(No Model.)

G. H. BARTLETT.

CASH INDICATOR AND RECORDER.

No. 550,385. Patented Nov. 26, 1895.

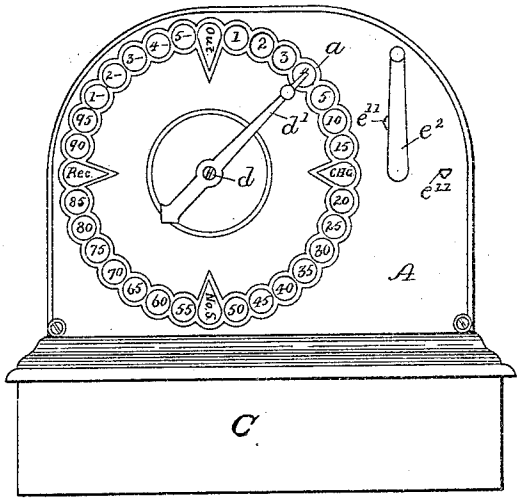

Fig. 1.

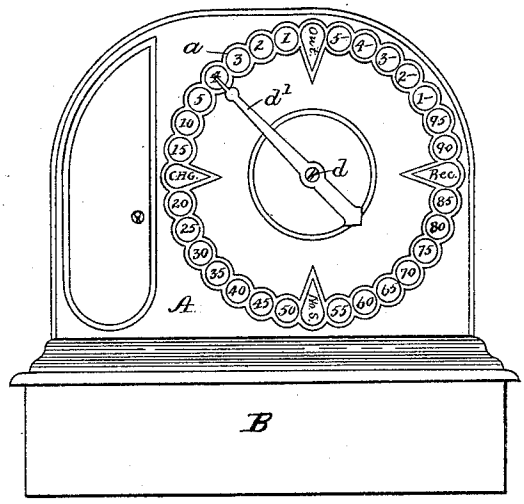

Fig. 2.

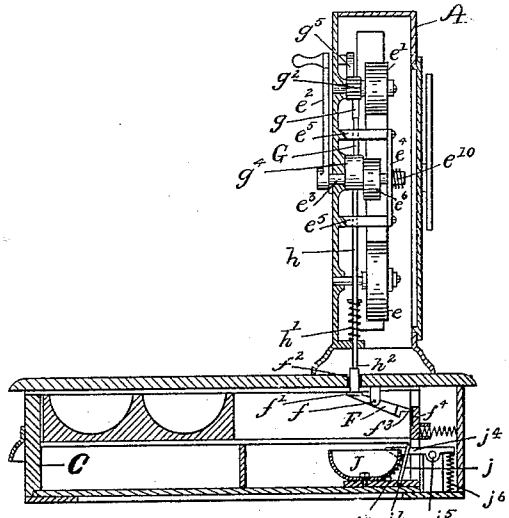

Fig. 3.

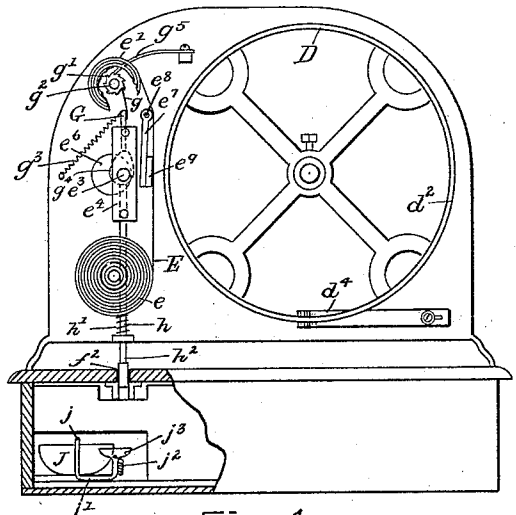

Fig. 4.

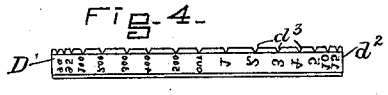

Fig. 5.

WITNESSES.

F. L. Laymon

J. M. Dolan

INVENTOR.

George Henry Bartlett

UNITED STATES PATENT OFFICE.

GEORGE HENRY BARTLETT, OF BOSTON, ASSIGNOR TO OTIS M. CUTLER, OF WAKEFIELD, MASSACHUSETTS.

CASH INDICATOR AND RECORDER.

SPECIFICATION forming part of Letters Patent No. 550,385, dated November 26, 1895.

Application filed February 6, 1895. Serial No. 537,434. (No model.)

To all whom it may concern:

Be it known that I, GEORGE HENRY BARTLETT, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Cash Indicators and Recorders, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification, in explaining its nature.

The invention relates to a cash indicator and recorder comprising a recording-wheel contained in a suitable case and having upon its periphery impressing or embossing figures, letters, or other indicators extending therefrom arranged in any order desired and adapted to be turned from without the case by a handle or pointer, the figures of the wheel corresponding to the figures of a dial upon each side of the case and the turning of the wheel to bring the pointer opposite any given amount, at the same time turning the figures or letters which indicate the amount of the sale or other information into a position to emboss or impress a recording-strip moved against them. The recording-strip is in the form of a roll of paper suitably mounted and is carried or fed between the periphery of the wheel and an embossing-pad, which is actuated to press it against the embossing-figures of the wheel, and the strip automatically moved or fed upon each movement of the embossing-pad. The embossing-pad, strip receiving or feed roll, the money-drawer and its actuating apparatus and alarm are all operated by an independent shaft turned by a handle outside the case and carrying operating-cams, and the whole mechanism is organized to provide great simplicity and cheapness of construction. The money-drawer is held closed against the pressure of a spring by a latch, and there is connected with the drawer an alarm-gong, and upon the release of this latch the spring partly opens the drawer and at the same time causes the alarm to be tripped and sounded. The return of the drawer to a closed position causes it to be engaged by a latch, the spring to be compressed, and the alarm mechanism to be also engaged by another latch, as will hereinafter appear.

Referring to the drawings, Figure 1 is a view in rear elevation of a recorder having the features of my invention. Fig. 2 is a view in front elevation thereof. Fig. 3 is a vertical section crosswise the case and lengthwise the base and drawer, and Fig. 4 is a vertical section crosswise the case. Fig. 5 is a view in plan of the embossing-wheel.

A is a case, preferably of metal, containing the recording mechanism and mounted upon a base B, having a sliding money-drawer C. The case A has a dial *a* on each side, one facing the customer and the other facing the operator; and this dial may have any desired enumeration or information arranged in circular form thereon and about the shaft-hole *d* in the case A. To each end of the shaft there is secured a pointer *d'* from the outside of the case to coact with each dial, and the rear one has a small knob by which the shaft and pointer may be turned. The shaft within the case carries the large wheel D, having a somewhat wide periphery d^2, which carries or has upon it embossing figures, letters, or devices arranged to correspond with the figures, letters, or devices on the dial. These may be cast upon the periphery of the wheel or attached thereto in any desired way, and I prefer to mount them thereon by means of a thin metal band of ductile metal, such as brass or copper, in which the embossing figures or devices have been formed by plating or by molding or by dies or in any other suitable way, and this strip is wound about the periphery and fastened thereto by solder or in any other suitable manner. This forms the entire apparatus for indicating, say, the amount of the purchase and for bringing the numerals upon the wheel indicating said amount into operative relation to the recording-strip and pressure-pad or for bringing the other devices into such position.

E is the recording-strip. It extends from the giving-off roll *e*, close to the periphery of the wheel D, to the winding-roll *e'*, and it is moved into contact with the embossing devices of the wheel when it is desired to record the amount of a purchase or obtain an impression by means of the separate handle e^2 at the rear of the case and at the end of the cam-shaft e^3, the cam-shaft being supported

at one end by the shell of the case and at the other end by a plate e^4, attached to the two studs e^5, extending inward from the inner surface of the plate. This cam-shaft is adapted to be oscillated by the lever, and has the cam e^6, by which this oscillating movement is brought against the lever e^7, which is pivoted at e^8, which has a resilient or elastic pad e^9, preferably of rubber, and it is between this pad and the periphery of the embossing-wheel that the paper is fed, and a movement of the cam forces the lever against the paper and presses the paper with sufficient stress against the periphery of the embossing-roll to cause the figures to emboss their value in the paper. This movement of the cam-shaft also operates the strip-feed roll e' and the cash-drawer latch F. It actuates the strip-feed roll e' by means of the push-bar G, carrying at its upper end a spring-pawl g, which engages in successive order the teeth g' of the ratchet-wheel g^2 on the feed-roll shaft. A spring g^3 serves to retract or hold the push-rod in contact with the cam g^4, and a detent-pawl g^5 serves to prevent the feed-roll being turned backward upon the downward movement of the feed-pawl. The cam which operates the push-bar and the drawer-latch is upon the shaft e^3 and is a wiper-cam, and it also serves to actuate the push-rod h operating the drawer-latch. The cam-shaft carrying the cams is moved in one direction by the handle e^2 and upon the reverse direction by the coiled spring e^{10}, one end of which is attached to the shaft and the other to the plate e^4. The handle can be moved one quarter of a revolution, and its movement in each direction is checked by the stops e^{11}. The drawer-latch push-rod is moved downwardly by the said cam g^4 and is moved upwardly by the spring h', and its lower end h^2 is made vertically adjustable by a screw upon the end of the push-rod. The drawer-latch F is in the form of a lever pivoted at f to the under side of the top of the case in which the drawer is movable, and having an end f' in line with a hole f^2 in the case through which the push-rod extends and a notch f^3 at the other end which engages a latch-plate f^4 on the back of the drawer when the drawer has been pushed inward past it. This latch is preferably a gravity-latch, the retaining end being heavier than the other end and dropping into place when the drawer has been pushed by it, the edge of the back of the drawer riding upon the under surface of the latch and pushing it upward until it passes the notch, when the latch drops by gravity and holds the drawer and retains it in place against the stress of the spring I, that is fastened to the back of the drawer, and is adapted to be compressed against the back of the case as the drawer is closed, thus storing up sufficient stress or power to push the drawer outwardly when the drawer-latch is released. The drawer carries a gong J and also a striker j, which is pivoted at j', and has an operating-spring j^2. The striker has the extension j^3, which upon the closing of the drawer rides under the latch j^4. The latch is pivoted at j^5 to a stud extending upward from the bottom of the case and is pushed downward by the operation of the compression-spring j^6. On the outward movement of the drawer the striker is held by the latch, but is finally released and flies forward, striking the gong, thus sounding an alarm. This action is caused by the drawer-spring upon the release of the drawer-latch. The wheel D has notches d^3 in the edge of its periphery with each of which a spring-latch d^4 is adapted to engage. These notches are the same distance apart as the figures upon the periphery, and the latch acting with the proper notch serves to hold the wheel while the amount of the sale is being embossed upon the paper strip. The notches are V-shaped, and the movement of the wheel by its handle easily disengages the pawl therefrom and permits it to be readily moved without hinderance from the latch.

The operation of the indicator is as follows: The wheel D is turned by the operator until the pointer is moved to the appropriate figure or mark upon the dial, and the cam-shaft is then turned by its arm e^2 to cause the recording-strip to be forced against the face of the wheel and take from it the impression of the figures or marks which are in line therewith and which are the ones to be recorded, at the same time moving downwardly the rod, which releases the drawer-latch and permits the drawer-spring to move the drawer outward and sound the alarm. The cam-shaft is then automatically reversed and the pawl operating the feed-roll actuated. The wheel D may have, of course, indicating characters or words of any description, and the dials upon the outside of the case are arranged with corresponding characters or words.

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

1. In a cash indicator and recorder the combination of an externally threaded push rod h with an adjustable end h^2, the drawer latch F, the drawer C, the gong J, the striker j with an operating spring j^2, the extension j^3, the latch j^4 pivoted to a stud at j^5 and a compression spring j^6, as and for the purposes described.

2. In a cash indicator and recorder the combination of the case A having the dial a with a base B and a drawer C, a wheel D connected with pointers a' having united to its periphery a thin strip of metal bearing raised figures or letters, a cam shaft e^3 supported by the plate e^4, attached to the studs e^5, bearing cams e^6 and g^4, with a handle e^2, the spring e^{10}, the lever e^7, pivoted at e^8 bearing a resilient pad e^9, the push bar G bearing the spring pawl g, the roll e, and the feed roll e' with the ratchet wheel g^2, having teeth g', the spring g^3 and the detent pawl g^5.

3. In a cash indicator and recorder the combination of the case having similar circular

dials on each face, a shaft extending through the case and bearing at each end outside the case a pointer to co-operate with the dial of its side and one of which pointers serves as a handle, a wheel mounted upon said shaft within the case and bearing upon its periphery raised impressing figures, letters or other characters, a paper strip feed at one side of its wheel, a movable pad between which and the wheel the paper is fed, a box to said case containing a money drawer, a spring to press it outward, a latch to hold it closed against the pressure of the spring, a gong actuated upon the outward movement of the drawer, and a shaft having a handle outside the case by which it is adapted to be turned and bearing cams to operate the paper strip presser, the paper feed and the drawer releasing latch, as and for the purposes described.

GEORGE HENRY BARTLETT.

Witnesses:
F. F. RAYMOND, 2d,
HENRY G. MAYRHOFER.