D. D. GOOD.

DOOR ADJUSTER.

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1,318,988. Patented Oct. 14, 1919.

Fig. 3.

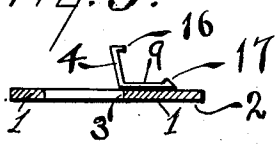
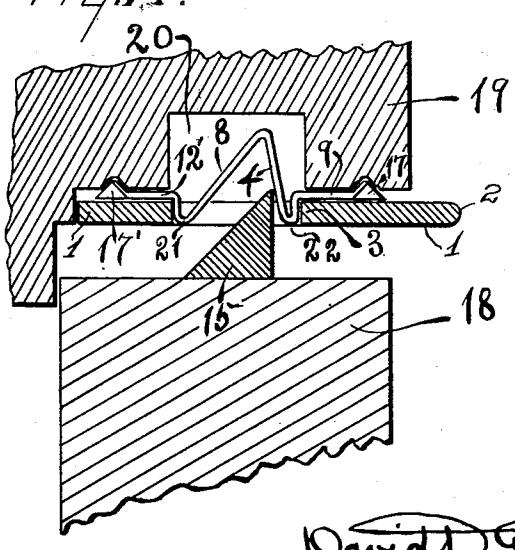


Fig. 2.



Fig. 1.



WITNESSES.

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DOOR-ADJUSTER.

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To all whom it may concern:

Be it known that I, DAVID D. GOOD, a citizen of the United States, residing at No. 6203B Jefferson street, in the city of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Door-Adjusters, of which the following is a specification, reference being had therein to the accompanying drawing.

My invention has for its object the providing of means whereby doors may be held close to their stops automatically allowing for swelling and shrinking, thus preventing them from rattling.

Throughout the accompanying drawing similar figures represent similar parts.

Figure 1 is a horizontal section through a door and jamb fitted with an ordinary mortise lock showing how my improvement may be attached.

Fig. 2 is a simplified form of my improvement designed to be placed under an ordinary keeper.

Fig. 3 is a cross section through a keeper and my improvement as shown in Fig. 2.

In Fig. 1, 1 is the keeper of a mortise door lock, 2 the member which depresses the bolt of the lock, 3 is the plane edge against which the face of the bolt bears in holding the door closed, 4 is a plane flat member adjacent to the back of the keeper in a vertical position so that one of its edges is flush with the edge 3 of the keeper and its face is slightly inclined from the perpendicular to the face of the keeper. It will hereinafter be known as the inclined member.

It will be seen that if this inclination is toward the opening in the keeper as is intended its action will be that of a wedge against the bolt and will take up any lost motion that would otherwise exist between the bolt and the edge 3 of an ordinary keeper.

In Fig. 1 is shown a form of my improvement applicable to ordinary door keepers. The members 9 and 12 have their corners 17 and 17′ turned or bent inwardly to form pointed tangs that will penetrate or sink into the wood of the jamb. The U bend 22 is usable in the case of a door which is much shrunken. The shoulders formed by the U bends 21 and 22 assist in securing the adjuster in place.

It is apparent that when this form of my door adjuster is placed back of an ordinary keeper and the usual screws therein tightened that the points 17 and 17′ will sink into the jamb and hold therein.

Figs. 2 and 3 illustrate a simplified form of my invention. The member 9 is designed to be placed between an ordinary mortise keeper and the door jamb. The tightening of the screws in the keeper will exert sufficient pressure to force the tangs 17 in to the jamb and hold the adjuster in place. The inclined member 4 is attached to the member 9 at a suitable angle which is acute to the perpendicular of 9. A member 16 is attached to the edge of the member 4 and is parallel to the member 9 and of such length that it will bear against the side of the latch opening in the door jamb. It will then maintain the proper position of the inclined member 4 when pressure from the bolt of the lock is exerted against it.

In Fig. 1 the bolt or latch is illustrated as extending midway into the keeper and bearing against the inclined member 4 of my improvement. As is customary in such locks a spring acts to force the latch into the keeper. Should the door or stops shrink the latch will be forced farther into the keeper. As the inclined member 4 has the character of a wedge, owing to its angle with the line of motion of the latch it will automatically take up any lost motion as the bolt is advanced by its spring.

Owing to the acuteness of the angle under discussion there will be no tendency to depress the latch spring and release the latch from the keeper. Thus all rattling of the door by the wind will be prevented and the door will be held close to the stops and in a tightly closed position.

Having thus described my invention I claim as novel—

1. In a door adjuster the combination with the keeper of a lock, of two flat plates 9 and 12, tangs and shoulders thereon, to be held in place between said keeper and the door jamb, a binding member 8 and an angularly opposed member 4 to bear against the latch bolt of a lock adapted to hold the door against the stops on the jamb substantially as described.

2. In a door adjuster the combination with the keeper of a lock, of a flat plate having tangs adapted to enter a door jamb and to be held in place by the pressure exerted on it by the said keeper and an inclined member 4 attached to the flat plate in a position to bear against the latch and to take up lost

motion between the latch and keeper, substantially as described.

3. In a door adjuster the combination with the keeper, of two flat plates 9 and 12, an inclined member 4 and a binding member 8 connected together forming a rigid device, adapted to be held in place between the said keeper of a lock and a door jamb, to take up lost motion between the keeper and the bolt of the lock substantially as described.

4. In a device of the character described, the combination, with a keeper, of a flat plate adapted to be placed under the keeper, tangs on the plate to enter the door jamb, a shoulder on the plate to coact with the opening in the keeper, an inclined member attached to the plate adapted to have a wedging effect on the latch of a lock, a joining member to attach the inclined member to a second plate, the second plate, tangs and shoulder thereon all forming a rigid device to keep a door tightly closed and prevent it from rattling.

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