

No. 716,669.

Patented Dec. 23, 1902.

J. W. CONNOLLY.

LATCH.

(Application filed May 10, 1902.)

(No Model.)

Fig. 7.

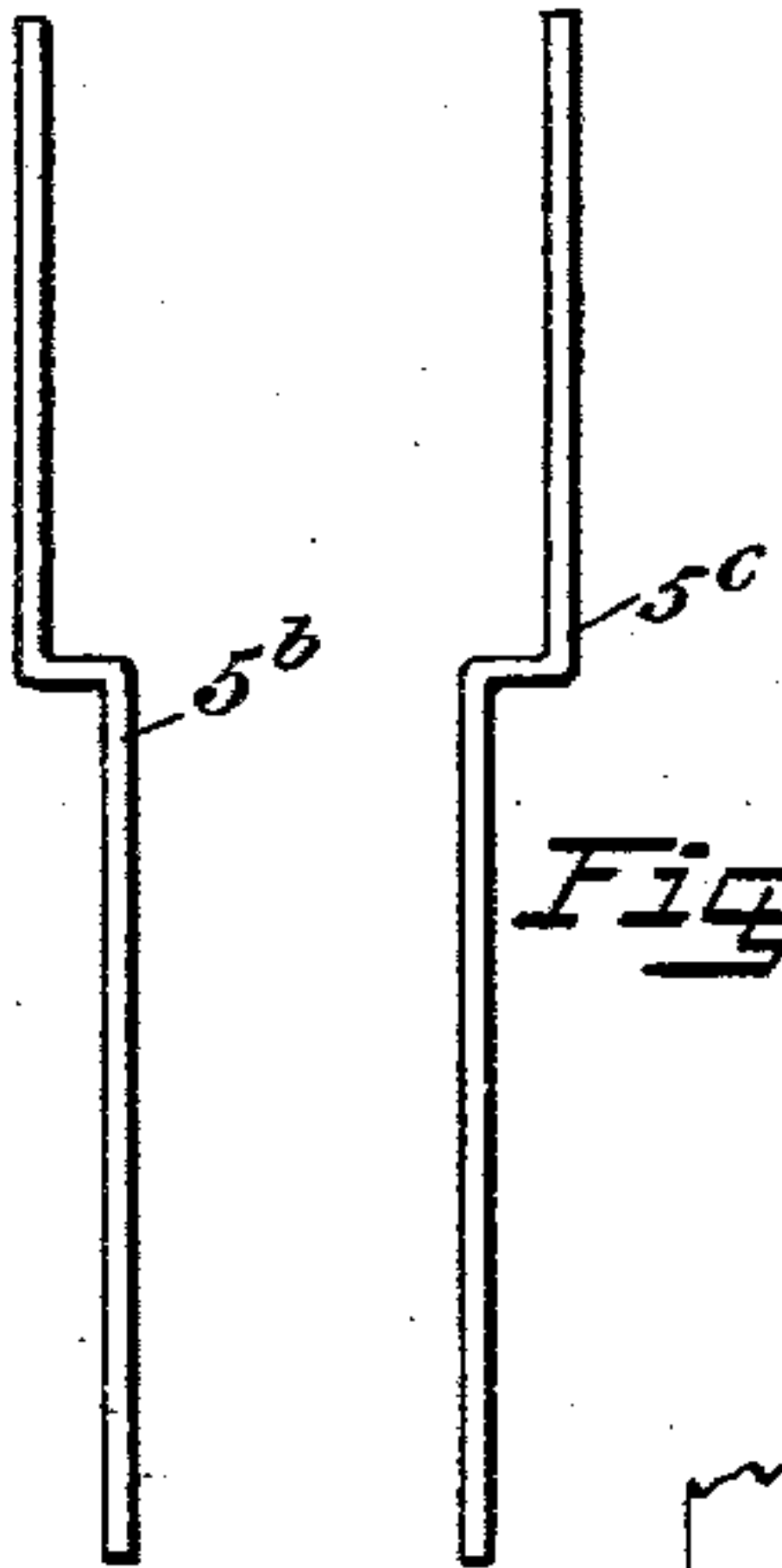


Fig. 1.

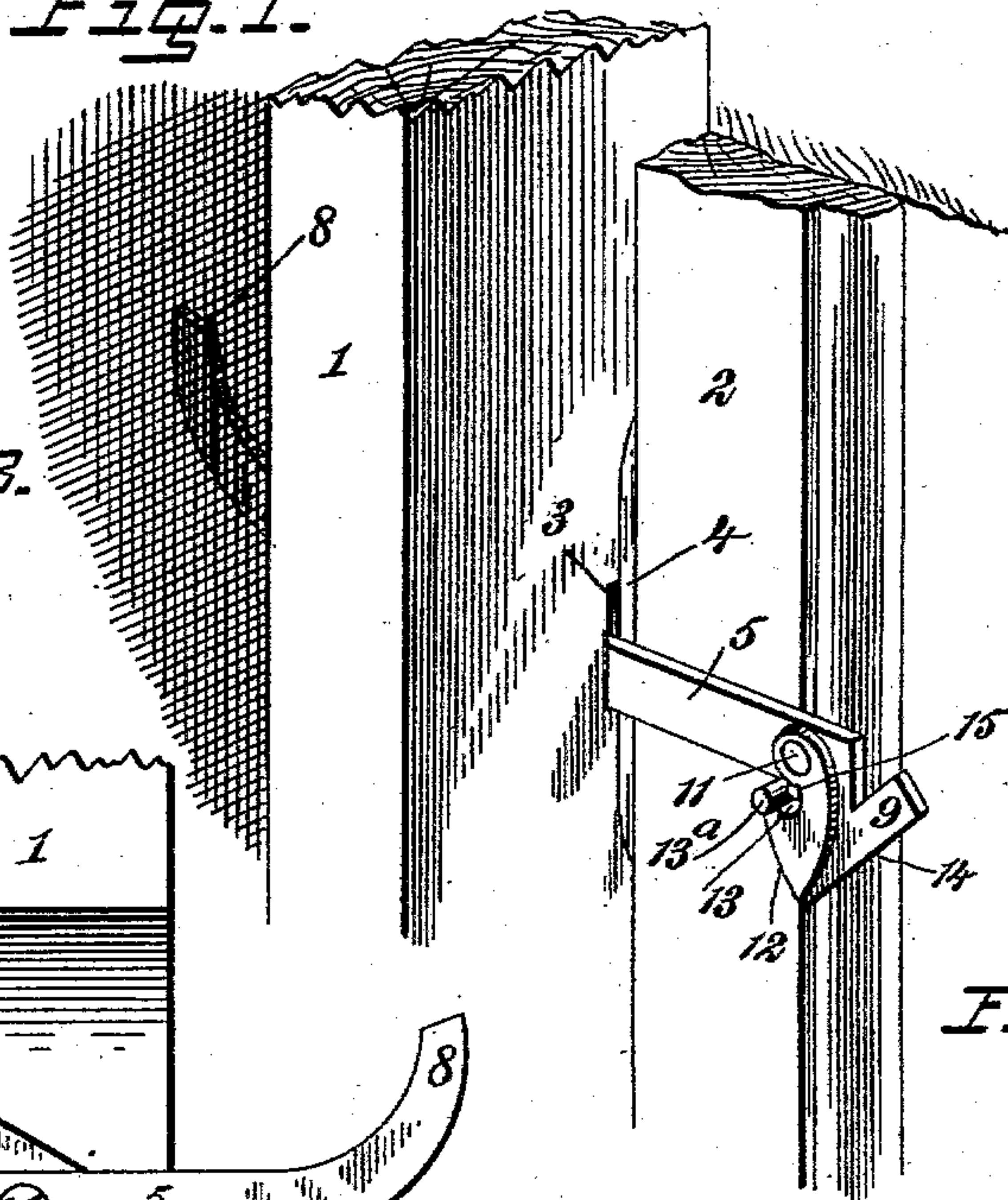


Fig. 8.

Fig. 2.

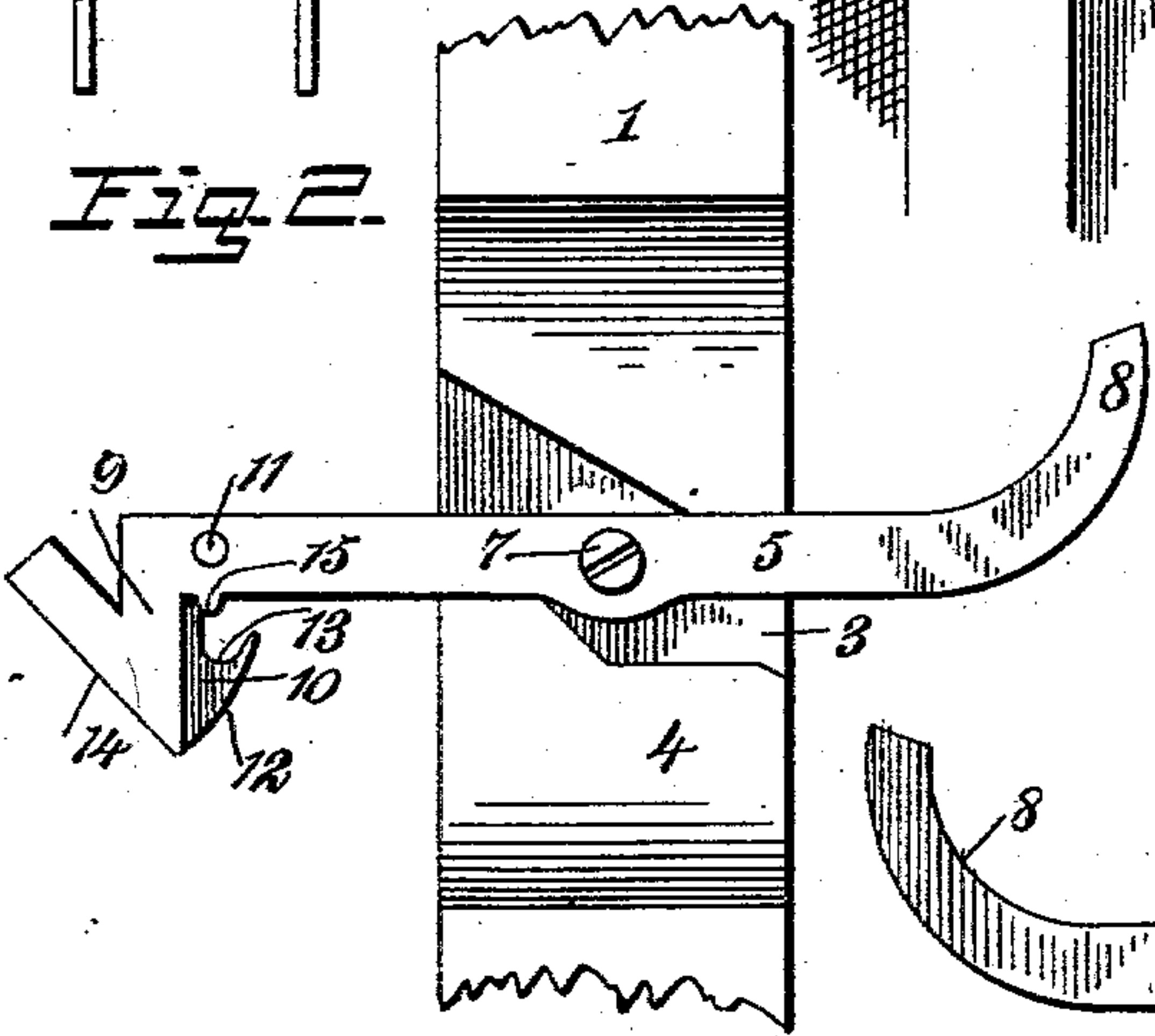


Fig. 6.

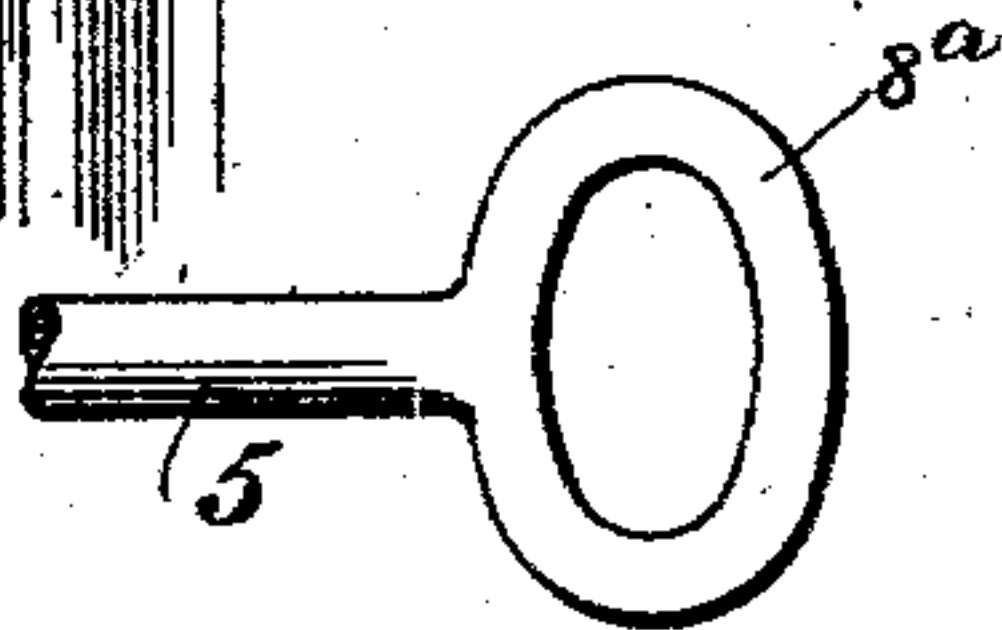


Fig. 3.

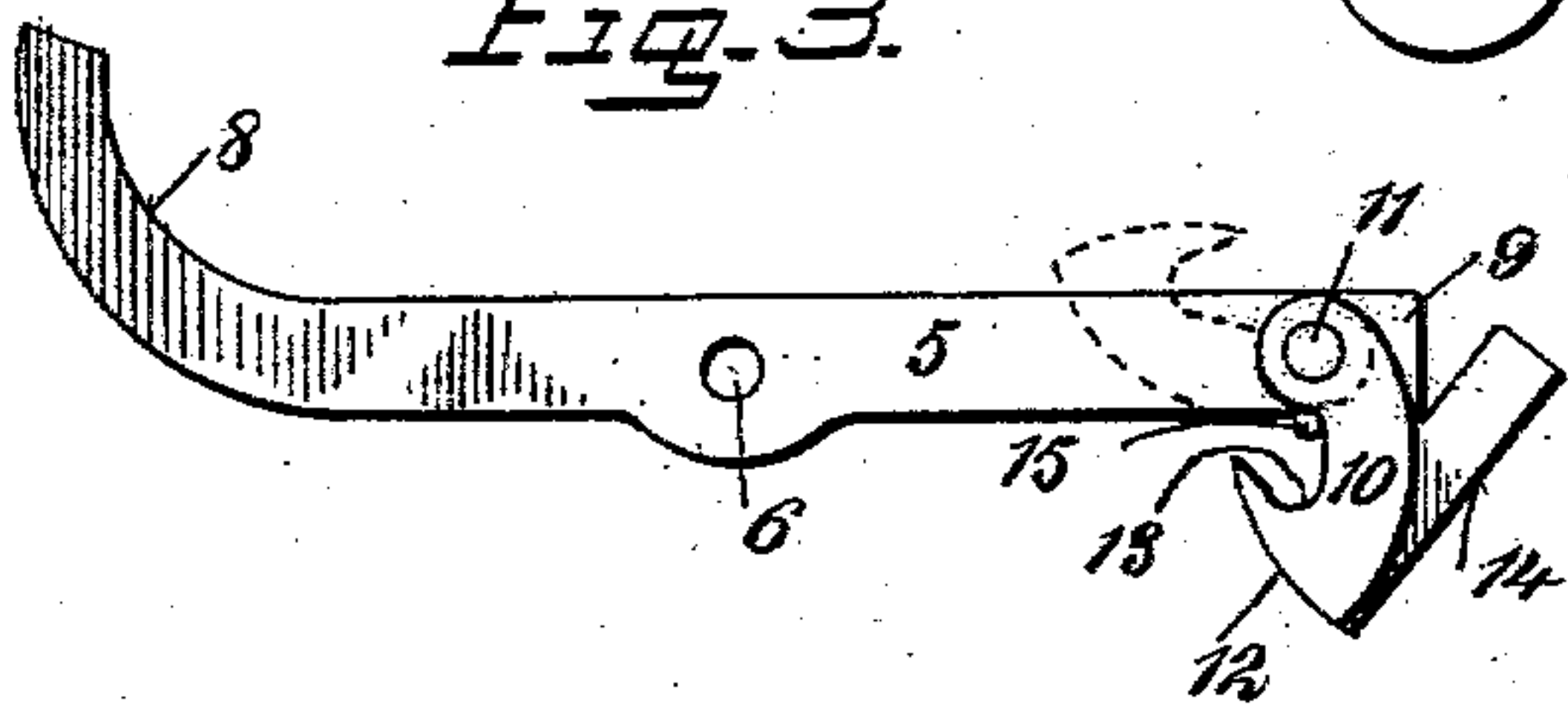


Fig. 4.

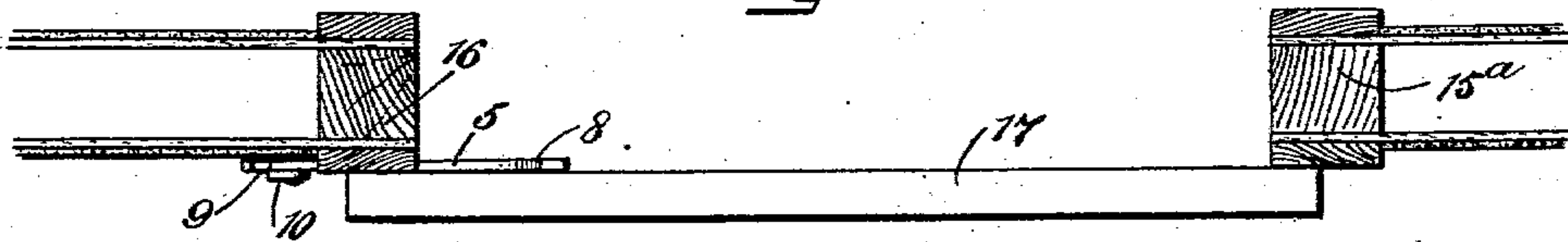
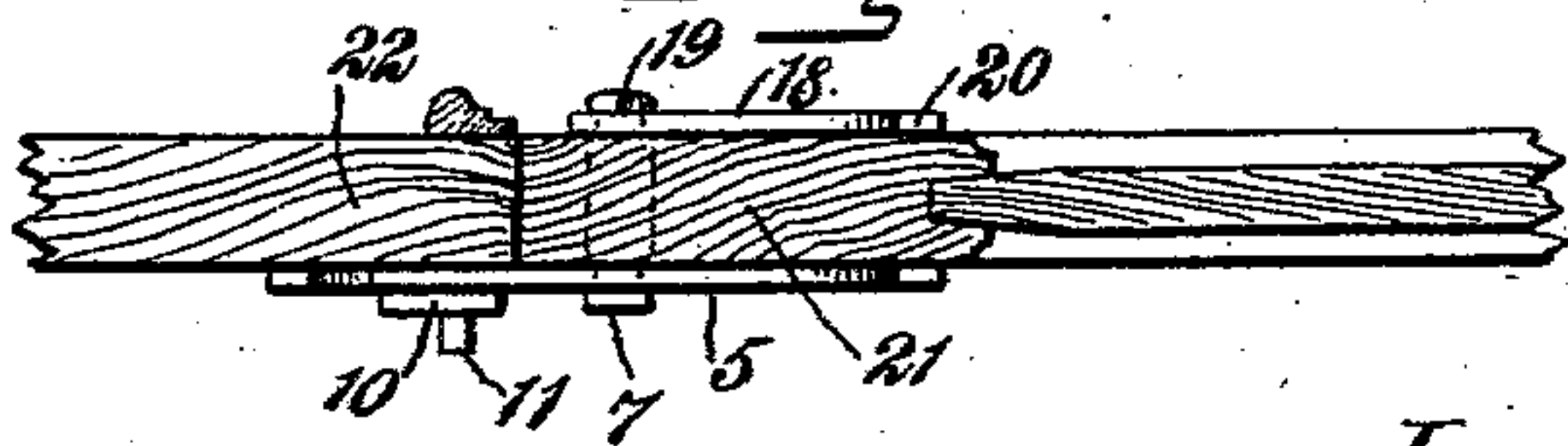


Fig. 5.



WITNESSES:

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JOSEPH WILLIAM CONNOLLY, OF TOLEDO, OHIO.

LATCH.

SPECIFICATION forming part of Letters Patent No. 716,669, dated December 23, 1902.

Application filed May 10, 1902. Serial No. 106,711. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH WILLIAM CONNOLLY, a citizen of the United States, and a resident of Toledo, in the county of Lucas and State of Ohio, have invented new and useful Improvements in Door-Latches, of which the following is a full, clear, and exact description.

My invention relates to door-latches, its object being more particularly to produce a simple and efficient latch which can normally be released from only one side of a door, but which can be so arranged that it may be released from either or both sides of the door.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a fragmentary perspective view showing my latch as applied to an ordinary wire-screen door. Fig. 2 is a side elevation of the latch and its mountings. Fig. 3 is a side elevation of the latch removed from its mountings. Figs. 4 and 5 are horizontal sections showing my device as applied to different types of sliding doors. Fig. 6 is a side view of a modification in the form of the end of the latch, and Figs. 7 and 8 are views of modifications in the general form of the latch.

My invention admits of so many modified forms that I find it impracticable to describe all of them in detail. I will therefore describe only one or two of my preferred forms.

The door is shown at 1, and the jamb at 2. The door is provided with a slot 3 and with a removable block 4, which covers the latch, as shown. For this purpose the latch is provided with a pivot-hole 6, through which the screw-pivot 7 is inserted into the door 1. One end 8 of the latch is curved upward for the purpose of affording a convenient grip for the finger. The other end of the latch is provided with a head 9, having a bevel 14 and being of substantially triangular shape, as indicated more particularly in Fig. 2.

A hook 10 is loosely mounted upon a pivot 11, rigidly secured in the latch. The hook 10 is provided with a slightly-curved edge 12, the same constituting a sort of bevel opposite the bevel 14, the head 9 and the hook 10 thus together constituting a composite member of substantially triangular form, as indi-

cated in Figs. 2 and 3. A recess 13 in the hook is free to be engaged by a boss 13^a, rigidly secured to the jamb 2. A boss 15, preferably integral with the latch 5, is disposed in the position indicated in Figs. 1, 2, and 3, so that the hook 10 may rest upon the boss when the hook is placed in the position shown by dotted lines in Fig. 3. To place the hook in this position, all that is necessary is to throw it upward, whereupon it lodges with its back upon the boss 15.

When the hook is in the position indicated by the dotted lines in Fig. 3 and the door is closed, the bevel edge 14 of the head 9 merely glides upward over the boss 13^a, and the head then drops down, so as to hold the door closed. A slight pressure upward upon the end 8 of the lever will of course elevate the triangular head 9. If, however, the hook 10 be thrown over to the right from the position indicated in dotted lines, so as to assume the position indicated in full lines in Fig. 3, another result takes place, to wit: The boss 13^a enters the recess 13 in the hook, so that downward pressure upon the end 8 of the lever does not disengage the lever from the boss. In other words, a person outside of the door is unable to open the same. This arrangement is used in various relations, and particularly where it is desired to leave a door in such a condition that persons inside of the house can open the door, but persons outside are unable to open the same. It therefore serves as a very efficient night-latch when used in this manner. During the daytime the hook 10 preferably occupies the position indicated in dotted lines. When placed in this position, the latch can be used for an indefinite period of time without causing the door to lock. The instant the hook is thrown over, however, and the door is closed it automatically locks the latch, and the latter can only be released from the side adjacent to the hook.

Where a sliding door of the type indicated in Fig. 4 is used, the two jambs 15^a 16 are disposed in the usual manner, and the sliding member 17 normally occupies the position indicated. The latch 5 is arranged parallel with the plane of the door, the hook 10 being given the position shown. In this event the

door can only be opened by persons adjacent to the side of the door upon which the hook appears or when the hook occupies the position indicated by dotted lines in Fig. 3. If desired, the form shown in Fig. 5 may be used. As shown in Fig. 5, an auxiliary lever 18, provided with an upturned end 20, is rigidly secured upon the pivot 19, and the latch 5 is also rigidly secured upon this pivot, so that the latch can normally be raised by a person upon either side of the door. The movable part of this door is shown at 21 and the jamb at 22. Where this form is used, as in those above described, the hook 10 may be left in the position indicated by dotted lines in Fig. 3, so that the latch may be left in the position indicated by full lines in Fig. 3, whereupon the latch can be released only by persons upon that side of the door represented at the bottom of the figure.

Instead of having the upturned end 8 the latch may be provided with a ring 8^a, in which a good grip may be secured by a finger.

If desired, the latch forms instead of being flat may be bent, as indicated, into either of the forms 5^b 5^c. (Shown in Figs. 7 and 8.)

Having thus described my invention, I

claim as new and desire to secure by Letters Patent—

1. As an article of manufacture, a door-latch comprising a lever secured to a swinging member and provided with a head having a bevel face and also provided with a depending hook having a bevel face, the said bevel faces together normally constituting a member of substantially triangular shape, and a boss secured to the doorway, to be engaged by either of said beveled faces.

2. As an article of manufacture, a door-latch comprising a longitudinal lever provided with a head having a bevel edge, a hook loosely provided upon said lever adjacent to said head and provided with a bevel edge, said bevel edges normally meeting at a common point, and a boss against which said hook may be lodged for the purpose of temporarily rendering said hook inactive.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOSEPH WILLIAM CONNOLLY.

Witnesses:

MICHAEL CONNOLLY,
FELIX CONNOLLY.