

N. Quayle.
Door Check.

N^o 89,942. Patented May 11, 1869.

Fig. 1

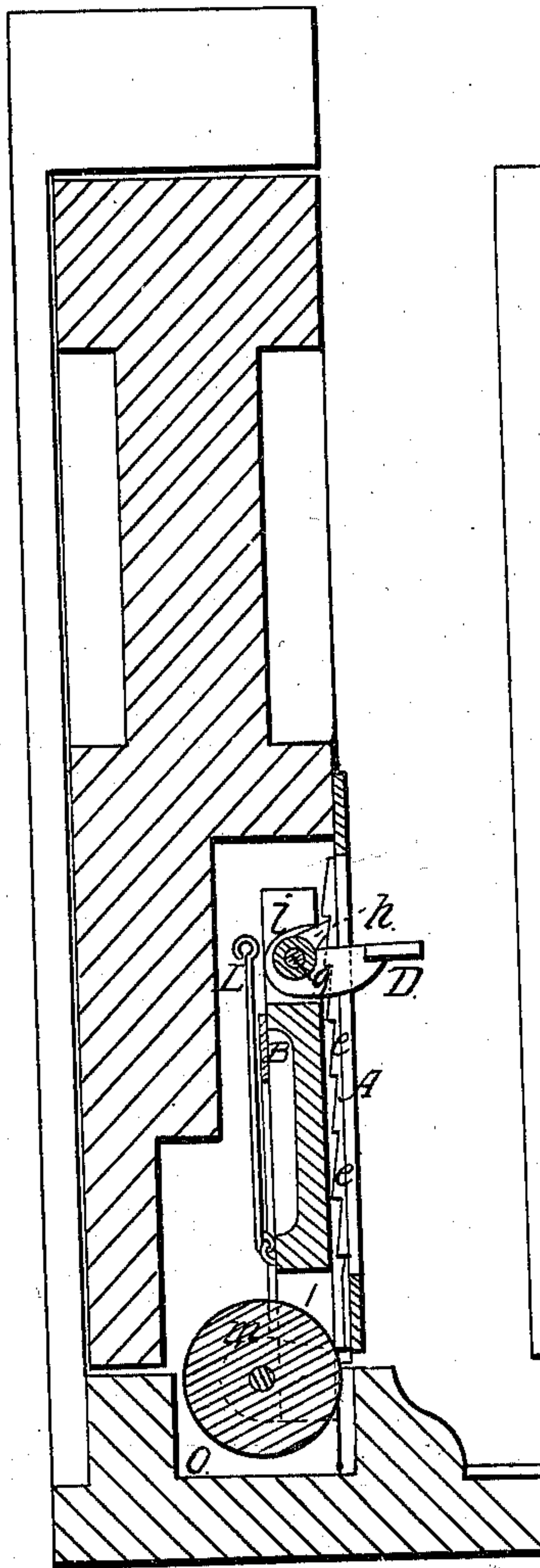
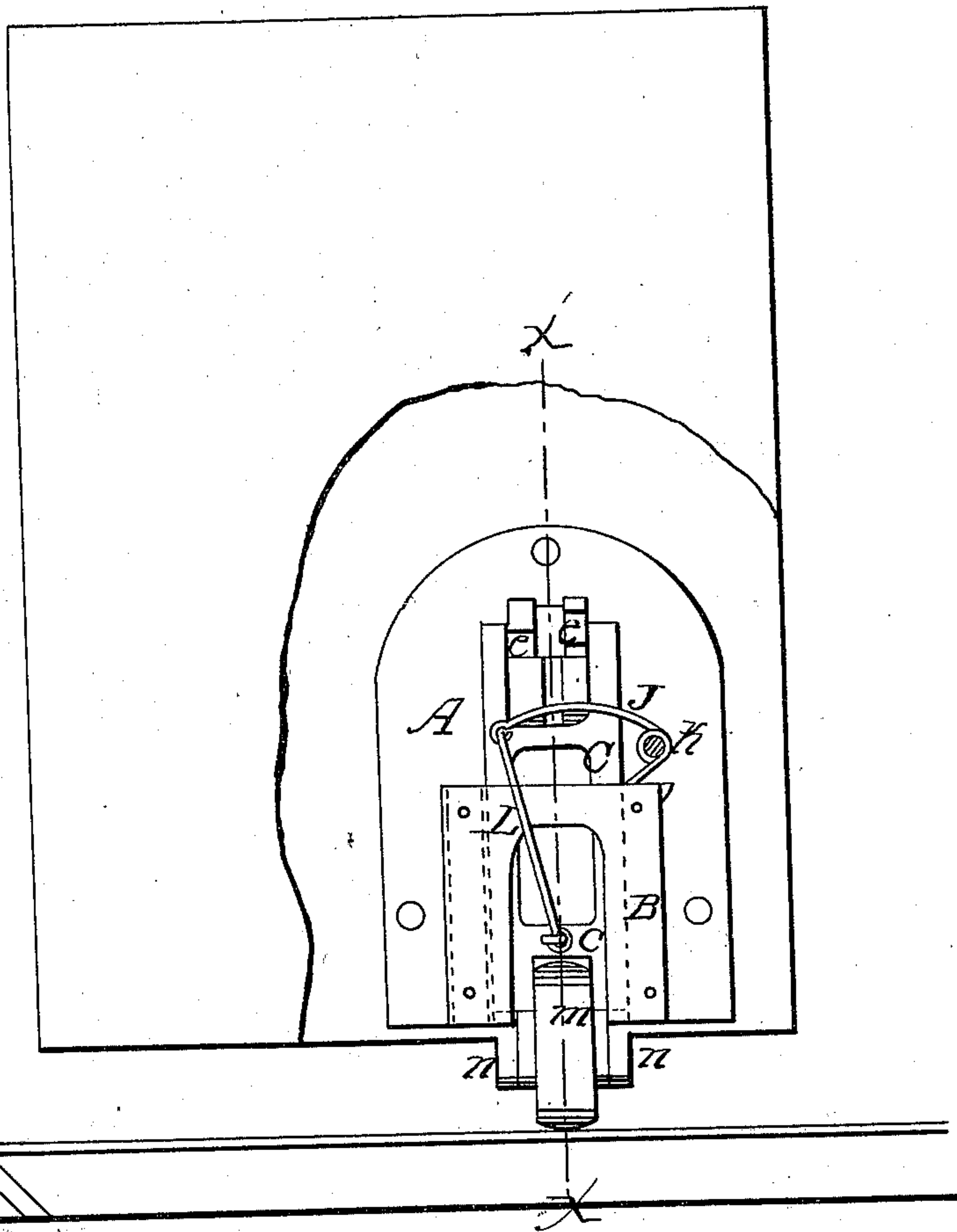


Fig. 2



Witnesses:

H. C. Ashkewitz
J. A. Morgan

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WILLIAM QUAYLE, OF WARSAW, ILLINOIS.

Letters Patent No. 89,942, dated May 11, 1869.

IMPROVEMENT IN DOOR-FASTENERS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, WILLIAM QUAYLE, of Warsaw, in the county of Hancock, and State of Illinois, have invented a new and improved Combined Safety-Bolt and Door-Holder; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

The object of this invention is to so arrange a bolt on a swinging door, that it may be operated so as to hold the door in any desired position when it is open; and

The invention consists in attaching to or inserting in the bottom and side of a door, a combined safety-bolt and holder, which shall fasten the door on the inside by bolting it into the threshold, and hold the open door in any desired position by bearing on the floor or carpet, as will be hereinafter more fully described.

Figure 1 represents a vertical section of the bolt and holder attached to the door, the section being through the line *x x* of fig. 2.

Figure 2 is a front or side view, showing the door as when open, and the holder bearing upon the floor or carpet.

Similar letters of reference indicate corresponding parts.

A is a plate, to which the parts of the combined bolt and door-holder are attached, and which is firmly secured in a recess in the door.

There are two wings, or flanges, which project from the back side of this plate, to which the slotted plate B is attached, leaving a recess between the two plates and between the two flanges, in which the bolt C slides up and down.

The front side, or face of the plate A, is slotted, so that the toe-piece D can move therein.

On the back of the plate A there are ratchet-teeth, as seen at *e*.

The toe-piece D is attached to the bolt C by the pin *g* in such a manner that it operates pawls *h*, which engage with the ratchet-teeth.

These pawls are loose on the pin *g*, and are pressed into the ratchets by small springs *i*, which are attached to the toe-piece.

When the toe-piece is pressed down, the springs bear upon the pawls, and hold them to the ratchets, but when the toe-piece is pressed up, the pawls are relieved of that pressure, and they are raised from the ratchet by the toe-piece.

In fig. 2, J represents a spring, which is coiled around a stationary pin, *k*.

It is connected with the bolt by the rod L.

The tendency of this spring is to raise the bolt from the floor or threshold when the toe-piece D is raised, as it is so adjusted that it constantly pulls upward and draws the bolt clear of the floor and threshold.

To the lower end of the bolt, which is crotched with projecting ears, there is secured a friction-roll, or holder, of rubber or other suitable material, which is marked *m*.

The ears on the bolt (by which the roll *m* is attached) are marked *n*, a side view of which is seen in dotted lines in fig. 1.

There is a recess, or cavity, *o*, made in the threshold of the door, sufficiently large to receive the bolt and the roll, as seen in fig. 1.

It will be seen that the bolt is pushed down by the toe of the shoe or boot, and that when down, it is held in position by the ratchets and pawls, and that when it is desired to raise the bolt and holder from the recess *o*, or from the carpet or floor, it is only necessary to raise the toe-piece D enough to disengage the pawls from the ratchets, when the spring immediately lifts them clear.

The ratchets and pawls hold the bolt and roller down after being pushed down by the foot or toe, and the spring J throws them up, whether the door is bolted or held stationary when open.

The roller *m* might be dispensed with, were it not for injuring the carpet or floor by the end of the bolt.

With the roller attached to the bolt, all danger is avoided.

I am aware of the application of Robert Yale, filed May 8, 1868, in which the sliding spring-bolt, without a roller, is provided with ratchet-teeth upon its face-side, with which a spring-pawl engages, arranged upon the outside of the slotted receiving-plate, but this construction I do not claim.

Having thus described my invention,

What I claim herein as new, and desire to secure by Letters Patent, is—

The loose spring-pawls *h*, toe D, slotted plate A, having the ratchet teeth *e* formed upon it, the bolt C, slotted back plate B, spring J, and connecting-rod L, in combination with the roller *m*, all constructed, arranged, and operating as herein described for the purpose specified.

The above specification of my invention signed by me, this 29th day of March, 1868.

WM. QUAYLE.

Witnesses:

A. ROESLER,
GEORGE SIMMONS.