

J. Morgan,

Permutation Padlock.

No. 108,166.

Patented Oct. 11, 1870.

Fig. 1.

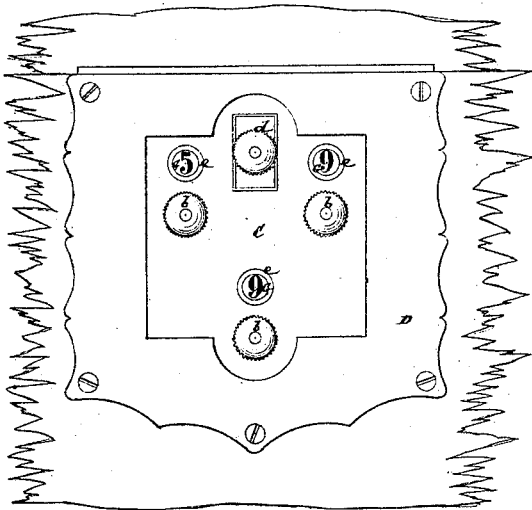


Fig. 4.

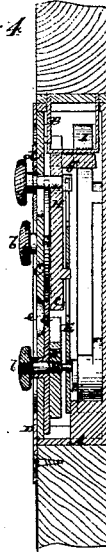


Fig. 2.

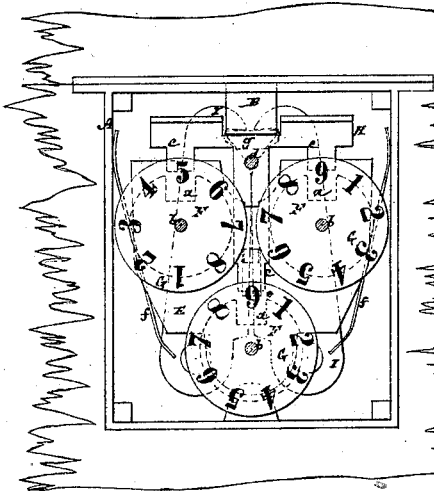
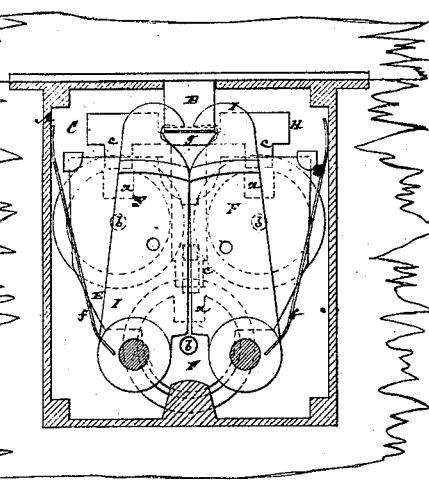


Fig. 3.



Witnesses:
J. H. Haynes
R. R. Robins

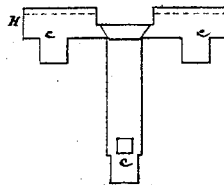


Fig. 5.

Joseph Morgan

United States Patent Office.

JOSEPH MORGAN, OF NEW YORK, N. Y.

Letters Patent No. 108,166, dated October 11, 1870; antedated September 24, 1870.

IMPROVEMENT IN TRUNK-LOCKS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, JOSEPH MORGAN, of the city, county, and State of New York, have invented a new and useful Improvement in Trunk and other Locks, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing forming part of this specification, and in which—

Figure 1 represents a front view of a lock constructed in accordance with my invention, and as applied to a trunk, shown only in part;

Figure 2, a face sectional view, showing the front plate or plates of the lock removed;

Figure 3, a rear sectional view, taken on the inside of the back of the lock, and looking toward its front, or in a reverse direction to that in which the lock is viewed in fig. 2; and

Figure 4, a transverse section, taken centrally through the lock.

Figure 5 is a face view of the bolt detached.

Similar letters of reference indicate corresponding parts.

My invention consists in a novel and compact arrangement of the operating parts of a permutation-lock, of the class designed to be used without a key, the better to adapt such lock for application to trunks, boxes, drawers, or similar small articles.

Referring to the accompanying drawing—

A represents the lock case, supposed to be let into the box or body portion of the trunk, and

B the staple, secured to the lid thereof.

C is the front plate, loosely fitting within the mouth of the case, and held in position by an outer front plate, D.

Between the plate C and the inner plate E are a series of circular tumblers, F F F, arranged side by side, or in the same plane, two above and one below.

These tumblers have each a slot or opening, *a*, in their peripheries, and are operated or rotated from the exterior by knob-spindles *b*, which have a screw-thread upon them, to secure their attachment to the tumblers, and which bear, at their heads, on collars projecting from the faces of dials G G G, interposed between the tumblers F F F and the front plate C, so that while said knob-spindles clamp the tumblers and dials together, to secure their rotation in common, the dials, by slightly unscrewing the knob-spindles, may be separately turned, for the purpose

of giving to the lock a permutation character or changing the opening numbers or marks on its dial when required, the lock being a combination one, as hereinafter more fully described.

H is the bolt, arranged to have a vertically-sliding motion, and of T-shape, with projections *c c c*, that when the bolt is down, drop into the notches *a* of the tumblers, when the latter are separately turned to bring said notches into receiving position for the projections *c* of the bolt, but which, when the tumblers are turned out of receiving position, ride or rest on the circular portion of the tumblers.

The bolt H is operated from the exterior by a hand-slide, *d*, arranged in front of the plate C, and connected, through a slot in said plate, with the bolt.

The dials G G G are suitably lettered, numbered, or marked, and peep-holes, *e e e*, made in the plate C, to indicate when the tumblers, in connection with their respective dials, are turned into their receiving or opening position for the bolt, which is determined by the set of the dials, or any particular number or mark on them, relatively to the notches *a* in the tumblers.

To lock the bolt H it is raised, by the slide *d*, out of the notches *a*, and the tumblers turned, so that the bolt rests upon the unbroken portion of their peripheries.

The locking with the staple B is effected when the bolt is raised to rest on the peripheries of the tumblers F, by pivoted hooks I I, acted upon by springs *f f*, at their backs, and said catches are thrown out of locking position with staple B, on the tumblers being turned into opening position, and the bolt H lowered into their notches *a*, by means of a wedge or projection, *g*, on the inner side of the bolt, working down between the noses or free ends of the hooks I I, said wedge keeping the hooks out of lock till the bolt H is raised again by hand from the exterior of the lock.

What is here claimed, and desired to be secured by Letters Patent, is—

The triangular arrangement of the revolving tumblers F, and their adjustable dials G, in combination with the T-shaped bolt H, provided with the wedge projection *g*, and the locking hooks I I, substantially as shown and described.

JOSEPH MORGAN.

Witnesses:

JOHN D. RESSET,
HENRY PALMER.