

(No Model.)

3 Sheets—Sheet 1.

E. T. TAYLOR.

CASH REGISTER AND INDICATOR.

No. 380,831.

Patented Apr. 10, 1888.

Fig. 1.

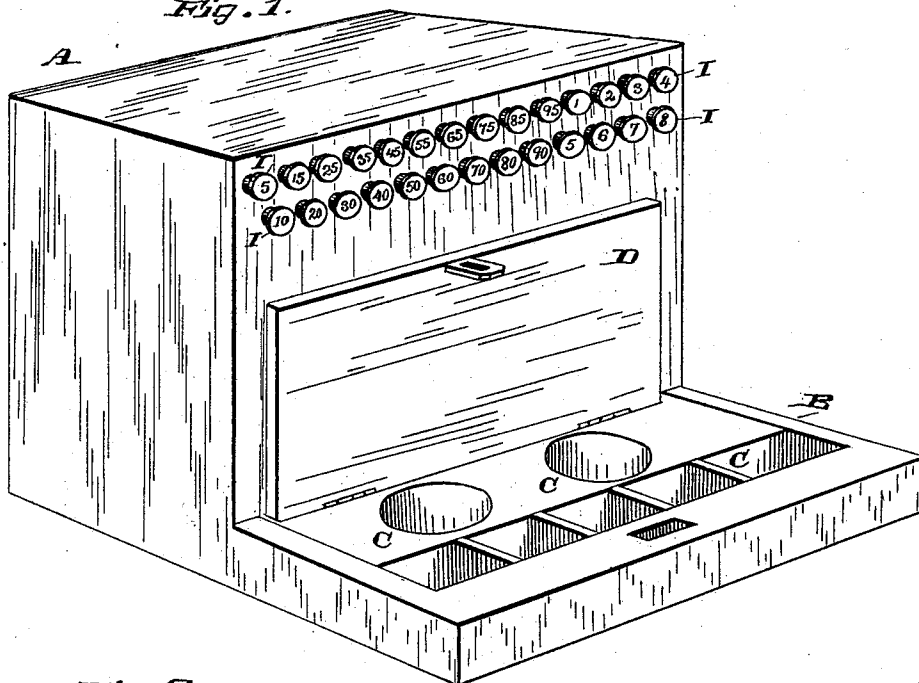
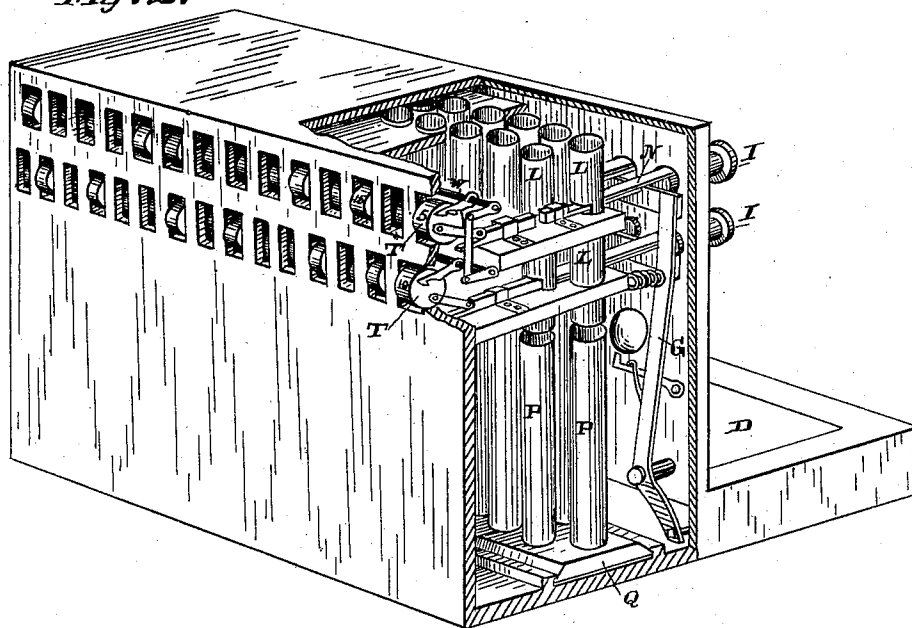


Fig. 2.



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Fig. 3.

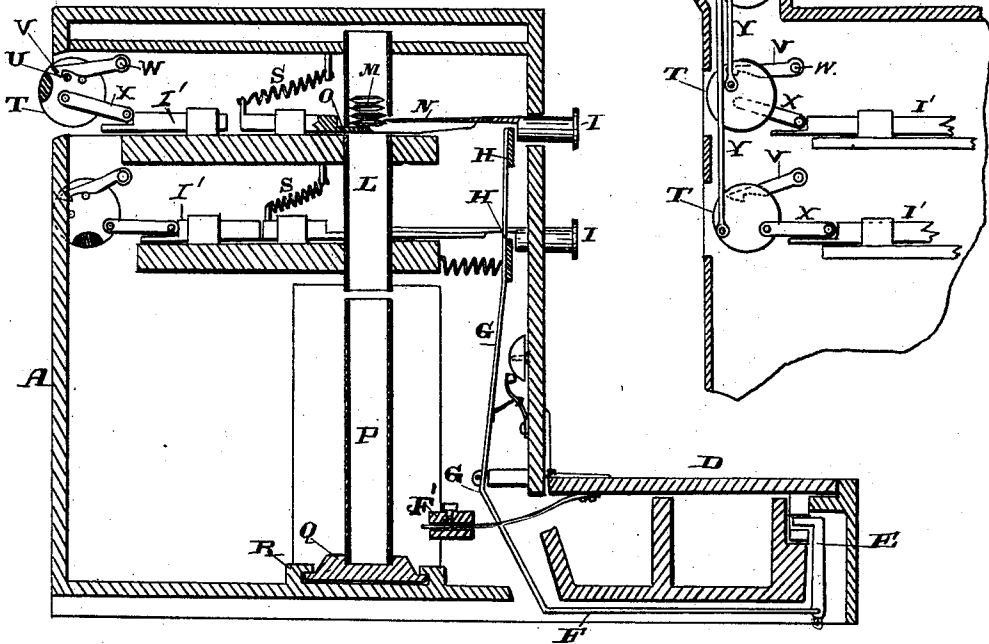


Fig. 5.

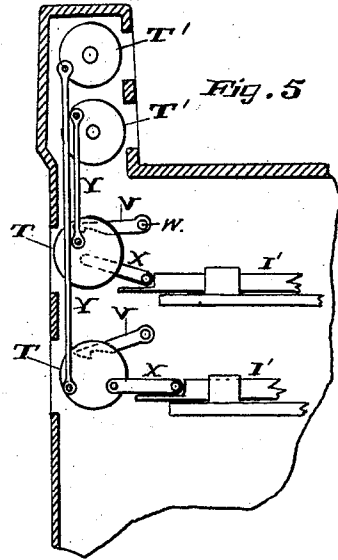


Fig. 4.

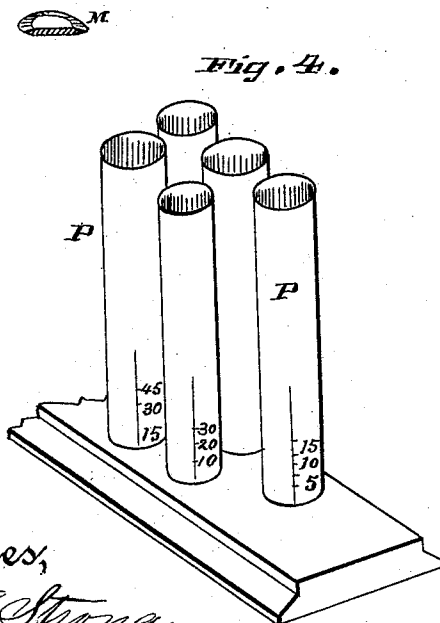
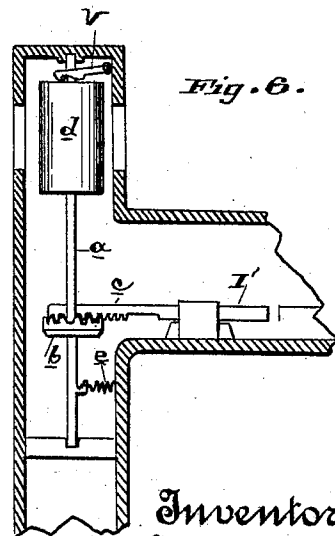


Fig. 6.



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Fig. 7.

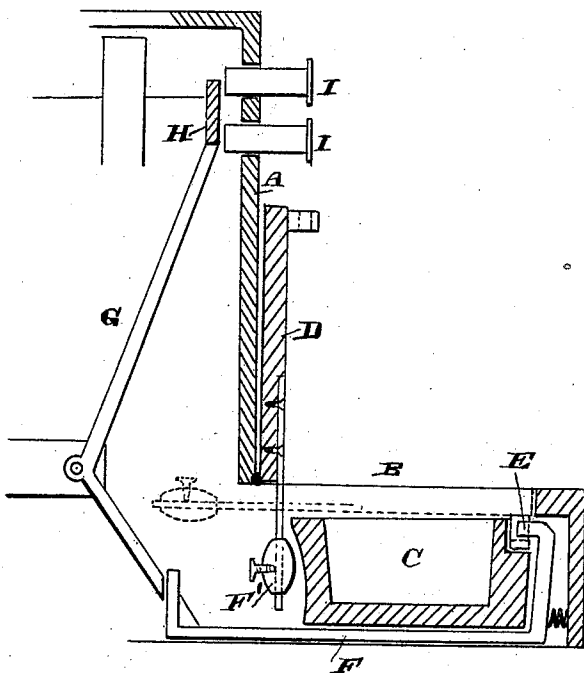


Fig. 8.

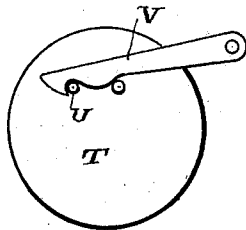
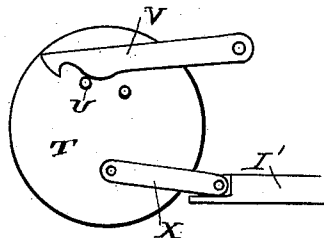


Fig. 9.



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UNITED STATES PATENT OFFICE.

EDWARD T. TAYLOR, OF OAKLAND, CALIFORNIA.

CASH REGISTER AND INDICATOR.

SPECIFICATION forming part of Letters Patent No. 380,831, dated April 10, 1888.

Application filed June 30, 1887. Serial No. 243,042. (No model.)

To all whom it may concern:

Be it known that I, EDWARD T. TAYLOR, of Oakland, county of Alameda, State of California, have invented an Improvement in Cash Registers and Indicators; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to a novel cash register and indicator; and it consists in the employment of tubes containing disks which represent the coins or amounts to be handled, in combination with reciprocating slides by which the disks are allowed to fall from an upper to a lower compartment and thus register the amount placed in the till, and, in connection with this, of indicators and a mechanism by which said indicators are operated, the cover of the till or drawer opened, and a bell sounded.

Referring to the accompanying drawings for a more complete explanation of my invention, Figure 1 is an exterior perspective view of the apparatus, taken from the front. Fig. 2 is a perspective view taken from the rear, with a part of one end and the top broken away to show the interior arrangement of the parts. Fig. 3 is a vertical section taken through one of the disk-tubes, showing the registering mechanism and the means for locking the till or drawer connected therewith. Fig. 4 is a view of a group of the disk-tubes. Fig. 5 is a sectional elevation of the rear part of the case, showing the rollers of the registering device and their connections. Fig. 6 is a similar sectional elevation showing modifications of the indicating device. Fig. 7 is a sectional view showing the means for actuating the cover D. Figs. 8 and 9 are details to be referred to.

A is an exterior case having an extension, B, from the lower front portion, within which are the receptacles C, for holding the various amounts which may be taken in.

D is the hinged cover of this receptacle, which is fitted to close in flush from above, and it is locked by means of a catch or hook, E, engaging a link or staple in a cover and operated by means of a rod, F, and lever G, which extends upward and has the transverse bars H extending behind the push-buttons I, so that when any one of said buttons is pressed in it will force the lever G back and cause it

to release the cover D, so that it may open automatically by the action of the weight F', (see Fig. 7,) or an equivalent spring connected with it.

Within the case A are fixed the tubes L, in the upper part of which are placed disks M. The number of the tubes will correspond with the different amounts which are to be registered by the apparatus, and the disks are retained in the upper part of the tubes by means of sliding plates N and O. The plates N are connected with the push-buttons I, and their ends just enter slots in the sides of the tubes, which are made to allow the slides to pass through when forced inwardly.

The slide N is slightly above the slide O, the two being connected so as to move simultaneously, and there is a space or slot between the adjacent edges of the two slides, so that when the buttons I and the slides N are in their normal position the disks will rest upon the slides O.

The edges of the disks M are beveled, as shown, and the edges of the slides N are similarly beveled from below, so that when the button I of any one of the tubes is pressed inwardly one of the disks passes below the slide N, and as the slide O is withdrawn from the tube to the opposite side from the slide N it allows the disk to fall downward into the receiving-tube P. This tube may be made of glass and have numbers placed upon its side to indicate the amounts of coin contained within it; or it may be made of metal or other material and slotted so that the disks may be seen, the same marks to show the amounts being placed upon the tubes in this case. These receiving-tubes P are set in a base, Q, which slides in and out from one side of the main case A, traveling in guides R, which insure the tubes standing exactly in line below the tubes L.

The door at the end of the case, through which the tubes P are introduced and withdrawn, is locked and the key retained by the person whose duty it is to inspect the disks from time to time.

Whenever an amount of money is to be deposited in the till, the button I, which has a mark upon its front representing the amount taken, will be pressed inwardly, thus releasing

the cover D, which immediately opens to allow the money to be placed in the till. At the same time the slides N and O operate, as before described, to allow the disk representing the amount collected to fall from the tube L into the tube P. When the button is released, the slide O will return, so as to stand across the tube L while the slide N is withdrawn from the tube, as before described, and another disk will rest upon the slide O, ready to be deposited by the next movement of the button. The return of the button and slides is effected by springs S, or other equivalent means.

In order to indicate the amount which is being collected and deposited, each of the buttons I has the corresponding figure upon its face, so that it can be seen by the clerk or operator and also by the person paying the money, if the apparatus stands so that the buttons are toward the front; but if the back of the apparatus is toward the customer the indicator may consist of a horizontal cylinder or disk, T, the face of which appears through a slot made in the back of the case for that purpose, and these indicators are also shown toward the front, as hereinafter described.

The disks T are mounted eccentrically and turn loosely upon their shafts, and they are provided with pins U, projecting from the ends, over which latches V will fall, so as to hold the disk in the position to expose the figures printed upon the side and corresponding with those upon the push-button which operates the disk. The latches are connected with a horizontal shaft, W, extending across the rear portion of the case, and the extension or rods I', which pass backward into the case from the push-buttons and slides, are connected with the eccentrically-mounted disks or rollers T by links X, so that when the buttons are pushed in these links act to turn the roller sufficiently to expose the figures upon the side, and the latch will hold the roller in its position until released by the movement of another button. If the same button be pressed again, no change will take place in the indicating roller or disk; but if another button be pressed inwardly the pin U will raise the latch of the roller corresponding to the button pressed, thus turning the arm or shaft W, to which all the latches are connected, so that all other disks or rollers will be released and will return by gravitation to their normal position, in which the figures are concealed from view. As the number of tubes and indicating-buttons are considerable, there will be two or three sets of rollers, and these rollers are connected together, as more plainly shown in Fig. 5, by rods, so that the operation of any button will act through these rods and the latches to turn the shaft upon which all the other rollers of the same row or series are mounted. In some cases another set of rollers may be employed, as shown at T' in Fig. 5, with the indicating-figures toward the clerk or operator, this set being arranged above the rollers T and connected therewith by rods or links, as shown at Y.

In Fig. 6 I have shown a vertically-arranged shaft, a, carrying a crown-wheel, b, which is engaged by a rack, c, connected with the slide I' of the push-button, so that when the button is pushed in the shaft a will be caused to rotate. Upon the upper end of this shaft is fixed a vertical cylinder, d, the face of which is exposed through openings in opposite sides of the case, and this face may have the indicating-figures upon it in the same manner as the disks or rollers before described. This cylinder is retained in place by means of a latch, V, in the same manner as described for the horizontally-journaled cylinders, and when the latch is released it is returned to its normal position by a spring, e, connected with a lug or pin upon the shaft a, as shown plainly in Fig. 6.

The indicating-rollers are preferably thirty in number, with the several amounts from five cents to ninety-five cents, and then from one dollar to ten dollars, together with one indicating twenty dollars. These rollers are simply intended to indicate to the customer the amount of his purchase, the indicating being done by the tubes and disks. The clutch V is made with a hook-shaped point which engages or hooks over the pin U, as shown in Fig. 8, and its office is to liberate all the rollers that may be turned to expose figures, except the one which is being operated, this being held by the hook, as before described. When the roller is pushed around, the pin in the same first strikes the front or outer end of the hook and then passes on and rides beneath the enlargement or curvature just behind the hook, as shown in Fig. 9, and this raises all the hooks on the same shaft high enough to allow the pins of their respective rollers to pass, and the rollers fall by gravity, so as to show the blank sides.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a cash-indicator, a series of vertically-arranged tubes having transversely-moving slides, and disks which are discharged singly from the upper to the lower portion of the tube by the movement of said slides, and push-buttons showing the amounts to be deposited, in combination with a till or drawer for the reception of the amount, and a hinged cover or door with connecting-rods and locking-bolt so arranged as to be operated to open the cover by the movement of the button, substantially as herein described.

2. The vertically-arranged tubes with transversely-moving slides and disks which are delivered singly from the upper part of the tubes to the lower by the movement of the slides, an operating-slide, and a button having the amount to be registered marked upon its front, and a till or drawer for the reception of the money, having a hinged cover by which it is closed, and a lock, in combination with connecting rods and levers which are operated by the inward movement of the indicating-button so as

to allow the cover to be opened simultaneously with said movement, substantially as herein described.

3. A series of vertically-arranged tubes having transversely-moving slides, and disks which are delivered singly from the upper to the lower portion of the tube by the movement of the slides, and the push-buttons which are connected with them, in combination with rollers or cylinders having figures marked upon one side corresponding with those of the push-buttons and connected with the slide and buttons so that said figures will be thrown up into view when the button is pressed inwardly, and a disk dropped to the bottom of the tube, substantially as herein described.

4. The indicating rollers or cylinders journaled upon horizontal shafts and connected with the movable slides and indicating push-buttons, so that they are rotated by the movement of said slides and buttons to present the figures to view, in combination with latches or hooks by which they are retained in position after the button and slide has returned to its normal position, substantially as described.

5. The indicating rollers or cylinders eccentrically mounted upon horizontal shafts and connected with the indicating push-buttons, and slides whereby the disks are delivered from the upper to the lower part of the connecting-tubes, a shaft lying parallel with the rollers and having latches attached thereto, by which any roller is held in position to exhibit the indicating-figures upon its surface when the corresponding button is depressed, said latches also acting to release any other roller and allow it to return by gravitation to its normal position and conceal its figures, substantially as herein described.

6. A series of rollers or cylinders having indicating-figures upon their surface and connected with correspondingly-marked push-buttons upon the opposite side of the case,

hooks or latches by which the cylinders are retained in position to exhibit the figures after the button has been depressed, and connecting-links whereby all other cylinders are returned to their normal position so as to conceal the figures upon them, substantially as herein described.

7. In a cash-indicator, a series of weighted or eccentrically-mounted or spring-actuated rollers having indicating-figures upon one side corresponding with those of a push-button or indicator with which they are connected, and intermediate slides passing transversely through vertically-arranged tubes containing disks, so that the disks are dropped singly from the upper to the lower portion of the tube and the amount corresponding with that marked upon the button is indicated upon the roller or cylinder and retained in view until the next deposit is made, substantially as described.

8. The sets of disk-holding tubes placed one above the other, the upper series having the transversely-moving slides by which the disks are allowed to fall singly into the lower tubes, the latter being graduated or marked to show the amount represented by the contained disks, substantially as described.

9. The sets of superposed tubes standing in vertical lines, those above having transversely-moving slides by which a series of disks are deposited in the lower tubes, said lower tubes being marked to indicate the amounts represented by the contained disks and supported in a removable base, substantially as herein described.

In witness whereof I have hereunto set my hand.

EDWARD T. TAYLOR.

Witnesses:

S. H. NOURSE,
H. C. LEE.