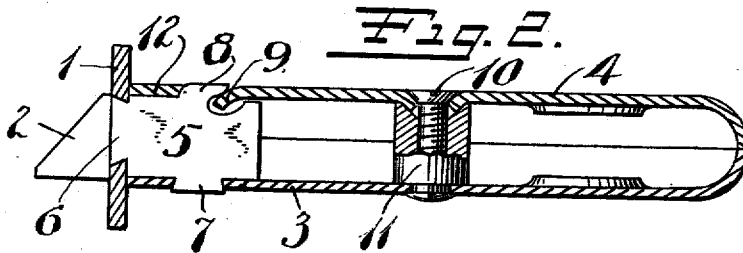
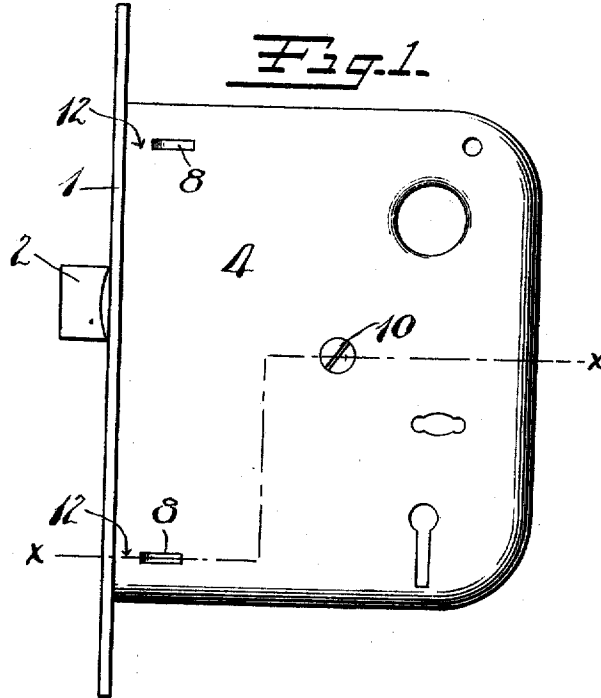


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 LOCK CASE CONSTRUCTION.  
 APPLICATION FILED JULY 15, 1908.

927,442.

Patented July 6, 1909.



Witnesses:  
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# UNITED STATES PATENT OFFICE.

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## LOCK-CASE CONSTRUCTION.

No. 927,442.

Specification of Letters Patent.

Patented July 6, 1909.

Application filed July 15, 1908. Serial No. 443,595.

To all whom it may concern:

Be it known that I, AUGUST ARENS, a citizen of the United States, residing at New Britain, county of Hartford, Connecticut, have invented certain new and useful Improvements in Lock-Case Construction, of which the following is a full, clear, and exact description.

My invention relates to improvements in lock construction, having particular reference to that type of lock known as a mortise lock.

The object is to provide simple and effective construction for permanently connecting the end plate to the case, at the same time providing means whereby the cap or cover plate may be very easily and quickly applied or removed, which cover when applied is positively secured at several points. Although the cover is secured at several points, as stated above, it requires the manual manipulation of but a single fastening device to secure or free the same.

A distinct advantage is gained by having the cap connected to the case at several points, for, when so connected, a very much lighter grade of material may be employed therefor, and great economy is thereby attained.

These and other advantages of my invention will be better understood by the mechanic skilled in the art from a reading of the following description and an examination of the accompanying drawings, in which—

Figure 1 is a side elevation of a lock constructed to embody my invention. Fig. 2 is a section thereof on the line  $x-x$  of Fig. 1, enlarged.

1 represents the face plate of the lock.

2 is the projecting latch-bolt controlled by suitable mechanism (not shown) within the case proper.

The main body of the case is indicated at 3, and this part will hereafter be referred to as the "case".

4 represents the removable cap or cover.

In assembling the various parts of such a lock, it is customary for the locksmith to set up the various operating pieces within the case 3, the cap being laid to one side. After the parts have been put in place and found to properly fit, the cap 4 is applied and fastened in place. In the form shown, the case 3 and cover 4 are hollowed out and are of a corresponding shape (although reversed) so

that when brought together they will form a box-like receptacle for the lock-work. By so constructing these parts, they may be readily formed from sheet metal by the use of a suitable die.

The means for connecting or coupling up the foregoing elements is unique and simple. It comprises an anchor plate 5, riveted at 6 to the face plate 1. This anchor plate 5 has a laterally projecting rivet 7, by which the case 3 is secured in place, so that its edge will bear against the rear of the face plate 1. The upper or opposite side of the anchor plate 5 has a shoulder 8 undercut at one end. The cap 4 is provided with an inclined tongue or cam 9, which is arranged to project under the shoulder 8, so as to lock the forward part of the cap in place, so that it cannot be pried out. As the cap piece moves from the left to the right (as viewed in the drawings) upon being slipped into place, the tongue 9 engages shoulder 8 and tends to draw the edges of the cap 4 and case 3 into tight contact. When the cap is substantially in place, a fastening screw 10 is employed, the said screw passing through a perforation in the cap 4, so as to take into a lug 11 secured to the case 3. When these parts are properly proportioned and positioned, as the fastening screw 10 draws in, it tends to force the cap laterally into its final connected position.

As shown in the drawings, it is preferred to have a plurality of anchor plates corresponding to the anchor plate 5, said drawing (Fig. 1), illustrating two of such plates, one being near the lower edge of the case and intersected by the section line  $x-x$ , the other being at the other end of the case and bearing approximately the same relation to the face plate.

As will be seen, the tongue 9 is formed preferably slightly away from the forward edge of the cap, so that that portion of the case between the perforation forming the tongue and the face plate may stand in a position to prevent the rearward displacement of the cap. This it does by standing between the forward edge of the shoulder 8 and the front plate, as indicated at 12 in Fig. 2.

Since the internal lock parts constitute no part of this invention, they have not been illustrated, nor will there be any occasion to describe the same.

I have illustrated and described my invention in its preferred form only, appreciating that modifications in various parts may be readily made without departure from the spirit and scope of my invention.

From the foregoing description it will be seen that the case and cap are bound together by means of the screw 10 and also by the interlocking engagement of said cap with the anchor-plate, said binding engagement being such as to prevent the removal of the cap by lateral movement.

What I claim is:

1. In a lock, a case, a cap detachably connected to said case, a shouldered anchor plate rigidly connected to the casing and having an inclined locking shoulder, a portion of said cap cooperating with said inclined shoulder of said plate to detachably interlock therewith and to hold said cap down, and a manually controllable fastening screw independent of said interlocking means and arranged to detachably connect the cap and case at a point away from said interlocking means.

2. In a lock, a case, a removable cap, an

anchor plate rigidly connected to said case, a shoulder on said anchor plate, a recess in said cap arranged to receive said shoulder, an interlocking tongue at one end of said recess arranged on an incline and adapted to interlock with said anchor plate to hold said cap against movement in one direction, the opposite edge of said recess in the cap engaging the shoulder on said anchor plate at the opposite side to hold said cap against movement in an opposite direction, and a manually controllable fastening device.

3. In a lock, a front plate, a case, a removable cap, an anchor plate rigidly connecting the front plate and case, an undercut interlocking shoulder on said anchor plate, a portion of the cap being arranged to extend under said shoulder and interlock therewith, and a holding screw operating to connect both the cap and case at a point away from the first mentioned interlocking connection between said parts.

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Witnesses:

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