

H. AHREND.

Padlock.

No. 206,517.

Patented July 30, 1878.

Fig. 1.

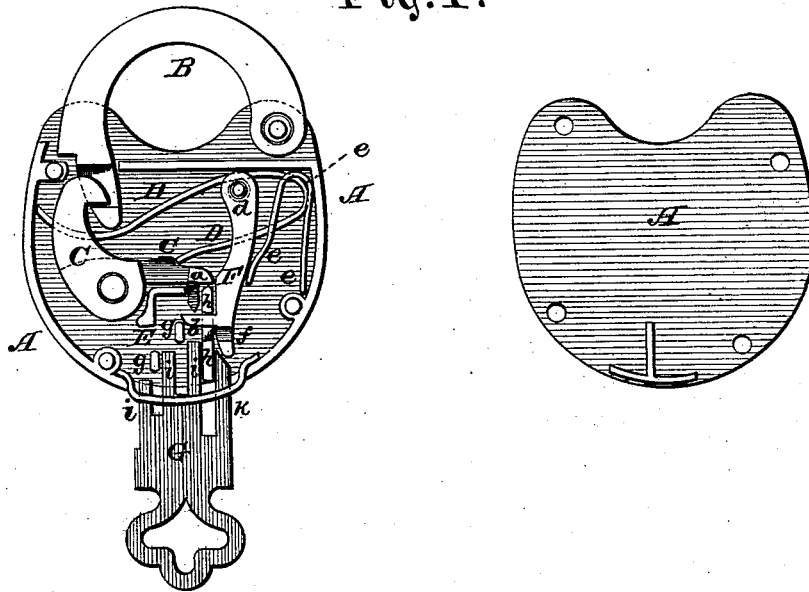


Fig. 2.

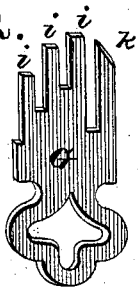
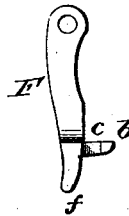


Fig. 3.



Witnesses:

P. C. Dieterich
C. H. Watson

Inventor:

Hermann Ahrend.

Per *C. H. Watson & Co.* Attorneys.

UNITED STATES PATENT OFFICE.

HERMANN AHREND, NEWARK, NEW JERSEY, ASSIGNOR TO ROMER & CO.,
OF SAME PLACE.

IMPROVEMENT IN PADLOCKS.

Specification forming part of Letters Patent No. **206,517**, dated July 30, 1878; application filed
July 10, 1878.

To all whom it may concern:

Be it known that I, HERMANN AHREND, of Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Padlocks; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to padlocks in which a flat key is used, in which one end of the hasp is released by a straightforward movement of the key, and has for its object to produce such lock in a simple manner, so far as relates to construction, and a lock not liable to get out of repair, and which cannot be readily picked; and it consists in providing a tumbler operated by a spring, a projection of which covers that part of the catch upon which the key operates until such time as the same is removed, as will be hereinafter more fully described.

In the annexed drawings, Figure 1 represents a plan view of the lock with one side of the case removed, showing the mechanism inside embodying my invention. Fig. 2 represents the key, and Fig. 3 represents an under view of the spring pawl or latch.

A represents the case; B, the shackle; C, the catch; D, the catch-spring, and E the angular projection below the catch, all of which, so far as described, may be of the usual or of any desired form. The catch is provided with a downward extension, *a*, as shown in Fig. 1, at which point a key engages with the same, which releases the catch from the hasp, when the spring D throws the shackle B outward.

F represents the tumbler, which is pivoted at *d*, so that it can swing back and forth. *e* represents a spring, which is placed in between the outer portion of the case and the tumbler F, and holds the latch in position when the key is removed. The lower part of the latch

is provided with a rounded or beveled part, *f*, while on the inside it is provided with a lip or projection, *b*, having a slot or opening, *c*. The inside of the lock is provided with studs or projections *g*, which serve as guides for the key, and also prevent the insertion of any broad instrument into the lock. There is also another stud or projection, *h*, against which the end of the latch F rests.

G represents the flat key used, which is provided with arms or projections *i* and *k*, the part *k* being rounded or beveled to correspond to the part *f* of the latch.

In operation the key is inserted in the lock, as represented in Figs. 1 and 2, and pressed forward until the part *k* of the key comes in contact with the part *f* of the tumbler, which moves the latch outward, the opening *c* in the tumbler allowing the key to pass forward and release the catch from the shackle. When the key is removed the springs D and *e* throw the catch and tumbler back to their former positions respectively, as shown in Figs. 1 and 2.

Having thus fully described my invention, what is claimed, and desired to be secured by Letters Patent, is—

1. In a lock, a spring-tumbler, F, with projection *b*, in combination with a pawl or catch, substantially as described.

2. The tumbler provided with the projection *b* and the rounded or beveled part *f*, in combination with the key G, having the beveled part *k*, substantially as and for the purpose set forth.

3. The tumbler provided with projection *b*, having the opening *c*, in combination with projection *h*, key G, and catch, substantially as and for the purpose specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

HERMANN AHREND.

Witnesses:

ROBERT P. LEHLBACH,
REUNE J. D. DUNN.