

March 19, 1940.

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2,194,033

STRIKER PLATE

Filed March 31, 1938

2 Sheets-Sheet 1

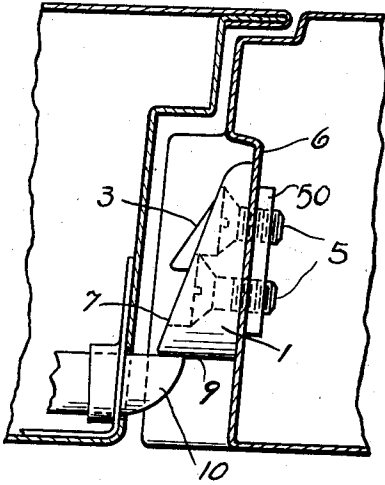


Fig. 2

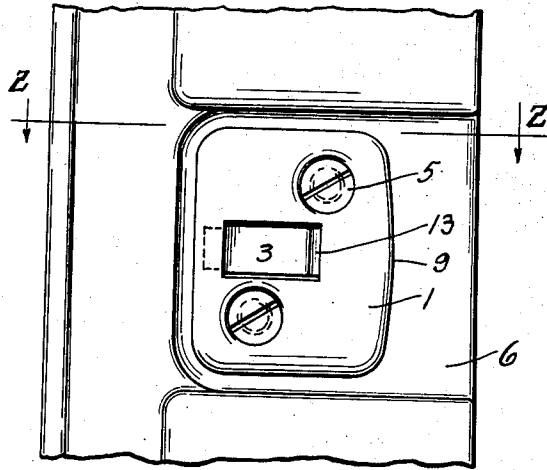


Fig. 1

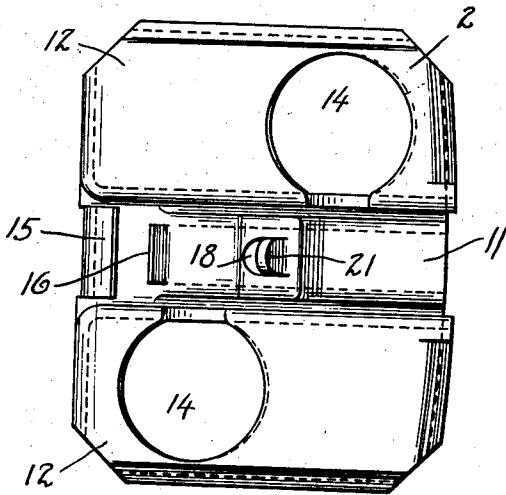


Fig. 8

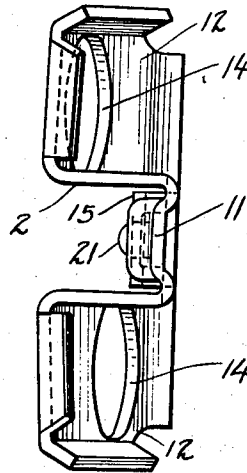


Fig. 9

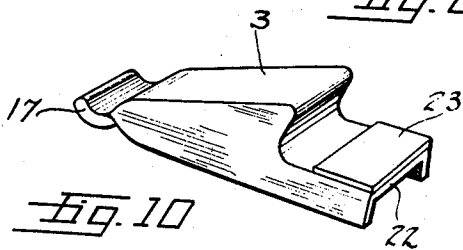


Fig. 10

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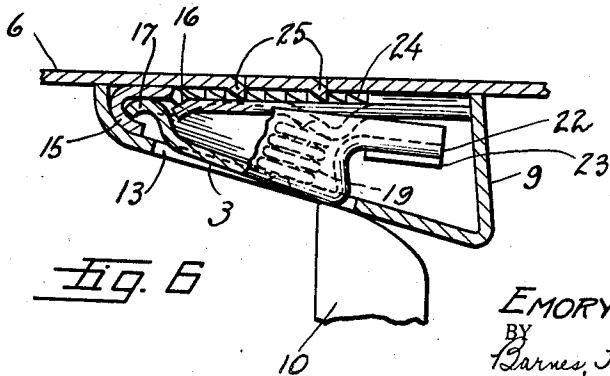
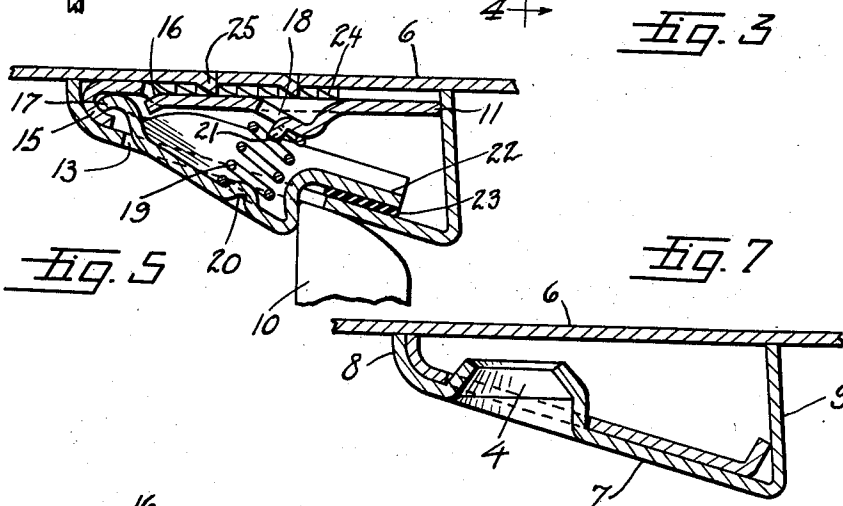
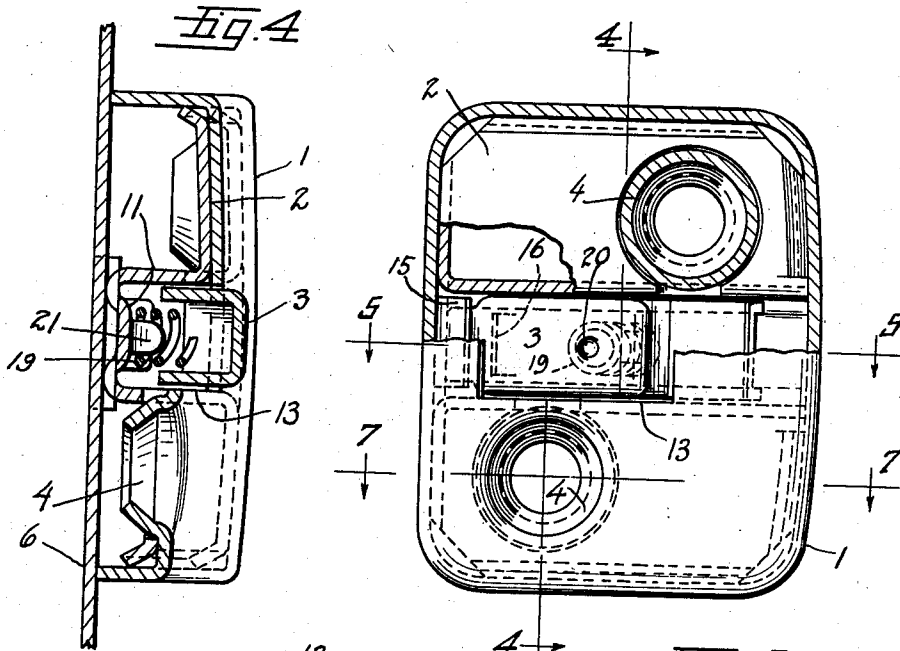
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STRIKER PLATE

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2 Sheets-Sheet 2



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STRIKER PLATE

Emory Glenn Simpson, Detroit, Mich., assignor
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Application March 31, 1938, Serial No. 199,207

5 Claims. (Cl. 292—340)

This invention relates to a striker plate for a latch bolt and more particularly to a stamped striker plate with a pivoted safety catch.

A striker plate with a pivoted safety catch is broadly old in the art. However, it is believed it is new to fabricate a striker plate with a pivoted safety catch from metal stampings. This invention contemplates a stamped metal striker plate with a pivoted safety catch which is simple in structure, cheap to manufacture and stronger and more durable than a die-cast striker.

In the drawings:

Fig. 1 is an elevation showing the striker plate assembled to the jamb pillar.

Fig. 2 is a sectional view showing the door closed with the bolt interengaged with the final step of the striker.

Fig. 3 is an elevational view partly in section of the striker.

Figs. 4 and 5 are sectional views along the lines 4—4 and 5—5 of Fig. 3.

Fig. 6 is a view similar to Fig. 5 showing the safety catch depressed by the latch bolt.

Fig. 7 is a section along the line 7—7 of Fig. 3.

Figs. 8, 9 and 10 are details of the striker.

Referring more particularly to the drawings it will be seen that the striker comprises three main parts: the housing 1, a retainer 2 and the pivoted safety catch 3, all of which are metal stampings.

The housing 1 is provided with the countersunk openings 4 which receive the bolts 5 which screw into nut 50 to secure the housing 1 to the body door jamb pillar 6. The housing has its outer face 7 inclined along a continuous uphill plane from its front edge 8 to the rear edge 9 along which the latch bolt 10 climbs in the closing of the door until it engages behind the innermost face 9 or final step of the striker to latch the door. The housing 1, upon being secured to the body jamb pillar 6, retains the retainer 2 and the safety catch 3 in position.

The retainer 2 is stamped in the form shown particularly in Figs. 8 and 9. The periphery of the retainer 2 corresponds to the inside periphery of the housing 1 so that the retainer 2 will fit snugly within the housing 1. The retainer comprises a central U channel portion 11 which serves as a socket for the safety catch 3 and flange portions 12 which seat against the inside face of the housing 1 on each side of the opening 13 for the safety catch. The flanges 12 are provided with openings 14 for the countersunk holes 4 in the housing 1.

The front end of the channel portion 11 of the retainer is provided with a turned back lip 15. The base of the channel portion 11 has a struck up lug 16 which cooperates with the lip 15 to serve as a socket for the arcuate end 17 of the safety catch 3. The lip 15 cooperates with the arcuate end 17 of the safety catch 3 to form a hinge connection between the safety catch 3 and the retainer plate 2. It will be noted that when the housing 1 is removed that this hinge connection is freely separable so that the safety catch can be readily assembled to, and disconnected from, the retainer 2.

The base of the channel 11 is bumped up as at 18 to form a seat for the coil spring 19 which projects the safety catch 3. It will be noted that the seat 18 is normal to the central longitudinal axis of the coil spring 19. The safety catch is bumped in as at 20 and the seat 18 has a struck up lug 21 which interengages the coil spring 19 at its opposite ends to hold the same in place. The safety catch is of channel cross section (Fig. 4) and thus cooperates with the channel portion 11 to house the coil spring 19. The safety catch is provided with a stop portion 22 which cooperates with the inner face of the housing 1 to limit the outward projection of the safety catch 3. A rubber bumper 23 for silencing the action of the safety catch is preferably secured to the stop portion 22.

The bottom side of the channel portion 11 of the retainer 2 is provided with a plurality of teeth 24 and the jamb pillar 6 is provided with a pair of struck out lugs 25 which cooperate with the teeth 24 to securely hold the retainer and thus the entire striker plate assembly in whatever position it is adjusted inwardly and outwardly along the face of the jamb pillar 6.

It is evident that the housing 1 for the retainer plate 2 and keeper 3 also cooperates with the safety catch 2 to retain the same in hinged relation with the retainer 2.

In the closing of the door the head of the bolt latch 10 rides up the incline face 7 of the housing 1 and, as shown in Fig. 6, depresses the safety catch 3 flush with the face 7 of the housing. As soon as the bolt head 10 rides beyond the face of the safety catch 3, the spring 19 projects the same outwardly so that the bolt 10 engages behind the safety catch 3, as shown in Fig. 5, to latch the door. Further closing movement of the door causes the bolt head 10 to finally ride off the striker face 7 and snap behind the final step 9 of the striker.

In the opening of the door the bolt is re-

tracted sufficiently far to clear the final step 9 of the striker and at this time the bolt head is also free to clear the safety catch 3.

I claim:

5 1. A striker plate comprising a retainer plate having a channel, a yieldable safety catch for the said channel, one end of the channel having a turned back lip which cooperates with the forward end of the safety catch to provide a hinged connection between the safety catch and the retainer plate, and a housing positioned over and concealing the said retainer plate, said housing having an inclined face along which the bolt is adapted to travel in the closing of the door, said 10 face having an opening through which the safety catch projects, said housing serving as a closure for the said channel to limit the outward projection of the safety catch and to retain the safety catch in hinged relation with the retainer 15 plate. 20

2. A striker plate adapted for interengagement with a latch bolt comprising a stamped metal retainer plate, a stamped metal safety catch, a hooked lip on the retainer plate adapted 25 to engage the forward end of the safety catch to hinge the safety catch to the retainer plate, and a stamped metal housing positioned over the retainer plate for maintaining the safety catch and retainer plate in hinged relation, the said 30 housing having an inclined face provided with an opening through which the safety catch normally projects.

3. A striker plate adapted for interengagement with a latch bolt comprising a stamped metal 35 retainer plate having a channel portion, the base of the channel portion having a return bent lip and a struck out lug cooperating to form a socket, a stamped metal safety catch having an end portion positioned in the said socket whereby the 40 said socket and end portion serve as a separable hinge about which the safety catch swings within and without the said channel, and a housing having an inclined face positioned over the retainer plate for closing the said channel and 45 retaining the safety catch in hinged relation with

the retainer plate, the inclined face of the housing having an opening through which the safety catch normally projects and a spring for normally projecting the said safety catch.

4. A striker plate adapted for interengagement 5 with a latch bolt comprising a stamped metal retainer plate having a channel portion, the base of the channel portion having a return bent lip and a struck out lug cooperating to form a socket, a stamped metal safety catch having an end portion 10 positioned in the said socket whereby the said socket and end portion serve as a separable hinge about which the safety catch swings within and without the said channel, a housing having an inclined face positioned over the 15 retainer plate for closing the said channel and retaining the safety catch in hinged relation with the retainer plate, the inclined face of the housing having an opening through which the safety catch normally projects and a spring for normal- 20 ly projecting the said safety catch, a lug struck out of the base of the channel, a bump pressed inwardly of the striker plate, and a coil spring positioned over the said bump and lug between the base of the channel and the safety catch 25 for normally projecting the safety catch.

5. A striker plate comprising a stamped metal retainer plate having a channel portion, a stamped metal safety catch of channel cross section telescoped within the channel portion of the 30 metal retainer and pivotally mounted in the channel at its forward end to swing within and without the channel, a spring positioned between the safety catch and the base of the channel portion of the retainer whereby the channel 35 shaped safety catch and channel portion of the retainer serve as a housing for the spring, a housing having an inclined face positioned over the retainer for closing the channel and limiting the pivoting movement of the safety catch, the 40 inclined face of the housing having an opening through which the safety catch normally projects to serve as a safety catch for the latch bolt in the closing of the door.

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