

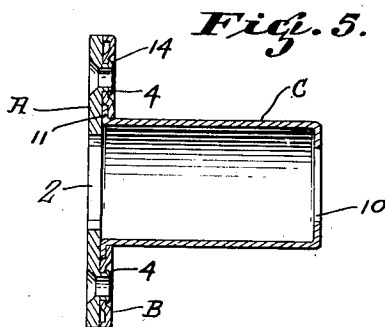
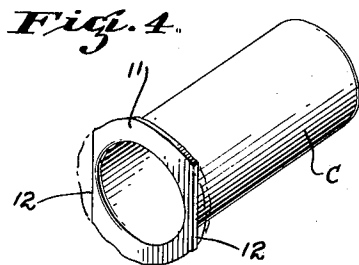
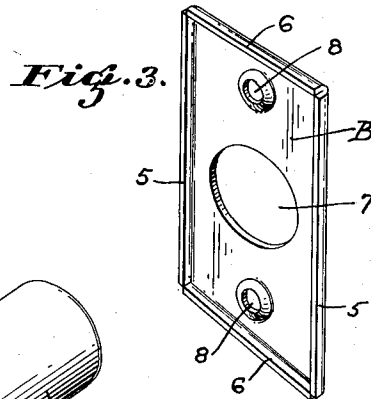
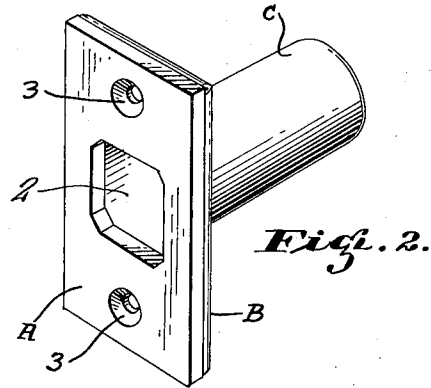
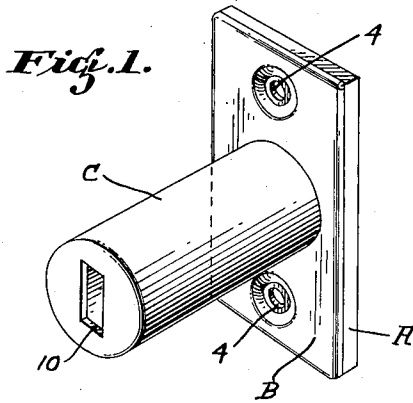
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LATCH FACE PLATE MOUNTING

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LATCH-FACE-PLATE MOUNTING

Application filed July 18, 1928. Serial No. 293,559.

This invention relates to door latches, such as shown in my co-pending application entitled "Door latch" filed June 18, 1928, Serial Number 286,078 and especially to improvements in the construction and assembly of the latch housing and face plate cooperating therewith.

The object of the present invention is to generally improve and simplify the construction and operation of door latches, and especially to provide a structure whereby the connection between the latch housing and the face plate is improved and strengthened, and whereby turning movement of the latch housing with relation to the face plate is prevented.

The face plate and latch housing assembly is shown by way of illustration in the accompanying drawings, in which:

Fig. 1 is a perspective view of the latch housing and face plate, as assembled.

Fig. 2 is a similar view looking from the face plate side.

Fig. 3 is a perspective view of the auxiliary face plate.

Fig. 4 is a perspective view of the latch housing.

Fig. 5 is a longitudinal vertical section of the latch housing and face plate, when assembled.

Referring to the drawings and particularly Figs. 2, 3 and 4, A indicates a main face plate, B an auxiliary face plate, and C the latch housing. The main face plate may be constructed of any suitable metal, it is rectangular in shape, as shown, and it is provided with a central opening 2 through which the latch extends and whereby the latch is guided. The main face plate is otherwise provided with two openings, such as indicated at 3, 3 for the reception of screws whereby the face plate may be secured to the edge of a door. The openings 3 are preferably formed by punch or press operation, so as to force the metal outwardly through the rear face of the plate, thereby forming an annular shoulder 4, which is later on seamed over to secure the auxiliary face plate B, as will hereinafter be described.

The auxiliary face plate B is rectangular in shape, and of a size similar to the main

plate A. It is usually constructed of a lighter material, and it is provided with side flanges 5, 5 and end flanges 6, 6. It is also provided with a central opening 7, so as to permit it to be slipped over the latch housing C, and it is further provided with perforations 8, 8 at opposite ends, to permit fastening screws to extend therethrough. The latch housing C is cylindrical and elongated in form, as shown in Figs. 4 and 5. The inner end is provided with a suitably shaped opening 10, to permit the latch shank or plate to extend therethrough. The forward end is provided with an annular flange 11, and this is cut away on opposite sides, as indicated at 12, 12, to form flattened opposed surfaces which are engaged by the side flanges 5, 5 of the auxiliary face plate B. The distance which the flanges 5, 5 and 6, 6 project is equal or slightly less than the thickness of the flange 11, so that a clamping action is exerted when the flange 11 is interposed between the plates A and B.

In actual operation the auxiliary face plate B is slipped over the latch housing C, and this is turned so that the flattened sides 12 of the flange 11 will lie between the side flanges 5. This is important as it locks the latch housing against rotation. The main face plate A is then placed against the flange face of the auxiliary plate B, and the annular flange 4 previously referred to will then extend through the screw openings 8. The plates are then placed tightly together and the annular flanges seamed over, as shown at 14, in Fig. 5. The flange 11 of the latch housing is thus securely clamped between the main face plate and the auxiliary plate, and it is furthermore secured against rotation due to the engagement of the side flanges 5, and the flattened face 12 of the latch housing flange. The structure and connection is rigid, and displacement of the parts with relation to each other is positively prevented as the plates A and B are secured at opposite ends by the seamed annular flanges 4, and the latch housing is secured by the flattened face 12 engaging the flanges 5.

While certain features of the present invention are more or less specifically described,

I wish it understood that various changes may be resorted to within the scope of the appended claims, similarly that the materials and finishes of the several parts employed may be such as the manufacturer may decide, or varying conditions or uses may demand.

Having thus described my invention, what I claim and desire to secure by Letters Patent is:

1. In a device of the character described, a latch housing having an annular flange formed at one end, a main face plate engaging the flanged end of the latch housing; and an auxiliary face plate secured to the rear side of the main face plate and engaging and clamping the annular flange of the latch housing with relation to the main face plate.
2. In a device of the character described, a latch housing having an annular flange formed at one end, said flange being flattened on opposite sides; a main face plate engaging the flanged end of the latch housing; an auxiliary face plate secured to the rear side of the main face plate and engaging and clamping the annular flange of the latch housing with relation to the main face plate; and means on the auxiliary face plate engaging the flattened sides of the flange and securing the latch housing against rotation with relation to the main and auxiliary face plates.
3. In a device of the character described, a cylindrical shaped elongated latch housing, substantially closed at one end and open at the other end; an annular flange on the open end of the housing; said flange being flattened on opposite sides; a main face plate engaging the front face of the flange; an auxiliary face plate having an opening formed therein permitting it to be slipped over the latch housing so as to engage the rear face of the flange; and means whereby the face plates are rigidly secured with relation to each other so as to clamp and secure the flange of the latch housing.
4. In a device of the character described, a cylindrical shaped elongated latch housing, substantially closed at one end and open at the other end; an annular flange on the open end of the housing; said flange being flattened on opposite sides; a main face plate engaging the front face of the flange; an auxiliary face plate having an opening formed therein permitting it to be slipped over the latch housing so as to engage the rear face of the flange; means whereby the face plates are rigidly secured with relation to each other so as to clamp and secure the flange of the latch housing; a pair of side flanges on the auxiliary face plate, and means on the latch housing flange engageable with the side flanges and securing the latch housing against rotation with relation to the face plates.
5. In a device of the character described, an elongated cylindrical housing having an annular flange formed at one end, and flattened

portions formed on opposite sides of the flange, an auxiliary face plate, rectangular in shape and having side and end flanges formed thereon; said flanges projecting from the inner face of the plate a distance slightly less than the thickness of the flange on the latch housing; said auxiliary face plate having a circular opening formed therein permitting it to be slipped over the latch housing so as to engage the rear face of the latch housing flange, and to assume a position where the side flanges of the auxiliary face plate will engage the flattened portions of the latch housing flange so as to secure the latch housing against rotation with relation to the auxiliary face plate and a main face plate secured to the auxiliary face plate, and clamping the latch housing flange between the face plates.

6. In a device of the character described, a face plate, an auxiliary face plate, said auxiliary face plate having an opening formed therein to receive one end of a latch housing, a flange on the end of the latch housing, adapted to be interposed between the face plate and the auxiliary face plate, and means securing the face plate and the auxiliary face plate with relation to each other so as to retain the flanged end of the latch housing against removal.

WALTER R. SCHLAGE.