

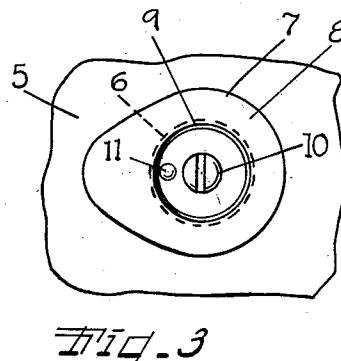
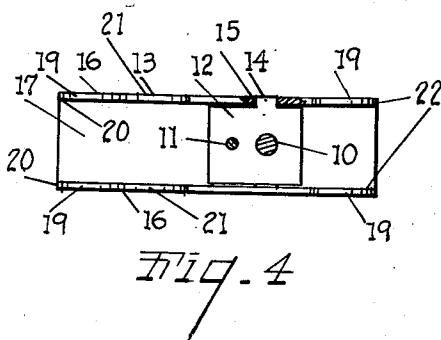
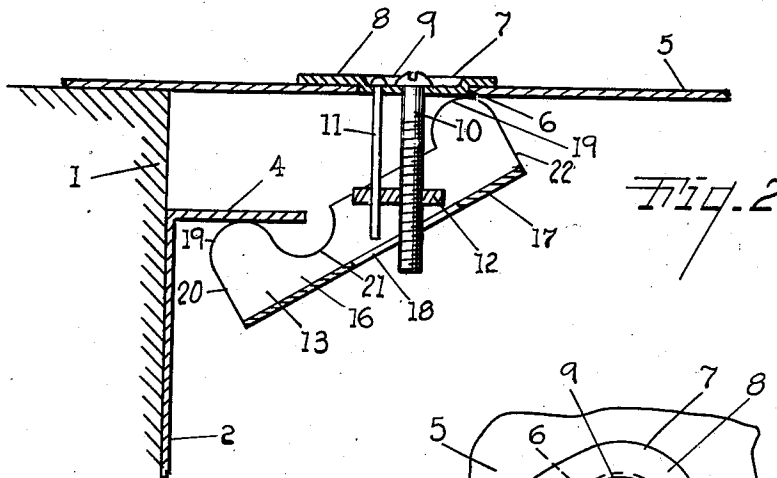
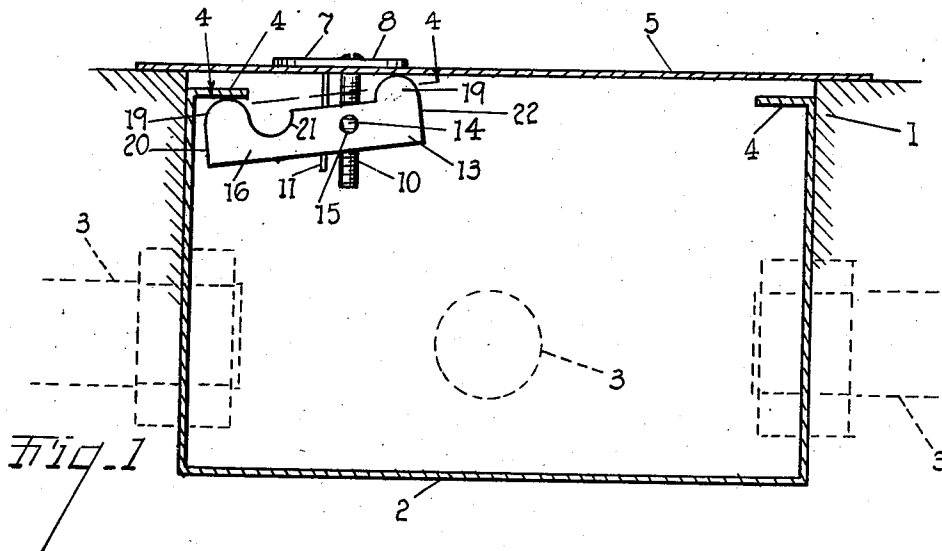
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FINISH OR WALL PLATE

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FINISH OR WALL PLATE

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3 Claims. (Cl. 220—24.2)

This invention relates to improvements in finish or wall plates.

The main objects of my invention are:

First, to provide a finish or trim wall plate having novel and improved provisions for clamping the same to a switch box or other similar receptacle mounted in a wall.

Second, to provide a plate of the type described adapted to be brought into operative closing relation and secured in that position by an improved locking device which is effective for its intended purpose without entailing alteration of the receptacle in any manner or the provision of particular locking means on the wall for co-action with said device.

Third, to provide locking means for a finish or wall plate.

Fourth, to provide a plate of the type described which may be attached to variously positioned receptacles.

Further objects relating to details and economies of my invention will definitely appear from the description to follow. The invention is defined in the claims.

A structure embodying the features of the invention is illustrated in the accompanying drawing, wherein:

Fig. 1 is a plan view in horizontal section through a wall and receptacle therein, illustrating my finish plate and locking device associated therewith in operative relation to the receptacle.

Fig. 2 is an enlarged fragmentary plan view in horizontal section further illustrating the details of my invention.

Fig. 3 is a fragmentary view illustrating a detail of the exterior of the finish plate of my invention.

Fig. 4 is an elevational view in section on line 4—4 of Fig. 1, further illustrating the construction of the locking element.

The present invention relates to a finish or wall plate for a receptacle mounted in a wall and adapted to enclose fuses, switches, or other similar elements, the invention being more particularly concerned with the provision of improved locking means cooperative with said receptacle whereby the finish plate may be quickly and easily assembled thereon and releasably though securely held in assembled position. Generally speaking, the invention contemplates the provision of a toggle clamp member having a medial pivot engageable by a threaded member and the ends of which are engageable respectively with the finish plate and the receptacle whereby actuation of the threaded member will draw the re-

ceptacle and plate together to lock the latter in desired position.

Referring to the drawing, the reference numeral 1 indicates a wall having a sheet metal outlet box or receptacle 2 therein with which cables 3, indicated in dotted lines, communicate. The said receptacle has inwardly extending flanges 4 on its walls.

The reference numeral 5 designates the finish or trim plate of my invention which it is desired to lockingly associate with the said receptacle and the plate has an opening 6 therein to receive the locking member which is generally indicated by the reference numeral 7.

The locking member consists of a fastener plate 8 embossed at 9 to provide a projection engageable in opening 6 and pointed to further facilitate locating the member properly in assembling. The projection or boss 9 is apertured to receive a tightening member in the form of a machine screw 10 and an elongated guide pin 11. The screw threadedly engages the cross bar 12 of the locking toggle element 13 while the pin 11 is slidably received in another aperture in the said cross bar.

The cross bar 12 has trunnions 14 pivotally received in openings 15 in the parallel sides or arms 16 of the toggle element 13, the latter being U shaped in cross section. The bottom or base 17 of the element has a clearance opening 18 therein through which the free end of the screw extends.

The ends of element 13 are adapted to engage respectively the flange 4 of receptacle 2 and the inside of plate 5 and are therefore provided with rounded extensions 19 serving in the capacity of cams for this purpose. The flange engaging end 20 has a concavity 21 formed adjacent its projection 19 in order to provide space to accommodate the end of flange 4 for the initial engagement of the projection with the inside of the flange.

The operation of my device is as follows: The finish plate is brought into closing relation to the receptacle with the toggle element 13 and screw 10 on the plate and with the screw sufficiently backed away on cross bar 12 to allow the engagement of the inside of flange 4 by cam 19 on end 20 of the locking element as described. Although the flange is hidden by the plate 5 in this relative position of the parts, it is possible to bring the locking element into proper position because of the fact that the fastener plate 8 is pointed to facilitate its orientation. Likewise, the guide pin 11 serves to bring the toggle element

13 into proper position relative to the flange when the fastener plate is manipulated for this purpose. The screw is thereupon tightened, with the result that the opposite end 22 of the element 5 engages the inside of plate 5. Further rotation of the screw will swing the locking or toggle element 13 around trunnions 14 toward a position in alinement with the cross bar. This draws the wall plate 5 inwardly under the camming action of extensions 19, the screw being tightened until the desired contact of the wall plate 5 with wall 1 is accomplished.

The advantages of my construction are obvious. It is very simple in nature and inexpensive of production yet very effective in operation for the desired purpose and the single screw included therein fully performs the function of a plurality of screws in hitherto known constructions. It also permits a wide range in the placement of the receptacles.

I have illustrated and described my improvements in an embodiment which is very practical. I have not attempted to illustrate or describe other embodiments or adaptations as it is believed this disclosure will enable those skilled in the art to embody or adapt my improvements as may be desired.

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

1. The combination of a finish plate, and means for mounting said plate to a wall receptacle comprising a fastener plate having an offset portion thereon adapted to fit an opening in said finish plate and having a hole therein and a locating portion, a screw extending through said

hole at right angles to said fastener plate, and a clamping element having a nut member journaled therein, said element having a surface adapted for camming engagement with said receptacle, said screw threadedly engaging said nut member to pivot said element about said nut member and draw said finish plate into operative relation to said receptacle.

2. Means for operatively mounting a finish plate relative to a wall receptacle, said means comprising a fastener plate adjustable relative to said finish plate, a threaded tightening member carried by said fastener plate, a clamping element, means pivotally connected to said element and threaded engaged by said member, said element engaging said receptacle and finish plate, whereby actuation of said member causes pivotal movement of said element around said means connected thereto to draw the finish plate into operative relation to the receptacle, and means carried by said fastener plate and engaging said pivotally mounted means to permit threading rotation of said member relative thereto.

3. The combination of a finish plate for a receptacle of the class described having an inwardly projecting part, a securing means for said plate comprising a clamping screw carried by the plate, a nut member on said screw, a clamping member pivoted on said nut member and adapted to contact the plate and the projecting part on the receptacle, and means carried by the plate for preventing rotative movement of the nut member.

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