Oct. 16, 1923. 1,470,937

F. W. SCHOU

KEYHOLE GUARD

Filed Nov. 26, 1921

Fig. 1.

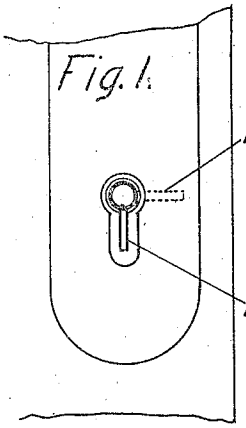


Fig. 2.

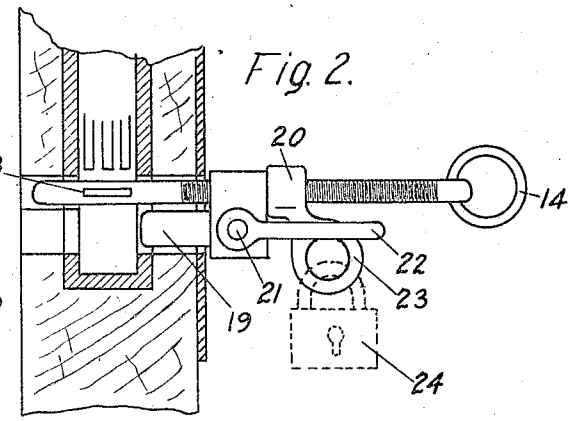


Fig. 3.

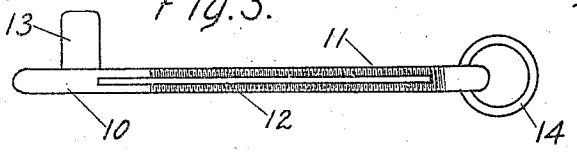


Fig. 4.

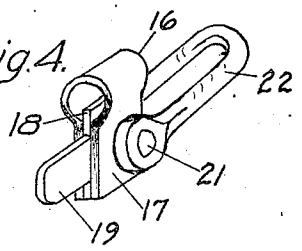


Fig. 5.

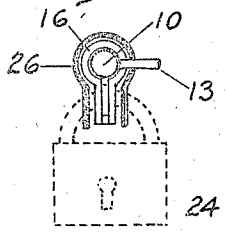


Fig. 6.

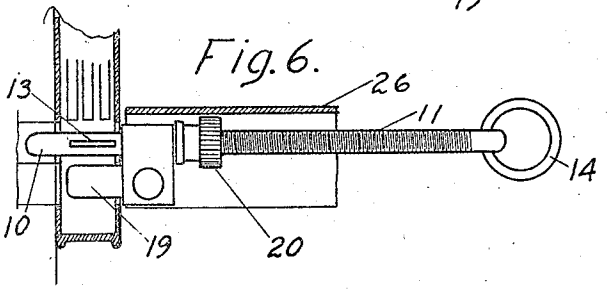


Fig. 7.

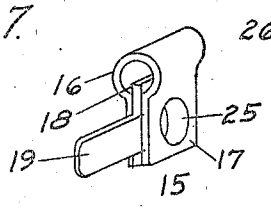
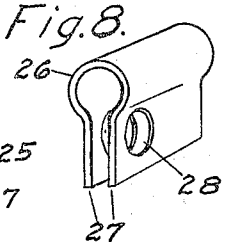


Fig. 8.



FRANK W. SCHOU INVENTOR.

BY

Emil F. Lange ATTORNEY

Patented Oct. 16, 1923. 1,470,937

UNITED STATES PATENT OFFICE.

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KEYHOLE GUARD.

Application filed November 26, 1921. Serial No. 517,330.

To all whom it may concern:

Be it known that I, FRANK W. SCHOU, a citizen of the United States, residing at Lincoln, in the county of Lancaster and State of Nebraska, have invented certain new and useful Improvements in Keyhole Guards, of which the following is a specification.

My invention relates to key hole guards, and has for its object the prevention of lock picking, regardless of whether the occupant is present or absent from the room.

Houses are often entered by thieves and burglars by means of pass keys. It is well known that most of the mortise and other locks on house doors can be easily unlocked by using a button hook, hair pin, bent wire, or other improvised substitute for a key. If the door key is left in the lock, it can be easily pushed out, or by means of long nosed pliers it can be turned and made to unlock the door. These troubles occur most frequently in apartment houses, hotels, and rooming houses, where many a guest has awakened in the morning to find that his room had been entered during the night, and that money, jewelry, or valuable papers were missing. My invention gives effective protection not only when the occupant is in the room but also when he is away.

In the drawings which form a part of this application—

Figure 1 shows a portion of a door with my device applied to the opposite side.

Figure 2 shows a section of the same door.

Figure 3 is a detail view of the screw threaded rod and its key way.

Figure 4 is a detail of the part which is slidably secured to the rod.

Figure 5 is a transverse section of another form of my invention.

Figure 6 shows in plan the same modification, the collar being sectioned to show the rod.

Figure 7 illustrates the key hole guard, and

Figure 8 shows the collar used with the modification shown generally in Figures 5 to 8.

The rod 10 is screw threaded throughout a portion of its length at 11 and is provided with a key way 12. A lug 13 is secured to the end of the rod which enters the key hole. The lug projects radially outward from the rod, and is angularly disposed with reference to the key way, the preferred angle being a right angle. At its free end the rod terminates in any suitable handle such as a hook or knob, but I prefer to use a ring as shown at 14.

The key hole closure 15 shown in detail in Figure 7 is preferably formed from two pieces of metal welded or otherwise secured together. The outer piece is bent upon itself to form a collar 16 and ears 17. The internal diameter of the collar is slightly greater than the diameter of the rod 10. The inner piece comprises a portion fitting between the ears 17 and the inner edge of this portion is a key 18 which is adapted to fit into the key way 12. The lug 19 is integral with the portion between the ears, and is of such a length that when it is seated in the key hole, the lug 19 extends into the path of rotation of the lug 13.

Thus far the structure is common to both forms of my invention, and when it is desired to secure the lock on the inside of the room, this structure is all that is needed. In this case the lock bolt is thrown by means of its key in the usual manner and the key is then removed from the key hole. The rod 10 with its bolt 13 is then thrust into the key hole and given a quarter of a turn, which brings the lug 19 into alignment with the key hole. The key hole guard 15 is then pushed forward until it is flush with the door casing, at which point the lug 19 will practically fill the key hole of the lock proper. The follower 20 is then screwed tight.

It will readily be seen that access through the lock from the outside is utterly impossible. The key hole guard 15 can not rotate because of the anchorage of the lug 19 in the key hole nor can it be shoved lengthwise against the follower 20. The rod 10 being keyed against rotation can not turn while the key hole guard is seated in the key hole, and even in the almost impossible event that the key should yield in the key way, the lugs 13 and 19 would limit the rotation to a quarter turn which would have no appreciable effect lengthwise on the follower 20. In this case the lugs 13 and 19 would be brought into juxtaposition, and both lugs together can not pass out of the key hole at the same time. The only possible way to remove my device from the lock is to first

unscrew the follower 20, and since this is on the inside of the room, it is impossible to gain access to it through the door.

It frequently happens that the occupant when he leaves his room wishes to secure the lock so that the room can not be entered during his absence. For this reason I have added to the fundamental structure other elements which make it impossible to tamper with the follower 20 when the device is applied to the outside of the door. In the construction shown in Figures 2 and 4, I perforate the ears 17 of the key hole guard 15 and pass a pin 21 through the aperture thus formed, firmly securing the pin in the aperture thus formed. To the two extremities of the pin I pivot a yoke 22. The follower 20 is provided with a looped element 23 integral therewith. When all of the parts are in place on the door lock, the yoke 22 is swung over the loop 23 and a padlock, preferably of the Yale or pin tumbler type, is secured to the loop. This of course necessitates in the case of unauthorized entry into the room that the padlock be first picked before access can be gained to the door lock.

In the construction shown in Figures 5, 6, 7, and 8, I accomplish the same result by means of a slight modification. I perforate the ears 17 at 25, the aperture 25 extending through the portion between the ears. A sleeve 26 having ears 27 and of a size to fit snugly but slidably over the collar 16 and ears 17, and of a suitable length, is added to the equipment. Apertures 28 in the ears 27 register with the apertures 25 in the ears 17 when the device is in place on the door lock. In use the key hole guard is seated in the key hole, the follower 20 is screwed tight, the sleeve 26 is shoved into position, and a pad lock 24 is secured through the apertures 25 and 28, thus making access to the follower 20 virtually impossible.

Having thus described my invention and the method of using it, what I claim as new and desire to secure by Letters Patent of the United States is:—

A key-hole guard comprising a stem which is adapted to enter a key-hole, a lug on said stem adjacent one of its ends, a keyway positioned lengthwise of said stem and extending throughout the greater portion of the length of the stem, a yoke slidably mounted on said stem, said yoke being provided with a key which cooperates with the keyway of the stem to prevent rotation of the yoke on the stem, said yoke also being provided with a lug integral therewith, said last named lug being adapted to enter the key hole and to extend into the path of rotation of said first named lug, a screw thread on said stem, a screw-threaded follower surrounding said stem, a second yoke which is adapted to surround said first named yoke and said follower, and apertures in both of said yokes, the arrangement being such that when the key-hole guard is in place in the lock, the apertures in the two yokes will register for the reception of a padlock.

In testimony whereof I affix my signature.

FRANK W. SCHOU.