Feb. 9, 1932. J. R. BRANDON 1,844,459

SAFETY LOCK

Filed Oct. 1, 1929

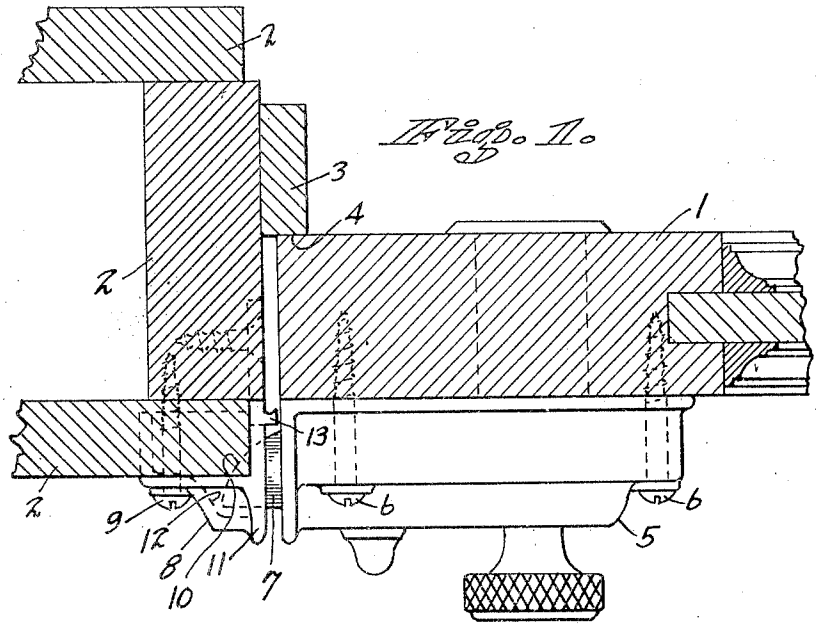

Fig. 1.

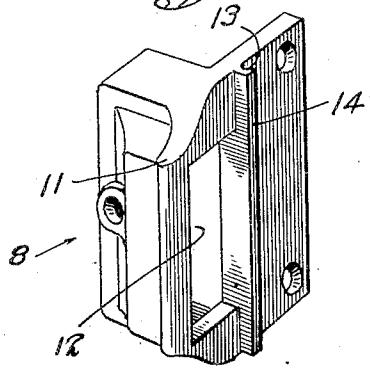

Fig. 2.

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SAFETY LOCK

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The present invention relates to improvements in safety locks and the principal object of the invention is to provide a lock of the character described designed to prevent unauthorized opening of the lock by other than the regular actuating means.

My invention has particular reference to a lock in which a retractable latch mounted in the lock housing has an inclined surface adapted for impact with the keeper, whereby the latch is retracted to pass the front edge of the keeper and to afterwards enter a recess provided in the keeper.

I have found that in locks of this character it frequently is comparatively easy to open the latch by introducing a card or a thin sheet of metal such as the front end of a knife, between the lock housing and the keeper, and by pushing the card or knife against the slanting face of the latch, whereby the latter is made to retract and to disengage from the keeper, so as to allow the door to which the lock is applied to be opened.

It is proposed in the present invention to provide a very simple means for preventing such unauthorized opening of the lock.

Further objects and advantages of my invention will appear as the specification proceeds.

The preferred form of my invention is illustrated in the accompanying drawings, in which

Figure 1 shows a horizontal section through the edge of a door and the adjacent casing, having a conventional lock applied thereto with my improvement incorporated in the lock, and

Figure 2 shows a perspective view of the keeper, embodying my improvement.

While I have shown only the preferred form of my invention, I wish to have it understood that various changes or modifications may be made within the scope of the claim hereto attached without departing from the spirit of the invention.

Referring to Figure 1, the swinging end of the door 1 is shown in normal closing position relative to the casing 2, which latter is provided with a slat 3 against which the door rests, as shown at 4.

The lock housing 5, which may be of any suitable form, is fastened to the door by means of screws 6 and has the conventional latch 7 retractably mounted therein, the operating means for the latch not being shown, as being of conventional character.

A keeper 8, also of conventional character except for my improvement and shown in detail in Figure 2 is fastened to the casing 2 in operative proximity to the lock housing 5, by means of screws 9. The latch 7 is formed with an inclined face 10 which in normal use strikes the keeper when the door is closed and, upon passing the front edge 11 of the keeper, projects into the recess 12 formed in the keeper. It is understood, of course, that the latch 7 may be of any suitable form and may be manually operated or spring operated as the case may be without affecting the object of the present invention.

I have found that a person may open a lock of this character with comparative ease by prying the slat 3 away from the casing and introducing a card or the blade of a knife or a similar tool between the slat and the casing and forcing the same against the slanting face of the latch, which will cause the latter to retract and allow the door to be opened. To prevent unauthorized opening of the door in this manner, I provide a stop 13 adjacent to the base of the inclined face of the latch so that a card or blade introduced in the manner previously described will strike the stop 13 instead of the latch and will therefore be prevented from operating the latter. The stop may be of any suitable character and is shown in the drawings as comprising a flange 14 projecting from the keeper adjacent to the rear edge of the recess 12, the flange being of sufficient size to cover the space between the keeper and the lock housing without interfering with the opening and the closing of the door, and the active face of the flange being preferably curved as shown in the drawing so as to cause a flexible member used in the attempt to open the door to be curled when contacting the flange and turned back on itself.

It should be understood that for the purpose of my invention the flange may be ap-

plied either to the keeper as shown in Figure 2 or to the lock housing, as long as the same effectively protects the inclined face of the latch from approach by means of an object advancing between the door and the casing.

I claim:

In a lock of the character described, a keeper having a recess adapted to receive a retractable latch therein and having a stop flange adjacent to the recess for barring a thin blade or the like from gaining access to the latch, the blade barring face of the keeper being concave so as to turn the blade back upon itself when pressure is applied to the blade.

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