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F. J. BREMER

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BOLTWORK FOR SAFES AND THE LIKE

Filed April 15, 1927

Fig. 1.

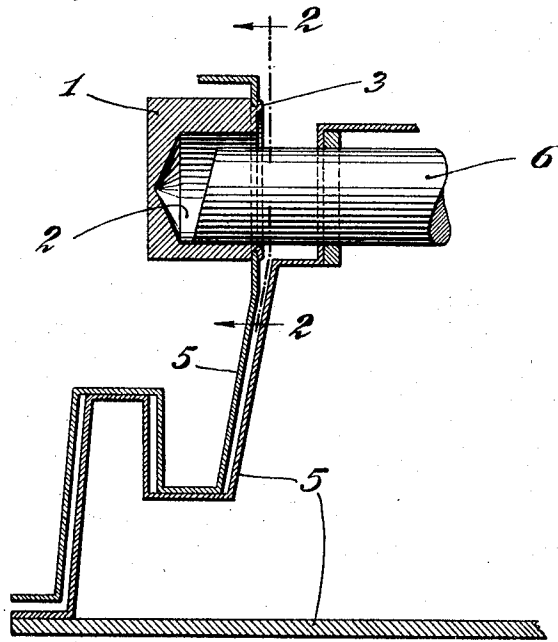


Fig. 2.

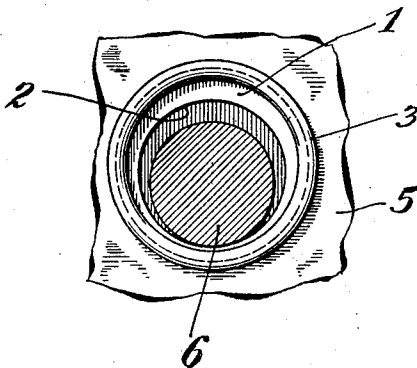
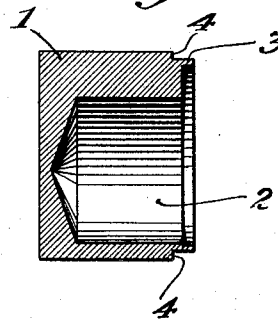


Fig. 3.



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BOLTWORK FOR SAFES AND THE LIKE.

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This invention relates to bolt work for safes and the like, and more particularly relates to a bolt cup in which the end of a bolt seats when the door is closed and the bolt is projected.

Heretofore in locking a safe the bolts are engaged either behind a shoulder or else in a hole in the safe jamb. Sometimes a bolt cup having a central recess is placed in the hole merely for the purpose of forming a lining therefor. Such hole is not adjustable on the jamb. It is essential that the bolt fit behind the shoulder or in the bolt cup so tightly that there is no outward play of the door permitted, yet to fit loose enough to permit reciprocation of the bolt easily and smoothly. It has been practically impossible to place these shoulders, or the bolt holes, so accurately on the jamb that the bolts will make the fit desired. Accordingly, it has been the practice heretofore in fitting a safe door to drive the metal shoulder one way or the other to make the bolt fit tighter or looser as required. With a bolt cup it has been the practice heretofore either to drive the metal up to fit the bolt or to cut some of the metal away to establish the fit desired. This method of obtaining the correct fit of the bolt is very crude and creates an unsightly appearance, due to the marring and distorting of the metal.

The principal object of my invention is to provide means whereby the desired fit of the bolt in a bolt cup may be obtained readily and easily without requiring any metal to be driven one way or the other or any part of the structure to be marred or distorted.

Another object of my invention is to provide means of the character described which will insure the maintenance of the correct fit of the bolt in the bolt cup after the correct fit has once been obtained.

A further object of my invention is to provide an improved bolt cup whereby the correct fit of the bolt in the bolt cup may be obtained readily and easily and permanently without requiring the distortion or marring of any part of the structure.

Other objects of this invention will be in part obvious and in part pointed out hereinafter.

In accordance with my invention, I provide a bolt cup having a bolt hole eccentrically located therein. The bolt cup is

adapted to be placed in the jamb wall of the safe and rotated, so that the hole in the cup may be placed in exactly the right position on the jamb for the correct fit of the bolt therein. Then the bolt cup may be permanently secured in place on the jamb so that the correct fit of the bolt will be maintained permanently.

In order that a clearer understanding of this invention may be had, attention is hereby directed to the accompanying drawing forming a part of this application and illustrating one possible embodiment of my invention. Referring to the drawings, Fig. 1 is a sectional view of a jamb wall and a complementary door edge wall of a safe, and including a bolt cup embodying my invention mounted on the jamb wall, and including the end of a bolt mounted on the door edge wall; Fig. 2 is a sectional view of a fragment of the construction and is taken on the line 2—2 of Fig. 1; and Fig. 3 is a sectional view of the bolt cup removed from the jamb wall. Similar reference characters refer to similar parts throughout the several views of the drawings.

Referring to the drawings, the bolt cup 1, which embodies my invention, is provided with a recess or hole 2, eccentrically located. The cup is formed with a flange 3 and a shoulder 4 so that the flange 3 of the cup may be inserted through a hole of corresponding shape and size formed in the jamb wall 5, with the shoulder 4 seating against the inside of the jamb wall. The flange 3 is then clinched over the opposite side of the jamb wall, as shown in Figs. 1 and 2, so that the cup will be secured to the jamb wall but will be rotatable thereon.

In fitting the door 5, the bolt 6 carried thereon is projected into the bolt cup 1 and then the bolt cup is rotated to vary the relative position of the bolt hole 2 with respect to the bolt until exactly the desired fit of the bolt in the cup is obtained. The bolt cup 1 is then permanently fastened to the jamb wall 5 against rotation, thus insuring permanence of the correct fitting of the bolt thereafter.

From the above, the simplicity of securing the correct fit of a bolt when my improved bolt cup is employed will be apparent. It will also be evident that when my bolt cup is used no unsightly appearance will be

created, since no metal of the jamb is required to be driven one way or the other, or to be cut away.

What I claim is:—

5 1. The combination with a jamb wall, a complementary door edge wall and a bolt carried on the door edge wall, of a bolt cup having an eccentrically located bolt hole mounted on the jamb wall, said bolt cup being adapted to be rotated on the jamb wall to place the bolt hole in various positions with respect to the bolt, whereby the fit of the bolt in the bolt cup may be varied.

2. The combination with a jamb wall, a complementary door edge wall and a bolt carried on the door edge wall, of a bolt cup having an eccentrically located bolt hole mounted on the jamb wall, said bolt cup being adapted to be rotated on the jamb wall to place the bolt hole in various positions with respect to the bolt, whereby the fit of the bolt in the bolt cup may be varied, said bolt cup including a shoulder abutting the inside of the jamb wall and a flange adapted to be clinched over the other side of the jamb wall, whereby the bolt cup is held to the jamb wall.

3. The combination with a jamb wall, of a bolt cup mounted on the jamb wall, said bolt cup having means eccentrically positioned whereby rotation of said cup in the plane of the jamb wall will position said means for firm engagement with a cooperating bolt.

4. The combination with a jamb wall, of a bolt cup mounted on the jamb wall, said bolt cup having means eccentrically positioned whereby rotation of said cup will

position said means for the reception of the end of a cooperating bolt.

5. The combination with a jamb wall, of a bolt cup rotatably mounted on the jamb wall, said bolt cup having a bolt hole eccentrically located therein, said bolt hole being adapted, after adjustment of the bolt cup on the jamb to position said hole for correct fitting, to bury the end of a cooperating bolt.

6. The combination with a jamb wall, a complementary door edge wall and a bolt carried on the door edge wall, of a bolt cup mounted on the jamb wall, said bolt cup having bolt engaging means and adapted to be rotated in the plane of the jamb wall to place said means in various positions with respect to the bolt, whereby the fit of said bolt and said means may be varied.

7. A bolt cup including a body portion, said body portion having a bolt hole eccentrically located therein, said bolt hole adapted to enclose the end of a bolt whose longitudinal axis is in line with the longitudinal axis of the bolt cup.

8. The combination with a jamb wall, of a bolt cup mounted on the jamb wall, said bolt cup having a bolt hole eccentrically mounted therein, and means for permanently securing said bolt cup to the jamb wall after adjustment of said cup on the jamb to position said hole for the correct fitting of a bolt in the bolt hole.

This specification signed this 6th day of April, 1927.

FRED JOHN BREMER.