Sept. 1, 1953 R. GARBS 2,650,848

STRIKE PLATE

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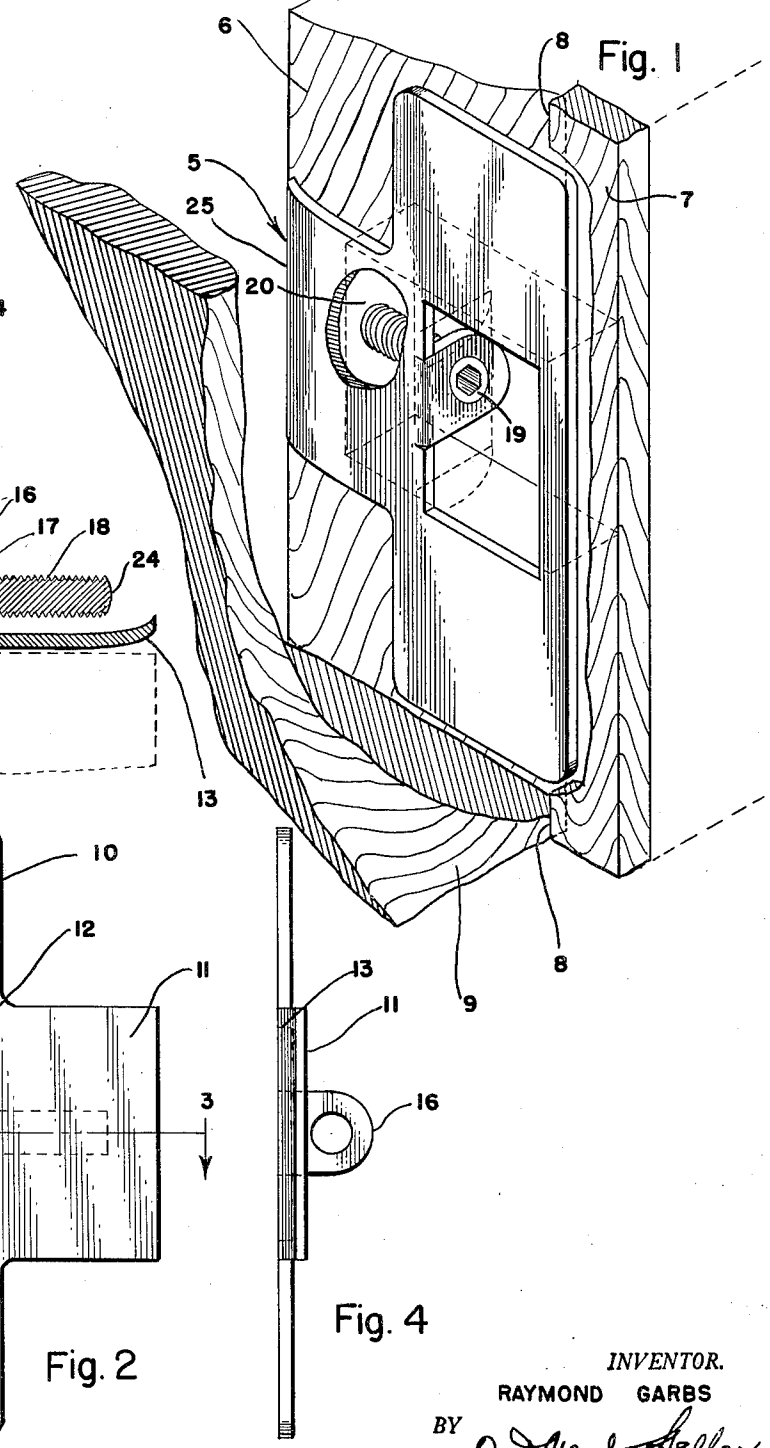


Fig. 1

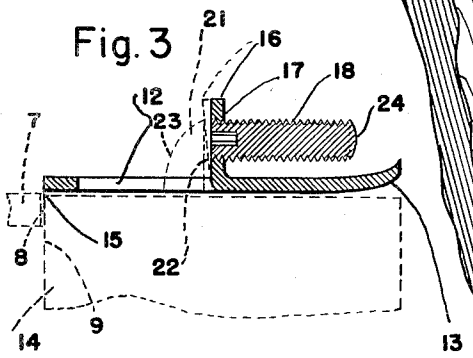


Fig. 3

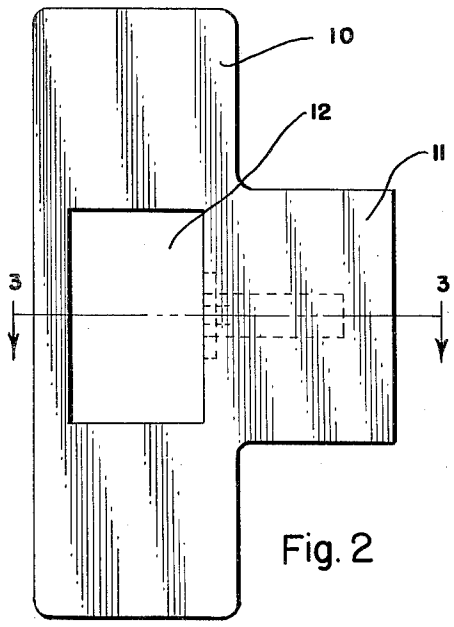


Fig. 2

Fig. 4

INVENTOR.

RAYMOND GARBS

BY David Marley Heller

ATTORNEY

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STRIKE PLATE

Raymond Garbs, Kankakee, Ill.

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My invention relates to strike plates to be used in connection with door frames, and has specific relation to an improvement in such plates whereby adjustments may be made from time to time to prevent doors from rattling.

An important object of my invention is to provide a strike plate of the aforementioned character which has an opening to receive the spring-urged latch structure on a door; the said strike plate being provided with a right angularly formed lug interiorly of the said opening, and which is maintained in adjustment by set screw means having its tip abutting the mortised portion in the door frame.

Another object of my invention is to provide a strike plate having adjustment means, as hereinbefore described, made of a single piece.

A still further object of my invention is to provide a strike plate of the aforementioned character which is practical, and of such simple construction as to warrant economical manufacture thereof in quantity production.

Other objects, ancillary advantages, and features resident in my invention will become apparent from an examination of the accompanying drawings, bearing further elucidation in the ensuing description wherein like symbols are used to designate like parts, and in which:

Fig. 1 is a perspective view of a door frame portion with my strike plate attached thereto; portions being broken away in section in order to more clearly depict the structural features of my invention.

Fig. 2 is a front view of the strike plate comprising my invention.

Fig. 3 is a cross-sectional view taken substantially on the line 3—3 of Fig. 2.

Fig. 4 is an end view of Fig. 2.

Referring to the drawings, my invention is generally designated 5 and is attached by screws, or other means not shown, to the said door frame 6; an abutting or stop ledge 7 is secured as indicated providing the abutment or stop surface 8 against which the surface 9 of the door 14 will rest when closed.

The latch structure 21, which is usually mounted in suitable mechanism and is spring urged, is provided with a cam surface 23 and the abutment surface 22. The strike plate consists of an elongated flat supporting portion 10 having an elongated extension 11, and a bolt or latch receiving opening 12. On one side of the said latch receiving opening, a lug portion 16 is formed at right angles to the surface 10. The said adjusting lug 16 is provided with a threaded hole

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17 therein in order that the screw 18 may be made to function adjustably therein. The said screw has preferably a hollow head, as indicated at 19, to be engaged by a wrench or other similar instrumentality when adjustment is required.

The tip of the screw 18 is, preferably, hemispherical, or partially spherical as indicated at 24 in order to exert pressure against the surface 20 of the mortise 25. Thus it can be seen, as shown in Fig. 3 that the adjustable lug 16 may assume varied positions indicated by the dotted lines in Fig. 3, and thus tend to confine the door 14 so that its surface 9 will rest against the stop edge 8 of the abutting ledge or stop 7. The forward portion of the strike plate is bent as indicated at 13 in order to provide suitable clearance for the edge 15 of the door when swinging into locking engagement.

The strike plate portion 11 is partially curved, or bent, as indicated at 13 in order to afford suitable clearance for the edge 15 of the door 14 when swinging into closed position. The cam surface 23 thus will cause the latch 21 to move inwardly against the spring tension provided therefor, and allow the same to escape subsequently, so that its flat surface 22 will abut the forward surface of the adjusting lug 16, thus maintaining the door confined against movement between the left-hand surface of the adjusting lug 16 and the abutting surface 8 of the abutment ledge 7.

If the door shrinks and rattles, then the adjusting lug 16 is adjusted to some such position afforded by the range of flexure provided by the dotted line indicated in Fig. 3. By rotating the screw 18, pressure is exerted against the surface 20 to cause an adjustment to take place to make the door 14 rattle-proof. Likewise, if the door should swell for any reason, then the adjustment screw 18 may be loosened allowing the adjustment lug 16 to assume its normal position thereby providing a greater increment of space between the stop portion 8 and the left-hand surface of the adjusting lug 16, permitting adjustments to be made under climatic conditions when doors are apt to either shrink or swell, and thus the device comprising my invention will accommodate and aid in rectifying such conditions that might arise due to climatic changes. Thus it can be seen that I have provided an improved strike plate which is also anti-rattle.

Although I have herein described rather succinctly the nature and use of my invention so that persons skilled in the art will have no difficulty apprising themselves of the teachings thereof and, inasmuch as the disclosure is sus-

ceptible of various alterations, modifications, and improvements, I hereby reserve the right to all modifications, alterations, and improvements falling within the scope and spirit of my invention, as well as any modifications that are embraced suggestively in the accompanying drawings, and any that may come within the purview of the foregoing description; my invention to be limited only by the appended claims.

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

1. A strike plate made of one piece of material for a door frame having a mortised opening, comprising a plate element consisting of an elongated supporting portion merging with an extension, a latch receiving opening in the said elongated supporting portion and contiguous to the said extension and in registry with the said mortised opening, an adjusting lug portion adjacent the said latch receiving opening and in right angular relationship to the said extension, and adjusting screw means secured substantially perpendicularly to the said adjusting lug portion its free terminus abutting a face within the interior confines of the said mortised opening for urging the said adjusting lug portion in order to alter the right angular relationship thereof.

2. A strike plate made of one piece of material for a door frame having a mortised opening, comprising a plate element consisting of an elongated supporting portion merging with an extension, a latch receiving opening in the said elongated supporting portion and contiguous to the said extension and in registry with the said mortised opening, a resilient adjusting lug portion adjacent the said latch receiving opening and in right angular relationship to the said extension, and adjusting screw means secured substantially perpendicularly to the said adjusting lug portion its free terminus abutting a face within the interior confines of the said mortised opening for urging the said adjusting lug portion in order to alter the right angular relationship thereof.

3. A strike plate made of one piece of material for a door frame having a mortised opening, comprising a plate element consisting of an elongated supporting portion merging with an extension, a latch receiving opening in the said elongated supporting portion and contiguous to the

said extension and in registry with the said mortised opening, an adjusting lug portion adjacent the said latch receiving opening and in right angular relationship to the said extension, adjusting screw means secured substantially perpendicularly to the said adjusting lug portion its free terminus abutting a face within the interior confines of the said mortised opening for urging the said adjusting lug portion in order to alter the right angular relationship thereof, the said adjusting means, including a threaded opening in the said adjusting lug portion, and screw means threadably and adjustably engaging the said threaded opening, the tip of the said screw resting against a face of a mortised opening in a door frame.

4. A strike plate made of one piece of material for a door frame having a mortised opening, comprising a plate element consisting of an elongated supporting portion merging with an extension, a latch receiving opening in the said elongated supporting portion and contiguous to the said extension and in registry with the said mortised opening, a resilient adjusting lug portion adjacent the said latch receiving opening and in right angular relationship to the said extension, adjusting screw means secured substantially perpendicularly to the said adjusting lug portion its free terminus abutting a face within the interior confines of the said mortised opening for urging the said adjusting lug portion in order to alter the right angular relationship thereof, the said adjusting means, including a threaded opening in the said adjusting lug portion, and screw means threadably and adjustably engaging the said threaded opening, the tip of the said screw resting against a face of a mortised opening in a door frame.

RAYMOND GARBS.

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