

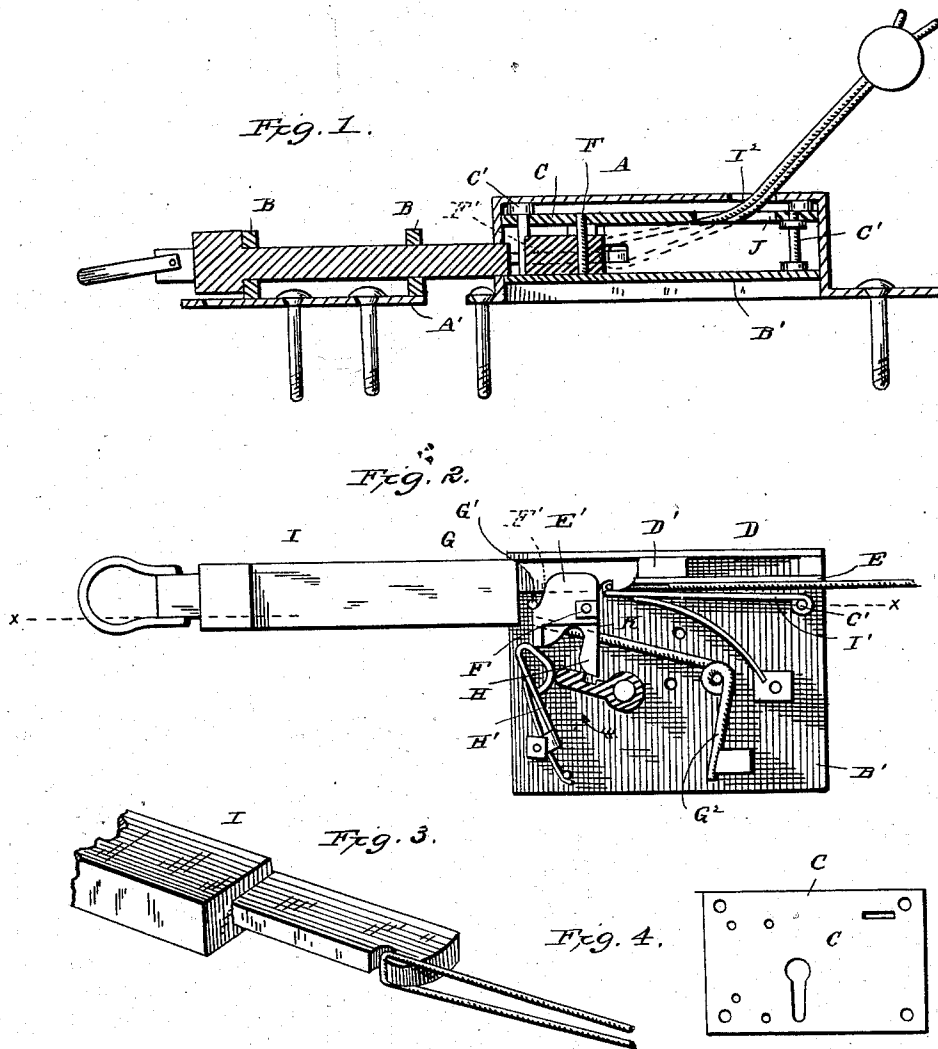
(Model.)

W. W. SHALLUS.

SEAL LOCK.

No. 282,380.

Patented July 31, 1883.



Witnesses.
Edwin L. Jewell.
H. A. Saulmin

Inventor.
W. W. Shallus.
C. M. Alexander.
Attorney.

UNITED STATES PATENT OFFICE.

WILLIAM W. SHALLUS, OF LANCASTER, PA., ASSIGNOR OF TWO-THIRDS TO
SAMUEL B. BITZER AND WILLIAM B. WILSON, OF SAME PLACE.

SEAL-LOCK.

SPECIFICATION forming part of Letters Patent No. 252,380, dated July 31, 1883.

Application filed April 3, 1883. (Model.)

To all whom it may concern:

Be it known that I, WILLIAM W. SHALLUS, a citizen of the United States, residing at Lancaster, in the county of Lancaster and State of Pennsylvania, have invented certain new and useful Improvements in Seal-Locks, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in seal-locks; and it consists, essentially, in the employment, with a suitable casing, of a revolving locking-tumbler, a pivoted detent, a spring-actuated guide, and a sliding bolt, together with certain other minor co-operating devices, the several peculiarities of which shall hereinafter more fully appear; and my invention has for its object to provide a lock which shall secretly engage and hold the seal-wire within its casing securely and firmly in such a manner as to make it impossible to unlock the same (unless the key be used) without breaking or severing the seal-wire.

In the accompanying drawings, forming a part of this specification, and on which like reference-letters indicate corresponding features, Figure 1 represents a longitudinal sectional view of my improved lock, the same being taken on the dotted line *x x*, Fig. 2; Fig. 2, a plan view of the lock, showing the relative arrangement of the locking mechanism, the casing being removed; Fig. 3, a detail perspective view of a portion of the sliding bolt, showing the seal-wire in engagement therewith; and Fig. 4, a plan view of the top plate detached.

The letter A indicates the casing of my improved lock, the same consisting of a rectangular box constructed of metal, and provided with suitable apertures and bolts, or other means by which it may be secured to the door; or to the door-frame or other object to be locked. A plate, A', provided with guides B, for the purpose of sustaining the lock-bolt, is secured to the door or to the door-frame, according to the position of the lock. Suitably secured within the casing is the base-plate B', to which is strongly attached the top plate, C, by means of the studs C', these plates being constructed of metal. From one edge of the plate B' extends the side D, and to the studs

D', extending from the bed-plate B', is secured the fixed wire-guide E. 50

The letter E' designates the rotating tumbler, the said tumbler being pivoted on a stud, F, secured, preferably, to the bed-plate; and it consists of a block having a groove, F', on one edge for the passage of the sliding bolt, (to be hereinafter further mentioned,) an abutment, G, which engages a fixed pin, G', whereby, in connection with a suitable spring, G², it is normally held in locking position, and a lug, H, the configuration of which is such as to receive the key and cause the tumbler to rotate. 55 60

The letter H' refers to a pivoted spring-actuated detent or pawl, the free end of which stands normally behind and in close contact with the tumbler E, and serves to hold the said tumbler in a locked position against the withdrawal of the sliding bolt. This detent is so shaped as to be forced from its normal position by the initial movement of the key just preceding its action on the tumbler, and to be returned to such a position as the key advances in the arc of its rotation, the spring causing such return. 65 70

The letter I indicates a sliding lock-bolt, to one end of which is preferably attached a finger loop or ring to facilitate in the withdrawal of the bolt, and a shoulder, *i*, which prevents the plate A' from being forced back, the other end terminating in a shank adapted to enter the groove F' in the rotating tumbler E', and to be laterally held therein by the side piece, D, or by other equivalent means. The extremity of this shank is rounded, or so beveled as to admit of the loop end of the seal-wire being forced past it, and it is provided with a recess or other means of engaging said wire, as shall presently appear. 75 80 85

Pivoted, preferably, to the base-plate B' is a spring-actuated or yielding wire-guide, I', which, in connection with the fixed guide E', forms a passage or conduit for the seal-wire as the looped end of the said wire enters the lock through the apertures formed, respectively, in the casing and the top plate. It will thus be seen that in order to set the device in locking position the bolt is inserted, as indicated in Fig. 2, and the seal-wire forced through 90 95

apertures above mentioned and between the fixed and yielding guides until its looped end reaches the bolt, when a slight continued pressure wedges it between the said yielding guide and the bevel of the shank until it drops, finally, into the recess. When in this position, the bolt cannot be withdrawn without breaking or severing the wire, as the looped end of the latter, should an attempt at withdrawal be made, will be brought in contact with the tumbler E', and thus arrest the bolt. When it is desired to unlock the parts, the key is applied through the apertures in the casing and the top plate, and rotated in the direction of the arrow until the detent H' is forced beyond the arc described by the tumbler, and the latter then rotated so as to bring its straight side K parallel, or approximately so, with the bolt, when the latter can be withdrawn, the loop of the wire passing free of the tumbler.

It is to be observed that I contemplate sometimes dispensing with the outer casing, A, and so constructing and connecting the plates B' and C' (after the manner of an ordinary lock, for instance) that they will be sufficient of themselves for the purposes contemplated.

It may also be remarked that my lock is particularly designed to be used on railway-cars, though its use, as is obvious, is not restricted to such appliances.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, in a seal-lock, of the

rotating tumbler, the spring-detent, and the return-spring, adapted, the one to normally hold the tumbler, and the other to return it to such position against its abutment, with the sliding bolt provided with the wire-recess, and the seal-wire adapted to engage therewith and to bind against the tumbler, whereby the parts are locked, substantially as described.

2. The combination, in a seal-lock, of the rotating tumbler having a groove to receive the bolt, the spring-detent, and the return-spring, adapted, the one to normally hold the tumbler, and the other to return it to such position against its abutment, with the sliding bolt and the wire conduit or guides, the said bolt being adapted to engage the wire and to cause it to bind against the tumbler, and the conduit to guide the wire, substantially as described.

3. The combination, in a seal-lock, of the rotating tumbler, its return-spring, and the spring-detent, the said tumbler and detent being provided with lugs, whereby they are thrown out of engagement and the tumbler is rotated, with the bolt and the conduit having a yielding guide, whereby the wire is guided and allowed to enter the recess in the bolt, substantially as described.

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

WILLIAM W. SHALLUS.

Witnesses:

CHAS. D. DAVIS,

WILLIAM D. ALEXANDER.