A. P. Floyd,

Door Bolt.

No. 51,034. Patented Nov. 21, 1865.

Fig: 2.

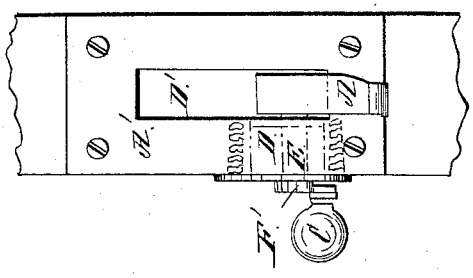


Fig: 3.

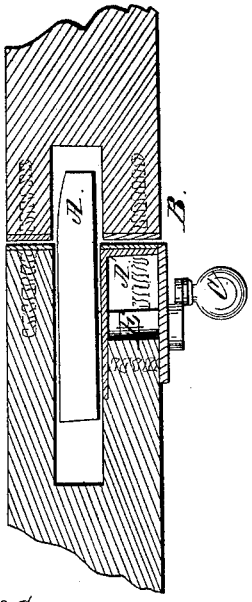
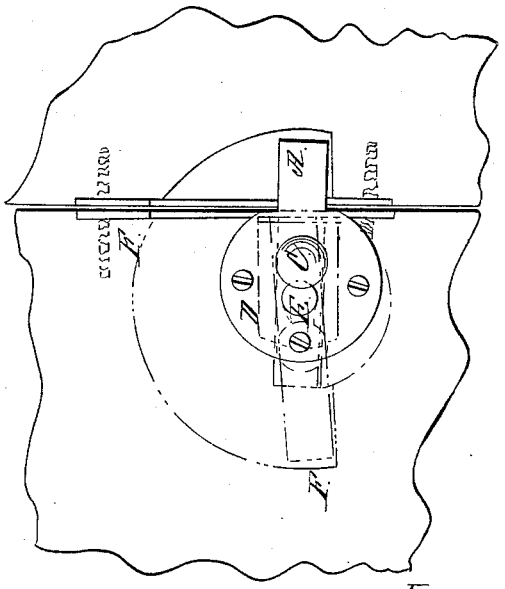


Fig: 1.



Witnesses:

C. H. Piper

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UNITED STATES PATENT OFFICE.

ALBION P. FLOYD, OF NIAGARA FALLS, NEW YORK.

IMPROVED DOOR-BOLT.

Specification forming part of Letters Patent No. **51,034**, dated November 21, 1865; antedated November 9, 1865.

To all whom it may concern:

Be it known that I, ALBION P. FLOYD, of the village of Niagara Falls, in the town and county of Niagara and State of New York, have invented a new and useful Improved Door-Bolt, and method for moving into place and withdrawing bolts in fastening and unfastening doors on the inside; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure I is a view of the apparatus attached to the door for use, looking at the inside of the door, standing inside of the room. Fig. II is a view of the same attached to the door, looking at the edge of the door, the door being open. Fig. III is a horizontal section of the same cut through on the upper line of the bolt attached to the door and entering the frame of the door while in use and the door fastened.

The nature of my invention consists in moving and withdrawing a bolt in and out of the frame of the door by means of a rod attached to the bolt near its end and passing through two plates to the side of the door, to which is attached a crank with a knob, or any other convenient attachment by which the rod is turned, and the bolt is then, by turning the rod with the crank, moved and turned back or forward on the axis of the rod.

In Fig I, A is the bolt in position when the door is fastened. The red lines indicate the position of bolt when unfastened. C, knob at end of crank, used to turn the same; D, plate fastened on the door with screws, through which the rod E passes; dotted line F F, circle made by the bolt in being moved through a mortise in or near the center of the edge of the door, and which is out of sight when door is shut.

In Fig. II, A′ is the plate fastened on edge of door with screws, and is all one piece with plate D, (seen in Fig. I.) A is the bolt (perspective view;) E, the rod connecting with bolt through the plate D and with crank F. D′ is a slot through the plate A′ and mortise, into which the bolt passes when withdrawn.

In Fig III the bolt A is seen in place when the door is fastened. B B is a plate corresponding to plate A′ in Fig. II, and has a slot through which the bolt is passed into the mortise in the frame. D is the plate, riveted on the inside to the plate A in Fig. II, and is placed close to to the slot and bolt, and when attached to the door not only supports the rod C, but fits to the edge of the mortise and renders the bolt firm in its place. The rod connecting with the bolt and crank is placed far enough back from the edge to allow room to move the knob from one side to the other without interfering with the molding around the door.

The size of the apparatus is the same as shown in the drawings, but may be made larger or smaller, according to the size of the door.

The rod is attached to the bolt about a half-inch from the inner end, so that the weight is partly balanced and the bolt not so hard to turn. The rod and bolt are wrought, and may be cast in one piece. The rod passes through the crank and is riveted. The bolt is made to fit the slot in the plate on the door when in place in the frame, so that the door cannot be forced without either breaking the bolt square off or breaking the plate and splitting the door or the frame. The bolt is made tapering near the end on the far side, so that it will not catch or the sides of the plates when moved.

The crank projects from the rod the same way as the bolt, so that it can be seen at a glance whether the door is bolted or not, and for that reason is preferable to a knob alone, which might be used. The bolt is made to work freely, and is put in its place in the frame or withdrawn by lifting the knob and turning from one side to the other.

This bolt will not become useless or have to be readjusted to the door by the swelling or shrinking of the wood-work in and about the door, or by the rising or settling of the door or frame, as the slot in the plate on the frame is made a very little wider than the bolt, and the bolt is made a little tapering at the end, and the slot in the plate on the frame is made a little higher than in that on the door. It is not liable to fly out or in by centrifugal force when the door is suddenly shut or thrown back, and this is accomplished without springs, notches, or offsets, the weight of the bolt itself keeping it in place.

What I claim as my invention, and desire to secure by Letters Patent, is—

The vibrating bolt A, with the plates D and A′, shaft E, and crank F′, when constructed, applied, and operated as described, and for the purposes specified.

ALBION P. FLOYD.

Witnesses:

C. H. PIPER,

E. C. PETER.