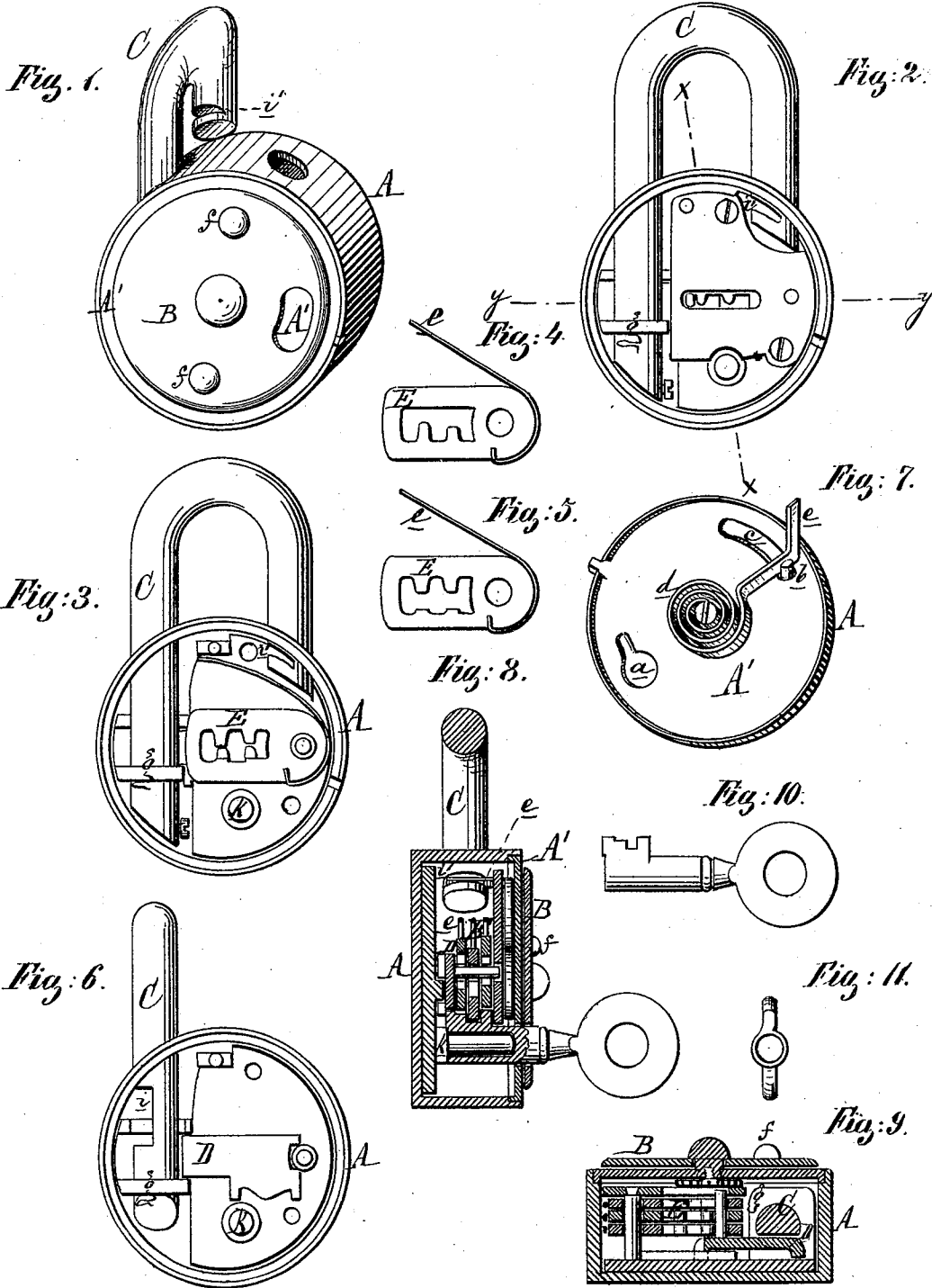


J. L. HIRSCH.

PAD-LOCK.

No. 171,806.

Patented Jan. 4, 1876.



Attest.
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Thos. S. Day

Inventor:
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UNITED STATES PATENT OFFICE.

JACOB L. HIRSCH, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN PADLOCKS.

Specification forming part of Letters Patent No. 171,806, dated January 4, 1876; application filed October 25, 1875.

To all whom it may concern:

Be it known that I, JACOB L. HIRSCH, of Chicago, in the county of Cook and State of Illinois, have invented an improvement in Padlocks, of which the following is a specification:

The nature of my invention relates to an improvement in padlocks of that variety wherein the key-hole is protected by a plate revolved over it by a spring, and is more especially designed as an improvement in padlocks for the doors of railway freight-cars.

The invention consists in the novel construction and arrangement of the parts composing the padlock, all as more fully hereinafter described.

Figure 1 is a perspective view of a padlock with the staple swung open. Fig. 2 is a front elevation, with the front plate of the case removed. Fig. 3 is a similar view, but with the front tumbler-plate removed. Figs. 4 and 5 are elevations of the tumblers. Fig. 6 is an elevation, showing the tumblers removed, the bolt thrown, and the staple raised and turned. Fig. 7 is a perspective view of the inner side of the front plate of the case and its spring. Fig. 8 is a cross-section at *x x*. Fig. 9 is a cross-section at *y y*: Figs. 10 and 11 are side and end elevations of the key.

In the drawing, A represents a cylindrical case, closed in front by a plate, A', having a key-hole, *a*. B is a protecting-plate for the key-hole, rotating on an axial stud on the outside of the plate A'. It has an opening for the key, Fig. 10. There is also a stud, *b*, which projects through a segment-shaped slot, *c*, in the plate A', to the center of which, on the inside, there is secured a flat coiled spring, *d*, terminating in a hook, *e*. The spring *d* bears against the stud *b*, and so turns the plate B as to cover the key-hole in the lock-plate, except the former be turned by hand against the pressure of said spring, it being provided with button-heads *f* for that purpose. C is a hook-shaped staple, having one long and one short arm, the former of which is inserted through the upper part of

the case, and passes down through a stop-plate, *g*, in the left side of the case, with a pin inserted in its lower end, below the stop-plate, to prevent it from being withdrawn from the latter and the case. The short arm of the staple may enter the case through a hole in the top when pushed down into it, or the staple may be raised far enough to disengage the short arm, when it may be rotated on the longer arm axially, and the hook or short arm be swung around to the rear. There is a recess, *i*, cut in the back side of the long arm, which receives the bolt D of the lock, which prevents its from being raised or turned. There is also a slot, *v*, cut in the hook end of the staple, which engages the hook *e* of the spring *d*, whenever the plate B is turned to enter the key, so that even if the bolt be thrown the staple will not be free until the key is withdrawn from the lock to allow the protecting-plate to swing back to its normal position. *k* is the key-post, on which the key turns, and E E E are three tumblers, each with its spring *l*, and so constructed that the key must be turned two revolutions before the bolt can be shot or thrown.

It will be seen, then, that the key-hole is normally covered, so as to exclude dust and the elements; that when the key is introduced and the bolt is thrown the key must be withdrawn before the hook-staple will be free to move, and, when free, it can be swung back so as to present the hook end to the rear, to readily engage with or be disengaged from the hasps of a car-door.

What I claim as my invention is—

In a padlock, substantially as described, the combination of the rotary guard-plate, the spring terminating in a hook, and the slot in the short arm of the staple, for securing the latter while a key is in the lock, substantially as described.

JACOB L. HIRSCH.

Witnesses:

WM. H. LOTZ,
WM. G. HOFFMANN.