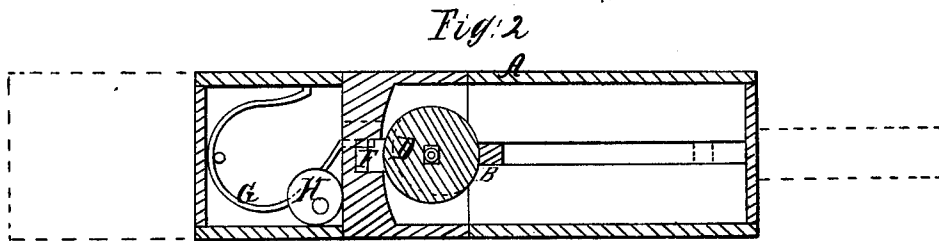
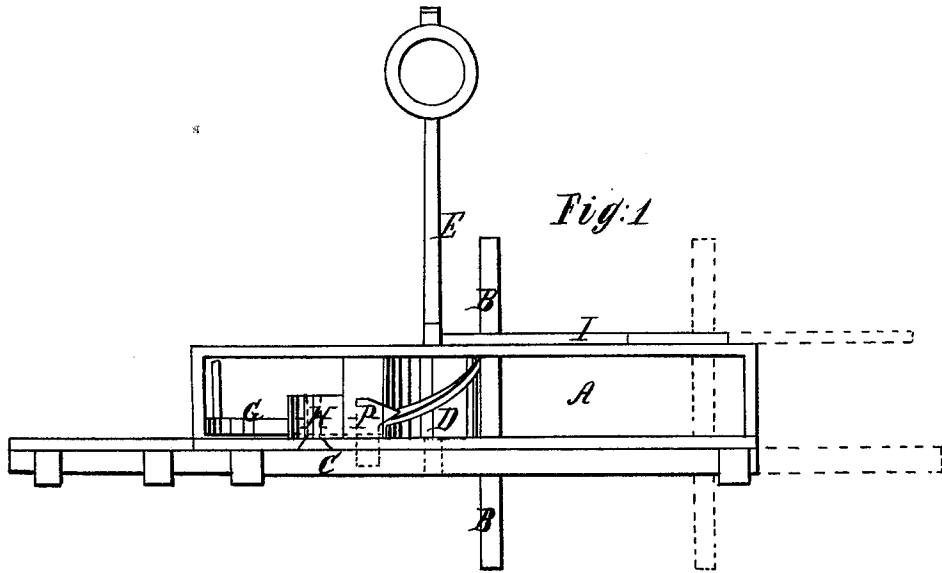


Swartz & Opdycke,

Door Bolt.

No. 91,180.

Patented June 8, 1869.



Witnesses  
J. A. Lehmann

Inventors  
Levi B. Swartz  
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Attys

# United States Patent Office.

LEVI B. SWARTZ AND JAMES M. OPDYCKE, OF LUMBERVILLE,  
PENNSYLVANIA.

Letters Patent No. 91,180, dated June 8, 1869.

## IMPROVED DOOR-BOLT.

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

### To all whom it may concern:

Be it known that we, LEVI B. SWARTZ and JAMES M. OPDYCKE, of Lumberville, in the county of Bucks, and in the State of Pennsylvania, have invented new and useful Improvements in Door-Bolts; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The object of our invention is to provide a simple, cheap, and effective door-bolt; and consists in the arrangement of the devices hereafter set forth and described.

Figure 1 is a side elevation of our bolt, with the side removed, so as to show its internal construction.

Figure 2 is a plan view of the same, with the top removed.

Letter A represents the frame of our bolt, which may be constructed of any suitable size or material, and which is divided into two apartments, one much larger than the other. There are two bolts, or slides attached to this frame, one on top and the other on the opposite side, and are both moved backward and forward by the pin B, which passes entirely through the frame, and which plays in a slot cut in both top and bottom. The longer one of these slides, C, on the face, has a mortise cut in it, on the side toward the frame, and two openings entirely through, one for the pin B and the other for the key.

At the forward end of the longer apartment there is placed the drum D, which has a screw-thread cut around its periphery, as seen in fig. 1. Upon both top and bottom of this drum there is a rod-like projection, the ends of which are so formed that the key E can be placed upon them, for the purpose of turning the drum.

Playing up and down in an opening cut in the side of the partition between the apartments, there is a notched bolt, F, which is raised from or lowered into the mortise in the slide C by means of the screw-thread

cut in the sides of the drum. When this bolt is depressed, the end prevents the slide from being moved.

Placed in the small apartment is the spring G, which has one end fastened to the frame, is then curved around a pin, to keep it in place, presses against the cam H, and has its other end passed through the partition, and fits in a notch cut in the side of the bolt F. When the bolt is pressed down, the end of this spring fits in this notch, and prevents the bolt from being raised so as to unlock the slide.

Passing up through the frame, and connected to the cam, there is a screw, by means of which the cam is operated. Upon the end of the key E there is placed a small sharp projection, for fitting this screw. When this is inserted in the screw-head and turned around, the shoulder on the cam is pressed against the spring, so as to press it out of the notch in the bolt, when it can be readily raised by applying the key to the drum, as seen in fig. 1.

Having thus described our invention,

What we claim, and desire to secure by Letters Patent, is—

1. The hollow frame A, divided into two apartments, and slotted as described, in combination with the two slides C and I, and pin B, when used in the manner and for the purpose set forth.

2. The drum D, grooved as set forth, in combination with the notched bolt F, cam H, and spring G, when used in the manner specified.

3. The arrangement of the frame A, slides C and I, spring G, pin B, cam H, and notched bolt F, when all are combined for the purpose set forth.

In testimony that we claim the foregoing, we have hereunto set our hands, this 24th day of March, 1869.

LEVI B. SWARTZ.  
JAMES M. OPDYCKE.

Witnesses:

E. H. HOUGH,  
HENRY HOUGH.