JOSEPH B. SARGENT.

Improvement in Door-Bolts.

No. 115,645. Patented June 6, 1871.

fig. 1.

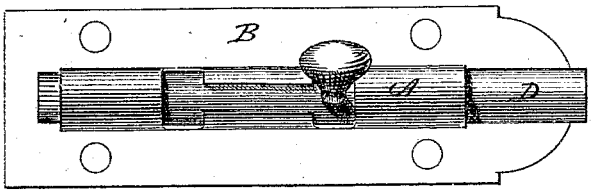


fig. 2.

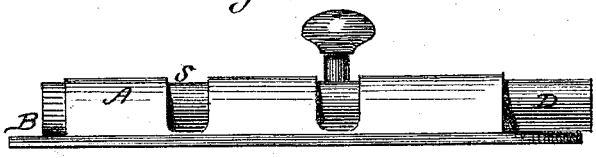


fig. 3.

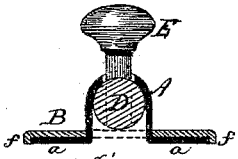


fig. 4.

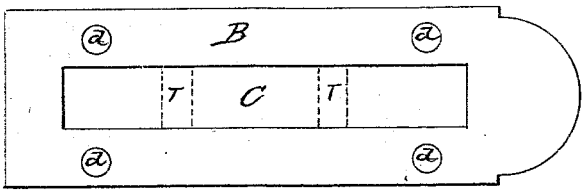


fig. 5.

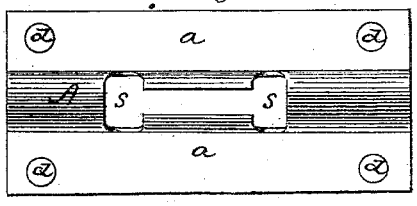
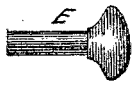


fig. 6.

fig. 7.



Witnesses

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JOSEPH B. SARGENT, OF NEW HAVEN, CONNECTICUT.

IMPROVEMENT IN DOOR-BOLTS.

Specification forming part of Letters Patent No. 115,645, dated June 6, 1871.

To all whom it may concern:

Be it known that I, JOSEPH B. SARGENT, 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 that 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 front view; Fig. 2, a side view; Fig. 3, a transverse section; and Fig. 4, the covering-plate; Fig. 5, the barrel; Fig. 6, the bolt; Fig. 7, the knob. All detached.

This invention relates to an improvement in that class of bolts termed barrel-bolts; the object of the invention being to cheapen the construction.

Heretofore this class of bolts has been made by riveting the barrel to the plate either by tongues or rivets formed on the barrel and extending through the plate to the under side and there riveted, or by turning out the lower edge of the barrel upon the upper surface of the plate and then riveting the two together by independent rivets.

The process of riveting is one of the chief expenses of this class of manufacture: first, on account of the labor of riveting, and, secondly, because the metal must necessarily be of sufficient thickness to stand the riveting. By my invention this difficulty is overcome: first, by dispensing entirely with rivets, and, secondly, I am enabled to use very much lighter metal and produce a bolt of equal strength.

To this end my invention consists in forming the barrel of the bolt with a flange projecting from either side, and the plate with a slit, through which the barrel is inserted from the under side, so that the plate lies upon the upper surface of the barrel-flanges, and the two temporarily secured together by the insertion of the bolt. The bolt, when within the barrel, prevents the separation of the two parts, and the securing of the bolt to the door, or whatever it may be, permanently secures the two parts together, all as more fully hereafter described.

A is the barrel, of the usual form for this class of bolts, shown detached in Fig. 5, and is constructed with flanges, *a*, projecting from each side, as also seen in Fig. 5, and in solid black, Fig. 3. B is the plate, shown detached in Fig. 4, and constructed with a slot, C, corresponding to the barrel A, so that the said plate will pass freely over the barrel down onto the flanges *a a*, as seen in Figs. 1 and 3. After the two parts are set together the bolt D, Fig. 6, is inserted through the barrel, and the knob E secured thereto in the usual manner.

In this class of bolts the bolt is usually of such length as to project from either end of the barrel; therefore, after the bolt is inserted its ends will rest upon the upper surface of the plate B and thus prevent the separation of the two parts.

The flanges and plates are correspondingly perforated, as at *d*, for the insertion of screws for the purpose of securing the bolt to door or other places.

When the bolt is thus secured the parts are as firmly fixed together as if riveted or made solid, and, in consequence of not riveting, the metal employed may be very much lighter.

For convenience of illustration in Fig. 3 the thickness of the metal is much.

For a short bolt, or one in which the bolt cannot conveniently be made to project from the ends sufficiently to secure the parts together, as before described, the plate B may be constructed with connections T across the slot, as denoted in broken lines, Fig. 4, which pass down into the slots S S of the barrel, the bolt passing into the barrel over these connections, as denoted in dotted lines, Fig. 3.

I prefer to construct the plate B with its entire edge turned down, as at *f*, Fig. 3, whereby the edge of the flanges A is entirely covered; and this construction adds very little to the expense, as the edge may be turned at the same time of striking the plate and gives to the bolt a more finished appearance.

I claim as my invention—

A bolt in which the barrel is constructed with the flanges *a a*, and the plate B with the slot C, so as to be set down over the barrel onto the said flanges *a a* for the purpose of securing the parts together, substantially as described.

JOSEPH B. SARGENT.

Witnesses:

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