W. GRIFFITH.

Reversible Knob-Latches.

No. 150,027. Patented April 21, 1874.

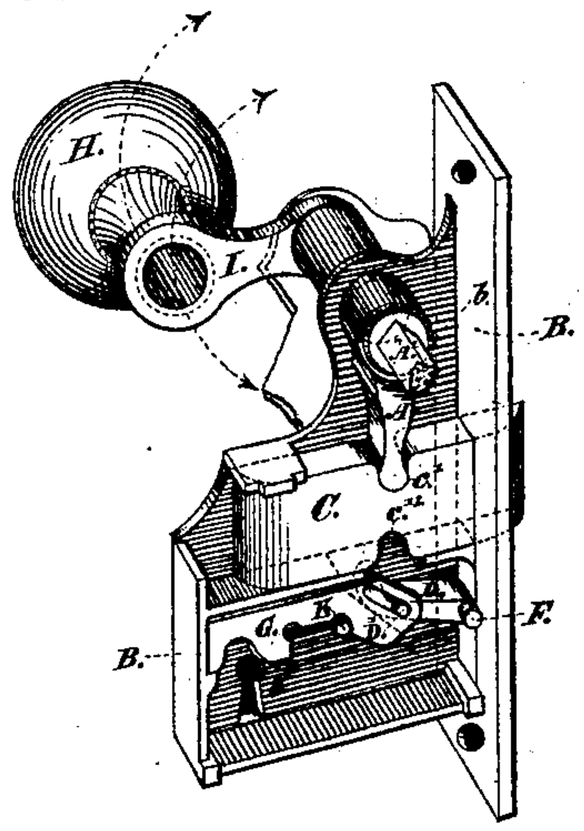

Fig. 1.

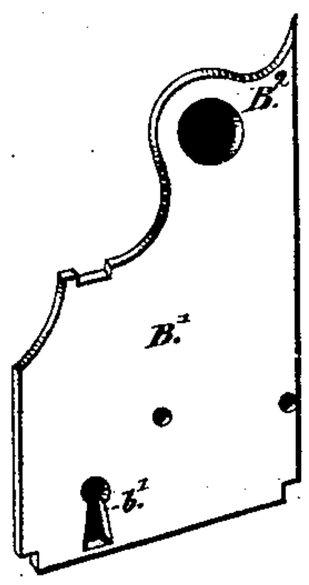

Fig. 2.

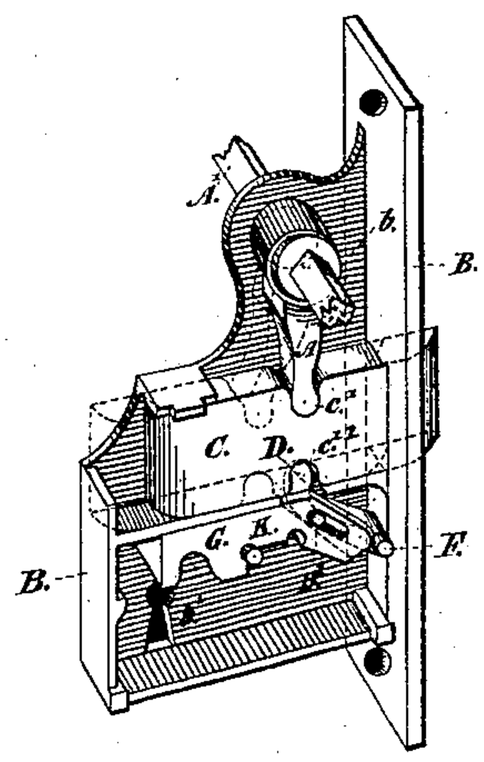

Fig. 3.

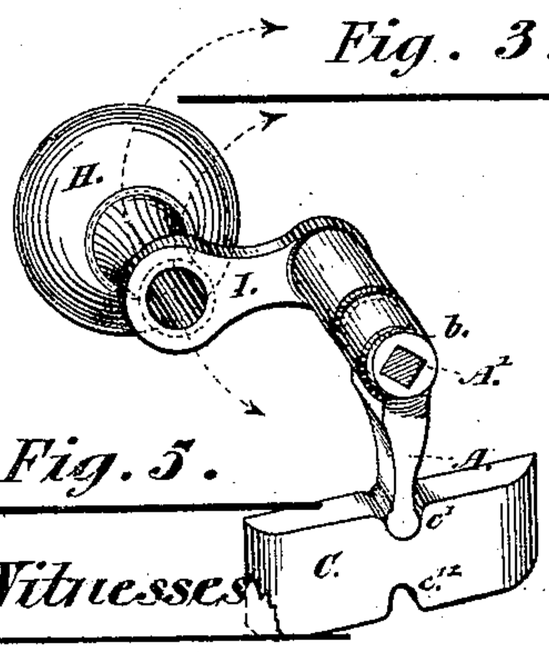

Fig. 5.

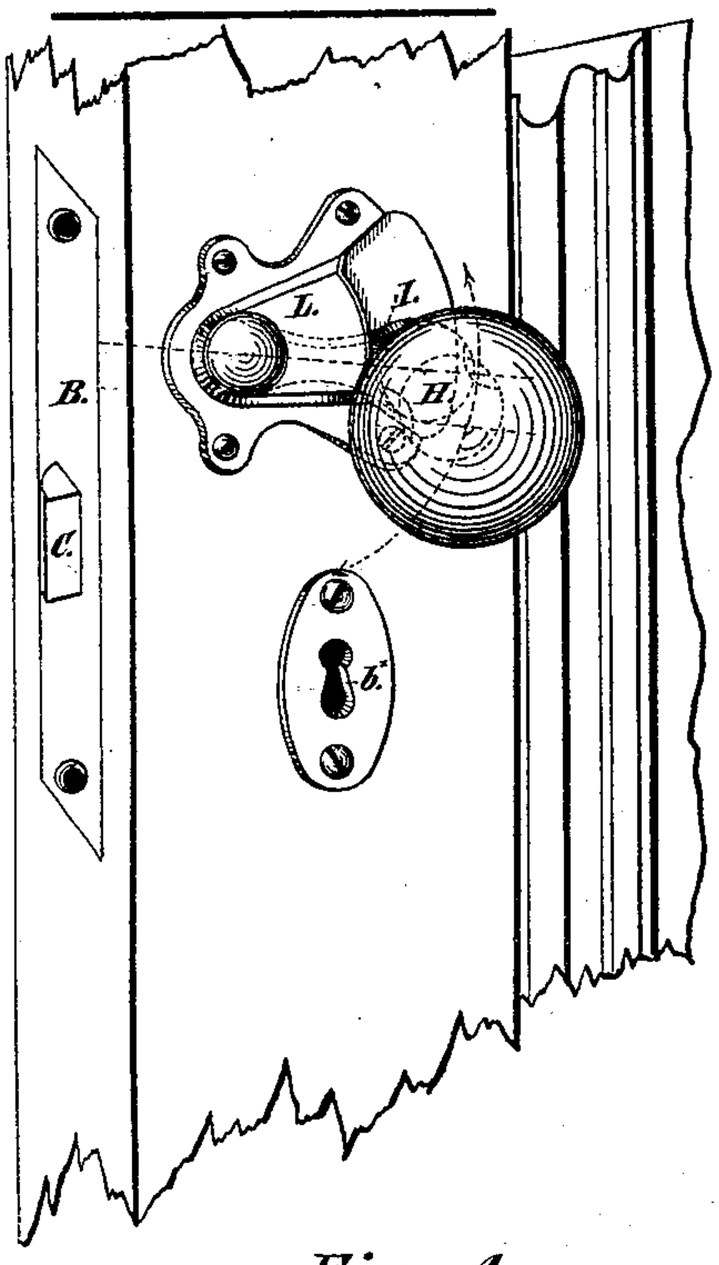

Fig. 4.

Witnesses

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UNITED STATES PATENT OFFICE.

WILLIAM GRIFFITH, OF TORONTO, CANADA.

IMPROVEMENT IN REVERSIBLE KNOB-LATCHES.

Specification forming part of Letters Patent No. **150,027**, dated April 21, 1874; application filed February 20, 1874.

To all whom it may concern:

Be it known that I, WILLIAM GRIFFITH, of the city of Toronto, in the county of York, in the Province of Ontario, Canada, have invented an Improvement in Reversible Knob-Locks, of which the following is a specification:

Figure 1 is a perspective view with one side of case removed, showing the bolt unlocked. Fig. 2 is a perspective view of the removed side. Fig. 3 is a similar view to Fig. 1, except that the bolt is shown locked. Fig. 4 is a view of lock when in place, and Fig. 5 a detail view of levers and knob.

In order that those duly qualified may be able, from this description and drawing, to manufacture my improved lock, I shall proceed to describe in detail its various parts and specify its mode of action; but, before doing so, I may here remark that, although I believe the proportions and shapes of parts shown will be found most appropriate, still I do not wish it to be inferred that I intend to confine myself to the exact shapes and sizes shown, nor have I any intention of adhering to any special kind of material.

In the following description like letters indicate corresponding parts in each figure.

A is the bolt-lever, having shoulders *b* on each side of its hub, which fit into holes in the sides B and B′ of the casing and held in its proper position, its other end fitting into the recess *c′* in the reversible bolt C. A rectangular or other suitably-shaped hole is made in the center of the hub, through which a shank or spindle, A′, correspondingly shaped, passes, on either end of which are fitted the cranks I, at right angles to the bolt-lever A, the cranks I having on their opposite ends the knobs H. By reference to the drawings it will be seen that, through the combination thus described, the bolt C is kept out by the weight of the knobs H, which press downward, as indicated by the single arrow in Fig. 1. In order to draw the bolt back it is merely necessary to raise the knobs H, as indicated by the double arrow in the same figure. In order to restrain the action of the levers I within the proper limits, I screw on each side of the door-stile a quadrant-plate, L, shaped as shown in Fig. 4. These plates also serve as caps, to prevent the spindle A′ and lever L from working out of position, no other fastenings being employed.

As thus described, my invention would be an efficient catch-lock, but I make it more complete by combining with the reversible bolt C a locking movement consisting of a sliding block, G, operated upon by an ordinary door-key and actuating a pawl, D, which is pivoted on F within the casing B and connected to the sliding block G by the pin D′ fitting into a slot in the sliding block G, as shown. The pin K passes through the casing B, and, with the assistance of the pin D′, supports the sliding block G.

The advantages of my invention are obvious. There are no springs to get out of order. All the parts are held compactly and in their proper position within the casing B. It is cheap and simple in its construction, and no ordinary lock could be more durable or efficient.

What I claim as my invention is—

1. The combination of the spindle A′ and levers I with the quadrant-plates L, substantially as and for the purpose specified.

2. The reversible bolt C, having the recssses *c′* and *c″* cut therein, in combination with the pivoted pawl D, having pin D′, which works in a slot in the sliding block G, and pin K, all arranged and operating substantially as and for the purpose specified.

WM. GRIFFITH.

Witnesses:
W. H. BEATTY,
HUGH AIRD.