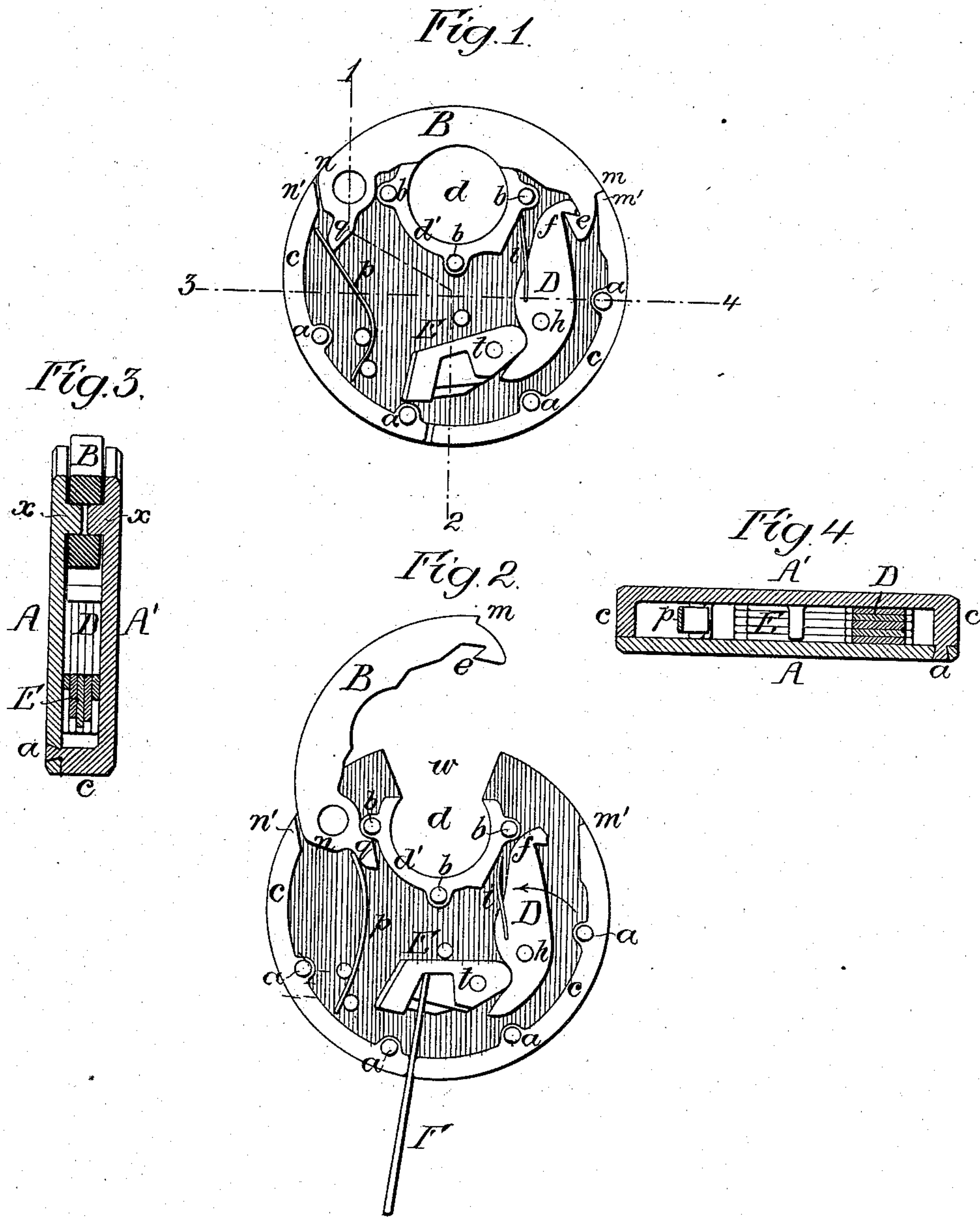


H. H. DANIELS.
Padlock.

No. 235,750.

Patented Dec. 21, 1880.



Witnesses
M. Demer.
Harry Smith

Inventor
Henry H. Daniels
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UNITED STATES PATENT OFFICE.

HENRY H. DANIELS, OF PHILADELPHIA, PENNSYLVANIA.

PADLOCK.

SPECIFICATION forming part of Letters Patent No. 235,750, dated December 21, 1880.

Application filed April 14, 1879.

To all whom it may concern:

Be it known that I, HENRY H. DANIELS, of Philadelphia, Pennsylvania, have invented a new and useful Improvement in Padlocks, of which the following is a specification.

The main object of my invention is to construct a padlock which cannot be easily tampered with or damaged by rough handling, and which can be cheaply manufactured. This object I attain in the manner which I will now proceed to describe, reference being had to the accompanying drawings, in which—

Figure 1 is a side view of my improved padlock, from which one of the side plates or disks has been detached for the purpose of exhibiting the interior; Fig. 2, the same, showing the shackle of the lock opened; Fig. 3, a transverse section on the line 1 2, Fig. 1; and Fig. 4, a section on the line 3 4.

The circular casing of the lock is composed of the plate-disk A and flanged disk A', which are riveted together at as many points *a* and *b* as the size of the lock may require, to insure a perfect and secure junction of the two disks together.

On each of the disks is cast a projection, *x*, Fig. 3, the two projections forming a more substantial and less expensive pivot for the shackle B than an ordinary pin driven through the disks, the pivot having the advantage, moreover, of not being easy of access to any one disposed to tamper with the lock.

The shackle B is so formed that when closed, as in Fig. 1, its outer edge shall be concentric with or shall form a continuation of the circular edge of the case, and so that it shall not present any protuberance likely to be damaged by the rough handling which many padlocks, especially such as are used for mail-bags, frequently receive.

A recess, *d*, is formed in the case, and is edged by a flange, *d'*, cast on one of the disks, an opening, *w*, communicating with the recess, being formed in the case. When the shackle is locked this recess *d* presents a round opening bounded above by the shackle, this shaped opening being preferred because locks of this class are generally adapted to staples made of round metal, and the staple may be made to so conform with the opening as to prevent the easy introduction of instruments between the said staple and the shackle for the purpose of prying the latch open. The shackle is hooked at *e*, near its outer end, so as to catch into the hooked upper ends, *f*, of a se-

ries of levers, D, pivoted independently of each other to the case at *h*, each lever having a spring, *i*, bearing against the case and tending to force the upper arms of the levers outward.

When the shackle is locked, as in Fig. 1, its shoulder *m* should be in contact, or very nearly so, with the end *m'* of the flange *c*, and the heel *n* of the shackle should be as near as possible to the end *n'* of the flange. In other words, the shackle, when closed, should fit snugly in the space formed for its reception between the disks by discontinuing the flange *c*, so as to prevent the access of dust and moisture to the interior of the case. The shackle, moreover, being entirely contained within the casing, excepting immediately above the opening *d*, cannot be so easily tampered with as the usual prominent and exposed shackles.

A spring, *p*, bears against a projection, *q*, on the shackle, and tends to open the same when released.

As many tumblers E as there are levers B are loosely pivoted, independently of each other, to the case at *t*, these tumblers being so formed in respect to the wards of a key, F, that when the latter is introduced into the case through a slot in the lower edge of the same and pushed upward the whole of the tumblers, acting as one lever, will be the medium through which the key will move all the levers D in the direction of the arrow and release the shackle, which, when depressed, after the key has been removed, is self-locking to the hooked ends of the levers.

It will be seen that the lock is composed of comparatively few parts, and that those parts may be readily fitted together.

I claim as my invention—

The combination of the shackle B of the lock with a case concentric therewith, and the sides A A' of which are carried up beyond the limits of the rim *c*, the projecting portions fitting closely to the sides of the shackle and having upper edges coinciding laterally with the top of the shackle when the latter is locked, all substantially as specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HENRY H. DANIELS.

Witnesses:

WILLIAM J. COOPER,
HARRY SMITH.