outside to press back the bolt, and thus open the window.

45 My improved lock is so constructed that it is impossible to reach the bolt by any instruments inserted between the sashes, or to open the fastening from the outside. Moreover, the locking parts act by gravity, and the use of 50 springs is entirely dispensed with.

As is usual in such class of fastenings, my

improved lock is in two parts, one of such parts being secured to the top rail of the lower sash, and the other to the bottom rail of the upper sash. That portion of the lock on the 55 lower sash consists of a case or box, C , which is pivoted to the plate A , as is shown at P , Fig. 4, so it can readily be turned over the plate B attached to the upper sash, as will be seen from Figs. 1 and 2. Within this box C is 60 the bolt D , secured by the pin T , which passes through the bolt and the sides of the box, and on which as a fulcrum the bolt freely moves up and down. As will be seen more particularly from Fig. 4, the pin T passes through 65 the bolt near one end, so that the other end when raised will fall by its own weight and remain in the recess c'' in the end of the box. A part of the bolt is cut away to fit the hook or catch hereinafter described, as shown at d'' , 70 Fig. 3.

On the plate B attached to the other or upper sash is a hook or catch, H . As will be seen from the drawings, Figs. 1 and 2, this hook is curved and when the fastening is 75 turned in locking slides in a corresponding recess, c , formed in the box C . The construction of the hook is seen in Fig. 3, which shows the recess or catch h in the top, and the two curves at the point h' and h'' . 80

The operation of fastening and unfastening the lock is as follows: The plate A , to which is pivoted the box C , having been attached to the lower sash by screwing or otherwise, and the plate B with the hook H to the upper sash, 85 the box is turned around on the pivot P and over the plate B , when the hook slides into the recess c formed in the box, as is shown in Fig. 2. As the box is turned, the bolt D , the lower surface of which may be beveled, is raised by 90 the curve h' on the top of the hook, and slides over the same until the box is turned across the plate B , when the bolt drops down into the recess h in the hook, where it is securely held by the shoulder of the recess, which prevents the box from being turned back, and 95 thus locks the fastening. As the plate c' forming the bottom of the box C extends over both plates A and B and across the opening between the sashes, as will be seen from Fig. 4, 100 the bolt D cannot be reached or interfered with by any instrument inserted between the

sashes from the outside. Hence the fastening cannot be unlocked or opened from the outside.

To unlock the fastening, it is only necessary to raise the end of the bolt from the recess in the hook, which is done by pressing down the other end of the bolt d' , when the box may be turned back away from the hook H and onto the plate A, when the two parts of the fastening will be disconnected, and the window may be opened. The lower surface of the hook being curved at the point, as shown at h'' , Fig. 3, when the box is turned in locking if the two plates A B are not in the same plane, the bottom of the box c' , striking against the curved surface h'' , will tend to raise the upper sash and press down the lower one, bringing the two plates in the same plane, therefore not only facilitating the entrance of the hook into the recess in the box, but forcing the upper and lower sash into their places. The hook H, being curved as shown, and sliding in the recess in the box C, serves to draw the two sashes together, thus closing the opening between them and holding them tightly. My improved fastening, therefore, not only securely locks the sash, but by its construction serves to bring the sashes tightly together and closes the window, and, moreover, dispensing with the use of all springs, may be cheaply constructed and is not liable to get out of order.

Instead of the construction shown and described above, the bolt D may be pivoted near

the locking end d , so that the end d' will be the heavier, and the end d will be raised when in a locked position. In this form of fastening the hook H is constructed as shown in Fig. 5, and the bolt, instead of sliding over the hook as before when the case C is turned, strikes against the curve or level h' , and slides under the hook until the case is in place, when it rises into the catch or recess h and secures the lock.

To unlock the fastening, the end d' of the bolt is raised, as is indicated by dotted lines in Fig. 6, when the end d is freed from the catch in the lock, and the case may be turned back.

What I claim is—

1. The combination, with the fixed notched or locking hook H, of the pivoted movable case C, having a continuous or solid plate on its under surface and inclosing or carrying the pivoted and gravitating locking-bolt D, substantially as and for the purposes set forth.

2. The combination, with the fixed notched or locking hook H, of the pivoted movable case C, recessed to receive the hook H, and having a continuous solid plate on its under surface and carrying or inclosing the pivoted gravitating locking-bolt D, substantially as shown and described.

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Witnesses:

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