Feb. 2, 1926. 1,571,543

G. FRATZKE

PORTABLE DOOR LOCK

Filed April 1, 1924

Fig. 1.

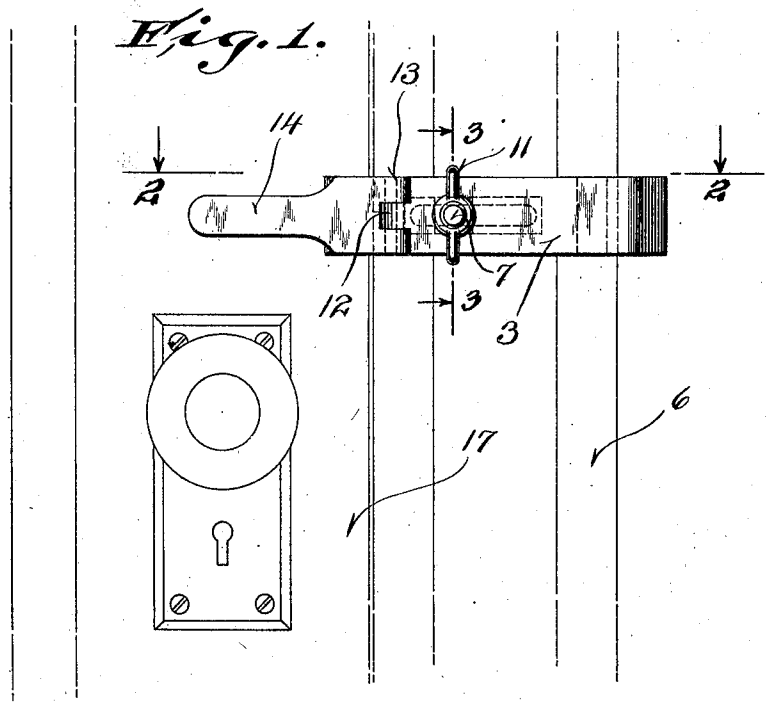


Fig. 2.

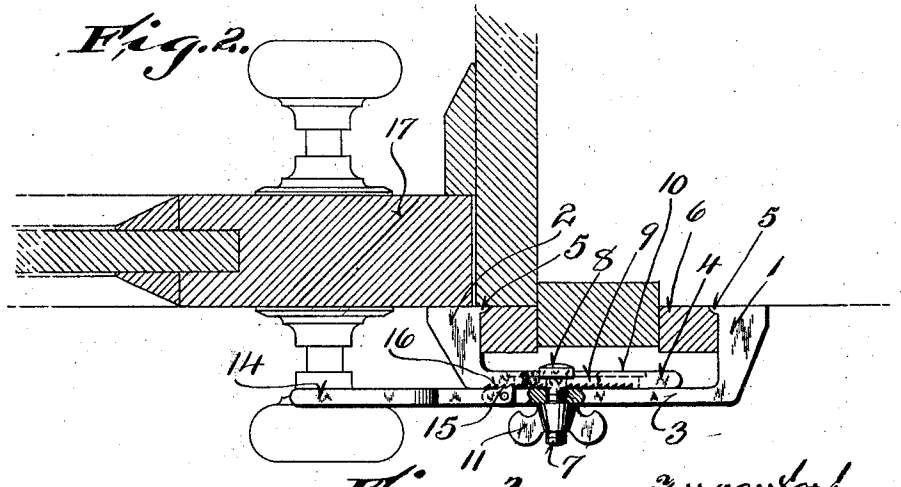
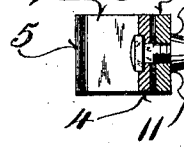


Fig. 3.



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UNITED STATES PATENT OFFICE.

GUSTAV FRATZKE, OF MERRILL, WISCONSIN.

PORTABLE DOOR LOCK.

Application filed April 1, 1924. Serial No. 703,420.

To all whom it may concern:

Be it known that I, GUSTAV FRATZKE, a citizen of the United States, and resident of Merrill, in the county of Lincoln and State of Wisconsin, have invented certain new and useful Improvements in Portable Door Locks; and I do hereby declare that the following is a full, clear, and exact description thereof.

This invention relates to portable door locks.

It frequently happens that a room in a small hotel or other corresponding place is secured by a transient patron, and it is found that the door is not equipped with a lock. Consequently the usual safety afforded the guests is not provided, and difficulty often arises. In addition to this, a great many hotels so form their locks that they may all be opened by the ordinary types of skeleton keys, and thus the security of the patron is jeopardized.

This invention is designed to overcome the above noted defects, and objects of such invention are to provide a portable door lock which may be carried by the traveler, and may be immediately applied to any type of door without damaging the door, without leaving blemishes upon the wood work, and which will afford the utmost protection against unauthorized entries.

Further objects are to provide a portable lock which is of simple and strong construction, which is of attractive appearance, which is of light weight and which is compact and may be most readily carried.

An embodiment of the invention is shown in the accompanying drawings, in which:—

Figure 1 is an elevation of a portion of a door and door casing showing the lock in position.

Figure 2 is a horizontal sectional view on the line 2—2 of Figure 1.

Figure 3 is a vertical sectional view on the line 3—3 of Figure 1.

The lock comprises a pair of lugs 1 and 2 which are provided with arms 3 and 4 integrally formed with the respective lugs. These lugs are provided with small inwardly directed beveled or tapered portions 5 which are adapted to fit over opposite edges of the door casing 6, as shown in Figure 2. The arms 3 and 4 are slidably related and one of the arms, for instance, the arm 3 is provided with an aperture through which the stem 7 of a bolt, provided with a square head 8 passes. The other arm 4 is provided with a slot 9 adapted to receive the stem and with a small channel portion 10 adapted to receive the head and hold it against turning. A wing nut 11 is carried by the stem 8 and thus permits the arms to be readily clamped and locked in any desired adjusted relation. The arm 3 is provided with an inwardly projecting tongue 12 to which is pivotally attached a pair of ears 13 of a small lever 14. The lever 14 is provided on the inner side of its inner end with teeth 15 which cooperate with ratchet teeth 16 formed on the arm 4 of the lug 2.

In using the device, the door 17 is closed and the lugs 1 and 2 are positioned on opposite sides of the door casing 6, and are pressed inwardly by the operator into close engagement with the casing. The lever 14 is allowed to extend outwardly at substantially right angles to the position shown in Figures 1 and 2, during this operation. Thereafter, the lever 14 is rocked into parallelism with the arms so that it forms in effect a continuation of the arm 3, as shown in Figure 2. During this rocking motion the teeth 15 engage the teeth 16 and thus force the lugs 1 and 2 towards each other. This causes the beveled portion 5 of the lugs to slide beneath the edges of the casing and to secure a very firm grip thereon. The wing nut 11 is then tightened and the arms are locked in their relative adjusted position.

Any attempt to open the door merely transmits the force directly to the lug 2 which is in the most intimate binding relation to the casing, thus it is impossible to open the door when this lug is in place.

It will be seen, therefore, that a portable lock has been provided which may be most readily applied to any type of door, which may be readily carried, which is of extremely simple and rugged formation, which is light weight and which may be cheaply manufactured.

Although the invention has been described in considerable detail, it is to be understood that the invention may be variously embodied and is, therefore, to be limited only as claimed.

I claim:

1. A portable lock comprising a pair of lugs adapted to grip opposite sides of a door casing, said lugs having slidably related inner and outer flat arms paralleling the

surface of said casing, one of said arms having a slot therethrough and having a groove adjacent said slot and wider than said slot, the other of said arms having an opening therethrough aligning with said slot, a clamping bolt having a head fitted within said groove and having a threaded shank projecting through said slot and through said aperture, a wing nut positioned on the outside of said outer arm and screwed upon said shank, said inner arm having ratchet teeth a lever pivoted to said outer arm and having means for engaging said ratchet teeth to draw said lugs towards each other.

2. A portable lock comprising a pair of lugs adapted to grip opposite sides of a door casing, said lugs having slidably related arms, one of said arms being provided with ratchet teeth, a lever pivoted to the other of said arms and having teeth adapted to engage said ratchet teeth to draw said lugs towards each other when said lever is manipulated, and a bolt provided with a wing nut for locking said arms together.

In testimony that I claim the foregoing I have hereunto set my hand at Merrill, in the county of Lincoln and State of Wisconsin.

GUSTAV FRATZKE.