E. F. VINCENT.

DOOR SECURER.

APPLICATION FILED MAR. 22, 1912.

1,038,690.

Patented Sept. 17, 1912.

Fig. 1.

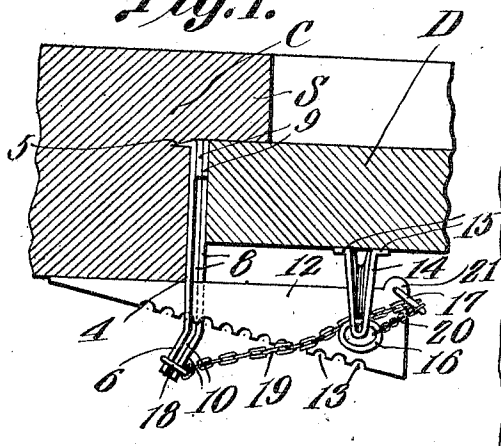


Fig. 2.

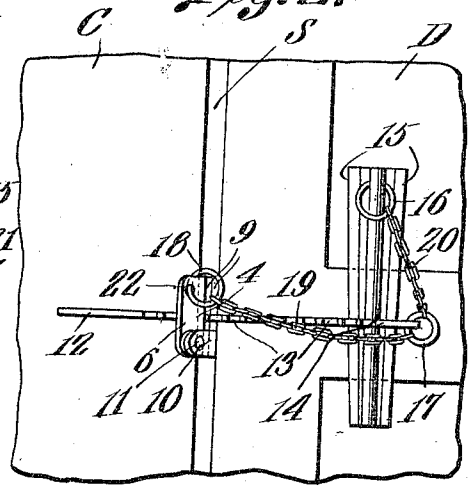
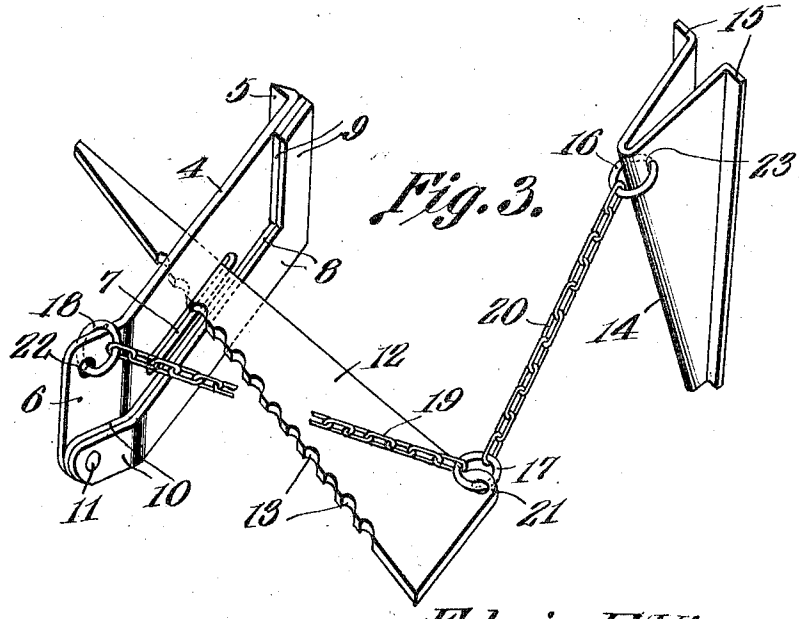


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

EDWIN F. VINCENT, OF LIMA, MONTANA.

DOOR-SECURER.

1,038,690. Specification of Letters Patent. Patented Sept. 17, 1912.

Application filed March 22, 1912. Serial No. 685,500.

To all whom it may concern:

Be it known that I, EDWIN F. VINCENT, a citizen of the United States, residing at Lima, in the county of Beaverhead and State of Montana, have invented a new and useful Door-Securer, of which the following is a specification.

This invention relates to door securers or door locks, and particularly to those which are portable and which may be temporarily applied to the doors in hotels and other places while the room is being occupied in order to securely lock the door and prevent the intrusion of unwarranted or malicious persons.

The object of the present invention is to provide a device of this character which may be readily applied to the door casing, and which will be retained in position by the door when the same is closed, and including means for holding the door closed.

This invention also contemplates the provision of a device of this character which may be effectively applied to door casings wherein the door is spaced more or less from the jamb of the casing, and this invention further aims to make provision for holding the door in position when the inner side of the door is inset from the inner side of the casing when the door is closed, and to also provide means for holding the door when the door and casing are flush.

A further object of the present invention is to provide a device of this character which, when not in use, may be compactly stored away or carried about, and which is simple and inexpensive in construction, as well as convenient and efficient in use.

With the foregoing and other objects in view this invention is embodied in the novel construction and combination of parts set forth in the following description and pointed out in the appended claims, it being understood that this device is susceptible of alterations or deviation in its details within the scope of the appended claims without departing from the spirit of the invention.

The invention has been illustrated in its preferred embodiment in the accompanying drawings, wherein similar reference characters denote corresponding parts, and wherein:

Figure 1 is a plan view of the present device as in use. Fig. 2 is an elevational view thereof. Fig. 3 is a perspective view of the device.

Referring specifically to the drawings, in Figs. 1 and 2, the door casing has been designated by the letter C, the door by the letter D, and the door stop by the letter S. As shown in the said figures the inner side or face of the door is inset from the inner side of the casing when the door is closed, but it is understood that this device is also applicable to doors and casings which are flush when the door is closed, as will hereinafte appear.

The present door securer or lock embodies three principal parts, namely, the keeper which is engageable with the door casing, the key which is engageable with the keeper for holding the door closed, and a wedg which is insertible between the key and the door, the last mentioned part being useful in connection with doors which are inset from the inner face of the casing when the door is closed.

The keeper comprises a plate 4, which may be of any suitable material and of any suitable thickness, and which has the inner end thereof bent angularly to one side and sharpened to form a lip 5 for engaging or biting the door casing, and has the outer or other end thereof deflected at an angle toward the same side with the lip 5, this deflected end being designated by the numeral 6. The plate or keeper 4 is also provided with an elongated slot or opening 7 extending longitudinally thereof and approximately midway between the longitudinal edges of the plate or keeper. A plurality of narrow arms 8 have one of the ends deflected as designated by the numeral 10, and pivoted to the deflected end of the keeper adjacent one edge thereof by means of a rivet or other like member 11, the arms being adapted to swing against the keeper a g the said edge and having shims o xtensions 9 at their free ends adapted to be brought into coöperation with the inner end of the keeper at the side opposite the lip 5. The arms 8 are adapted to lock over the corner formed by the deflected end section of the keeper in order to retain the arms in coöperative r lation with the

keeper, the said arms being readily swung away from the keeper. The arms 8 when swung into coöperative relation with the keeper are positioned between the slot 7 and the corresponding edge of the keeper, and the shims 9 lie along the inner end of the keeper. It will be noted that the deflected ends of the arms and keeper being pivoted together will necessitate a slight springing of the arms in being swung into coöperation with the keeper in order to retain the arms in such relation, and it will also appear that these arms may be readily swung away from the keeper by overcoming the tension necessary to spring the arms out of engagement with the corner formed by the deflected end 6 of the keeper. One or both of the arms 8 may be swung into coöperative relation with the keeper, and it is understood that any number of the arms 8 may be employed as is deemed desirable or essential.

The key comprises a tapered or wedge shaped plate 12 having a series of serrations or notches 13 along one edge thereof. This key is adapted to be engaged with the keeper by inserting the smaller or pointed end thereof through the slot 7 with the serrated or notched edge thereof disposed outwardly, the said serrations or notches being adapted to engage the keeper at the outer end of the slot for retaining the key in engagement with the keeper as will be understood.

The wedge is designated by the numeral 14, the same comprising a plate bent upon itself and having the edges outturned to provide flanges 15, the line of the bend of the plate converging downwardly toward the plane in which the flanges 15 lie. The flanges 15 form a suitable base or surface for the engagement of the wedge with the surface of the door in order to prevent the wedge from shifting from its proper position and in order to prevent the wedge from marring or otherwise injuring the door.

The keeper, key and wedge are preferably attached together so that none of the said parts will be liable to be lost, and this is effected by means of a short length of suitable chain 19 connecting a ring 18 engaging in an aperture or opening 22 in the deflected end 6 of the keeper at the edge opposite the rivet 11 and engaging a ring 17 which passes through an eye 21 provided at the larger end of the key 12 opposite the serrated or notched edge, and a short length of chain 20 connected to the ring 17 and to a ring 16 passing through the aperture or opening 23 in the wedge 14 adjacent the bend thereof and adjacent the larger end of the said wedge. It is understood, however, that the keeper, key and wedge may be attached together in any other suitable manner to suit the particular whim of the user.

When the device is used to lock a door which is inset from the inner side of the casing when the door is closed, the keeper 4 is applied to the jamb of the casing prior to the door being closed with the lip 5 projecting toward the jamb, and the door in then being closed will cause the lip 5 to be embedded into the jamb in order to retain the keeper in position, the pointed end of the key then being inserted into the slot 7 in the keeper and the wedge 14 then being inserted between the key and the door to provide a bearing for the key lying in the plane of the inner side of the door casing, the key then being forced into engagement with the keeper, which will effectively lock the door in closed position. Should the space between the free end of the door and the door jamb be greater than the width of the keeper, one or more of the shims 9 may be swung into coöperative relation with the inner end of the keeper as heretofore indicated, in order that the shim or shims may fill the space between the free edge of the door and the door jamb, thus retaining the keeper in position and assuring the engagement of the lip 5 with the door jamb when the door is closed. The wedge 14, which is adjustable vertically, is preferably inserted between the key, which is adjustable horizontally, and the door adjacent the edge of the door, even more so than is shown in Fig. 1, but the particular location of the wedge 14 depends more or less upon the particular door structure. It will follow, that the key being adjustable horizontally and that the wedge being adjustable vertically, permit the wedge to be adjusted vertically so that the key will contact properly with the door casing and the wedge, flush with the face of the door casing, the key then being permitted to be adjusted relative to the keeper upon the door casing and wedge, without effecting the relation of the wedge and key. When the device is to be used with a door which lies flush with the casing when the door is closed, the wedge 14 is omitted, and the key 12 is inserted through the slot 7 to bear against the door and the casing for holding the door in closed position, as will be understood.

This device therefore, provides convenient and efficient means for locking a door from the inside to prevent the unwarranted intrusion of persons into the room and will serve as a suitable device to be carried by traveling salesmen or other persons for locking the doors of their rooms while occupied, particularly when the doors are not supplied with interior locks of suitable character. This device is applicable to various forms of doors and is also simple and inexpensive in construction and capable of being compactly stored or carried about. This device may be constructed of any suitable material and in various sizes, styles or

proportions, and it is understood that this device is otherwise susceptible of alterations or deviations in its details within the scope of the appended claims without departing from the spirit of the invention.

Having described the invention, what is claimed as new is:—

1. A door securer embodying a keeper having door casing engaging means, a horizontally adjustable door holding key engageable with the keeper, and a vertically adjustable wedge insertible between the door and the key.

2. A door securer embodying a slotted keeper having door casing engaging means at its inner end, a horizontally adjustable tapered door holding key insertible through the slot in the keeper, and a vertically adjustable wedge insertible between the door and the said key.

3. A door securer embodying a keeper having door casing engaging means, a door holding key engageable with the keeper, and a wedge insertible between the door and key and comprising a plate bent upon itself and having the edges outturned to provide door engaging flanges, the line of the bend of the plate converging toward the plane in which the flanges lie.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

EDWIN F. VINCENT.

Witnesses:
W. T. CHINEY,
MAUD NELSON.