

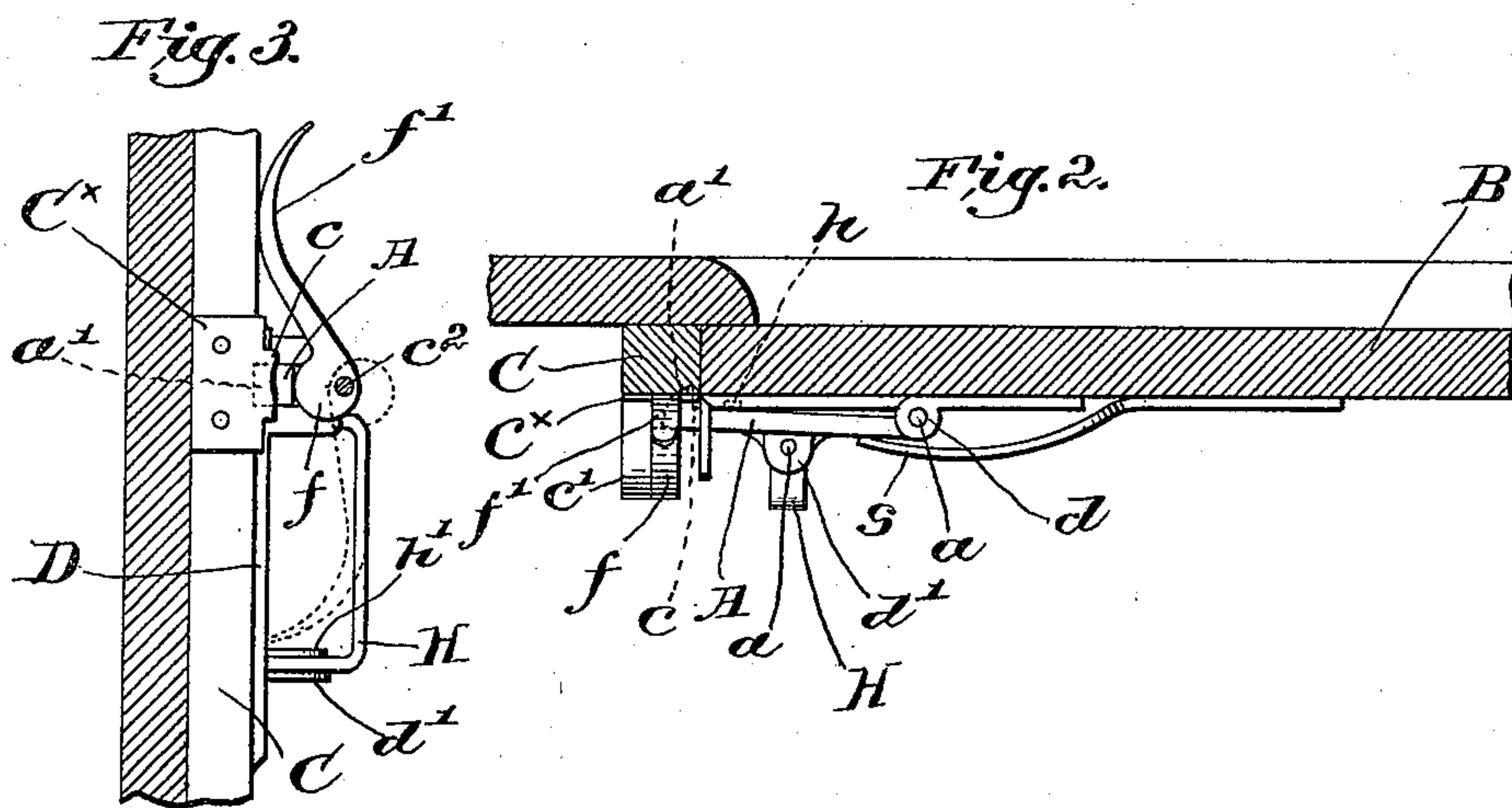
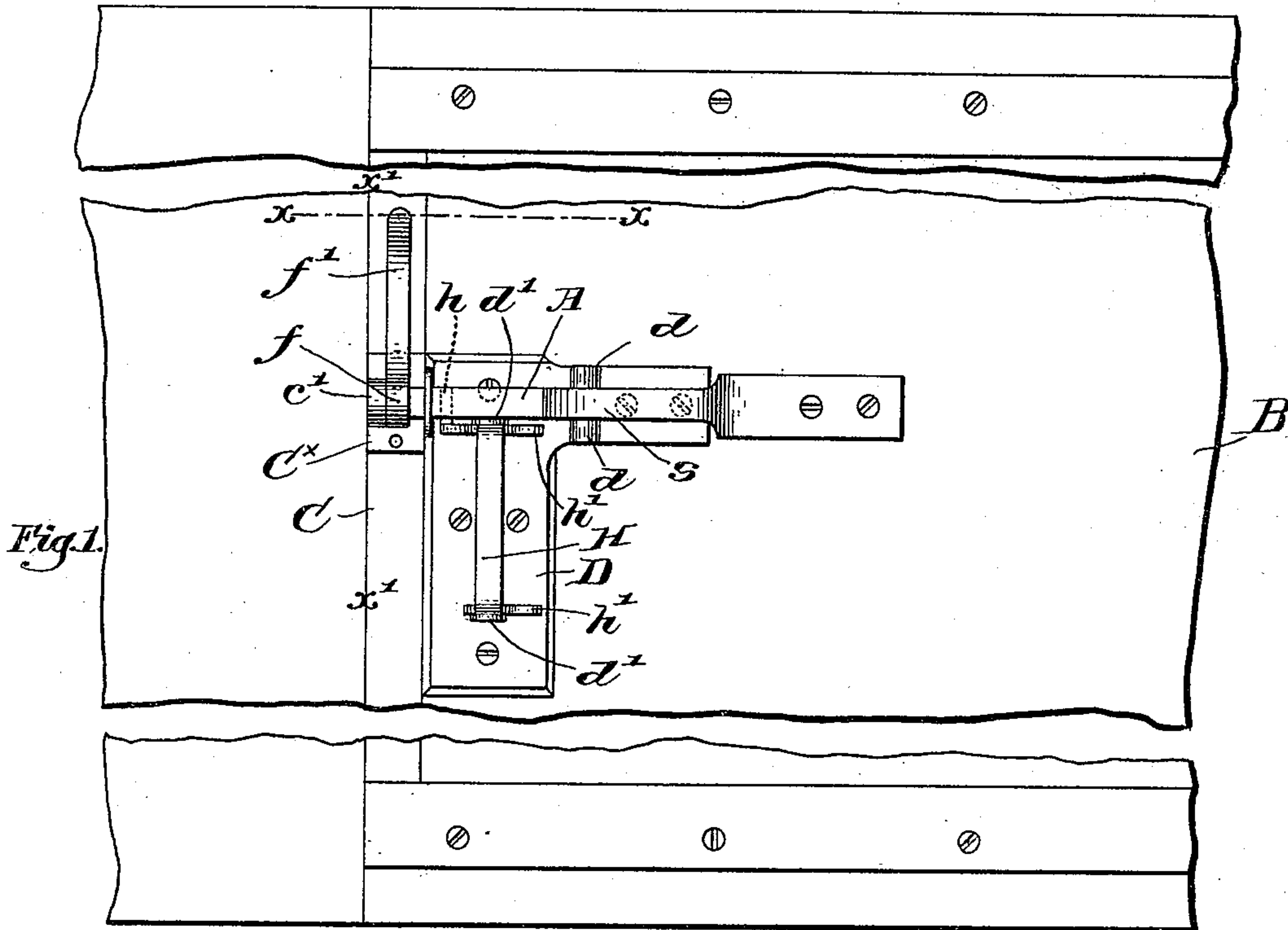
No. 641,435.

Patented Jan. 16, 1900.

E. M. CLOUGH.
SLIDING DOOR LATCH.

(Application filed Dec. 16, 1898.)

(No Model.)



Witnesses.
Thomas J. Drummond.
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Inventor.
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UNITED STATES PATENT OFFICE.

ENOS M. CLOUGH, OF LAKEPORT, NEW HAMPSHIRE.

SLIDING-DOOR LATCH.

SPECIFICATION forming part of Letters Patent No. 641,435, dated January 16, 1900.

Application filed December 16, 1898. Serial No. 699,412. (No model.)

To all whom it may concern:

Be it known that I, ENOS M. CLOUGH, of Lakeport, county of Belknap, State of New Hampshire, have invented an Improvement in Locking-Latches for Sliding Doors, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

The latch forming the subject-matter of this invention is applicable to sliding doors, and is particularly intended for the sliding doors of freight or express cars, ordinarily applied to the inside thereof and self-locking; and my present invention has for its object the improvement of the latch forming the subject-matter of United States Patent No. 275,149, granted to me April 3, 1883, whereby the latch cannot be tampered with and opened from the exterior. It has been found that the latch shown in said patent may be released from the exterior by boring a hole in the door and inserting from the outside a pin, nail, or other device to lift the latch from the keeper, and I have herein provided means for locking the latch in operative position so that it is impossible to unlock the door from the exterior unless it is smashed bodily.

Figure 1 is an inner side elevation, broken out to save space, of a sliding door and its mounting with my present invention applied thereto. Fig. 2 is a horizontal sectional view thereof on the line $x x$, Fig. 1, looking down; and Fig. 3 is a vertical section taken on the line $x' x'$, Fig. 1.

The latch A is pivotally mounted at a on ears d , formed on the upper arm of a substantially inverted-L-shaped metal plate D, said latch having a hook or catch a' to engage the keeper c on the door-jamb C, the plate D being suitably secured to the inner face of the door B. A leaf-spring s , attached to the door, bears at its free end on the latch between its pivot and the catch a' to normally press the latch toward and to maintain it in engagement with its keeper.

The main portion of the supporting-plate D is provided with upturned ears d' to form bearings for the handle H, the latter having at one end a projection h extended beyond it and beneath the latch A, tilting or rocking of

the handle acting through the projection h to withdraw the latch from its keeper, after which the door is pushed back or opened by a pull on the handle.

In order that the handle may be firmly supported when grasped by the hand to open the door, the bearing ends of the handle are enlarged to form stops h' to abut against the plate D and limit the rocking movement of the handle.

The construction thus far described is substantially that shown in my patent referred to, with some minor changes in detail.

I have herein shown the keeper c as a lip forming a part of a casting C^x , rigidly secured to and partially embracing the door-jamb, said casting having at its side farthest from the keeper an outwardly-projecting ear c' , on which is mounted at c^2 the locking member for the latch. Said locking member consists, as herein shown, of a substantially circular body portion f , eccentrically mounted on the stud c^2 and provided with an operating-handle f' , the body f being located just over the end of the latch when the latter is in engagement with the keeper. When the handle f' is turned up in full-line position against the jamb C, the eccentrically-mounted body f acts as a cam to firmly and securely press the latch toward the keeper, maintaining the catch a' in engagement with the latter, the greater portion of the body f of the locking member being interposed directly between the latch and the fulcrum c^2 , so that the latch cannot be released either by the handle H or from the exterior of the door. When the locking member is in operative position, the handle f' thereof is over center and the said member cannot be accidentally released. By turning the handle down into dotted-line position, Fig. 3, the body f is thrown out away from the latch, and the latter is then free to be released from its keeper, and the locking member then is entirely out of the way of any desired operation of the latch mechanism.

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

In a latch mechanism for doors, a substantially inverted-L-shaped metallic plate secured to the inside of the door, a latch piv-

otally supported upon one branch of said L-shaped plate, an actuating-handle mounted upon the other branch of said L-shaped plate, and provided with a projection located to engage the latch and lift the same laterally, a
5 fixed metallic keeper mounted upon the jamb, and a latch-locking member pivotally supported upon said keeper and provided with a cam portion located to bear directly against

the outer face of the latch and normally prevent the lifting movement of the latter.

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

ENOS M. CLOUGH.

Witnesses:

HENRY B. QUINBY,
ALBERT C. MOORE.