(No Model.)

B. J. LOOMIS. KEY.

No. 602,561.

Patented Apr. 19, 1898.



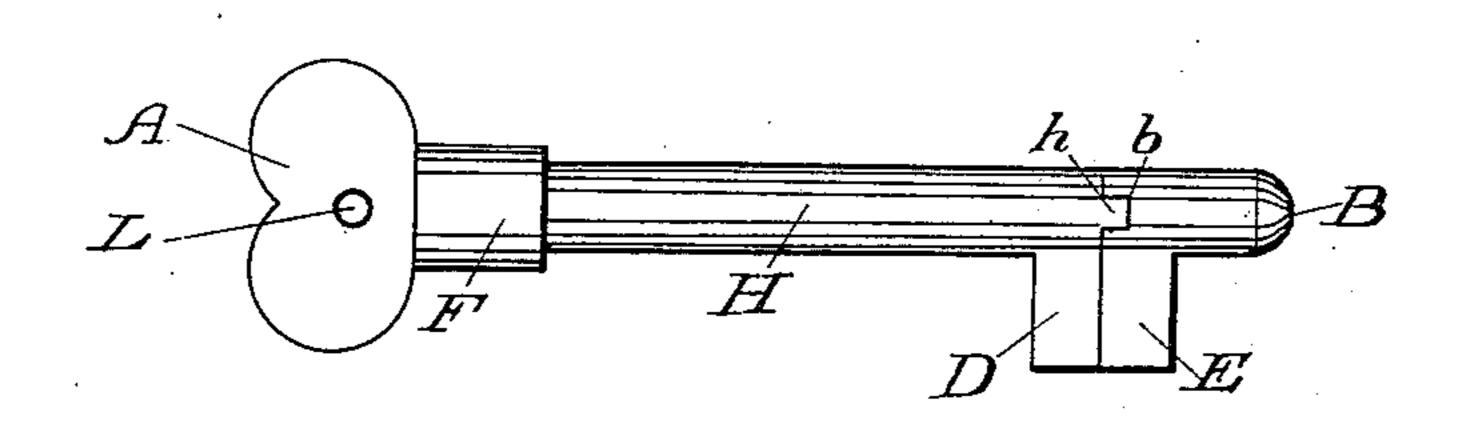
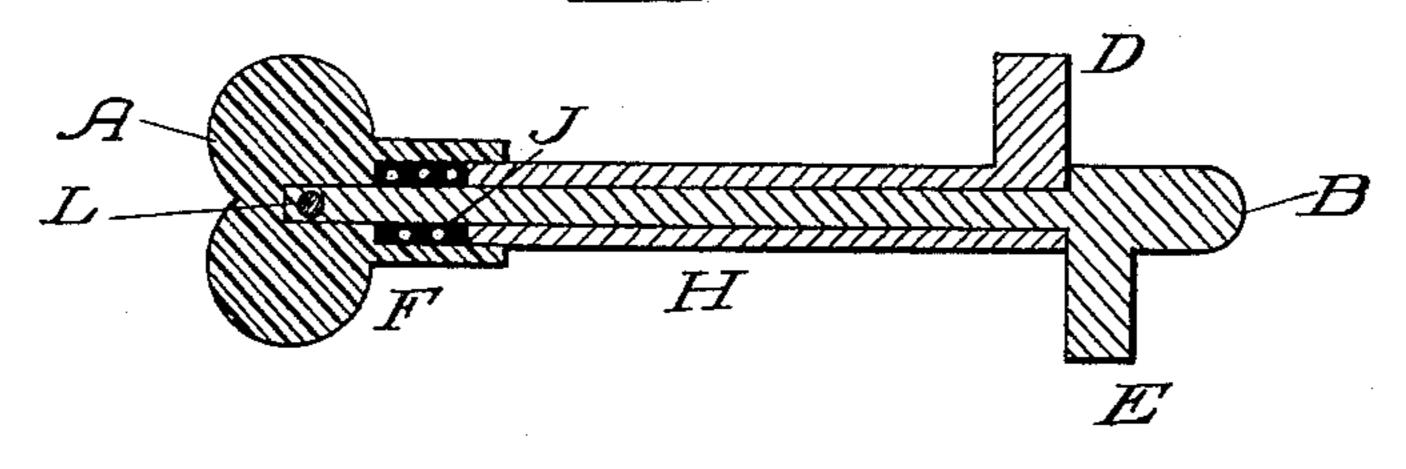


Fig. 2.



WITNESSES

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## UNITED STATES PATENT OFFICE.

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## KEY.

SPECIFICATION forming part of Letters Patent No. 602,561, dated April 19, 1898.

Application filed November 2, 1897. Serial No. 657,181. (No model.)

To all whom it may concern:

Be it known that I, Boardman J. Loomis, a citizen of the United States, residing in the city and county of Los Angeles, State of Cali-5 fornia, have invented a new and useful Improvement in Safety Door-Keys, of which the following is a specification.

My invention relates to keys for door-locks. The objects of my invention are to provide 10 a key which, when inserted in the lock and the lock locked, can be so manipulated by the person inserting it, who is on the inside, by dividing the web thereof, and turning one half up and the other half down, so that the key can-15 not be removed from the lock, or the lock unlocked, until it is returned to its normal position, rendering it impossible for one on the outside to tamper with the lock or unlock the door. I accomplish these objects by mechan-20 ism illustrated in the accompanying drawings, in which—

Figure 1 is a plan view of a key embodying my invention. Fig. 2 is a sectional view of the same, showing the web of the key di-25 vided, one-half above and one-half below, in which position it will be placed when it is desired to prevent the door from being unlocked or the key removed from the lock from the opposite or out side.

A is the thumb-piece.

B is the shank of the key, and E is that part of web integral with the stem B. H is a sleeve surrounding the stem or shank B, and D is the other half of the web, which is 35 integral with the sleeve H.

F is a cylindrical projection on the thumb-

piece A.

J is a spiral spring housed within the cylindrical projection F and is coiled around the 40 stem B and presses against the sleeve H.

L is a screw which holds in place the shank

B on the thumb-piece A.

h is a catch or projection on the sleeve H, adapted to enter a recess b on the end of the 45 stem. This catch is preferably made square at the end. A like catch is provided on the other side of this sleeve, and a like recess is made on the opposite side of the stem.

The operation of my improved key is as fol-

lows: The normal position of the key is as 50 shown in Fig. 1, in which position it is inserted in the lock, and the lock is then locked. Then the sleeve H is pressed outwardly from the web, dividing the web into two parts, and at the same time the catches hh have passed 55 out of the recesses b b on the stem, permitting the sleeve to rotate on the stem. The sleeve is then rotated one-half way around and released from the pressure. The impact of the spring will cause the notches to enter the 60 recesses on the stem, (the catches changing places in the recesses,) and that part D of the web will assume the position shown in Fig. 2. The key is now fast in the lock, and the lock cannot be unlocked until the key is 65 placed in its normal position. It can only be removed by one who is on the inside and can get at the key and put the key in its normal position again, after which the lock can be unlocked and the key removed.

I am aware that it is not new to provide a key having a divided web, one part of the web being integral with a sleeve surrounding a stem and the other part integral with the stem and the two parts of the web held into 75 engagement with each other by means of a spring encircling the stem and bearing against the sleeve surrounding the same, and I do not

claim the same; but

What I do claim is— In a key, the stem, B, having web, E, projecting therefrom and being integral therewith, and having on either side of said halfweb, E, square recesses, b b, formed therein; the said stem having removably attached 85 thereto the thumb-piece, A; the thumb-piece being provided with cylindrical projection, F, forming housing for spring, J; the sleeve, H, having half-web, D, projecting therefrom and being integral therewith and having 90 square catches, h h, projecting therefrom adapted to enter the recesses, b b, on the stem; and the spiral spring, J, all in combination substantially as shown and described.

BOARDMAN J. LOOMIS.

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Witnesses:

HENRY T. HAZARD, G. E. HARPHAM.