

Nov. 29, 1938.

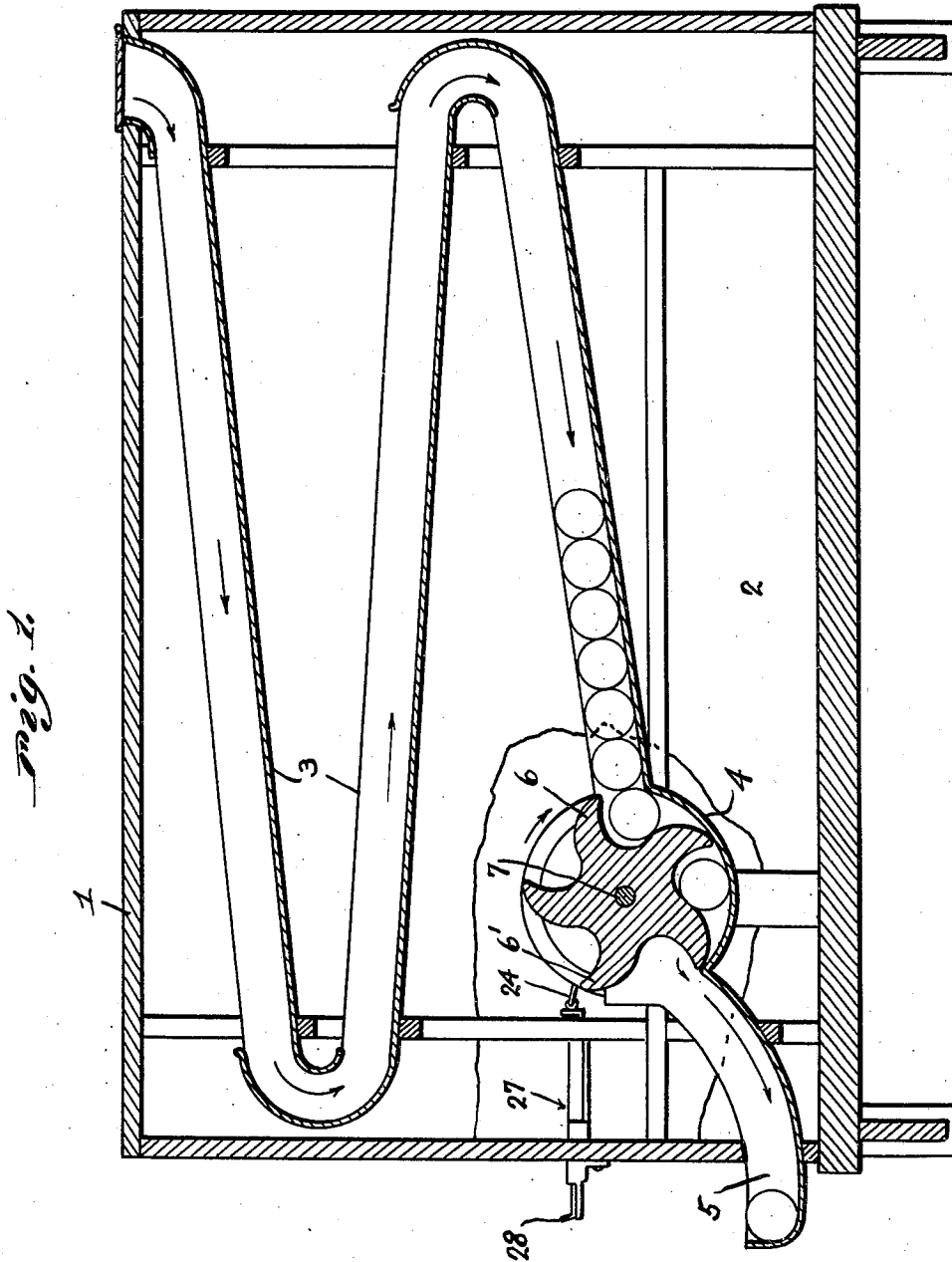
L. L. GIANNINI

2,138,232

BOTTLE VENDING MACHINE

Filed July 2, 1937

4 Sheets-Sheet 1



Inventor
Louis L. Giannini

By *L. B. James*

Attorney

Nov. 29, 1938.

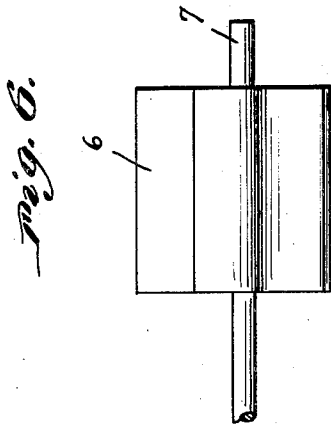
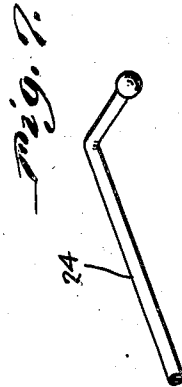
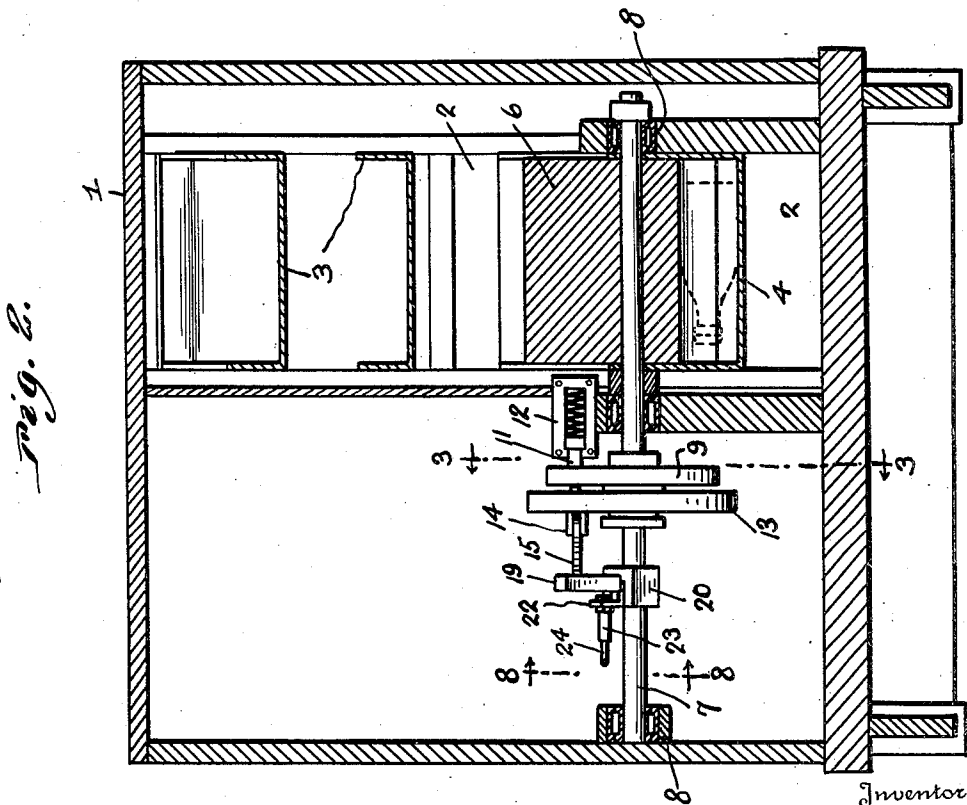
L. L. GIANNINI

2,138,232

BOTTLE VENDING MACHINE

Filed July 2, 1937

4 Sheets-Sheet 2



Inventor

Louis L. Giannini

By *L. B. James*

Attorney

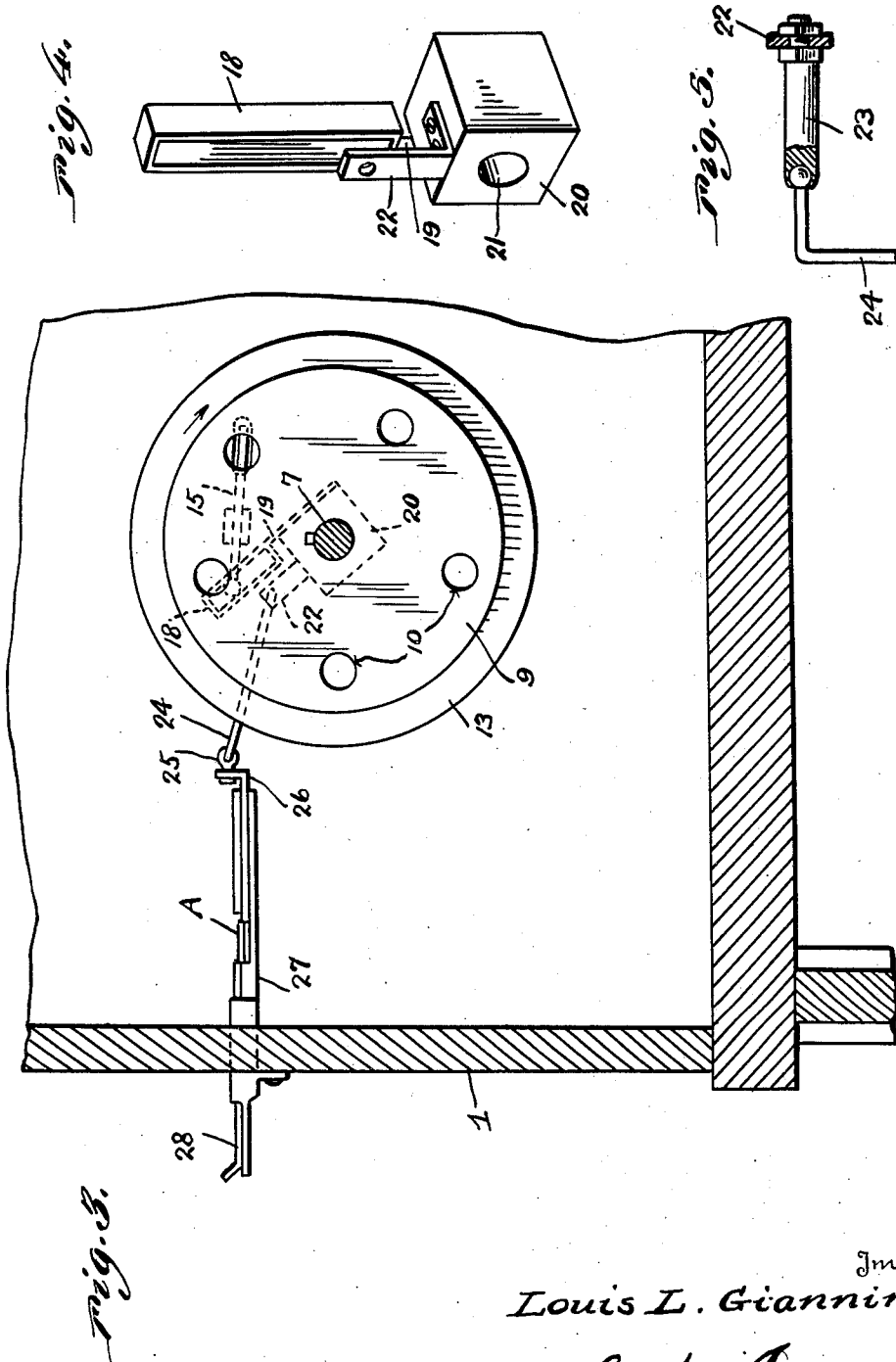
Nov. 29, 1938.

L. L. GIANNINI
BOTTLE VENDING MACHINE

2,138,232

Filed July 2, 1937

4 Sheets-Sheet 3



Inventor
Louis L. Giannini

By *L. B. James*
Attorney

Nov. 29, 1938.

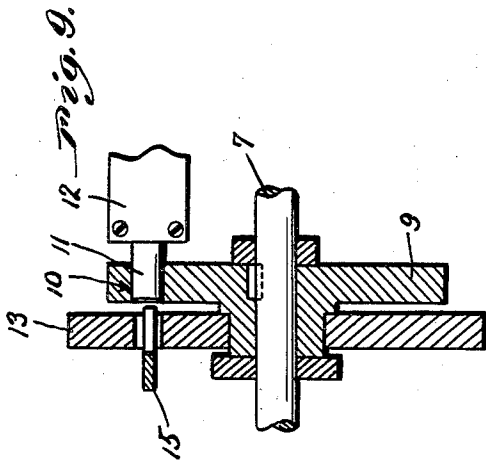
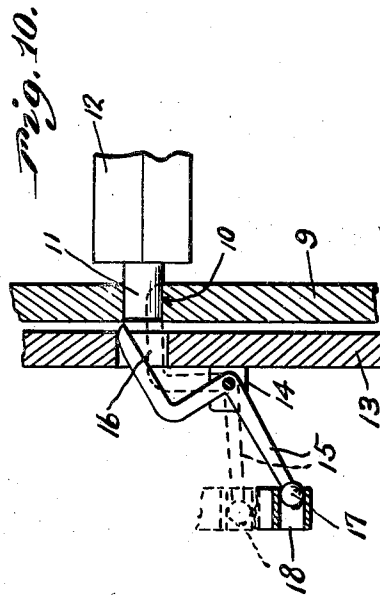
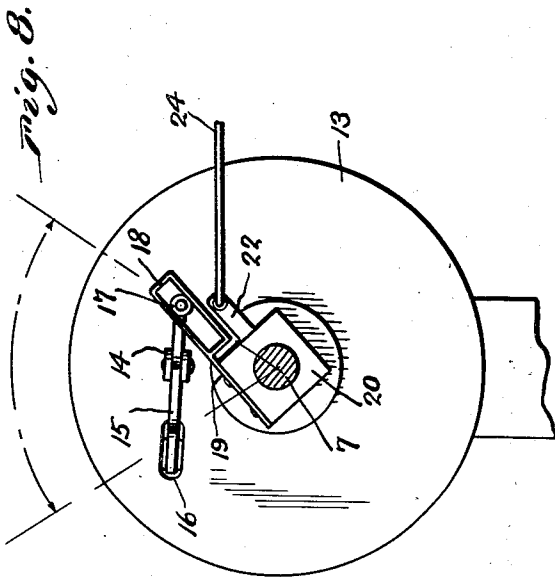
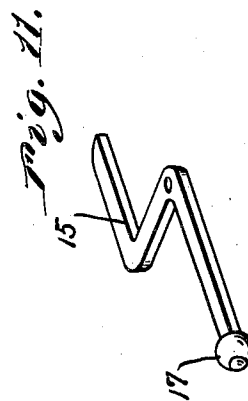
L. L. GIANNINI

2,138,232

BOTTLE VENDING MACHINE

Filed July 2, 1937

4 Sheets-Sheet 4



Inventor
Louis L. Giannini

L. B. James

Attorney

UNITED STATES PATENT OFFICE

2,138,232

BOTTLE VENDING MACHINE

Louis L. Giannini, San Jose, Calif.

Application July 2, 1937, Serial No. 151,745

2 Claims. (Cl. 74—155)

This invention relates to a vending machine, the general object of the invention being to provide coin controlled means for actuating a dispensing member step by step, when a manually operated member is actuated.

Another object of the invention is to provide a gravity chute in a cabinet, which feeds the objects to the dispensing member, said member delivering an object from the chute to a delivery chute each time the member is actuated.

This invention also consists in certain other features of construction and in the combination and arrangement of the several parts, to be hereinafter fully described, illustrated in the accompanying drawings and specifically pointed out in the appended claims.

In describing the invention in detail, reference will be had to the accompanying drawings wherein like characters denote like or corresponding parts throughout the several views, and in which:

Fig. 1 is a vertical longitudinal sectional view showing one manner of carrying out the invention.

Fig. 2 is a transverse sectional view through Fig. 1.

Fig. 3 is a sectional view on line 3—3 of Fig. 2.

Fig. 4 is a perspective view of the oscillating block and the guide for the bell crank lever.

Fig. 5 is a sectional detail view showing how the link of the coin slide is connected with the bracket on the block.

Fig. 6 is an elevation of the dispensing member.

Fig. 7 is a fragmentary perspective view of the link.

Fig. 8 is a sectional view on line 8—8 of Fig. 2.

Fig. 9 is a detail sectional view through the discs on the operating shaft.

Fig. 10 is a similar view showing how the bell crank lever engages the spring plunger.

Fig. 11 is a view of the bell crank lever.

In the present embodiment of this invention the numeral 1 indicates a cabinet in which is located a chamber 2 which is adapted to be cooled in suitable manner, such as by ice or a cooling coil. A zig-zag gravity chute or runway 3 is located in the chamber and opens out through the top thereof, so that bottles or other articles can be placed in the chute. A transversely arranged arcuate member 4 is located in the lower part of the chamber and the chute discharges into said member. A delivery chute 5 leads from the member 4 through the front of the chamber. A wheel or roller 6 operates in the member 4 and is fastened to a shaft 7 journaled in the cabinet

and chamber by the anti-friction means 8. The wheel 6 is formed with the curved radiating projections or arms 6' which form recesses between them for receiving the bottles or other articles rolling down the chute 3. As will be seen a bottle will pass from the chute 3 into a recess in the wheel and a projection 6' will push the bottle through the member 4 and into the chute 5, down which it will roll to a point outside of the front of the cabinet where it can be picked up by a person standing in front of the cabinet. By providing the zig-zag chute a long run-way is formed for the bottles so that the maximum amount of bottles can be placed in the chamber and the contents of the bottles will be thoroughly cooled before they are discharged.

A disc 9 having holes 10 therein, is fastened to the shaft 7 to one side of the chamber and a spring pressed plunger 11 is adapted to engage these holes to lock the disc, and therefore the wheel 9 against movement, until the plunger has to be retracted. The plunger and its spring are arranged in a casing 12, supported in the cabinet. A second disc 13 is rotatably supported on the hub of the disc 9 and this second disc 13 carries a bracket 14 to which is pivoted a bell-crank lever 15, one end of which is arranged to operate through an opening 16 in disc 13. The other end of the lever 15 has a ball 17 thereon, which operates in a guide-way 18, formed on a member 19, attached to a block 20, which has a bore 21, through which the shaft 7 passes, the block being mounted for rocking movement on the shaft. A bracket 22 is fastened to the block and carries a stud 23, which has a spherical socket in its free end which receives the ball end of a link 24 which has its other end connected by an eye 25, connected to a slide 26 of the coin mechanism 27, which may be of any suitable construction, the drawings showing one as having a finger operated slide 28 at its outer end which is located exterior of the cabinet.

As will be seen, when a coin A is placed in the mechanism and the slide 28 pushed inwardly, the coin will cause the slide 26 to move towards the rear of the cabinet and this movement will cause the link 24 to rock the block 20 on the shaft 7 and this movement of the block will cause the guide 18 to rock the lever 15. The first movement of the lever will cause its free end to engage the plunger and push the same from a hole 10 in the disc 9 so that the disc will be free to turn, and then further movement of the lever will cause a partial turning movement of both discs and as the disc 9 is fastened to the shaft to

which the wheel 6 is fastened, said wheel will be caused to move a bottle from the member 4 into the discharge chute 5 and a bottle from the chute 3 into the member 4. During this movement the plunger will simply slide on the disc 9 until it comes opposite another hole 10, when the plunger will enter said hole and thus lock the parts against movement again. The disc 13 returns to its original position as the coin mechanism returns to its original position either by hand or automatically by spring means. The device is then ready for another operation of discharging a bottle upon insertion of a coin and the pushing in of the exterior slide 28. The drawings show the wheel 6 as being provided with five arms or projections, so the wheel must be moved one-fifth of a revolution each time the coin mechanism is actuated, to secure a bottle from the device.

While the drawings show the invention as being used for a bottle vending device it will, of course, be understood that it can be used for vending other articles.

Having thus described my invention, what I desire to protect by Letters Patent is:

1. In a device of the class described, a disc on

the shaft having holes therein, a spring lock for engaging the holes to hold the disc and shaft against movement, a member rotatably supported on the hub of the disc, a lever carried by said member, means for tilting the lever to first cause it to push the lock from a hole and then to partially rotate the disc and shaft, after which the parts are again locked by the lock engaging the next hole, and a manually operated member to actuate the lever.

2. In a device of the class described, a rotary member, a disc thereon having recesses therein, a spring plunger for engaging the recesses to hold the disc and member against movement, a second member rotatably supported by the disc, a lever pivoted to the second member, a slotted member supported for rocking movement and with the slot of which an end of the lever engages and manually actuated means for rocking the slotted member to move the lever to first cause a part of the lever to push the plunger from a recess and then to move the lever carrying member and the rotary member a partial revolution.

LOUIS L. GIANNINI.