

(No Model.)

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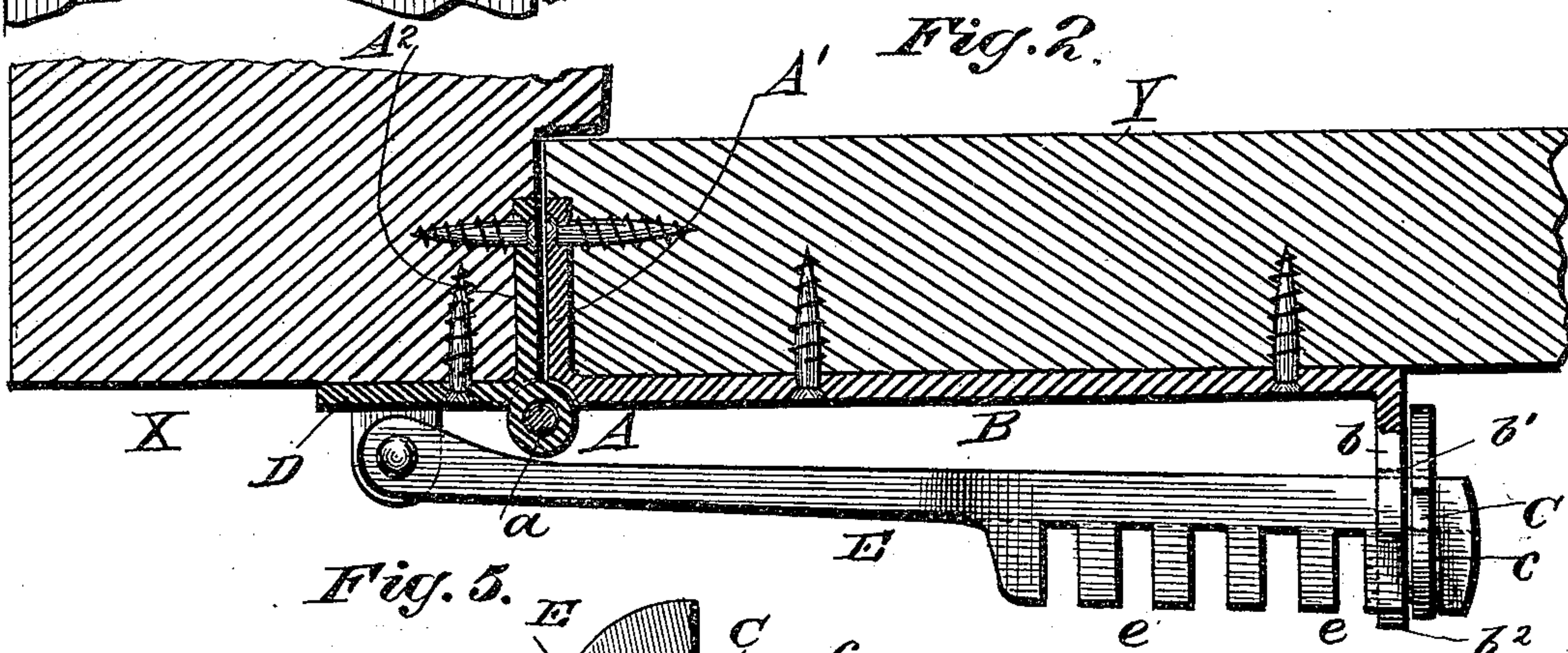
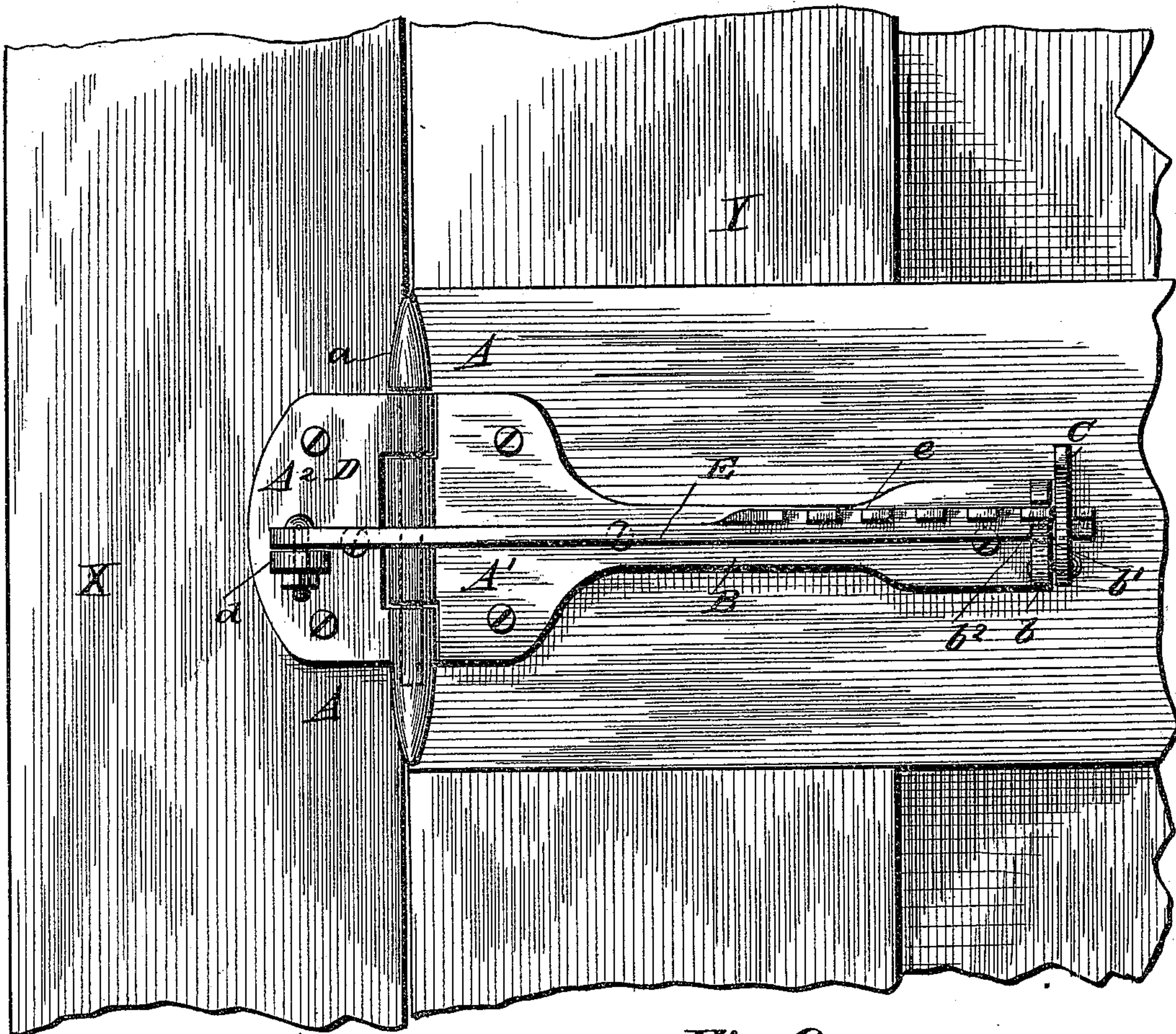
E. D. BEALES.

LOCK HINGE.

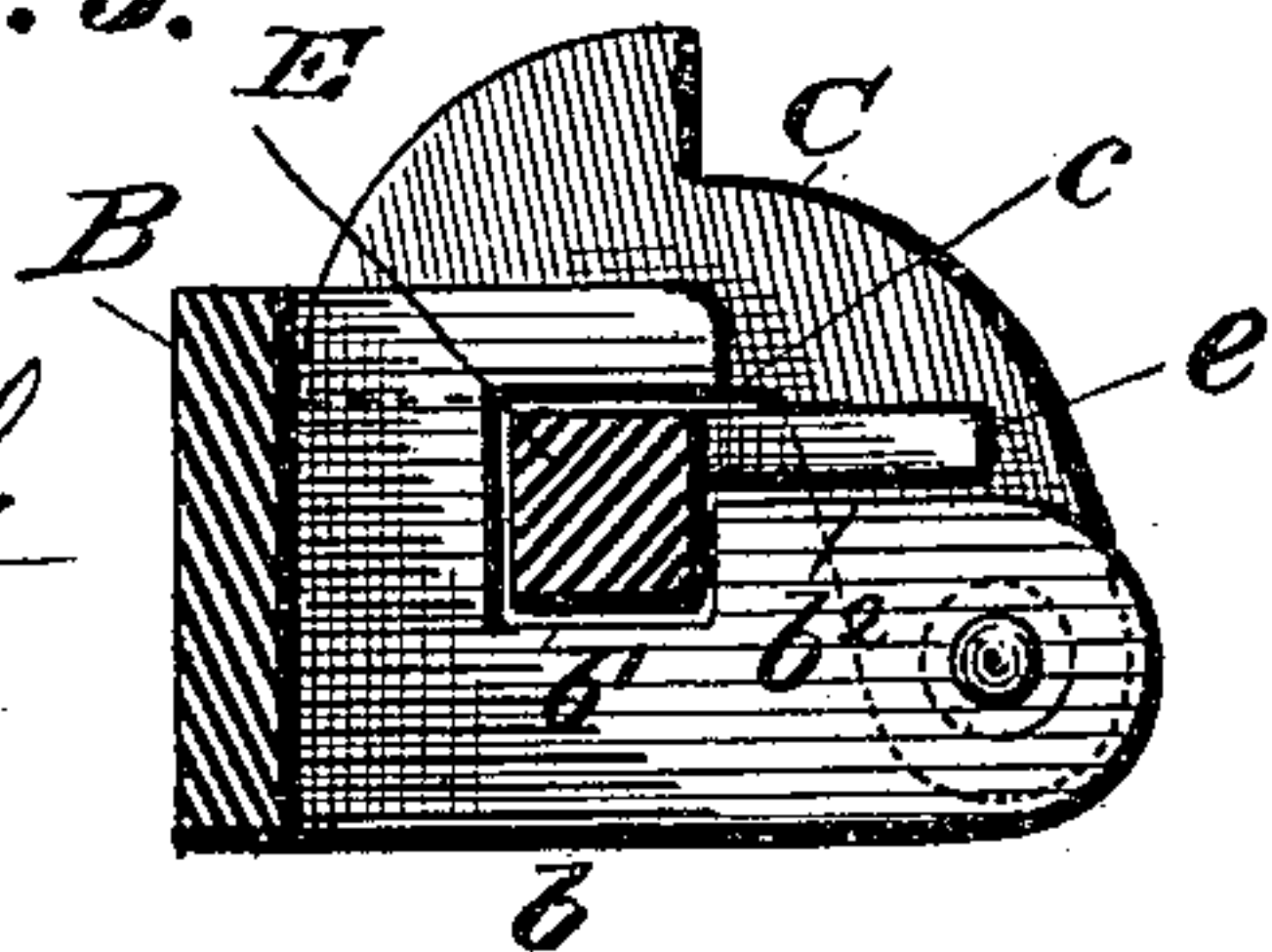
No. 348,099.

Patented Aug. 24, 1886.

*Fig. 1.*



*Fig. 3.*



WITNESSES

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(No Model.)

2 Sheets—Sheet 2.

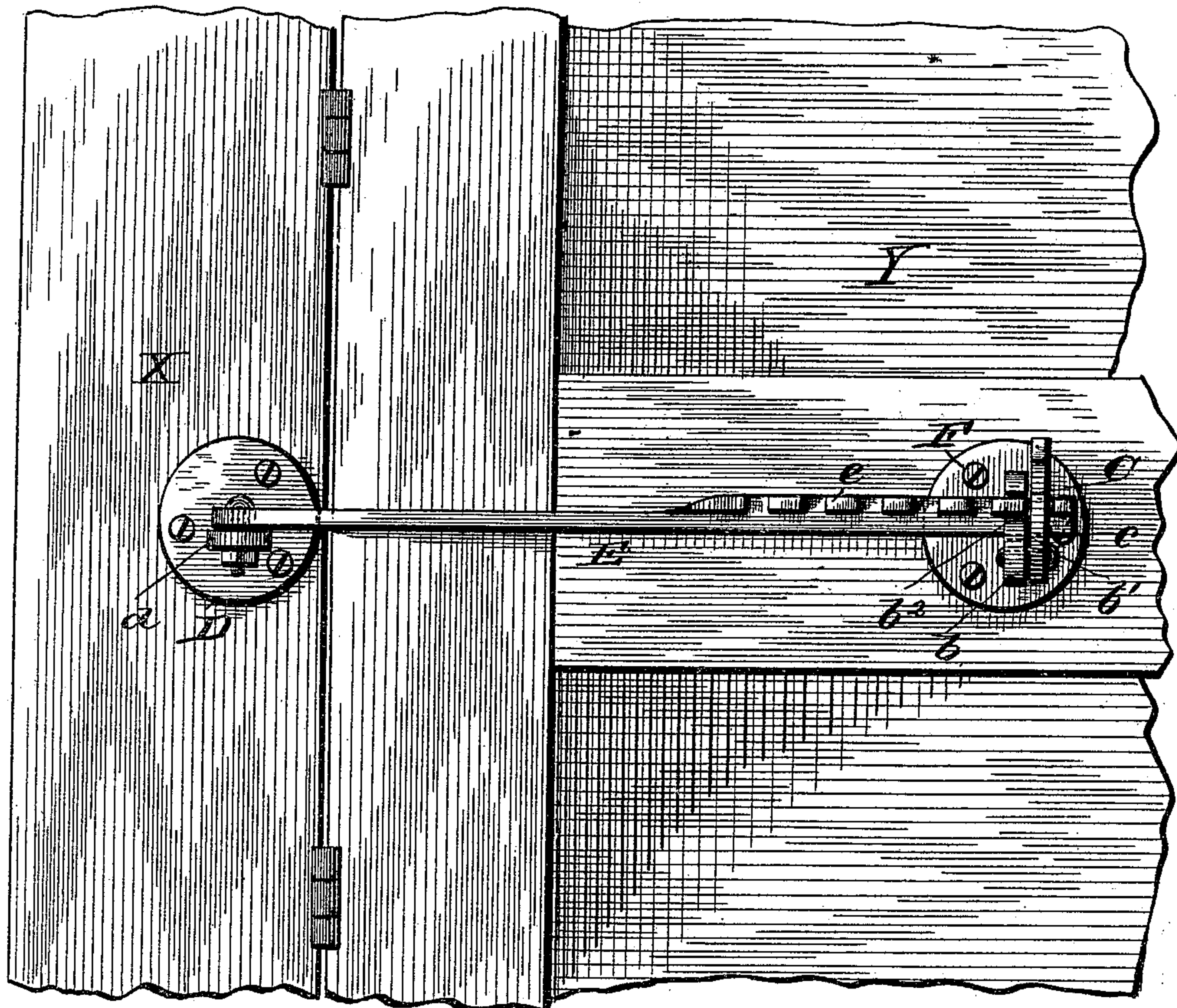
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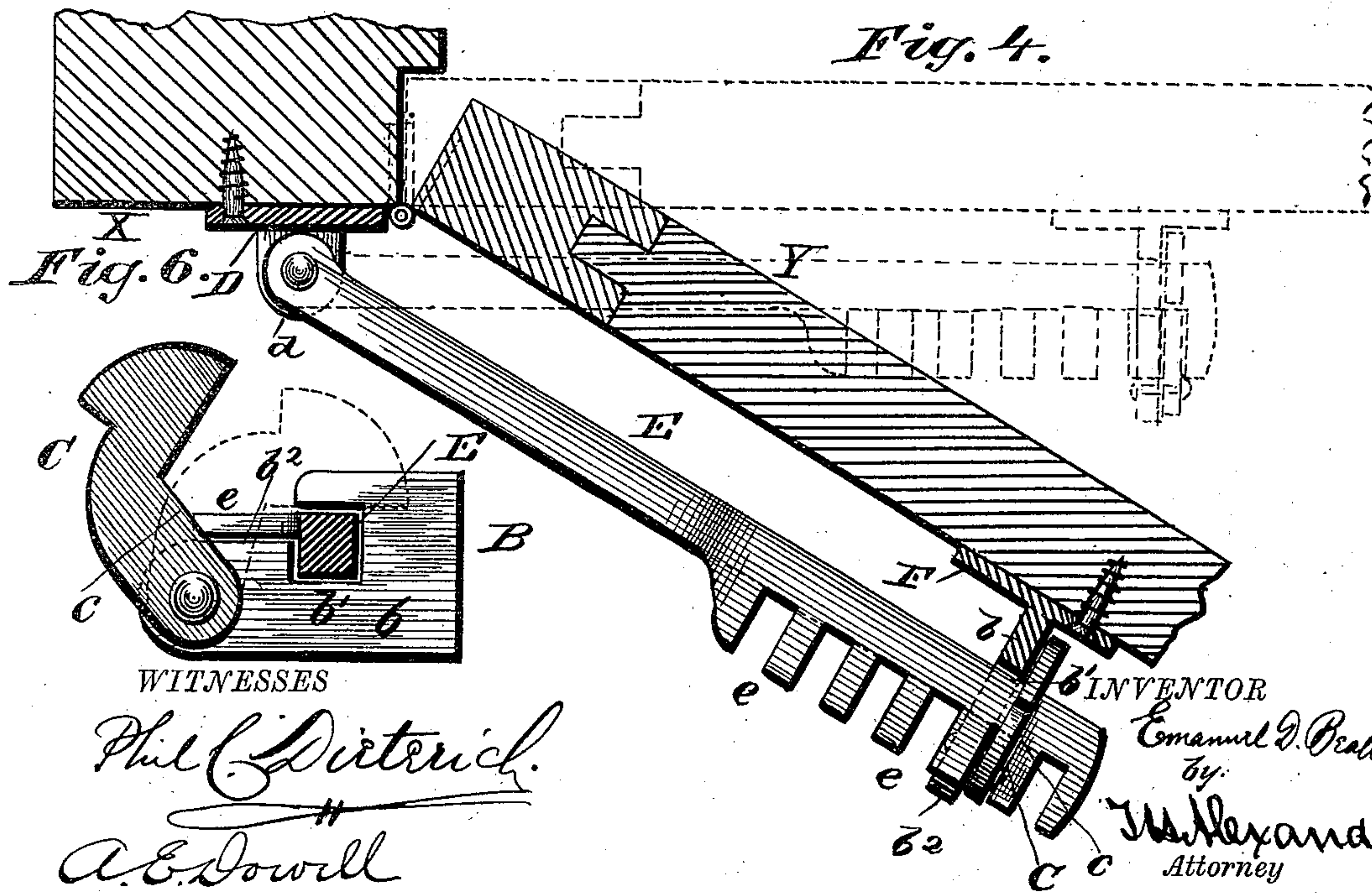
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*Fig. 3.*



*Fig. 4.*



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# UNITED STATES PATENT OFFICE.

EMANUEL D. BEALES, OF GUYANDOTTE, WEST VIRGINIA, ASSIGNOR TO  
HIMSELF AND JAMES L. CALDWELL, OF SAME PLACE.

## LOCK-HINGE.

SPECIFICATION forming part of Letters Patent No. 348,099, dated August 24, 1886.

Application filed June 30, 1886. Serial No. 206,707. (No model.)

*To all whom it may concern:*

Be it known that I, EMANUEL D. BEALES, of Guyandotte, in the county of Cabell and State of West Virginia, have invented certain  
5 new and useful Improvements in Lock-Hinges; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked  
10 thereon, which form part of this specification, in which—

Figure 1 is an elevation of a door and jamb, showing my improvement attached. Fig. 2 is a horizontal section of the same. Fig. 3 is  
15 an elevation of the door and jamb, showing another form of the device. Fig. 4 is a horizontal sectional view of the same. Figs. 5 and 6 represent detail views of the latching device.

20 This invention relates to improvements in that class of lock-hinges by means of which the door may be held open at any desired angle; and it consists in the construction and novel arrangement of parts adapted to be at-  
25 tached to the jamb and the door, which parts are hereinafter described, illustrated in the drawings, and pointed out in the claims here- to appended.

Referring to the accompanying drawings,  
30 A' designates one leaf of a hinge, A. A<sup>2</sup> designates the other leaf, and *a* the pivotal rod on which one of the leaves turns.

The leaf A' has extending at right angles from its edge adjacent to its joint the plate-  
35 bar B, having at its end an extension, *b*, standing at right angles outward. *b'* is a rectangular guide-notch in the said extension, having the shoulder *b<sup>2</sup>* at the lower part of its outer side; and C is a latch or detent bar pivoted  
40 upon the extension *b*, to the outer side of and below the notch *b'*. The inner or engaging edge of the said latch is bent so as to form a re-entering right angle, *c*, the outer edge being curved.

45 D is a plate standing at right angles from the leaf A<sup>2</sup>, adjacent to the joint, and provided on its outer surface with the lug *d*, upon which is pivoted one end of a bar, E, the opposite end of which is provided with the rack *e*, with

its teeth standing horizontally outward. The  
50 bar E rests and moves in the notch *b'*, and the rack rests and moves on the shoulder *b<sup>2</sup>*.

When the latch C is turned up, the part thereof between the pivot and angle *c* enters  
55 between any two teeth of the rack, locking the door in position, and the part between said angle and end of the latch rests on the upper surface of the bar E and against the outer surface of the extension *b*, so that the  
60 latch is steadied.

One leaf of the hinge is secured by screws or otherwise to the edge of the jamb forming part of the frame X, and the other to the edge of the door Y. If the leaf A' is secured to the  
65 edge of the jamb, the plate-bar B is secured to the side of the same, or to the side of the door if the leaf A' is secured to the edge thereof.

It is necessary that the latch C should be  
70 lifted to engage the rack, else a person in passing through the door and closing the same might cause the latch to fall and lock the door on the inside. The leaf A' must therefore be secured to the door when that position  
75 brings the latch below the rack, and to the jamb when the door opens on the opposite edge to that in the former case.

Fig. 3 shows another and the principal modification of the invention. In this the door has  
80 the usual number of hinges, and the hinge is omitted in the device, the inner enlarged end, F, of the plate-bar B being secured to the side of the door or jamb, as the case may be, and the plate D being secured to a corresponding  
85 point on the side of the jamb or door.

Having described my invention, I claim—

1. The combination, with the door-frame and door hinged therein, of the fixed or non-  
90 moving plate-bar having at its outer end the outward extension provided with the guide-notch, the latch or detent pivoted to said extension and arranged to be lifted on its pivot  
95 to engage the rack, the plate provided with a lug, the bar pivoted to the lug on said plate and moving in the guide-notch, and the rack on said bar adapted to be engaged by the latch, substantially as specified.

2. The combination, with the frame X and

the door Y, hinged thereon, of the hinge A,  
the plate-bar B, provided with the extension  
b, having the guide-notch b' and shoulder b<sup>2</sup>,  
the latch C, pivoted upon said extension out-  
5 ward from and below said notch and provided  
on its engaging edge with the re-entering right  
angle c, the plate D, provided with the lug d,  
the bar E, pivoted to said lug, and the rack  
e, resting and moving on the shoulder b<sup>2</sup> and  
10 adapted to be engaged by the latch C, all con-

structed and arranged substantially as and for  
the purpose specified.

In testimony that I claim the foregoing as  
my own I affix my signature in presence of  
two witnesses.

E. D. BEALES.

Witnesses:

T. H. ALEXANDER,  
M. P. CALLAN.