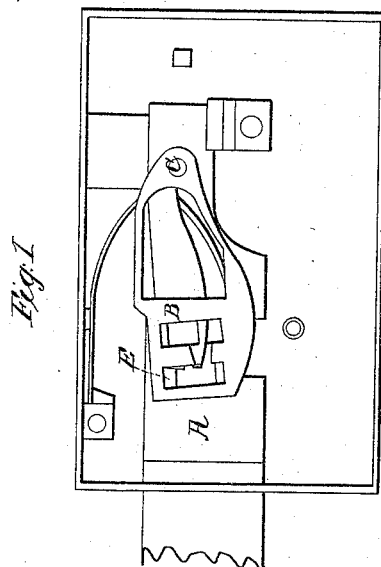
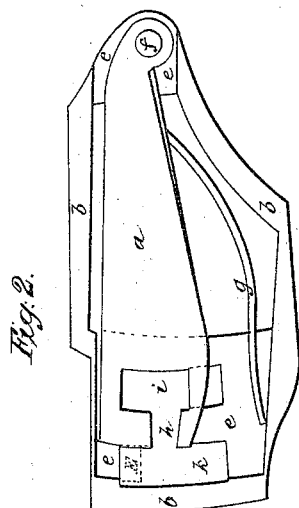


Stephenson & Edwards,

Bank Lock.

N^o 3,651.

Patented July 9, 1844.



UNITED STATES PATENT OFFICE.

M. R. STEPHENSON AND O. EDWARDS, OF BOSTON, MASSACHUSETTS.

SAFETY-LOCK FOR BANKS, SAFES, &c.

- Specification of Letters Patent No. 3,651, dated July 9, 1844.

To all whom it may concern:

Be it known that we, MARCUS R. STEPHENSON and OLIVER EDWARDS, of Boston, in the county of Suffolk and State of Massachusetts, have invented a certain new and useful Improvement in Locks to be Applied to Bank-Vaults, Doors of Safes, &c., and that the following specification of the same, taken in connection with the accompanying drawings, fully sets forth the nature and principles thereof by which it may be distinguished from others of like character.

Figure 1. of the drawings above mentioned represents the interior of the case of a lock, wherein the bolt A. and spring levers, usually applied thereto, and other parts are duly exhibited. In this lock five spring levers, or raising plates are applied to the bolt in order to prevent its retraction, one of them viz. B. being shown in Fig. 1. the others being arranged upon, or side by side with each other and turning on the same center pin C. and being lifted by the key when the bolt is thrown forward. For a long time after the invention and introduction of a lock of this kind it was thought that it presented insuperable obstacles to those who might endeavor to pick it; but a method of opening the lock or of retracting the bolt without using the key was soon discovered; the said method consisting simply in steadily applying a force or power against the bolt in order to throw the stud E, which projects from the side of the bolt and passes and moves through the slots or openings of the lever plates, against the sides of the front vertical openings of the levers. Thus by gradually elevating each lever in succession an experienced picklock could readily discover when the horizontal opening or part of the slot came into line with the stud E. of the bolt. Generally speaking the looseness of the parts, or elasticity of the metal would then cause the lever to advance a trifling distance or sufficiently to retain it in this position during the time the other levers were similarly operated upon. All but the last one being treated in this manner, as soon as the last lever was in its turn raised the requisite height, the bolt would retreat, and thus the opening of the lock would be completed.

Our improvements are calculated to prevent such an operation from being carried into effect. For this purpose in one or more of the levers we arrange a supplementary

lever *a*. (see Fig. 2. which represents one of the levers *b. b. b.* as removed from the lock) which (lever) plays in a suitable sunken space *e. e. e. e.* of the main lever and turns or moves at one end upon the same center pin *f.* with the main lever *b. b. b.* A spring *g.* (one end of which is confined to the main lever while the opposite end is in contact with the lower side of the secondary lever) presses the lever *a* against the upper side or top of the space *e.* or into the position denoted in the drawings (Fig. 2.) or in other words, into such a position that the entrance passage *h.* of the slot *i.* of the secondary lever, shall be over or coincide with the entrance passage between the vertical slots of the main lever. Now whenever an attempt is made to pick the lock in the manner as hereinbefore described, and the main bolt has a pressure applied to it in order to retract it, its stud E. (which is represented by dotted lines in Fig. 2.) will be thrown against the extreme end of the secondary lever *a.* (which should project a very short distance by, or over the rear side of the vertical slot *k.* in the manner as seen in the drawing) and will bear against the same while it does not touch the said rear side of the slot *k.*; so that when the main lever is raised by the picklock the secondary lever will remain stationary and thereby prevent a retraction of the main bolt. In order to admit of the main lever being freely moved upon the secondary lever, the space *e. e. e.* within the main lever should be a little greater in depth than the thickness of the secondary lever. The number of lever plates in any lock which may be provided with secondary levers in the above manner will be optional with the maker or user thereof.

Having thus set forth our improvement we shall claim—

The secondary lever plate *a.* in combination with the main lever plate *b. b.* the same being applied thereto and operating there- with as hereinbefore described.

In testimony that the above is a correct specification of our improvement we have hereto set our signatures this eighth day of February in the year 1844.

MARCUS R. STEPHENSON.
OLIVER EDWARDS.

Witnesses:

R. H. EDDY,
JOHN NOBLE.