

(No Model.)

2 Sheets—Sheet 1.

W. W. JOHNSON.
CHANGE MAKER.

No. 467,030.

Patented Jan. 12, 1892.

Fig. 1.

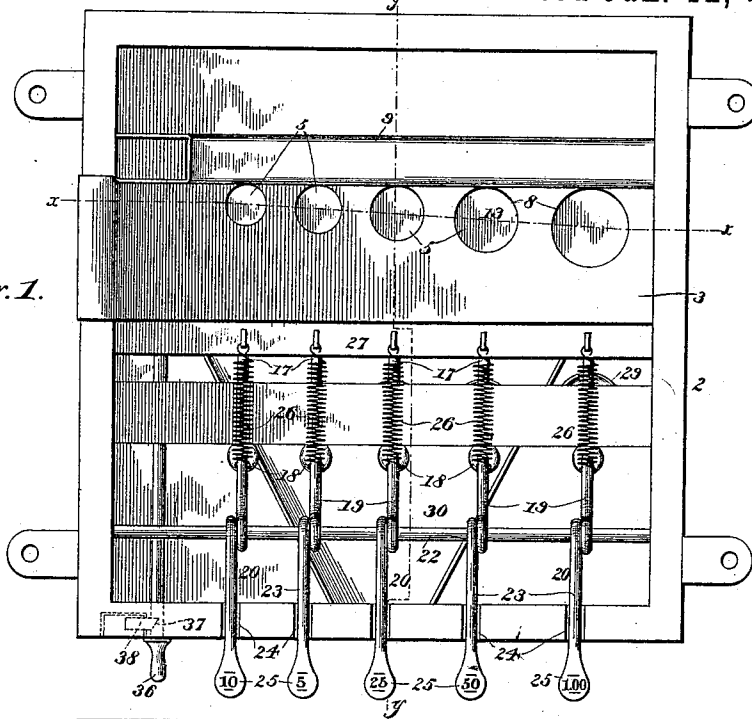
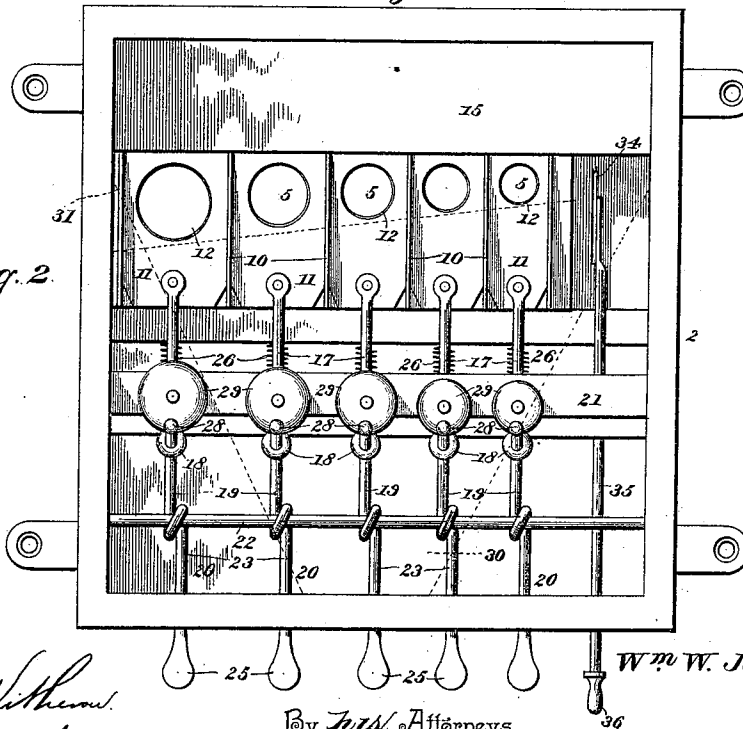


Fig. 2.



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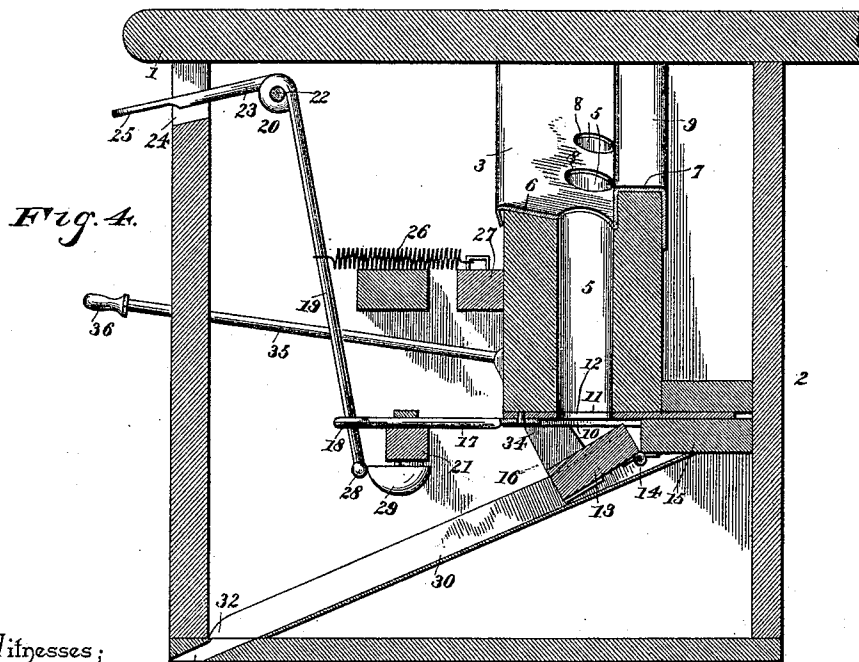
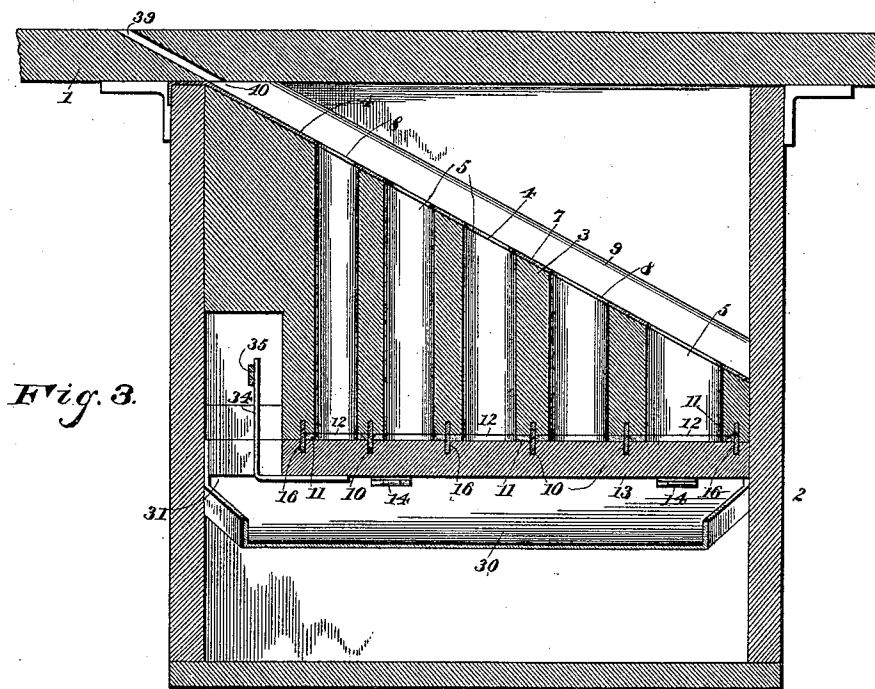
(No Model.)

2 Sheets—Sheet 2.

W. W. JOHNSON.
CHANGE MAKER.

No. 467,030.

Patented Jan. 12, 1892.



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UNITED STATES PATENT OFFICE.

WILLIAM W. JOHNSON, OF SAN ANTONIO, TEXAS.

CHANGE-MAKER.

SPECIFICATION forming part of Letters Patent No. 467,030, dated January 12, 1892.

Application filed August 1, 1891. Serial No. 401,401. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM W. JOHNSON, a citizen of the United States, residing at San Antonio, Bexar county, and State of Texas, have invented a new and useful Money-Drawer, of which the following is a specification.

This invention relates to improvements in money-drawers which are designed to separate the coin placed therein according to the various denominations, and at the same time providing means whereby change may be readily had; and it has for its object to provide a device of this character that will be conveniently placed beneath the counter and to which may be had ready access, and a drawer that will positively and accurately separate silver coin which is placed therein, and from which any amount of change can be easily and quickly obtained, and also to provide means whereby at the close of a day's business the money and change within the drawer may be quickly and readily removed from the drawer at one and the same time; and with these objects in view the invention consists in a suitable casing secured beneath the ordinary counter and communicating with an opening therein and provided with an inclosed money-sorter and means for withdrawing single coins from the same or at the same time, which will be hereinafter more fully described, illustrated in the accompanying drawings, and specifically pointed out in the appended claims.

In the accompanying drawings, Figure 1 is a top plan view of a money-drawer constructed in accordance with my invention and detached from the counter. Fig. 2 is a bottom plan view, the bottom of the drawer being removed and the money-chute being shown only in dotted lines and the hinged bottom being shown open. Fig. 3 is a cross-section on the line *xx* of Fig. 1. Fig. 4 is a similar view on the line *yy* of Fig. 1, the hinged bottom being open.

Referring to the accompanying drawings, 1 designates an ordinary counter, to the under side of which is screwed or otherwise suitably secured a box or casing 2, of sufficient dimension to accommodate the various parts of the device, and takes the place of the ordi-

nary money-drawer. Transversely secured within said drawer or boxing is secured the sorter or separator 3, which is constructed of a block of wood or other suitable material, and is inclined, as shown at 4, from the top edge of one side of the casing toward the bottom of the opposite side. The incline of said block provides a way for the coin to travel down the same, and said block is provided longitudinally of its length with a series of perforations 5, which vary in size from the lower bottom edge of said sorter or separator to accommodate a silver dollar up to the size which will accommodate the smallest coin, all the perforations extending through the entire thickness of the block and are made slightly larger than the circumference of the coin. The said sorter or separator is also laterally inclined or beveled from its front edge inward, as at 6, in order that the coin will not slide directly down the main incline, but on account of said lateral incline or bevel will have the tendency to roll from the inner edge of said separator. The top face of the sorter or separator 3 is sheathed or covered by a smooth metallic plate 7, preferably of tin, which is provided with a series of perforations 8, registering with those in the sorter-block, but of slightly less diameter, in order that the coins may clear the wooden edges of the perforations 4 in said sorter. One edge of the perforations in both the sorter and the metallic covering are all in the same direct line, and directly rising from the aligned edges of said perforations the said plate 7 is provided with a flange or shoulder 9, against which the coin presses and rolls in its downward descent on account of the lateral incline of the separating-block, causing the coin to press thereagainst. Thus the money will roll down edgewise, leaning against the shoulder or flange abruptly arising along the edges of the money-holes, and as the coin reaches the hole designed to accommodate the same readily and easily drops within and is sorted according to its denomination.

On either side of the perforations 5 and along the bottom of the sorter or separator block are arranged a series of projecting guide-plates 10, between which are formed ways which accommodate the sliding plates 11, each

of which is provided with a perforation 12, registering exactly with the perforation in the sorter-block and in which the bottom coin is designed to rest and be withdrawn singly when the said plate is drawn forward in the manner to be presently described.

Inclosing the bottom of the series of perforations in the block 3 and fitting closely over the sliding plates thereunder is the bottom board 13, hinged at 14 to the supporting-block 15, and is provided along its inner face with a series of grooves or notches 16, into which the projecting guide-plates 10 are designed to rest, and thus allow the intermediate bearing-faces of the hinged bottom to rest firmly against said sliding plates and over the perforations therein, so that the coin resting within the perforation of any one of the sliding plates may be easily slid along and over said bottom. Each of said sliding plates is provided with horizontally-extending arms 17, terminating in the loops or eyes 18, through which the downwardly-extending arms 19 of the operating bell-crank levers 20 extend and operate the same. The said arms 17 rest upon the supporting-bar 21 and are provided with suitable bearings thereon in order that the same may be steadied in their backward and forward movement. The levers 20 are looped around or pivoted to the cross-bar 22, secured in opposite sides of the drawer near its upper edge, and the arms 23 thereof project through perforations or slots 24, located in the front upper edge of the casing, and terminate in the operating ends or keys 25, each of which is suitably designated by figures to represent the coins which are controlled thereby. The slides are held normally in place over the bottom of the perforations 5 beneath the sorter or separator-block by means of the coiled springs 26, secured to the cross-bar 27 within the casing and connected to the depending arms 19 of the bell-crank levers, and thus when withdrawn are immediately thrown back into their normal position by the tension of said spring. The said arms 19 project a short distance beneath the loops or perforations 18 in the slide-arms and are provided with the clappers 28, which, when the said levers are operated, are designed to strike and ring the bells 29, arranged along the under side of the supporting-bar 21, upon which said slide-arms rest. The bells are of different pitch or tone, so that when one becomes accustomed to the sound he can tell the denomination of coin which is removed from the drawer without observing the indicating-figures arranged beneath the operating-keys along the front face of the drawer.

When it is desired to remove a single coin from the separator holding the same in assorted lots, the operator pulls upward on the operating ends or keys 25 of the bell-crank levers and withdraws the slide arranged under each perforation in the sorter-block, which contains and holds a single coin. When withdrawn a sufficient distance, the coin, having

passed over and beyond the face of the hinged bottom, having no further support, falls from the perforation in the slide and drops upon the conducting-chute 30.

The chute 30 is provided with an enlarged end 31, which extends entirely across the width of the drawer, and is secured by any suitable means directly under the bottom of the sorter or separator block and beneath the hinged bottom thereto, and is inclined therefrom downward to the lower bottom edge of the drawer and, converging to a tapered end 32, communicates with the opening 33, located in the bottom edge of the drawer, and from which the coin falls into the hands of the operator. The construction of the chute and arrangement thereof permit each coin to be discharged from the same opening, and from which, when desired, all coins may be discharged at the same time.

The hinged bottom board 13 is provided at one end with an upwardly-extending arm 34, to the upper end of which is pivoted the horizontally-extending operating-rod 35, provided at its outer end without the casing with a knob or button 36, by means of which the operator can control the said hinged bottom. The said operating-rod 35 is provided within the casing with a notch or recess 37, which is adapted to be engaged when said rod is in its normal position entirely within the drawer and holding the bottom board tightly against the bottom of the sorter or separator by the spring catch or lock 38, which may be unlocked from the inner portion of the drawer facing the operator. When at the end of a day's business, or at any time that may be desired, all the coins may be removed from the drawer at one and the same time by simply unlocking the operating-rod and withdrawing the same, which operation draws forward the arm secured to the bottom of said hinged bottom, and thus throws the same down and away from the bottom of the separator, thus taking away the bottom or under support for the columns of coins thereabove, which will then all fall upon the chute thereunder and slide down the same and without the drawer, and can be easily collected in bags or other suitable receptacles for collecting the money.

The construction and operation of our invention are thought to be apparent without further description. Being suitably secured beneath the counter, the coin received from the customer is placed within the slotted opening 39 therein, which communicates with the opening 40 at the top upper edge of one of the sides of the drawer. Upon entering the said opening the coin travels down the inclined sorter and falls within the perforation or hole designed for its reception.

Change can be made in the manner described by operating the coin-removing slides, and all the money may be removed at a single time in the manner as stated when desired or necessary.

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

1. In a money-drawer, a downwardly-inclined separator provided with a series of varying perforations, a registering metallic slide covering said separator, a series of perforated slides arranged under each perforation, a hinged lock-controlled bottom located beneath said slides and normally closing said perforations therein and locked thereunder, a chute, and means for operating said slides, substantially as set forth.

2. In a money-drawer, a downwardly and laterally inclined or beveled separator provided with a series of varying perforations aligned along one edge, a metallic slide covering said separator and provided with a series of registering perforations and a shoulder or flange arising from the aligned edges of the perforations, a series of perforated slides arranged under each of said varying perforations, a swinging lock-controlled bottom arranged beneath the said slide and normally closing said perforations therein, a lock-controlled rod connected with and operating said bottom, means for operating said slides, and a chute arranged thereunder, substantially as set forth.

3. In a money-drawer, an inclined separator provided with a series of varying perforations, perforated slides arranged in ways beneath each of said varying perforations and pro-

vided with outwardly-extending arms, spring-actuated bell-crank levers connected to and operating said slides and terminating in operating-keys without the drawer, a hinged bottom arranged under said slides and over the perforations and provided with an upwardly-extending arm, a lock-controlled operating-rod connected with the arm secured to said bottom board, and a chute arranged beneath the separator, substantially as set forth.

4. In a money-drawer, an inclined separator provided with a series of varying perforations, perforated slides arranged in ways beneath each of said varying perforations and provided with outwardly-extending arms, spring-actuated bell-crank levers connected to said outwardly-extending arms and provided at one end within the drawer with clappers and terminating in operating-keys without the drawer, a series of alarm-bells arranged within the drawer in the path of said clappers, a hinged bottom, means for locking and operating said hinged bottom, and a chute arranged beneath the separator, substantially as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

W. W. JOHNSON.

Witnesses:

G. N. GIARAN,
W. HAINES.