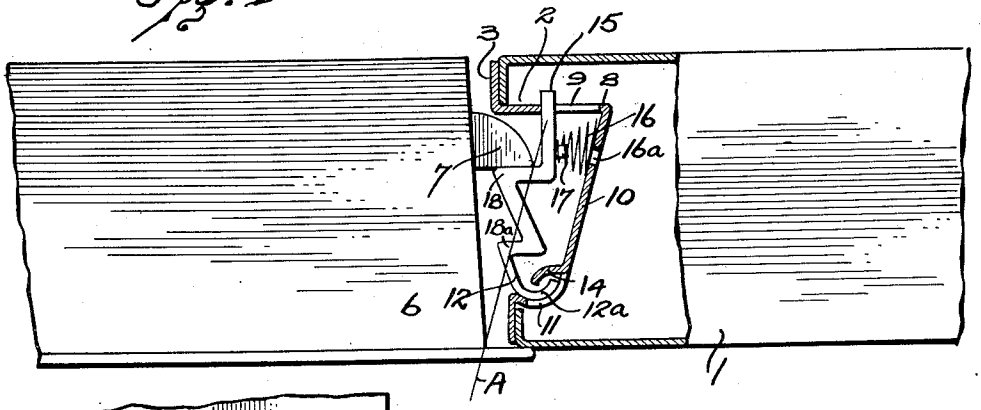
March 20, 1928. 1,663,300

S. H. HALPER

STRIKER PLATE

Filed April 30, 1927

Fig. 1



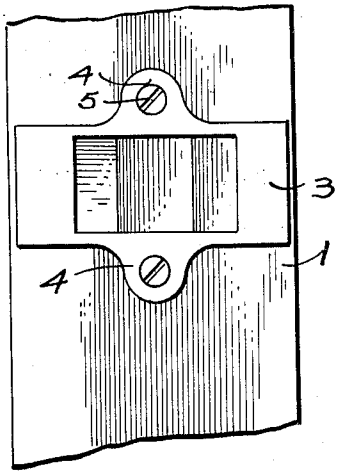


Fig. 3

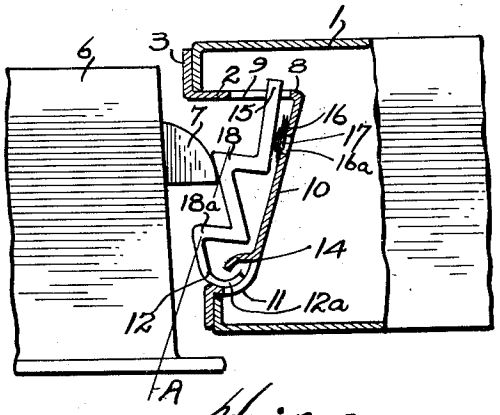


Fig. 2

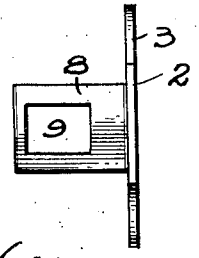


Fig. 4

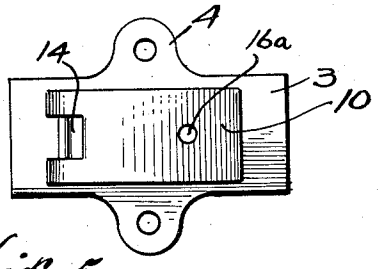


Fig. 5

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STRIKER PLATE.

Application filed April 30, 1927. Serial No. 187,717.

This invention relates to improvements in striker plates for door latches, and is primarily intended for use in connection with automobile door latches.

Owing to the fact that the springs which hold latch bolts in outward position are usually very strong to guard against accidental disengagement of the bolt from its striker plate many people make the mistake of slamming the doors. This in course of time loosens the body parts and causes other damage thereto. Moreover owing to the pressure required on a latch bolt to move it inwards it frequently happens that the bolt engages only the first dog on a fixed striker plate with the result that the door is not fully closed.

It is an object of the present invention to provide a striker plate having dogs so arranged on a movable retainer that when a latch bolt comes in contact with the dogs when moving into locking position the latter will move inwards and permit the bolt to pass either into intermediate or fully closed position; and further to so arrange the dogs that the latch bolt is securely held by them once the bolt has moved past either or both of them. Moreover since only slight pressure in the correct direction is required to move the dogs the possibility of a door being accidentally only half closed or not closed at all is practically eliminated.

A further object of the invention is to provide a striker plate which can be produced at comparatively slight cost, and wherein the dogs are so mounted on a retainer that the latter cannot come out of its plate once the latter has been mounted in position in a door frame member.

With these and other objects in view, the invention is hereinafter more fully described with the aid of the accompanying drawings, in which:

Figure 1 illustrates a sectional view of the striker plate in position in a door frame member, and a latch bolt engaged thereby.

Figure 2 shows a similar view but with the dogs and retainer plate being depressed by the latch bolt.

Figure 3 is a front view of the striker plate, and

Figures 4 and 5 are end and rear views of the latter.

Referring to the drawings, 1 designates a door frame member within which a striker plate 2 is arranged. The margins 3 of the latter are preferably outwardly flexed and bear against the end of the door frame member. Through the lugs 4 integral with these margins fastening means, such as the screws 5, pass which hold these margins to the member 1.

In the striker plate intermediately of its width and height, and on the far side of the striker plate towards which the door 6 and latch bolt 7 swing when moving into closed position, is an inwardly projecting wall 8 through which an opening 9 is provided. The back 10 of the striker plate is forwardly inclined from the wall 8 towards its opposite side 11 which is slightly concave on the inside.

A retainer 12 is mounted in the striker plate and has a curved end 12^a which turns on the concave side 11 and is held thereagainst by an inbent finger 14 integral with the back 10. The opposite end 15 of the retainer extends through the opening 9. This opposite end is normally held against the outer side of the opening 9 by the tension of the spring 16 which is arranged between the back 10 and the retainer. Moreover in order to hold this spring in position a projection 17 may be provided on the back of the retainer to engage one end of the spring, and a hole 16^a may also be provided in the back 10 for the projection to enter when the retainer is forced back by the latch bolt. On the outer surface of the retainer, and usually integral therewith, are dogs 18 and 18^a which are provided to engage the latch bolt and hold it in either fully closed or intermediate position.

As the latch bolt swings against the first dog 18^a the dog and its retainer move inwards as the spring 16 is weaker than the spring (not shown) which holds the latch bolt in extended position. However once the latch bolt is past the dog 18^a the spring 15 moves that dog forward again so that the latch bolt cannot repass it until the latter is moved inwards in the normal manner. Similarly the dog 18 is depressed if the door continues to swing and is similarly moved outwards again by the spring so that the bolt is securely held.

In this manner means are provided for allowing the door to be partially or entirely closed with far less effort, and then held securely in that position. The line A—A in-

dicated in Figures 1 and 2 show the path through which the end of the latch bolt turns as the door 6 swings.

Having thus described the invention, what I claim is:

1. In an article of the character described the combination of a striker plate having a trough-shaped central portion, means for attaching the marginal portions of said plate to a door frame, a retainer pivotally mounted in said trough-shaped portion adapted to swing either wholly within the latter or so that it projects partly therefrom, means on the outer surface of said retainer adapted to engage a latch bolt, means for limiting the outward swing of said retainer, and means for tending to hold the retainer so that its outer surface projects outwardly from said trough-shaped portion.

2. In an article of the character described, the combination of a striker plate having a trough-shaped central portion and outwardly flared margins, a retainer pivotally mounted in said trough-shaped portion and towards one end of the latter, the opposite end of said trough-shaped portion having an opening therethrough, one end of said retainer extending through said opening, means on the outer surface of said retainer for engaging a latch bolt, said retainer being adapted to swing either wholly within said trough-shaped portion or so that its outer surface projects beyond the outwardly flared margins of the plate, and means for tending to hold the retainer in the latter position.

3. In an article of the character described, the combination of a striker plate having a trough-shaped central portion, a retainer in said trough-shaped portion provided on its outer surface with means adapted to engage a latch bolt, an inwardly curved finger integral with the bottom of the trough-shaped portion towards one end of the latter, the opposite end of said portion having an opening therethrough, an inwardly curved portion at one end of said retainer coacting with said finger so that said retainer may swing pivotally on the latter, the opposite end of said retainer extending through said opening so that the pivotal movement of the retainer is limited by the length of said opening, and a spring between the underside of said trough and said retainer which tends to hold the latter so that its outer surface projects forwardly from said trough-shaped portion, said retainer being however adapted to be swung wholly within said trough-shaped portion.

SAMUEL H. HALPER.