April 1, 1958 M. A. DE ANGELO 2,828,996

STRIKER FOR A DOOR LATCH

Filed Sept. 14, 1955

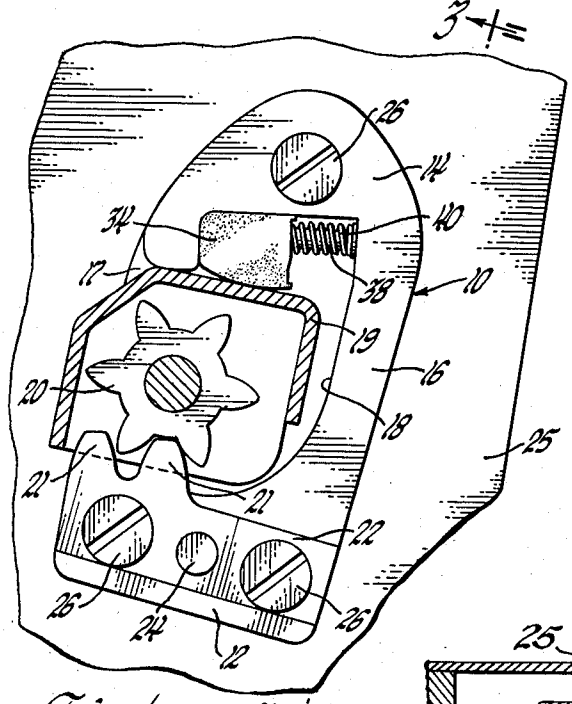



Fig. 1

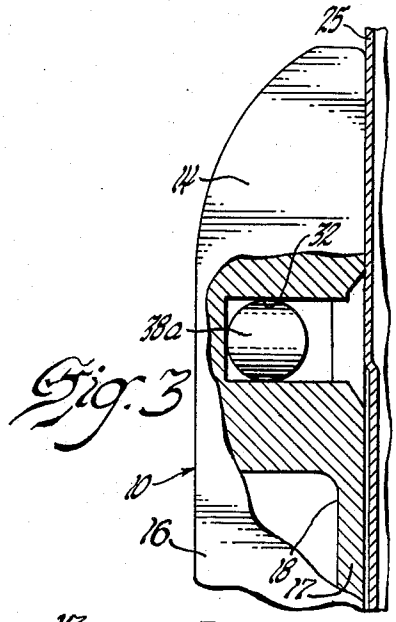



Fig. 3

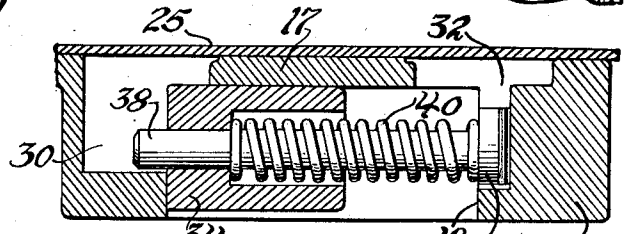



Fig. 4

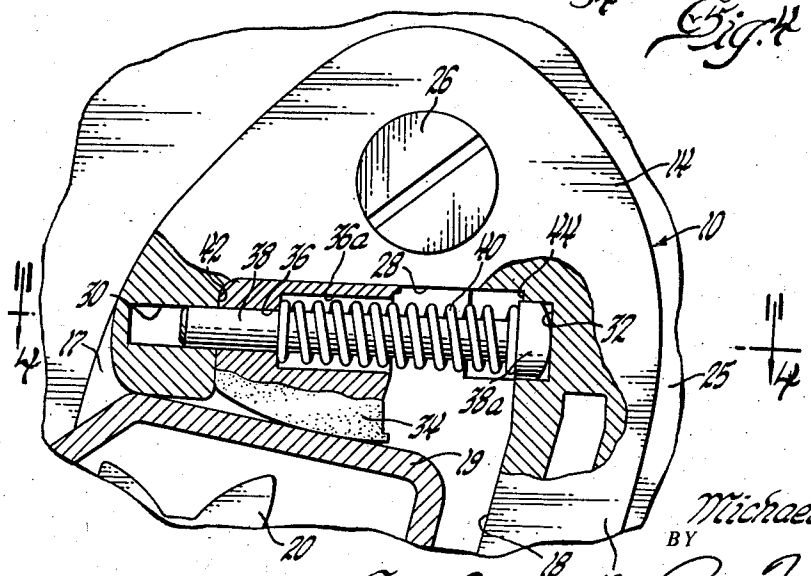



Fig. 2

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# STRIKER FOR A DOOR LATCH

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3 Claims. (Cl. 292—341.13)

This invention relates to a striker, and more particularly to a striker for an automobile door latch.

One feature of the invention is that it provides an improved striker; another feature of the invention is that it provides a striker having a slidable wedging shoe and readily removable means retaining the shoe on the striker body for slidable movement therealong; a further feature of the invention is that the striker body has opposed aligned retainer openings into which the stud which mounts the sliding shoe may be snapped; and still another feature of the invention is that the spring which normally urges the shoe to an operating position also holds the stud in the retaining openings in the striker.

Other features and advantages of the invention will be apparent from the following description and from the drawings, in which:

Fig. 1 is a side elevation of the improved striker mounted on an automobile door pillar and having a latch bolt in operating engagement therewith;

Fig. 2 is an enlarged view of the upper portion of the striker of Fig. 1, parts being shown in section;

Fig. 3 is an enlarged fragmentary view along the line 3—3 of Fig. 1, parts being shown in section; and

Fig. 4 is a section taken along the line 4—4 of Fig. 2.

In an automobile, the door latching means includes a latch with a movable bolt, the latch and bolt normally being carried by the door, and a striker mounted on the automobile body. In order to prevent vibration of the door, the striker has a sliding spring-pressed shoe which is wedgingly engaged by a part of the door latch to hold the door against vibration in vertical directions. In the past, this spring-pressed shoe has been nonremovably mounted on the striker body on a stud which is peened or riveted to the striker body. In addition to requiring a peening or riveting operation during assembly of the striker, this construction makes it difficult to replace or repair the shoe when necessary, and in the event it is necessary to remove the shoe, the mounting stud or rivet must be replaced with a new part when the shoe is assembled back on the striker.

This invention provides a novel and improved means for mounting the shoe on the striker, being mounted by readily removable means so that the shoe can be disassembled easily and without ruining the mounting stud. In the assembly of the parts, the formerly necessary riveting operation is eliminated and the assembly including the shoe and its mounting means is merely snapped into place in blind retaining openings in the striker body.

Referring more particularly to the drawings, the striker which is designated generally at 10 comprises a lower body portion 12, an upper body portion 14 and a connecting web 16 and backing plate 17. The upper and lower body portions 12 and 14 are spaced to form a recess 18 which is closed at one side by the web 16 and at another side of the backing plate 17. The recess receives a door latch part which may be a housing 19 for a rotary bolt 20.

The lower body portion 12 of the striker carries bolt engaging teeth 21 for cooperation with the bolt 20. While these teeth may be formed integrally with the striker body, in the striker illustrated in the drawings the teeth are formed on a separate steel plate 22 which fits in a recess in the lower striker body 12 and is secured by a rivet 24. When the striker is mounted on an automobile body mounting pillar 25, the two lower ones of the securing bolts 26 hold the parts 12 and 22 firmly together.



Referring particularly to Fig. 2, a trackway 28 is formed in the under surface of the upper striker body portion 14 at the upper end of the recess 18, and opposed aligned retainer openings 30 and 32 are provided at each end of the trackway. Preferably, these openings are blind and do not extend to the respective outside walls of the striker. A shoe 34 is mounted for sliding movement along the trackway 28. The shoe has a bore 36 through which a headed stud 38 extends and a coil spring 40 on the stud seats at one end against the head of the stud and at the other end against the sliding shoe, a portion of the spring entering an enlarged portion 36*a* of the bore 36. The stud 38 is longer than the distance between the opposed outer faces 42 and 44 of the retainer openings 30, 32, but the total distance provided between the blind ends of the aligned openings 30, 32 is greater than the length of the stud.

In assembling the striker, the spring 40 is slipped onto the shank of the stud 38 and the shank of the stud is then inserted through the bore 36 of the sliding shoe 34. The subassembly, including the parts 34, 38 and 40, may then be snapped into place in the striker body by inserting the end of the shank of the stud in the retainer opening 30 and snapping the enlarged head 38*a* of the stud into the opposed retainer opening 32.

In the past in striker assemblies the shoe has been slidable on a stud which was riveted to the stiker body, a construction of this type being shown in Patent 2,629,622. In addition to requiring a riveting operation during assembly, this riveted construction is disadvantageous in the event it is necessary to remove the slidable shoe for any reason. In such event, it has been necessary to break the riveted stud. With the construction shown and claimed here, it is only necessary to grasp the stud 38 with a pair of pliers or a similar tool and slide the stud along the retainer opening 30 until the head of the stud clears the retainer opening 32 so that the subassembly of stud 38, spring 40 and shoe 34 can be removed from the striker. The shoe can be repaired or replaced and the subassembly put back on the striker in the manner described earlier. This construction requires no additional parts than have been used in the past. In prior art constructions the spring 40 was used to yieldably urge the shoe 34 to its operative position as shown. In addition to this function, in the claimed construction the spring reacts against the head of the stud to hold the parts assembled.

While I have shown and described one embodiment of my invention, it is capable of many modifications. Changes, therefore, in the construction and arrangement may be made without departing from the spirit and scope of the invention as set forth in the appended claims.

I claim:

1. A door latch striker of the character described, including: a striker body having a recess therein including a recessed portion for receiving a door latch part and a recessed portion for mounting a wedging shoe, said striker body being formed with opposed aligned blind retainer openings which face each other in opposite walls of said last-mentioned recessed portion; a wedging shoe formed with a channel extending longitudinally thereof; a stud in the channel of said shoe slidably supporting said shoe in said last-mentioned recessed portion, the opposite ends of said stud being received in the respective blind openings, the blind ends of said openings being spaced apart a dis-

tance greater than the length of the stud to permit the stud to move longitudinally; and a spring yieldably urging the shoe to an operative position for engagement with a door latch part and yieldably biasing one end of said stud against the blind end of one of said openings.

2. A door latch striker of the character described, including: a striker body having a recess therein including a recessed portion for receiving a door latch part and a recessed portion for mounting a wedging shoe, said striker body being formed with opposed aligned blind retainer openings which face each other in opposite walls in said last-mentioned recessed portion; a wedging shoe having a bore therethrough; a headed stud projecting through the bore of said shoe and slidably supporting said shoe in said last-mentioned recessed portion, the respective opposite ends of said stud being received in said openings, the blind ends of said openings being spaced apart a distance greater than the length of the stud to permit the stud to move longitudinally; and a compression spring mounted coaxially on said stud and having one end in engagement with the



shoe and yieldably urging the shoe to an operative position for engagement with a door latch part and the other end engaging the head of the stud and yieldably biasing the head of the stud against the blind end of one opening.

3. Apparatus of the character claimed in claim 2, wherein the bore of the shoe has an enlarged portion terminating in the shoulder which seats the end of the spring.

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