

Arnold & Steele,
Bolt.

No. 89,191.

Patented Apr. 20, 1869.

Fig. 1.

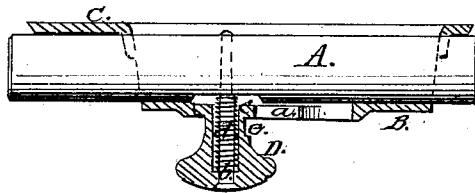
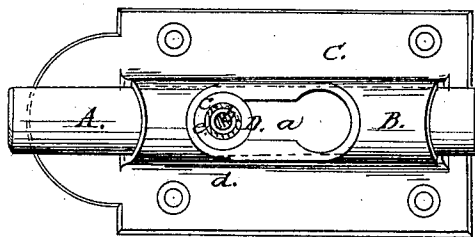


Fig. 2.



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Letters Patent No. 89,191, dated April 20, 1869.

IMPROVEMENT IN BOLTS FOR DOORS, &c.

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, WILBER F. ARNOLD and OGDEN L. STEELE, both of New Britain, in the county of Hartford, and State of Connecticut, have invented a new and useful Improvement in Bolts for Doors, &c.; and we do hereby declare the following to be a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification, in which drawing—

Figure 1 represents a longitudinal section of this invention.

Figure 2 is a sectional plan, or face view thereof.

Similar letters indicate corresponding parts.

This invention relates to an improvement in that class of bolts technically known as "barrel" bolts; and

The improvement consists in the arrangement of a flanged spring-button, in combination with a dumb-bell-shaped slot in the barrel of the bolt, in such a manner that when the bolt is moved to either of the extreme ends of its stroke, the flange of the spring-button catches in one of the enlarged ends of the dumb-bell-shaped slot, and thereby the bolt is locked; and by depressing the button against the action of its spring, the flange thereof is thrown out of the enlarged portion of the slot, and the bolt can be moved with ease and facility.

A represents a bolt, which is fitted into the barrel B, that rises from the supporting-plate C in the usual manner.

The barrel is provided with a dumb-bell-shaped slot, *a*, through which extends a stud, *b*, which is firmly riveted, or otherwise fastened to the bolt.

This stud forms the guide for a button, D, and round said stud winds a spiral spring, *d*, which has a tendency

to force the button out to the position which the same occupies in fig. 1 of the drawing.

The inner end of the button D forms a flange, *c*, just large enough to enter the enlarged ends of the slot *a*, but too large to pass through the narrow part of said slot.

Next to this flange is a neck, *e*, which is small enough to pass freely through the narrow part of the slot *a*.

When the bolt is brought in either of the extreme ends of its stroke, and the button is permitted to follow the action of its spring *d*, the flange *c* drops into one of the enlarged portions of the slot *a*, and the bolt is locked.

In order to move the bolt, the button must be depressed to such a position that the neck *e* comes opposite the narrow portion of the slot *a*, and when the bolt has reached the opposite end of its stroke, the button rises, and the flange *c* enters the enlarged portion of the slot, and locks the bolt.

By these means a self-locking bolt is obtained, which is handsome in its appearance, simple and durable in its construction, and operated without difficulty.

Having thus described our invention,

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

The hollow button D, *c*, *e*, fitted to slide on the pin *b*, and enclosing the spring *d*, when arranged as shown, with relation to the bolt A, casing B, and slot *a*, to be operated as set forth.

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