

L. J. DITTMAR.
CHANGE MAKING DEVICE.
APPLICATION FILED OCT. 20, 1909.

964,149.

Patented July 12, 1910.

2 SHEETS—SHEET 1.

Fig. 1.

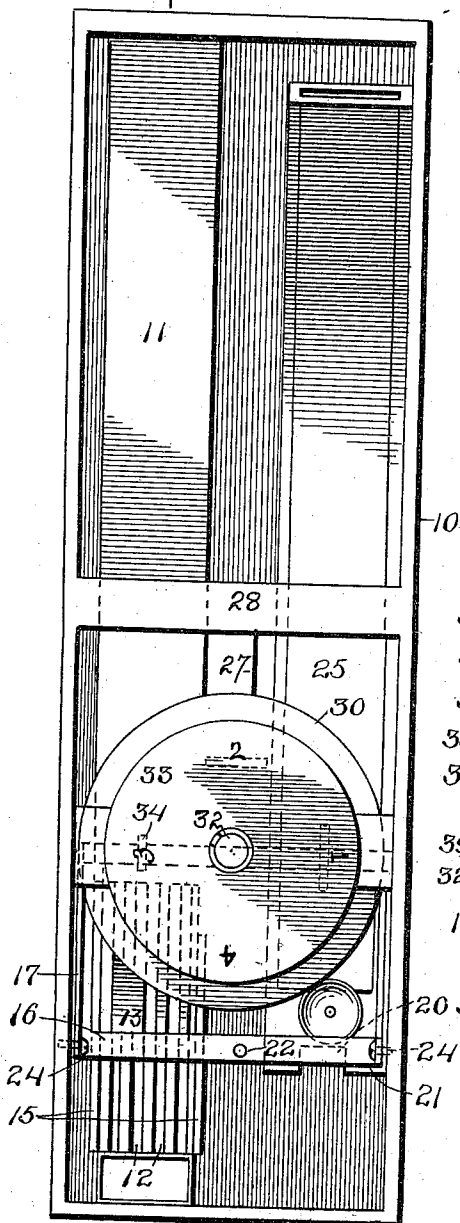
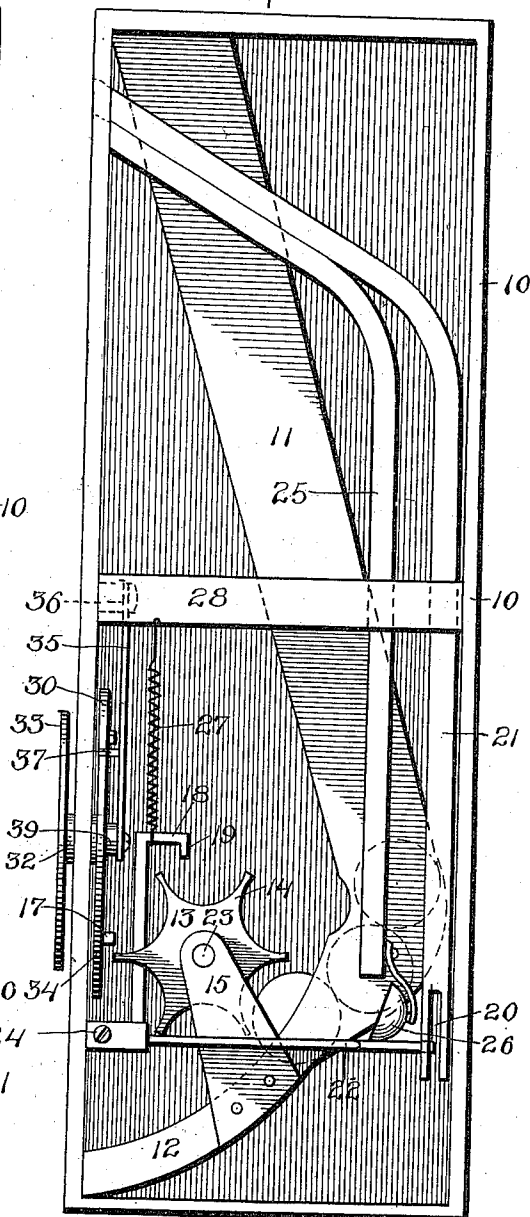


Fig. 2.



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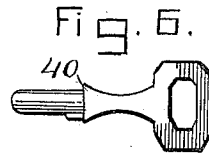
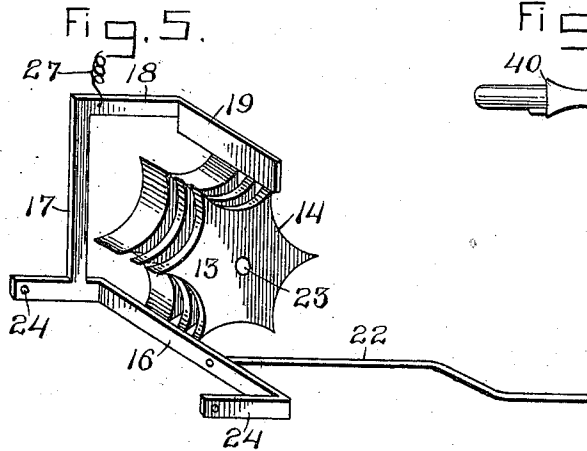
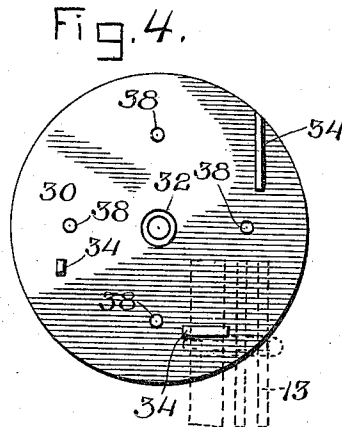
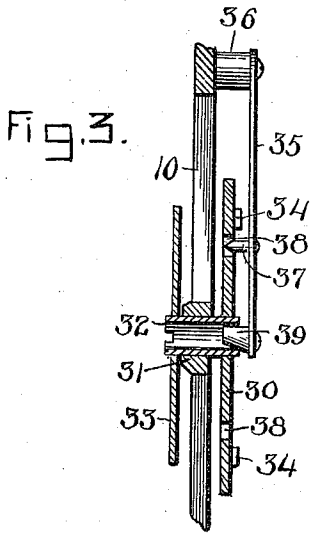
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2 SHEETS—SHEET 2.



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UNITED STATES PATENT OFFICE.

LOUIS J. DITTMAR, OF LOUISVILLE, KENTUCKY.

CHANGE-MAKING DEVICE.

964,149.

Specification of Letters Patent.

Patented July 12, 1910.

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To all whom it may concern:

Be it known that I, LOUIS J. DITTMAR, a citizen of the United States, residing at Louisville, county of Jefferson, State of Kentucky, have invented certain new and useful Improvements in Change-Making Devices, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to an improvement in change making devices and particularly to the construction shown in my Patent No. 920,281, dated May 4, 1909.

This invention has for an object to provide a novel and improved construction of means for controlling the delivery from a series of coin chutes so that the coins therein may be delivered from one or more thereof as desired.

Other and further objects and advantages of the invention will be hereinafter set forth and the novel features thereof defined by the appended claims.

In the drawings—Figure 1 is a front elevation with the casing removed; Fig. 2 is a side elevation with the casing removed; Fig. 3 is a vertical section through the delivery controlling device; Fig. 4 is a front elevation thereof; Fig. 5 is a detail perspective of the means for retaining the coin delivery; and Fig. 6 is an elevation of the key to release the latch shown in Fig. 3.

Like numerals of reference refer to like parts in the several figures of the drawings.

The numeral 10 designates a casing which may be of any desired material or configuration adapted to receive the mechanism carried thereby. This casing is provided with a series of coin delivery chutes 11, any desired number thereof being disposed so as to deliver at the front of the machine. For this purpose the chute is provided with an angularly disposed portion 12 at its front, above which a feed wheel 13 is disposed and provided with segmental sockets 14 adapted to separately receive the coins to be discharged from this chute. The series of wheels may be of any desired thickness in order to cooperate with one or more chutes, for instance as shown, one of the wheels is of sufficient width to cooperate with two chutes and the remaining wheels of such width as to cooperate with one chute each, thus requiring only three wheels to control the delivery from four coin chutes. These

wheels are pivotally mounted upon a shaft 23 mounted in supports 15 carried by the chutes 12 and the rotation of all of the wheels is controlled by a unitary retaining device 16 pivotally mounted at the front of the casing by means of arms 24. This retaining device is provided with a standard 17 having at its upper end an angular portion 18 which carries a dog 19 disposed parallel with the shaft 23 so as to contact with the upper surfaces of the wheels thereon. Extending rearwardly from the retaining device is an arm 22 which is disposed within the bifurcated lower end 20 of the coin chute 21. This chute is formed with a communicating discharge chute 25 provided at its lower end with an alarm device 26 adapted to receive coins of an improper size and other articles which may be introduced in an attempt to operate the machine. This retaining device is normally held in raised position so that the body 16 thereof will contact with the lower portion of the wheels by means of a tension spring 27 extended from the portion 18 to a fixed part 28 carried by the casing as shown in Fig. 2.

For the purpose of preventing rotation of one or more of the wheels when released by the retaining device, a disk 30 is provided and pivotally mounted at 31 in the front of the casing by means of a tubular pivot 32 which carries an indicating disk 33. The controlling disk 30 is provided upon its inner face with a plurality of tangentially disposed ribs or flanges 34, these being of different lengths in order to control a corresponding number of the wheels 13 when brought into alinement therewith by a partial rotation of the disk. For the purpose of locking this controlling disk in its adjusted position, any desired means may be used, a convenient form thereof comprising a spring arm 35 secured to the casing at 36 and provided with a holding pin 37 adapted to enter any one of a series of apertures 38 within the controlling disk 30. These apertures are circumferentially disposed so that when the pin is released from one, it will automatically seat in the next aperture. For the purpose of releasing the pin, the lower end of the spring arm 35 has secured thereto a lug 39 disposed within the tubular pivot 32 of the controlling disk and adapted to be pushed inward by the insertion of a proper key 40 as shown in Fig. 6.

In the operation of the invention it will be seen that when the portion of the controlling disk having no flange thereon is opposite the delivery wheels, each of these wheels is free to rotate for a partial revolution when released by the movement of the retaining device due to the contact of a coin with the operating arm thereof. The downward movement of this arm withdraws the body of the retaining device from contact with the under face of the wheels and brings the dog into engagement with the upper face thereof. As soon as the coin is discharged by gravity from this operating arm, the retaining device is raised by its spring to withdraw the dog from the wheel which permits the partial rotation thereof to discharge a coin before engaging the body of the retaining device. Under these conditions if a coin be inserted in the machine, four coins of less denomination will be delivered in change. If it be desired to deliver only three coins, the shortest of the flanges upon the controlling disk is brought into alinement with one of the wheels, while if two coins are to be delivered, the next longer flange is brought into position. When the longest flange is brought into alinement with the wheels, the rotation of all of them is stopped so that there is no delivery when released by the retaining device. The invention is adapted for use either alone or associated with an article delivery device to be operated therewith and the number and arrangement of the chutes and delivery wheels may be varied to suit the conditions of use and for operation by coins of any denomination for the delivery of either change or other articles from the machine. The construction permits a change of the delivery mechanism without access to the interior of the machine while the indicating disk will readily show the number of coins to be discharged upon the insertion of a proper coin for that purpose. The controlling disk is locked in its adjusted position and cannot be released except by the insertion of a proper key for that purpose so that the machine cannot be readily tampered with to change the predetermined number of coins to be delivered therefrom. The invention therefore presents a simple efficient and economically constructed device for delivering a predetermined number of articles upon insertion of a proper coin therein.

Having described my invention and set forth its merits what I claim and desire to secure by Letters Patent is—

1. In a change making device, the combination with a series of delivery chutes, of independent feed devices coöperating with each chute, a unitary retaining device controlling all of said feed devices, means for operating said retaining device, and pivoted

means having a plurality of members movable to control delivery from one or more of said chutes.

2. In a change making device, the combination with a series of delivery chutes, of independent feed devices coöperating with each chute, a unitary retaining device controlling all of said feed devices, means for operating said retaining device, and a pivoted plate provided with a plurality of independent means to control delivery from one or more of said chutes.

3. In a change making device, the combination with a series of delivery chutes, rotating feed wheels disposed above said chutes, a retaining device coöperating with said wheels, means for operating said device, and pivoted means movable into the path of travel of one or more of said wheels.

4. In a change making device, the combination with a series of delivery chutes, rotating feed wheels disposed above said chutes, a retaining device coöperating with said wheels, means for operating said device, and a rotating disk provided with controlling devices adapted to be disposed in the path of travel of one or more of said wheels.

5. In a change making device, the combination with a series of delivery chutes, rotating feed wheels disposed above said chutes, a retaining device coöperating with said wheels, means for operating said device, and a rotating controlling disk provided with a series of lateral flanges of different lengths adapted to traverse the path of travel of one or more of said wheels.

6. In a change making device, the combination with a series of delivery chutes, rotating feed wheels disposed above said chutes, a retaining device coöperating with said wheels, means for operating said device, pivoted means movable into the path of travel of one or more of said wheels, and locking means adapted to engage and retain said pivoted means.

7. In a change making device, the combination with a series of delivery chutes, rotating feed wheels disposed above said chutes, a retaining device coöperating with said wheels, means for operating said device, pivoted means movable into the path of travel of one or more of said wheels, and a locking spring provided with a pin adapted to enter a recess in said pivoted means.

8. In a change making device, the combination with a series of delivery chutes, rotating feed wheels disposed above said chutes, a retaining device coöperating with said wheels, means for operating said device, pivoted means movable into the path of travel of one or more of said wheels, a locking spring provided with a pin adapted to enter a recess in said pivoted means, and a key operated releasing lug carried by said spring.

9. In a change making device, a casing, a series of delivery chutes therein, a series of feed wheels disposed above said chutes, a controlling disk pivoted in the casing to hold one or more of said wheels, and an indicating disk carried by the pivot of said controlling disk.

10. In a change making device, a casing, a series of delivery chutes therein, a series of independently rotatable feed wheels, a controlling disk provided with a series of locking apertures, means upon said disk to engage one or more of said wheels, and a spring provided with a locking pin to seat in said apertures.

11. In a change making device, a casing, a series of delivery chutes therein, a series of independently rotatable feed wheels, a controlling disk provided with a series of locking apertures, means upon said disk to engage one or more of said wheels, a spring provided with a locking pin to seat in said apertures, a tubular pivot for said disk, and a key operated releasing lug disposed within said pivot and connected to said spring.

12. In a change making device, a casing, a series of delivery chutes therein, a shaft supported above said chutes, a series of independently rotatable feed wheels mounted upon said shaft, a retaining device pivotally mounted at the front of the casing to engage the lower portion of said wheels, a dog carried by said device to engage the upper portion of said wheels, an operating arm extended from said device, and means for operating said arm.

13. In a change making device, a casing, a series of delivery chutes therein, a shaft supported above said chutes, a series of independently rotatable feed wheels mounted upon said shaft, a retaining device pivotally

mounted at the front of the casing to engage the lower portion of said wheels, a dog carried by said device to engage the upper portion of said wheels, an operating arm extended from said device, means for operating said arm, a tension device for supporting said retaining device in elevated position, and rotatable controlling means disposed for movement into the path of one or more of said wheels.

14. In a change making device, a casing, a series of delivery chutes therein, a shaft supported above said chutes, a series of independently rotatable feed wheels mounted upon said shaft, a retaining device pivotally mounted at the front of the casing to engage the lower portion of said wheels, a dog carried by said device to engage the upper portion of said wheels, an operating arm extended from said device, means for operating said arm, a tension device for supporting said retaining device in elevated position, a controlling disk pivotally mounted in the casing, and a series of flanges thereon of different lengths and adapted to be disposed in the path of said wheels.

15. In a change making device, a series of delivery chutes therein, a series of independently rotatable feed wheels mounted to cooperate with said chutes, a controlling disk mounted in the casing with its pivot at an angle to the pivot of the wheels, and a series of tangentially disposed lateral flanges carried by said disk and adapted to traverse the path of travel of said wheels.

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

LOUIS J. DITTMAR.

Witnesses:

CORINNE R. GREENLEY,
CAMDEN R. MCATEE.