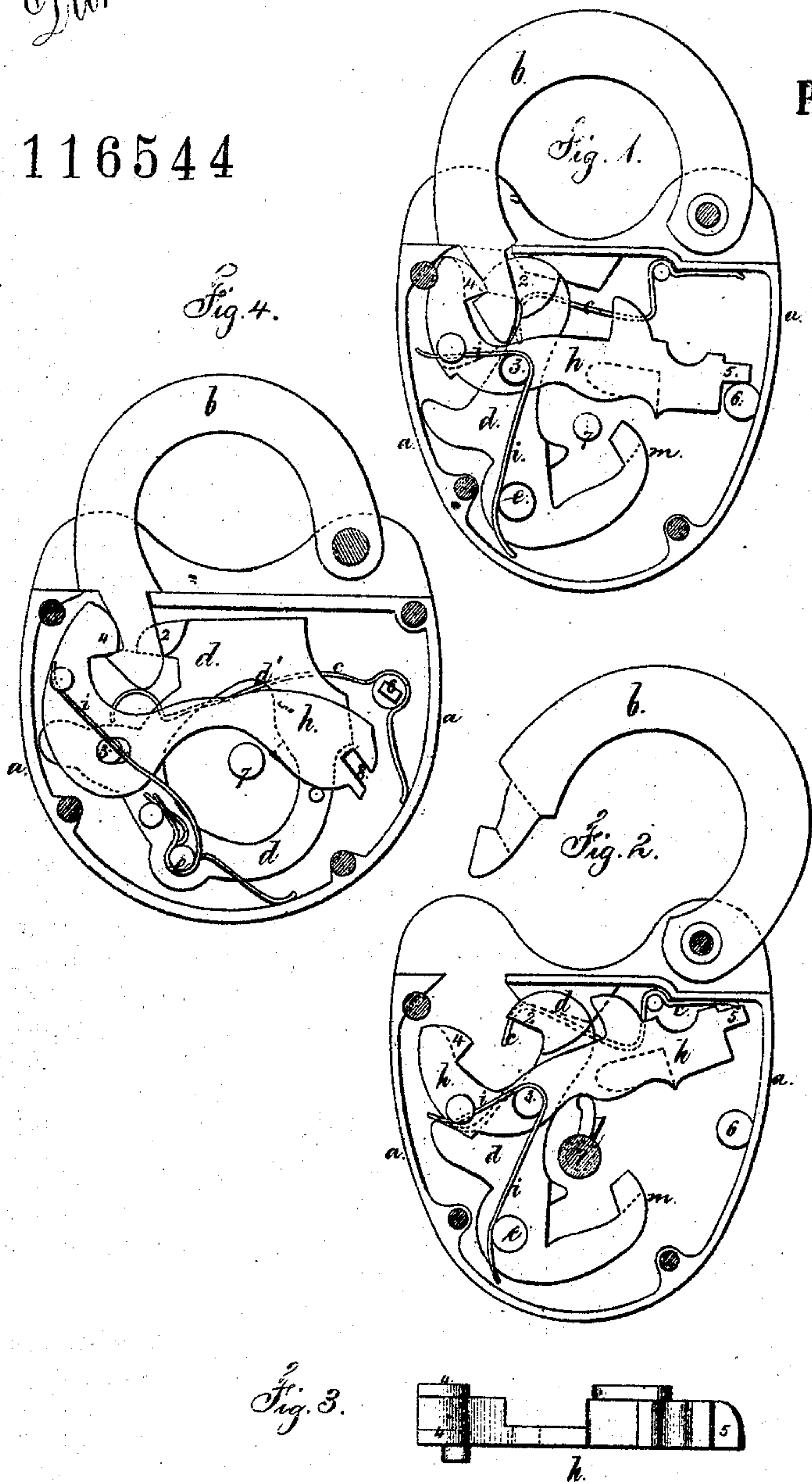


Daniel J. Brown. Improvement in Pad-Locks

116544

PATENTED JUL 4 1871



Witnesses

Chas. H. Smith
Geo. D. Maer

Daniel J. Brown
Lemuel W. Errell atty

UNITED STATES PATENT OFFICE.

DANIEL T. BROWN, OF PLAINFIELD, NEW JERSEY, ASSIGNOR TO JAMES H. McWILLIAMS, OF NEW YORK CITY.

IMPROVEMENT IN PADLOCKS.

Specification forming part of Letters Patent No. 116,544, dated July 4, 1871.

To all whom it may concern:

Be it known that I, DANIEL T. BROWN, of Plainfield, in the county of Union and State of New Jersey, have invented an Improvement in Padlocks; and the following is declared to be a correct description thereof:

This invention relates to a compound swinging tumbler that grasps the moving end of the shackle, said tumbler being blocked in such a manner that a blow on the case will not relieve the tumbler from its hold upon the shackle. The compound tumbler is made of two parts, the first of which swings upon a fixed stud, and the second part swings upon the first, and the two grasp the end of the shackle somewhat like a pair of nippers.

In the drawing, Figure 1 is an elevation of the lock with the cap-plate removed. Fig. 2 is a similar view, the hasp being thrown back and the tumblers turned by the key; and Fig. 3 is a plan of the secondary tumbler. Fig. 4 is an elevation of a variation in the form of this compound tumbler.

The case *a* and shackle *b* are of any usual size or shape, and a spring, *c*, may be used to act against the swinging end of the shackle and throw it out of the case when the tumblers relax their hold. The primary tumbler *d* swings upon the stud *e*, and has a talon, 2, to enter a mortise in the shackle and hold the same. The secondary tumbler *h* swings upon the stud or joint 3 upon the tumbler *d*, and the spring *i* acts between the primary and secondary tumblers to draw the talons 2 and 4 toward each other. When the lock is locked, the end 5 of the tumbler *h* rests against and upon the stud 6, so that the tumbler cannot be thrown back by a blow upon the case of the lock. When the lock is to be opened, the key *l* is introduced and turned upon the stud 7 and lifts up the tumbler *h* to unhook the talon 4, and then the further movement of the key moves both tumblers and swings the tumblers upon the stud *e*

until the talons 2 and 4 are clear of the end of the shackle. The foot-piece *m* of the tumbler *d* extends around below the key-hole as a guard, and carries at its end projections that act as wards to the key.

It will now be apparent that the primary and secondary tumblers form a compound tumbler, resembling a pair of nippers, and that these tumblers swing in opposite directions, and that the secondary tumbler has to swing before the primary one can be moved; hence there is great security against the lock being opened by any extraneous means.

All the parts of this lock are easily constructed, and hence cheaply made.

In Fig. 4 the before-described parts are shown in a slightly-different shape, and the letters of reference indicate the same parts, but instead of depending upon the tumbler *h* drawing back the primary tumbler *d*, I make use of the portion *d'* of said tumbler *d* for the key to act against and insure the correct movement of the said primary tumbler. The stud 6 is located so that it blocks the tumblers if any attempt is made to open the lock by concussion or by a pick, because the tumbler *h* has to be raised exactly to the point where the notch 8 at its end will pass back over the stud 6 before the lock can be opened. The hole in *h* for the joint-pin 3 is elongated to allow an endwise movement of the secondary tumbler *h* as the parts 2 and 4 are separated by the forcing in of the end of the shackle *b*.

I claim as my invention—

The hook-ended tumblers *d h*, crossing each other and hinged together at 3, and swinging upon the stud *e*, the parts being arranged and acting substantially as specified.

Signed this 19th day of January, A. D. 1871.

DANIEL T. BROWN.

Witnesses:

CHAS. H. SMITH,
GEO. T. PINCKNEY.