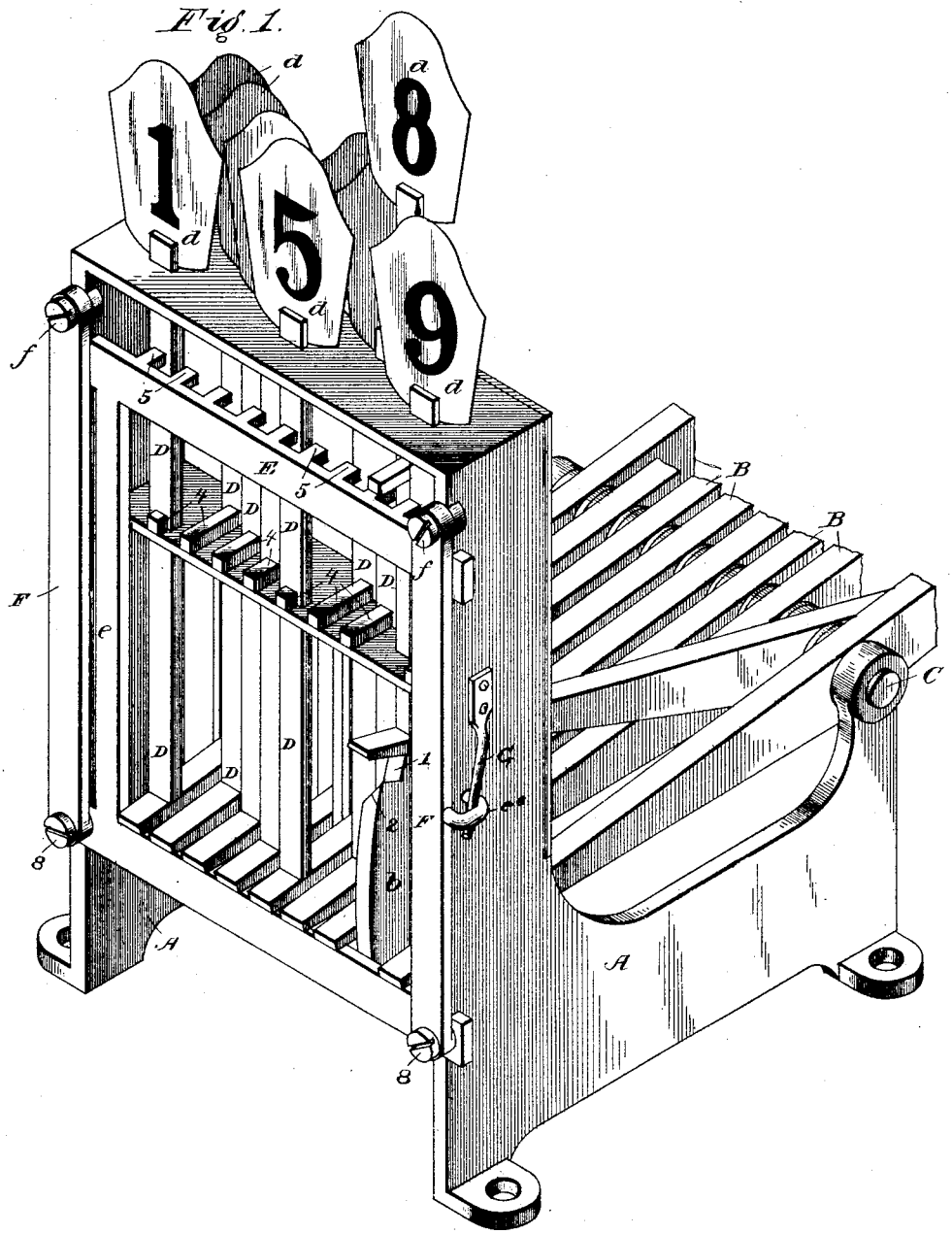
(No Model.) 3 Sheets—Sheet 1.

J. J. WEBSTER & K. HYDE.

CASH REGISTER AND INDICATOR.

No. 458,541. Patented Aug. 25, 1891.

Fig. 1.



Witnesses—
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Attys

(No Model.) 3 Sheets—Sheet 2.

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Fig. 3.

Fig. 4.

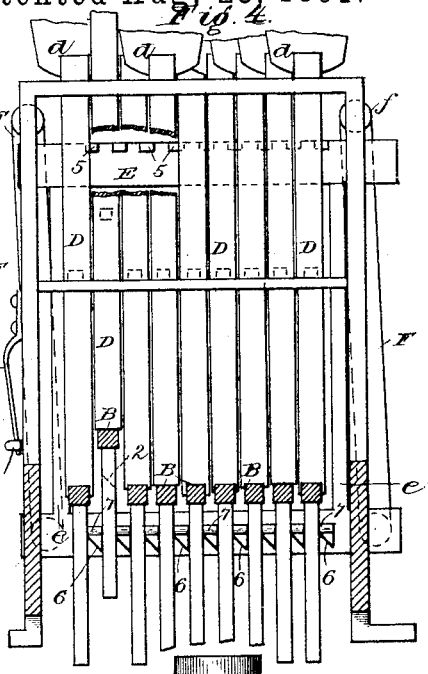


Fig. 2.

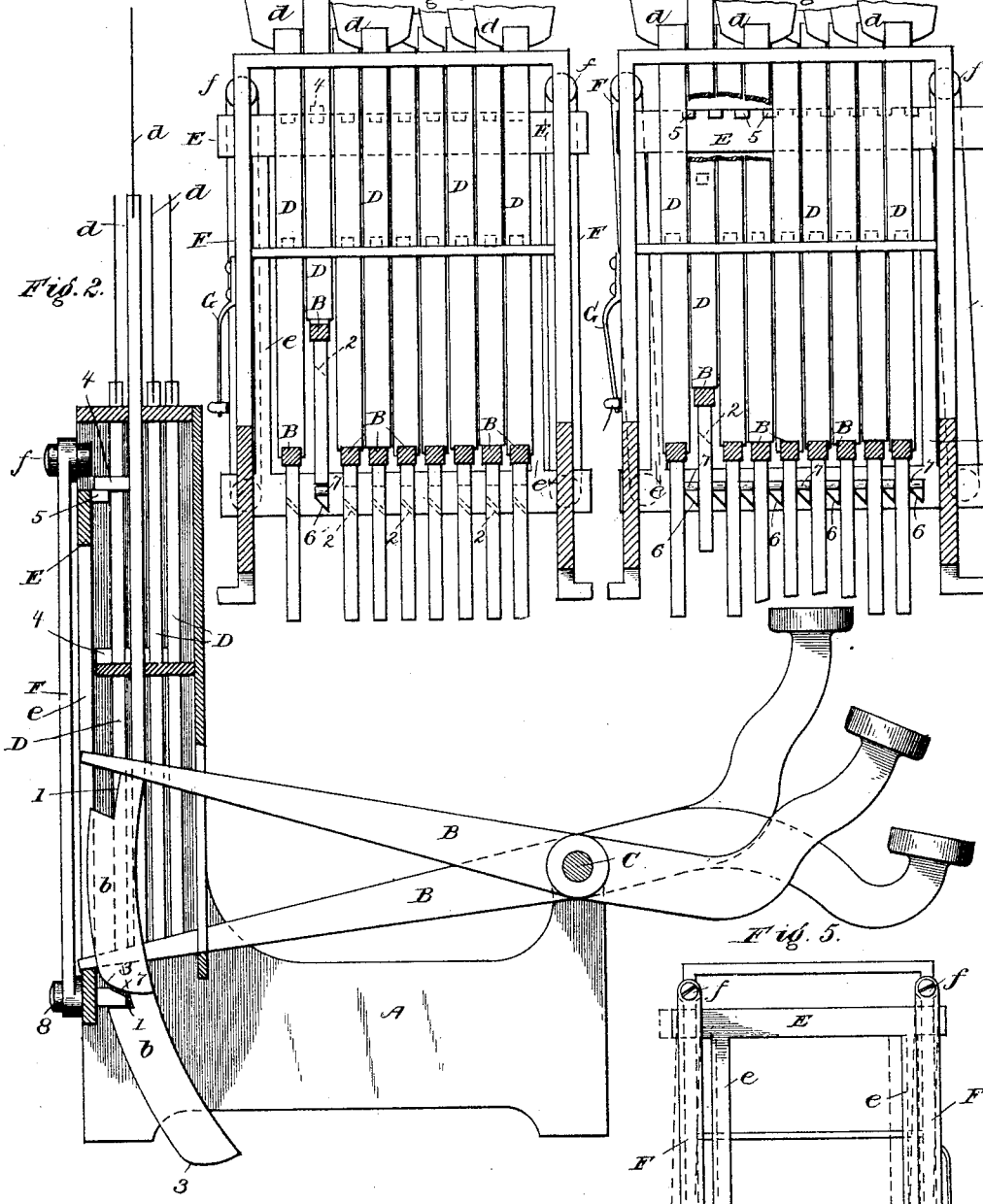
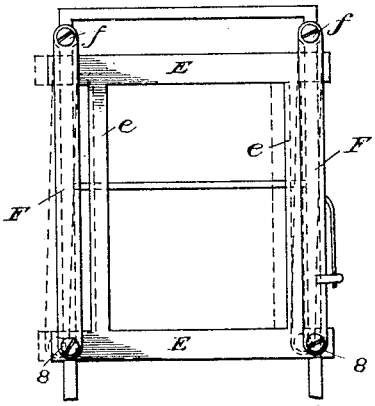


Fig. 5.



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(No Model.) 3 Sheets—Sheet 3.

J. J. WEBSTER & K. HYDE.

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Fig. 8.

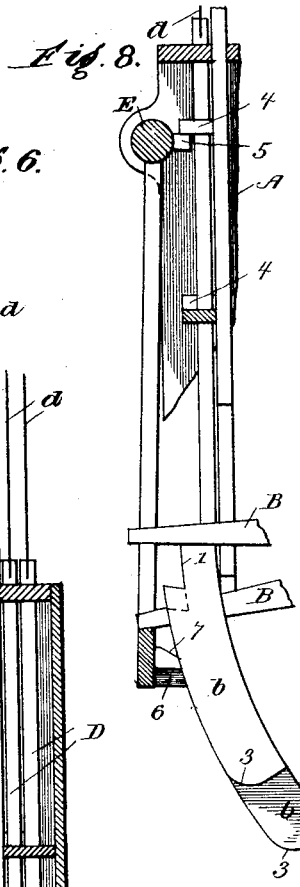


Fig. 7.

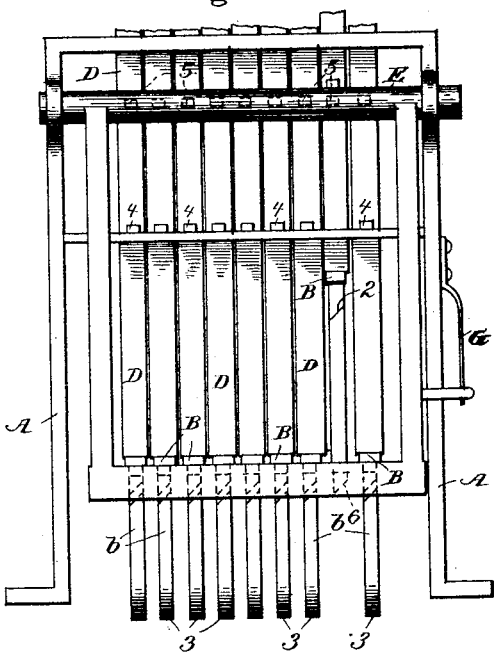
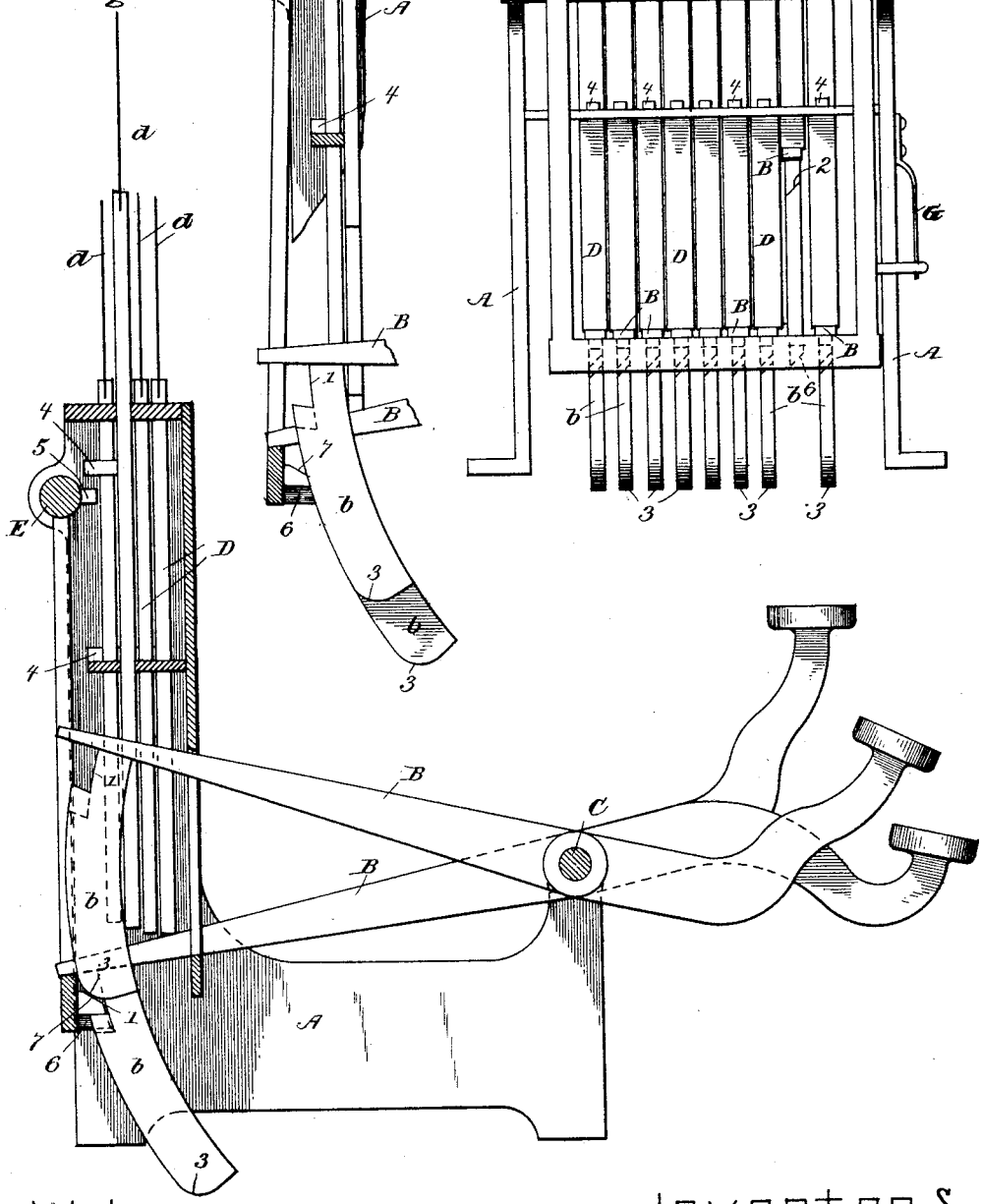


Fig. 6.



Witnesses—
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UNITED STATES PATENT OFFICE.

JEROME J. WEBSTER, OF SOMERVILLE, AND KIRKLEY HYDE, OF LOWELL, MASSACHUSETTS, ASSIGNORS TO THE BOSTON CASH REGISTER COMPANY.

CASH REGISTER AND INDICATOR.

SPECIFICATION forming part of Letters Patent No. 458,541, dated August 25, 1891.

Application filed April 2, 1891. Serial No. 387,354. (No model.)

To all whom it may concern:

Be it known that we, JEROME J. WEBSTER, a citizen of the United States, and a resident of Somerville, Middlesex county, Massachusetts, and KIRKLEY HYDE, a citizen of the United States, and a resident of Lowell, Middlesex county, Massachusetts, have invented certain new and useful Improvements in Cash Registers and Indicators; and we do hereby declare that the following is a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

Our invention relates to improvements in cash registers and indicators of the class having tablet-rods operated through the medium of key-levers and sustained in the raised or exposed position by a locking wing or rod.

The object of the invention is to dispense with intermediate tripping connections between the keys and the locking device as well as to promptly release and bring a previously-exposed tablet back to normal position out of view when a new key begins to raise a new tablet-rod.

The invention consists, essentially, in the combination of a tablet-rod-locking device and a series of operating keys or levers, the adjacent sides of these parts having inclined or cam surfaces to move said locking device aside during the first part of the movement of the levers.

It also consists in other combinations hereinafter described and claimed.

In the drawings forming a part of this specification, Figure 1 is a perspective showing the supporting-frame and operative parts of an indicator embracing one form of our invention. Fig. 2 is a section in front of a raised key. Fig. 3 is a view with the front plate removed, showing the parts of the apparatus partly in section and partly in elevation, one key being raised to the full extent, as in Figs. 1 and 2. Fig. 4 is a similar view, one key being partially raised. Fig. 5 is a rear elevation of the frame and operative parts, the locking-frame being shown in full lines in place to lock the tablet-rods in the raised position, as shown in Fig. 3, and in dotted lines in place to release said tablet-rods, as shown in Fig. 4. Figs. 6, 7, and 8 are views similar to the foregoing, showing a second form of locking-frame.

The frame-work for supporting the operating parts is contained in any usual or appropriate case or cabinet.

A is a frame of ordinary construction in which the operative parts are mounted; B, the key-levers; C, the fulcrum-rod; D, the tablet-rods; E, a movable locking device or frame, and F pendants upon which the locking-frame is hung. The key-levers B are provided with downward projections *b* at or near their rear ends, and each projection is provided with a notch 1, an inclined or beveled face 2, and a beveled toe part 3. The tablet-rods and tablets *d* are of usual construction in this class of machines. The tablet-rod teeth 4, however, have by preference plane under surfaces to provide a broad step or rest upon their supports. The supporting device in the form of the invention herein shown consists of a frame whose horizontal bars or rails are marked E and side pieces *e e*. The upper rail of this frame is provided with teeth 5, which serve to sustain the tablet-rods in their raised position, and the lower rail is provided with a series of projections having double-cam faces 6 and 7, corresponding in number with that of the keys. This frame is attached to the lower end of pendants F F by pivotal connections 8 8, and the pendants are pivotally connected with the rear end of the main frame at *f f*. By this arrangement free lateral movement of the locking-frame is provided, so as to be easily operated through the medium of the key-levers. The lower end of the pendants have a slight outward and inward movement from and toward the main frame to provide for the return of the keys from the raised to the normal position. This is provided for by making the pendants slightly flexible by jointing them near the upper ends or by having the pivotal supports *f f* loose. A second form of locking-frame is shown in Figs. 6, 7, and 8, wherein the frame is loosely hung from a shaft adapted to slide laterally of and swing outward from the main frame. The lock-frame is held to its normal or locking position by spring G, and is moved laterally to

drop a raised tablet and to permit a new tablet to be raised above the lock-teeth by means of the incline 2 on the key projection *b* operating against the bevel or cam faces 6 on the lower rail of the lock-frame. The projections *b* hold the lock-frame so that its teeth 5 are out of the path of the teeth 4 of the tablet-rods while the rods are raised by the key-levers; but when they have passed beyond the projections 6 the spring brings the frame back to normal position and locks the tablet-rods in the raised position, as shown in Fig. 3 of the drawings. Upon the return movement of the keys the bevel 3 strikes the cam-face 7 and swings the lock-frame outward slightly, and passes down until said part 7 comes opposite the notch 1 in the projection *b*, when it is brought back to position shown in Fig. 2 by the spring G.

The operation is as follows: When a key is depressed, for example, 8, the tablet is raised, and simultaneously therewith the locking-frame is moved laterally by the incline 2 working against the cam 6. The teeth 5 of the lock-frame are thus caused to pass from under the teeth 4 of any of the tablets which may have been raised and permits such tablet to drop to normal position. As the key continues its movement, the vertical side or face of projection *b* holds the lock-frame to one side of normal position until the key has carried the teeth 4 of the tablet-rod above the lock-rod teeth 5, when the lower end of projection *b* passes above the cams 6 and 7 and allows the lock-frame to be returned to normal position by the spring G. Upon the return of the key the bevel 3 engages the cam 7 and swings and holds the lock-frame backward until the notch 1 comes opposite the cams 6 and 7, when the spring G draws the lock-frame forward to normal position.

Having now described our invention, what we claim is—

1. In a cash-register, the combination of a series of operating keys or levers, a series of tablets, and a tablet-locking device for holding the tablet in view after the keys have returned to normal position, the lock and keys having adjacent projections for moving the lock aside upon operating a key, substantially as described.

2. In a cash-indicator, the combination of a series of tablets, a tablet-lock for holding the tablets in a raised position after the keys are released, and a series of operating-levers, each of the levers and the lock being provided with a projection adjoining that of the other, whereby the lock is moved aside upon operating a key, substantially as described.

3. In a cash-indicator, the combination of a tablet-rod provided with teeth, a supporting rod or frame provided with teeth engaging said tablet-teeth, and a series of keys or levers, each provided with a projection for moving aside the supporting-frame and releasing the exposed tablet, substantially as described.

4. In a cash-indicator, the combination of a tablet-rod-locking frame for engaging the tablets, pendent supports for said frame, and a series of keys or levers having projections for laterally swinging the frame aside to release the tablet-rod, substantially as described.

5. In a cash-indicator, the combination of a series of tablet-rods and tablets, a locking-frame for said rods, pendent supports for said frame, and a series of keys or levers, each having a projection provided with a cam-face for swinging the frame aside at the beginning of the stroke, a side face for holding it out of locking position during most of its movement, and a notch for permitting said frame to return to locking position, substantially as described.

6. In a cash-indicator, the combination of a tablet-rod-locking frame and a series of keys provided with a projection having a cam-face, a plane face, a notch, and a bevel or cam-face at or near its outer extremity for swinging and holding the frame aside, permitting it to return, and for throwing the frame outward to permit the return of the key to place, substantially as described.

In testimony whereof we affix our signatures in the presence of two witnesses.

JEROME J. WEBSTER.
KIRKLEY HYDE.

Witnesses to signature of Jerome J. Webster:

E. N. FOOTE,
C. H. PIERCE.

Witnesses to signature of Kirkley Hyde:

JAMES F. SAVAGE,
CHAS. H. MCINTIRE.