Feb. 16, 1971 A. FERRER 3,563,069

SAFETY LOCK FOR DOORS

Filed July 7, 1969

Fig. 1.

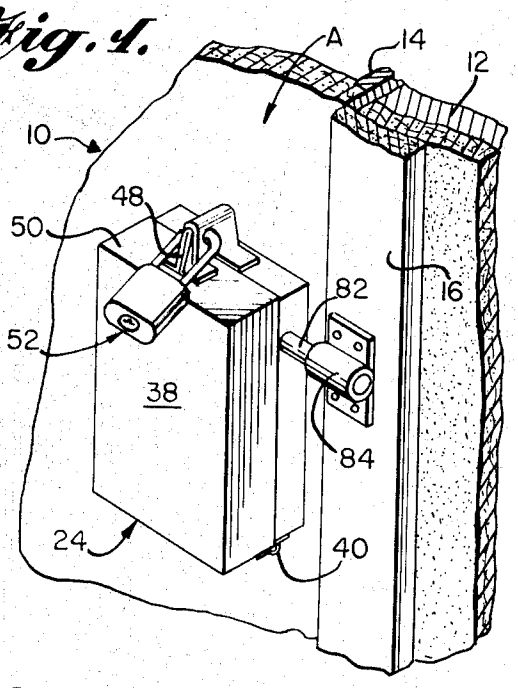


Fig. 2.

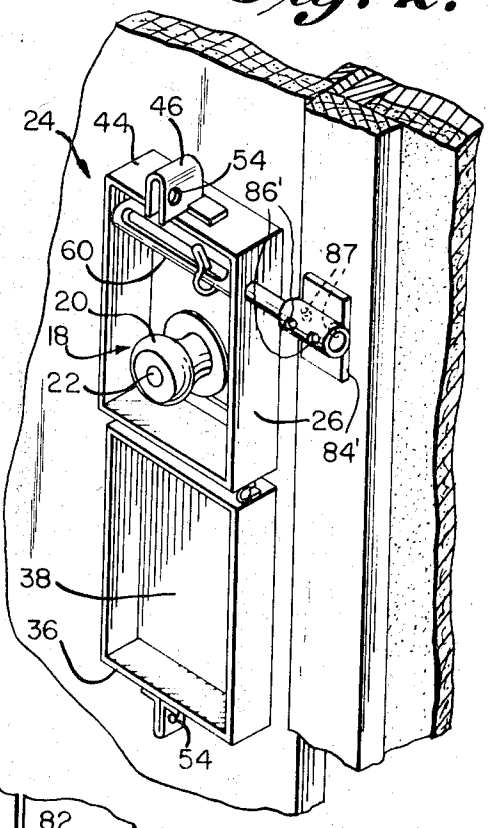


Fig. 3.

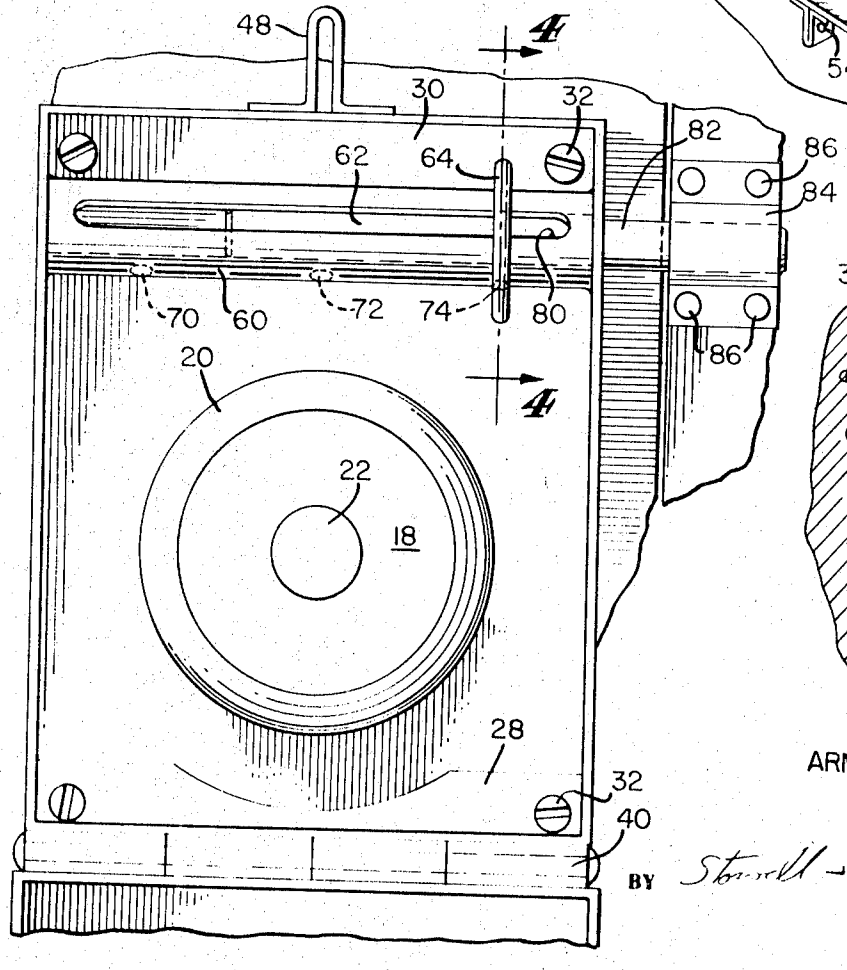
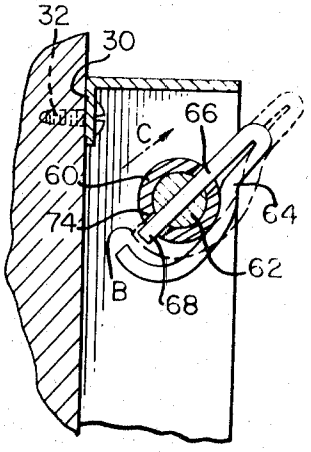


Fig. 4.



INVENTOR
ARMANDO FERRER

BY Stowell & Stowell

ATTORNEYS

United States Patent Office 3,563,069 Patented Feb. 16, 1971

3,563,069

SAFETY LOCK FOR DOORS

Armando Ferrer, 59 NW. 28th St.,
Miami, Fla. 33127

Filed July 7, 1969, Ser. No. 839,438
Int. Cl. E05b 59/00, 13/00; E05c 13/02
U.S. Cl. 70—129 5 Claims

ABSTRACT OF THE DISCLOSURE

A supplemental locking device is provided for a door having a door knob consisting of a pair of frames which are hinged together and attachable to a door over the door knob. Lock means are provided to secure the pair of frames together and when so secured the door knob is inaccessible. The supplemental locking device also includes a slide bolt carried by the door attached frame which slide bolt is similarly inaccessible when the pair of frames are locked together.

BACKGROUND OF THE INVENTION

Supplemental locking devices for home, office and the like doors are known which are adapted to enclosed in whole or in part door knobs and conventional locks for the doors. The prior art devices have drawbacks in that access to the door knob may be readily had by for example breaking a pane of glass in the door or in a frame adjacent to the door.

The present invention is directed to an improved supplemental safety locking device for a door which includes a pair of hingeable quadrangular frame mechanisms which enclose the door knob and when the pair of frames are locked together it is no longer possible to have access to the door knob notwithstanding that panels of glass or the like are removed from the door or from a panel adjacent to the door. The invention also includes a slide bolt arrangement which is primarily housed within the pair of hingeable frames and which also becomes inaccessible when the pair of frames are locked together.

It is an advantage of the present invention to provide such a device wherein the slide bolt may be moved in either direction so that the supplemental locking device may be employed on either left or right hand doors.

It is another advantage of the present invention to provide such a supplemental locking device which may be employed on either inwardly or outwardly opening doors by merely modifying the form of the slide bolt keeper which keeper may be of conventional design.

It is a further object of the present invention to provide such a supplemental locking device which when employed with certain forms of conventional door-locking mechanisms may be used when the occupants are outside or inside the locked structure.

These and other objects and advantages are provided in a safety lock for a door comprising a first quadrangular frame, internal plate means for the frame adapted to receive fasteners for attaching the frame to the door over the door knob, a second quadrangular frame having a closed face, hinge means connecting the first and second frames such that when the pair of frames are in abutting alignment the door knob is enclosed therein, lock means separateably connecting the frames at a position remote from the hige means, and a slide bolt carried by the first frame and adapted to be received in keeper means carried by the door frame.

The invention will be more particularly described in reference to the accompanied drawing wherein;

FIG. 1 is a fragmentary perspective view of a door and door frame having the improved supplemental lock means attached thereto;

FIG. 2 is a view like that illustrated in FIG. 1 with the supplemental lock means in the unlocked position;

FIG. 3 is a front elevational view of the structure as shown in FIG. 2; and

FIG. 4 is a section on line 4—4 of FIG. 3.

Referring to the drawing **10** generally designates a door hinged to swing in the direction of the directional arrow A and when in the closed position as indicated in the drawing to cooperate with the door frame generally designated **12** having butt plate **14** and trim strip **16**. The door is equipped with a conventional lock type door knob and opener generally designated **18**. The lock type door opener includes the inside knob **20** having a locking button **22** which may be of the rotatable or push-button type whereby when the button is pushed or turned to the locked position entry through the door may be had from the outside via a key but an occupant within the house may open the door by merely rotating the door knob. Further, once the locking mechanism **22** is placed in the locked position a person within the building structure may leave and pull the door closed without disturbing the locked position thereof.

The supplemental locking mechanism of the present invention is generally designated **24** and includes a first quadrangular frame **26** having inturned flanges **28** and **30** along the inner top and bottom edges thereof. These flanges are bored to receive one or more attaching devices such as the illustrated wood screws **32**. By having the flanges internal of the frame access to the screws may only be had when the supplemental locking devices in an unlocked position as will be more fully evident hereinafter. While internal flanges are only illustrated at the upper and lower marginal edges of the inner quadrangular frame **26** it will be appreciated that the flanges may also be provided on the vertical edges of the frame or only on the vertical edges of the frame.

The assembly also includes a second quadrangular frame **36** having a closed face **38**. The frame **36** is hinged to the first frame **26** by for example piano type hinge **40** attached along the lower manginal edges of the pair of frames. Secured to the upper edge **44** of the first frame **26** is a latch half generally designated **46**. The latch half in the illustrated form of the invention is welded to its cooperating surface of the edge **44**. A cooperating latch half **48** is similarly secured to wall **50** of the second quadrangular frame **36** such that when the second frame is closed against the first frame a conventional padlock, generally designated **52**, may be passed through aligned openings **54** in the cooperating pair of latch-half members **46** and **48** as illustrated in FIG. 1 of the drawing.

With the padlock **52** in the "locked" position, as illustrated in FIG. 1, access to the inside of the supplemental lock is barred and the knob **20** of the conventional door locking mechanism is inaccessible thereby preventing access to the building structure by merely breaking a window in for example the door **10** or in a panel adjacent to the door frame **12** and turning the door knob.

As a further safety mechanism, the first or innermost frame **26** has secured thereto a generally tubular housing **60** which slideably receives a slide bolt **62**. The slide bolt is provided with an actuator **64** which is received in a bore **66** in the bolt **62**. The actuator **64** is of the type which may be moved a limited space generally designated B in FIG. 4 of the drawing relative to the slide bolt **62** and when the actuator **64** is moved in the direction of the directional arrow C the extended end **68** of the member frees itself from one of three bores **70**, **72**, or **74** in the housing **60** permitting the operator to slide the bolt from an inoperative position with the end of **68** projecting through opening **72** to a locked position with the end **68** projecting through opening **74**.

The opening **70** shown in FIG. 3 of the drawing is employed when the structures are mounted on a door having the lock mechanism mounted along the left-hand vertical edge and the hinge line at the right-hand vertical edge. The upper portion of the straight leg of the actuator **64** rides in a slot **80** in the generally tubular track way **60** as more clearly shown in FIGS. 3 and 4 of the drawings.

When the supplemental lock device of the invention is mounted on a door adapted to swing in the direction of directional arrow A the extended end of the bolt assembly **82** is received in a keeper **84** attached to the trim strip **16** of the door. Preferrably, the keeper **84** is attached to the trim strip with blind screw type fasteners **86** to prevent removal of the screws once the device has been attached to the door.

It will be recognized by those skilled in the art that where the door to the structure opens outwardly, the keeper **84** would be of another form such as a bore in the door jam **14** which bore may receive a metal sleeve as is known in the art.

As herein before discussed, with a person within the building to be locked, first the door is locked in a conventional manner by the example depressing or turning the locking button **22**; the bolt assembly is moved to the right to place the extended end **82** thereof in its keeper **84** and the actuator **64** is moved downwardly such that its extended end **68** passes through the bore **74** in the tubular housing **60**. Then the quadrangular frame **36** is closed and the padlock **52** is passed through the cooperating bores **54** in the latch mechanism **46–48**. The door is then secure and it cannot be opened from the inside or the outside without removing the padlock **52**, opening the closed pair of frame members and withdrawing the bolt assembly.

If the door is to be secured with no occupant within the building structure, the bolt assembly cannot be used; however, the pair of cooperating frames can be padlocked as illustrated in FIG. 1 and access to the interior of the building structure may be had by unlocking the conventional door lock **18** with a key from outside of the building. However, a person not having the door key cannot gain access to the building by merely removing a window or panel structure from the door or from a panel adjacent to door frame **12**.

From the foregoing description of a preferred embodiment of this invention, it will be seen that a simple, relative inexpensive and highly effective supplemental locking means is provided for a door. It will also be apparent to those skilled in the art that various modifications may be made in the specific illustrated form of the device without departing from the scope of the invention.

For example instead of employing the blind screws **86** for the keeper **84** the keeper may be constructed as shown at **84'** in FIG. 2 of the drawings. In this form of the invention holes **86'** are provided in the barrel portion of the keeper which are aligned with smaller holes adapted to receive conventional screws **87**. It will be seen that with the bolt in the locked position the heads of the screws **87** are covered and inaccessible.

I claim:

1. A safety lock for a door comprising a first quadrangular frame, internal plate means for such frame adapted to receive fasteners for attaching the frame to a door over the door knob, a second quadrangular frame having a closed face, hinge means connecting the first and second frames such that when the pair of frames are in abutting alignment they form an enclosure for the door knob, lock means separably connecting the frames at a position remote from the hinge means, supporting means within the first frame, and a slide bolt carried by the supporting means and adapted upon projection to be received in keeper means carried by the door frame and dogging means within the enclosure cooperating with the slide bolt to releasably secure it in the projected position thereof.

2. The invention defined in claim **1** wherein the lock means separateably connecting the frames comprises a padlock received in telescoping keepers one carried by the first frame and one carried by the second frame.

3. The invention defined in claim **2** wherein the supporting means includes a tubular housing carried by the first quadrangular frame and said slide bolt is mounted within said tubular member.

4. The invention defined in claim **3** wherein the dogging means includes pin means cooperating with the slide bolt and its housing to positively lock the bolt in the locked and unlocked positions thereof.

5. The invention defined in claim **4** including opposed bores in the vertical walls of the first quadrangular frame to permit passage of either end of the slide bolt therethrough whereby the safety lock device may be employed on a left-hand or right-hand door.

References Cited

UNITED STATES PATENTS

543,226	7/1895	Atwood	292—150X
1,950,503	3/1934	Mahon	70—178X
2,716,882	9/1955	Gill et al.	70—159
2,862,381	12/1958	Fresard	70—462

FOREIGN PATENTS

783,438	9/1957	Great Britain	70—161

MARVIN A. CHAMPION, Primary Examiner

A. G. CRAIG, JR., Assistant Examiner

U.S. Cl. X.R.

70—107, 209, 462; 292—150