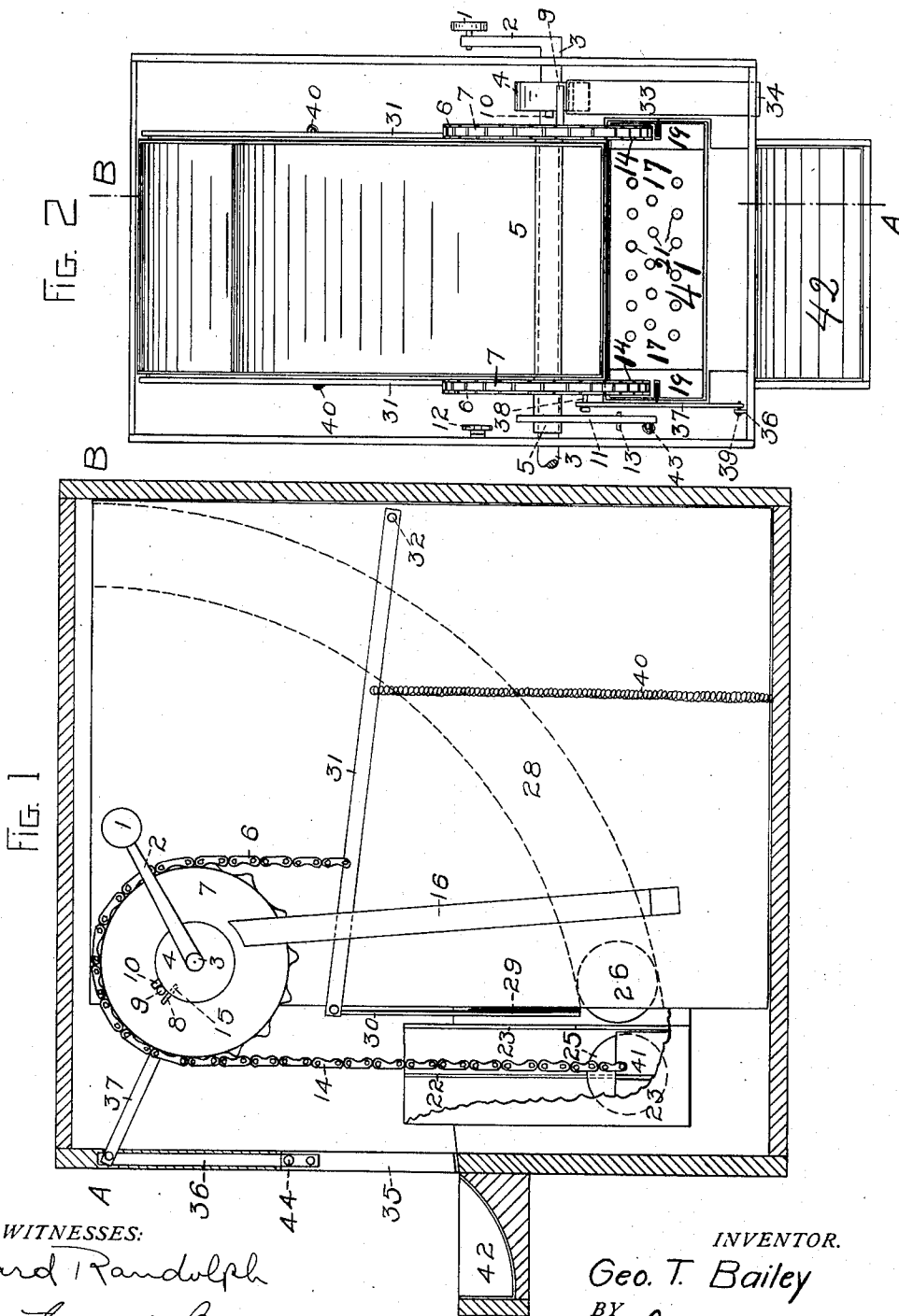


G. T. BAILEY.
ATTACHMENT FOR COOLING AND VENDING MACHINES.
APPLICATION FILED MAR. 30, 1911.

1,016,601.

Patented Feb. 6, 1912.

3 SHEETS—SHEET 1.



WITNESSES:
Ward Randolph
Katherine Bryan

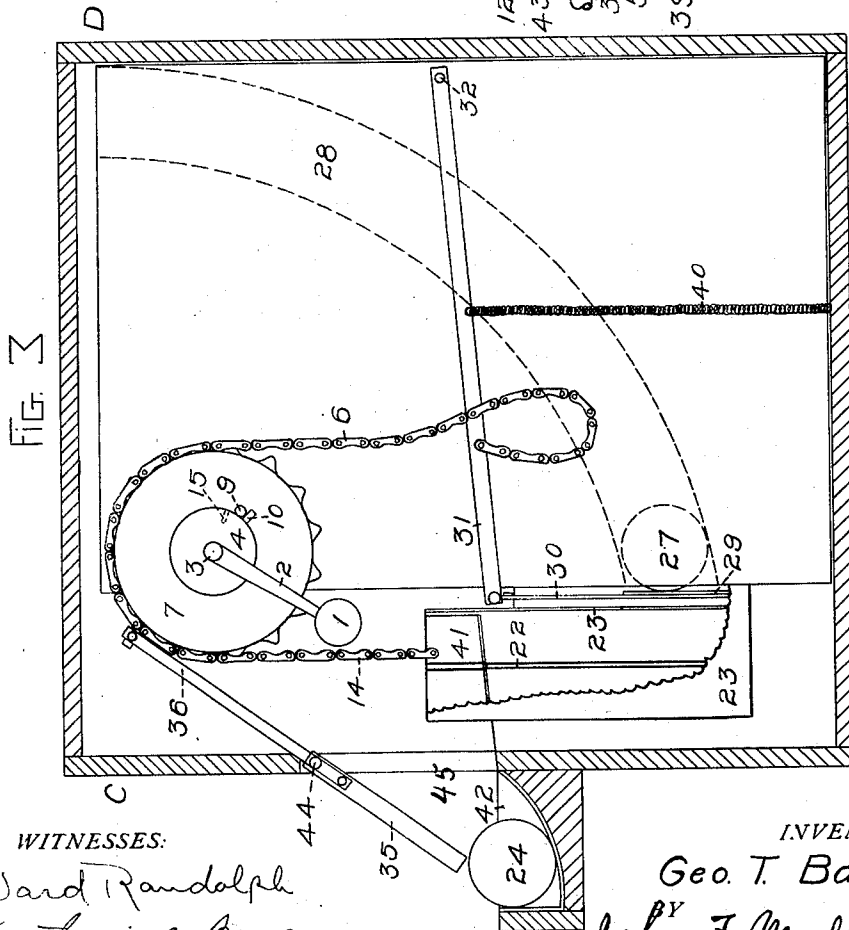
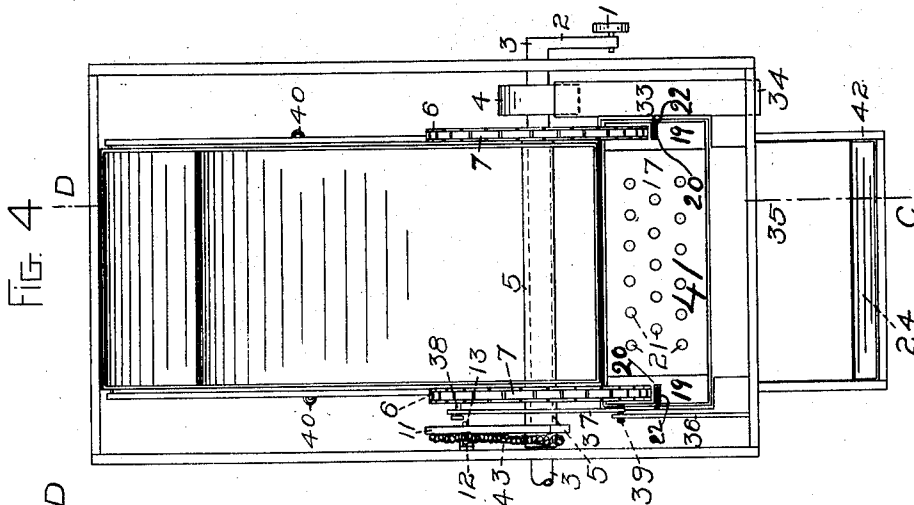
INVENTOR.
Geo. T. Bailey
BY
John F. Mullaney
ATTORNEY.

G. T. BAILEY.
ATTACHMENT FOR COOLING AND VENDING MACHINES.
APPLICATION FILED MAR. 30, 1911.

1,016,601.

Patented Feb. 6, 1912.

3 SHEETS—SHEET 2.



WITNESSES:
Ward Randolph
Catherine Bryan

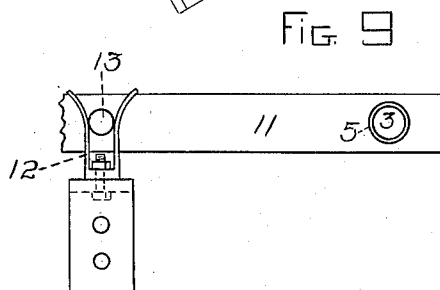
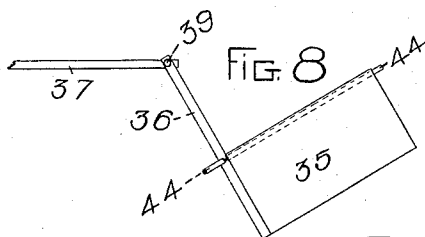
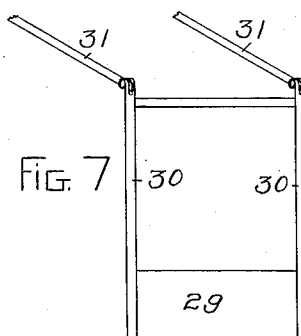
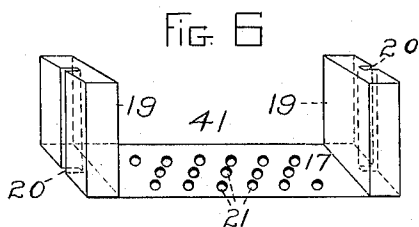
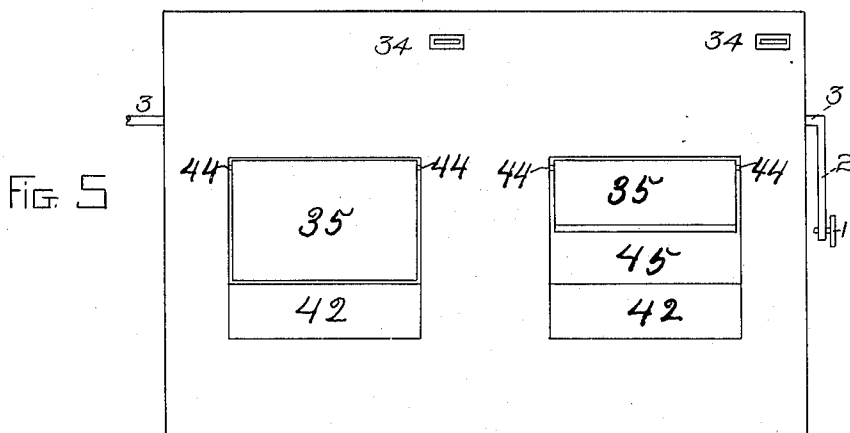
INVENTOR.
Geo. T. Bailey
John F. Mullaney
ATTORNEY.

G. T. BAILEY.
ATTACHMENT FOR COOLING AND VENDING MACHINES.
APPLICATION FILED MAR. 30, 1911.

1,016,601.

Patented Feb. 6, 1912.

3 SHEETS—SHEET 3.



WITNESSES:

Ward Randolph
Katherine Bryan

INVENTOR.

Geo. T. Bailey

BY
John F. Mullaney
ATTORNEY.

UNITED STATES PATENT OFFICE.

GEORGE T. BAILEY, OF COLORADO SPRINGS, COLORADO.

ATTACHMENT FOR COOLING AND VENDING MACHINES.

1,016,601.

Specification of Letters Patent.

Patented Feb. 6, 1912.

Application filed March 30, 1911. Serial No. 617,884.

To all whom it may concern:

Be it known that I, GEORGE T. BAILEY, a citizen of the United States, residing at Colorado Springs, in the county of El Paso and State of Colorado, have invented a new and useful Attachment for Cooling and Vending Machines, of which the following is a specification.

My invention relates to improvements in attachments for cooling and vending machines in which a coin is guided into a notch in an otherwise freely moving cylinder so as to engage pins connected with the discharging appliances of the device proper so as to secure the otherwise movable and free cylinder with the discharging and re-loading device so as to operate it by means of a hand lever secured to said cylinder; and the objects of my invention are, first, to provide means for bringing forth from a magazine or receptacle the desired articles therein one at a time; second, to provide means for automatically opening and closing said magazine or receptacle at the time desired in the transmission of the article. I attain these objects by means of the mechanism illustrated in the accompanying drawings, in which—

Figure 1, is a vertical section of Fig. 2, on the line A—B; Fig. 2, a top view of the device with cover removed and coin in place on cylinder; Fig. 3, a vertical section of the right side of Fig. 4, on the line C—D; Fig. 4, a top view of the device showing cover removed and coin released and taken; Fig. 5, a front elevation of two of the attachments united with one lever for operation; Fig. 6, a perspective of the package elevator 41; Fig. 7, a perspective of the automatic obstructing shutter; Fig. 8, a perspective of the automatic outlet door; Fig. 9, a side elevation of the check lever 11, in friction contact with the V grip 12, encircling the check pin 13.

Similar letters and figures refer to similar parts throughout the several views.

The driving shaft 3, carrying one or more cylindrical coin drums 4, the obstructing shutter 29, the outlet door 35, the delivering elevator 41, together with the package and means for operating these four parts in harmony, constitute the principal parts of

my device. The driving shaft 3, extends through the body of one or more of the casings of the devices and is operated by a single crank lever 2, having the handle knob 1. Rigidly secured to the driving shaft 3, near one side of the receptacle is the coin drum 4, having in its perimeter the coin slot 15, showing in Fig. 1, the coin 8, in place ready to engage the driving pin 9. Loosely mounted on the driving shaft 3, is the hollow sprocket shaft 5, carrying the two sprocket wheels 7, one of which is rigidly secured to either end and each carrying one of the sprocket chains, the front end 14, of each chain being secured to the top of the right and left ends 19, 19 of the elevator and herein designated the elevator chains, while the rear ends 6, of the sprocket chains are designated the shutter chains and are secured to the lifting levers 31, provided to elevate and lower the upright arms 30, at the lower end of which is secured the obstructing shutter 29. Attached intermediate the ends of the lifting levers 31, are the depression springs 40, arranged to force down the said levers 31, and the obstructing shutter 29, when released from the tension of the shutter chains 6. The package chute 28, is an inclined magazine provided to hold packages to be delivered to the package elevator 41, shown in Fig. 6, Fig. 1, and Fig. 3.

In Fig. 1, is shown the elevator 41, in the bottom of the elevator shaft, with part of the walls 23, of the shaft removed so as to disclose the parts within it. Here the package 25, is shown in the elevator having just dropped past under the obstructing shutter 29, and is ready to be raised up the elevator shaft to the outlet door 35. In the sides of the elevator shaft are guide rods 22, provided to be received by the guide grooves 20, in the ends 19, of the elevator.

To obtain the package 25, in elevator, the operator places the required coin 8, into the intake 34, of the coin delivering chute 33, as shown in Fig. 2, and Fig. 4, whence it is conveyed by gravitation to the coin slot 15, in drum 4, as shown in Fig. 1 where it is projecting in the path of the driving pin 9, which is rigidly attached to sprocket wheel 7, and is shown in this view between the coin 8, and the driving pin 10, rigidly

attached to coin drum 4, thus securing the sprocket wheels 7, so as to be turned with the crank lever 2, by means of handle knob 1. The operator now turns the handle knob 1, downwardly and this pulls up on the elevator chains 14, which are secured to the ends 19, 19, of the elevator 41, which lifts it to the position at the top of the elevator shaft as shown in Fig. 3, allowing the package to roll out upon the delivery tray 42. As the elevator 41, begins to rise the obstructing shutter 29, is forced down and closes the entrance to the bottom of the elevator shaft from the chute 28, and prevents the package 27, as shown in Fig. 3, from entering the elevator shaft until the elevator 41, has been returned to the bottom of the shaft as shown in Fig. 1. The coin 8, secured in the coin slot 15, in the drum 4, engages the driving pin 9, and with it forces the rotation of the sprocket wheels 7, which rotate together on the driving shaft 3, by means of the hollow sprocket shaft 5, as shown in Fig. 2, and Fig. 4.

On the shaft 5, at its end opposite the crank lever 2, is rigidly attached the check lever 11, at one end and projecting at right angles therewith, as shown in Fig. 2, and Fig. 4. In Fig. 2, the check lever 11, is shown projecting forward while the crank-lever 2, is shown projecting backward, and they both being rigidly secured by the coin 8, maintain the same relative position toward each other. In the outer side of the check lever 11, and near its swing end is the check pin 13, provided to be received and held by the V grip 12, as shown in Fig. 9, on an enlarged scale, or detail. The prongs of this V grip are of elastic material and have a tendency to hold the check pin 13, by friction. When the elevator 41, is raised to the top of the elevator shaft the check pin 13, is forced into the grip of the V grip 12, and is held so tightly that it requires considerable reverse force on the handle knob 1, to release it, additional to the weight of the elevator. While the elevator is being raised, the coin 8, is firmly held in place in the coin slot 15, by the pressure of the driving pin 9, being forced against it by the weight of the elevator and its contents, and though the coin slot 15, should be turned downwardly as shown in Fig. 3, the coin would not be released from the drum 4, while being pressed against by the driving pin 9, caused by the weight of the elevator. When the check pin 13, is forced into the V grip 12, it is held there with sufficient friction to overcome the weight of the elevator 41, and as the check lever 11, is rigidly and permanently secured to the hollow sprocket shaft 5, and turns therewith it holds the elevator 41, from dropping down and holds the sprocket wheels 7, from turning to the left on top until forced back by the crank lever

2, forcing the driving pin 10, against the driving pin 9, which releases the pressure of the driving pin 9, on the coin 8, and allows it to drop down and out of the coin slot 15, and then the force of the pressure of driving pin 10, against driving pin 9, will force the check pin 13, from between the prongs of the V grip 12, and allow the machinery shown in Fig. 3, to be turned back to assume the position shown in Fig. 1, thus lifting the obstructing shutter 29, so as to allow the cylindrical package 26, to roll down into the elevator and occupy the position shown in Fig. 1, by package 25.

The lifting levers 31, are pivoted at 32, 80 their rear end, and drop downwardly as the elevator is raised upwardly, until the obstructing shutter 29, is arrested by coming into contact with a package, as 26, shown in Fig. 1, or into contact with the bottom of the package chute 28, after which the shutter chains 6, will fold slack as shown in Fig. 3, because of the fact that the elevator 41, has a longer course to traverse than has the obstructing shutter 29, as shown in Fig. 1 and 90 Fig. 3.

The outlet door 35, is suspended pivotally at its two upper corners and hangs downwardly and closes partly by gravitation and by the force applied to the door lever 36, 95 which projects upwardly from the edge of the door and is actuated by the door pitman 27, attached to the crank wrist 38, secured into the side of the sprocket wheel 7, as shown in Figs. 1—2—3—4. In Fig. 8, is shown a detail in perspective of the outlet door 35, and its bearings 44, upon which it is pivoted, and the pivot connection 39, between the top end of outlet lever 36, and the front end of door pitman 37. As the handle knob 1, is turned backwardly and upwardly from the position shown in Fig. 3 to the position as shown in Fig. 1, the door pitman 37, forces the outlet door 35, closed and prevents access of the human hand or of vermin or dust 110 or other obnoxious subjects. The orifice 45, provided for the outlet for the packages 24—25—26 and 27, is shown open in Fig. 3, and closed in Fig. 1, by the outlet door 35.

In Fig. 5, is shown the front of my appliance 115 showing the cabinet with two compartments joined together, or with two of my appliances inclosed in a double cabinet, provided to be operated by the single lever 2, and the continuous extension of the shaft 3, 120 projecting through the double cabinet. This appliance is purposed to be used with a plurality of appliances in one cabinet when desired. The disconnecting arrangement by means of the coin 8, dropping from the coin slot 15, in each separate appliance releases all the appliances not having coins in the proper slots, from connection with the driving shaft 3, so far as raising the elevator 41, is concerned. This permits any desired ele- 130

vator in a cabinet containing a plurality of these appliances described, to be raised by connecting its mechanism with the driving shaft 3, by means of the proper coin being
 5 dropped into the proper slot 34. This appliance is provided to have arrangement for different sized coins for different machines for different sized slots and different priced packages. In this Fig. 5, the outlet door 35,
 10 to the right is shown open disclosing the outlet orifice 45, and the left side shows the outlet door 35, closed as shown in Fig. 1.

The floor 17, of the elevator slopes outwardly toward the front of my appliance so
 15 that when the elevator is raised to the top of the shaft, as shown in Fig. 3, the package 24, will roll forwardly out of the elevator and down into the delivery tray 42, as shown in Fig. 3. As the bottom of the elevator
 20 shaft will sometimes contain water for cooling the packages, as 25, and 26, I have provided perforations 21, in the floor of the elevator to allow any liquid to drain through it and so as to not spill any liquid upon the
 25 delivery tray 42.

I am aware that prior to my invention coin vending attachments have been used for various purposes of selling and dispensing small articles or packages on various
 30 kinds of magazines of supply by means of attaching and detaching a crank to the machinery proper by means of a coin. I therefore do not claim such a combination broadly; but

35 I claim:

1. In an attachment for cooling and vending machines, a supply magazine in the form of an inclined chute provided to contain cylindrically formed packages, a delivering elevator from said magazine, an
 40 automatic shut off between said magazine and said elevator, a rotary mechanism for lifting, by means of chains, said elevator and operating said shut off, a shutter or door at the delivery outlet for said packages and automatically opening and closing
 45 at the desired time by a pitman connection with said rotary mechanism, in combination with an operating crank secured to a driving shaft and turning with said rotary
 50 mechanism, substantially as set forth and for the purposes specified.

2. In an attachment for cooling and vending machines, having the combination
 55 of a plurality of cooling machines arranged side by side in a common case and operated by a common lever from the side of the case, integral with a crank shaft each separate cooling machine being provided with an
 60 individual separate supply magazine, each cooling and vending machine being individually alike, an automatic feed shut off, consisting of a drop shutter connected at its top by means of upright arms 30, with
 65 lifting levers 31, operated by means of

shutter chains 6, extending over the operating machinery to be rotated by means of the said driving shaft, a delivering elevator to receive packages to be vended from said drop shutter, to said elevator from a
 70 provided supply magazine in said cabinet, and means for operating same by said crank, all substantially as set forth.

3. In an attachment for cooling and vending machines, an inclined chute provided
 75 as a magazine to contain the packages to be vended, an elevator mechanism provided to receive said packages from the outlet of said chute and to elevate them to the delivery window of the vending machine, a shut off shutter provided to operate between
 80 the outlet to said chute and the receiving part of said elevator and provided to close the outlet of said chute when said elevator is not in position to receive packages therefrom, lifting chains provided to operate
 85 said elevator and said shut off shutter at the proper time, sprocket wheels above said elevator and said shut off, provided to carry sprocket chains to raise and operate said elevator and said shut off, in combination with
 90 means to operate said sprocket wheels by the operator turning a crank, substantially as set forth.

4. In an attachment for vending machines
 95 an elevator having its floor longitudinally horizontal and raised at its edge nearest the magazine and over which the package to be vended is received, and having vertical guide grooves in the upright end walls at
 100 either end of said floor provided to receive guide rods vertically attached to the sides of the elevator shaft walls, lifting sprocket chains attached to said elevator and having
 105 operating mechanism above same connected with sprocket wheels to receive said chains, an obstructing shutter constructed and operated so as to pass down between the receiving side of said elevator and the magazine from which the said elevator receives
 110 its packages and to be lifted from between said elevator and said magazine to allow the packages one at a time to enter said elevator, substantially as set forth and for the purposes specified.
 115

5. An attachment for cooling and vending machines, comprising an inclined chute provided to be used as a magazine for packages to be vended, a mechanically operated obstructing shutter at the outlet of said chute
 120 provided to obstruct the outlet of said chute when it is not desired to allow a package to pass through said outlet, an elevator mechanically operated to drop below the outlet of said chute to receive therefrom
 125 one of the packages to be vended and to raise the received package to the delivery window of said vending machine, and having a floor in said elevator inclined downwardly and outwardly toward the said de- 130

livery window provided to allow said pack-
age to roll against the door to said delivery
window, a door in said delivery window and
means for operating same automatically, to
5 allow said package to roll out of said vend-
ing machine to within reach of the pur-

chaser, substantially as set forth and for
the purposes specified.

GEORGE T. BAILEY.

Witnesses:

KATHERINE BRYAN,
H. K. WING.