

(No Model.)

W. R. VAN VLIET.
TILL LOCK.

2 Sheets—Sheet 1.

No. 478,897.

Patented July 12, 1892.

FIG. 1.

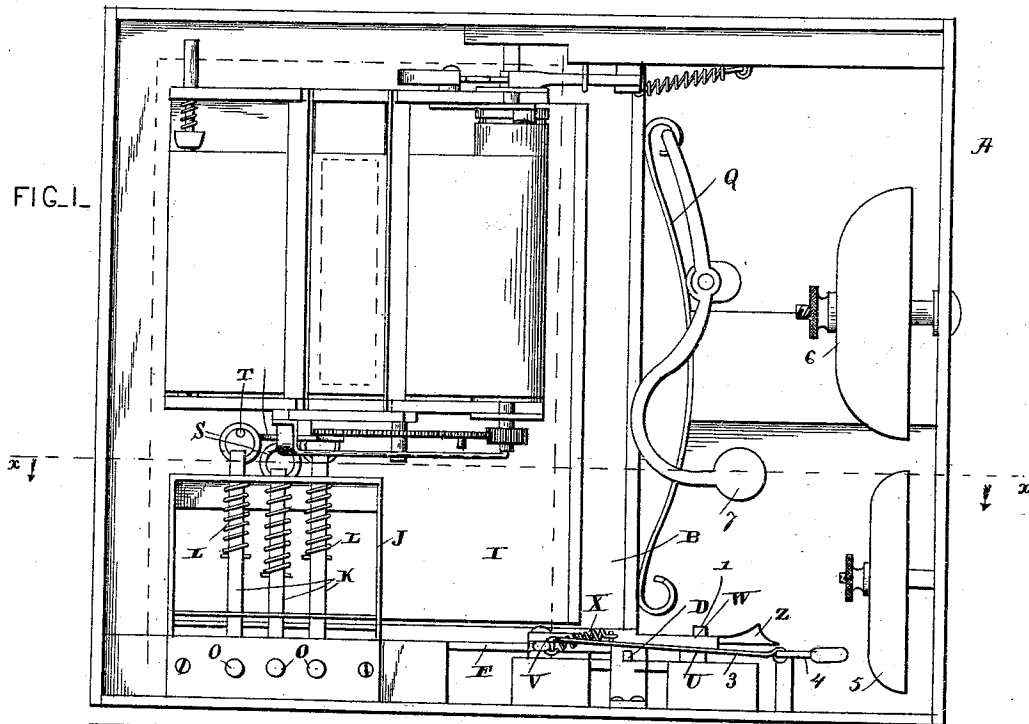
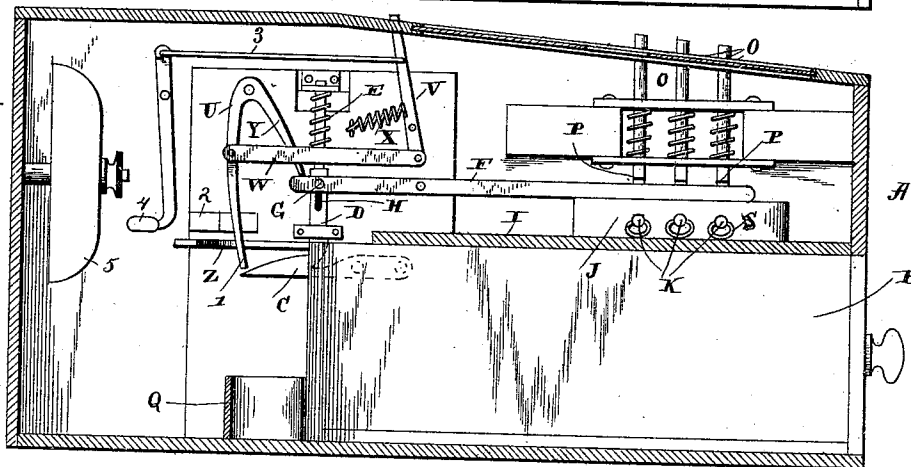


FIG. 2.



WITNESSES.

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per
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(No Model.)

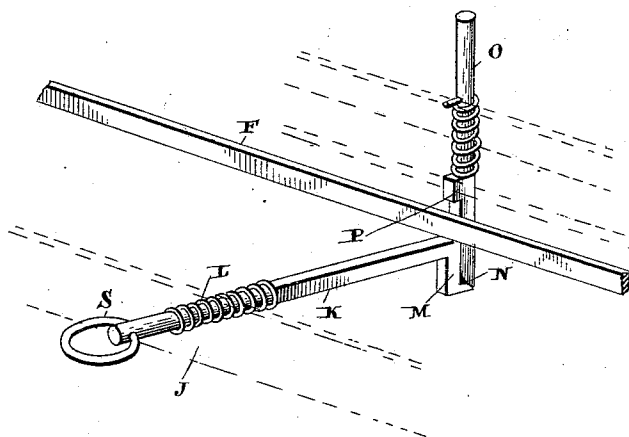
2 Sheets—Sheet 2.

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Fig. 3.



WITNESSES.

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UNITED STATES PATENT OFFICE.

WARREN R. VAN VLIET, OF EAST STROUDSBURG, PENNSYLVANIA.

TILL-LOCK.

SPECIFICATION forming part of Letters Patent No. 478,897, dated July 12, 1892.

Application filed May 6, 1891. Serial No. 391,802. (No model.)

To all whom it may concern:

Be it known that I, WARREN R. VAN VLIET, of East Stroudsburg, in the county of Monroe and State of Pennsylvania, have invented certain new and useful Improvements in Locks for Cash-Drawers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in locks for cash-drawers; and it consists in the construction and arrangement of parts, which will be fully described hereinafter.

In the drawings, Figure 1 is a plan view of a machine which embodies my invention complete. Fig. 2 is a vertical section taken on the line *x x* of Fig. 1, showing the locking mechanism which is placed upon one side of the box. Fig. 3 is a detached view showing one of the locking-bolts and the drawer-locking lever.

A is an inclosing casing, in one end of which is placed a cash-drawer B, which moves back and forth therein in the usual manner. Connected to the inner corner of this cash-drawer and projecting inward any desired distance is a catch C, which has its inner upper face inclined, as shown, so that the vertical spring-actuated bolt D will pass over this inclined surface of the catch and fall behind its shoulder for the purpose of locking the drawer closed. This bolt is normally held downward by means of a spring E, and the bolt slides freely in suitable bearings supported from the side of the box, as shown. Pivoted between its ends to the side of the box is a lever F, which has its inner end connected to the bolt D by means of a screw or pin G, and this pin projects into a vertical slot H, which is made in the bolt. By means of this construction when the drawer is pushed inward and the catch engages the lower end of the bolt the bolt is allowed a free upward movement independent of the lever and without in any manner affecting the said lever. The pin, which projects inward from the lever, normally rests against the upper wall of the said slot, so that when the outer end of the lever is depressed the bolt will be moved upward for the pur-

pose of releasing the drawer, as will hereinafter appear.

I is a horizontal partition in the case above the drawer, carrying the frame J, in which the sliding rods or bars of the lock work. The inner end of this frame J of the combination-lock is placed over an opening made in the partition I, and in this frame any desired number of tumblers or sliding bars K are placed, and are normally held outward by means of the springs L, which are placed around them. These bars K have their inner ends extend downward, as shown at M, and the lower portions of these downwardly-extending portions are cut away on their outer ends to form an incline N, with which the lower ends of the vertical spring-actuated keys O engage as they are forced downward. One end of the lever F normally rests over the outer ends of the sliding bars K and a suitable distance above them, so that when one of the keys O is depressed the bar K, which that key operates, is moved inward out of the way of the lever which is engaged by a shoulder P, which is formed upon each of the keys, and allows the lever to be depressed at its outer end by the key and its inner end raise the bolt, which allows the drawer to be forced outward by means of the spring Q, which is fastened to the bottom of the box between its ends, inside of the inner end of the cash-drawer. Connected to the inner ends of the sliding bars K are the rings or loops S, which can be passed over a pin or projection T for the purpose of holding the bars drawn inward out of the way of the adjacent end of the pivoted lever F. By means of this construction the bars and keys form a combination-lock, so that it will require one, two, three, or more of the keys to be depressed in order to allow the outer end of the lever to be depressed for the purpose of raising the bolt and releasing the drawer. Those bars which are not in the combination will be drawn inward and secured by means of the rings and pins, so that when their corresponding key is depressed it will not have any effect, and the outer end of the lever will be arrested by the other bars that are in the combination and which are normally held outward by means of their springs under the said lever. In this manner those keys which operate the bolts that are in

the combination must be operated before the drawer will be released.

In order to further lock the lever, a V-shaped locking arm or finger U is provided at the inner end of the said lever, and this finger is pivoted between its ends. Connected at one end to this finger and at its opposite end to an operating-handle V is a bar W, by means of which the finger is operated for the purpose of locking the inner end of the lever and preventing it from being raised. Connected to the handle V at one end and to the box at its opposite end is a spring X, by means of which the end Y of the finger is normally held over the inner end of the lever F. The opposite end of this finger is made longer and extends downward to be forced outward by means of an inwardly-extending arm Z, which is secured to the inner corner of the cash-drawer above the catch. This arm has its outer end inclined, so that when the drawer is pushed inward it will force the end 1 of the said finger outward and release it from a catch 2, with which it engages when forced backward by means of the operating-handle V. The normal position of the finger is with the short end Y over the inner end of the lever F, which prevents it from being raised for the purpose of raising the bolt and releasing the drawer, and hence it becomes necessary to first operate this handle before the drawer can be opened by the keys O. By pulling outwardly upon the handle V the end 1 of the finger will engage the catch 2 and be held in this position. Then by depressing the proper keys O—that is, the keys that are in the combination—the outer end of the lever will be depressed, the inner end raised, and the bolt released from the catch at the inner corner of the drawer and the drawer thrown outward by means of the spring. When the drawer is again pushed in, the arm Z engages the arm 1 of the finger and disengages it from the catch 2, when the short end Y will be drawn over the inner end of the lever F and prevent it from being operated. As the lever or handle V is operated a bell or alarm is sounded by means of a rod 3, which operates a spring-actuated clapper 4, that strikes a bell 5. So, also, when the cash-drawer is thrown open a bell 6 is struck by means of a clapper 7, and an alarm thus given. This clapper 7 is pivoted between its ends to a support which rises from the bottom of the box, and has its end opposite from the clapper extending downward and into a loop 8, formed in the adjacent end of the spring Q.

Having thus described my invention, I claim—

1. A cash-drawer having a catch, a locking-bolt, a lever pivoted between its ends and hav-

ing one end connected with the bolt, spring-actuated sliding bars placed under the opposite end of the lever for preventing it from being depressed, and keys which operate the lever and move the bars from under it, the parts combined to operate substantially as described.

2. A cash-drawer having a catch, a locking-bolt for engaging the catch, a lever pivoted between its ends, the bolt having a vertical slot, and a projection at one end of the lever which enters the said slot, spring-actuated sliding bars placed under the opposite end of the lever for preventing it from being depressed, and keys which move the bars from under the lever and at the same time depress it, the parts combined substantially as specified.

3. A cash-drawer having a catch, a locking-bolt which engages the catch, a lever pivoted between its ends and having one end connected with the bolt, spring-actuated sliding bars placed under the opposite end of the lever, the inner ends of the bars being inclined, and keys which engage the inclines of the bars for moving them from under the lever and at the same time engaging the lever for depressing it, the parts combined substantially as shown and described.

4. A cash-drawer having a catch, a spring-actuated locking-bolt, a lever pivoted between its ends and having one end connected with the bolt, spring-actuated sliding bars placed under the opposite end of the lever, keys for operating the bars and the lever, a finger at the opposite end of the lever, which engages the adjacent end of the lever and prevents it from being raised, and a handle for operating the finger, the parts combined to operate substantially as set forth.

5. A cash-drawer carrying a catch, a locking-bolt, a lever pivoted between its ends and having one end connected with the bolt, spring-actuated sliding bars placed under the opposite end of the lever, keys for operating them and the lever, a finger at the opposite end of the lever pivoted between its ends and having two depending arms, one arm normally resting over the adjacent end of the said lever, a catch for holding the other arm of the finger, and an arm upon the drawer for releasing the finger from the catch, and a handle for operating the finger, the parts combined substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

WARREN R. VAN VLIET.

Witnesses:

MORRIS WAUMAN,
WILLIAM VAN GORDEN.