Aug. 2, 1932. J. HOLLAND 1,869,689

DOORLOCK

Filed Dec. 20, 1930

Fig. 1

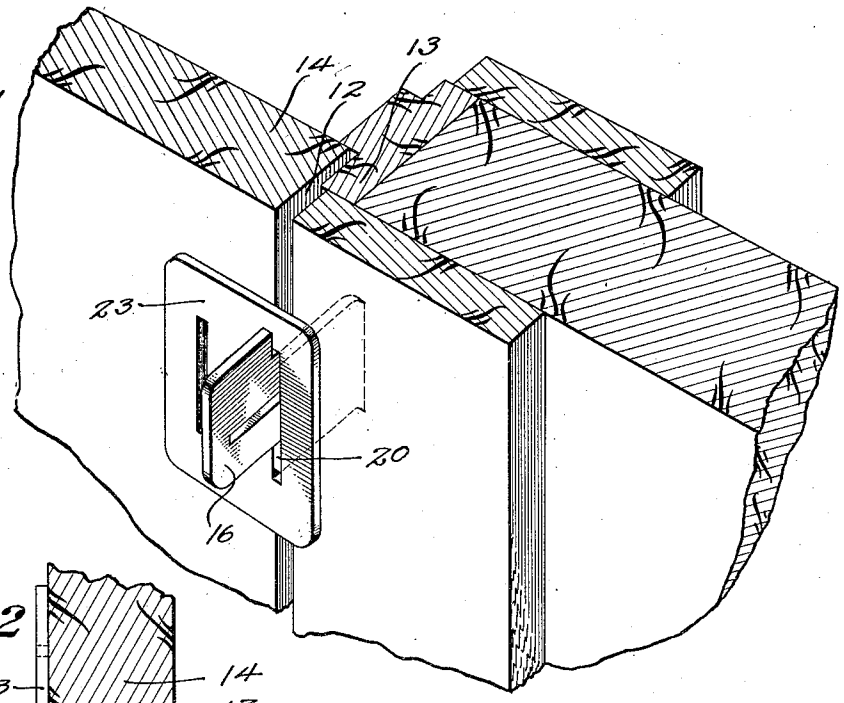


Fig. 2

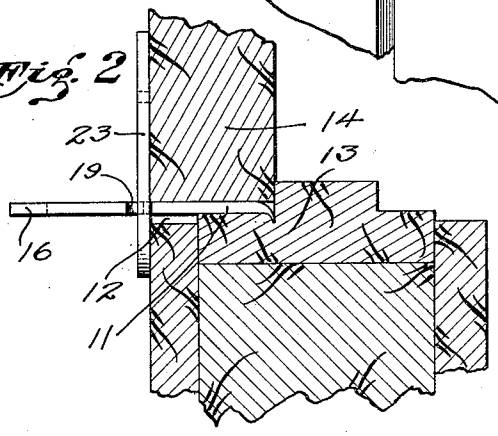


Fig. 3

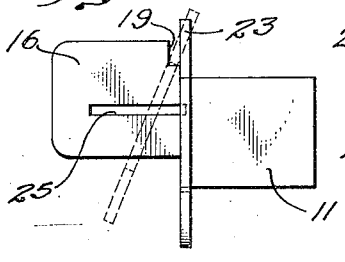


Fig. 4

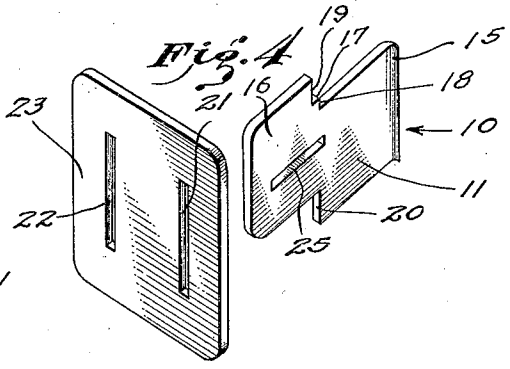
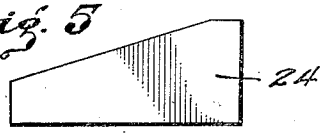


Fig. 5



INVENTOR
JAMES HOLLAND.

BY Townsend Loftus & Abbett
ATTORNEY

Patented Aug. 2, 1932 1,869,689

UNITED STATES PATENT OFFICE

JAMES HOLLAND, OF LOS ANGELES, CALIFORNIA

DOORLOCK

Application filed December 20, 1930. Serial No. 503,775.

This invention relates to a door lock and particularly pertains to an auxiliary lock structure for doors of rooms and the like. It often occurs that a person desires more adequate lock protection upon doors than is usually obtainable, particularly when traveling and when in strange places, and it is the principal object of the present invention to provide a lock structure which is of simple construction and arrangement, and is portable in character, so that a traveler may conveniently carry the structure and quickly apply it upon a door.

The present invention contemplates the provision of a lock plate and a keeper, the lock plate being readily inserted and secured in a crack formed between the door post and the free edge of the door, after which a keeper plate may be readily mounted in position to prevent the door from being opened.

The invention is illustrated by way of example in the accompanying drawing in which:

Figure 1 is a fragmentary view in perspective showing the application of the lock structure to a door.

Fig. 2 is a fragmentary view in plan showing the lock structure as applied.

Fig. 3 is a view in side elevation showing the lock and the keeper plate assembled.

Fig. 4 is a view in perspective showing the lock and the keeper plate in disassociated relation to each other.

Fig. 5 is a wedge plate which may be used if it is desired to reinforce the lock.

Referring more particularly to the drawing, 10 indicates a lock plate having an insertable portion 11 adapted to extend into a crack 12 between the door post 13 and the edge of a door 14. The end of the portion 11 terminates in a turn blade 15, the edge of which is sharpened so that it may be forced into the wood of the post and prevent removal when the door is closed, as is clearly indicated in Fig. 2 of the drawing. At the outer end of the portion 11 of the lock plate is a lock portion 16 which is vertically offset from the body portion 11 and thus forms an intermediate horizontal shoulder 17 and vertical shoulders 18 and 19. Due to the offset relation of the body portion 11 and the lock portion 16 a vertical shoulder 20 will be formed beneath the lock portion 16 at the forward edge of the body portion 11. The lock portion 16 of the plate is adapted to be inserted through one of the openings 21 or 22 of a keeper plate 23. These slotted openings extend vertically in the keeper plate and are of a width slightly greater than the thickness of the lock plate and of a length slightly greater than the height of the lock plate. The length of the slots 21 and 22 is also slightly in excess of the height of the body portion 11 of the lock plate, making it possible for the keeper plate to fit snugly on the lock plate either at the outer end 16 or further along on the body portion 11.

Attention is directed to the fact that the upper edge of the lock plate structure 10 is formed with an offset horizontal shoulder 17 which is of substantially the width represented by the thickness of the keeper plate and is offset so that the keeper plate may be slipped over the end of the lock plate and then slightly inclined as indicated by dotted lines in Fig. 3 to slip downwardly and in the rear of the vertical shoulder 18 of the lock plate so that it will be held between the face of the door and the vertical shoulder 18.

It will also be obvious that due to the proportion of parts the front face of the keeper plate will lie flush with the face 20 of the lock plate so that there will not be an opportunity for the keeper plate to move and become dislodged after it has been slipped over the lock plate and adjusted to its seated position. By reference to Fig. 1, it will be seen that when the keeper plate is thus secured upon the lock plate it will bridge the space between the edge of the door and the door post and prevent the door from being opened. In some instances the details of the construction of the door and the door post may make it necessary to move the keeper plate so that the portion 16 of the lock plate is inserted through the slotted opening 22 of the keeper plate instead of the opening 21. It may also be desirable to wedge the keeper plate in position when there is variation in

the thickness of doors, and for that purpose a lock wedge 24 is provided as shown in Fig. 5. This may be inserted through a wedge slot 25 and the wedge may then be driven tight until it will hold the keeper plate in contact with the door and prevent its movement.

In operation of the present invention the lock plate 10 may be positioned horizontally against the door post and with the inturned blade 15 abutting against the door stop. This will cause the plate to stand out at an angle to the face of the door post. The door may then be forced shut and as this is done it will act upon the inclined face of the lock plate to wedge the plate 16 into the wood of the door post and thus cause it to positively engage the post and to be held in this engaged position so long as the door is closed. When the lock plate has been thus positioned and the door is closed it is then possible to place the keeper plate in position. By reference to Figure 1 of the drawing it will be seen that the front face of the keeper plate 23 is flush with shoulder 20, after the keeper plate has been slipped over the horizontal shoulder 17, and its front face abutting the vertical shoulder 18. To insert or place the keeper plate on the member 16, the keeper plate with its slots 21 and 22 is first moved horizontally over the portion 16, and then swung outwardly as shown in dotted lines in Figure 3, and then downwardly in back of vertical shoulder 18 and finally moved inwardly so that the lower portion of the slot in the keeper plate passes over the shoulder 20 and the face of the shoulder 20 is then flush with the front face of the keeper plate 23. This will prevent a vertical movement of the keeper plate 23 and consequently prevent a horizontal movement until the said keeper plate is first swung outwardly to clear the shoulder 20 and then moved vertically upwardly to clear the shoulders 18 and 19 and then by horizontal movement the keeper plate may be removed entirely from the part 16. By an examination of the drawing it will be seen that when the lock keeper has been moved over the lock plate to this final position the keeper will bridge the crack of the door and will prevent the door from being swung open. It will be further evident that the keeper will have a substantially snug fit around the lock plate and that there will be small possibility of its accidental removal or dislodgment by any manipulation from the outside of the door. It is also evident that in the event it is desired to make a further safeguard of the lock the wedge 24 may be inserted in the slot 25 and forced home to hold the keeper plate in a wedged position against the face of the door post and the face of the door. When it is desired to unlock the door the keeper may be slipped vertically so that the upper edge of its slotted opening may clear the horizontal shoulder 17 on the lock plate, after which the keeper may be moved outwardly on the lock plate until it encounters the vertical shoulder 19, when the keeper may again be moved a slight distance upwardly until the upper edge of the slotted opening clears the upper edge of the lock plate portion 16. When this has taken place the keeper plate may be easily withdrawn from the lock plate and the door then opened.

It will thus be seen that the lock structure here disclosed comprises a few simple parts, which may be readily assembled and which are portable so that they may be conveniently used by travelers and the like.

While I have shown the preferred form of my invention, as now known to me, it will be understood that various changes may be made in combination, construction, and arrangement of parts by those skilled in the art without departing from the spirit of my invention as claimed.

Having thus described my invention, what I claim and desire to secure by Letters Patent is:—

1. A device of the character described comprising a lock plate adapted to be inserted between the edge of a door and a door post, the portion of the plate extending between said members terminating in a blade adapted to penetrate the face of the door post and to be held in place by the door when the door is closed, a plate having a slotted opening through which an outwardly projecting portion of the lock plate extends whereby the keeper plate will lie substantially flush against the face of the door and its post, said lock plate being vertically offset to form an upper vertical shoulder spaced a distance from the face of the door substantially equal to the thickness of the keeper plate and whereby the keeper plate may be positioned between said shoulder and the face of the door, a vertical shoulder formed along the lower edge of the lock plate and lying in substantially the same vertical plane with the shoulder of the upper edge whereby a lower projecting portion of the lock plate will extend into the slotted opening of the keeper plate to prevent direct vertical movement thereof when the keeper plate is interposed between the upper vertical shoulder and the face of the door.

2. A device of the character described comprising a lock plate adapted to be inserted between the edge of a door and a door post, the portion of the plate extending between said members terminating in a blade adapted to penetrate the face of the door post and to be held in place by the door when the door is closed, a plate having a slotted opening through which an outwardly projecting portion of the lock plate extends whereby the keeper plate will lie substantially flush

against the face of the door and its post, said lock plate being vertically offset to form an upper vertical shoulder spaced a distance from the face of the door substantially equal to the thickness of the keeper plate and whereby the keeper plate may be positioned between said shoulder and the face of the door, a vertical shoulder formed along the lower edge of the lock plate and lying in substantially the same vertical plane with the shoulder of the upper edge whereby a lower projecting portion of the lock plate will extend into the slotted opening of the keeper plate to prevent direct vertical movement thereof when the keeper plate is interposed between the upper vertical shoulder and the face of the door, and a second upper shoulder offset from the first upper shoulder a distance substantially equal to the keeper plate whereby the keeper plate may be interposed between this shoulder and the face of the door and thereafter moved downwardly and inwardly to assume its position between the upper vertical shoulder and the face of the door with the lower portion of the slot receiving the lower edge of the lock plate.

JAMES HOLLAND.