United States Patent

Krakauer

[15] **3,680,337**

[45] **Aug. 1, 1972**

[54] **SAFETY LOCK**

[72] Inventor: **Edwin G. Krakauer,** 2 Turf Lane, Roslyn Heights, Long Island, N.Y. 11577

[22] Filed: **March 9, 1971**

[21] Appl. No.: **122,320**

[52] **U.S. Cl.** **70/419,** 70/455

[51] **Int. Cl.** **E05b 17/18**

[58] **Field of Search** 70/419, 420, 421, 455

[56] **References Cited**

UNITED STATES PATENTS

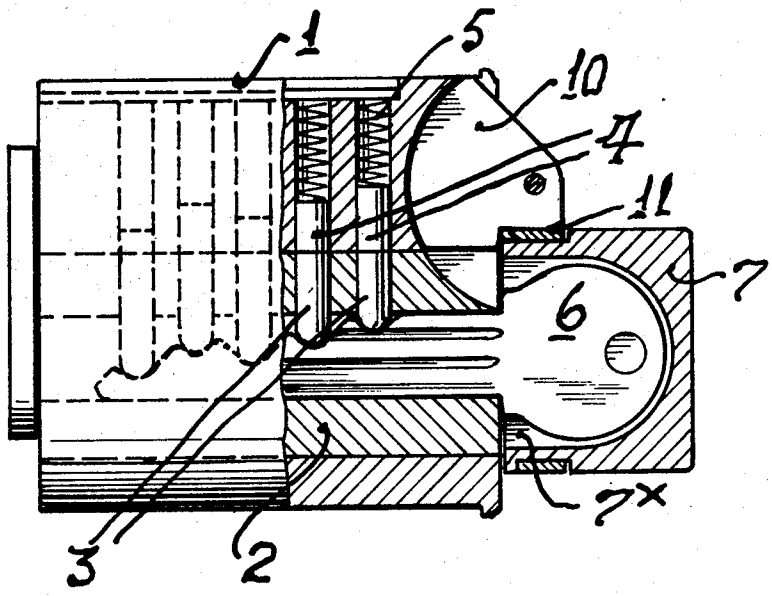
1,031,953	7/1912	Müller	70/363
2,179,947	11/1939	Miller	70/364 A
2,491,337	12/1949	Segal	70/419
3,267,707	8/1966	Adams	70/419
3,630,053	12/1971	Krakauer	70/421

Primary Examiner—Albert G. Craig, Jr.
Attorney—W. Lee Helms

[57] **ABSTRACT**

The lock casing employs a key-operated cylinder having tumbler-receiving passages in line with spring-engaged tumblers in the casing for the cylinder. When unlocking by a key, the latter moves the tumblers into inoperative position, as customary. To prevent "-picking" of the lock, a key-receiving turn button is pivotally held on the casing, and when the turn button-is moved into key-slot exposed position, said movement effects locking of the cylinder. It is only when the turn button abuts the key-opening of the cylinder that the latter can be turned by the key to unlock. Thus when the key-hole of the cylinder is exposed the cylinder is held inoperative.

2 Claims, 4 Drawing Figures



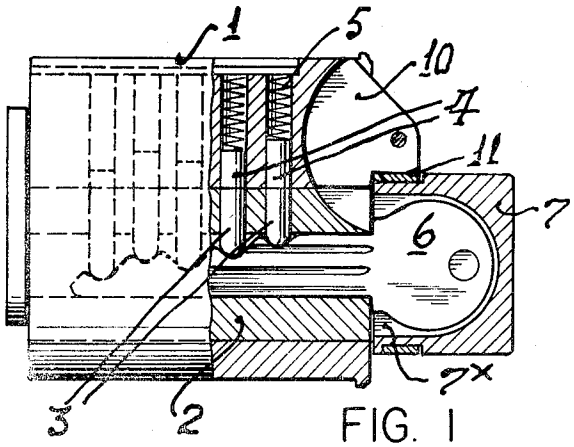


FIG. 1

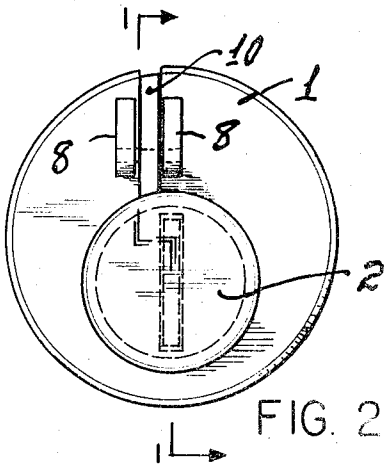


FIG. 2

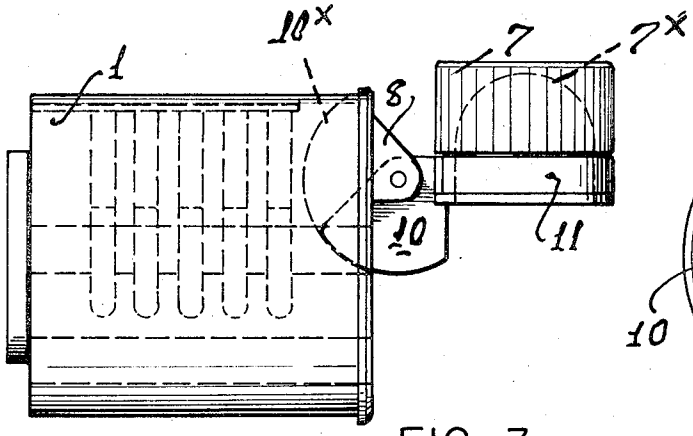


FIG. 3

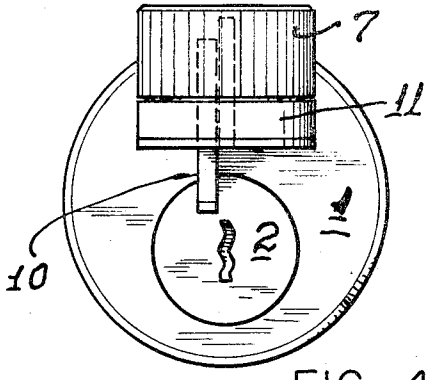


FIG. 4

INVENTOR.
Edwin G. Krackauer
BY W. Lee Helms
Attorney

SAFETY LOCK

The invention will be described with reference to the accompanying drawings, in which:

FIG. 1 is a side elevation, partly in section and partly in dotted lines, illustrating an embodiment of the invention, the section being on the line 1—1, FIG. 2.

FIG. 2 is a front-end elevation of the structure shown in FIG. 1.

FIG. 3 is a view similar to that of FIG. 1, with the turn Button in key-receiving position.

FIG. 4 is a front-end elevation of the structure in its position shown in FIG. 3.

Referring to the drawings, it will be seen that the embodiment shown comprises a barrel-like casing 1, in which is rotatably mounted a cylinder 2 formed with a row of apertures which receive tumbler pins 3. Adapted to be aligned with the tumbler pins by rotation of the cylinder is a row of tumblers 4 in apertures of the casing, the said tumblers 4 being engaged by pressure springs 5. As shown in FIG. 1 the cylinder 2 is formed with a key-receiving slot for receiving a key, such as indicated at 6.

At 7 is shown one form of a turnbutton, and which has an internal passage to closely receive the head of the key 6, and as indicated at 7^x, FIG. 1. At its front the casing is provided with two spaced relatively heavy lugs 8 which receive between them a cylinder-engaging combination lock and turn button carrier 10, the latter being integral with a ring 11 seated in an annular channel of the turn button 7. As shown by comparison of FIG. 1 with FIG. 3, it will be seen that when the turn button is raised, to expose the keyhole, carrier 10 has been swung downward in a slot 10^x and which continues into the cylinder itself, thus locking the cylinder against rotation.. Thus in the position of the elements shown in FIG. 3 the key can be inserted into the cylinder but it cannot turn the cylinder until the turn button has been brought to the position of FIG. 1, and the key-head is received in its seat within the turn button.

After a door is locked with the device, the turn button can be swung into position for freeing the key-head, and the key can be removed. However, the lock cannot be picked because an adequate movement of the turn button to expose the key-slot will cause member 10 to lock the cylinder against rotation.

It will be understood that various modifications can be made in the form and positioning of the elements shown in the illustrated embodiment, within the spirit of the following claims.

Having described my invention, what I claim and desire to secure by Letters Patent, is as follows:

1. In a safety lock comprising a casing having tumbler-receiving passages, a key-operated cylinder having a key-receiving passage and tumbler-receiving passages, tumblers intermediate the casing and cylinder and in register with said receiving passages, of a turn button, means pivotally connecting said turn button to the casing whereby said turn button is adapted to block or expose the key-receiving passage of the cylinder, a cylinder lock member engaged by the turn button and adapted to engage the cylinder for locking the same against rotation when the turn button is pivotally moved from a position in which it blocks insertion of an object into the key-receiving passage of the cylinder, and means for holding the turn button for its rotation.

2. A safety lock constructed in accordance with 1, in which the cylinder is formed with a slot; the cylinder lock member being finger-like and pivotally mounted in such manner as to enter said slot of the cylinder by engagement of the turn button on the raising of the latter from a position blocking the key-receiving aperture of the cylinder.

* * * * *