

G. W. Tileston,

Sash Holder.

No. 39,762.

Patented Sept. 1, 1863.

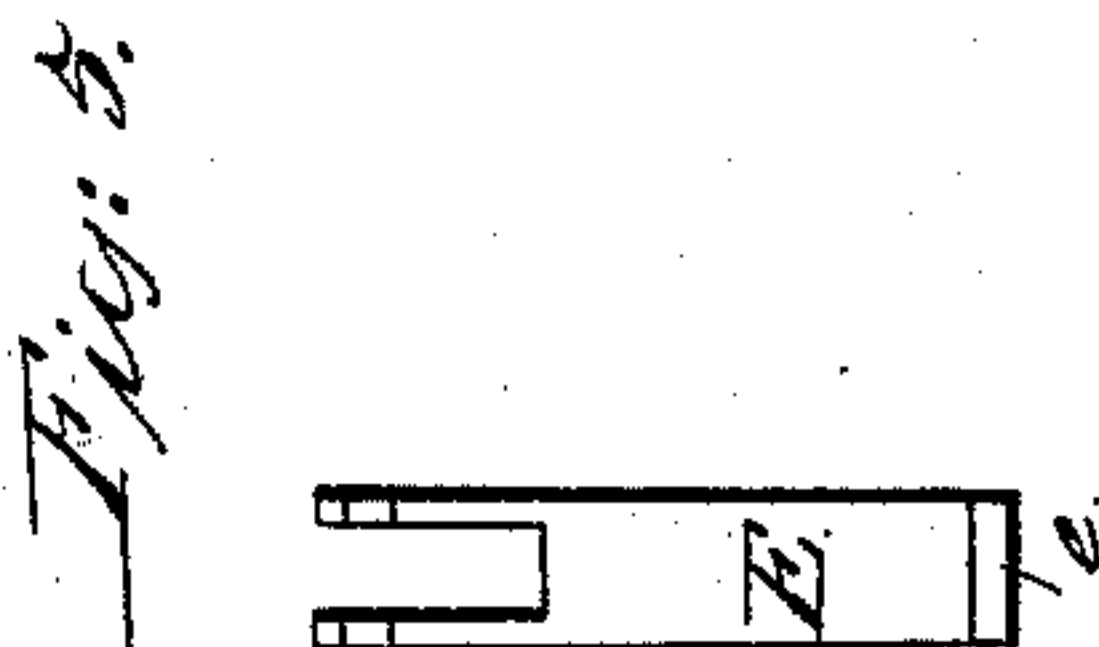
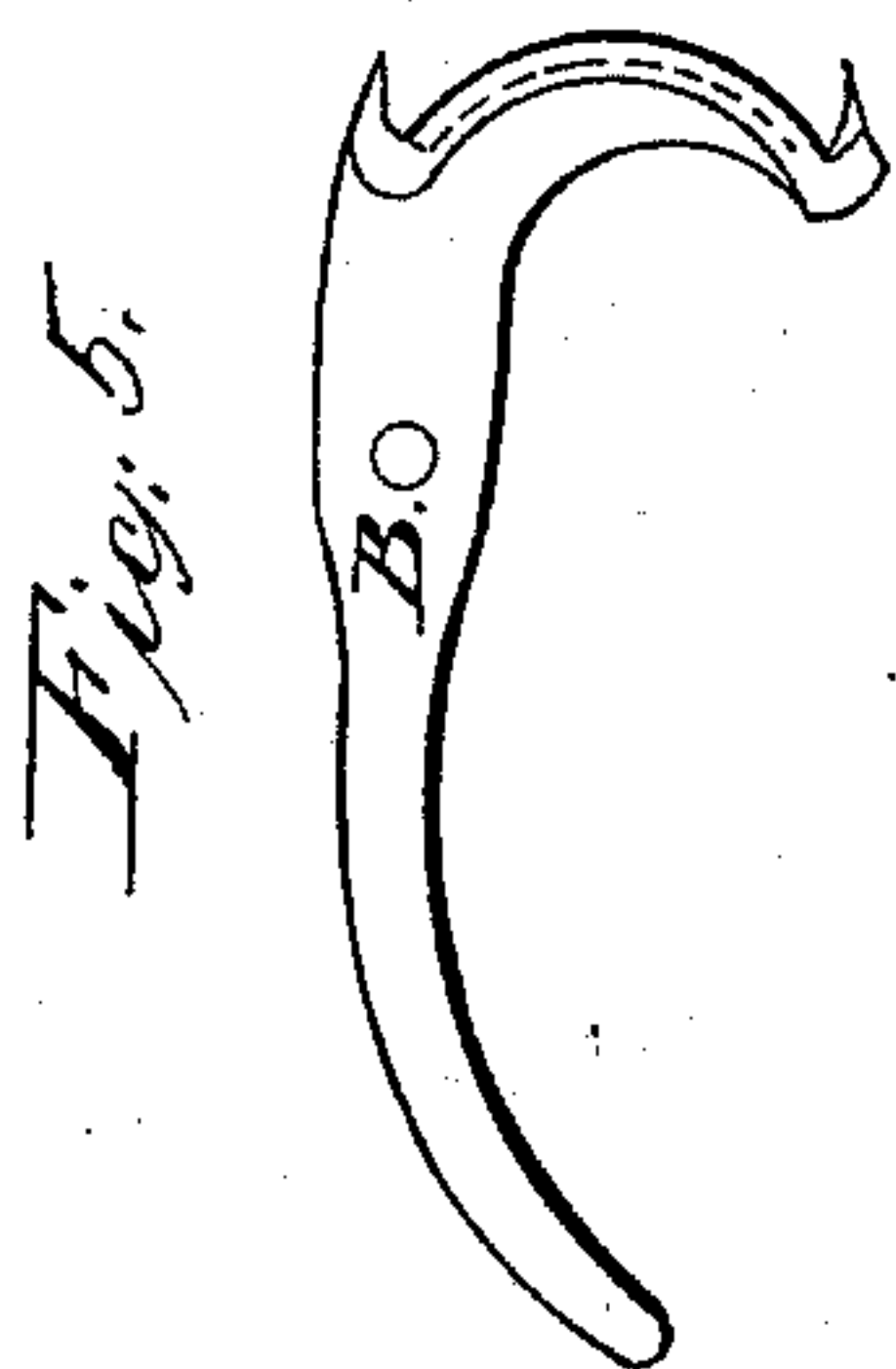


Fig. 3.

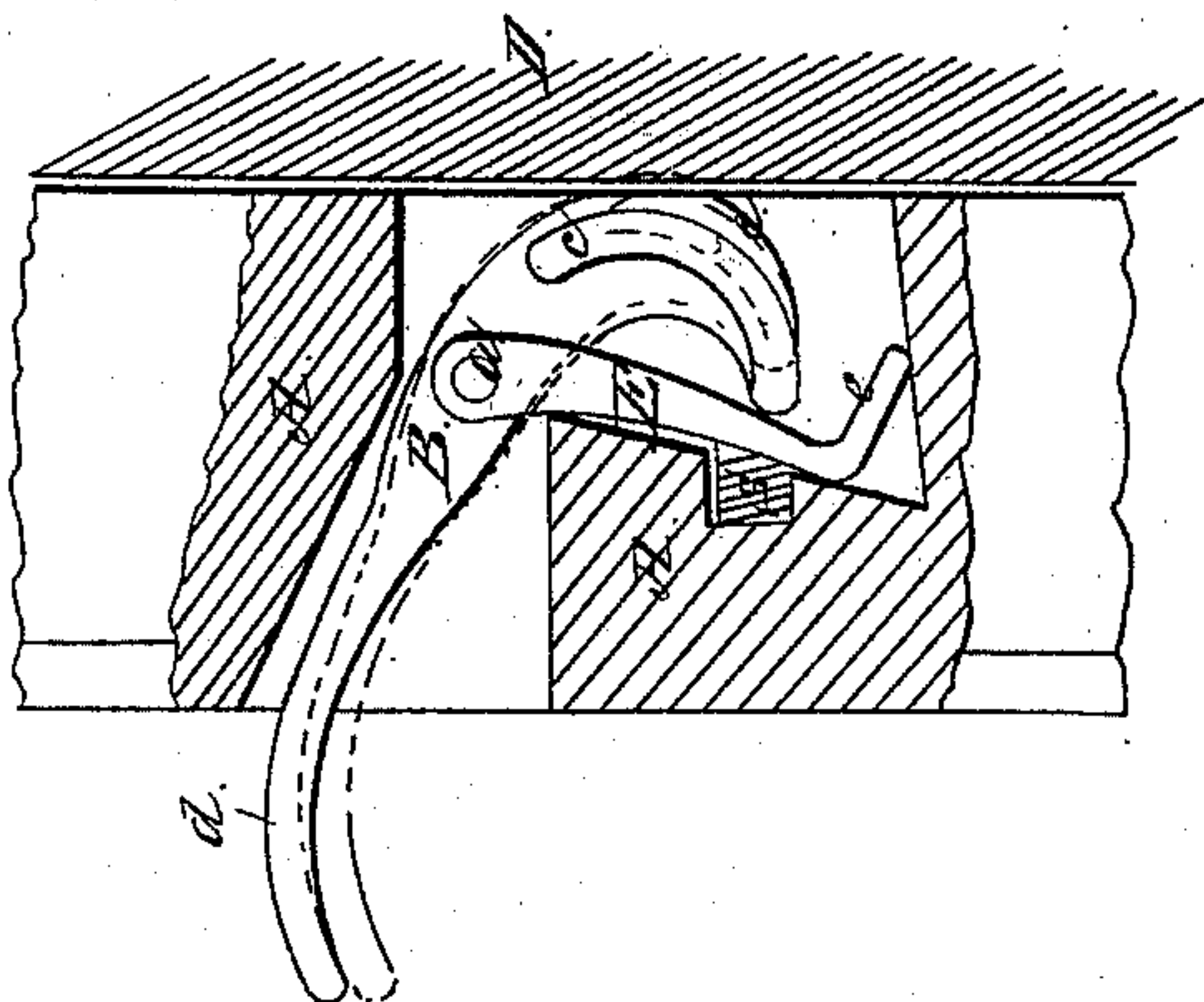


Fig. 4.

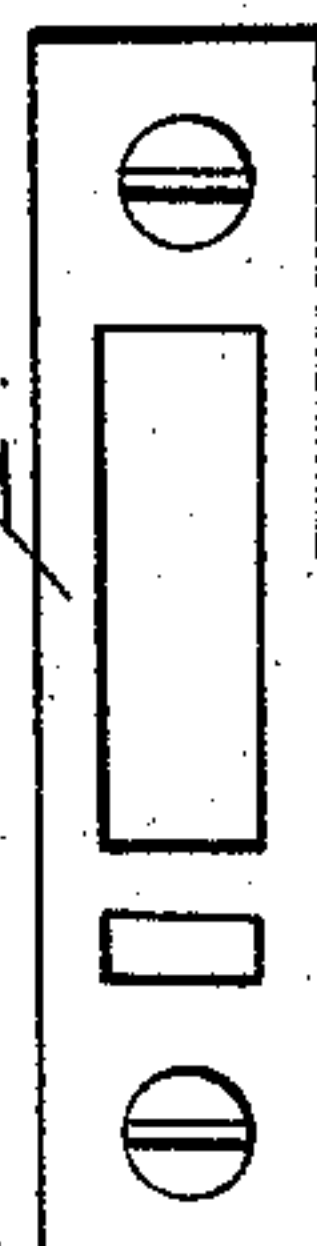


Fig. 1.

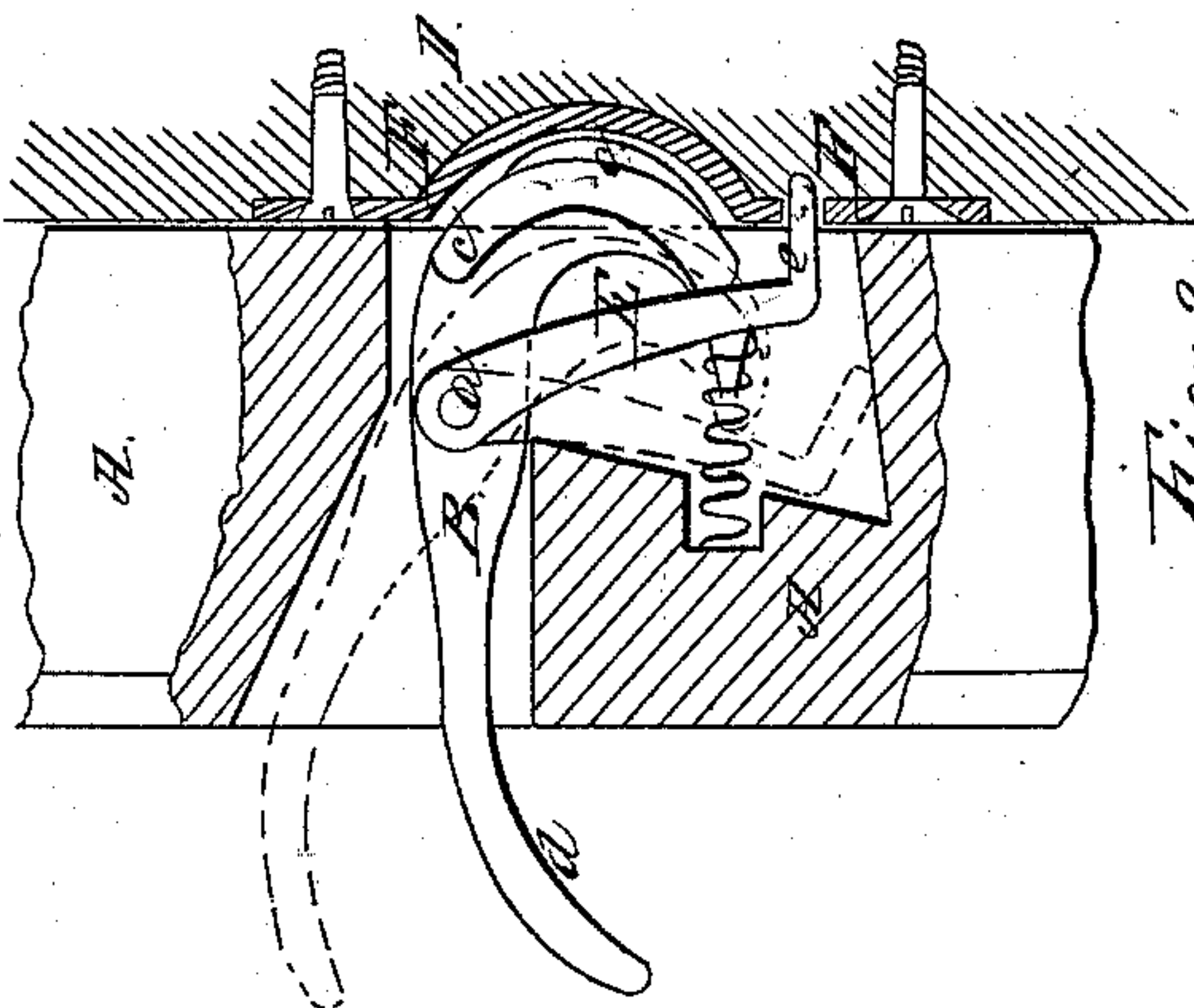
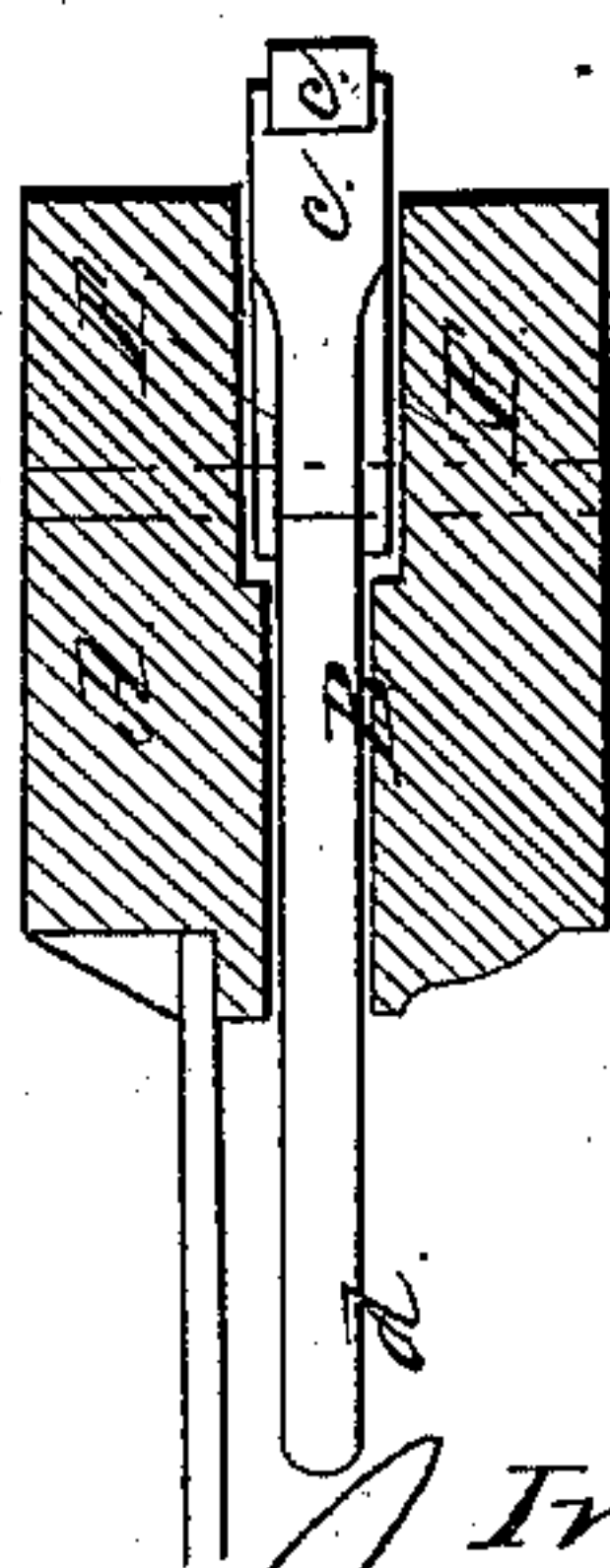


Fig. 2.



Witnesses:

Rufus H. Crawford

Inventor:

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By his atty John E. Earl

UNITED STATES PATENT OFFICE.

GEORGE W. TILESTON, OF NEW HAVEN, CONNECTICUT.

IMPROVED WINDOW SPRING AND FASTENER.

Specification forming part of Letters Patent No. 39,762, dated September 1, 1863.

To all whom it may concern:

Be it known that I, GEORGE W. TILESTON, of the city and county of New Haven and State of Connecticut, have invented new and useful Improvements in Window Springs and Fasteners; and I do hereby declare the following to be a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a section of a sash-stile, showing a side view of my invention, as locked by black lines, and unlocked in red lines. Fig. 2 is a transverse section of the same, giving a plan or top view of my invention. Fig. 3 is a side view to illustrate the working of the same, and Fig. 4 a face view of the latch-plate. Fig. 5 is a face view of the latch.

My invention has for its object to avoid cutting away the sash for its insertion, as is required by the springs and fasteners in common use; and it consists in a cam-lever hung in the sash-stile so as to press against the window-jamb, and of such form that the weight of the sash, bearing upon the fulcrum of the lever, will press the sash against the opposite side or jamb with sufficient force to sustain the sash in any desired position, and this cam-lever combined with a latch hung to the said lever by a pivot, which forms the fulcrum of the lever, for the purpose of fastening or locking the sash.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

A is a section of a common sash-stile.

B is a lever, hung upon a pivot, *a*, for its fulcrum. One of its ends, C, is constructed in the following manner: I cast that part which is to receive the rubber (see Fig. 5) so as to form lips *s*. I place the rubber or other pad so that its two ends will each come under one of the said lips. I then hammer or otherwise force the said lips down onto the pad *c*, to hold the said pad in its place. This is much better than gum, which is the common method of fixing similar pads. This forms a cam to press against the jamb D of the window-frame. The other end, *d*, extends inward and through the sash-stile, and forms a handle by which to operate the cam C.

E is a latch, its upper end forked (see

Fig. 5) and hung to the pivot *a*, or in an equivalent position, relatively to the cam-lever. The other end turns outward below the cam C, to form the catch *e*.

S is a spiral spring, or its equivalent, set in the sash back of the latch to force it outward.

F is a latch-plate, secured to the jamb D of the window-frame.

To apply my invention, make a mortise in and through the sash-stile of a form nearly as shown in Figs. 1, 2, 3; also a hole into which to insert the inner end of the spring S. Then place the latch F on the spring, inserting the stem I within the outer coils of the same. Then place the cam-lever B in the mortise, in the position shown in black, Fig. 1, and through the forked end of the latch. Lastly, insert the pivot *a* through a hole previously made in the sash for the purpose, and through the latch and lever. Then fix the latch-plate F in the jamb D of the window-frame in such position that when the sash is down or in any position where it is desired to lock it that the opening *o* in the plate will come opposite the catch *e*, that the said catch may spring into it, as shown in black, Fig. 1, to lock the sash and prevent its being moved either up or down without first releasing the lock. When from this position it is desired to release the sash, raise the inner end of the lever, as denoted by red lines, Fig. 1, in which operation the lower end of the cam will press against the latch and force it back, as also denoted by the red lines. When in this position, the sash may be freely moved. To hold the sash up in any desired position, raise the sash to that position after having first unlocked, as above. In the ascent of the sash the cam or pad will move freely upon the jamb, but when the power by which the sash is raised is removed the weight of the sash upon the fulcrum of the lever tends to turn the cam upward (see Fig. 3 in red) and force the sash from the jamb D against the opposite jamb with sufficient force to sustain itself. From such position the sash may be raised higher and held up simply by raising the sash; but if desired to lower the sash, raise the lever, as denoted in black, Fig. 3, lower the sash to the desired position, release the lever, and the cam will operate as before until it reaches the latch-plate, when the latch will spring into the opening prepared for it in the latch-plate, as

before described. These operations are described as applied to the lower sash, or one which closes downward, yet it is equally applicable to the upper, or one which rises to close. The position of the several parts may be changed so as to fix the cam, latch, and lever in the jamb of the window, and the latch-plate in the stile of the sash, by fixing the handle which operates the cam fast in the cam and turning it from the inside, similar to the knob of a door-latch, but allowing the latch to turn on the spindle in the same manner as described. I prefer the arrangement I have described, as offering less trouble in its application and much cheaper.

In the construction, the latch-lever and spring may be set in a metallic plate and the plate be fitted into the sash-stile, but I find this method described the cheapest and equally convenient of application.

I do not broadly claim the padded cam-lever, as it is not new, the same being used by J. C. Butterworth in his patent of April,

1861; neither do I broadly claim an eccentrically-hung lever for the purpose of sustaining the sash in any position by the action of the weight of the sash upon the said lever, as such is not new, the same being combined in the patent of Lewis B. Page, September 4, 1849; also in that of Porter A. Gladwin, October 4, 1860, as well as in several others. Neither do I claim operating the latch by means of the said cam-lever, this being done in the above-mentioned cases; but

What I do claim as new and useful, and desire to secure by Letters Patent, is—

1. The lever B and latch E, when the same are pivoted together and combined with the spring S, substantially in the manner and for the purpose specified.

2. The manner described of attaching the pad c to the lever B.

GEORGE W. TILESTON.

Witnesses:

HENRY KELLOGG,
JOHN E. EARLE.