

D. McArthur,

Door Bolt.

No. 108,920.

Patented Nov. 1. 1870.

fig. 1.

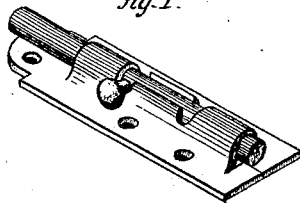


fig. 2.

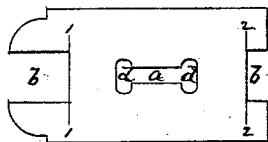


fig. 3.

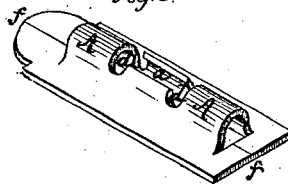


fig. 5.

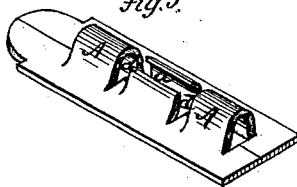
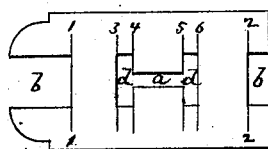


fig. 4.



Witnesses

J. H. Shumway
a. J. Tibbitts

Duncan McArthur

Inventor

By his Attorney

Wm. E. Earle

United States Patent Office.

DUNCAN McARTHUR, OF NEW HAVEN, CONNECTICUT, ASSIGNOR TO SARGENT & CO., OF SAME PLACE.

Letters Patent No. 108,920, dated November 1, 1870.

IMPROVEMENT IN DOOR-BOLTS.

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

To all whom it may concern :

Be it known that I, DUNCAN McARTHUR, of New Haven, in the county of New Haven and State of Connecticut, have invented a new Improvement in Door-Bolts; and I do hereby declare the following, when taken in connection with the accompanying drawing and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawing constitutes part of this specification, and represents in—

- Figure 1, a perspective view of the bolt complete;
- Figure 2, the blank from which the barrel and plate are formed;
- Figure 3, the barrel and plate as struck from the blank shown in fig. 2;
- Figure 4, a modification of the blank in fig. 2; and in
- Figure 5, a perspective view of the same as struck up.

This invention relates to an improvement in barrel-bolts, the object being to produce a good article in an inexpensive manner. To this end

My invention consists in forming the plate and barrel in one and the same piece, by cutting away a portion at the center of the plate, so that the barrel may be struck up, and the two edges of the plate from which the portion is cut will, in striking up the barrel, be drawn together so as to meet at or near the center, and form, as it were, a single flat plate with a barrel thereon, having the general appearance of a common barrel-bolt.

From suitable sheet metal I strike the blank, as seen in fig. 2, forming a slot, *a*, in the center, through which the knob of the bolt is to pass, and transverse slots *d* at the end of the slot *a*, into which the knob falls to lock the bolt.

Then from each end I cut out a portion to leave a recess, *b*, in the plate, with transverse slits 1 1 2 2; and the portion between the slits 1 and 2 is struck up, as seen in fig. 3, forming bands *A A*, which contracts the plate until the edges of the recess *b* meet at *f*, as seen in fig. 3. The plate is then bored for the screws, and the bolt placed in the barrel in the usual manner.

By this construction the transverse slots *d* do not extend down to the plate. If it is desirable to do this, I form the blank as seen in fig. 4, the slots *b* being the same, as also the transverse slots 1 1 2 2, and the slot *a* is the same.

In addition to this I make other transverse slots, 3 4 5 6, and between the slots 3 4 and 5 6 I cut out a portion corresponding to the width of the recess *b*; then strike up the barrel the same as before, leaving the parts between the slots 3 4 and 5 6, which, like the other portions of the plate, are drawn together until they meet at the center, as seen in fig. 5.

By this construction a lighter metal can be used than for ordinary bolts, inasmuch as the plate is strengthened by the raising of the barrel therefrom, and the whole expense of preparing and riveting the parts together is avoided.

I claim as my invention—

As an article of manufacture, a barrel-bolt, in which the plate and barrel are formed in one and the same piece by cutting away a portion of the center of the plate, so that in raising the barrel the two parts of the plate are drawn together at the center, substantially in the manner herein set forth.

DUNCAN McARTHUR.

Witnesses:

JOHN H. SHUMWAY,
A. J. TIBBITS.