

July 18, 1950

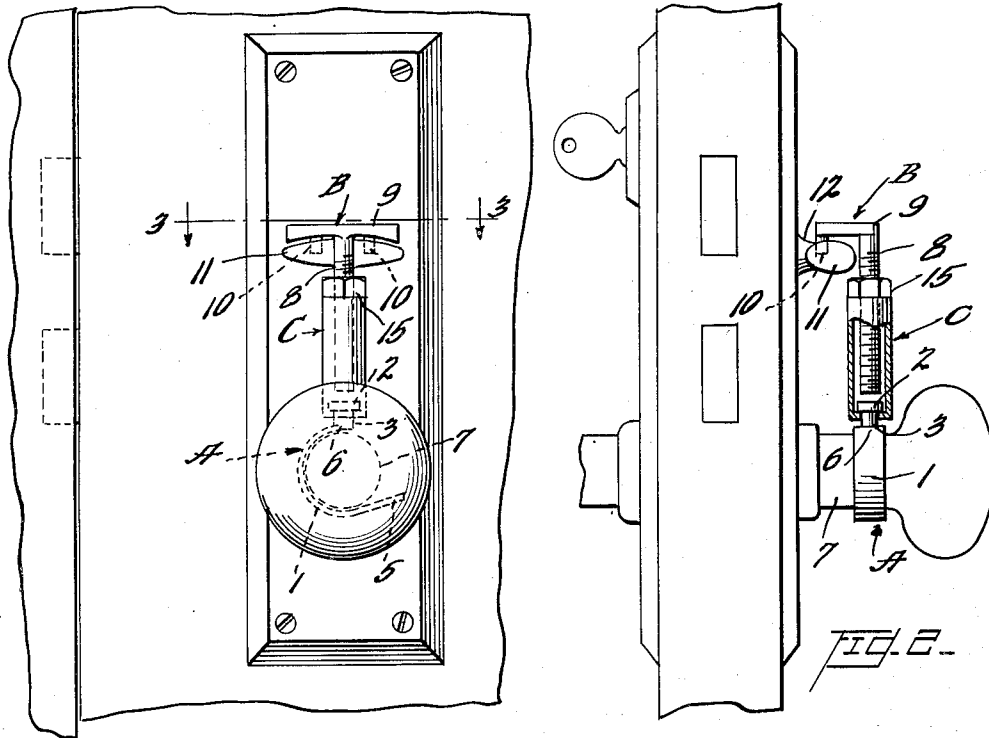
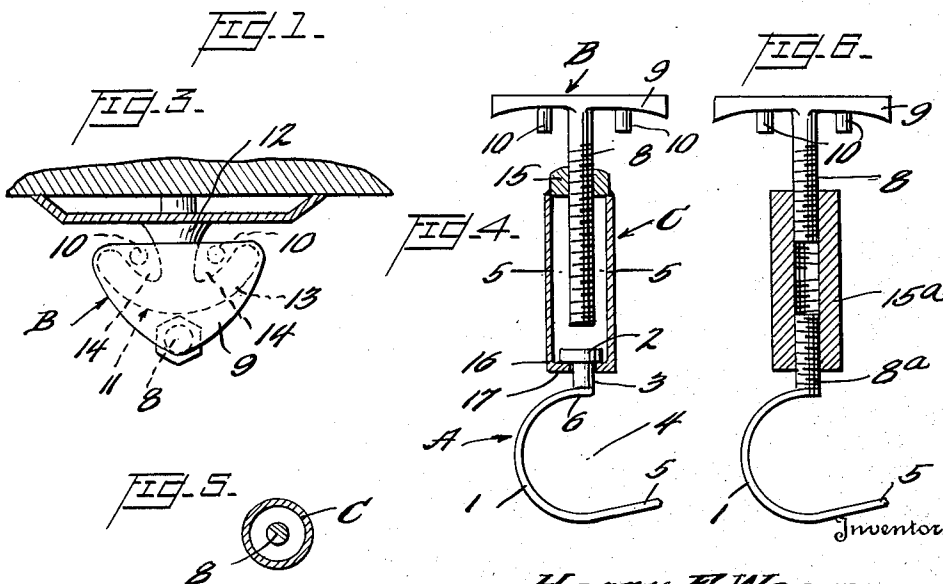
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2,515,364

DOOR-NIGHT-LATCH-BAR SECURING DEVICE

Filed March 7, 1947

2 Sheets-Sheet 1



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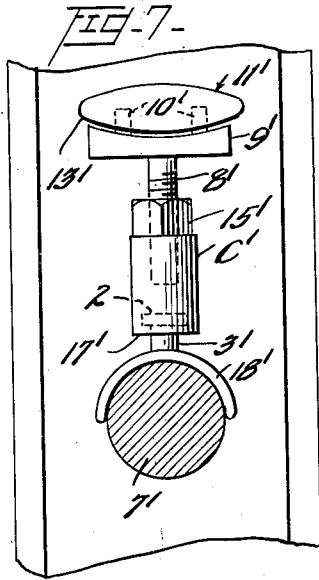
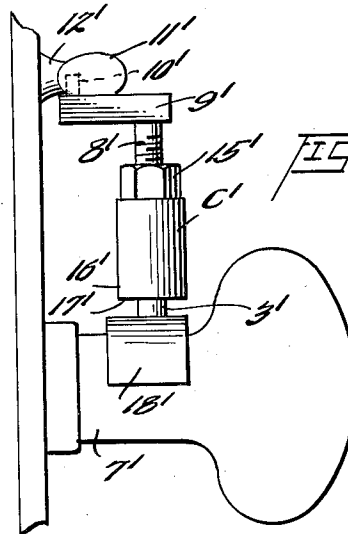
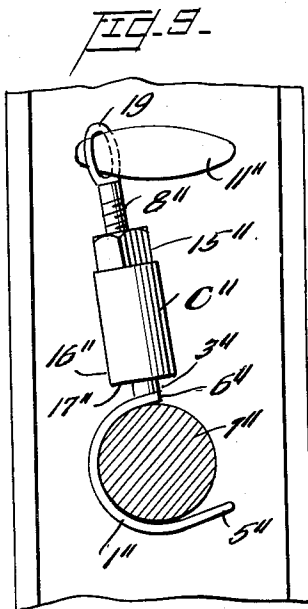
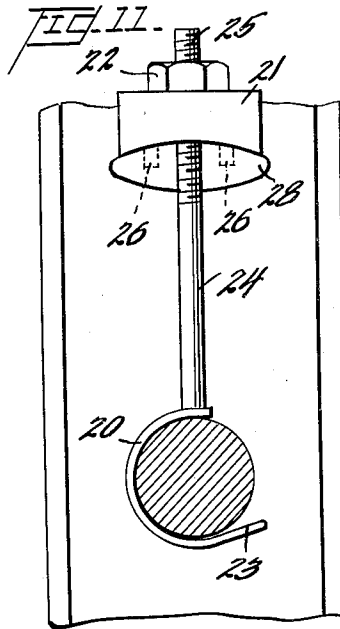
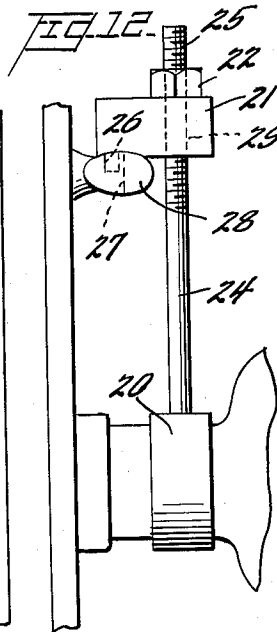
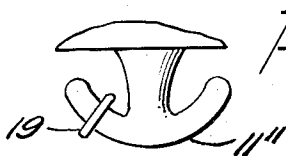
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DOOR-NIGHT-LATCH-BAR SECURING DEVICE

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2 Sheets-Sheet 2



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DOOR-NIGHT-LATCH-BAR SECURING
DEVICE

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4 Claims. (Cl. 292—359)

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This invention relates generally to attachments for night latches of door locks, and more specifically to devices, mounted on the inside of doors, for securing night latch bars positively in locked position, so as to effectively prevent unauthorized attempts being made, from the outside of the doors, to move such night latch bars out of such locked position, in efforts to improperly gain entrance through such locked doors.

Locks installed on the doors of some houses, apartments, other buildings or rooms, are designed in such a manner that the main locking bar may be moved into and out of the receptacle that is provided in the door frame by turning the night-latch bar from inside the door or by turning a key inserted in the lock from outside the door, thus locking or unlocking the door.

The key for such a lock actuates the main locking bar and also turns the night-latch bar. However, the main locking bar cannot be moved by turning the key in the lock, if the night-latch bar is secured properly, so it cannot move. When the main locking bar is in the locked position, the night-latch bar usually is in a horizontal position. Conversely, when the main locking bar is in the unlocked position, the night-latch bar is in the vertical position.

One of the principal objects of this invention is to provide a locking device to secure the night-latch bar on a door in the horizontal or locked position and thereby prevent the unlocking of a door by means of a key or other instrument.

A further object of the invention is to prevent unlawful or undesirable entry by way of a door, which may be the only door, or one of two or more doors, to a room, or apartment or house, or other building, each of which doors embodies such a night-latch bar, with my device placed in position thereon, while a person occupies such room, etc.

A still further object is to prevent unauthorized attempts to enter a room through any of one or more doors provided with my locking device, placed in position thereon by a person, before leaving such room by a still additional door, less accessible to the would-be intruder to such room, while thus left unoccupied.

My invention is simple in construction and efficient in operation, strong yet light in weight, relatively cheap to make, and easy and quick to adjust in position.

Various other objects and advantages of this invention will be obvious from the following particular description of embodiments of my invention.

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The various features of novelty which characterize my invention are pointed out with particularity in the claims, annexed to and forming a part of this specification, but for a better understanding of the invention, however, its advantages and specific objects attained with its use, reference should be had to the accompanying drawings and descriptive matter in which I have illustrated and described the best forms of my invention.

Of the drawings:

Fig. 1 is a front elevation of the preferred form of my invention.

Fig. 2 is a side elevation of the same.

Fig. 3 is a horizontal section on the line 3—3 of Fig. 1.

Fig. 4 is a sectional view of the front elevation shown in Fig. 1.

Fig. 5 is a sectional view on the line 5—5 of Fig. 4.

Fig. 6 is a view similar to Fig. 4 with certain parts substituted therein.

Figs. 7 and 8 are front elevation and side elevation, respectively, of the first modification of my invention.

Fig. 9 is a front elevation of the second modification of my invention.

Fig. 10 is a detail of the form of invention shown in Fig. 9.

Figs. 11 and 12 are front elevation and side elevation, respectively, of the third modification of my invention.

Referring to the form of the invention shown in Figs. 1 to 5, inclusive, my preferred form of invention comprises only three separate members, including a hook-like door-knob-shaft engaging member A, a bolt-like night-latch-bar engaging member B, and a turnbuckle-like member C swivelly connecting such members A and B.

The member A is formed with a hook 1 and a swivel head 2 and a shank 3 connecting such hook and swivel head. The open space 4 between the free end 5 and the shank end 6 of the hook is preferably made sufficient to permit the movement therethrough of a door-knob-shaft 7 of standard, or slightly greater or less than standard, diameter, in order that such hook may be readily attached to and detached from such shaft, when desired.

The member B is formed with a stem 8 and a head 9 and posts 10 so positioned and dimensioned as to cooperate with a night-latch bar 11, and also with the turnbuckle-like member C. The stem 8 is shown threaded for most of its full length which is preferably less than the distance

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between the night-latch bar 11 and the door-knob-shaft 7. As indicated in Fig. 3 of the drawings, the head 9 is of the general configuration of an isosceles triangle, near the apex of which is attached the stem 8 and near the base of which extend the posts 10, in the same direction as stem 8. The base of such triangular head is shown as substantially the same length as that of the night-latch bar 11, which latter has the shaft 12 supporting the thumb-piece 13 of arcuate shape, so as to form recesses 14 to receive the posts 10. The posts 10 are thus spaced from each other and from the stem 8, as shown in Figs. 1 and 3 of the drawings, when this form of the invention is applied, and thus in operative position, the night-latch bar 11 lies between the posts 10 and the stem 8, with the latter extending clear of, but alongside, the convex side of the arcuate bar.

Cooperating with such threaded stem 8 and also with hook A, is the turnbuckle-like member C, which is shown as being of general hollow cylindrical shape, with either plain or rough surface, and having at one end a nut portion 15 and at the opposite end a swivel portion 16. The nut portion 15 has a threaded central bore therethrough which is of such diameter and pitch of thread as to receive the threaded stem 8. The swivel portion 16 has the wall thereof bent inwardly to form a flange 17 to lie beneath the swivel head 2 of the hook, and thus prevent separation but permit rotative swivelling movement between such turnbuckle C and hook A, when the threaded turnbuckle, upon being rotated in one direction, draws the head toward the hook A, to clamp the device in position.

Fig. 6 is similar to Fig. 4 except the swivel head 2 in Fig. 4, is replaced with a threaded stem 8a similar to stem 8 of the opposite end, and the flange 17 in Fig. 4 is replaced with a nut 15a.

In the first modification, shown in Figs. 7 and 8, the parts 2', 3', 7', 8', 10', 11', 12', 13' and 14' correspond, respectively, to parts 2, 3, 7, 8, 9, 10, 11, 12, 13 and 14 in the preferred form shown in Figs. 1 to 5. However, in this first modification, the parts 8', 9', 10' and 15' differ slightly from the corresponding parts in the preferred form of the invention. Thus, in Figs. 7 and 8, the bolt stem 8' threadedly cooperates with turnbuckle nut 15' of turnbuckle C', similarly as in the corresponding parts in Figs. 1 to 5, except that each of such bolt stem 8' and turnbuckle C' is less in length than their counterparts in Figs. 1 to 5, for the reason that in this first modification the clamping pressure is exerted against opposite faces of the bar 11' and knob shaft 7', to exert pressure by turning the turnbuckle, whereas in the Figs. 1 to 5 inclusive form, there is a pull exerted and pressure to clamp the device against rotation. In the form shown in Figs. 7 and 8, the swivel head 2 (similar to that in Figs. 1 to 5) is connected to arcuate or semi-circular plate member 18, which is adapted to fit over the door-knob shaft. In harmony with such different method of operation, the posts 10' are mounted in the upper face of the head 9' to be held inserted in recesses 14' of the latch bar 11', when pressure is exerted on semi-circular or arcuate plate 18' so as to hold it against shaft 7'. Thus in applying this form of the invention, the arcuate member 18' is slipped on the shaft 7' and then the head 9' is placed under the bar 11', and the posts 10' forced into the recesses 14' by turning the turnbuckle.

In the second modification, shown in Figs. 9

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and 10, all the parts correspond to parts in Figs. 1 to 5, except the head 9 of Figs. 1 to 5 is replaced by eye or ring 19 of the second modification, which eye fits on one end of the latch bar 11'.

In the third modification, shown in Figs. 11 and 12, the form of invention comprises three separate members, including a hook-like door-knob-shaft engaging member 20, a slidable plate member 21 and an adjusting nut 22. The hook-like member 20 comprises a hook 23 similar to that of Figs. 1 to 5, except that instead of the swivel head of such preferred form, the hook 23 is, in Figs. 11 and 12, securely attached to the bolt 24 which is threaded at the top end thereof, as at 25. The slidable plate member 21 has two posts 26 secured to the underside thereof for insertion in the recesses 27 of the latch bar 28 when the plate member's smooth bore 29 loosely fits over the threaded bolt 25. The adjusting nut 22 is threaded on the threaded bolt and is used to force the plate 21 into position on top of the night-latch bar.

To attach the preferred form Figs. 1 to 5, the hook 1 is placed in position on the door-knob-shaft 7. The turnbuckle C' is rotated in one direction so the threaded stem 8 is extended far enough to allow posts 10 to be inserted in the recesses 14. The turnbuckle is then rotated in the opposite direction until the head 9 is snugly against the top of the night-latch bar 11 and the hook 1 is snugly against the bottom of the door-knob-shaft 7. To detach, rotate the turnbuckle until the posts 10 can be removed from the recesses 14. Remove hook 1 from door-knob-shaft 7.

To attach the first modification of the device Figs. 7 and 8, the turnbuckle C' is rotated in one direction until the length of the assembly has been reduced sufficiently to allow the arcuate member 18' to be placed on the shaft 7' and posts 10' in the recesses 14'. The turnbuckle C' is then rotated in the opposite direction to extend the 8' until the top of head 9' fits snugly against the bottom of bar 11', and the arcuate member 18' is snugly against the upper part of the door-knob-shaft 7'. To detach, rotate the turnbuckle C' until the posts 10' can be removed from the recesses 14'.

To attach the second modification of the device shown in Figs. 9 and 10, the hook 1'' is fitted over the door-knob-shaft 7''. The turnbuckle C'' is rotated in one direction until the stem 8'' is extended enough to allow the ring 19 to be slipped over that end of the latch bar 11'' that moves in an upward arc when the latch bar 11'' is turned from the horizontal to the vertical position. The turnbuckle C'' is then rotated in the opposite direction until the assembly is snugly in position and the latch bar 11'' cannot be turned from the horizontal position. To detach, the turnbuckle C'' is rotated until the stem 8'' is extended enough to allow the ring to be removed from the end of the bar 11''.

To attach the third modification shown in Figs. 11 and 12, the hook 23 is placed on the shaft 7. The adjusting nut is rotated until the plate 21 is far enough upon the bolt 24 to allow the posts 26 to be placed in the recesses 27 of the latch bar 28. The adjusting nut 30 is then rotated in the opposite direction until sufficient pressure is exerted by the plate 21 on latch bar 28 to prevent movement of the bar 28.

Having thus described the several parts of the invention, it is understood that when the locking device is placed in position and properly adjusted

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on the night-latch bar and door-knob-shaft of a door, such door cannot be opened from the outside by means of a key or other instrument. Thus, it is apparent that this locking device will prevent unlawful or undesirable entry by way of any door to a room, apartment, house, or other building, which embodies such a night-latch bar with my device placed in position thereon, while a person occupies such room, etc. It is understood also that entrance cannot be gained to a room, etc., by means of a key or other instrument applied to the lock of any door provided with my locking device placed in position by a person before leaving such room by an additional, less-accessible door while the room, etc. is left unoccupied.

While in accordance with the statutes I have illustrated and described the best embodiments of my invention now known to me, it will be apparent to those skilled in the art that changes may be made in the subject matter and form of the invention disclosed without departing from the spirit of my invention as set forth in the appended claims, and that in some cases certain features of my invention may be used to advantage without a corresponding use of other features.

I claim:

1. In a securing device for a latch bar provided with spaced apertures including an aperture on either side of a shaft thereof mounted adjacent a door-knob-shaft, the combination of a hook-like door-knob-shaft-engaging member, a plate member and an adjusting nut, said hook-like member comprising a hook and a threaded bolt stem, said plate member being slidable on said stem and being formed with posts for engaging in said apertures in the latch bar, said nut being threaded to receive said threaded stem and thereby permit clamping of the latch bar in horizontal position and prevent turning of said latch bar.

2. In a securing device for a latch bar provided with spaced apertures including an aperture on either side of a shaft thereof mounted adjacent a door-knob-shaft, the combination of a door-knob-shaft engaging member, a latch-bar engaging member, and a turnbuckle-like member swivelly connecting said members, said shaft-engaging member comprising an arcuate portion and a swivel head portion, said latch-bar engag-

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ing member being formed with a threaded stem and with posts for cooperative engagement in said apertures in said latch bar, said turnbuckle-like member comprising a nut threaded to receive said threaded stem and also comprising a swivel end to cooperate with said head portion.

3. In a securing device for a latch bar provided with spaced apertures including an aperture on either side of a shaft thereof mounted adjacent a door-knob-shaft, the combination of a hook-like door-knob-shaft engaging member, a bolt-like latch bar engaging member, and a turnbuckle-like member swivelly connecting said members, said hook-like member comprising a hook, a swivel head and a shank connecting said members, said bolt-like member comprising a threaded stem, a head, and posts spaced apart and projecting from said head, so as to extend into spaced apertures of said latch bar, in order to prevent turning of said latch bar, said turnbuckle-like member comprising a hollow cylinder having at one end a nut portion and at the opposite end a swivel portion, said nut portion being threaded to receive the threaded stem of the bolt-like member and said swivel portion rotatively supporting the swivel end of said hook-like member.

4. A securing device for a latch bar provided with spaced apertures including an aperture on either side of a shaft thereof mounted adjacent a door-knob-shaft comprising means for engaging a door-knob-shaft, means for engaging the latch bar, said last-named means including a head formed with a pair of spaced projections adapted to enter said apertures in said latch bar, and means for connecting said first-named and second-named means.

HARRY FRYE WEAVER.

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