W. H. GAGE.

ROTARY BOLT.

No. 259,523. Patented June 13, 1882. F. B. Townsend

## United States Patent Office.

WILLIAM H. GAGE, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF TO WILLIAM R. CLARK, OF SAME PLACE.

## ROTARY BOLT.

SPECIFICATION forming part of Letters Patent No. 259,523, dated June 13, 1882.

Application filed March 1, 1882. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. GAGE, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Rotary Door Bolts; and I do hereby declare the following to be a full, clear, and exact description thereof, that will enable others to understand and make use of the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, forming a part of this specification.

This invention relates to that class of locks which are placed on the inside of doors, and is intended as a substitute for the ordinary slide locking-bolt; and it consists of two flat plates or disks connected together by means of a central pivot, the under plate being rigidly attached to the door, while the upper plate is adapted to be rotated thereon, both plates being provided with a suitable locking device, whereby the rotating plate is locked at different points in the line of rotation, all as will be hereinafter more fully set forth in detail, the particular object being to provide a locking device that cannot be operated upon by burglars from the outside.

Figure 1 is a face view of the device when attached; Fig. 2, a view of the under plate or disk, the upper plate being removed. Fig. 3 is a vertical section in the plane 3 3, Fig. 1; Fig. 4, a vertical section in the plane 4 4, Fig. 2. Figs. 5, 6, and 7 show a modification.

Referring to the drawings, A represents the upper plate; B, the under plate; and C, a rivet securing the two plates relative to each other, and also providing a bearing for the rotating plate A. A part of the edge of each plate is cut away, as shown in Figs. 1 and 2 of the drawings. The plate B is attached to the door by means of screws inserted through the apertures a a', which are countersunk for the heads of the attaching-screws. The plate B is provided with the recesses  $a^2 a^3$ , in which are placed the spiral springs b b' and the locking catches or caps C' C², as shown in Fig. 3 of the drawings.

The upper plate, A, is provided with the apertures  $b^2$   $b^3$ , in which are inserted the push-

pins D D. These pins are provided on the in- 50 ner ends with the heads dd, which bear against the shoulder  $a^4$ , and prevent the pins from springing out beyond the required point.

The plate B is attached so that the cut-away edge F is on a line with the opening edge of the 55 door, the plate A being correspondingly cut away on the line F', as illustrated in Fig. 1, which shows the plate A rotated so as to leave the door unlocked, the circular dotted line to the right showing the position of the rotating 60 plate when the door is locked, while the dotted line to the left shows the position of the cut-away edge, leaving this edge of the under plate, B, exposed.

By pressing on the push-pins DD the catches 65 C' C<sup>2</sup> are forced into the recesses in the plate B and released from engagement with the upper plate, A, which may now be rotated until the recesses in the under plate come in line with the apertures in the upper plate, when 70 the catches C' C<sup>2</sup> are automatically forced into a locking position by means of the springs bb'. The push-pins D D must be of just the right length, so as not to engage with the under plate. By this arrangement a device is 75 presented that cannot possibly be unlocked from the outside, as both push pins must be pressed inward at the same time or the upper plate cannot be rotated, and when the pushpins are pressed inward there is but little 80. chance for any instrument inserted through the door from the outside to unlock the device. The keeper may be attached to the door and the locking device to the door-post, if such arrangement may be found more desirable, or 85 if practical working so requires.

The stationary plate attached to the door may be provided with any number of recesses, as shown in Fig. 5 of the modification, which permits of the rotating plate being locked at 90 any point.

Figs. 5, 6, and 7 illustrate a modification, and show a different construction as to the locking-catches, a short lever having a central fulcrum being recessed in the under side 95 of the upper plate with the push-pin on the upper side of one end, while the locking-catch, engaging with the under plate, is attached to

the opposite end and under side of the rocking lever, a flat spring being substituted for the spiral ones.

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

The combination, with the plate B, having

the recesses  $a^2$   $a^3$ , of the springs b b', the locking-catches C' C<sup>2</sup>, the push-pins D D, and the rotating plate A, substantially as described. WILLIAM H. GAGE.

Witnesses:

L. M. FREEMAN, L. B. COUPLAND.