

J. S. JOHNSON.  
LATCH.  
APPLICATION FILED OCT. 5, 1909.

975,361.

Patented Nov. 8, 1910.

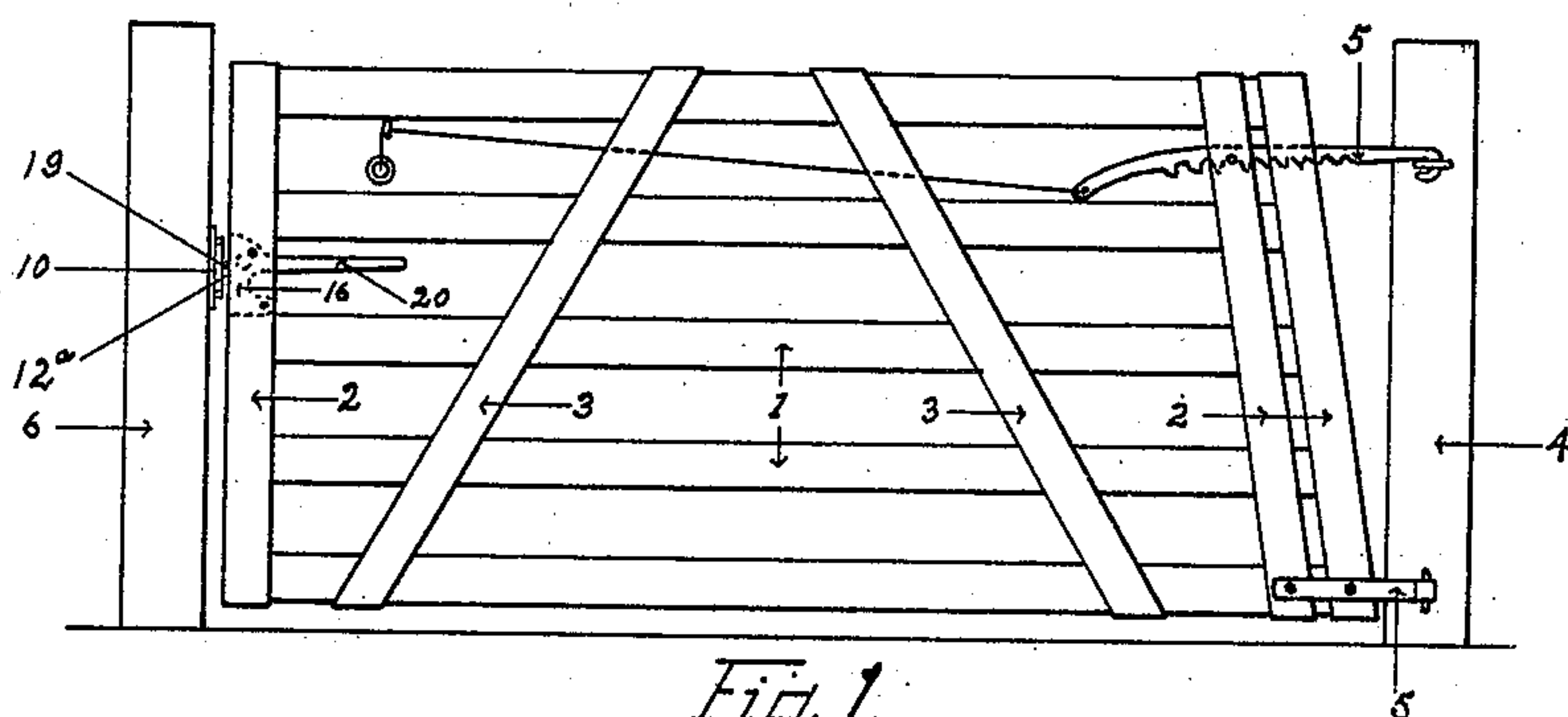


Fig. 1.

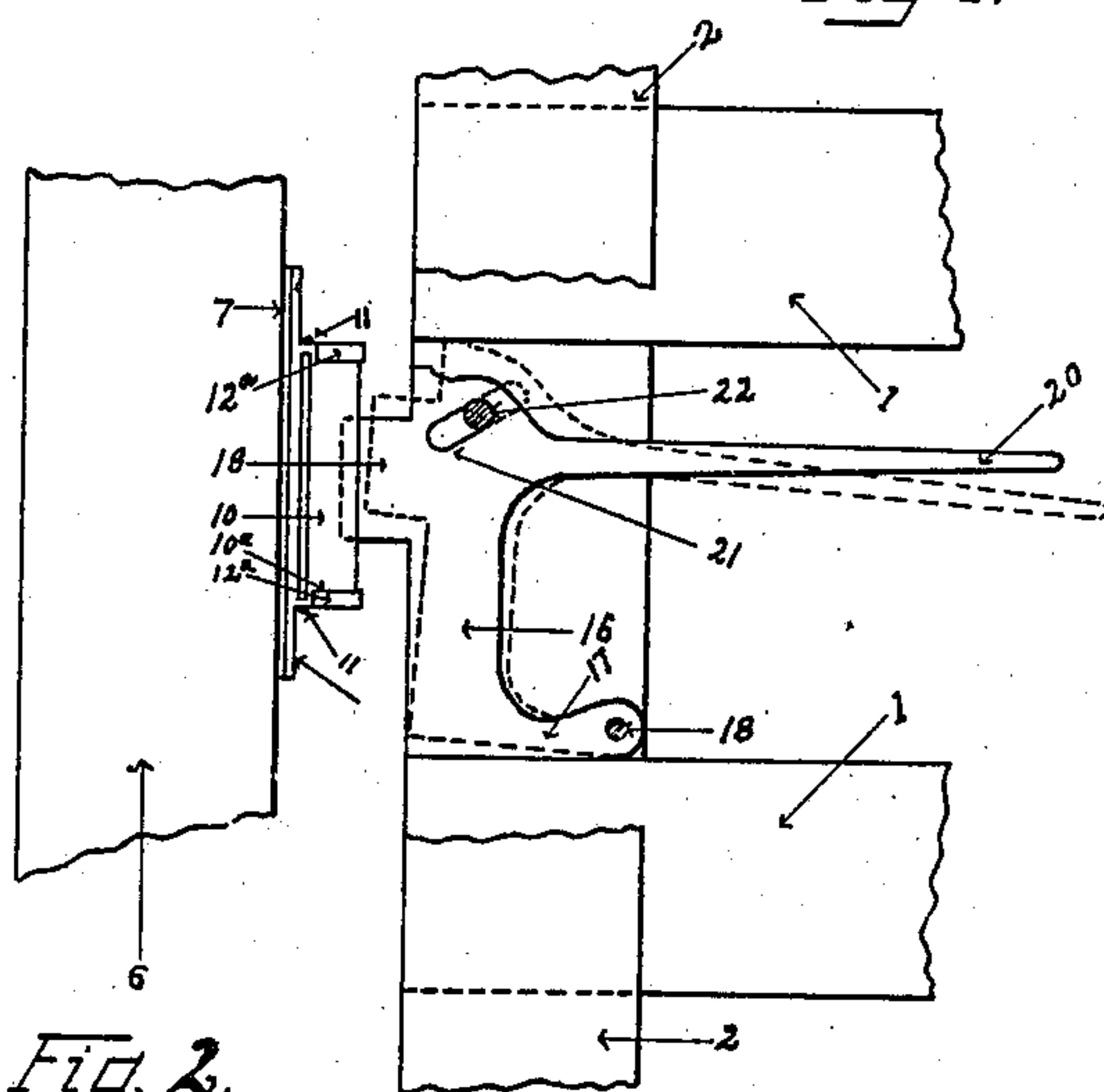


Fig. 2.

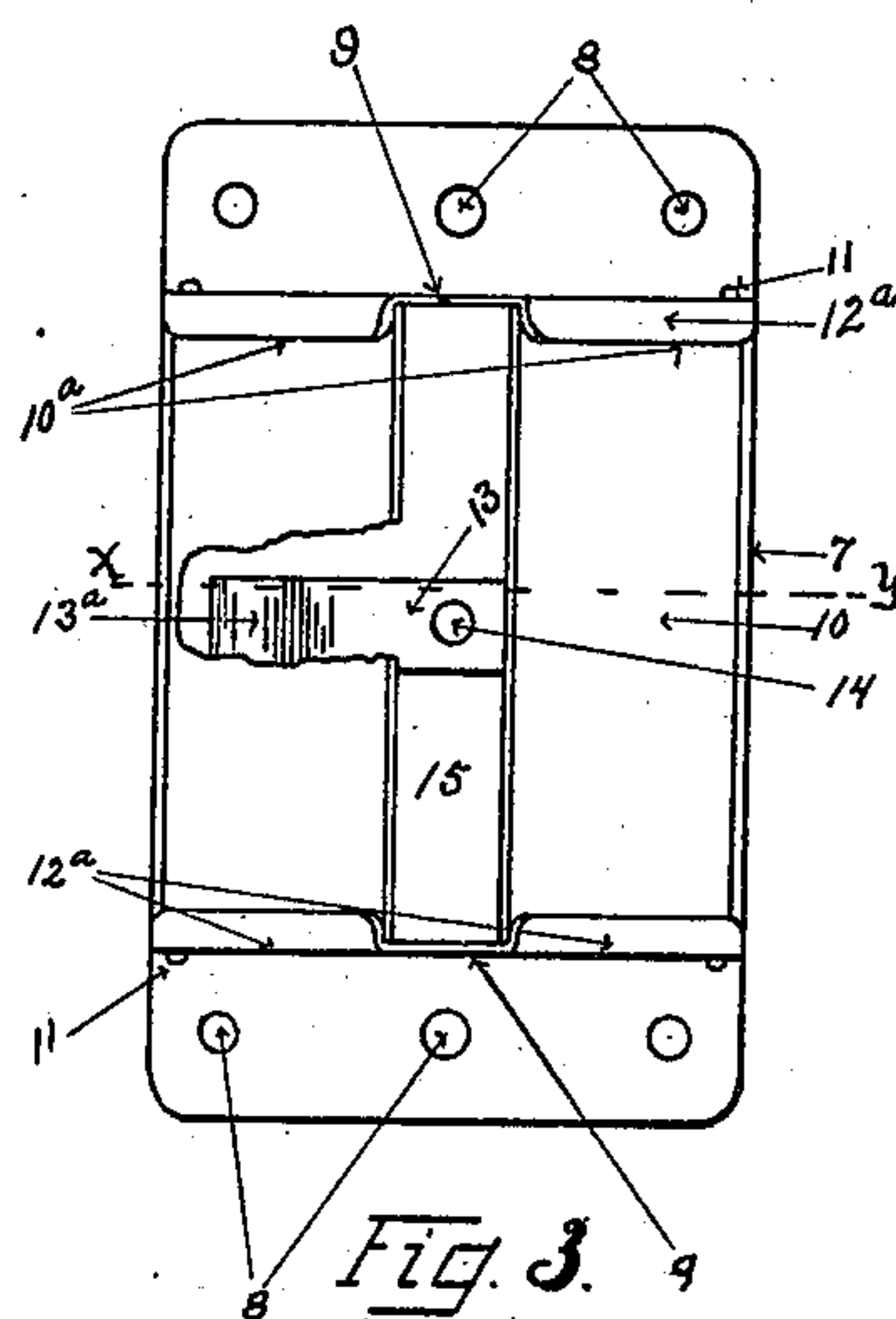


Fig. 3.

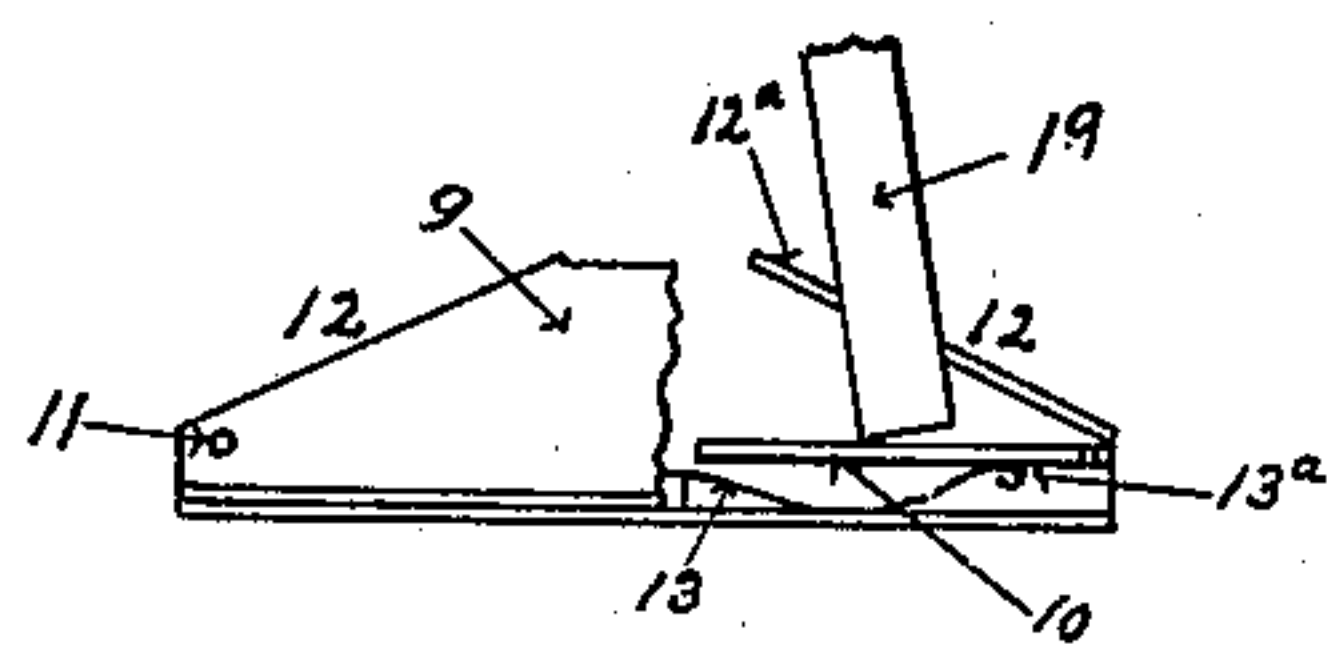


Fig. 4.

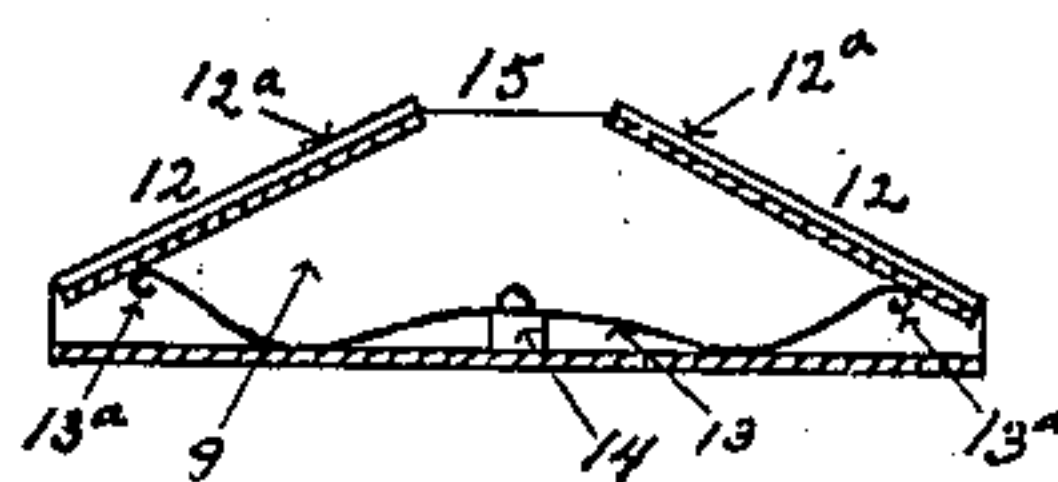


Fig. 5.

Witnesses:  
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W. O. Bane

Inventor:  
Joseph S. Johnson  
per attorney: *Arman B. Swartz*



# UNITED STATES PATENT OFFICE.

JOSEPH S. JOHNSON, OF LODI, OHIO.

## LATCH.

975,361.

Specification of Letters Patent.

Patented Nov. 8, 1910.

Application filed October 5, 1909. Serial No. 521,074.

*To all whom it may concern:*

Be it known that I, JOSEPH S. JOHNSON, a citizen of the United States, residing at Lodi, in the county of Medina and State of Ohio, have invented a new and useful Latch, of which the following is a specification.

My invention relates to improvements in latches, and particularly to that class which is designed to secure the free ends of doors and gates when swung across passage ways. Its object is to provide a simple and inexpensive latch for a gate or door, which will permit the same to be swung from either lateral direction in the direction of travel, and automatically lock the same to the post or jamb in position across the passage way as the gate or door swings thereto.

It consists of the novel construction, arrangement and combination of parts hereinafter described, and stated in the appended claims.

My invention is illustrated by the accompanying drawings in which similar letters and figures of reference indicate like parts. Referring thereto, Figure 1 is a side elevation of a gate with my improved latch applied thereto, in closed position. Fig. 2 is an enlarged detail side elevation of my improved latch, and a portion of the gate partly cut away for better illustration. Fig. 3 is a face view of the keeper portion of my latch. Fig. 4 is an end view of the same, a portion of one of the bearing brackets being cut away to better illustrate the action of the latch member upon one of the spring-resisted keeper plates. Fig. 5 is a transverse cross sectional view of the same on line X Y of Fig. 3.

My improved latch, in the present instance, is shown applied to the free end of a gate, constructed of horizontal bars 1, and cross bars 2 and brace bars 3. It is hinged to the post 4 and latched at the post 6, and is adapted to swing on the hinges 5 which are preferably arranged to cause the gate to return across the passage way by the action of gravity, from either lateral direction—but these details form no part of my present invention, the same being the subject of my prior patent, and are used only for the purpose of illustration.

My improved latch comprises a keeper portion and a latch member, the latter of which may be of any suitable construction adapted to engage the keeper portion and freely enter the space between the two leaves

or hinged plates thereof as hereafter stated. The keeper portion aforesaid comprises a base plate 7, which is adapted to be secured to the side of the post or jamb 6 adjacent to the free end of the gate, by any suitable fastenings. The base-plate 7 is provided with a pair of horizontal keeper-bearing brackets 9, which carry a pair of keeper plates 10 pivoted thereto to hinge on the edges adjacent to the base plate respectively, in the present instance, by means of the pintles 11 bearing in the brackets 9.

The brackets 9 are arranged across the ends of the base plate 7 at right angles thereto, and are respectively provided with flanged edges 12<sup>a</sup> which are inclined with respect to the base plate, and adapted to form stops for the keeper-plates 10, the marginal ends 10<sup>a</sup> of the keeper plates being normally engaged by the flanges 12<sup>a</sup>, and the keeper plates being normally held into engagement with said flanges by means of a cross-spring 13 secured to the base plate 7 by a bolt or rivet 14. The inner or free sides of the keeper-plates 10 are normally spaced apart to provide an intermediate latch-receiving recess 15 to admit the latch member when the latter is moved therein by its engagement with one or the other of said keeper plates when the gate is moved to its closed position. The action and arrangement of the keeper plates is such that when the gate is swung from one direction the latch may freely enter the recess over the adjacent spring-resisted plate, which, when the latch has passed over its free edge, returns immediately to its normal position behind the latch, and, at the same time, the opposite keeper plate engages the latch member along its free inner edge, thus temporarily locking the gate at the post from either direction as it swings to position across the passage way. The latch member should be adapted to be withdrawn from the recess 15 at pleasure, and, as a suitable arrangement for this purpose, I construct a latch comprising a vertically disposed body portion 16 pivotally mounted between the front vertical bars 2, and the front portion of the two adjacent horizontal bars 1, the base thereof extending rearwardly as an arm 17 secured by the pivot 18.

The upper part of the body extends outwardly in the form of a latch-head 19, and is adapted to be withdrawn from said recess 15 by means of the hand lever 20. The



latch member thus constructed falls into position by gravity, and facilitates its passage over the keeper plate. As a means for giving a limited movement to the latch member, 5 a short guide-slot 21 is formed in the upper portion of the body 16, which is engaged by the guide-pin 22.

To reduce the friction on the keeper-plates by the passage of the latch-head, I 10 arrange the free ends 13<sup>a</sup> of the cross-spring 13 to bear closely to the hinged edges of the keeper-plates respectively as shown in Fig. 5.

I do not limit myself to the particular form 15 of constructing the latch shown, and the other described members may be modified within the spirit of my invention.

Having thus fully described my invention, what I claim as new and desire to secure by 20 Letters Patent is—

1. In a latch, a keeper, comprising a base-plate carrying brackets having oppositely disposed beveled sides provided with stop-flanges, inwardly extending spring-resisted 25 keeper-plates pivoted at their outer sides to

said brackets and having their marginal ends normally engaged by said stop-flanges, said keeper-plates having their inner adjacent sides set apart forming a latch-receiving recess between them, substantially as set 30 forth.

2. In a latch, the combination with a keeper comprising a base plate carrying brackets having oppositely disposed inclined sides provided with stop flanges, of 35 inwardly extending spring-resisted keeper-plates pivoted at their outer sides to said brackets, and having their marginal ends normally engaged by said stop-flanges, said keeper plates having their inner adjacent 40 sides set apart forming a latch receiving recess between them, and a latch head adapted to enter said recess over one of said keeper-plates, substantially as set forth.

In witness whereof, I hereunto set my 45 hand this 2nd day of October, A. D. 1909.

JOSEPH S. JOHNSON.

In presence of—

W. O. BEEBE,

MAHLON ROUCH.