

United States Patent Office.

ROBERT M. WEBB AND ISAAC HERMANN, OF NEW YORK, N. Y.

Letters Patent No. 67,089, dated July 23, 1867.

IMPROVEMENT IN SEALING PADLOCKS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that we, R. M. WEBB and ISAAC HERMANN, of the city, county, and State of New York, have invented a new and useful "Improvement in Applying Seals to Locks," and that the following description, taken in connection with the accompanying drawings hereinafter referred to, forms a full and exact specification of the same, wherein we have set forth the nature and principles of our said improvements, by which our invention may be distinguished from all others of a similar class, together with such parts as we claim, and desire to have secured to us by Letters Patent.

The present invention relates to a new and improved manner of applying seals to locks for the purpose of indicating when a lock has been tampered with, or attempts made to pick it; and for this purpose it consists in arranging within the key-hole of the lock, and in line with the same, either embracing the whole extent of the said key-hole or not, a spindle or rod, that extending through the lock-casing projects from its opposite side, where it is encased, and moves within a concentric tube or casing, permanently secured to the lock-casing. This tube has its outer end open, and made of a cup-shape, so as to receive a paper or other seal, properly prepared therefor, which seal, to prevent its being removed, is there secured by covering it with wax, or other suitable sealing material, so stamped that it cannot be removed, and then similarly resealed, without the use of a corresponding or other stamp; the said spindle, which extends through the lock-casing, as hereinabove stated, being provided at its end that is toward the seal used, as above explained, with a cutting edge or blade, or other suitable device, or in any other manner properly constructed for cancelling the said seal, when brought in contact therewith by the pushing in of the said spindle caused by attempting to insert the key in the key-hole of the lock, or any other instrument for unlocking or for picking the same, as will be hereinafter fully explained. In the accompanying plate of drawings our improvements are illustrated—

Figure 1 being an outside view of the front plate of the lock-casing.

Figure 2, a similar view of the back plate.

Figure 3, a transverse section, taken in the plane of the line xz , fig. 1.

Figures 4 and 5, sections taken respectively in the planes of the lines yy and zz , fig. 3; and

Figure 6, a detail view to be hereinafter referred to.

A, in the drawings, represents the lock, which is of that class known and commonly called a padlock, and as it may be of any of the ordinary constructions and arrangements of parts for such locks, it therefore needs no particular description herein, but for the more perfect operation of the present invention it is best that it should be self-locking, as will be readily apparent from the description which follows. B and C, respectively, the front and back plates of the locking-casing, from both of which, and in the same line with each other, outwardly projects a hollow sleeve or tube D, both of which are open at their outer ends E, and at their inner ends are secured to or form a part of the front or back plate of the lock, according as they project from either one or the other of the same; and with both the said front and back plates provided with an opening, G, corresponding to the interior diameter of the said tubes, or nearly so. Through these tubes D, from the outer end of the one attached to the front plate to the outer end of the one secured to the back plate, extends a spindle or rod, H, around which in the tube of the back plate is coiled a spiral spring, I, that at one end rests against a collar, M, secured to the said spindle, and at the other rests upon the shoulder a , at the outer end of the said tube. The front end of the spindle H is bored out, of a conical shape, as shown in fig. 3, and about the said rod, within the front tube, is a concentric tube or sleeve, L, which is confined between the shoulder b of the front end of such tube and the inside of the back plate of the lock-casing. To the inner end of this tube L an arm, M, is secured, by means of which, when the said tube is turned, as will be hereinafter explained, the bolt of the lock can be properly moved for locking or unlocking the same, as may be desired, as with an ordinary key. This sleeve L is notched at c of its outer end, corresponding to which is a notch, d , made in the outer end of the front tube D of the lock-casing.

From the above description, it is plain to be seen that if a key, N, of the form shown in fig. 3 of the drawings, be inserted in the outer front end of the spindle H, with the projection g upon such key, in line with the notch d of the front tube D, and then such key be pressed inward, it will move the said spindle forward in the lock, causing its back end O to project from the outer end of the tube of the back plate, at the same time

compressing the spiral spring I, when the projection of the key having become interlocked with the notch of the sleeve L, by then turning such key in the proper direction it will turn the said sleeve in conjunction therewith, and thus through its arm M move the bolt of the lock, either to lock or to unlock the same, as the case may be. To the outer end of the spindle H, upon the back plate of the lock, a knife or cutting edge is secured, and over the outer end of the back tube, surrounding said spindle, a cup-shaped cap, P, is attached, or formed as a part thereof. This cup is provided for the reception of the seal made of paper, card-board, sheet metal, or other suitable material, and of a proper shape to fit into the said cup, where, by using sealing-wax or other suitable material, it can be secured, and in such a manner, by stamping such wax, that if removed by an unauthorized person, and not resealed and restamped as before, the fact of such removal will be consequently made known by an examination of the lock.

By thus sealing the outer end of the back tube of the lock casing, and from the construction and arrangement of parts in connection therewith, as above explained, it is plain to be understood that if the key be inserted in the lock, as has been hereinabove described, which presses in the spindle, or if the said spindle be pressed inward by any other instrument or implement suitable for operating the lock, or by any attempt to pick the lock, the breaking of the "seal" upon the rear side of the lock-casing must necessarily occur, thereby showing at once to any person that the lock has been either unlocked after being sealed, or tampered with at least by some person or persons not authorized so to do; the importance of which is obvious in connection with mail-bags, safes, express-trunks, and other receptacles for valuables, as well as for many other purposes, such as in distilleries, etc.; and also in connection with the proper enforcement of the internal revenue laws, to prevent fraud and dishonesty in the returns made under the same.

The cutting edge of the spindle H necessarily defaces or cancels the seal as it is pushed through the lock by the action of the key or other implement upon it; but in lieu of this cutting edge there are other forms which may be given to the said spindle, which will accomplish the same result, as is obvious. In lieu of using a paper seal, and then sealing such seal with wax, as above explained, the paper seal may be dispensed with, and only the sealing by wax employed, the same end being accomplished in either case.

The form of the cutting edge *b* of the spindle edge H is angular-shaped, whereby, as is obvious, by turning the spindle in the tube, it can be changed in position or adjusted at any desired time or times, to do which an aperture, *l*, is made in the conical end of the spindle H, to receive a pin or other sharp-pointed implement, by which the said spindle can be turned around within the lock-casing; the object of the above being to cause the number of times which the lock has been tampered with to be indicated upon the seal without necessarily resealing it each and every time.

From the above description it is self-evident that as the unsealing, as it were, of the lock is produced by the insertion of the key, it is desirable or best to use a self-locking lock, and with such locks also to insert a plug in the bolt-aperture of the bow or shackle of the same, so as to prevent the said bow or shackle from closing and locking by accident, and before it is desired or required to lock the lock.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The spring spindle H, with sharp cutting edge *a*^x, operating in combination with the key N against the seal in cap P, substantially as described for the purpose specified.

2. The sleeve L, encircling the spindle H, with arm M and notch *e* operating in combination with the spring spindle H and key N, having projection *g*, substantially as described for the purpose specified.

The above specification of our invention signed by us this 28th day of July, 1868.

R. M. WEBB,
I. HERMANN.

Witnesses:

ALBERT W. BROWN,
WM. F. McNAMARA.