(No Model.)

ANTHONY ISKE & ALBERT ISKE.

LATCH.

No. 455,334. Patented July 7, 1891.

Fig. 1.

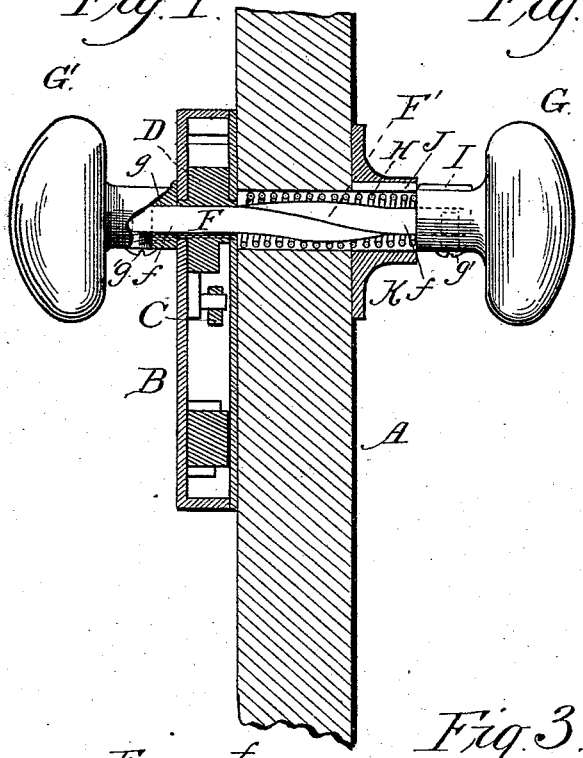


Fig. 2.

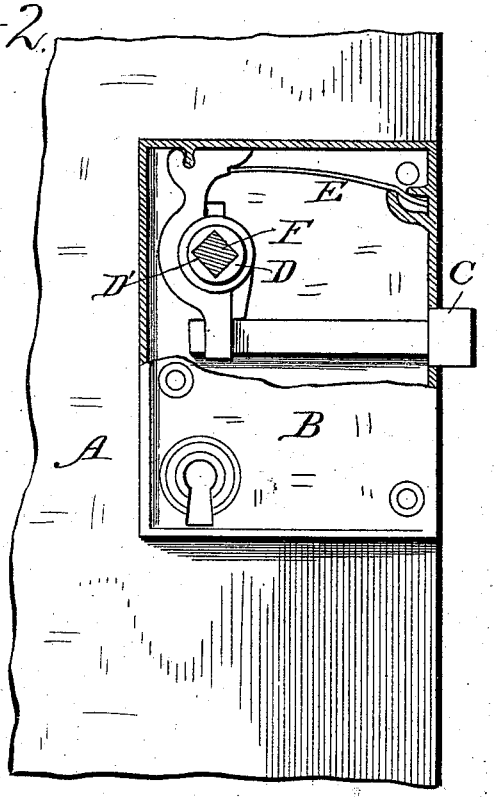


Fig. 3.

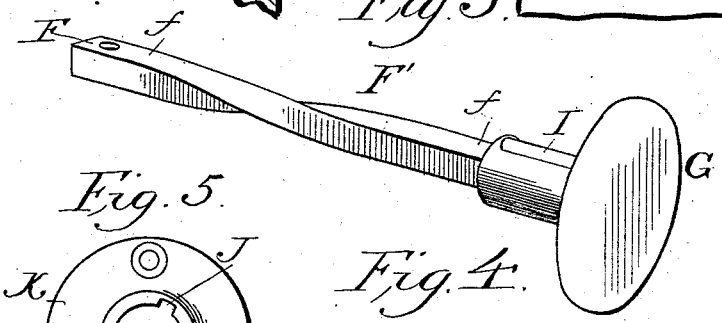


Fig. 5.

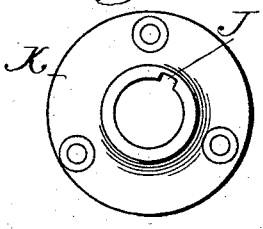
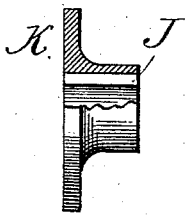


Fig. 4.



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ANTHONY ISKE AND ALBERT ISKE, OF LANCASTER, PENNSYLVANIA.

LATCH.

SPECIFICATION forming part of Letters Patent No. 455,334, dated July 7, 1891.

Application filed December 11, 1890. Serial No. 374,263. (No model.)

To all whom it may concern:

Be it known that we, ANTHONY ISKE and ALBERT ISKE, citizens of the United States, residing at Lancaster, in the county of Lancaster and State of Pennsylvania, have invented certain new and useful Improvements in Door Knobs and Latches; and we 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.

The object of this invention is to facilitate the unlatching and opening of doors by persons whose arms are encumbered, or who for any other reason find it more convenient to merely press forward on the knob than to take hold of it and turn the wrist and hand in the ordinary way. To this end we employ a longitudinally-movable door-knob shank, which is guided so that it cannot turn while thus moving, and being of twisted construction in order that its contact with the squarely-recessed or apertured hub of the latch may turn the latter when the door-knob is pressed upon. A spring surrounding said shank replaces it and the knobs in their normal position when the pressure is withdrawn.

In the accompanying drawings, Figure 1 represents a vertical section through the devices embodying my invention, taken in a plane parallel and contiguous to the door-knob shank. Fig. 2 represents a vertical section of the lock and shank, taken at right angles to Fig. 1, several parts being in elevation. Fig. 3 represents a detail view of one of the knobs and the shank; and Figs. 4 and 5 represent a detail view of the escutcheon, showing the guide-groove.

A designates the door, a small part of which only is shown; B, the latch-casing; C, the latch-bolt; D, the rotary hub for withdrawing the same, and E the latch-spring, the said parts B, C, D, and E being constructed, arranged, and mounted in the usual way. The hub D is provided with a square central aperture D′, as heretofore, to receive the door-knob shank F. This shank, instead of being straight-sided, as heretofore, from end to end, has only its terminal parts *f* thus formed to fit into the square recesses *g* of knobs G G′, which are fastened to it after the usual manner by screws *g*′, the middle part F′ of said shank being twisted, as shown, through a quarter-circle, so that the face, which at one end is on top, will at the other end be at the side of said shank. This twisted middle part F′ passes through the opening D′ of the said hub. A helical replacing spring H surrounds the said shank, bearing at one end against the said latch-casing B and at the other end against the tubular recessed part *g*′ of knob G. On this recessed part of said knob a guide-rib I is formed externally. This rib fits an internal guide-groove J of an escutcheon K, fastened, as usual, to said door. The said guide-rib and guide-groove, when engaged, allow the endwise motion of said shank and the inward and outward motion of the knobs accompanying it, but prevent the knobs and shanks from turning. The said rib is normally outside of said groove and escutcheon.

The operation is as follows: The knob G being pressed inward, the shank F moves with it endwise, the twisted part F′ passing through the square recess D′ of the hub, so that the contact of the faces of said twisted part with the inner faces of the hub necessarily turns the latter and withdraws the latch-bolt, the replacing-spring H being compressed simultaneously by the inward movement of the tubular part *g*′ of knob G, and the latch-spring E being of course put under tension. The withdrawal of pressure on said knob leaves both of these springs free to act, and by reversing the operation above described they restore all the parts to their former position. When the door is to be opened from the other side, the knob G′ is merely turned in the usual way, the spring H holding the rib I out of the groove J. The latch may also be operated in this way from door-knob G, the latter in that case not being pressed upon.

A shank and escutcheon constructed as described may be used with any ordinary door-latch intended for opening by rotary knobs.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

In combination with a door-knob having a rib I integral therewith, a fixed escutcheon K, having an internal groove J corresponding to said rib, a twisted shank attached to said knob, a latch having a hub through which said shank moves longitudinally, and a replacing-spring operating on said shank, substantially as set forth.

In testimony whereof we affix our signatures in presence of two witnesses.

ANTHONY ISKE.
ALBERT ISKE.

Witnesses:
JAS. B. DONNELLY,
P. DONNELLY.