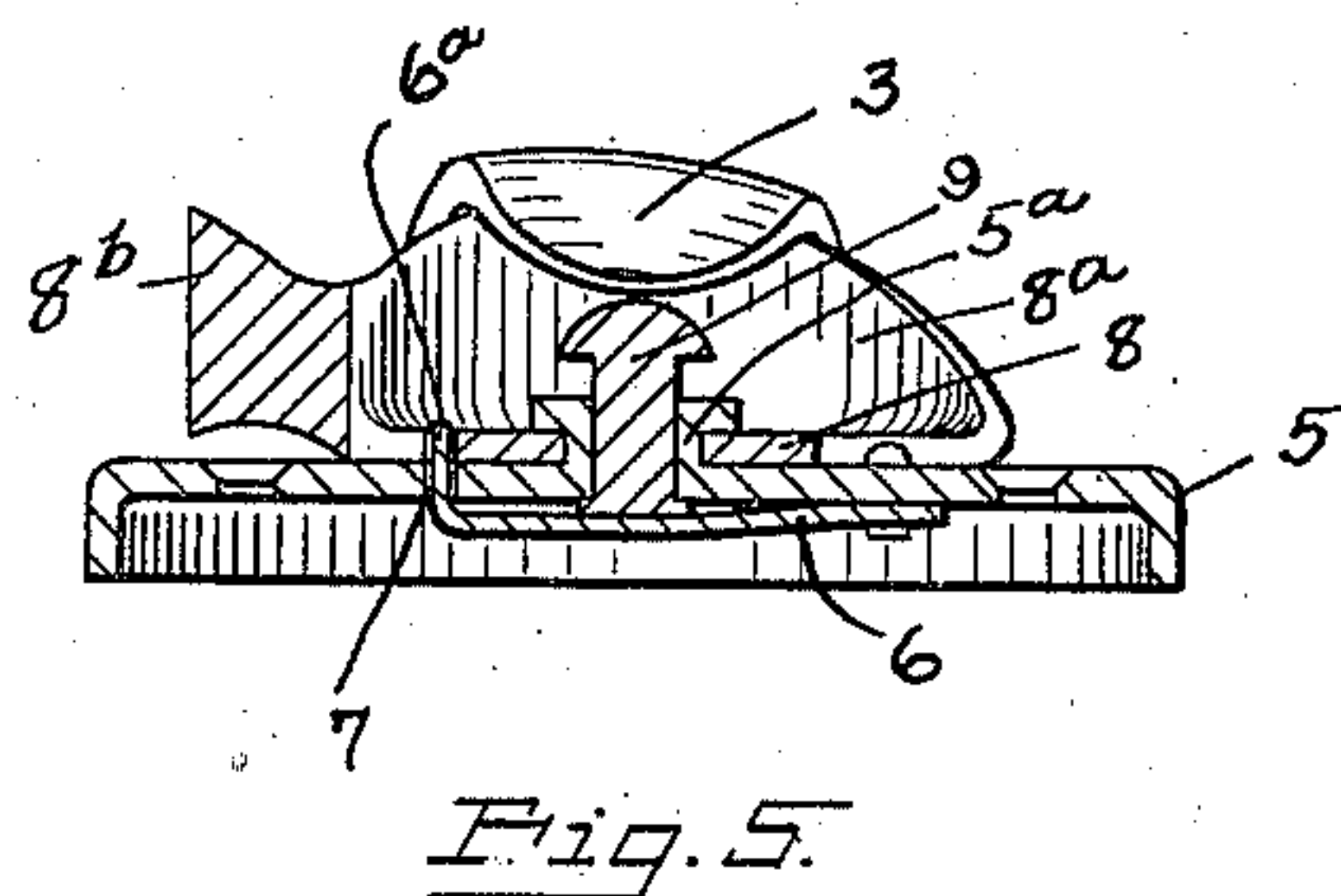
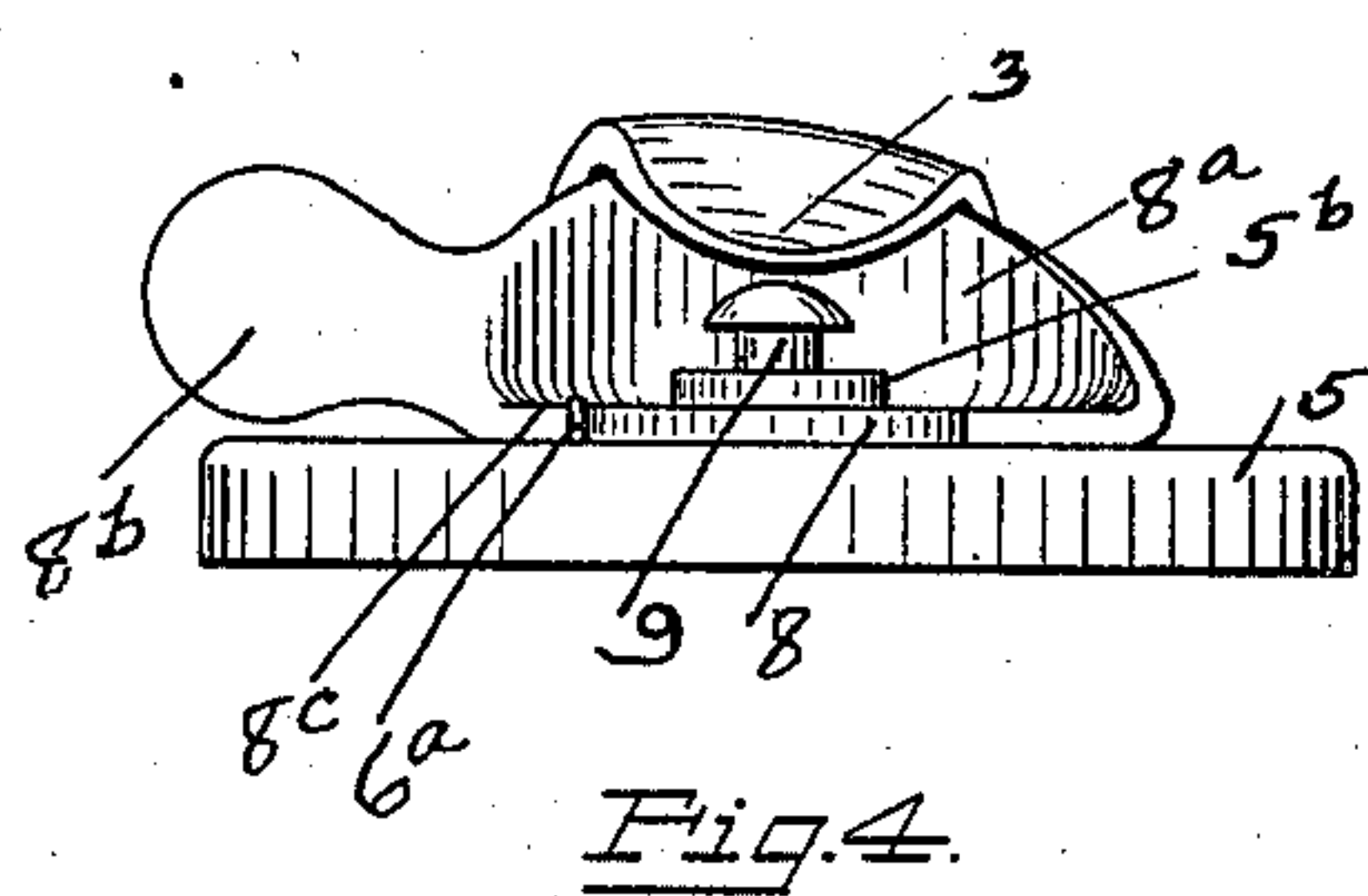
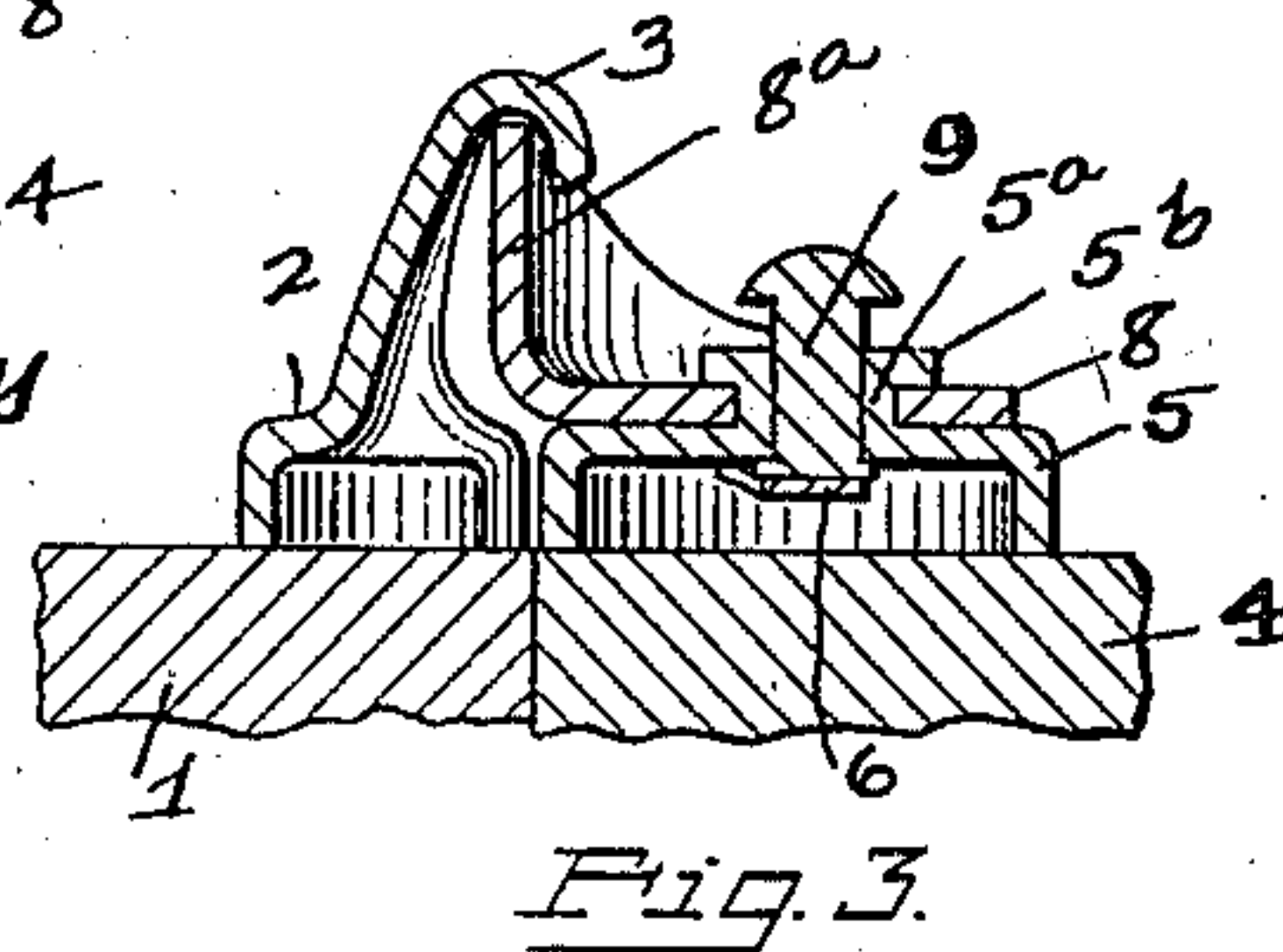
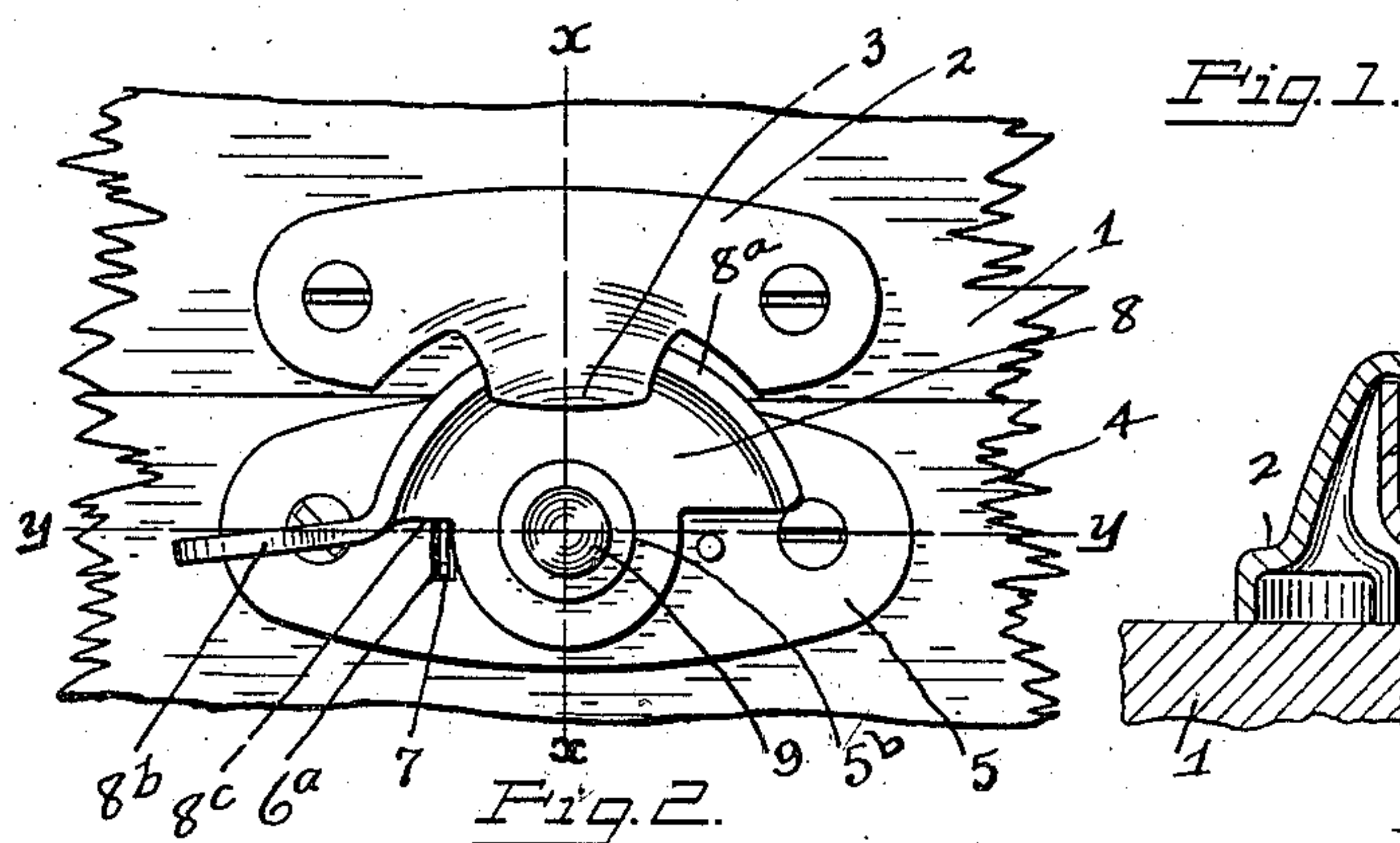
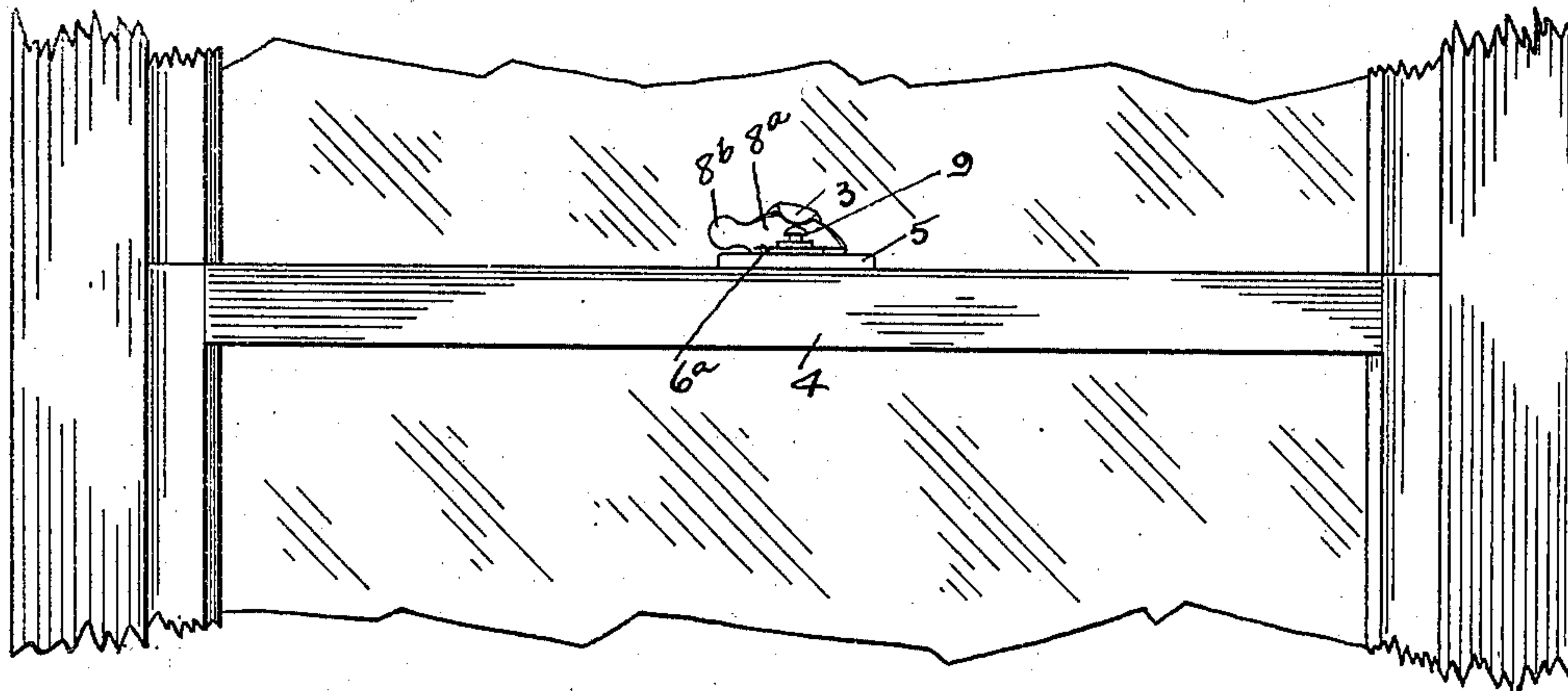


P. L. BERNHARD.  
SASH LOCK.  
APPLICATION FILED DEC. 8, 1909.

963,983.

Patented July 12, 1910.



Witnesses

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# UNITED STATES PATENT OFFICE.

PHILIP L. BERNHARD, OF COLUMBUS, OHIO.

SASH-LOCK.

963,983.

Specification of Letters Patent.

Patented July 12, 1910.

Application filed December 8, 1909. Serial No. 532,093.

*To all whom it may concern:*

Be it known that I, PHILIP L. BERNHARD, a citizen of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented certain new and useful Improvements in Sash-Locks, of which the following is a specification.

My invention relates to sash locks of that class in which a pivoted cam lever connected with the upper bar of the lower sash of a window, is adapted to be swung into engagement with a hook projection of a locking plate carried by the upper side of the lower bar of the upper sash and the objects of my invention are to so construct a sash lock of this class as to automatically lock the swinging catch lever in its connected position and to provide in conjunction therewith, means for releasing said lock from the inner side of the window; to so arrange my improved locking mechanism and releasing device as to prevent the same being operated or tampered with from the outer side of the window and to produce certain improvements in details of construction and arrangement of parts which will be more fully pointed out hereinafter. These objects I accomplish in the manner illustrated in the accompanying drawing, in which—

Figure 1 is an inner face view of portions of the upper and lower sash members of a window showing the same connected by my improved locking device, Fig. 2 is an enlarged plan view of the locking members showing the same in the locked or connected positions, Fig. 3 is a sectional view on line  $x-x$  of Fig. 2, Fig. 4 is a side elevation of the locking device, and, Fig. 5 is a sectional view on line  $y-y$  of Fig. 2.

Similar numerals refer to similar parts throughout the several views.

In carrying out my invention, I secure to the upper side of the lower bar 1 of the upper sash frame an elongated catch plate 2, which is provided on its inner side with the usual upwardly extending and downwardly bent hook projection 3, the latter being inclined toward one side, as shown. Upon the upper side of the upper bar 4 of the lower and inner sash frame, I secure an oblong plate 5, which as indicated in the drawing, is recessed on its underside and which at the center of its length, is formed with a hollow upwardly projecting stud 5<sup>a</sup> having a flanged head 5<sup>b</sup>. To the underside of the plate 5 on one side of the center of the

length thereof, I rivet one end of a spring strip or locking tongue 6, the latter extending beneath the central opening of the hollow stud 5<sup>a</sup> and having its free end bent or extended upward as indicated at 6<sup>a</sup> through a slotted opening 7 formed in the plate 5.

8 represents a well known form of swinging catch lever which comprise a plate body of partial disk form, one-half of which is formed on a greater arc of a circle than the other half. The enlarged portion of the plate has formed therewith an upwardly extending curved cam flange 8<sup>a</sup> which tapers toward one end and the remaining end of which is formed with a handle termination or finger piece 8<sup>b</sup>. This catch lever is pivoted to the plate 5 about the hollow stud 5<sup>a</sup>. Through said hollow stud is movably inserted the stem of a push button or pin 9 the lower end thereof having a bearing contact with the upper side of the spring strip 6. It will be observed that the normally upwardly projecting terminal member 6<sup>a</sup> of the spring strip 6, lies in the path of the shoulder 8<sup>c</sup> which is formed on the lever 8 as a result of the production of said lever on the arcs of different circles.

In operation, it will be understood that when the upper sash is raised and the lower sash lowered until the bars 1 and 4 are opposite each other, the lever 8 may be swung to such position as to cause the cam flange 8<sup>a</sup> thereof to engage the hook 3 of the member 2, thus locking the sash bars into close engagement one with the other and preventing the raising or lowering of either the upper or lower sash. In this locking operation, however, it is obvious that the underside of the enlarged portion of the lever 8, will travel over and depress the upturned end portion 6<sup>a</sup> of the spring 6 until said lever enlargement has passed said spring member, when the latter will be permitted to spring upward to the position shown in the drawing, where by contact with the shoulder 8<sup>c</sup> of the lever 8, it will prevent the reverse or unlocking movement of the lever until said spring is again depressed. In order to release the catch lever from engagement with the projecting end of the spring, I have provided the push button 9 which when pressed downward will depress the spring 6 sufficiently to permit of the lever 8 being swung to the unlocked position.

Heretofore in the class of locks to which my invention relates, it has been found that



the unlocking of the catch lever is a comparatively easy matter, inasmuch as the same may be manipulated by the insertion of wires or sharp blades between the sash members 1 and 4. It will be observed, however, that by the employment of the additional spring lock herein described, the catch lever cannot be moved to the unlocked position until the projecting portion of said spring has been depressed the proper distance and owing to the location of said spring and the position of the push button, great difficulty would be experienced in manipulating the same by the insertion of an instrument between the sash members.

From the foregoing description, it will be seen that simple and efficient means are herein provided for accomplishing the objects of the invention, but while the elements shown and described are well adapted to serve the purposes for which they are intended, it is to be understood that the invention is not limited to the precise con-

struction set forth, but includes within its purview such changes as may be made within the scope of the appended claim.

What I claim is:—

In a sash lock, the combination with a catch engaging plate carried by the lower bar of the upper sash of a window, of a plate carried by the upper bar of the lower sash, a pivoted catch lever on said plate, a spring strip having one end fixed to the underside of said lower sash plate and its remaining end projected through an opening in said plate in the path of a shoulder on said catch lever, and a push button extending through an opening of the lower sash plate and bearing upon said spring strip.

In testimony whereof I affix my signature in presence of two witnesses.

PHILIP L. BERNHARD.

Witnesses:

C. C. SHEPHERD,  
J. M. SCHOOLER.