

No. 747,532.

PATENTED DEC. 22, 1903.

W. R. BRIGGS.

LATCH FOR SWINGING SHUTTERS OR BLINDS.

APPLICATION FILED AUG. 7, 1903.

NO MODEL.

Fig. 1.

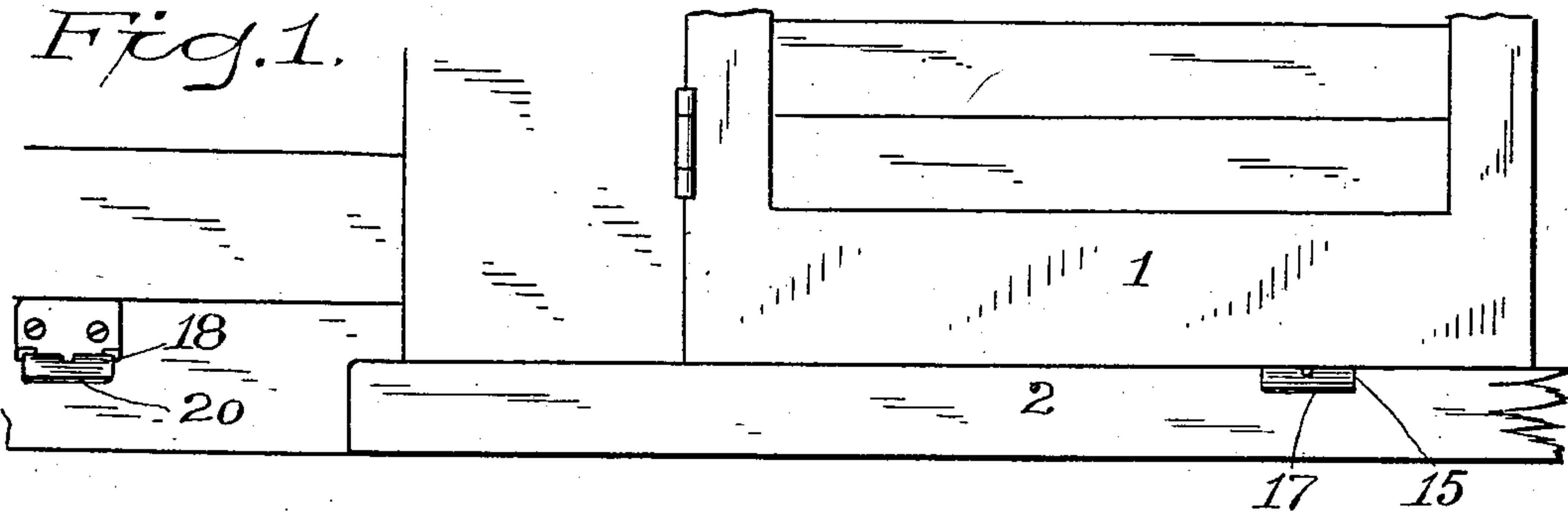


Fig. 2.

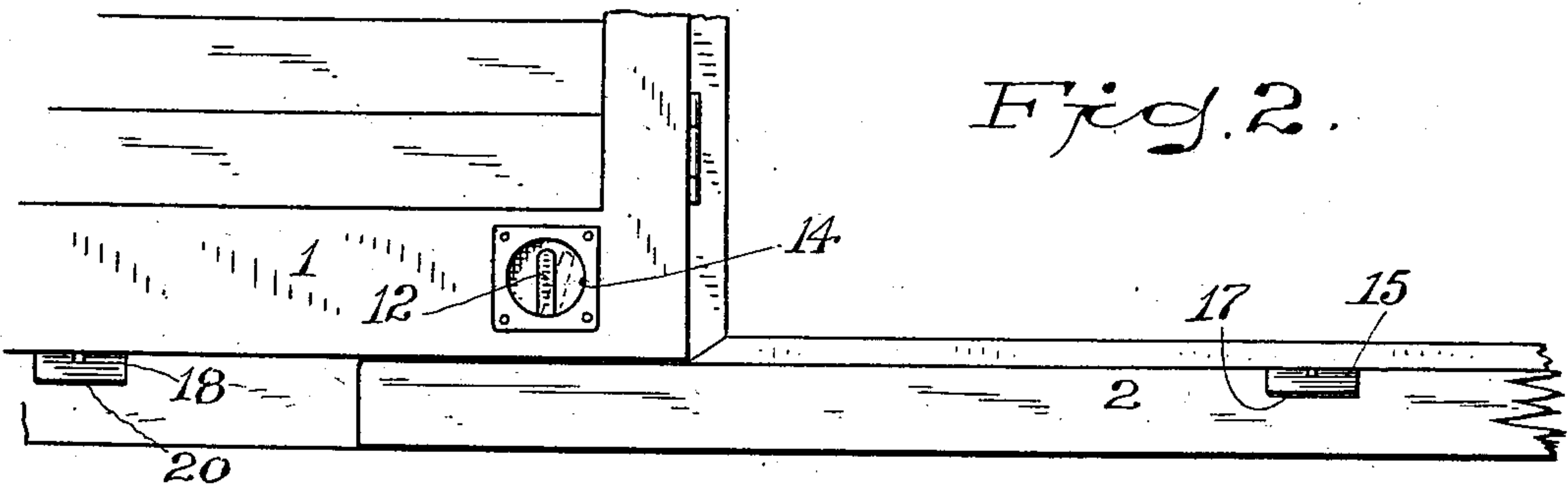


Fig. 3.

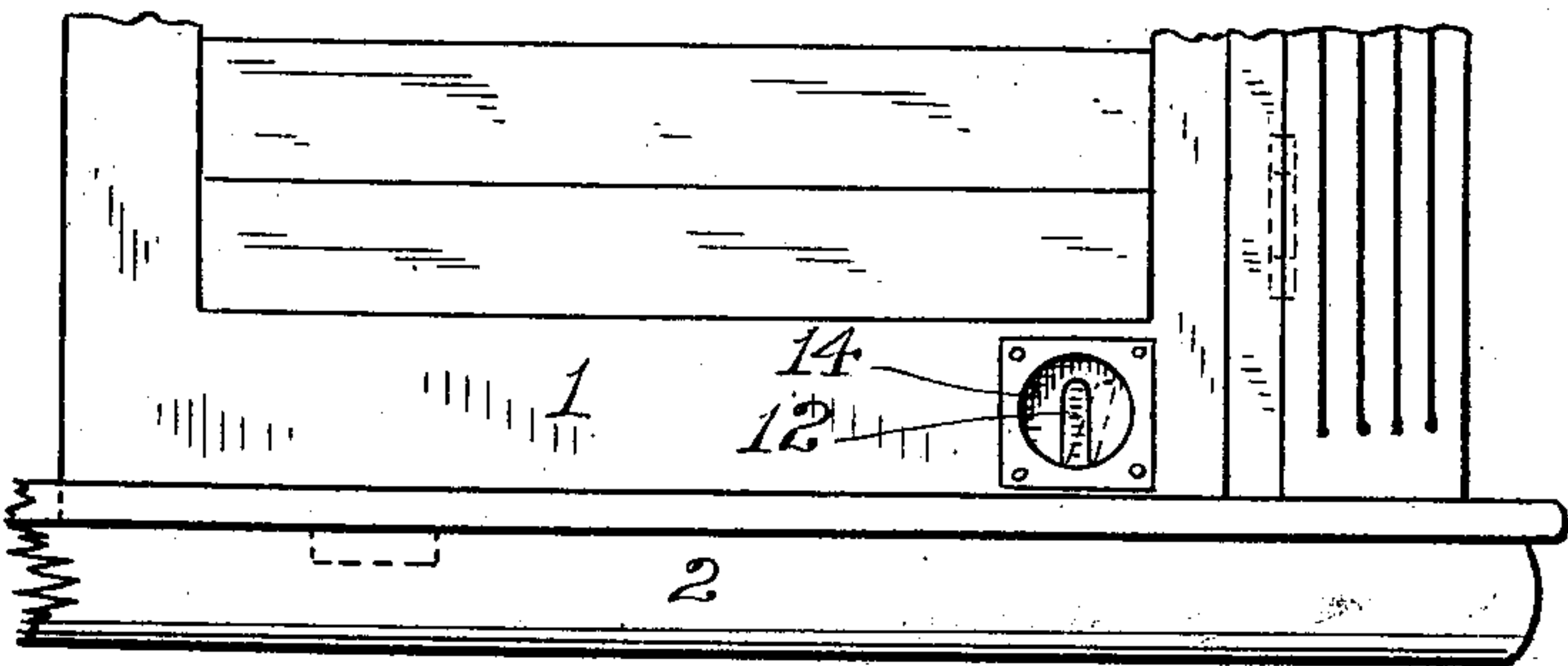


Fig. 4.

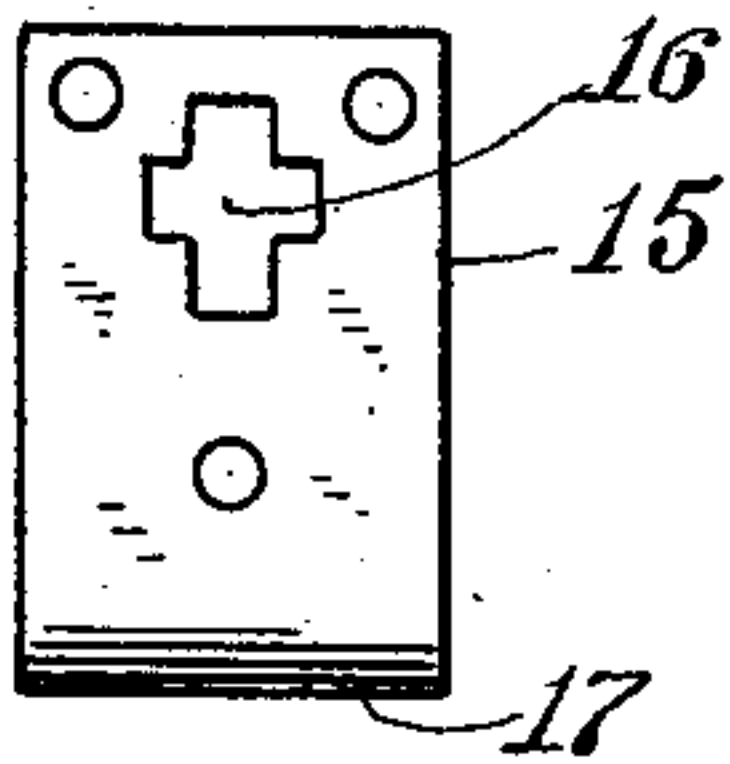


Fig. 6.

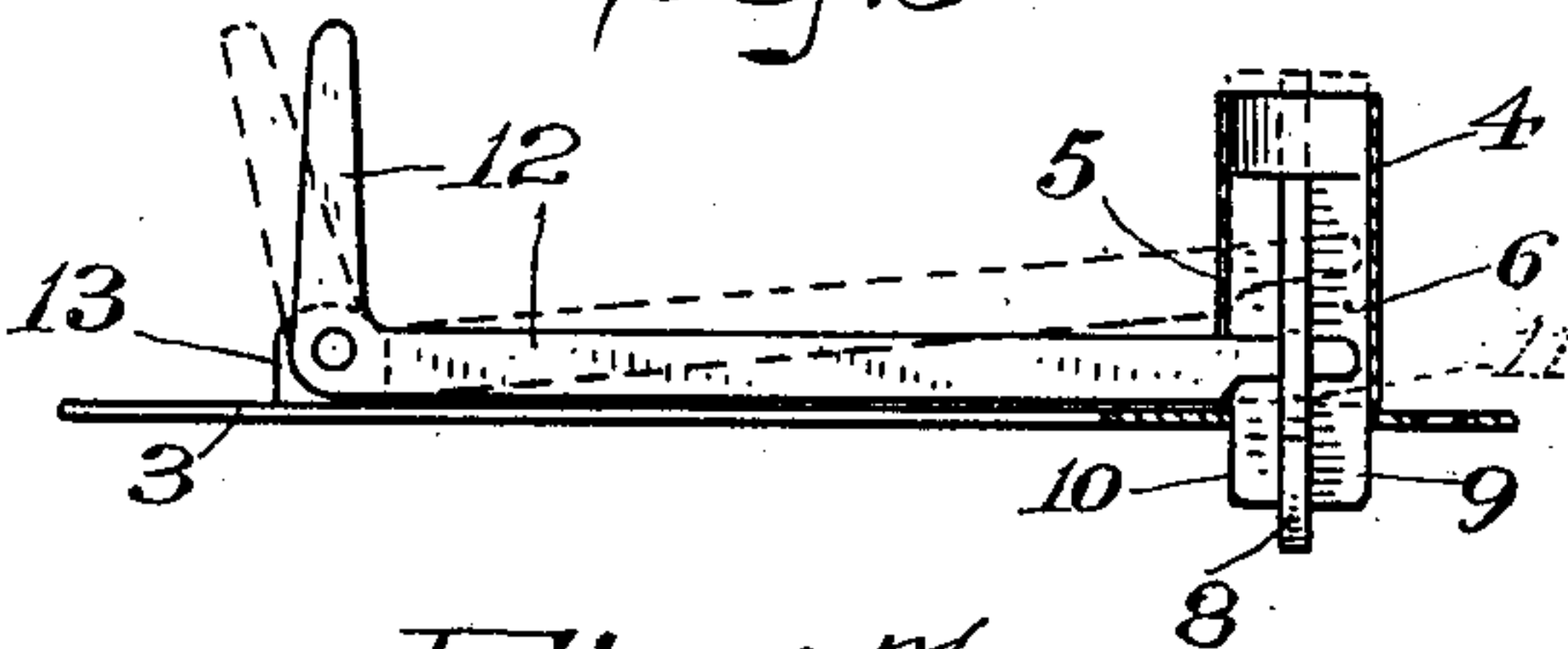


Fig. 5.

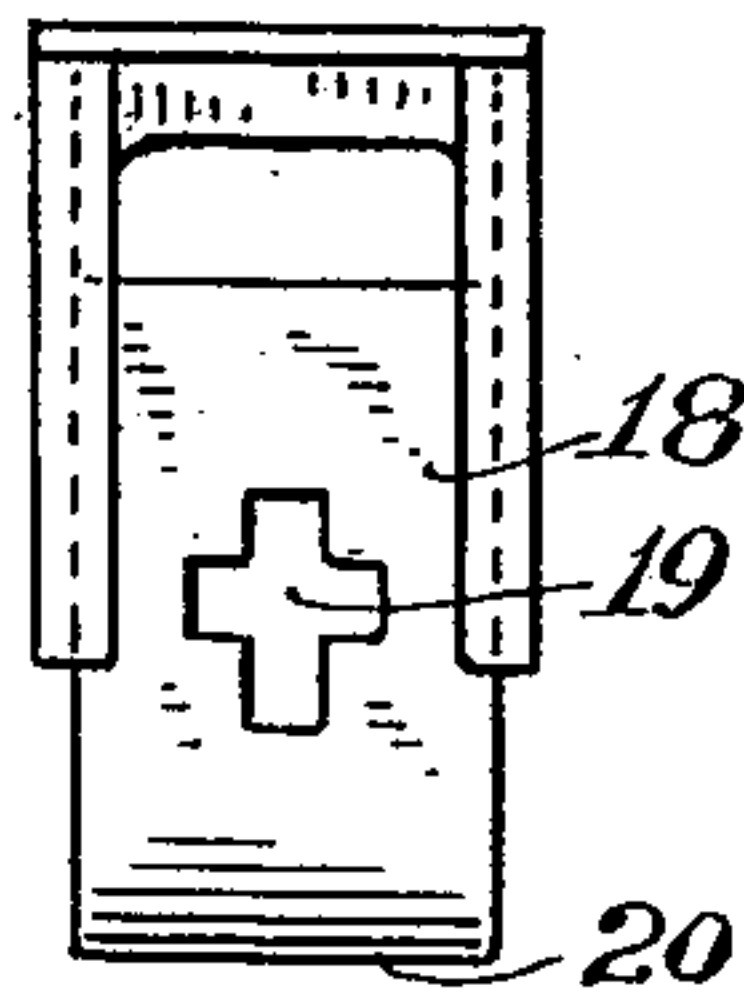
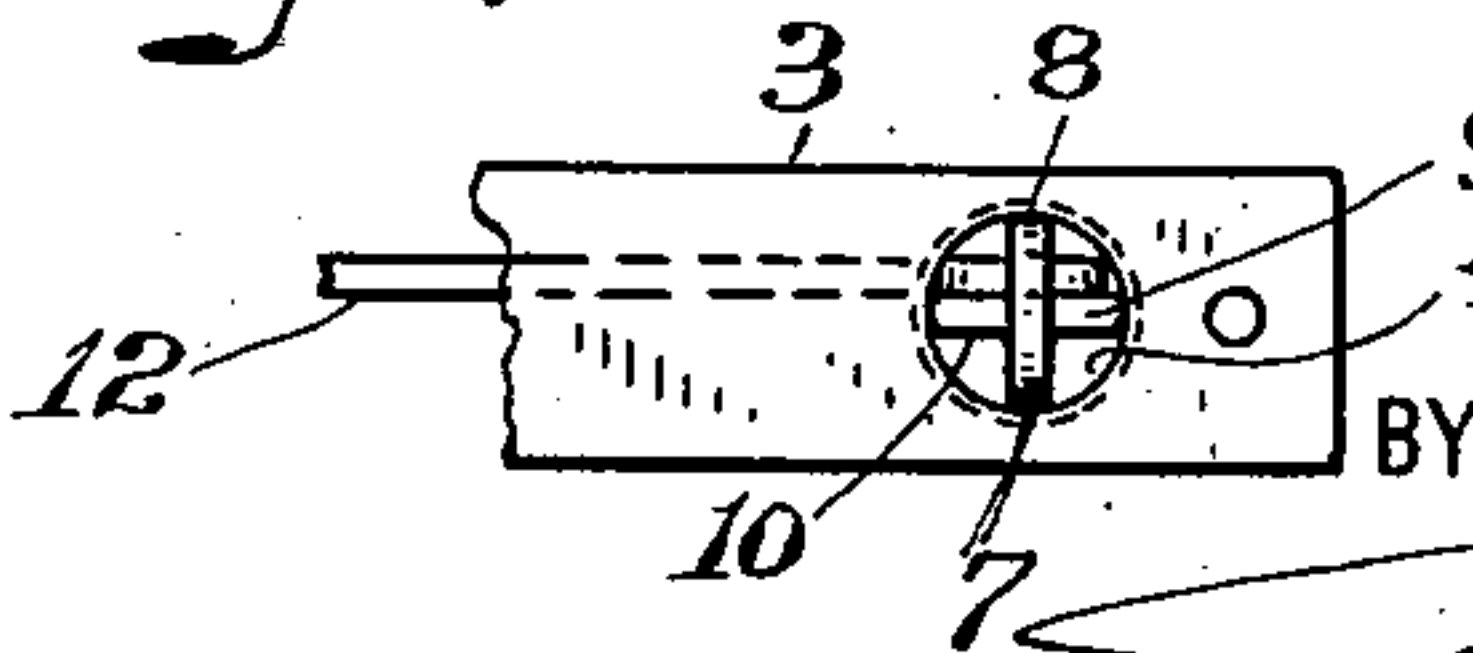


Fig. 7.



WITNESSES:

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WARREN R. BRIGGS, OF BRIDGEPORT, CONNECTICUT.

LATCH FOR SWINGING SHUTTERS OR BLINDS.

SPECIFICATION forming part of Letters Patent No. 747,532, dated December 22, 1903.

Application filed August 7, 1903. Serial No. 168,637. (No model.)

To all whom it may concern:

Be it known that I, WARREN R. BRIGGS, a citizen of the United States, residing at Bridgeport, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Latches for Swinging Shutters or Blinds; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to latches for swinging shutters or blinds, and has for its object to provide a very simple and economical device of this character and which may be readily operated and is not likely to get out of order.

A further object of my invention is to do away with all projections from the outside of the shutter, such as are ordinarily necessary for the purpose of engaging either with the catch-holder in the sill or the catch-holder on the wall of the building.

With these ends in view my invention consists in certain details of construction and combination of parts, which will be hereinafter fully set forth and then specifically be designated by the claims.

In the accompanying drawings, which form a part of this application, Figure 1 is an elevation of the outside of a closed shutter equipped with my improvement; Fig. 2, a similar view, but showing the shutter open. Fig. 3 is an inside elevation of a closed shutter equipped with my improvement; Fig. 4, a detail plan view of the sill-catch; Fig. 5, a detail plan view of the wall-catch; Fig. 6, an elevation, partly in section, of the catch-lever and latch; and Fig. 7, a bottom view of the construction shown at Fig. 6.

Similar numbers of reference denote like parts in the several figures of the drawings.

In Letters Patent No. 708,619, issued to me September 9, 1902, I showed and described a shutter-fastener which consisted of two independent levers pivoted together and provided at their free extremities with beveled catches which extend, respectively, inside and outside the shutter itself, and while this construction possessed considerable merit I have deemed it advisable to do away with all

parts projecting on the outside of the shutter and also to mortise the lever and catch within the bottom of the shutter, so that they are out of sight and are less likely to become bent or disarranged. In the present invention I have, furthermore, utilized a single catch to cooperate with the catch-holders on the sill and on the wall, and I have so constructed this catch that it cannot be readily tampered with so as to open the shutter from the outside, all of which improvements will be readily understood from the following description.

1 is the blind or shutter, hinged to the casing 2.

3 is a face-plate having secured near its forward end a barrel 4, which latter is provided with an elongated slot 5 at its bottom. Within this barrel is the catch 6, which is formed from four elongated fins 7 8 9 10, which extend from a common center, the fins 7 8 being at right angles to the fins 9 10 and the lower extremities of the fins 7 8 being beveled for the purpose presently to be explained.

This catch is adapted to move freely through the barrel 4 and is provided with a slot 11. (Dotted.) 12 is a lever which is pivoted intermediate of its ends to an ear 13, secured to the face-plate, the rear end of this lever being so fashioned that it may be readily manipulated, so as to swing the lever on its pivot, while the outer end of this lever extends loosely within the slot 11 in the catch, so that it will be readily understood that when the lever is elevated the catch will be raised, and when the rear end of the lever is released the catch will drop by gravity. The lower edge of the shutter is mortised, so as to contain this face-plate, lever, and barrel, and when the face-plate has been secured flush with the bottom of the shutter these operative parts will of course be concealed. The inside wall of the shutter near the bottom edge is mortised and provided with a cup-plate 14, which is secured to the shutter and extends within said mortise, and through the bottom wall of this cup-plate extends the rear end of the lever 12 to afford a thumb-piece for the ready manipulation of said lever. It will thus be seen that the only part of my improvement carried by the shutter which is visible is the

extreme rear end of the lever, which end is out of the way in that it is contained within the cup-plate, and, moreover, the latter affords a very neat finish.

5 15 is a catch-plate secured to the window-sill and having an opening 16 corresponding in shape to the cross-section of the catch, the outer edge of this plate being beveled downwardly, as shown at 17, for the purpose presently to be explained.

18 is the catch-plate, that is secured to the wall of the building and is provided with an opening 19 and has its outer edge beveled, as seen at 20, for the purpose presently to be explained.

The catch 6 normally extends beyond the face-plate 3 by reason of its gravity, and when the shutter is closed one of the beveled fins 7 will strike against the bevel 17 of the plate 15, and thereby effect the elevation of the catch until the latter registers with the opening 16, when said catch will drop within such opening and the shutter will be in locked position. When the shutter is thrown open to its full extent, the other beveled fin 8 will strike against the bevel 20 on the plate 18 and will effect the elevation of the catch until the latter registers with the opening 19, when said catch will drop within said opening and the shutter will be locked in open position. In order to bring about the unlocking of the shutter, it is merely necessary to throw the end of the lever rearwardly. As heretofore stated, the catch consists of four fin-like pieces disposed at right angles to each other, and I have heretofore called attention to the fact that the fins 7 8, which are in the same place, were beveled at their lower extremities, so that the catch could readily engage with the catch-plates. The fins 9 10, however, are perfectly straight across their lower edges, and when the catch is in locked position within the catch-plate 15 it will be clear that the shutter cannot be pulled or thrust open, because it will be securely locked by the impact of the sides of the fins 9 10 against the wall of the opening 16. If the fins 9 10 were omitted, it will be readily seen that a slight pull or push could easily open the shutter, owing to the fact that the beveled portion of the catch would ride up the wall of the opening until the catch was raised completely clear of the latter.

While I prefer to mortise all the operative parts of my improvement within the bottom of the shutter, it will of course be clear that these parts might be carried on the inside of the shutter and be operated very readily, and therefore I do not wish to be limited in this respect.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The herein-described improvement in latches for swinging shutters, comprising suitable catch-holders secured respectively to the sill and to the outside wall of the building, a catch element carried by the shutter and wholly contained and guided within a mortise formed in the bottom edge of said shutter, said catch capable of a free movement in a vertical plane, a pivoted angle-lever also carried by the shutter, the forward leg of said lever loosely engaging said catch, and the cup-plate mortised within the inner wall of the shutter and into which the rear leg of said lever extends, substantially as set forth.

2. The herein-described improvement in latches for swinging shutters, comprising suitable catch-holders secured respectively to the sill and to the outside wall of the building, the face-plate having rising from its forward end a slotted barrel, the beveled catch within said barrel and capable of a free movement therein and provided with a slot, the lever pivoted near the rear end of the face-plate and engaged loosely within the slot in said catch, and the shutter having its lower edge mortised and containing said face-plate and parts carried thereby, substantially as set forth.

3. The combination of suitable catch-holders secured respectively to the sill and the outside wall of the building, the shutter having its lower edge mortised and containing the latch element which comprises a face-plate, a barrel rising from its outer end and loosely containing a beveled catch and the lever pivoted to the other end of said plate and loosely engaging said catch, and the cup-plate mortised within the inner wall of the shutter and into which the rear end of said lever extends, substantially as set forth.

4. The combination of the catch which comprises elongated fins disposed in two vertical planes intersecting each other at right angles, the lower extremities of two of the fins in one plane being beveled while the lower extremities of the other two fins are straight, with the sill-catch having its outer edge beveled downwardly and provided with an opening corresponding in shape to the shape of the catch in cross-section, substantially as set forth.

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

WARREN R. BRIGGS.

Witnesses:

F. W. SMITH, Jr.,
M. T. LONGDEN.