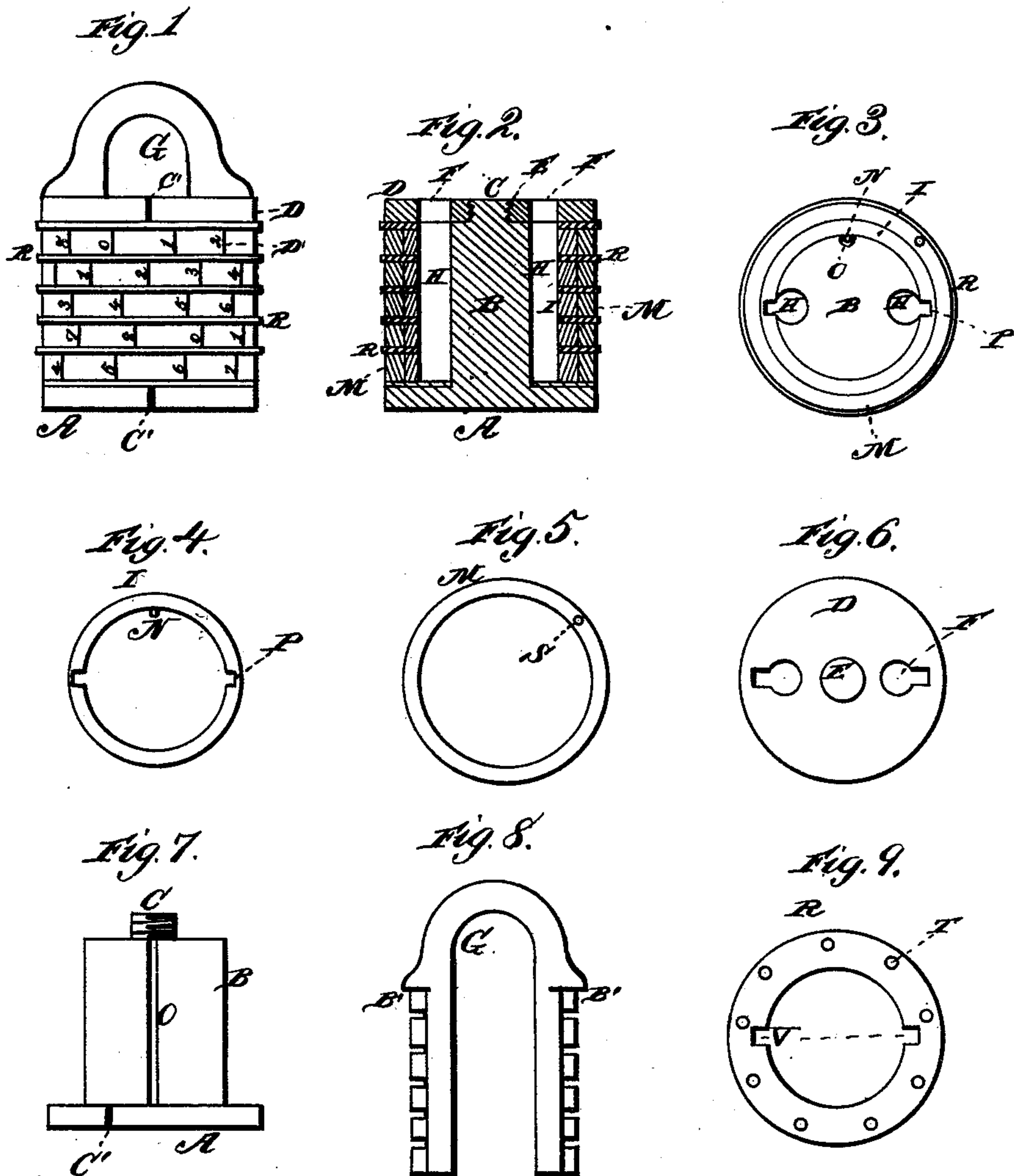


(Model.)

H. F. WEBB.  
Permutation Padlock.

No. 229,782.

Patented July 6, 1880.



WITNESSES

Robert E. Gault  
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# UNITED STATES PATENT OFFICE.

HENRY F. WEBB, OF PULASKI, TENNESSEE.

## PERMUTATION-PADLOCK.

SPECIFICATION forming part of Letters Patent No. 229,782, dated July 6, 1880.

Application filed March 27, 1880. (Model.)

*To all whom it may concern:*

Be it known that I, HENRY F. WEBB, of Pulaski, in the county of Giles and State of Tennessee, have invented certain new and useful Improvements in the class of Locks known as "Combination-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.

This invention relates to certain improvements in that class of combination-padlocks employed in the mail service; and it has for its object to provide for an increased number of changes in the combinations, and thereby better adapt the lock to the extensive use for which it is designed. This object I attain by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of the lock; Fig. 2, a central longitudinal section with the bolt or staple removed; Fig. 3, a horizontal transverse section of Fig. 2; Fig. 4, a view of one of the inner rings forming part of the lock; Fig. 5, a view of one of the external rings. Fig. 6 is a detached view of the crown-plate by which the parts of the lock are held in position. Fig. 7 is a side elevation of the base of the lock and the cylindrical standard which forms a bearing for the rings. Fig. 8 is a view of the shackle detached, and Fig. 9 a detached view of a portion of the lock.

The letter A indicates the base of the lock, provided with a cylindrical standard or extension, B, which forms a bearing for the various parts of the lock. The said standard is provided at its upper end with a screw-threaded stud, C, to which the crown-plate D is secured, the said plate having a screw-threaded aperture, E, at its center, which fits upon the threaded stud C, and apertures F, through which the bolt or staple G is inserted. The standard or extension B is provided on opposite sides with vertical recesses H for the reception of the shackle.

The letter I indicates a series of rings fitting upon the standard or extension B, and M a series of rings fitting over the rings I and adapted to turn freely thereon. The rings

I are provided with short pins or studs N, which are adapted to engage a groove, O, in the standard or extension B and prevent the said rings I from turning thereon. The rings I are also provided with recesses P on opposite sides, which fall opposite the vertical recesses H when the rings are in place.

The letter R indicates a series of annular steel plates mounted on the standard or extension B, (upon which they turn freely,) and alternating with the rings I and M. The rings M are each provided with a short stud or pin, S, and the plates R with a series of apertures, T, adapted to engage the pins and fasten the rings M to the respective annular plates in various positions, in order to change the combinations, as hereinafter more fully set forth. The annular plates are provided with recesses V, corresponding to the recesses P in the rings I.

The letter G indicates the shackle, which is U-shaped and provided with shoulders B', which rest against the crown-plate when said shackle is in place. The shanks of the shackle at each side are formed with a series of indentations or wards, with which the steel plates engage when the bolt is locked in place. The base and crown-plate have marks C' at their edges, and the rings M are provided with marks D' at equidistant points on their peripheries, and are numbered, as shown in Fig. 1 of the drawings.

The operation of my improved lock is as follows: To set the combinations the rings are all removed from the central standard. The first ring I is placed upon the standard, its projecting pin being secured in the groove in the same. The first ring M is then secured in place and the desired figure or number brought opposite the mark on the base. The first annular plate is then placed upon the standard or bearing B, in contact with the rings which have been secured in place, and turned until the proper aperture comes in place opposite the pin on the outer ring to bring the recesses of the annular plate opposite the recesses in the inner ring. The same operation is continued until all the parts are in place.

It will thus be perceived that when the proper numbers are in line with the marks on the base and crown-plate the recesses of the



inner ring and annular plate will be in line, and the shanks of the shackle G can be inserted in the recesses H, after which, by turning the plates R, which will carry the rings M, the recesses P and V will be thrown out of line, and the shackle cannot be withdrawn until they are again brought into line. The interposed plates R are milled upon their outer edges, and thus afford a convenient means of holding the numbers in position when they have been moved in line with the marks on the crown and base plates, besides making the manipulation of the plates more easy than if they were flush with the rings M.

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

In a permutation-padlock, the combination of the standard B, having recesses H, groove O, base-plate A, and crown-plate D, and the inner rings, I, having recesses P and pins N, and the outer rings, M, having pins S, with the interposed annular steel plates R, recessed at V and perforated at T, and the shackle G B', constructed and operating substantially as and for the purposes set forth.

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

H. F. WEBB.

Witnesses:

B. H. ENGLE,

ALFRED H. ABERNATHY.