This invention relates to door guards for preventing burglary or other unauthorized entry through a normally latched door.

The invention contemplates novel guard means for both inwardly and outwardly opening doors and whereby to prevent anyone from shifting the latch by the insertion of a flexible strip, such as relatively thin metal or plastic that is commonly employed to gain entry to the building by inserting the strip through the normal opening between the jamb and the door to force the latch inwardly and this invention is adapted to prevent unlawful entry to the building.

Novel features of construction and operation of the device will be more clearly apparent during the course of the following description, reference being had to the accompanying drawings wherein has been illustrated the preferred forms of the device and wherein like characters of reference are employed to denote like parts throughout the several figures.

In the drawings:

FIGURE 1 is a perspective view of a closure door to which the invention has been applied,

FIGURE 2 is a horizontal section taken substantially on line 2—2 of FIGURE 1,

FIGURE 3 is a transverse section taken substantially on line 3—3 of FIGURE 2,

FIGURE 4 is a perspective view of a fixed guard or attachment to the door jamb and the door stop,

FIGURE 5 is an edge view of a latch plate fixed to the edge of the door for cooperative engagement into the guard of FIGURES 3 and 4,

FIGURE 6 is a perspective view of a door in mounted position illustrating a latch guard for an outwardly opening door,

FIGURE 7 is a section taken substantially on line 7—7 of FIGURE 6,

FIGURE 8 is an edge view of the door showing the invention applied thereto,

FIGURE 9 is a perspective view of the combined guard and latch plate shown in FIGURE 7, and

FIGURE 10 is a perspective view of a modified form of guard for fitment over the usual latch plate.

Referring specifically to the drawings and particularly to FIGURES 1–5 inclusive, there has been provided a door jamb 5, having a stop 6. The stop 6 has its inner face routed to form a groove 7 and the jamb 5 is also recessed to receive the combined guard 8 and strike plate 9. The plate 8 at its inner end is bent upon itself to form a channel 10, that seats within the groove 7. The channel 10 is formed by the bending of the plate 8 at a right angle, forming a back wall 11 and the wall 11 is then bent at a right angle to form an outer wall 12, forming the channel 10. The plate 8 at its upper and lower ends are provided with inwardly directed ears 13 that are perforated at 14 to receive fastening screws 15 that are screwed into the inner edge of the stop 6, as clearly shown in FIGURE 3 and the ears 13 are flush with the edge of the stop 6. The plate 8 shown in FIGURE 2 is recessed into the jamb 5 and held by fastening screws 16. The screws 16 are staggered with respect to each other so that the screws are in different sections of the grain of the wood forming the jamb 5. The plate 8 is further cut away to form a rectangular opening 17 for passage of the door latch 18 of customary construction as a keeper for the door latch 15.

As shown particularly in FIGURES 2 and 5, the door 19 is provided with the usual mortised lock, actuated by the knobs 20 and that carries the latch bolt 18. Recessed into the door is a latch plate 21, that is adapted to be substituted for the usual rectangular latch plate normally employed in latch devices. The plate 21 is provided with the usual latch opening 22 for the latch 18 and the latch plate 21 is fixed to the door by screws 23. The latch plate 21 transversely is wider than the door 19 and the extension edge 24 of the plate fits into the groove 10 when the door is closed, as in FIGURE 2, forming a stop against the insertion of any flexible element between the door and the stop 6 and to prevent movement of the latch 18. In the normal operation of the door from the closed position shown in FIGURE 2, the latch 18 is actuated by a key or other operating means so that the door can be swung inwardly, moving the extension 24 out of the groove 10. It will be apparent, that even though someone moved the stop 6 away from the jamb, he still could not reach the latch 18 for forcing the latch to a release position.

The guard, illustrated in FIGURE 4 and shown at 8a is basically the same as that described with respect to FIGURES 1–3 but has been modified to make the guard adaptable to fitment over the usual stop and keeper that is ordinarily fixed to the jamb.

In FIGURES 6–9, there has been illustrated an outwardly opening door 25, carrying the usual latch 26, operated by door knobs 27. To prevent the latch 26 from being forced inwardly by any type of tool normally inserted between the door and the jamb 28, there has been provided a plate 29, screwed or otherwise attached to the edge of the door by screws 30. The plate 29 is provided with a T-head 31 having a width that overlies the opening between the door and the jamb. Since the door seats within the opening against the stop 32 slightly more than the depth of the opening, the head upon one side is made relatively thicker, as indicated at 33 and so that the opposite side of the T-head, indicated at 34 will lie flat against the reveal of the jamb 28. The head 31 is also provided with an inwardly opening wedge-shaped member 35 that substantially fills the opening between the plate 29 and the jamb 28 to further prevent the insertion of any tool for movement of the latch 26 to gain unlawful entry to the building. The plate 29, see FIGURE 9 is recessed into the edge of the door and in this form of the invention, has been cut away as indicated at 36 to fit over the usual latch plate. In the form illustrated in FIGURE 10, a plate 37 is provided with a T-head 38 and the plate 37 is cut away as indicated at 39 for engaging over the latch plate of inside doors, such as closet doors and the plates 29 and 37 are apertured at 40 and 41 to receive fastening screws where by the plates are rigidly anchored to the edge of the door thus, when the door is closed, as illustrated in FIGURE 7, the T-heads 31 or 38 overlie the space between the door and the jamb, preventing the insertion of any tool that would be used to shift the latch 26 for unlawful entry.

The door guards illustrated in the several forms of the invention are thus applicable to standard doors already installed or the plates 21, 29 and 37 may be manufactured to constitute a latch plate for application to locks and for initial installations however, the device primarily constitutes means that are adapted to be attached to the edge of the door and particularly to prevent unauthorized actuation of the door latches by the insertion of a flexible strip and the attachments are relatively long and project above and below the latch a substantial distance, making it practically impossible for someone to shift the latch, as before stated.

It will be apparent from the foregoing that the devices herein illustrated are relatively simple, are strong, durable,
cheap to manufacture and easily and quickly attached to the door and to the jamb. The device of FIGURES 2 and 3 of course require that the jamb 5 be recessed to receive the plate 8 and the stop 6 rabbed to receive the channel forming member that is carried by the plate 8. The devices illustrated in FIGURES 7–10 obviously require the fixing of the plates 29 and 37 to the edge of the door, requiring relatively little labor. All of the devices are made of suitable metal such as aluminum, brass or the like.

It is to be understood that the invention is not limited to the precise construction shown, but that changes are contemplated as readily fall within the spirit of the invention as shall be determined by the scope of the subjoined claims.

I claim:

1. A door guard for use with a swinging door and a door jamb to limit the swing of the door, a stop included with the jamb, a plate fixed to the door jamb and to the stop thereof and apertured to permit the passage through it of the bolt of a lock carried by the door, the plate being formed along one of its edges with a channel which is recessed into the jamb and is covered and concealed from view and rendered inaccessible from the outside of the door by being mounted in the recess, a plate fixed to the edge of the door, the latter plate having a forward edge part projecting forwardly of the front face of the door, said projecting portion of said plate entering into the channel and being rendered inaccessible from the outside of the door when the door is closed, the channel thereby forming an enclosure around said projecting part of the door-attached plate.

2. A door guard as provided for in claim 1, wherein the stop includes a recess into which the channel seats, the stop being of a size to cover and conceal the channel from outside view, and projecting tabs provided on the channeled plate for attachment to the stop above and below the recess therein.

References Cited by the Examiner

UNITED STATES PATENTS

90,092 5/1869 Gould 292—346
1,092,946 4/1914 Page 292—346
1,399,897 12/1921 Singer.
1,863,487 6/1932 Kirkpatrick 292—346
2,144,075 1/1939 More 292—346

FOREIGN PATENTS

490,802 1/1951 Canada.

EDWARD C. ALLEN, Primary Examiner.

RICHARD E. MOORE, Examiner.