

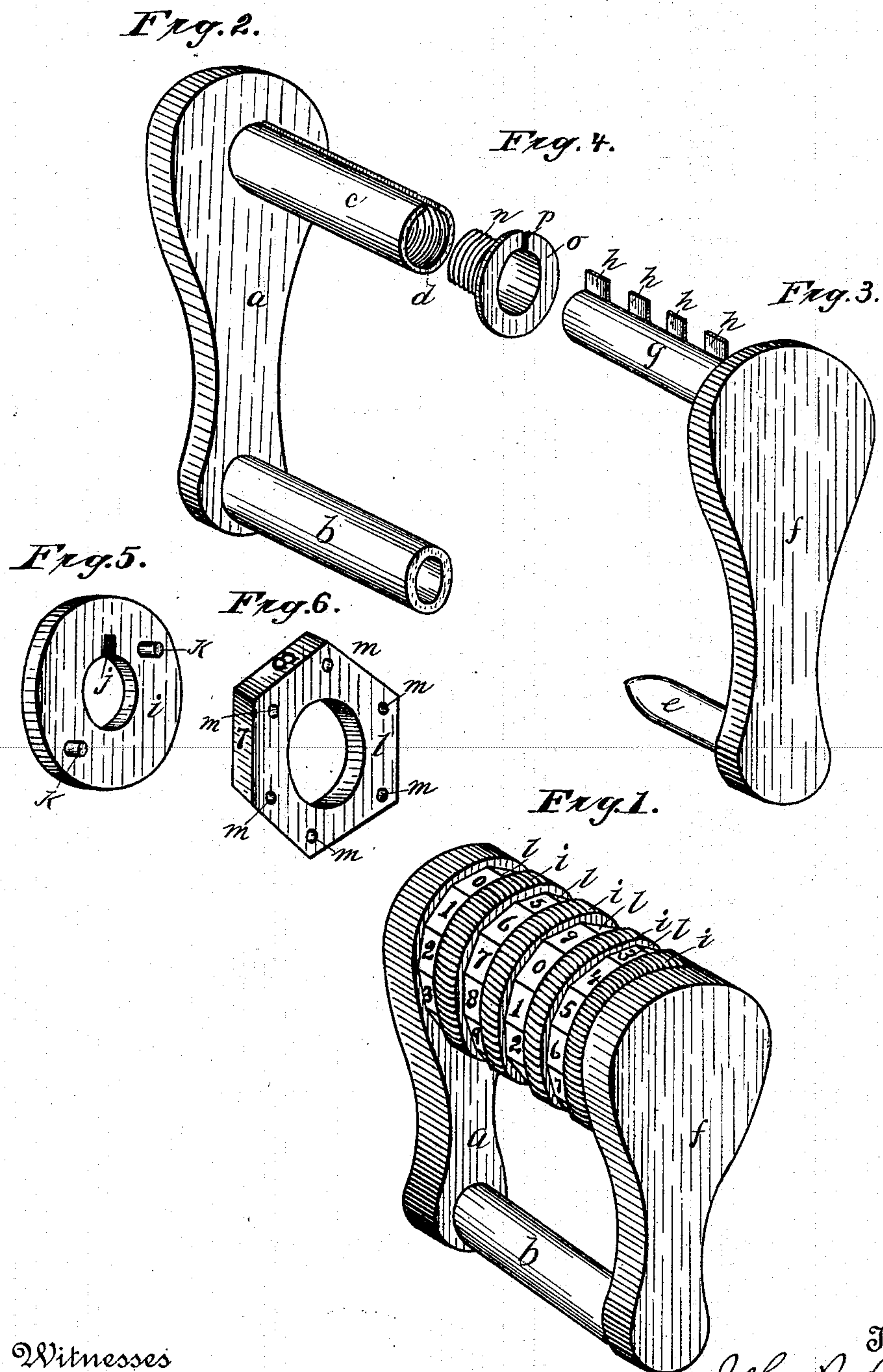
No. 615,525.

Patented Dec. 6, 1898.

J. R. BRODIE.
PERMUTATION PADLOCK.

(Application filed Feb. 1, 1897.)

(No Model.)



Witnesses

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PERMUTATION-PADLOCK.

SPECIFICATION forming part of Letters Patent No. 615,525, dated December 6, 1898.

Application filed February 1, 1897. Serial No. 621,449. (No model.)

To all whom it may concern:

Be it known that I, JOHN R. BRODIE, a citizen of the United States of America, residing in New York, (Brooklyn,) in the county of Kings and State of New York, have invented new and useful Improvements in Permutation-Locks, of which the following is a specification, reference being had to the accompanying drawings and the letters of reference marked thereon.

In the drawings like letters of reference indicate like parts.

Figure 1 is a perspective view of the lock complete. Fig. 2 is a like view of a portion of the body of the lock. Fig. 3 is a like view of the other body portion. Fig. 4 is a perspective view of the split cap-screw; and Figs. 5 and 6 are views of the tumblers and index-rings, respectively.

The construction and operation of my device are as follows:

A plate or part *a* is provided, having secured thereto or made integral therewith the posts *b* and *c*. The post *c* is hollow and is provided with a longitudinal slot, and the interior at the end is threaded, as shown at *d*. The post *b* is also recessed a sufficient distance to receive the post *e* upon the opposite piece.

The plate *f* is provided with a post *g*, having projecting pieces or lugs *h*, and is also provided with a post *e*, adapted to enter the opening in the post *b*. The post *g* is adapted to enter the opening in the post *c*, and the lugs *h* project through the slot in the post *c*.

The tumbler *i* (shown in Fig. 5) is provided with a slot *j* of sufficient depth to allow the passage of the lugs *h* and also provided with pins *k*. The index-pieces *l* are provided with a central opening of sufficient diameter to allow the passage of the lugs *h*, while the pieces *l* are mounted on the post *c*, they being kept in central position by the tumblers *i*; whose pins *k* enter openings *m* in the index-pieces *l*.

The screw *n* (shown in Fig. 4) is provided with a head *o* of sufficient diameter to prevent the escape of the tumblers *i* from the post *c*, and this screw is also provided with a central opening sufficiently large to allow the passage of the lugs *h*. The distance between the lugs *h* is substantially the same as the thickness of the tumblers *i*.

It will now be seen that if each pair—*i. e.*, one tumbler *i* and one index-piece *l*—be placed upon the post *c* and all of these be so located as to bring the slots *j* in line with the slot in the post *c* then the post *g* and lugs *h* may be carried to a position to bring the end of the post *c* against the body *f* and that if any of these pairs be turned in either direction the slot *j* in the tumbler so turned will be moved out of registry with lugs *h*, and it will be impossible to separate the parts until all of the tumblers be brought into registry with their respective slots in line with the lugs *h*.

If it is desired to change the combination, it simply becomes necessary to remove the screw *n* from the post *c*, take off one or more of the pairs, detach the tumbler from the index-piece, again attach it in different position, and return the pairs to their first position upon the post, and the combination may also be changed by removing the several pairs and replacing them upon the post *c* in different order.

It will also be observed that other means of detachably locking the tumblers to the index-pieces may be employed. For instance, the tumblers may be irregularly shaped or regularly shaped, with six sides, eight sides, or otherwise, and rest within a recess of like shape in the index-piece.

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

1. The combination in a permutation-lock of two plates one having a threaded post provided with a recessed slot and the other having a post provided with lugs adapted to enter the recess and slot in the opposite post, tumblers having pins; indicating-rings provided with a series of openings to register with said pins, said tumblers being mounted upon the recessed posts; a hollow and slotted screw *n* to engage said threaded post and hold said tumblers and indicating-rings thereon, and other posts mounted on said plates, one adapted to enter a recess in the other, substantially as shown.

2. The combination in a permutation-lock of a plate *a* having posts *b* and *c*, the post *c* being recessed and slotted and having a thread at the end portion thereof; a plate *f* having posts *e* and *g*, the post *g* being adapted to en-

ter the recess in the post *c* and having lugs *h*
adapted to enter the slot in the post *c* and
projecting beyond the surface of the post *c*,
tumblers *i* having a circular opening adapted
5 to fit the post *c* and having a slot *j* to pass
over the lugs *h* when the post *g* is in position
in the post *c* and provided also with pins *k*,
rings *l* having a series of openings to register
with the pins *k*, a hollow and slotted screw *n*

adapted to engage the thread *d* in the post *c* 10
and having a head of larger diameter than
the circular opening in the tumblers *i*, sub-
stantially as and for the purposes shown.

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Witnesses:

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