

F. ROBINSON & J. H. FERRIS.
BOLTS.

No. 178,080.

Patented May 30, 1876.

Fig: 1.

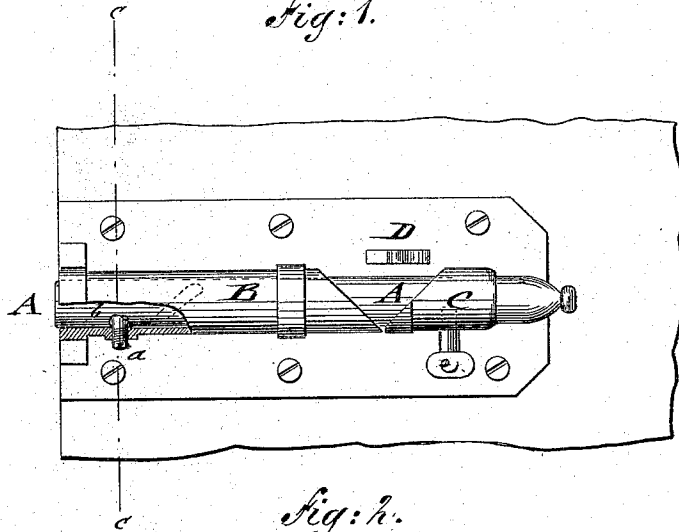


Fig: 2.

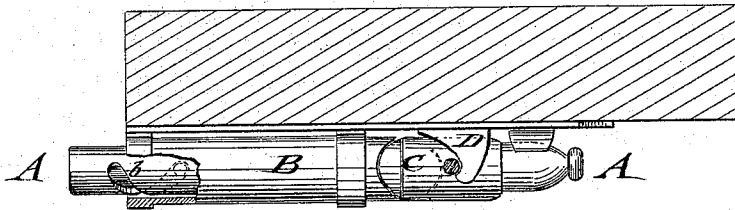
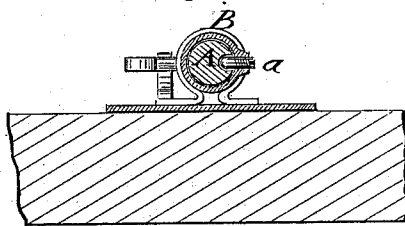


Fig: 3.



WITNESSES.

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FRANCIS ROBINSON AND JOHN H. FERRIS, OF TRENTON, NEW JERSEY.

IMPROVEMENT IN BOLTS.

Specification forming part of Letters Patent No. **178,080**, dated May 30, 1876; application filed May 1, 1876.

To all whom it may concern:

Be it known that we, FRANCIS ROBINSON and JOHN H. FERRIS, of Trenton, Mercer county, New Jersey, have invented a new and Improved Bolt, of which the following is a specification:

Figure 1 shows a front view of our improved bolt, partly in section; Fig. 2, a top view in closed position; and Fig. 3, a vertical transverse section of the same in line *c c*, Fig. 1.

Similar letters of reference indicate corresponding parts.

Our invention relates to an improved bolt that is readily opened and firmly retained in closed position.

The invention consists of a bolt that slides and turns in a barrel by means of an inclined elliptical collar of the bolt bearing on the correspondingly beveled end of the barrel.

The bolt is retained in locked position by a shoulder or seat of the handle, all as herein-after more fully set forth and definitely claimed.

In the drawing, A represents the bolt, and B the barrel, in which the bolt is guided during its forward and return motion when being opened and closed. The rear end of the barrel is cut at any suitable angle of inclination to form a beveled part of an elliptical shape. The bolt A is provided with a collar or sleeve, C, that extends around the same at the same angle of inclination, and is soldered or otherwise attached to the bolt.

The collar slides along the beveled end of the barrel when the bolt is turned by the handle *e*, and imparts a simultaneous turning and sliding motion of the bolt in forward or back-

ward direction when the bolt is thrown out into closed position. The handle *e* forms contact with a lug or stop, D, that prevents the forcing back of the bolt by tools or otherwise. The front end of the bolt is guided or steadied by a small screw or pin, *a*, that passes through the barrel, and engages a spiral groove, *b*, of the bolt.

The bolt may be readily opened or closed by swinging the handle down or up, it being locked in positive manner in closed position by the retaining-stop, so as to prevent meddling with the same.

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

1. The combination, with a guide-barrel, A, provided with the guide-pin *a*, and the rear end cut at a bevel or inclination, of a bolt, A, with a collar or sleeve, C, of corresponding bevel or inclination, to produce the opening or closing of the bolt on turning the same, and having the spiral groove *b*, substantially as specified.

2. The combination of the handle *e* of a turning and sliding bolt with a fixed stop or shoulder, D, that engages the handle when the bolt is thrown into closed position to prevent forcing open of the same, substantially as specified.

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Witnesses:

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