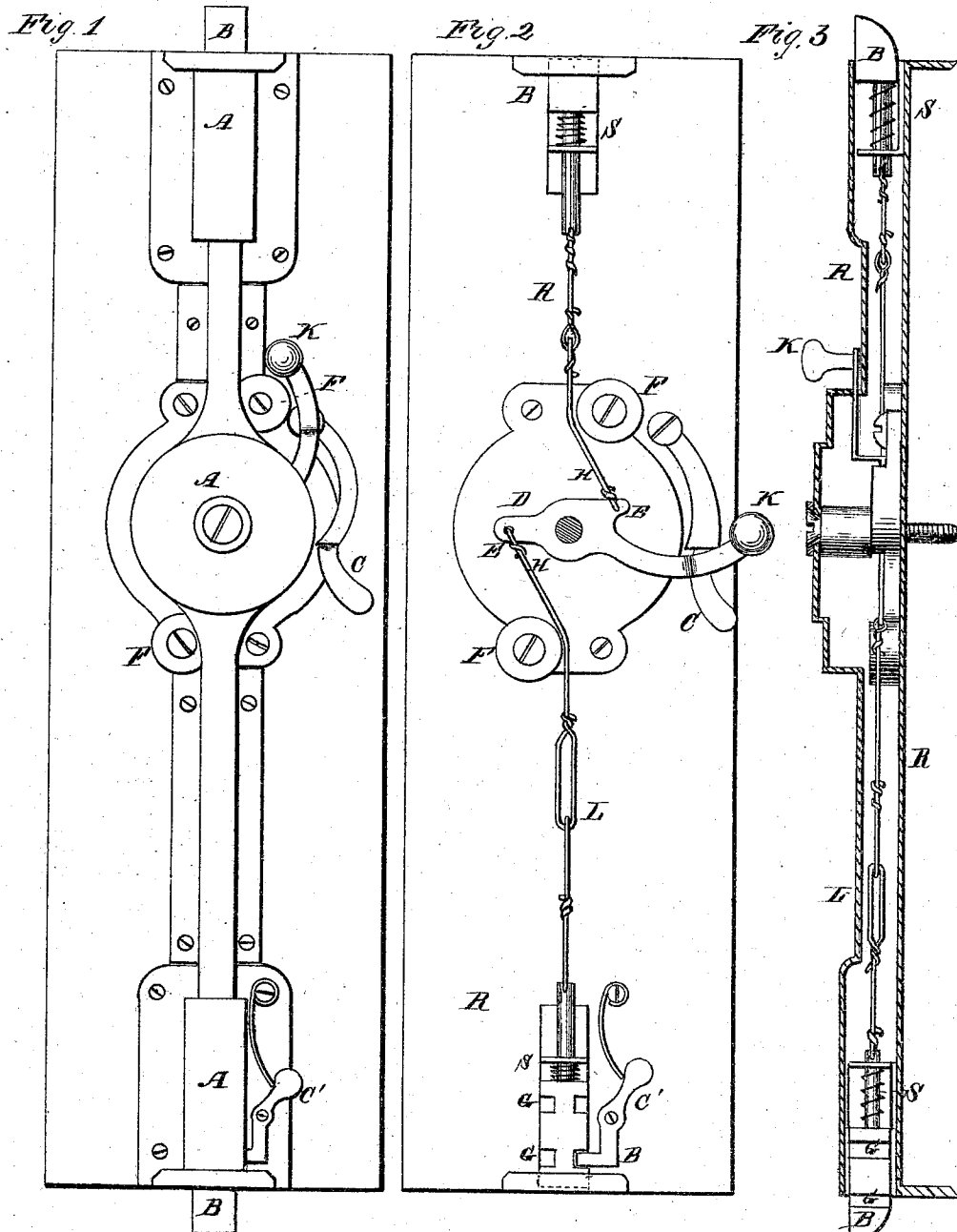


O. B. RAND.
Door-Latches.

No. 144,288.

Patented Nov. 4, 1873.



Witnesses
Oscar D. Mithill
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UNITED STATES PATENT OFFICE

ORIN B. RAND, OF KALAMAZOO, MICHIGAN.

IMPROVEMENT IN DOOR-LATCHES.

Specification forming part of Letters Patent No. **144,288**, dated November 4, 1873; application filed August 9, 1873.

CASE C.

To all whom it may concern:

Be it known that I, ORIN B. RAND, of Kalamazoo, in the county of Kalamazoo and State of Michigan, have invented a new and useful Improvement on my Improved Door-Latch, for which Letters Patent of the United States were issued June 24, 1873, No. 140,307.

My improvement consists in arranging my patented invention, above referred to, so as to attach it to the face of the door, and fasten it at the top and bottom, or either, as desired, and is particularly adapted to large double doors.

I construct my door-fastener, as improved, for the purpose above mentioned, as shown in the drawings, Figure 1 representing a front view, as incased and attached to the door; Fig. 2, a front view, showing the working parts without the casing; and Fig. 3, a side view.

To adapt my invention to use on the face of doors, I construct the crooked lever D, as shown in drawing, Fig. 2, with knob K, extending outside the casing, as shown in Fig. 3. At each end of the lever D, as shown at E E in the drawing, are attached hooks H H, connected with wire rods R R, as shown in drawing, and attached to the bolts B; one arm of lever D, to which the lower bolt is attached, being longer, to allow the lower bolt to extend farther than the upper one, when desired, and by attaching the rod equidistant thereon from the center when not. Connected with the rod to the lower bolt I attach links, as shown at L in drawings, for the purpose of operating the upper bolt alone, while the lower bolt is held by the spring-catch C', as shown in drawing as extended or drawn, the links allowing the rod to pass to accomplish it. At points, as shown at F F in the drawing, I place small friction-rollers, over which the rods are drawn in operating the bolts. The casings of the bolts are constructed

in three separate parts, for convenience in attaching the rods, as shown in Fig. 2 in the drawing, and the lower one provided with notches, as shown at G in drawing, to admit the spring-catch C', used to fasten it in operating. I also construct a spring or drop catch to hold the lever D in operating the upper and also lower bolt, when desired, as shown at C in drawing. The bolts are reversible, so as to use on doors swinging out or in, or from right or left. The fastener, as constructed, is reversible, as a whole, by simply substituting a left-hand lever, D. The casing A, to bolts, rods, lever, &c., is constructed separate, and attached in place after the working parts of the fastener are put on the door in working order.

My invention, as improved for the purpose herein mentioned, is single-acting, operated by taking hold the knob K, at the same time putting the toe of the boot against the spring-catch C', and pressing slightly in pulling down on the knob till caught by the spring C, the spring-catch C' at the same time dropping into the notch G in the bolt. The lower bolt now being fastened, the upper one may be operated alone, the links L allowing the lever to work without affecting the lower bolt.

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

The crooked lever D, catches C C', links L, and friction-rollers F, in combination with the rods R, bolts B, and springs S, all arranged on the face of the door so as to work the bolts at either or both ends, when constructed, arranged, and operated as described and shown, for the purpose set forth.

O. B. RAND.

Witnesses:

O. T. TUTHILL,
M. E. WILLIAMS.