

G. N. MASON.
TURN KNOB PLATE.
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1,066,131.

Patented July 1, 1913.

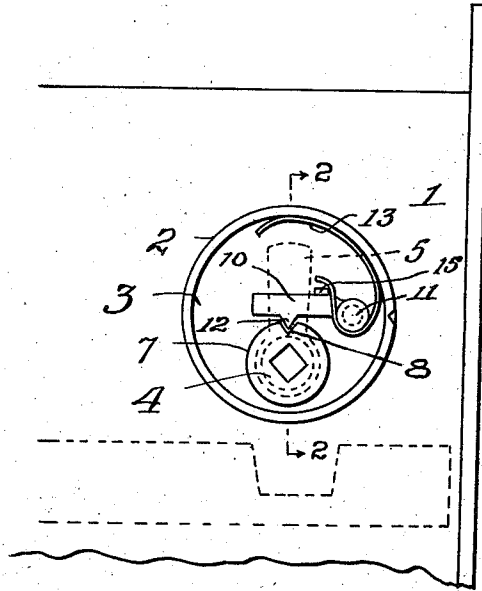


Fig. 1.

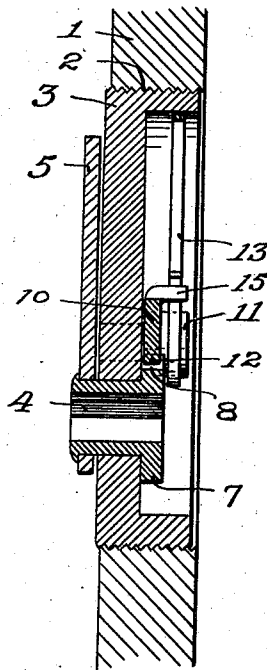


Fig. 2.

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Witnesses
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UNITED STATES PATENT OFFICE.

GEORGE N. MASON, OF MOUNT PENN, PENNSYLVANIA, ASSIGNOR TO READING HARDWARE COMPANY, OF READING, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

TURN-KNOB PLATE.

1,066,131.

Specification of Letters Patent.

Patented July 1, 1913.

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To all whom it may concern:

Be it known that I, GEORGE N. MASON, a citizen of the United States, residing at Mount Penn, in the county of Berks and State of Pennsylvania, have invented certain new and useful Improvements in Turn-Knob Plates, of which the following is a specification.

This invention relates to improvements in turn knob plates for door locks and it is particularly intended for use on cylinder locks.

The object of the invention is to provide a turn knob plate that may be entered in the casing through one of the openings therein usually used for the insertion of one of the cylinders, the one through which the bolt is actuated from the inside of the door.

The invention comprises a plate in disk form, threaded externally for entering it in the casing, and provided with a spring backed tumbler provided with means for engaging the knob spindle sleeve.

The invention is more fully described in the following specification and clearly illustrated in the accompanying drawing, in which:—

Figure 1 is a side elevation of a portion of a lock casing with my plate in position therein. Fig. 2 is a central sectional view, on an enlarged scale, through line 2—2 of Fig. 1.

The numeral 1 designates the lock casing which is formed with a screw-threaded opening 2 into which one of the cylinders is usually inserted. In this opening I insert my improved plate 3, which is screw-threaded externally, and is of disk form. The plate is usually inserted to a point slightly below the surface of the casing. This plate is provided with a sleeve 4 to accommodate the knob spindle. The sleeve is so mounted in the plate as to permit its turning therein and it carries on its inner end, a cam 5, adapted to engage the bolt, indicated in Fig. 1 by dotted lines. The sleeve is formed at its inner end with a collar 7 and this collar is formed with a V-shaped indentation 8 in its periphery.

The numeral 10 designates a tumbler, mounted on the face of the plate 3 by means of a headed pin 11. This tumbler is formed

with a V-shaped lug 12 on its under face adapted to engage the V-shaped indentation in the collar. A spring 13, seated against the inner wall of the dished plate, partly surrounds the pin 11 and its end engages a projecting lug 15 on the tumbler, tending to keep the tumbler in engagement with the collar. When the knob spindle is turned, the collar will turn and the tumbler will rise free from engagement with the indentation in the collar edge, and the lug 12 on the tumbler will ride on the outer surface of the collar until the collar has been turned sufficiently to cause the lug and the indentation to register.

With this construction the bolt operating cam will always be retained in proper position out of engagement with the bolt unless intentionally made to engage it.

Having thus described my invention, I claim:—

1. The combination of a lock casing and a locking bolt, with a turn knob plate removably located in the casing, said plate having a turn knob spindle sleeve rotatably mounted therein and carrying a cam on its inner end, and a collar on its opposite end formed with a V-shaped depression in its periphery; a tumbler mounted on the face of the plate and formed with a V-shaped lug for engagement with the collar, and a spring tending to keep the tumbler in engagement with said collar.

2. In a turn knob plate for door locks, a dished plate screw-threaded externally for engagement in the casing, a sleeve rotatably mounted in the plate, a cam carried on the one end of the sleeve, a collar formed on the other end of the sleeve and having a V-shaped depression in its periphery, a tumbler mounted on the face of the plate and formed with a lug for engagement with the depression in the collar, and a spring to keep the tumbler normally in engagement with the collar.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE N. MASON.

Witnesses:

ED. A. KELLY,
CLARA E. YOUNG.