Nov. 27, 1951 F. E. BEST 2,576,440

PRIVACY LATCH

Filed Feb. 4, 1948

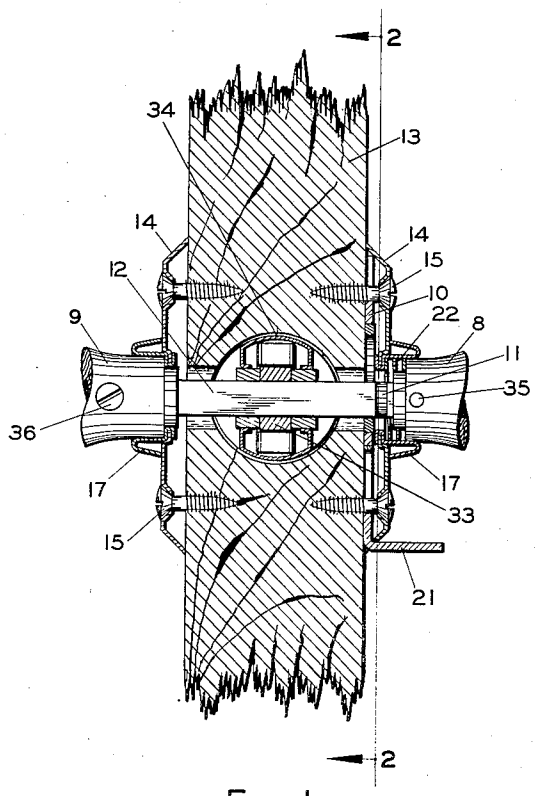



FIG. 1

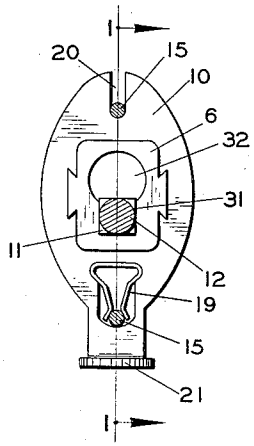



FIG. 2

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Patented Nov. 27, 1951 2,576,440

# UNITED STATES PATENT OFFICE

2,576,440

## PRIVACY LATCH

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Application February 4, 1948, Serial No. 6,120

1 Claim. (Cl. 292—359)

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My invention pertains to tubular locks and latches and is particularly directed to privacy latches for use in conjunction with knob sets, especially on interior doors, such as residential bath or toilet doors.

My invention consists of a spindle lock carried by a manually operated locking plate adapted for assembly beneath the knob set escutcheon on the interior side of said doors and adapted to lock the spindle against ordinary rotation, but to yield to rotation when the knob is forcefully pushed or pulled as the case may be, thus ordinarily granting privacy, but affording quick emergency entrance from the outside.

I illustrate my invention by the accompanying drawing, in which Figure 1 shows a fragment of a door and knob set, and particularly locking latch 10 in longitudinal section as taken in line 1—1 Figure 2.

Figure 2 shows a front view of locking latch 10 and a cross-section of spindle 12, as taken on line 2—2 of Figure 1.

Figure 1 shows a fragment of a door 13, with escutcheons 14 secured thereto by screws 15, trapping locking latch 10 in place therebetween.

Knob shanks 8 and 9 and spindle 12, mating in escutcheon roses 17, complete this view.

Figure 2 shows the locking latch having the usual spring clip 19 adapted to function with a lower screw 15 to guide and hold the said locking latch in an up or a down position. It also has the usual slot 20 adapted to cooperate with the upper screw 15 to align said locking latch relative to the related elements.

It is also provided with the thumb piece 21.

One of the novel elements of this invention consists of a coiled spacing spring 22 preferably comprising a stiff flat coiled spring secured in place between knob shank 8 and rose 17 and adapted to normally hold the knobs and spindle in proper operating spaced relation.

Another novel feature is an annular groove 11 turned around on the square spindle.

This groove 11 is so positioned that it is normally out of register with locking latch 10 that preferably has a hardened insert 6 provided with a square locking recess 31 and an upper unlocking enlargement 32.

The movement of thumb piece 21 up or down locks or unlocks spindle 12. Thus, normally, when thumb piece 21 is moved up the spindle and knobs are locked against rotation.

But, when knob 9 is forcefully pulled to the left as viewed in Figure 1, notch 11 registers with insert 6, and the spindle 12 and knobs 8 and 9

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are free to turn and thus to operate the main latch mechanism 33 of tubular knob latch 34, thereby unlocking the door.

Many users of this type of lock desire means of emergency entrance and various devices have been placed on the market to afford such a convenience.

To meet this demand and simplify the mechanism, I have made this invention which is much simpler than former methods used, a predecessor device being set forth in Patent 1,760,394, dated May 27, 1930.

With this device installed, emergency entrance may be provided by combined pulling and rotating the outside knob, under the impulse of which pulling, the groove 11 will register with insert 6 and permit the spindle to turn, thus retracting the main bolt of the tubular lock.

To any pulling pressure on the outside knob, of a lesser degree than said forceful pulling, the square part of the spindle remains stationary within the vice-like square recess 31 that thus indicates that the room is occupied and ordinarily affords privacy.

Usually knob 8 is permanently pinned to spindle 12 by pin 35, while knob 9 is removably and adjustably secured to spindle 12 by screw 36.

If a pushing action of knob 9 is preferable to a pulling action for emergency entrance, then it is only necessary to remove spring 22 from its position as shown, between knob 8 and its rose 17, and place it between knob 9 and its rose 17, in which instance, the normal position of groove 11 is moved to the left of insert 6, so that a pushing action on knob 9 is required to align said groove 11 with insert 6.

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

In locking means adapted to selectively lock and unlock a knob and spindle assembly against and for rotation respectively, the combination of elements comprising a spindle having longitudinal ridges and an annular groove, knobs securable to said spindle and forming therewith said knob and spindle assembly, roses adapted to support said knob and spindle assembly with latitude for longitudinal movement therein, a spacing spring around said spindle and between a knob and a rose adapted to normally hold said knob and spindle assembly against said longitudinal movement and a manually adjustable locking plate having spindle engaging and spindle releasing portions adapted to selectively engage and release said spindle against and for rotation respectively

when said locking plate is in alignment with said ridges and adapted to release said spindle for rotation when the said spacing spring is depressed by forceful longitudinal displacement of said knob and spindle assembly to bring the groove into alignment with said locking plate.

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