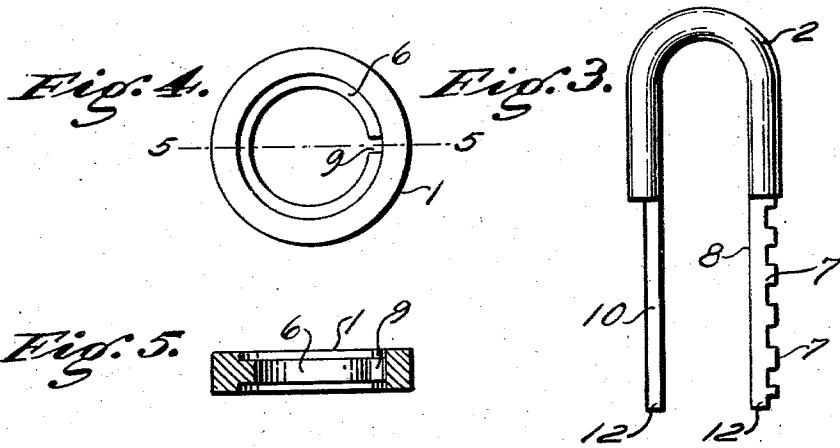
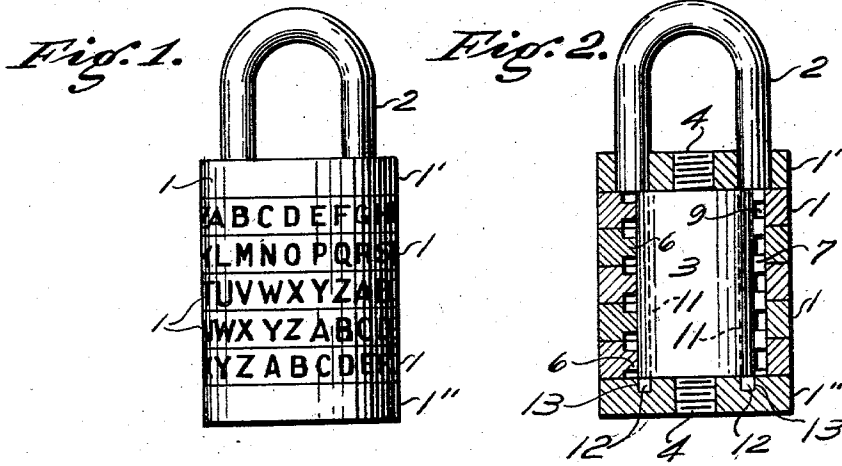


F. T. ANDERSON.
PERMUTATION PADLOCK.
APPLICATION FILED MAR. 12, 1903.

NO MODEL.



Witnesses:
Rudow Rummel
Blanche Michael.

Inventor,
Frank T. Anderson
by Rummel & Rummel
his Attorneys.

UNITED STATES PATENT OFFICE.

FRANK T. ANDERSON, OF CHICAGO, ILLINOIS.

PERMUTATION-PADLOCK.

SPECIFICATION forming part of Letters Patent No. 752,020, dated February 16, 1904.

Application filed March 12, 1903. Serial No. 147,428. (No model.)

To all whom it may concern:

Be it known that I, FRANK T. ANDERSON, a citizen of the United States of America, and a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Permutation-Padlocks, of which the following is a specification.

The main object of my invention is to provide an improved, comparatively compact, simple, and inexpensive permutation-padlock. I accomplish this object by the device shown in the accompanying drawings, in which—

Figure 1 is an elevation of a padlock constructed according to my invention. Fig. 2 is a vertical section of same. Fig. 3 is an elevation of the shackle used with this lock. Fig. 4 is a plan of one of the rings or washers shown in Fig. 1. Fig. 5 is a section on the line 5 5 of Fig. 4.

The padlock consists of a plurality of rings 1, a shackle 2, and a central cylindrical shaft 3, having opposite grooves 11. The shaft 3 has a threaded projection 4 at each end. The two end pieces 1' and 1'' are secured to the shaft 3 and serve to hold the rings 1 in place. Each of the rings 1 has a flange 6 on its inner face. The flanges 6 of the rings 1 engage corresponding teeth 7 on the shank 8 of the shackle 2. Each of said flanges 6 is recessed at 9 to allow the free passage of the teeth 7 when the rings 1 are set for insertion on removal of the shackle. The shanks 8 and 10 of the shackle fit corresponding grooves 11 in the shaft 3 and prevent the shaft 3 from turning relatively of the shackle. The lower parts 12 of the shanks 8 and 10 fit recesses 13 in the

end piece 1'', and thus serve to prevent the end piece 1'' from being unscrewed from the shaft 3 when the device is locked.

The letters on the outside of the rings 1 40 may be stamped thereon. The outside of the rings may be made polygonal, if desired, instead of circular, as shown.

It will be seen that the parts shown are of suitable form to be cast complete with the ex- 45 ception of the screw-threads and the lettering.

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

A padlock comprising a shaft formed with opposite longitudinal grooves and provided at each end with threaded projections, and end pieces formed with threaded openings to receive the projections of said shaft, the upper being also formed with a pair of spaced-apart openings, a shackle having its shank extend- 55 ing through the last-named openings, and the grooves of the shaft, and terminating in recesses provided in the inner face of the bottom end piece forming substantial locking means for the same, one of said shanks be- 60 ing formed with teeth, and rings rotatable on said shaft and provided with flanges on their interior for engaging the teeth of the said shank, and locking the same, said rings being aper- 65 tured to permit the shanks to pass through.

Signed at Chicago this 10th day of March, 1903.

FRANK T. ANDERSON.

Witnesses:

BLANCHE MICHAEL,
WM. R. RUMMLER.