

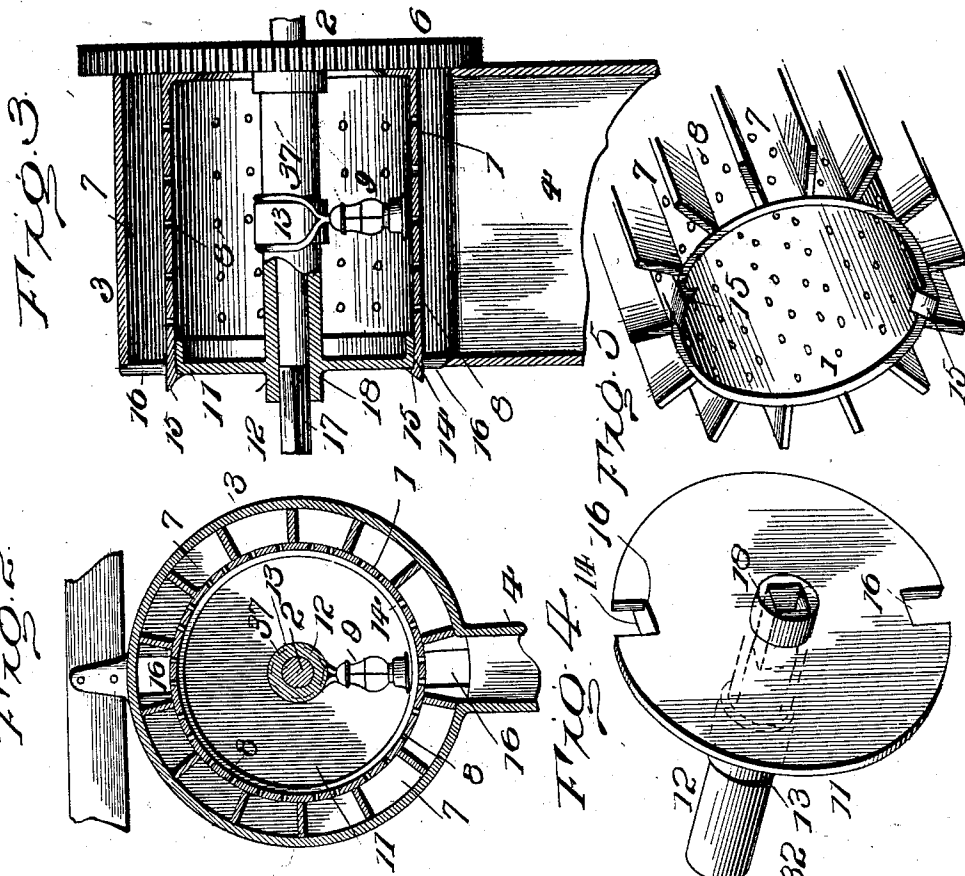
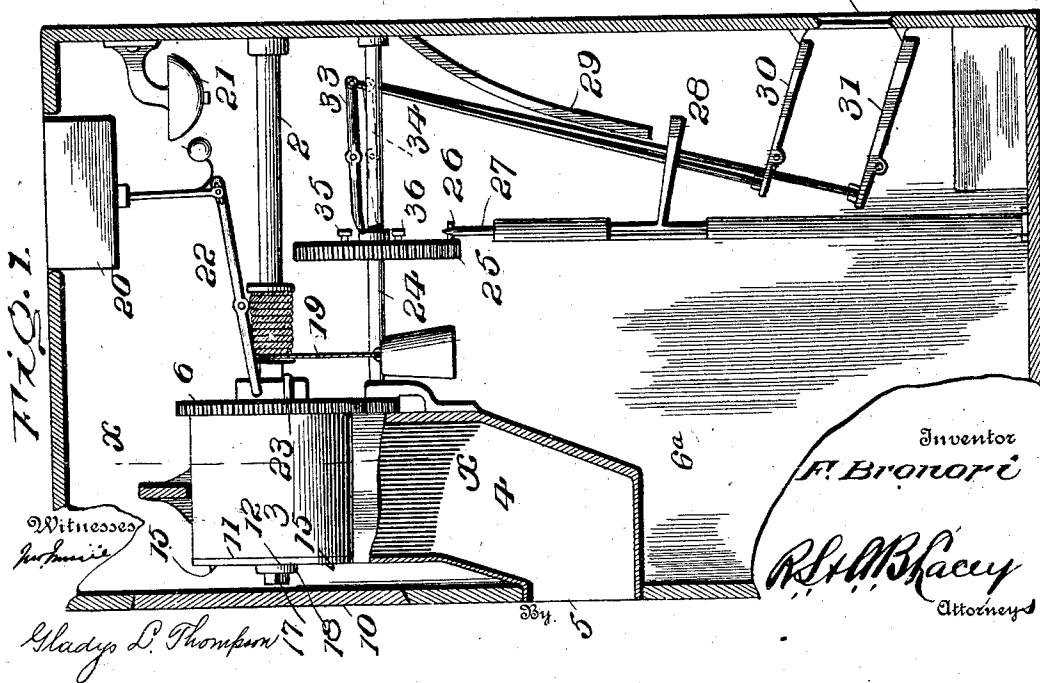
No. 679,879.

Patented Aug. 6, 1901.

F. BRONORI.
VENDING MACHINE.

(Application filed Nov. 1, 1900.)

(No Model.)



UNITED STATES PATENT OFFICE.

FRANK BRONORI, OF BENNINGTON, VERMONT.

VENDING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 679,879, dated August 6, 1901.

Application filed November 1, 1900. Serial No. 35,151. (No model.)

To all whom it may concern:

Be it known that I, FRANK BRONORI, a citizen of the United States, residing at Bennington, in the county of Bennington and State of Vermont, have invented certain new and useful Improvements in 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.

In automatic vending-machines of the class involving a rotary drum having peripheral pockets it is desirable to have the parts so constructed and arranged that access to the drum may be readily had for replenishing, for trimming the lamp when it is required to heat the articles to be vended, or for any required purpose.

With these ends in view and such others as may result from the peculiar construction and disposition of the parts the invention consists, chiefly, of the vending-drum and adjuncts, whereby the drum can be disconnected from the power mechanism to admit of the winding up of the motor and can be reached for the purposes aforesaid.

The invention is illustrated in the drawings hereto attached in connection with a coin-actuated mechanism, since it is designed to be similarly positioned in practice.

Figure 1 is a detail view in elevation of the vending mechanism, showing the cooperating parts. Fig. 2 is a section about on the line X X of Fig. 1. Fig. 3 is a central longitudinal section of the vending-drum and casing therefor. Fig. 4 is a detail view in perspective of a head and sleeve of the drum. Fig. 5 is a detail view in perspective of the outer end portion of the drum.

Similar reference-numerals are employed to designate corresponding parts in the several views of the drawings.

The drum 1 is loosely mounted upon a power-actuated shaft 2 and is surrounded by a casing 3, from which a chute 4 extends and terminates opposite an opening 5 in a side of the cabinet 6* to admit of the goods or articles being readily reached in the operation of the machine. The drum is attached to the gear-wheel 6 of the train of gearing and projects from a side thereof and is subdivided

around its periphery to provide a plurality of compartments 7, which receive the packages or articles to be vended. It is desirable in many instances to heat the goods and also to provide for ventilation. Hence the drum is foraminous or provided with a series of small openings 8, which communicate with the respective compartments 7. These openings 8 afford a free circulation of air and permit the heat from a lamp 9 or analogous device to have free access to the compartments for warming the articles contained therein. The end of the drum secured to the gear-wheel 6 is remotely situated from the side of the cabinet having the delivery-opening 5, and the end adjacent to said side is open and opposite a door-controlled opening 10, by means of which access is readily had to the drum either for recharging, for lighting or trimming the lamp, or for any cause. The outer or open end of the drum is closed by means of a cap 11, secured to a sleeve 12, loosely fitted upon the shaft 2 and having an annular enlargement 13 midway of its ends. The cap 11 has an inner rim or flange 14 adapted to snugly fit within the open end of the drum 1 and form a support therefor. The peripheral portion of the cap 11, exterior to the rim or flange 14, overlaps the outer ends of the compartments 7 and serves to prevent endwise displacement of the packages or articles contained therein. Interlocking means are provided between the cap and drum to retain said cap in position and consist of spring-catches 15 to engage over the cap 11 and enter notches 16, formed in the edges thereof. The outer end of the shaft 2 is made angular, as shown at 17, to receive a crank or key whereby the winding of the power mechanism is effected. The cap 11 is formed centrally with an outer boss 18, having its opening formed to snugly fit the angular portion 17 of the shaft 2, whereby the cap and shaft are caused to rotate together when said cap is in place, and when locked to the drum the latter and the gear-wheel 6 are caused to turn therewith, as will be readily comprehended. When the door 10 is open and the catches 15 thrust aside, the cap 11 and sleeve 12 can be removed and the compartments 7 can be filled and the lamp 9 lighted, trimmed, or supplied with oil, as required. When the cap is disconnected

from the drum, the shaft 2 can be turned by means of a key or other device, so as to wind up the weighted cord 19 or other device by means of which initial power is derived for operating the machine.

The person playing the machine is apprised when the articles have been exhausted by means of a placard 20 and a gong-bell 21, both being operated by means of a lever 22, having one end extended in the path of a trip 23, applied to the gear-wheel 6. A shaft 24 is in gear with the gear-wheel 6 and is provided with a gear-wheel 25, having an off-standing stop 26 to be engaged by means of a spring-actuated rod 27, carrying a receptacle 28 to receive a coin directed thereto by means of the chute or tube 29. The pans 30 and 31 have an observation-opening 32 in a side of the cabinet located opposite the space formed between them and are connected with levers 33 and 34, which are actuated by trips 35 and 36 to effect a discharge of the coin from the pans 30 and 31.

The lamp or heater 9 is suspended from the sleeve 12 by means of a hanger 37, which embraces the annular raised portion 13 of said sleeve, so as to prevent endwise movement of the lamp upon the sleeve after the parts have been fitted together. The lamp can be utilized for illuminating the machine by night as well as heating the articles to be vended.

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

1. In a vending-machine, a power-actuated shaft, a vending mechanism loosely mounted upon said shaft, a plate, and interlocking means between the said shaft and vending mechanism to cause the parts to rotate together, substantially as set forth.

2. In a vending-machine, a power-actuated shaft, a vending mechanism loosely mounted upon said shaft, a plate, interlocking means between the said shaft and vending mechanism to cause the parts to rotate in unison, and

a sleeve projected from the said plate and adapted to form a support for the heater, substantially as and for the purpose set forth.

3. In a vending-machine, a power-actuated shaft, a train of gearing including a gear-wheel loosely mounted on said shaft, a compartment attached to said gear-wheel to rotate therewith, a cap for closing the compartments of the drum, and interlocking means between the said drum and power-actuated shaft, substantially as set forth.

4. In a vending-machine, a power-actuated shaft, a train of gearing including a gear-wheel loosely mounted upon said shaft and constituting an element of the train of gearing, a drum secured to the said gear-wheel and having compartments around its periphery, a plate, interlocking means between the plate and the power-actuated shaft, and catches between said plate and drum, substantially as specified.

5. In a vending-machine, a power-actuated shaft, a train of gearing including a gear-wheel loosely mounted thereon and constituting an element of a train of gearing, a drum provided with a series of openings and having peripheral compartments and attached to the aforesaid gear-wheel to turn therewith, a cap, adapted to close the compartments thereof, interlocking means between the cap and power-actuated shaft, a sleeve projected from the said cap and loosely mounted upon the power-actuated shaft and having a centrally-disposed annular enlargement, and a heater suspended from said sleeve and prevented from movement thereon by the annular enlargement, substantially as specified.

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

FRANK BRONORI.

Witnesses:

EDMUND F. HOURAN,
C. LESLIE MORSE.