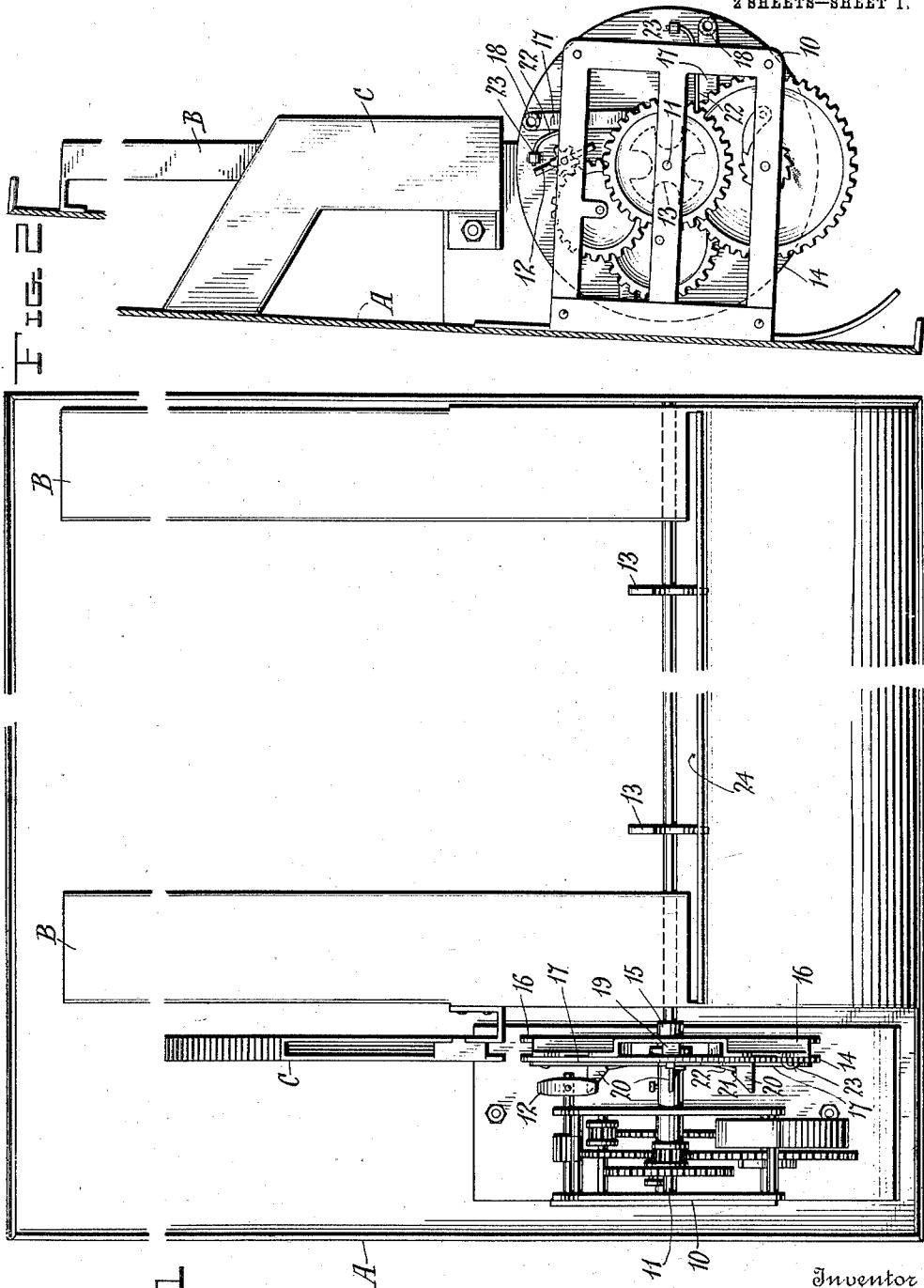


W. H. McMANNUS.
CHECK CONTROLLED MECHANISM FOR VENDING MACHINES.
APPLICATION FILED APR. 28, 1910.

967,418.

Patented Aug. 16, 1910.

2 SHEETS—SHEET 1.



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2 SHEETS—SHEET 2,

FIG. 4

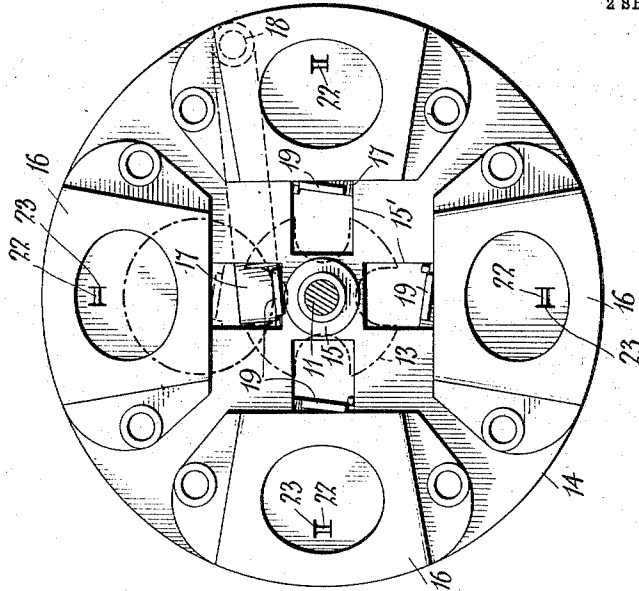


FIG. 3

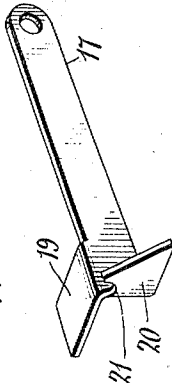
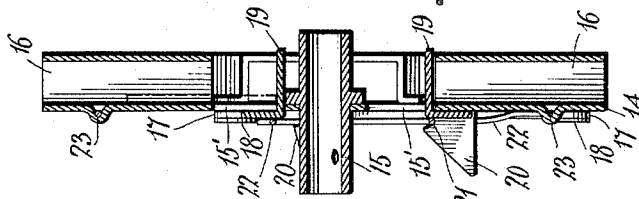
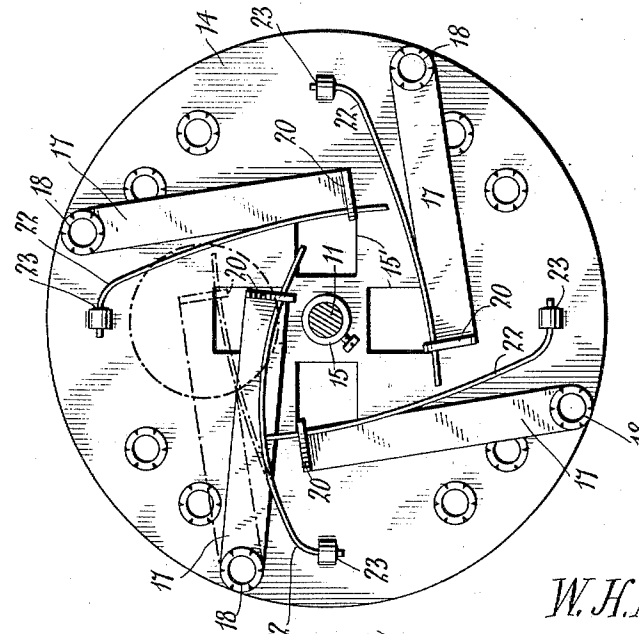


FIG. 5

FIG. 2



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UNITED STATES PATENT OFFICE.

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CHECK-CONTROLLED MECHANISM FOR VENDING-MACHINES.

967,418.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, WILLIAM H. McMANNUS, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles, State of California, have invented certain new and useful Improvements in Check-Controlled Mechanism for Vending-Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to vending machines and has special reference to a check controlled mechanism for such machines.

One object of the invention is to provide an improved form of check receiving device for vending machines, the device being adapted to control a motor.

With the above and other objects in view, as will be hereinafter apparent, the invention consists in general of a vending machine provided with a motor and delivering device, the motor being controlled by a novel and improved mechanism.

The invention further consists in certain novel details of construction and combinations of parts hereinafter fully described, illustrated in the accompanying drawings, and specifically set forth in the claims.

In the accompanying drawings, like characters of reference indicate like parts in the several views, and Figure 1 is a section taken through a vending machine and looking toward the front thereof, the section showing the motor and controlling means and having certain parts broken out in order to show the mechanism more clearly. Fig. 2 is a transverse section similar to Fig. 1. Fig. 3 is a view of one side of a check carrier forming part of this mechanism. Fig. 4 is a section taken diametrically through such a carrier. Fig. 5 is a view of the carrier taken from the side opposite to Fig. 3. Fig. 6 is a perspective view of a detent forming part of the controlling mechanism.

The vending machine is provided with the usual casing A.

In the machine here shown there has been illustrated a vending machine arranged for the sale of pencils but it will be obvious from what follows hereinafter that the device may be adapted for use in vending machines for other articles as well as for pencils. In the present device a pencil stor-

age chute is illustrated and this chute consists of spaced channel members B suitably supported in the casing.

Located adjacent the bottom of the casing is a motor here shown as a clock work mechanism indicated in general at 10. This motor is to be taken as typical of any form of motor but in every instance there is provided a drive shaft 11 and a motor controlling element 12. In the present showing this motor controlling element consists of a small revolving trip which is carried to the motor in such manner that the spring of the motor exerts but light torsional effort on the trip so that it requires but little strength to stop the trip and consequently stop the motor. The shaft 11 extends across the article chute and is provided between the two channels B with spaced star wheels 13 forming pencil delivering means. Upon the shaft 11 is positioned the check carrier, the latter being fixed to the shaft to rotate therewith. This check carrier consists of a disk 14 provided with a hub 15 which fits upon the shaft 11. This disk 14 has adjacent its center a series of radially arranged slots 15' and secured to one side of the disk in alinement with the slots are coin receiving pockets 16. These pockets extend to the periphery of the disk and taper laterally toward the center of the disk. The inner ends of these pockets are open and terminate substantially in alinement with the outer ends of the hubs 15. Upon the opposite face of the disk 14 from the pockets 16 there is provided a series of detents 17 each of which is pivoted adjacent the periphery of the disk as indicated at 18. Each of these detents has an arm 19 which projects through a respective slot 15' and extends across the bottom of the respective pocket 16. Each detent further has an arm 20 extending in the opposite direction to its arm 19 and this arm 20 is provided with a notch 21 wherein is held the free end of a spring 22 which is fixed to the disk 14 as at 23. The springs 22 normally urge their respective detents outward so that the arms 19 engage against the outer ends of the slots 15 and the bottoms of the pockets 16. The arms 20 of these detents project toward the motor 10 and are so positioned on the disk that as the latter revolves with the shaft 11 these arms will intersect the path of the end of the member 12 so that this member 12

will strike the detents 20 and the motor be stopped thereby, the gearing between the member 12 and the shaft 11 being so arranged that the detents move in one direction while the contacting end of the member 12 moves faster in this direction when passing each other.

At C is a coin chute of any preferred construction and this coin chute is so arranged that a coin passing down therethrough will drop directly into one of the pockets 16. The mouth of the coin chute C is preferably arranged so that it is vertically above the shaft 11, the coin thus passing into the uppermost of the pockets 16. Now, in the operation of this device when a coin is passed downward through the coin chute it will drop into the uppermost pocket 16. This will cause the spring 22 to yield and permit the free end of the detent 17 which has its arm 19 across the bottom of said pocket to move inward. As this detent moves inward its arm 20, which has been in engagement with the member 12, will release this member and permit the latter to revolve. As soon as the member 12 is released the motor starts and this causes the shaft 11 to revolve until the next detent 20 comes into position to be struck by the member 12. As this detent engages said member the motor will be stopped. The position of the detent with a coin in the pocket is clearly illustrated in Figs. 3, 4 and 5 where the uppermost detent is shown in such position. Now, as the carrier again revolves upon a second coin being deposited the first coin drops out of the carrier and the spring 22 restores the detent depressed by said first coin to position to engage the motor controlling element 12. During this revolution of the carrier and shaft 11 the pencils are engaged by the arms of the star wheel and successively fed downward through a slot 24, one pencil being delivered for each coin deposited.

There has thus been provided a simple and efficient device of the kind described and for the purpose specified.

It is obvious that minor changes may be made in the form and construction of this invention without departing from the material principles thereof. It is not therefore desired to confine the invention to the exact form herein shown and described, but it is wished to include all such as properly come within the scope of the appended claims.

Having thus described the invention, what is claimed as new, is:—

1. In a vending machine, a motor provided with a controlling element and a drive shaft, an article delivering device operated by said drive shaft, a check carrier fixed upon and rotating with said drive shaft, a detent mounted on said carrier and engaging said controlling element, said de-

tent being positioned on the carrier in the path of a check received by the carrier and movable by said check to disengage from said controlling element, and means to restore the detent to position to engage the controlling element when the check is discharged from the carrier by the rotation thereof.

2. In a check controlled mechanism, the combination with a motor provided with a controlling element and a drive shaft; of a check carrier fixed upon said drive shaft, an open bottom check receiving pocket on said carrier, a detent pivoted to the carrier and engaging said controlling element, said detent having an arm projecting across the bottom of said pocket and adapted to be struck by a check received in the pocket to move the detent and free the controlling element, and a spring normally holding said detent in position to engage the controlling element.

3. In a check controlled mechanism, the combination with a motor provided with a controlling element and a drive shaft; of a check carrier fixed upon said drive shaft, a check receiving pocket on said carrier, a detent pivoted to the carrier and engaging said controlling element, said detent having an arm projecting across said pocket and adapted to be struck by a check received in the pocket to move the detent and free the controlling element, and means to restore the detent to position to engage the controlling element when the check is discharged from the pocket.

4. In a check controlling mechanism, the combination with a motor provided with a controlling element and a drive shaft; of a check carrier fixed upon said drive shaft, a check receiving pocket on said carrier, a detent pivoted to the carrier and engaging said controlling element, said detent having an arm projecting across said pocket and adapted to be struck by a check received in the pocket to move the detent and free the controlling element.

5. In a check controlled mechanism, the combination with a motor provided with a controlling element and a drive shaft; of a check carrier mounted on said drive shaft, and a detent mounted on said check carrier and engaging said controlling element, said detent being positioned on the carrier in the path of a check received by the carrier and movable by said check to disengage from the controlling element.

6. In a check controlled mechanism, the combination with a motor provided with a controlling element and a drive shaft; of a check carrier mounted on said drive shaft, and a detent mounted on said check carrier and engaging said controlling element, said detent being positioned on the carrier in the path of a check received by the carrier and

movable by said check to disengage from the controlling element, and means to restore the detent to position to engage the controlling element when the check is discharged from the carrier.

7. In a check controlled mechanism, the combination with a motor provided with a controlling element; of a carrier, check receiving means on said carrier, a detent on said carrier engaging said controlling element, said detent being released from the controlling element by the presence of a check in the check receiving means, and means to restore the detent to position to engage the controlling element when the check is discharged from the carrier.

8. In a check controlled mechanism, the combination with a motor provided with a controlling element; of a carrier, check receiving means on said carrier, and a detent on said carrier engaging said controlling element, said detent being released from the controlling element by the presence of a check in the check receiving means.

9. In a check controlled mechanism, the combination of a revoluble check carrier, a motor to actuate the same and having a controlling element, a detent mounted on and carried by the check carrier and released by the check from said controlling element to cause the motor to put the carrier in oper-

ation, and means operative when the check has been delivered from the carrier to put the detent in position to engage the controlling element of the carrier.

10. In a machine of the class described, a revoluble check carrier including a disk provided with a series of radial slots, a series of check pockets fixed on one face of said carrier in alinement with said slots, said pockets having open bottoms, a series of motor controlling detents pivoted on the opposite face of said disk, each of said detents being provided with an arm projecting through a respective slot and across the bottom of a respective pocket, and springs normally holding said arms against the bottoms of said pockets.

11. In a machine of the class described, a revoluble carrier, an open bottom check pocket fixed on said carrier, a motor controlling detent pivoted to said carrier, said detent having an arm extending across the bottom of said pocket, and a spring normally holding said arm against said bottom.

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

WILLIAM H. McMANNUS.

Witnesses:

V. C. BRITENAILE,
E. M. SCHEAF.