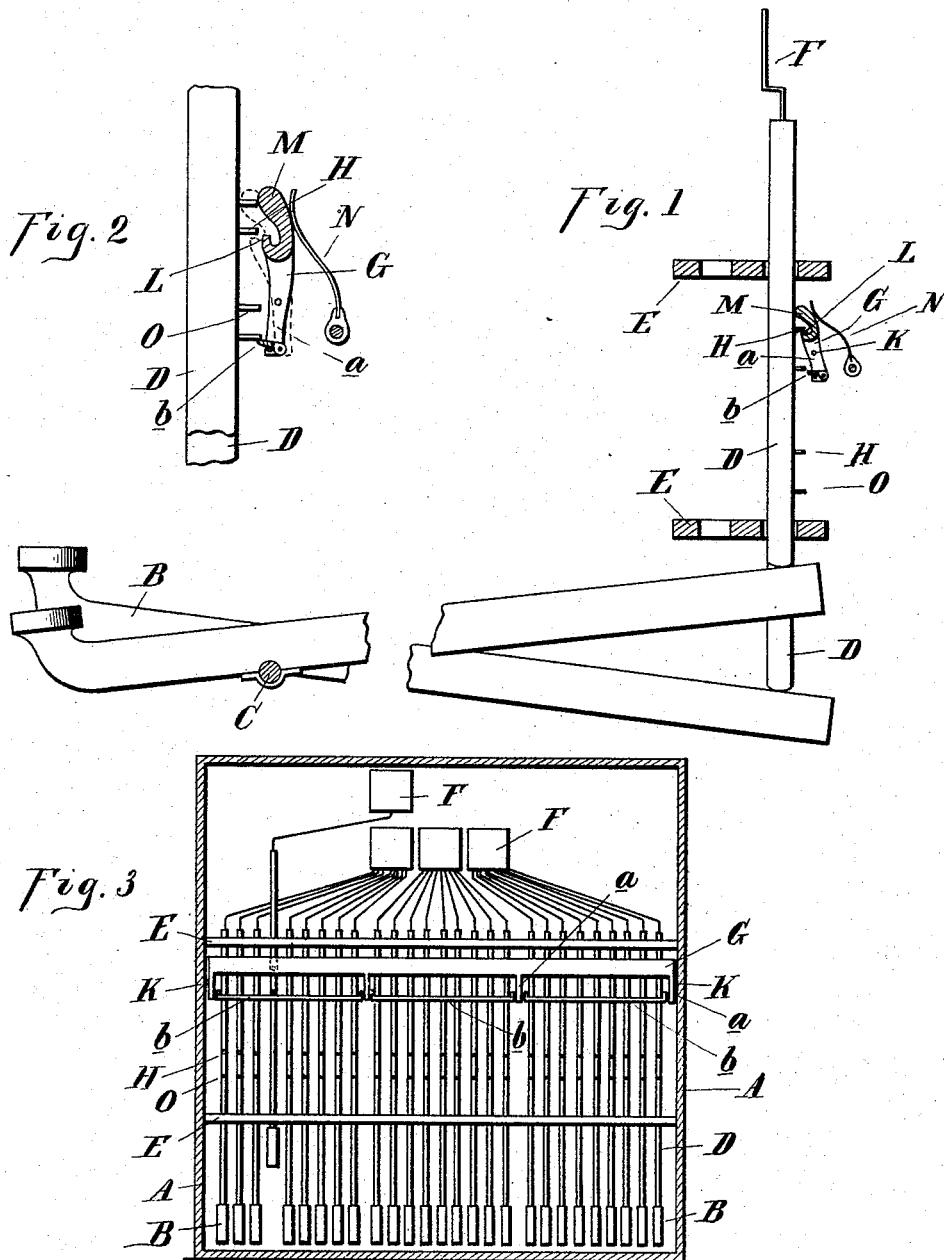


(No Model.)

W. G. LATIMER.
CASH REGISTER AND INDICATOR.

No. 458,810.

Patented Sept. 1, 1891.



Witnesses:
P. L. Shabbie
P. M. Hulbert

Inventor:
William G. Latimer
By *Charles Sprague* *Att'y.*

UNITED STATES PATENT OFFICE.

WILLIAM G. LATIMER, OF DETROIT, MICHIGAN, ASSIGNOR TO THE LATIMER
CASH REGISTER COMPANY, OF SAME PLACE.

CASH REGISTER AND INDICATOR.

SPECIFICATION forming part of Letters Patent No. 458,810, dated September 1, 1891.

Application filed November 20, 1890. Serial No. 372,102. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM G. LATIMER, a citizen of the United States, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Cash Registers and Indicators, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to new and useful improvements in cash registers and indicators; and the invention consists in the peculiar construction of the means employed for holding up the operated tablet-rods and of dropping out of sight the tablets previously operated, whereby the correct indication is always made, and, further, in the peculiar construction of these parts, whereby a series of keys may be operated successively to indicate an amount containing more than one figure.

The invention further consists in the peculiar construction, arrangement, and combination of the various parts, all as more fully hereinafter described.

The herein-described invention is intended as an improvement upon my patent, No. 409,107, of August 13, 1889, while it is especially designed for a machine of that type—that is, comprising a series of groups of digit-signs and a series of keys for operating the same. It is equally efficient in any machine using what is known as the “tablet” indication.

In the drawings, Figure 1 is a vertical central section through a cash-register embodying my improvements, showing one of the tablets in its indicating position. Fig. 2 is a similar section showing the tablet-rod and locking-bar in the position in which they would be during the depression of a key. Fig. 3 is a rear elevation of the tablet-rod shown in Fig. 1.

A is the frame of the machine.

B are the keys.

C is the transverse shaft upon which the keys are pivoted.

D are the tablet-rods supported upon the rear ends of the keys, one rod for each key and each rod supported in vertical guides E.

F is a figure-tablet secured upon the top of the tablet-rods D.

Any suitable registering mechanism may be used and applied in any desired manner. The description thereof I have omitted from this specification and drawings as unnecessary.

Heretofore many devices have been devised for holding up the elevated tablet-rod and dropping the rods which have been previously operated, the device shown in my patent referred to consisting of a mechanism between the keys and a universal bar, such as G, whereby the bar will be withdrawn from contact with the tablet-rods upon the operation of a key, allowing all of the previously-actuated rods to drop. A suitable detent or shoulder, such as H, is provided on the rear of the tablet-rods to engage with this bar and hold them in their elevated position. The objection to this construction is its multiplicity of parts, danger of getting out of order, and expense of manufacture.

My present invention consists in a single bar G, actuated by a shoulder or pin H upon the tablet-rods to release the previously-operated rods and have a secondary locking-bar adapted to engage under a second pin, such as b, to allow when one key is held in its depressed position of successively operating other keys.

The bar G is a universal bar extending across the rear of all the tablet-rods and pivoted upon suitable trunnion K at its end. This bar is provided with the shoulder L, operating as the locking-shoulder—that is, the shoulder adapted to engage under the pin H and hold the tablet-rods in their elevated position—and with the inclined face or bearing M above the shoulder L acting as the unlocking-shoulder for moving the bar upon the operation of a key away from the tablet-rods to allow of the disengagement of the pins H from the shoulder L. The bar is held normally in its forward position by the tension of a spring N.

The operation of the parts thus described is as follows: A number of keys having been operated, say, for instance, to indicate one dollar and sixty-five cents, if it is desired to indicate a succeeding sale of five cents, the tablet being in its raised position, the depression of the key which operates the five-cent

tablet rod will carry up the pin H beyond the shoulder L until it strikes the bearing M, which will cause the bar to be moved outwardly a sufficient distance to allow the previously-operated keys 1 and 6 of the combination "\$1.65" to drop, the position of the parts at this interval being shown in Fig. 2. This construction is complete in itself, but necessitates the simultaneous operation of the keys.

Now, in order to enable me while holding down one key to successively operate one or more keys I have devised the following construction: Below the pivotal point K of the bar G, I form an extension *a*, at the lower end of which is pivoted latch-bars *b*, one bar extending across the rear of each group of tablet-rods, this bar being held normally in a horizontal position and adapted to move upward, but held from a downward movement by a suitable stop upon the rear of the tablet-rod. Below the pin H, I form a second pin O. Now, when the bar G is moved out, as shown in Fig. 2, it is evident that the latch-bar *b* will be moved inwardly, and if the operator continues to hold down the operated key and operate a second key the pin O in its upward movement will lift the latch, which will immediately fall beneath the pin and prevent the lowering of that rod. This will hold the rod in its elevated position, with the upper pin H at a point above the shoulder L of the bar G. The operator can now depress a third key, the one which was operated second being held as described. Upon releasing his hold of the key first operated the latch *b* will be carried out of engagement with the pin O by the tension of the spring N, which will move the shoulder L beneath the upper pin H and hold all of the tablet-rods in their elevated position. The movement of the parts is so timed that the latch *b* is not moved into the path of the pin O until a sufficient time has elapsed to allow the pins upon previously-operated rods to drop by gravity beneath that bar, so that the operation of a single key after the operation of a series will cause to drop out of sight all of the previously-operated keys; or I preferably make the pin H shorter than the pin O, so that it may drop, no matter whether the latch is in its forward or rear position.

What I claim as my invention is—

1. In a cash register and indicator, a device for permitting the successive operation of two or more keys while the first key is depressed, consisting of an auxiliary locking device temporarily upholding the successively-operated tablet-rods until the releasing of the first-depressed key, and the reversely-operated primary locking device controlling the auxiliary locking device and adapted to be thrown out of engagement during the depression of the first key, substantially as described.

2. In a cash register and indicator, the combination, with a series of tablet-rods operated by a series of keys, of two locking-bars, one adapted to maintain the operated tablet-rod in an operated position after the actuating-keys are all released and the other for temporarily upholding the keys while one of the actuated keys is still held depressed, substantially as described.

3. In a cash register and indicator, a device for permitting the successive operation of a series of keys, consisting of a locking-latch in proximity to a series of stops on the operated mechanism and adapted to be brought into operation during the period of depression of a given key, substantially as described.

4. In a cash register and indicator, the combination, with a series of tablet-rods, of the bar G, forming a primary locking-arm, and the latch-bar *b*, forming a supplemental locking-bar, said bars being adapted to be alternately brought into play to engage with shoulders upon the tablet-rods, substantially as described.

5. In a cash register and indicator, the combination, with a series of groups, of the tablet-rods, the universal bar G, having a shoulder L, the latches *b*, one for each group, and the pins H and O upon the tablet-rods, the parts operated substantially as and in the manner set forth.

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

WILLIAM G. LATIMER.

Witnesses:

M. B. O'DOHERTY,
S. M. HULBERT.