

No. 610,945.

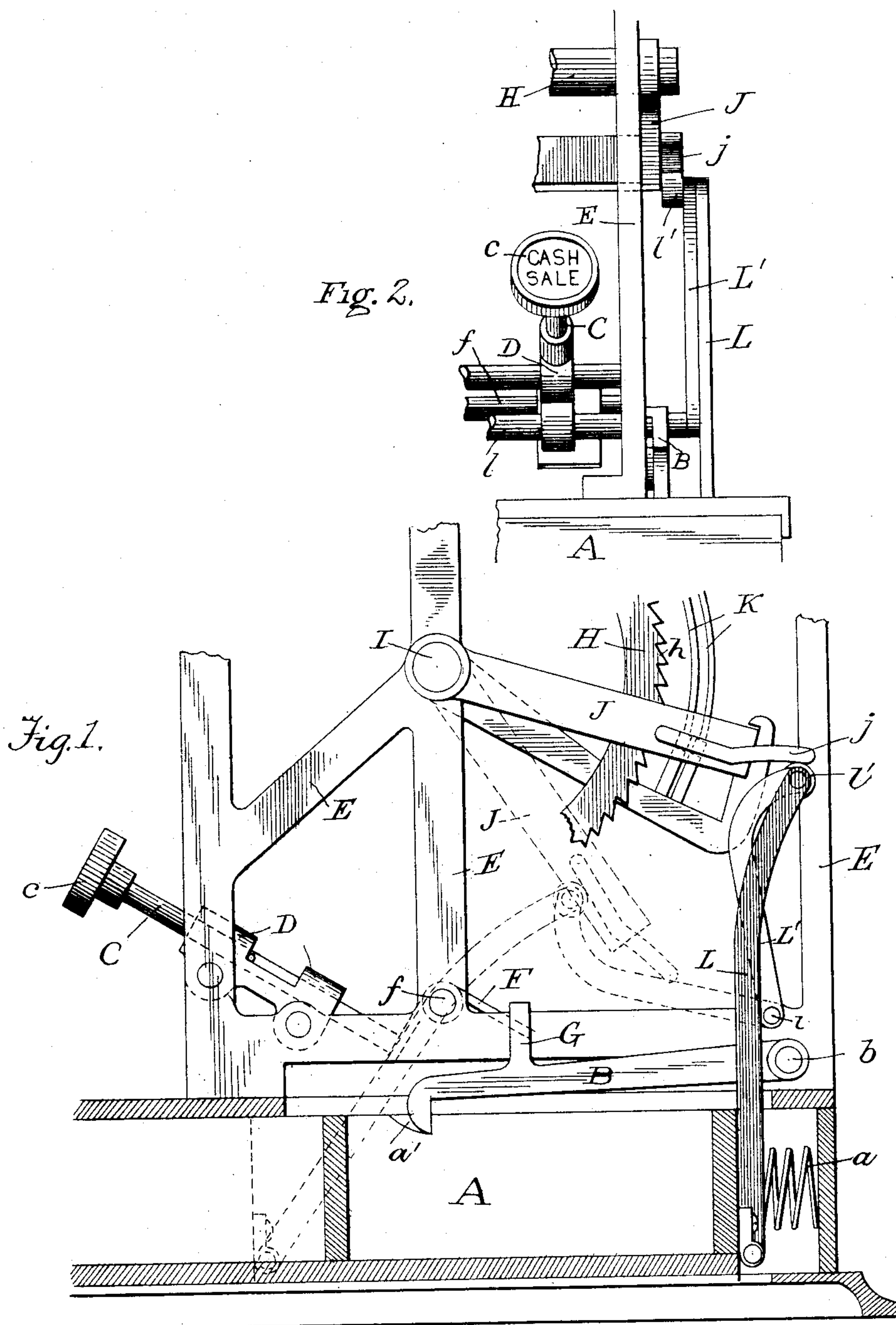
Patented Sept. 20, 1898.

J. H. McCORMICK.

CASH REGISTER.

(Application filed Nov. 26, 1897.)

(No Model.)



WITNESSES:

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JOHN H. McCORMICK, OF DAYTON, OHIO, ASSIGNOR TO THE NATIONAL CASH REGISTER COMPANY, OF SAME PLACE.

CASH-REGISTER.

SPECIFICATION forming part of Letters Patent No. 610,945, dated September 20, 1898.

Application filed November 26, 1897. Serial No. 659,830. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. McCORMICK, a citizen of the United States, residing at Dayton, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Cash-Registers; and I do hereby declare the following to be a full, clear, and exact description of the invention.

My invention relates to an improvement in cash-registers of that class in which the power to drive or actuate the adding-wheels is derived from the operation of the drawer.

It relates to machines of the class, for example, shown in the patent granted to me on October 27, 1896, No. 570,141, and machines of the type to which my invention is adapted are also shown in several of my pending applications. In the patent referred to when the cash-drawer is closed an inclined lever is abutted by a plate on the rear end of the drawer, and as the drawer closes the lever is raised, and the lever, when raised, turns the registering or adding wheels. The objections heretofore existing to drawer-operated machines have been that if the drawer is closed violently the lever could be given a degree of momentum sufficient to cause the adding-wheels to be turned violently and even to add incorrectly.

The object of my present invention is, therefore, to provide a connecting means between the drawer and the lever before referred to, so that during the initial movement of the drawer the lever will be raised rapidly, but toward the conclusion of the movement of the drawer the lever will necessarily be moved very slowly.

In the drawings, Figure 1 is a detail side elevation view of part of a cash-register like that referred to. Fig. 2 is a front elevation of the part of the cash-register shown in Fig. 1.

In both figures of the drawings the same letters of reference indicate identical parts.

The cash-drawer A slides in its usual compartment in the base of the machine. A spring *a* exerts a normal tendency to throw the drawer open; but it is held normally in closed position by the drawer-holder B, which is pivoted at its rear end upon the short cross-shaft *b* and at its forward end has a hook which engages a notch *a'* in the drawer. A release-

key C, having the button *c* at its front end, is slidably mounted in brackets D, secured to the fixed frame E of the machine. At its inner end the key C rests against one leg of the bell-crank lever F, which is pivoted at *f* to the frame E. The rear leg of the bell-crank lever passes under an arm G, which is carried by the drawer-holder B, so that when the release-key C is pushed inward it will turn the bell-crank, which will thereby raise the drawer-holder and release the drawer, as will be readily understood. The adding-wheels H, only one of which is shown, are mounted on a cross-shaft I, which is supported in the frame E. The adding-wheel, it will be noticed, has a ratchet *h* on its periphery. A frame J is journaled upon the transverse shaft I, and near its outer end the frame has a rearwardly-projecting track *j* for a purpose to be presently referred to. Pawl-carriers K, bearing pawls, (not shown,) engage the ratchets *h* of the adding-wheels H; but this much of my invention is old and well known and there are machines now on the market embodying the machine as I have thus far described it, except, perhaps, as to the track *j* on the frame J. Pivoted at its lower end to the rear end of the cash-drawer A is a long toggle-arm L, and a shorter toggle-arm L' is pivoted at its lower end at *l* to the fixed frame E. At the knuckle of this toggle-arm is the antifriction-roller *l'*, upon which rests the rearward end of the track *j*, and the frame J is thereby supported in normal position, as shown in Fig. 1. When the release-key is pressed, the drawer flies open under the impulse of the spring *a* and the toggle-arms assume the position shown in broken lines. The frame J falls, as shown also in broken lines. By an inspection of the drawings it will be seen that during the first movement of the drawer toward closed or normal position the frame J moves at first very rapidly, but as the drawer approaches closed position the leverage changes rapidly, so that the speed of movement of the frame J decreases very rapidly, and it has only a very slight movement during the final part of the movement of the drawer. In this manner I avoid the danger of having the frame J actuated with sufficient momentum to throw it past normal position, as shown in Fig. 1 of

the drawings. If the frame should be so actuated, the adding-wheels, which are turned by the pawls on the pawl-carriers K as the frame J is raised, would overregister.

5 Having thus described my invention, I claim as new and desire to secure by Letters Patent of the United States—

10 1. In a cash-register of the class described, the combination with a registering mechanism, of a cash-drawer, and a toggle-lever attached to said drawer whereby the operation of the latter will impart a variable movement to the registering mechanism.

15 2. In a cash-register of the class described, the combination with a registering mechanism, of a cash-drawer, and a toggle-lever having a jointed connection with said drawer and arranged to engage and operate the registering mechanism.

20 3. In a cash-register of the class described, the combination with a registering mechanism, of a cash-drawer, and a toggle-lever pivoted at one end to said drawer and at the other to a stationary part of the machine and
25 so located as to engage and operate the registering mechanism.

4. In a cash-register of the class described, the combination with a registering mechanism, of a cash-drawer, a toggle-lever pivot-

ally connected at one end to said drawer and 30 at the other to a stationary part of the machine and an antifriction-roller mounted on said lever and engaging the registering mechanism.

5. In a cash-register of the class described 35 in which the cash-drawer is arranged to transmit motion to an operating part, the combination with the drawer and the operating part, of a toggle-arm pivoted to the drawer at one end and arranged to bear against and 40 actuate the operating parts substantially as described.

6. In a cash-register of the class described in which the cash-drawer is arranged to transmit movement to an operating part, the combination with the cash-drawer and said operating part, of a toggle-lever pivoted at one end to the cash-drawer, its cooperating toggle-lever being pivoted at one end to a fixed point, and a roller carried by the knuckle of 50 the toggle-levers and arranged to directly actuate the said operating part.

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

JOHN H. MCCORMICK.

Witnesses:

IRA BERKSTRESSER,
WM. H. MUZZY.