

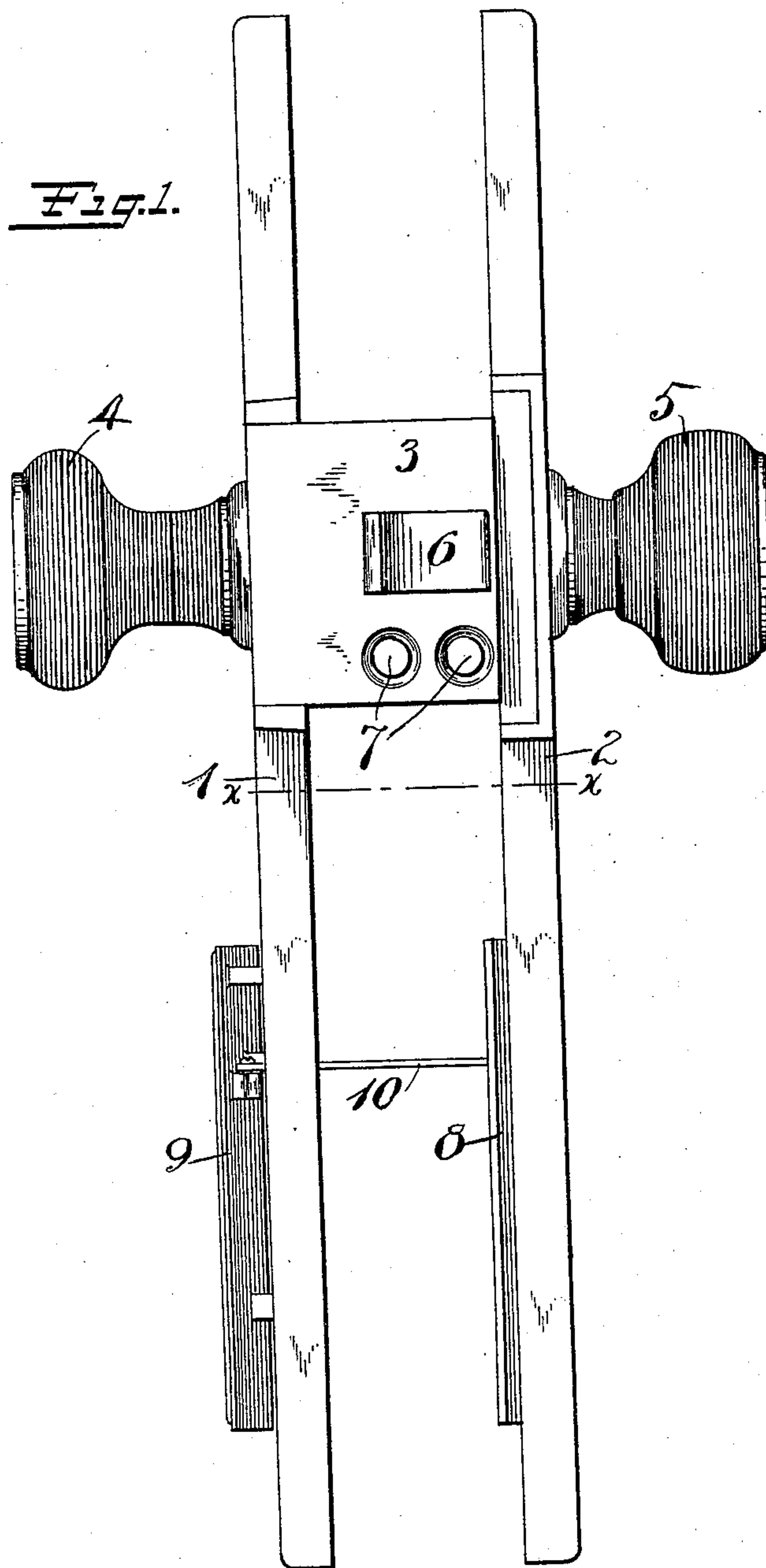
No. 868,235.

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H. G. VOIGHT.
LOCK.

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2 SHEETS—SHEET 1.



Witnesses.
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UNITED STATES PATENT OFFICE.

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LOCK.

No. 868,235.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, HENRY G. VOIGHT, a citizen of the United States, residing at New Britain, county of Hartford, State of Connecticut, have invented certain new and useful Improvements in Locks, of which the following is a full, clear, and exact description.

My invention relates to improvements in locks, particularly to that type in which there is a protected slot provided through the escutcheon plates to permit of the insertion of mail matter.

Heretofore, in such locks it was possible to introduce an instrument through the slot and manipulate the mechanism at the inner side of the lock, so as to operate the same and gain access to the room, which such a lock was supposed to protect. It is to defeat this method of attack that my invention is particularly designed.

In the accompanying drawings—Figure 1 is a front elevation of my invention as applied to one type of lock, the protective flaps being partially open; Fig. 2 is a view of the inner side of one of the escutcheon plates, showing a portion of the locking mechanism; and the blocking device therefor; Fig. 3 is a horizontal cross-section of Fig. 1 on the plane of the line $x-x$ looking down, but with the protecting flaps closed; Fig. 4 is a side view of a detail; Fig. 5 is a view of the same detail taken from the lower edge; Fig. 6 is a view partly in section of another detail.

1 is an inside escutcheon plate.

2 is an outside escutcheon plate.

3 is a face-plate.

4—5 are inner and outer knobs respectively.

6 is a latch.

7—7 are push-buttons, which represent conventionally the usual well-known stop-work mechanism employed to dog the outer knob 5 whenever desired. The construction of this stop-work mechanism is so well understood as to require no explanation, one form thereof being shown in my former patent No. 574506 to which reference is hereby made. Through the escutcheon plates 1 and 2 are passages or slots of a suitable size to admit of the passage of mail matter, and 8—9 represent respectively protective flaps, preferably hinged to their respective escutcheon plates and connected by a link 10, whereby the same will move together.

11 is a coil spring which may be suitably mounted, say on the bearing of the flap 8, in such a manner as to cause said flap to stand closed, as shown in Fig. 3. When this flap is closed, obviously the flap 9 will be closed through the action of the link 10.

12 is the latch-slide making suitable connection with the latch-bolt 6 and operated by suitable roll-backs, one of which is provided for each of the knobs 4 and 5. One of these roll-backs is shown in Fig. 2 at 14. By turning either of the knobs 4 or 5 (when the stop-work mechanism

is off) the latch-bolt 6 may be retracted through the medium of the slide 12. When, however, the stop-work mechanism 7 is on, the outer knob 5 cannot be turned, and hence the door is as effectively locked as though the latch-bolt 6 were a dead-bolt. Were it not for my improved mechanism, a suitable instrument could be inserted through the slot covered by the flaps 8—9 and the door could be opened by manipulating the free knob 4 at the inside. To prevent this, however, I provide coöperative means between one or both of the flaps 8—9 and the latch mechanism, whereby when the flaps 8—9 are open, the latch mechanism will be dogged and this method of attack rendered unsuccessful. This coöperating mechanism comprises a bolt 15, or equivalent device, arranged to engage at the proper time a stop-shoulder 16, or equivalent device, on slide 12.

17 is a lever-arm pivoted at one end to the escutcheon plate 1, and at the other end to the bolt 15. This member 17 carries an extension 17^a which is operated upon by a cam 18, in turn carried by flap 9. This cam is best seen in Fig. 6 and preferably has an abrupt shoulder 18^a, whereby, the instant the flaps 8—9 are opened, the lever 17 will be moved so as to project the bolt 15 into a position where it dogs the latch-work mechanism which, in the special form shown, would occur when the end of the bolt 15 stands to the rear of the shoulder 16 (see Fig. 2). The projection 17^a is of a suitable contour to avoid unnecessary friction between it and the cam 18. So long as the flaps 8—9 stand open, some part of the curved face 18^b will stand against the lever extension 17^a, so as to positively block the latch mechanism, thus making it impossible to effect an entry by the use of any instrument inserted through the letter passage.

It should be understood, of course, that when this lock is applied to the door, the escutcheon plates are securely braced against the opposite sides thereof, in the usual manner, and the passage for the mail is formed through the door stile so as to register properly with the slots in the escutcheon plate. This, of course, is too obvious to require illustration.

What I claim is—

1. In a lock of the character described, an escutcheon plate having a passage therethrough, a latch-bolt, a latch-operating means, a protecting flap for said passage through the escutcheon plate, a dogging mechanism between said flap and said latch-operating mechanism, and means for operating said dogging mechanism to dead-lock the latch mechanism when said flap is opened.

2. In a lock, an escutcheon plate having a passage there-through, a protecting flap therefor, a latch-bolt, a latch-operating mechanism, and means for preventing the operation of the latch-bolt when said protecting flap is opened.

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