

UNITED STATES PATENT OFFICE.

GEORGE C. RIDGWAY, OF OLNEY, ILLINOIS, ASSIGNOR OF ONE-HALF HIS
RIGHT TO WILLIAM RHODE, OF SAME PLACE.

IMPROVEMENT IN PERMUTATION-PADLOCKS.

Specification forming part of Letters Patent No. **209,294**, dated October 22, 1878; application filed
August 31, 1878.

To all whom it may concern:

Be it known that I, GEORGE C. RIDGWAY, of Olney, in the county of Richland and State of Illinois, have invented a new and valuable Improvement in Padlocks; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a central sectional plan of my padlock, and Fig. 2 is a transverse central section of the same.

The nature of my invention consists in the construction and arrangement of a combination-padlock, as will be hereinafter more fully set forth.

The annexed drawings, to which reference is made, fully illustrate my invention.

A represents the lock-case, made in circular form, and provided with the bail or hasp B, pivoted in a slot at *a*, and when closed its free end entering a slot at *b*.

Within the case A are three circular tumblers, C¹ C² C³, each provided with a screw, *d*, passing through it and projecting on both sides. All the tumblers C¹ C² C³ are placed loosely upon a stationary hub, C, in the lock, and the spindle *h* of the knob D passes through the hub, as shown.

On the end of the spindle *h* is secured an arm or finger, *i*, of such length that when the knob is turned it will come in contact with the screw in the tumbler C³.

It is, of course, understood that the screws *d* in the various tumblers are to be arranged so as to come in contact with each other when the tumblers are turned. Each tumbler is formed with a slot, *e*, extending from the outer edge radially inward for a suitable distance.

Within the lock-case A is secured a spring, I, which is provided on its end with a project-

ing tooth, *f*, to enter the slots *e* in the tumblers when the same have been turned to bring said slots in position for the tooth to enter.

The spring I acts against an arm, *m*, on the inner end of the hasp B to keep the same closed, and as the tooth *f* lies then against the peripheries of the tumblers, the lock cannot be opened. When, however, the tumblers have been turned in position, the hasp can be opened, the arm *m* pressing the tooth *f* into the slots *e*.

The face of the case A is graduated, and the knob D provided with a suitable mark, as usual. When the lock is set, to open the same the knob is turned three times to the right, stopping at a certain number; then turn to the left twice, stopping at another certain number, and then to the right once, and onto a given number, and the tumblers will be in position for unlocking.

To change the combination, when it is unlocked throw the hasp partly back and lift out the lid F; then change one or more of the screws *d* into different holes in their respective tumblers; then turn the knob the same as in unlocking, stopping when the notches *e* are opposite the acting tooth on the end of the spring, and noting the numbers indicated on the dial as the new combination.

What I claim as new, and desire to secure by Letters Patent, is—

In a combination-padlock, the combination of the tumblers C¹ C² C³, having slots *e*, the spring I, with tooth *f*, and the hasp B, with arm *m* at the rear end thereof, substantially as and for the purpose herein set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

GEORGE C. RIDGWAY.

Witnesses:

SAMUEL B. WINSOR,
DANIEL W. WINSOR.