

No. 778,000.

PATENTED DEC. 20, 1904.

S. S. BELL.
WINDOW OR SASH FASTENER.

APPLICATION FILED MAR. 10, 1904.

NO MODEL.

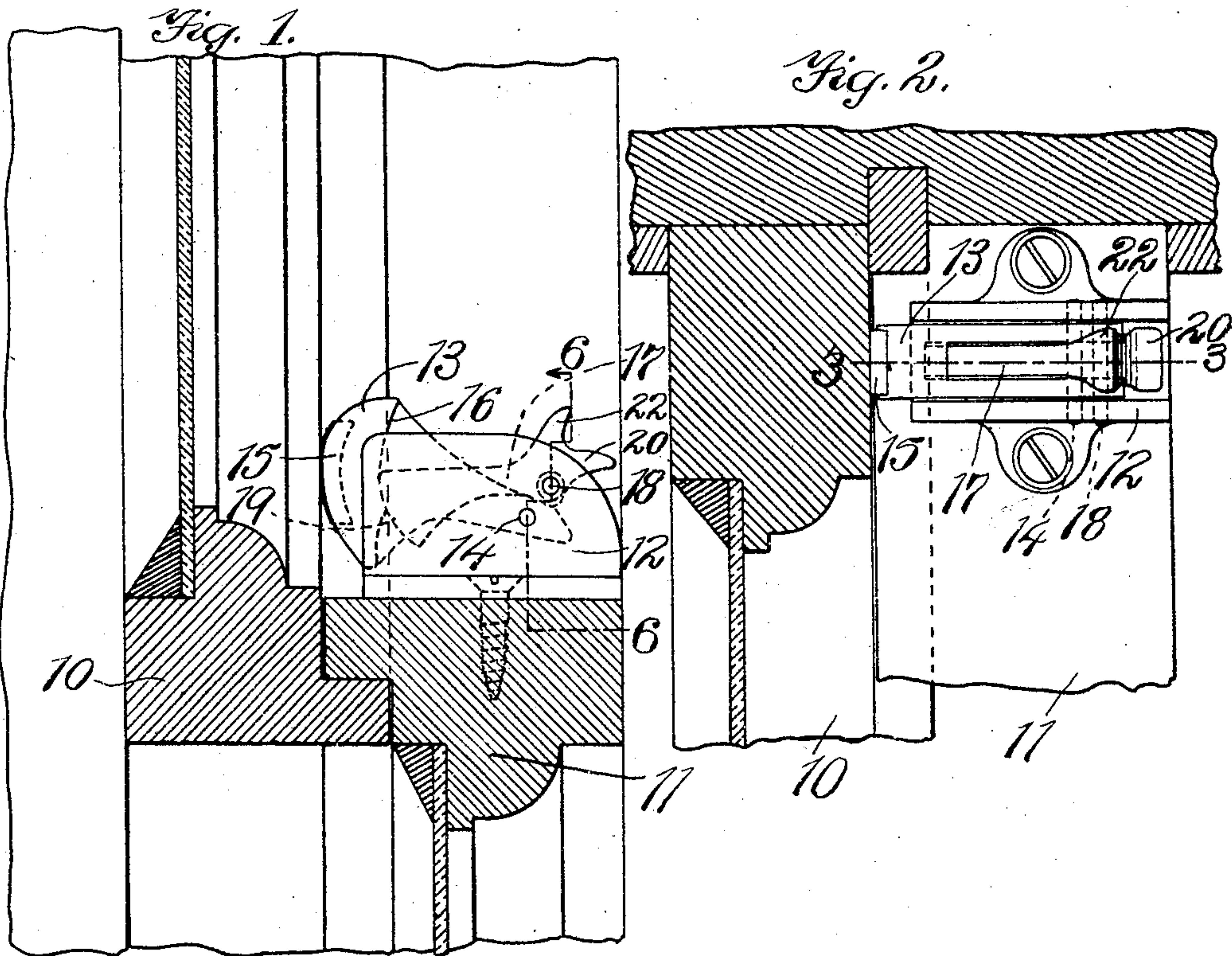


Fig. 5.

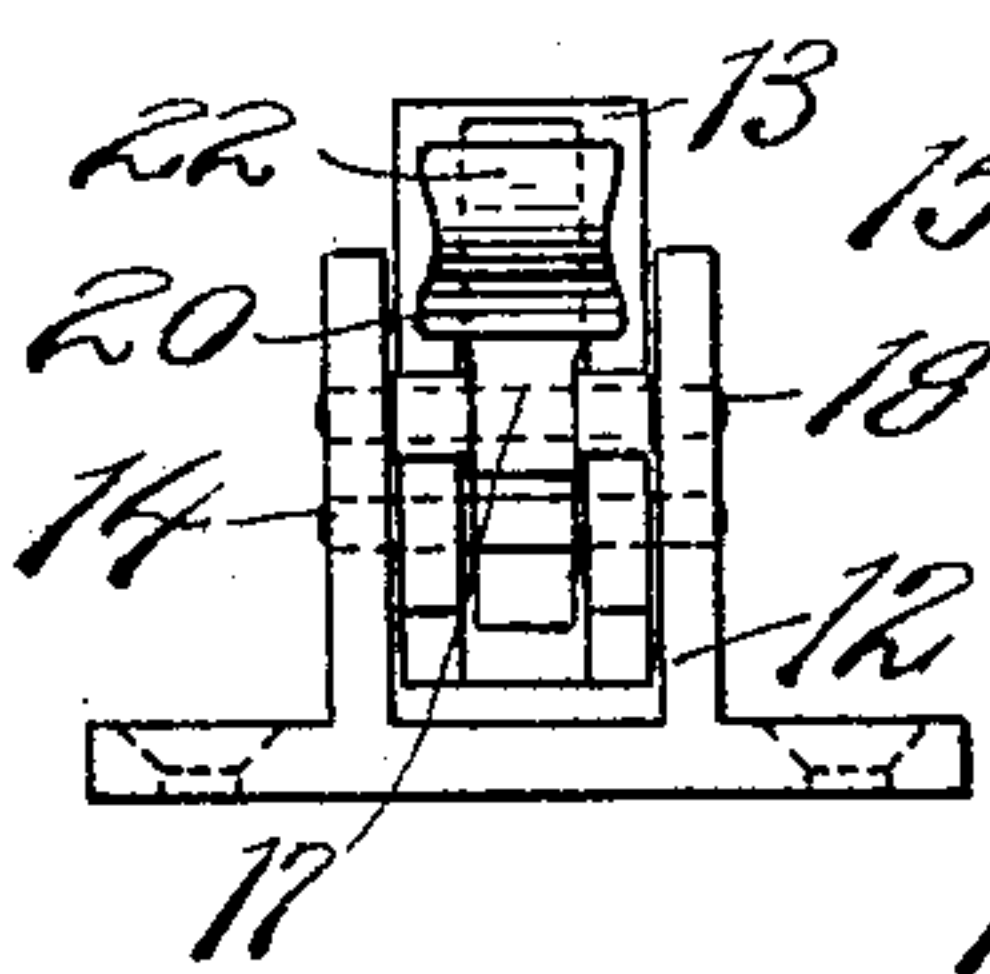


Fig. 3.

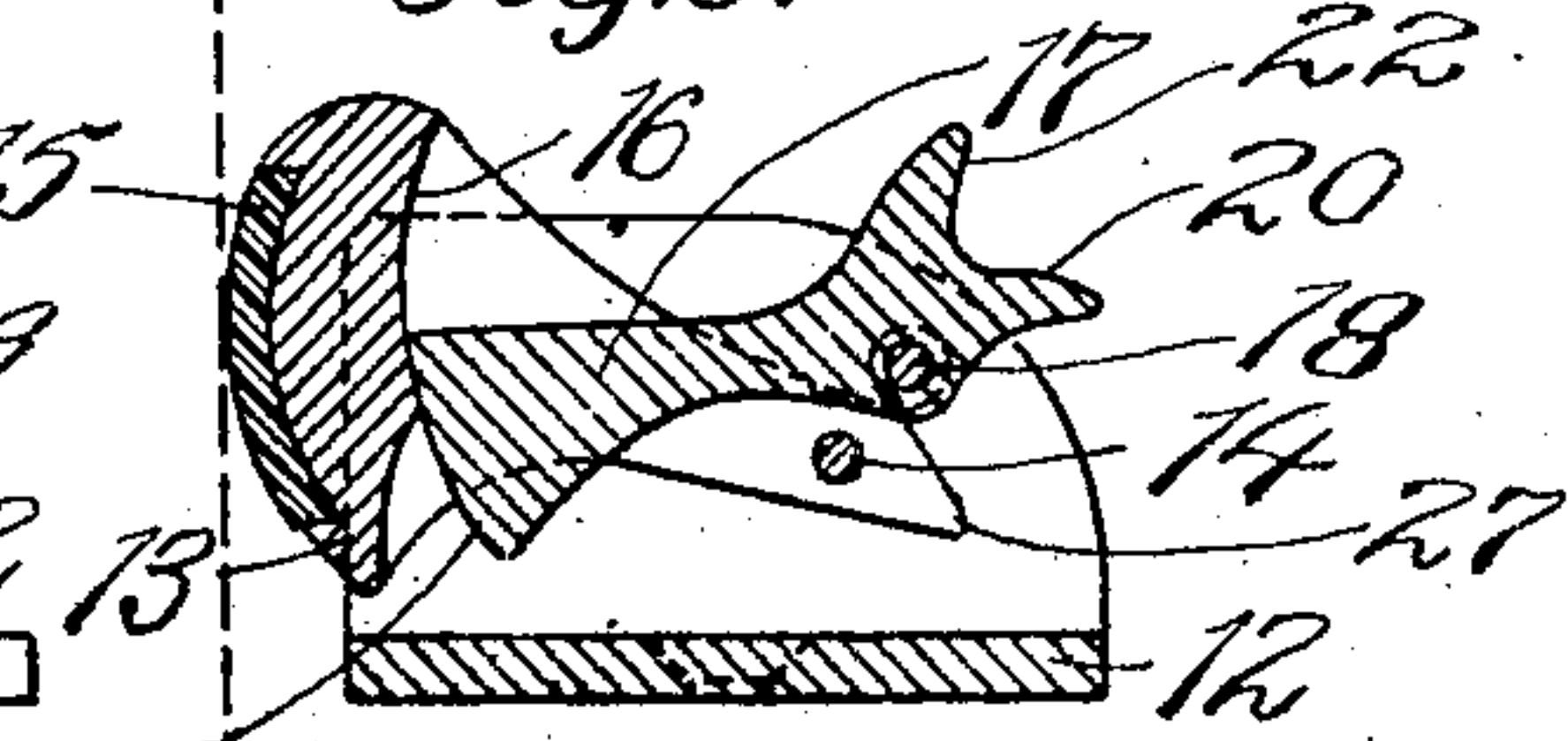


Fig. 4.

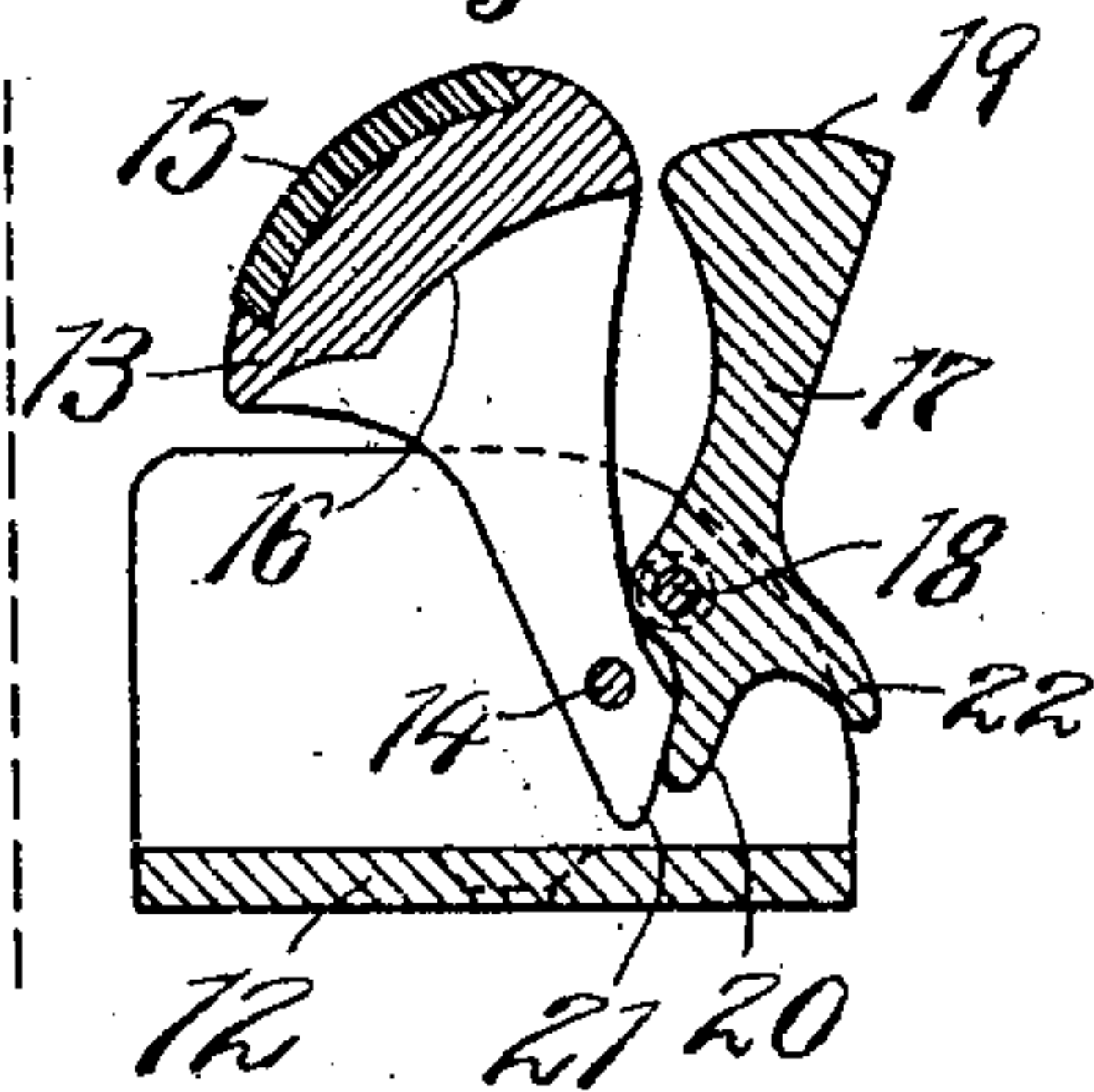


Fig. 7.

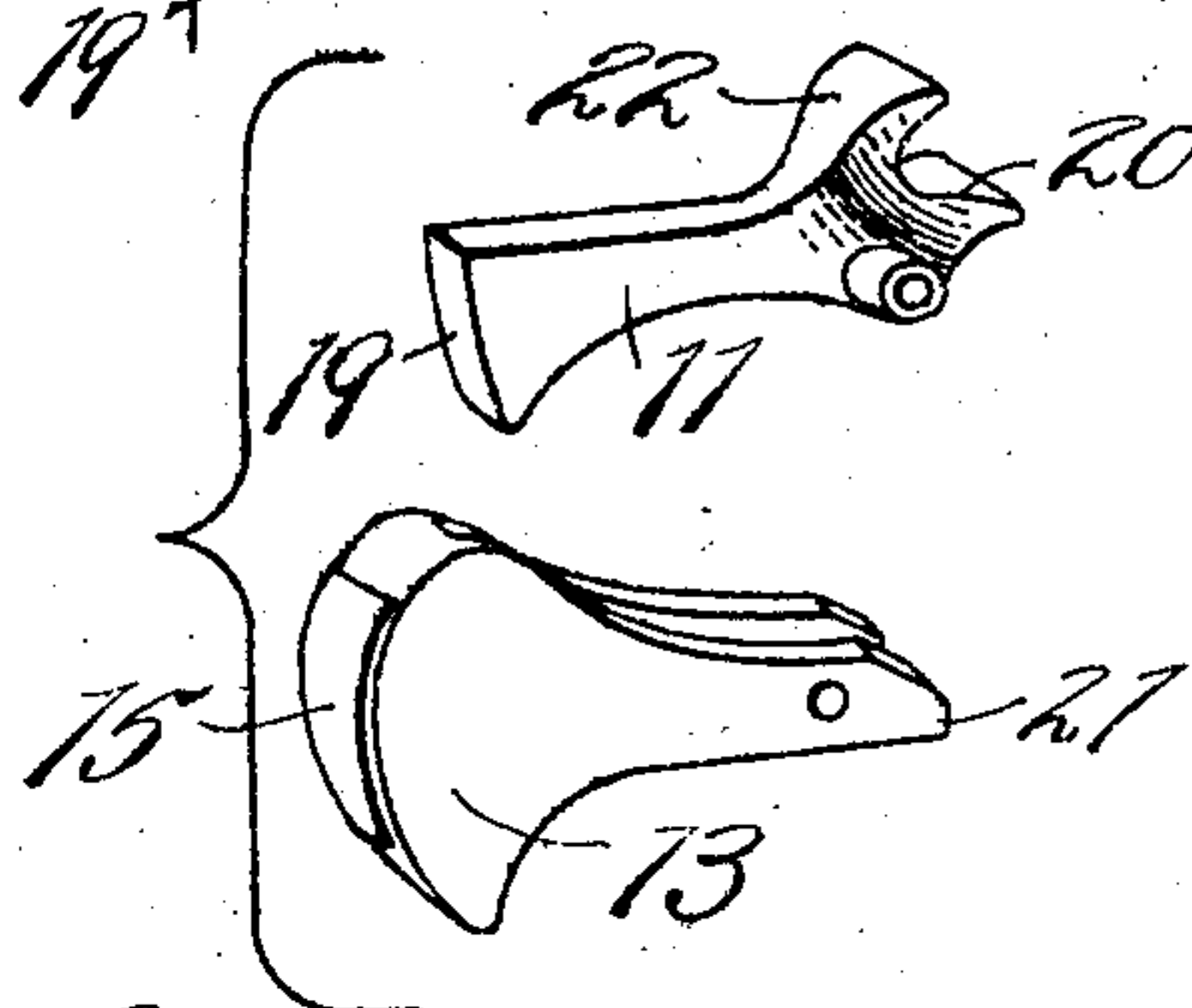
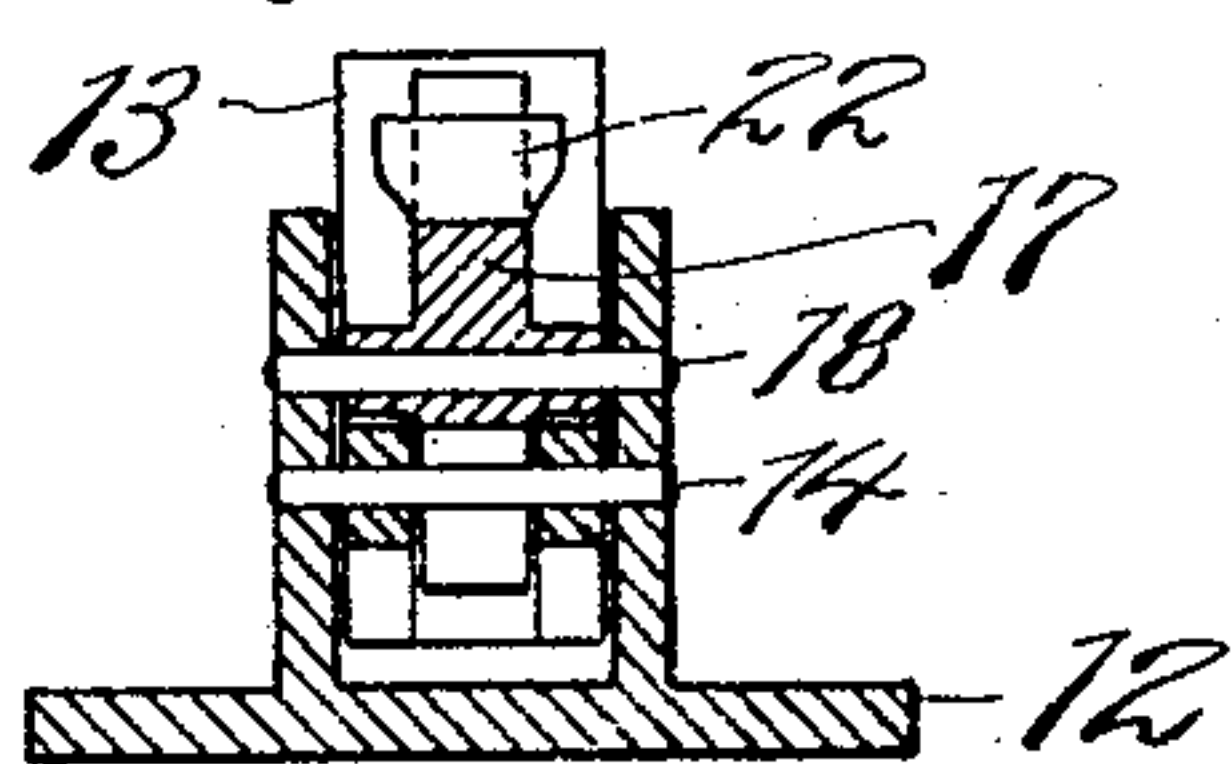


Fig. 6.



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UNITED STATES PATENT OFFICE.

STEWART S. BELL, OF READING, MASSACHUSETTS.

WINDOW OR SASH FASTENER.

SPECIFICATION forming part of Letters Patent No. 778,000, dated December 20, 1904.

Application filed March 10, 1904. Serial No. 197,556.

To all whom it may concern:

Be it known that I, STEWART S. BELL, of Reading, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Window or Sash Fasteners, of which the following is a specification.

This invention relates to window or sash fasteners, particularly of that type which is secured to the upper rail of the lower sash and is adapted to bind against the side rail of the upper sash, so as to lock the two sashes in their relative positions whether said sashes are closed or partially open. At the same time the device serves to prevent the sashes, or either of them, from rattling.

One of the objects of my invention is to provide a device of this type having means whereby the clamping-cam will be automatically locked in any position which it is permitted to assume relatively to the surface against which it binds.

A further object of the invention is to provide a device of this character with a finger-piece adapted to oscillate or actuate the cam toward either its clamping position or releasing position.

To these ends the invention consists in the construction and combination of parts, as substantially hereinafter described and claimed.

Of the accompanying drawings, Figure 1 represents a side elevation of my improved fastener, the same being shown in a suitable position relatively to the upper and lower sashes of a window, the latter being shown in section in said figure. Fig. 2 represents a plan view of the device, the top rail of the lower sash being also shown in plan and a portion of the upper sash and of the window-casing being shown in section. Fig. 3 represents a section on line 3 3 of Fig. 2. Fig. 4 is a view similar to Fig. 3, but showing the movable members of a fastener in a different position relative to the surface of the side rail of the upper sash, which surface is indicated by the vertical dotted line in both Figs. 3 and 4. Fig. 5 represents a rear elevation of the device. Fig. 6 represents a section on line 6 6 of Fig. 1. Fig. 7 represents the two movable members of the fastener in perspective.

The upper sash of the window is represented at 10, and the lower sash at 11. To the top of the upper rail of the lower sash is secured the casing 12, said casing being formed with side walls, which support the pivot 14 of the cam 13, said cam being preferably formed with a rubber facing 15 to bind against the surface of the side rail of the upper sash without marring the same. Devices of this character as so far described are common and well known and the operation thereof need not be further described herein.

My improvements will now be described.

The pivoted binding-cam 13 is formed with a recess one wall, 16, of which is eccentric relatively to the pivot 14 and also eccentric to the pivot 18 of the locking piece or lever 17, the pivot 18 being supported by the side walls of the casing above and slightly to the rear of the pivot 14.

As will be readily seen by comparing Fig. 4 with Fig. 3 and the dotted lines of Fig. 1, the two pivots 14 and 18 possess such relation to each other that the end face 19 of the locking piece or lever 17 is adapted to cooperate with the eccentric wall 16 of the cam, so as to ride down said wall 16 as the parts move from the position shown in Fig. 4 toward the position shown in Fig. 3, the end face 19 engaging the wall 16, so as to prevent the cam from being thrown upward by any pressure applied upwardly on the cam itself. The cam may automatically drop downward or may be pushed downward by moving the locking piece or lever 17 in the proper direction, as will be readily understood.

The lever 17 is formed with a lug 20 of a sufficient width to cross the recess of the cam and engage the toe portion 21 of the cam on each side of said recess. The lever 17 is also provided with a handle or finger-lug 22, by means of which the said lever may be oscillated. When said lug is pressed downward, the lug 20 engages the toe 21 of the cam and throws the latter to the position indicated in Fig. 4.

It will now be understood that owing to the fact that the locking-piece is pivoted eccentrically to the pivoted cam, the latter having an eccentric rear wall and the locking-piece

having a face adapted to engage said eccentric wall of the cam, the cam will be automatically locked in its binding or engaging position no matter what degree of movement has been imparted thereto. As is well known, various causes, such as irregularities in the surface which is clamped, result in cam-fasteners of this type moving downward to a greater or lesser degree, according to the distance of the surface to be clamped from the pivot of the cam; but the structure which I have provided enables the locking-piece to descend with the cam to the proper degree, so as to automatically lock the cam in any position assumed by the latter.

I claim—

1. A sash-fastener comprising a pivoted cam having an eccentric rear wall, and a locking-piece pivoted eccentrically to said cam and having a face adapted to engage the eccentric wall of the cam to lock the cam in position, the said locking-piece having a portion adapted to be brought into engagement with a portion of the pivoted cam whereby the clamping portion of said pivoted cam may be disengaged from the clamped surface.

2. A sash-fastener comprising a casing, independently-pivoted members supported by said casing, one of said members having a front face to engage the surface to be clamped and a rear face eccentric to its pivot, and the other member having one end adapted to engage said eccentric face to lock the device, its other end being adapted to engage with the end of the first-mentioned member to release it from engagement with the clamped surface.

3. In a device of the character described, the combination with a pivoted clamping member having a wall eccentric to its pivot, of a locking piece or lever mounted upon an independent pivot and having one end adapted to engage said wall and having its other end provided with a toe adapted to engage a portion of the cam to move the cam in one direction, said locking piece or lever having also a handle or finger-lug.

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

STEWART S. BELL.

Witnesses:

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