Feb. 24, 1931. J. HAMMERL 1,794,073

STRIKER

Filed March 28, 1927

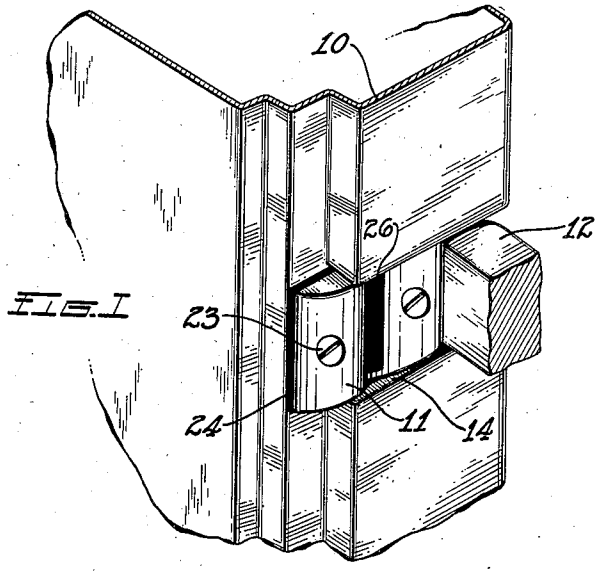


FIG. 1

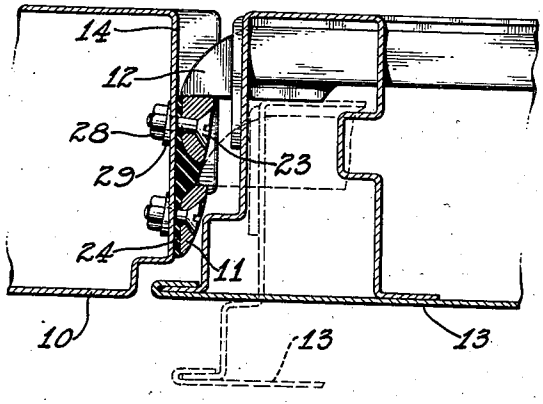


FIG. 2

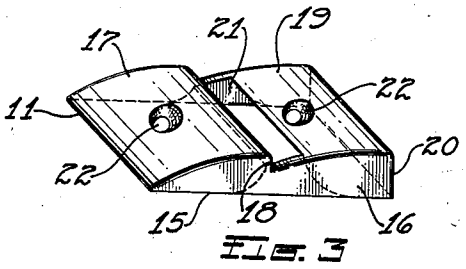


FIG. 3

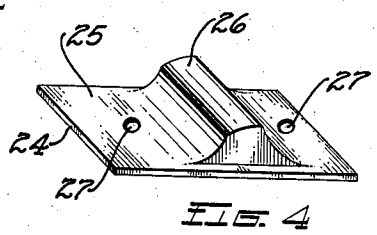


FIG. 4

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UNITED STATES PATENT OFFICE

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STRIKER

Application filed March 28, 1927. Serial No. 178,849.

This invention relates to motor vehicles and more particularly to motor vehicle body structure.

An object of the invention is to provide a striker plate for the door of a motor vehicle body.

Another object of the invention is to provide a sound insulated striker plate for the door of a motor vehicle body.

Another object of the invention is to deaden noise developed by closing the door of a motor vehicle body by using an insulated striker plate constituted and arranged to act as a cushion to deaden noise caused by the impact of the door lock bolt upon the striker plate.

Another object of the invention is to provide a two-notch striker plate adapted to cooperate with the bolt of a lock on the door of a motor vehicle, to effectively deaden the click of the bolt as it drops into the first notch and to act as a cushion to deaden the sound incident to completing the closing of the door.

Other objects of the invention will appear from the following description taken in connection with the drawings, which form a part of this specification, and in which:

Fig. 1 is a perspective view illustrating the invention mounted upon the jamb face of a portion of a motor vehicle body pillar;

Fig. 2 is a cross-sectional view of a portion of a pillar and a door illustrating the invention as applied, the door being shown in full lines in the closed position and in dotted lines in a partially closed position;

Fig. 3 is a perspective view of the striker plate, and

Fig. 4 is a perspective view of the cushion.

It is common practice in motor vehicle body construction, particularly in all steel bodies, to mount a striker plate for the door lock bolt directly upon the steel frame. In such structure the impact of the lock bolt on the striker plate is carried along the metal door frame and distributed through the body panels resulting in a disagreeable noise when closing the door. Furthermore, such striker plates are generally provided with two notches or catches, one to receive the lock bolt when the door is partially closed and the other to engage the bolt when the door is fully closed. When the lock bolt engages the first notch upon partially closing the door, there is imparted a distinct click of the lock bolt upon the metal striker plate which is also distributed through the frame and body panels. It is the aim of the present invention to overcome these noises by providing a striker plate in which the noise incident to closing the door is nil or negligible.

Referring by numerals to the drawings, 10 represents a door pillar of a motor vehicle body frame having mounted thereupon a striker plate 11 adapted for co-operation with a bolt 12 of a lock carried by a door 13. As shown, the face of the pillar forming a jamb for the door is slotted or recessed as at 14 to receive the striker plate 11 which is positioned in the slot with a slight clearance between its side faces and the side walls of the slot, the object being to prevent contact between the metal portion of the striker plate and the pillar so that noise created by the impact of the bolt against the striker plate is blocked from distribution to the frame of the vehicle.

As shown, the striker plate 11 comprises a plate having a flat bottom portion 15, vertical side walls 16, and a face portion gradually curved as indicated at 17 from the base or bottom at one end to substantiate the center, where the curved portion 17 meets the upper end of a vertical portion 18 constituting the first notch, from the lower end of which the remaining portion of the face is gradually curved as at 19, to the other end of the plate which is normal to the base as indicated at 20. The curved face 19 is provided with an elongated transverse slot adjacent and parallel to the vertical portion 18, the object of which will hereinafter appear. Each of the curved faces are provided with apertures 22 for the reception of screws or bolts 23 by means of which the plate is secured in position.

A cushion 24 is fitted beneath the plate 11. As shown, the cushion comprises a sheet or mat 25 of any suitable sound deadening material such as rubber having formed integral therewith a raised portion 26 fitting

snugly into the slot 21 flush with the curved face 19. The sheet or mat 25 is provided with apertures 27 which register with the apertures 22 in the curved faces of the striker plate, to receive the screws or bolts 23 which secure the striker plate and cushion in position. As shown, the heads of the bolts 23 are countersunk in the curved faces of the striker plate with their shanks extending through the plate, the cushion and the wall of the pillar 10 and taps 28 are threaded upon the shanks with sound deadening washers 29 interposed.

In operation the striker plate 11 is mounted upon and insulated from the pillar 10 by the sound deadening cushion 24, the raised portion 26 on the cushion fitting the slot 21 adjacent to the vertical portion 18 constituting the first notch or catch of the striker plate. It will thus be readily observed that upon closing the door the lock bolt will impact upon the curved face 17 of the striker plate without noise, since the striker plate is insulated by the cushion 24, that upon the bolt sliding over the curved face 17 and dropping into the first notch on the raised portion 26 of the cushion 24 any noise incident to the throw or seating of the bolt is avoided and that the bolt is free to move from the first notch or catch upon completing the closing of the door over the raised portion 26 and the face 19 which is flush therewith and finally drops back of the end of the striker plate which is normal to the base.

While I have shown and described the preferred embodiment of my invention, I wish it to be understood that I do not confine myself to the precise details of the construction herein set forth by way of illustration, as it is apparent that many changes and variations may be made therein by those skilled in the art, without departing from the spirit of the invention or exceeding the scope of the appended claims.

Having thus described the various features of my invention, what I claim as new and desire to secure in this patent is:

1. A striker plate comprising a plate having a catch and a transverse slot adjacent to the catch, a sound insulating member upon the back of the plate and a raised portion on the sound insulating member protruding into the slot.

2. A striker plate comprising a plate with a flat back portion and a notched face portion, the plate having a slot adjacent to the notch, a sound insulating member bearing against the back of the plate and a raised portion upon the sound insulating member positioned in the slot.

3. A striker plate comprising a plate having a flat back portion and a face portion with stops in series, the plate having a transverse slot adjacent to the first stop in the series, a sound insulating member upon the back of the plate, and a raised portion upon the sound insulating member positioned in the slot flush with the face of the plate.

4. A striker plate comprising a plate having a catch and a transverse slot adjacent the catch, a cushioning member upon the back of the plate and a raised portion on the cushioning member protruding into the slot.

5. In a striker, an apertured striker portion, and a sound insulating inset extending through the aperture, said inset being flush with the face of the striker portion and forming therewith a striker surface.

In testimony whereof I affix my signature.

JACOB HAMMERL.