

F. O. CARLSON.
Permutation-Padlock.

No. 221,444.

Patented Nov. 11, 1879.

Fig. 1.

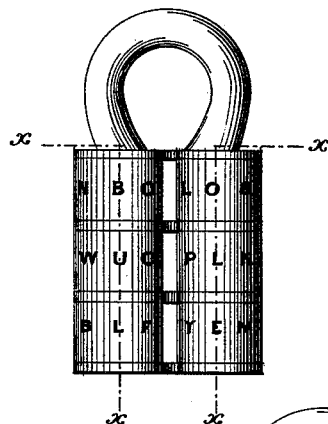


Fig. 2.

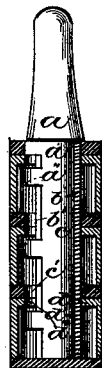
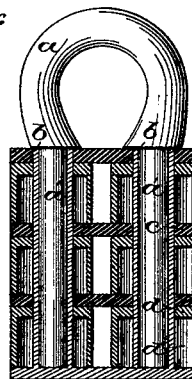


Fig. 3.



Witnesses:

W. F. Gaylord
M. F. Dooley

Inventor:

F. O. Carlson
By W. E. Simons
att.

UNITED STATES PATENT OFFICE.

FREDRIC O. CARLSON, OF HIGGANUM, CONNECTICUT, ASSIGNOR OF ONE-HALF OF HIS RIGHT TO CLINTON B. DAVIS, OF SAME PLACE.

IMPROVEMENT IN PERMUTATION-PADLOCKS.

Specification forming part of Letters Patent No. **221,444**, dated November 11, 1879; application filed September 9, 1879.

To all whom it may concern:

Be it known that I, FREDRIC OTTO CARLSON, of Higganum, in the county of Middlesex and State of Connecticut, have invented certain new and useful Improvements pertaining to a Combination-Padlock, of which the following is a specification, reference being had to the accompanying drawings, where—

Figure 1 is a front view. Fig. 2 is a vertical section, taken on either of the planes denoted by the dotted lines *xx*, both sections being alike. Fig. 3 is a central vertical section on a plane at right angles to the plane or planes of Fig. 2.

In all the figures the parts are in position for locking and unlocking.

The letter *a* denotes the hasp prolonged into two straight parallel legs, *a' a'*, furnished with the teeth *a''*. The letters *b b* denote two sleeves or barrels, into which the hasp-legs *a'* fit, and provided with the longitudinal slots or grooves *b' b'* for the reception and passage of the teeth *a''*. These sleeves or barrels are firmly held parallel by the tie-plates *c*, which have slots *c'* coincident with the slots *b'* for the passage of the teeth *a''*.

On each of the sleeves *b*, secured from escape by the tie-plates *c*, are one or more freely-rotating retainer-disks, *d*, each containing a central hollow or cavity, *d'*, to contain one of the teeth *a''*, and also containing on one side the slot *d''* for the passage of the teeth *a''* in locking and unlocking the padlock.

In locking the padlock all of the slots *d''* are brought into line coincident with the slots *b'*. This allows the hasp-legs to be inserted into the sleeves *b*. Now, by rotating the disk-retainers partially, the teeth *a''* are confined from escaping. In unlocking, the slots *d''* must be brought into line coincident with slots *b'*, when the hasp, with its legs, can be removed.

It is obvious that the disk-retainers must be

provided with some exterior mark, which will enable the operator to bring the slots *d''* into line coincident with slots *b'* when desired. The three on the right, in the present case, are marked, respectively, O L E, and the three on the left B U L, the mark being on the outside, and radially coincident with the slot *d'*. The periphery of each disk-retainer is marked at equal distances with various other letters, so that no one but the person in possession of the secret or combination has any clew to the proper position of the disk-retainers for locking and unlocking.

By shifting the relative positions of the disk-retainers the combination can be varied, and by enlarging the number of the disk-retainers the number of possible combinations is enlarged.

I am aware that combination-padlocks have been made consisting, essentially, of a hasp similar to the one I show, and a single set of locking-disks securing one or both of the legs of the hasp. Padlocks made in this manner I do not claim, as they differ from mine in not having a separate and independently operated locking device for each leg of the hasp, either of which locking devices would alone suffice to hold the hasp firmly secured were the other unlocked.

I claim as my invention—

The hasp *a*, provided with duplicate legs *a' a'*, bearing teeth *a''*, in combination with the two separate and independent locking devices, consisting of the longitudinal slotted sleeves *b b* embracing the legs *a' a'*, the tie-plates *c*, and the disk-retainers *d*, embracing and rotating on said sleeves, all arranged, constructed, and operated substantially as set forth and described.

FREDRIC OTTO CARLSON.

Witnesses:

D. H. BROPHEY,
EDWARD D. GILBERT.