

(No Model.)

S. P. HODGEN.
LATCH.

No. 503,085.

Fig. 1. Patented Aug. 8, 1893.

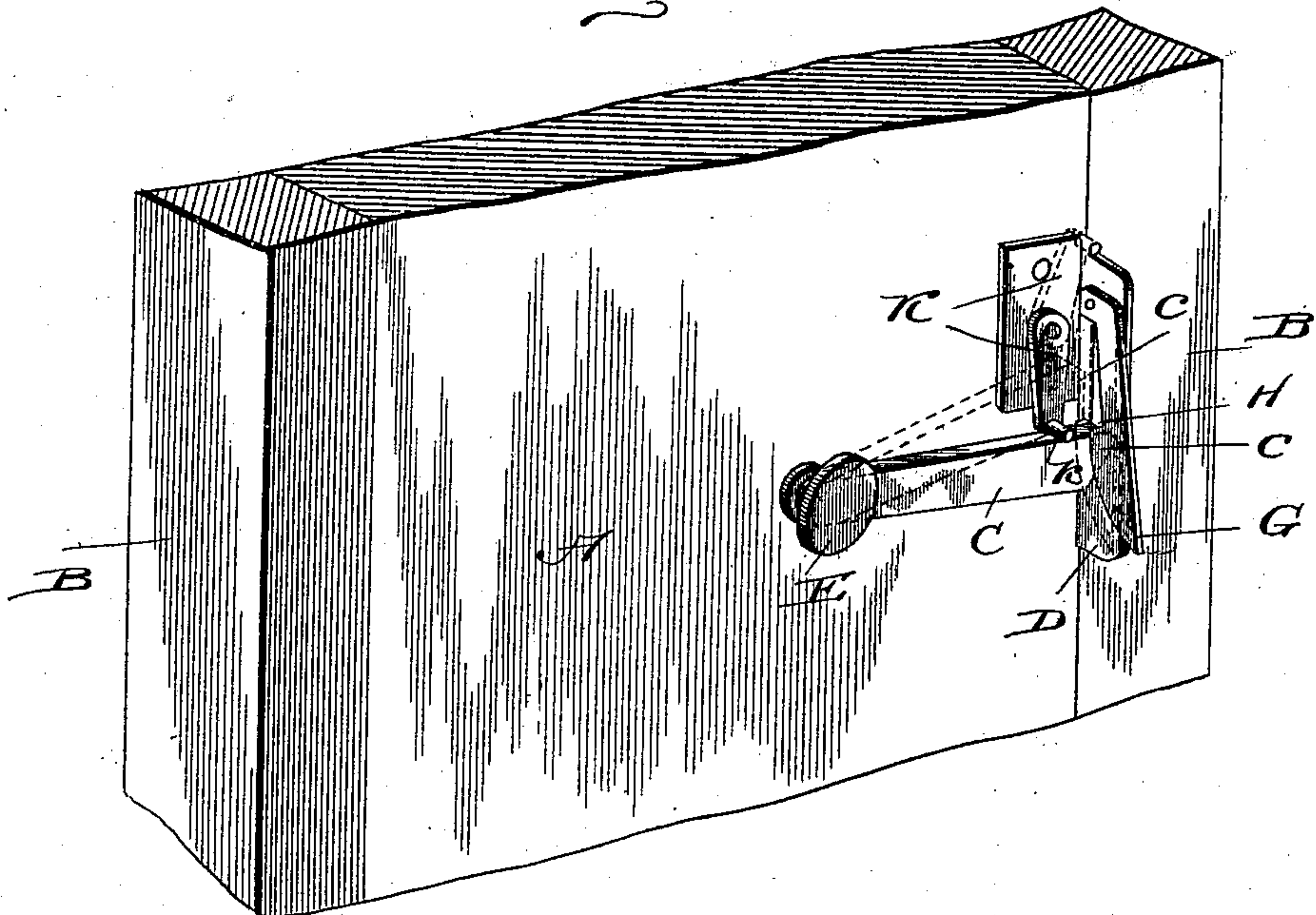


Fig. 2.

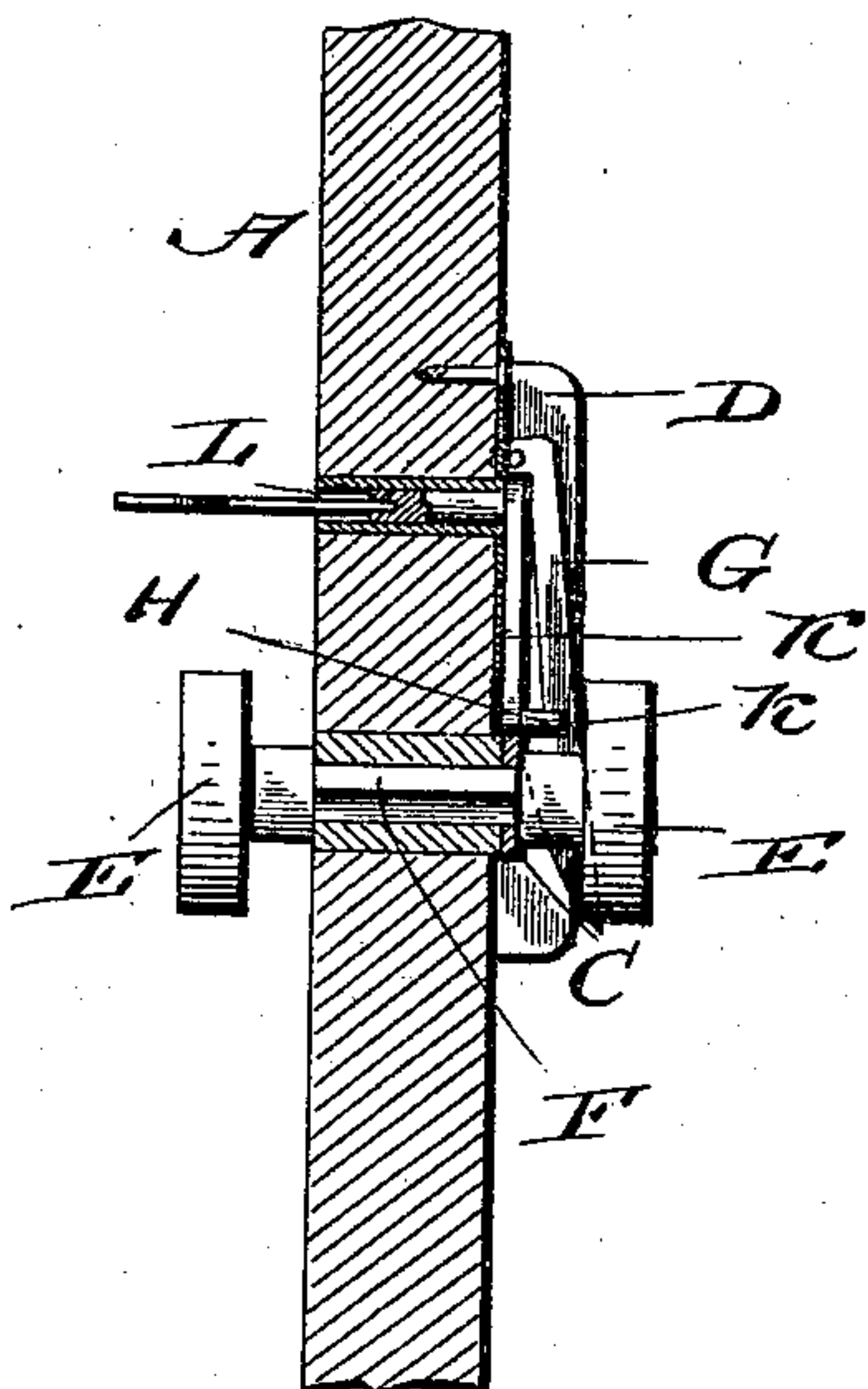
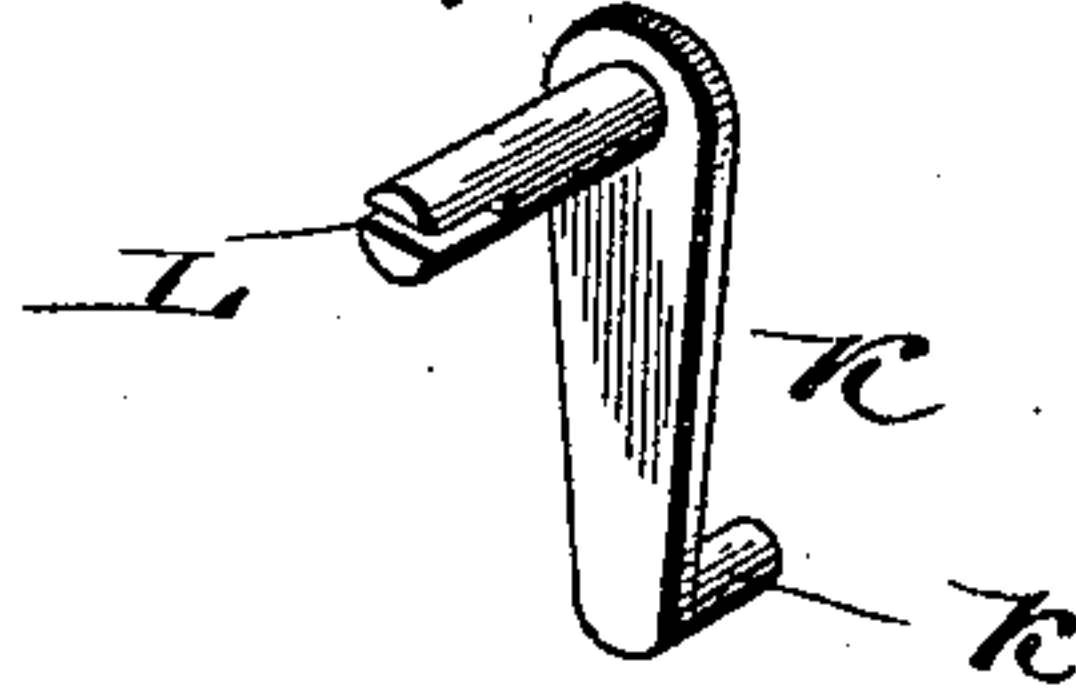


Fig. 3.



Fig. 4.



Witnesses:

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UNITED STATES PATENT OFFICE.

SAMUEL PARK HODGEN, OF PITTSFIELD, ILLINOIS.

LATCH.

SPECIFICATION forming part of Letters Patent No. 503,085, dated August 8, 1893.

Application filed September 10, 1892. Serial No. 445,523. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL PARK HODGEN, a citizen of the United States, residing at Pittsfield, in the county of Pike and State of Illinois, have invented certain new and useful Improvements in Latches; 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 improvements in latches for swinging doors; and the object of the invention is to provide a latch which can be operated from either side of the door to allow the same to be opened and which will be automatically operated, by the closing of the door, to hold the same in its closed position.

My invention consists in the peculiar construction and arrangement of parts, as will be hereinafter more fully pointed out and claimed.

In the accompanying drawings:—Figure 1 is a perspective view of a section of a door and its frame, the door being provided with my improvements; Fig. 2 is a vertical sectional view through the same; Figs. 3 and 4 are detail views of the locking finger and detent.

Like letters of reference denote corresponding parts in the several figures of the drawings, referring to which—

A designates the main body of the door and, B, a portion of the frame thereof. On the inner face of the door, near the forward side or edge thereof, is pivotally supported a latch bar, C, the forward end of which extends or projects through a vertically slotted guide plate, D, secured on the front edge of the door A. The forward end, *c*, of the latch bar, C, is preferably enlarged and said enlarged end extends in rear of the frame, B, when the door is closed and holds said door in its closed position. If desired a suitable keeper may be attached to the frame, B, to receive the forward end of the latch bar. The pivot or fulcrum pin, F, of the latch bar, is, preferably extended through the door and on the ends thereof are secured suitable knobs, E, by means of which the forward end of the latch bar can be raised to permit the swinging door, A, to be opened. When the door is open the latch bar, C, is held in its elevated position by means of a detent, G, which is pivotally attached, at its upper end, to the guide plate, D, and extends across the latch bar. In the edge of the detent, G, adjacent to the latch bar, is formed

a notch or seat, H, adapted to receive the lower edge of the latch bar, when the latter is elevated to permit the door to be opened, as shown in dotted lines in Fig. 1. The detent, G, is loosely pivoted to the plate, D, and the jar occasioned by the contact of the door with the frame, B, when the former is closed, causes said detent to turn slightly on its pivot and permit the latch to fall into the position indicated in full lines in Fig. 1.

To hold the latch bar in its lowered locked position I employ a short dog or finger, K, which is pivoted at its upper end to the door, A, and is provided at its lower end, with a laterally projecting stud or lug, *k*, which extends across the upper edge or side of the latch bar, C. The pivot pin of the finger, K, extends partially through the door and into a suitable socket or key hole formed in the front outer face thereof; and the forward end of the pivot pin is provided with a transverse slot, L, or with any suitable means for receiving or engaging the inner end of a suitable key by means of which the finger, K, can be raised out of contact with the latch bar to allow the latter to be operated. When the finger, K, is in the position indicated by full lines in Fig. 1 the bar, C, is firmly locked in place and the door cannot be opened.

Although I have shown and described my improved latch as applied to a swinging door I am aware that it can be used to good advantage on a gate. In case the latch is applied to a closet or cupboard door the pivot or fulcrum pin of the latch bar will be extended on one side only and only one knob employed.

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

The combination of a longitudinally slotted guide plate, D, adapted to be attached to the front edge of a door and project beyond one side thereof, a pivoted latch bar having its forward end extending into the slot in the guide plate, and a detent, G, pivotally connected to the guide plate and provided with a shoulder adapted to support the forward end of the latch bar when the latter is lifted, substantially as described.

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

SAMUEL PARK HODGEN.

Witnesses:

M. C. BATES,

L. A. CHAMBERLAIN.