

F. EGGE.
Pad-Locks.

No. 153,058.

Patented July 14, 1874.

FIG. 1.

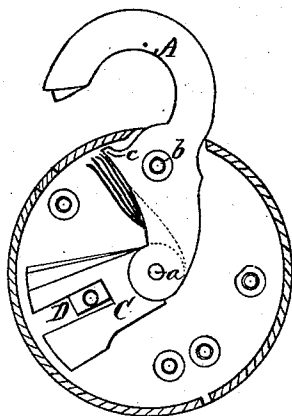


FIG. 2.

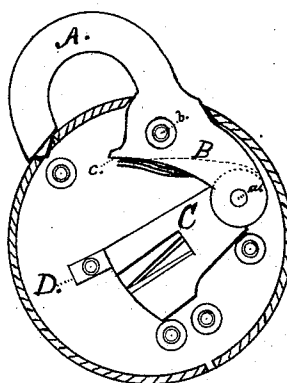


FIG. 7.

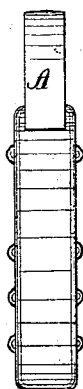


FIG. 4.

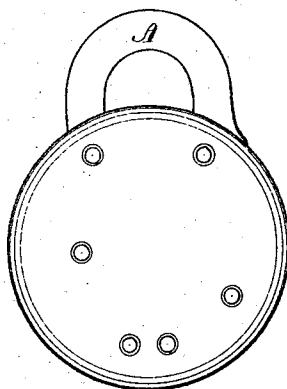


FIG. 5. E.

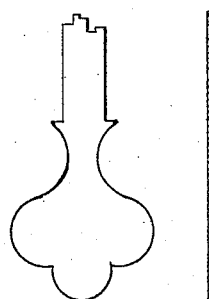
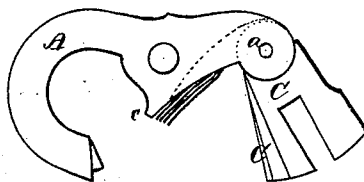


FIG. 3.



WITNESSES;

J. Smith.
George Ballou.

INVENTOR:

Friedrich Egge.

UNITED STATES PATENT OFFICE.

FREDRICK EGGE, OF BRIDGEPORT, CONNECTICUT, ASSIGNOR OF ONE-HALF HIS RIGHT TO FRIEND W. SMITH, OF SAME PLACE.

IMPROVEMENT IN PADLOCKS.

Specification forming part of Letters Patent No. **153,058**, dated July 14, 1874; application filed May 28, 1874.

To all whom it may concern:

Be it known that I, FREDRICK EGGE, of Bridgeport, in the county of Fairfield and in the State of Connecticut, have invented certain new and useful Improvements in Padlocks; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

My invention relates to that class of padlocks in which one or more spring-tumblers are required to be moved to certain positions before the bolt or hasp can be withdrawn, and is an improvement on the lock for which Letters Patent were granted me by the United States December 23, 1873, No. 145,853.

My invention consists in the construction and arrangement of the parts of the padlock, as more fully set forth.

By referring to the accompanying drawings I am able to illustrate my invention with more clearness.

Figure 1 represents the position of the parts when unlocked. Fig. 2 represents the position of the parts when locked. Fig. 3 represents the movement of the lock lifted out of the case or shell; Fig. 4, an elevation of the lock; Figs. 5 and 6, a side and edge view of the key; Fig. 7, an edge view of the lock.

A is the shackle or hasp, pivoted at *b*. B is the lower arm of the shackle, extending into the interior of the lock, and having a longitudinal recess on the inner side. The recess is indicated by the dotted lines. C is the tumblers, fastened into the recess by the pin *a*, which passes through the tumblers and takes into the upper and lower sides of the recess. The springs which actuate the tumblers, and also the shackle, are fastened into their respective tumblers at the proper point for giving the necessary action, and pass around the heel of the tumblers, and their ends rest, as represented in the drawings, against the projection *c* of the hub, and throw out the shackle when it is in position to unlock. D is a fixed stud or stump, made to match the slots in the tumblers C, and against which the face of the tumblers rest when the lock is locked, and

over which the slots in the tumblers move in the process of unlocking.

The operation of the lock is as follows: Supposing the lock to be locked, as in Fig. 2, the key brings the slots in the tumblers C in range with each other, and also in line with the fixed stud D. The lifting of the tumblers crowds the springs against the projection *c* of the hub of the shackle with such force that, as soon as the fixed stud and slots in the tumblers are brought in range with each other, the tumblers straddling the stump D are moved toward the center of the lock until their inner surfaces at the end of the slots abut against the stump. This action necessarily and simultaneously moves the other end of the shackle in the opposite direction, and the lock is thus opened.

The shell or case may be made of sheet metal struck up in two parts; or it may be cast from patterns. The lock is not necessarily round, but may be made any other shape that is desirable. The entrance for the key is from the bottom of the case, and the key itself is made of sheet-steel, and is flat. A barrel-key might, however, be used with the entrance at the side of the case. The tumblers, also, instead of being held by a pin to the shackle, might be united thereto in some other way by any joint that would give the required motion.

Having thus described my invention and illustrated all the parts fully, I will proceed to mention what I consider new, and for which I desire Letters Patent of the United States:

The combination, with a padlock-case provided with the stud D, of the shackle A, having extended bifurcated arm B, a series of slotted tumblers, C, pivoted in the bifurcated extremity of the arm, and a corresponding series of springs, *c*, secured therein, all substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 13th day of May, 1874.

FREDRICK EGGE.

Witnesses:

HERMAN GAUSS,
EDWARD H. LYON.