

No. 736,335.

PATENTED AUG. 11, 1903.

E. O'NEILL.
WINDOW SASH LOCK.

APPLICATION FILED MAR. 15, 1902.

NO MODEL.

Fig. 1.

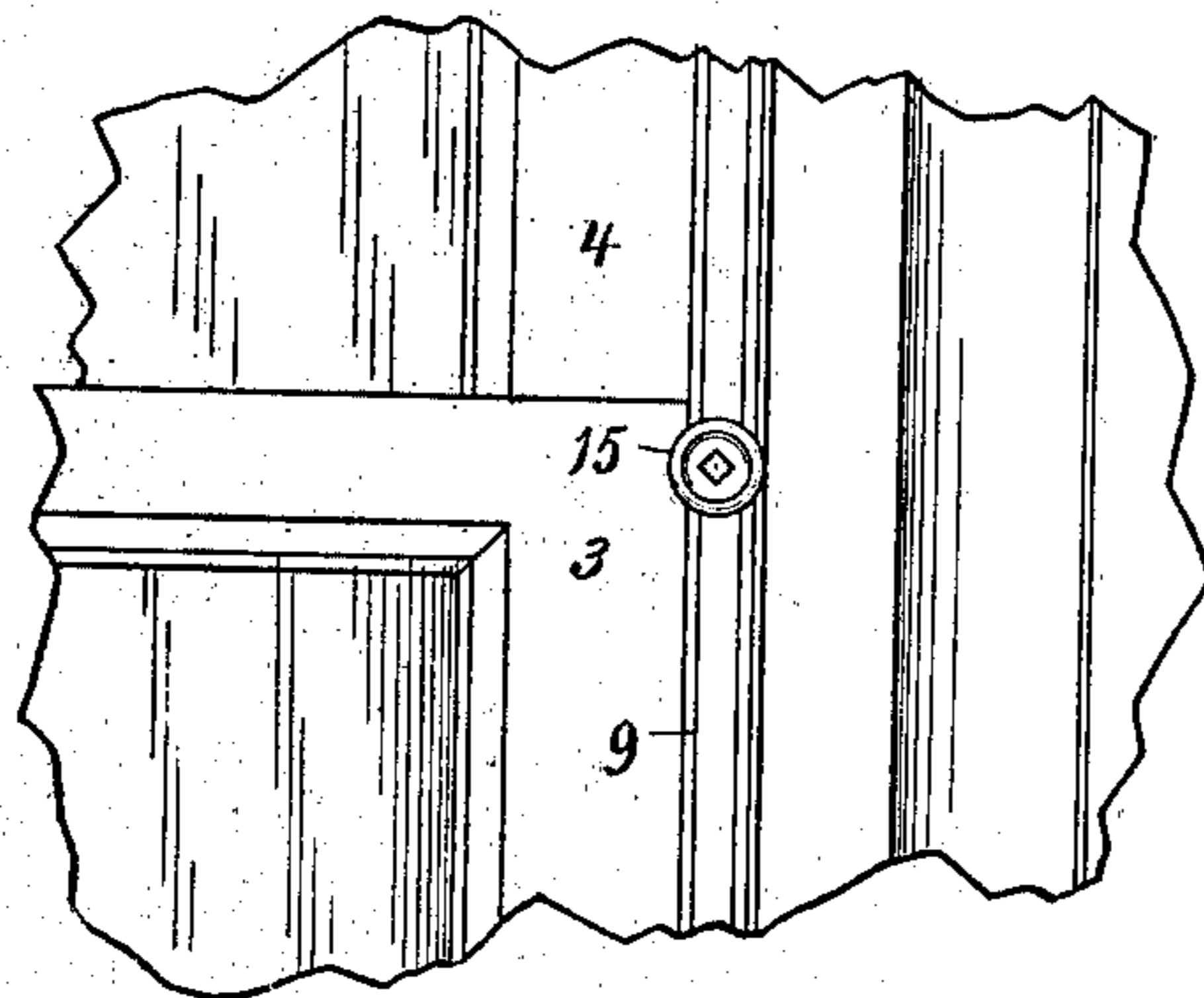


Fig. 2.

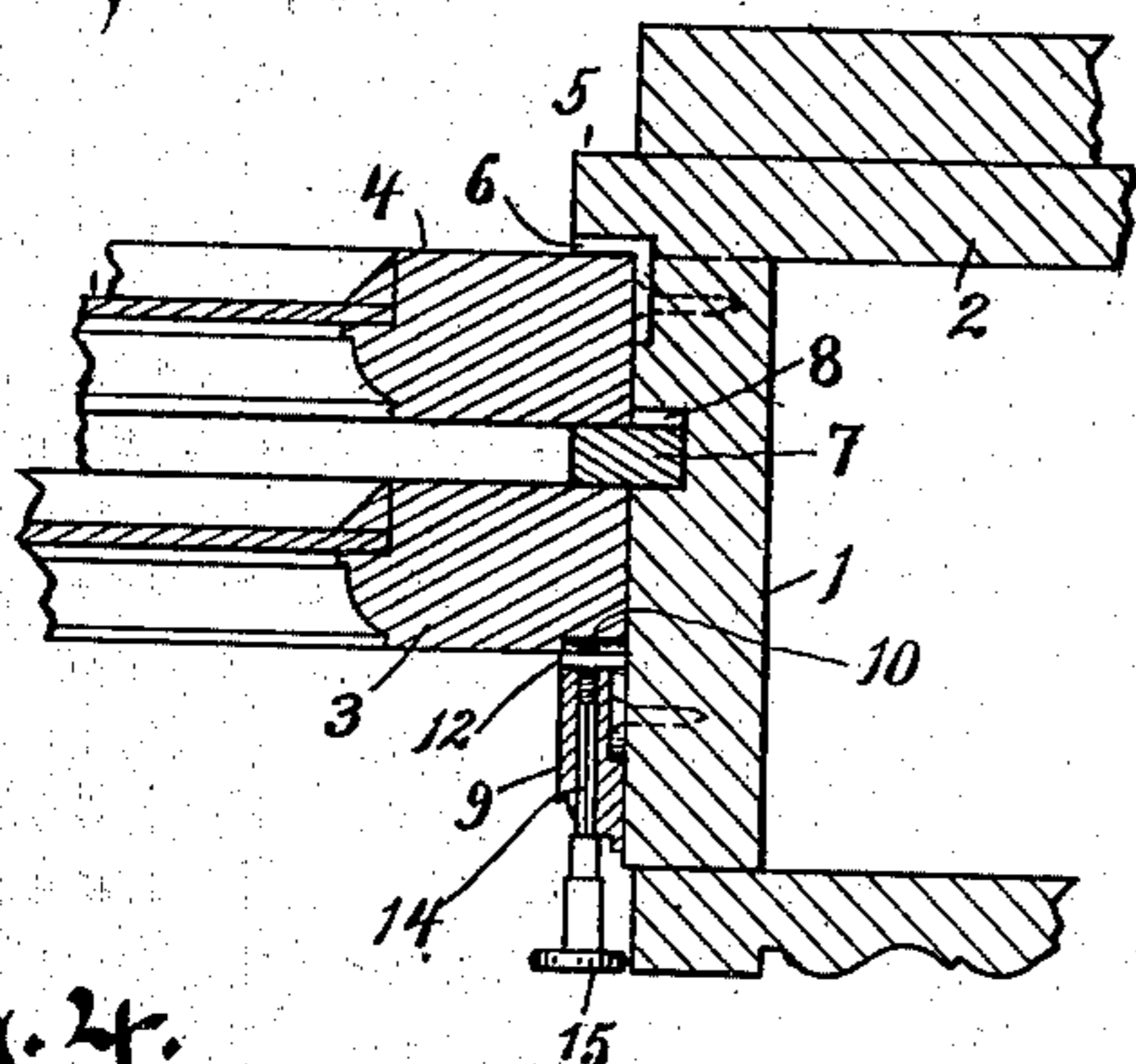


Fig. 4.

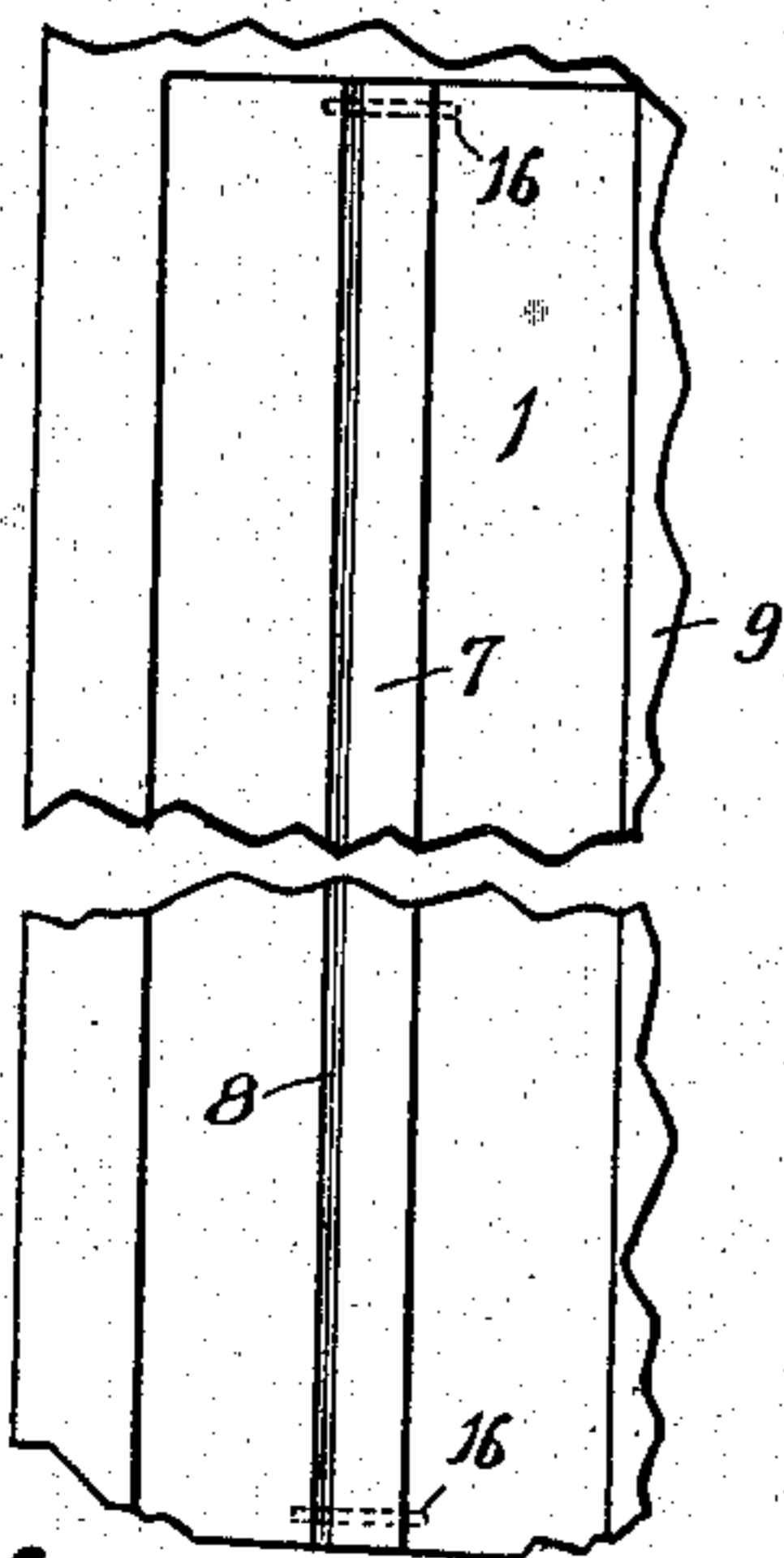


Fig. 5.

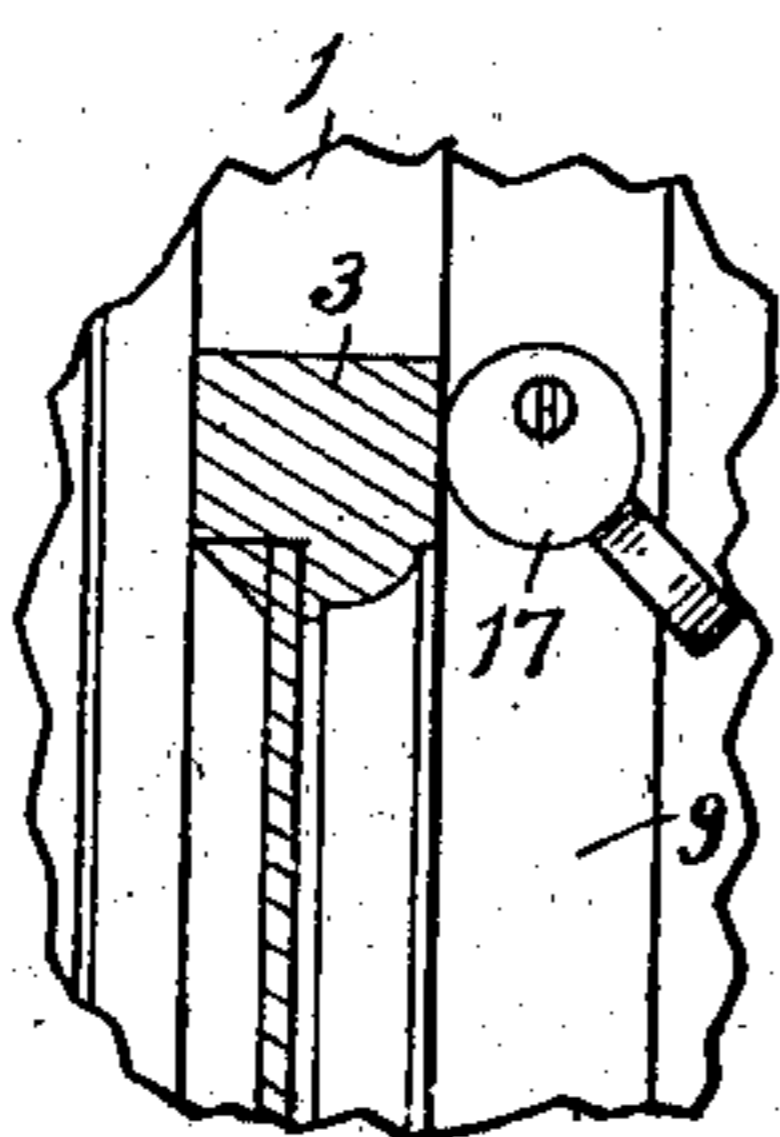
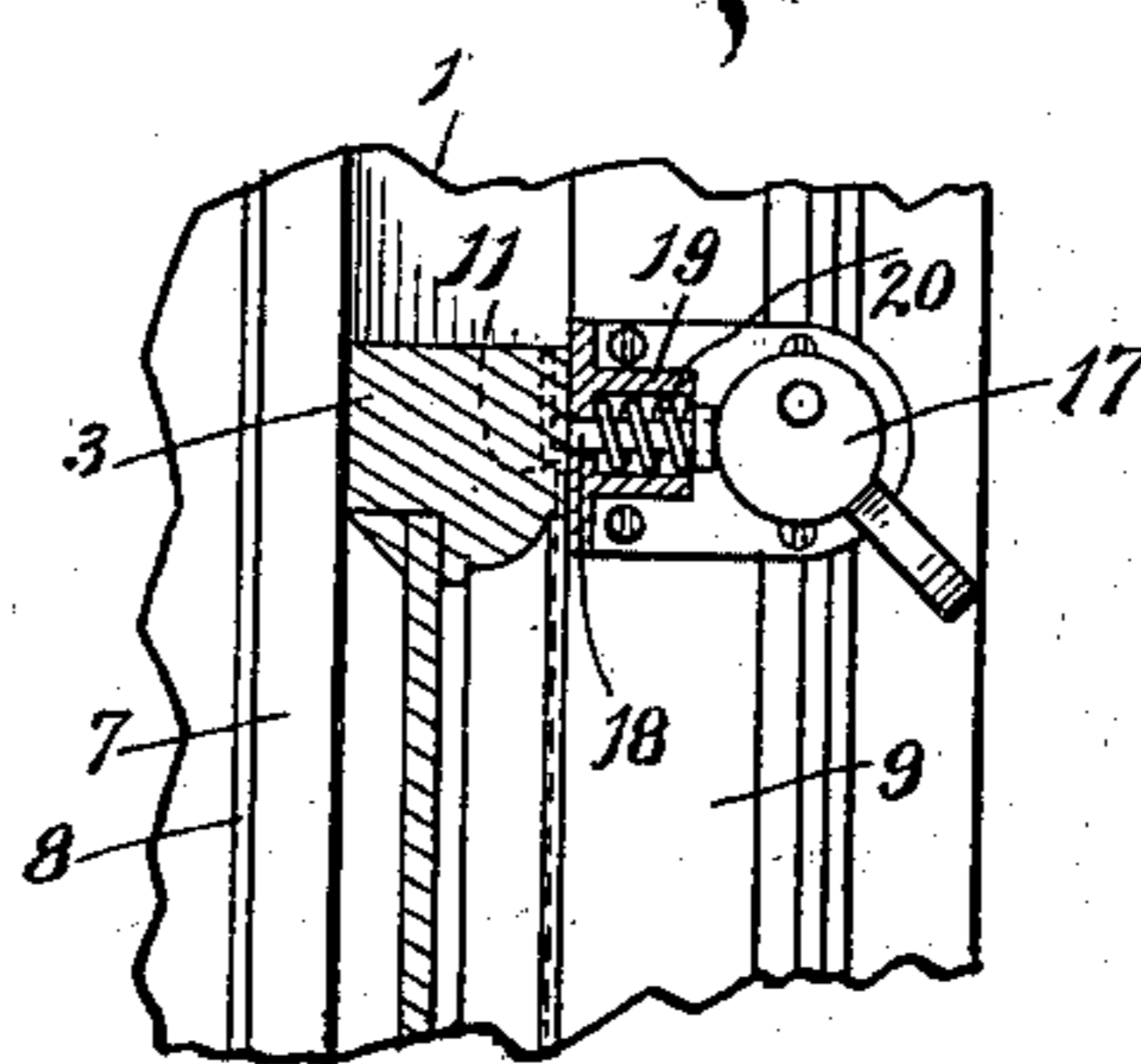


Fig. 6.



Witnesses:
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UNITED STATES PATENT OFFICE.

EDWARD O'NEILL, OF MILWAUKEE, WISCONSIN.

WINDOW-SASH LOCK.

SPECIFICATION forming part of Letters Patent No. 736,335, dated August 11, 1903.

Application filed March 15, 1902. Serial No. 98,326. (No model.)

To all whom it may concern:

Be it known that I, EDWARD O'NEILL, residing at Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented a new and useful Improvement in Window-Sash Locks, of which the following is a description, reference being had to the accompanying drawings, which are a part of this specification.

My invention relates to an improved window-sash lock, especially adapted to be employed in windows of common construction, in which there are two sashes meeting at the middle of the window and adapted to slide vertically past each other, as is common in windows of general construction.

My invention consists of the device, its parts, and combinations of parts, as herein described and claimed, or the equivalents thereof.

In the drawings, Figure 1 represents a fragment of a window-frame and of two glazed sashes with my improved lock therewith. Fig. 2 is a transverse section of the construction on line 2 2 of Fig. 3. Fig. 3 is an illustration of the construction vertically, parts being shown in section on different planes. Fig. 4 illustrates a form of construction in which the sash-stop is mounted somewhat differently than it is as shown in Fig. 3. Figs. 5 and 6 illustrate varying forms of the construction.

To illustrate my invention I have shown in the drawings a fragment of a window-casing in which 1 is the side member, and 2 is the outer member, of the casing. The vertical edges of the glazed sashes 3 4 fit slidably against the face of the side member 1, and the outer surface of the sash 4, near its margin, fits against the projecting edge of the outer member of the casing 2, the projecting portion of this member of the casing forming a stop 5 for the sash. It is sometimes desirable for securing a good fit and protecting the parts against wear to employ a sash-bearing 6, which consists of a strip of metal in angle form fitted into the casing and adapted to receive against it the bearing of the outer sash 4, in effect forming a way on which the sash travels. On a vertical line between the sashes 3 and 4 a sash-stop 7 is employed, which is let into a recess therefor in the casing member 1, and this sash-stop serves as a guide

and support for the sashes both while in their normal situations—one at the top and the other at the bottom of the window—and also during their travel up and down or when in position midway of the height of the window. For the purposes of my improved device I cut out and thereby enlarge the recess in the case member 1 outside of the sash-stop 7 from near the top to near the bottom of the casing, leaving a space, as shown at 8, open outside of the stop, adapted to permit of a little play of the sash-stop outwardly at any point in its length where such space exists. On the inside of the sash 3 a stop 9 is employed which is substantially such as is in common use, this stop being fastened to the case member 1 on the inner side of the sash 3, and so as to serve as a guide and support laterally therefor. On the inner surface of the sash 3, along near its edge and opposite the edge of the stop 9, a metal bearing-plate 10 is secured to the sash, and this bearing-plate is advisably provided with an offset or shoulder 11 near the upper edge of the sash 3 and advisably opposite the top rail thereof. A metal lug or standard 12 is provided with an elongated and flattened foot 13, by means of which the lug is fixed to the case member 1, conveniently with screws, under the stop 9. The lug 12 projects from the case member 1 substantially at a right angle thereto on the inner side of the inner sash 3 and serves as the support for a screw-threaded locking-bolt 14, which turns through the lug by its thread against the sash 3, or specifically against the bearing-plate 10 on and forming a part of the sash. The construction is such that by turning the locking-bolt in the lug 12 against the sash 3 it is forced outwardly against the stop 7, and this stop is thereby forced against the outer sash 4, which in turn is forced outwardly against the outer stop 5, and specifically against the sash-bearing 6 when such sash-bearing is employed. By this means the sashes are locked in position against vertical movement and are made tight in place. Also when the inner sash 3 is in place at the lower limit of its travel, or, in other words, when the sash is closed, the locking-bolt 14 will bear against the plate 10 just above the shoulder 11, and this shoulder will prevent raising the sash against the bolt. As shown in Figs. 1, 2, and 3, the bolt

14 extends inwardly from the lug 12 through the stop 9, which is provided with a transverse aperture through it therefor, or there may be a recess in the stop for the same purpose. For rotating the locking-bolt 14 some sort of a handle is desirable, and I preferably provide therefor a milled head 15; slidable and extensible on the inner faced portion of the bolt 14, whereby the head can be drawn out, as shown in Fig. 3, for rotating the bolt, and can then be pushed in alongside the casing so as not to project beyond the casing when not in use. This form of construction is especially desirable where curtains are used.

In the form of construction shown in Fig. 4 the side member 1 of the casing is provided with a channel for the stop 7 that is wider than the stop throughout its entire length, so that the complete stop may move therein bodily from its normal position at the front outwardly to such extent as is necessary to permit of the clamping of the inner sash to the outer sash and the outer sash to the outer stop. In this form of construction guide-pins 16 16 are fixed in the case member and extend loosely through the stop 7, by which means the stop is held against accidentally getting out of place and is permitted to be moved bodily outwardly or inwardly.

In Fig. 5 I have shown a construction in which, instead of the lug 12 and the bolt 14 of the form shown in Figs. 1, 2, and 3, I employ an eccentric 17 as a locking device. This eccentric is pivoted on the casing in front of the sash 3 and is adapted, by swinging it upwardly, to loosen the sash, permitting its vertical movement, and by swinging it downwardly to clamp the sash, forcing it outwardly against the outer sash, thus locking the two sashes in place, substantially as is done by the locking-bolt 14.

In the form of construction shown in Fig. 6 a slidable bolt 18 is mounted in a metal socket 19 therefor between the sash 3 and the eccentric 17 of the form shown in Fig. 5. The socket 19 is secured to the case member 1, and the bolt 18 is adapted to be forced inwardly into engagement with the sash 3 by

means of the eccentric 17, while the bolt is held out of engagement with the sash 3, when released by the eccentric 17, by means of a spring 20 in the socket 19, about and under the head of the bolt 18.

In the drawings the lug 12 and bolt 14 are located on the casing near the upper end of the lower sash, and this is the form in which the device will mostly be used; but when the sashes are high or long vertically, and are correspondingly stiff, the locking device may be located lower down or opposite a medial point vertically of the sash, so it can be reached conveniently by a person standing on the floor.

What I claim as my invention is—

1. In sash-locking devices, the combination with a window-casing provided with an outer sash-stop, an intermediate sash-stop fitted with play in the casing, and sashes slidable past each other on the casing against said stops, of a lug fixed on the casing, and a bolt turning through the lug against the inner surface of the inner sash.

2. In a sash-lock, a lug adapted to be secured to a window-casing, a screw-threaded bolt turning through the lug, and a bolt-rotating head slidable and extensible on a faced terminal portion of the bolt.

3. In combination, a window-casing having a side member and an outer projecting and stop-forming member thereon, an intermediate yielding sash-stop in a channel wider than itself in the side member, sashes slidable past each other in the casing and bearing respectively on opposite sides of the intermediate yielding stop, and means mounted on the casing opposite the upper rail of the inner sash and the lower rail of the outer sash adapted to bear directly against the inner surface of the inner sash and force it and the intermediate stop and the outer sash outwardly against the outer stop.

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

EDWARD O'NEILL.

Witnesses:

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