J. L. TAYLOR.

VENDING MACHINE.

APPLICATION FILED FEB. 28, 1914.

1,107,462.

Patented Aug. 18, 1914.

7 SHEETS—SHEET 1.

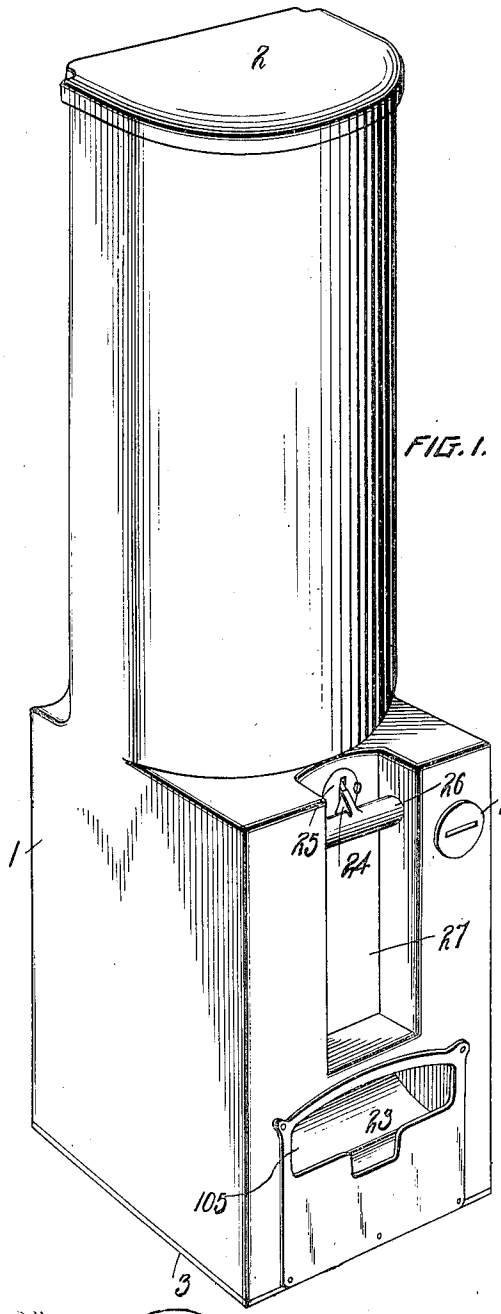


FIG. 1.

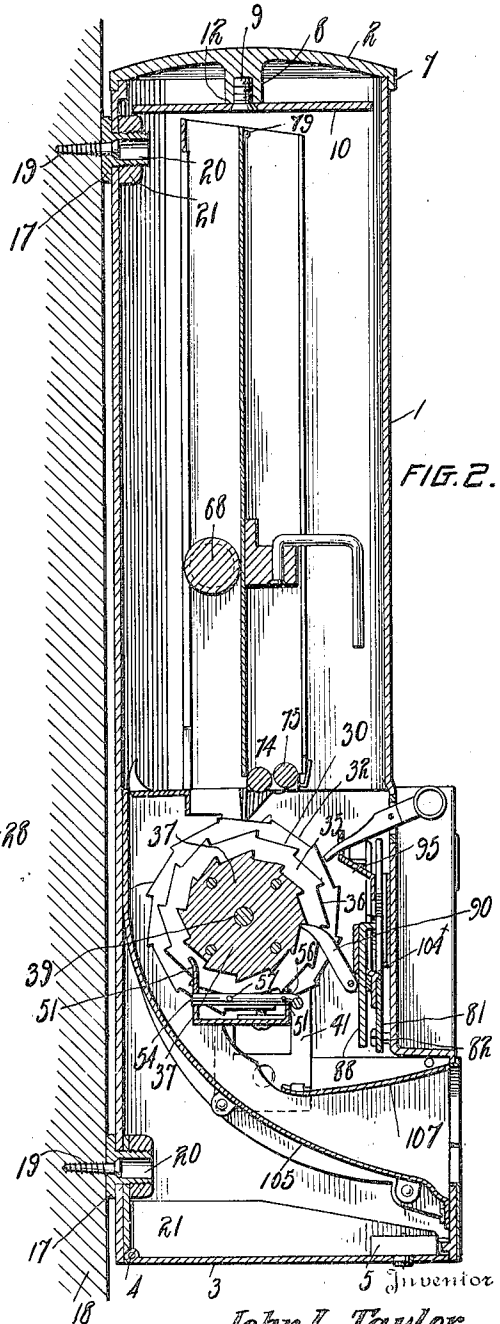


FIG. 2.

Witnesses

W. F. Taylor.

A. L. Hough

Inventor

John L. Taylor.

By Franklin H. Hough

Attorney

J. L. TAYLOR.

VENDING MACHINE.

APPLICATION FILED FEB. 28, 1914.

1,107,462.

Patented Aug. 18, 1914.

7 SHEETS—SHEET 2.

FIG. 3.

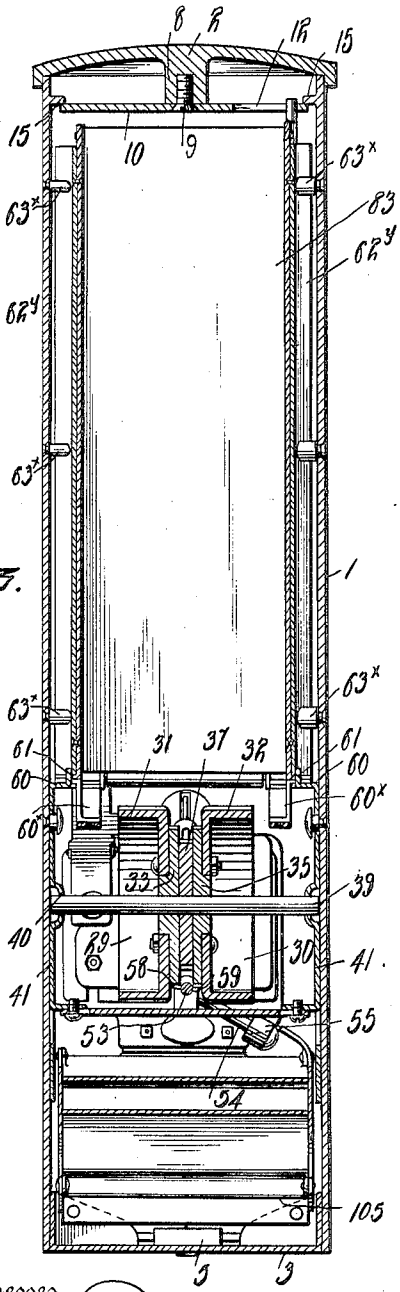


FIG. 4.

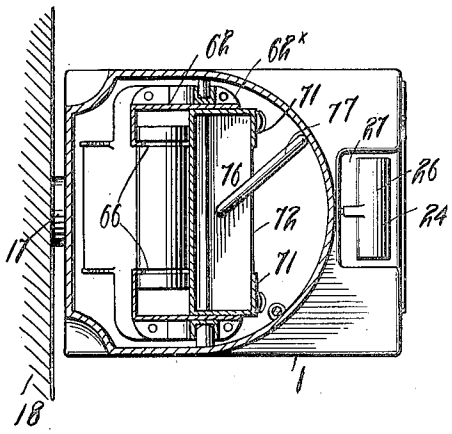
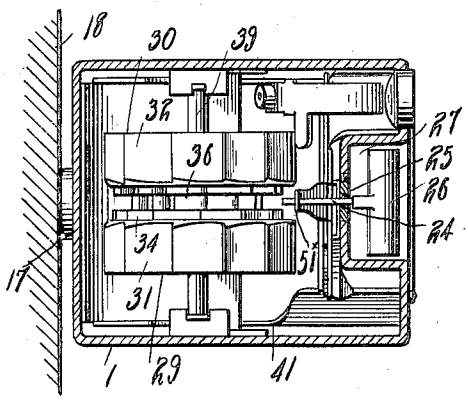


FIG. 5.



Witnesses

Wm. F. Kayle.

A. L. Hough

Inventor

John L. Taylor,

By Franklin A. Hough

Attorney

J. L. TAYLOR.

VENDING MACHINE.

APPLICATION FILED FEB. 28, 1914.

1,107,462.

Patented Aug. 18, 1914.

7 SHEETS—SHEET 3.

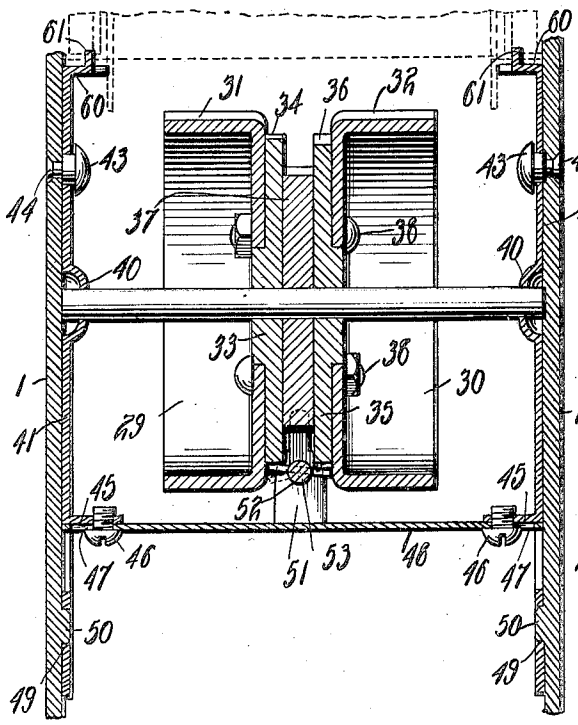


FIG. 6

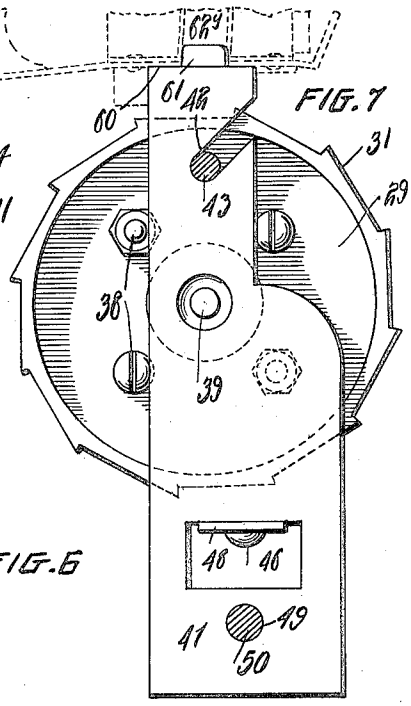


FIG. 7

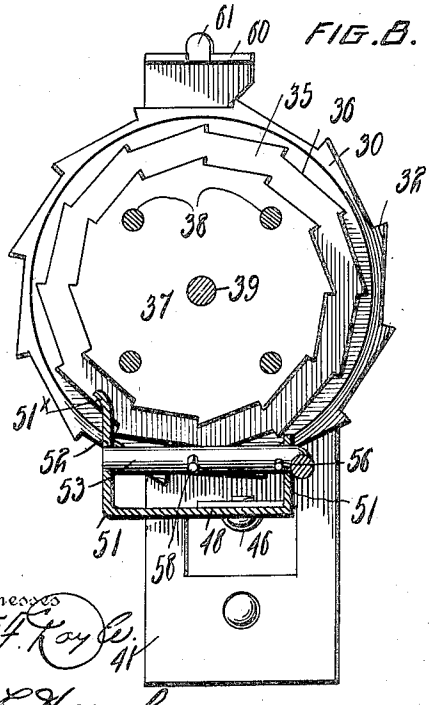


FIG. 8.

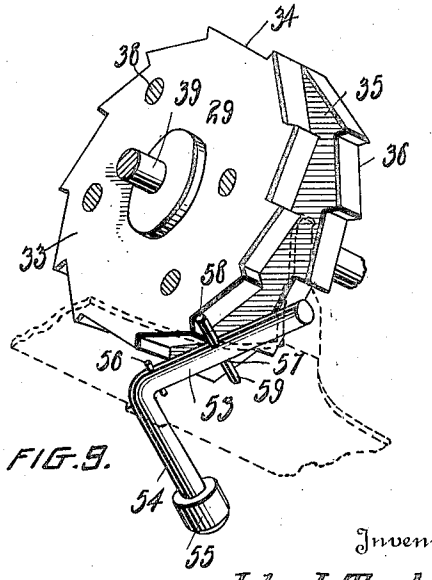


FIG. 9.

Witnesses

Wm. F. Kay Jr.

A. L. Hough

Inventor

John L. Taylor,

By Franklin A. Hough

Attorney

J. L. TAYLOR.

VENDING MACHINE.

APPLICATION FILED FEB. 28, 1914.

1,107,462.

Patented Aug. 18, 1914.

7 SHEETS—SHEET 4.

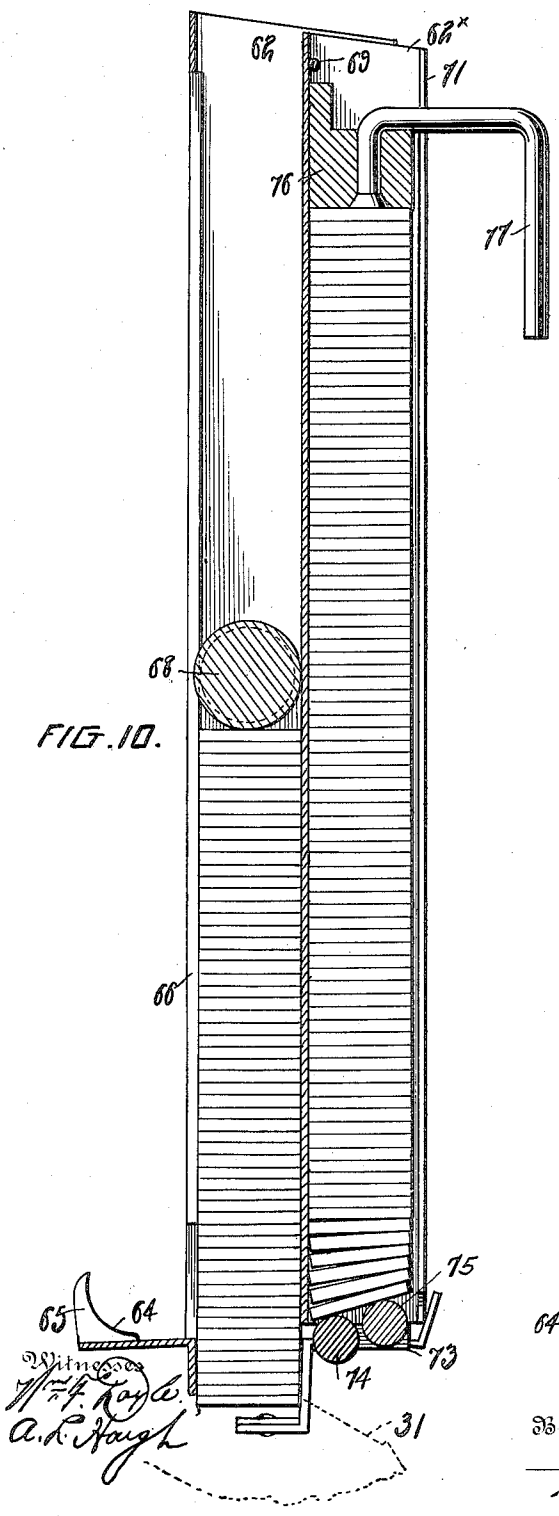


FIG. 10.

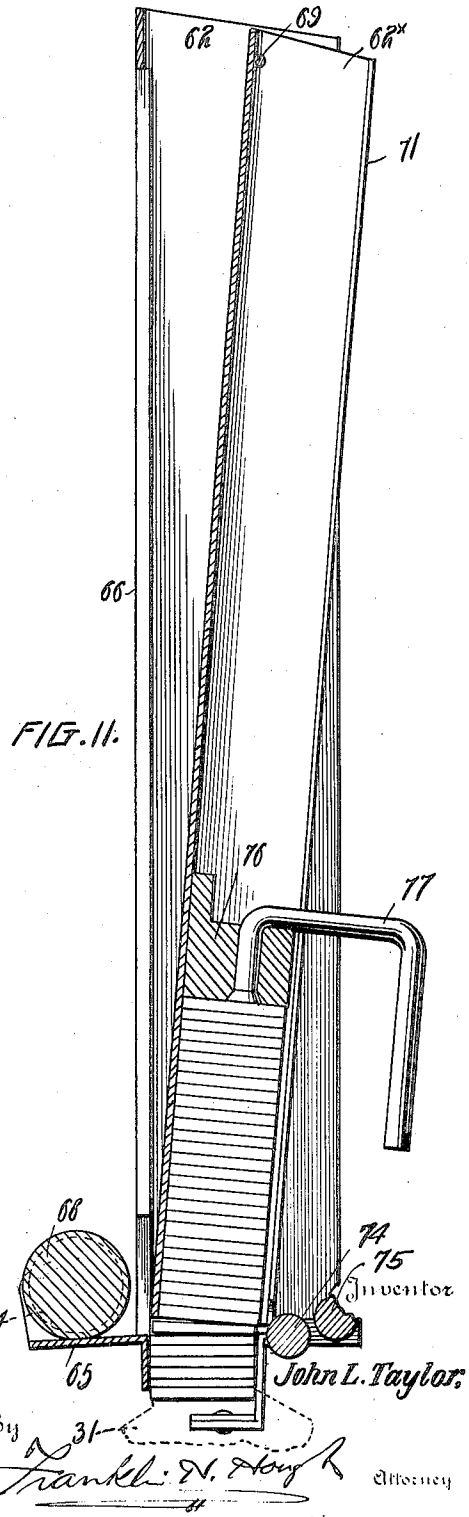


FIG. 11.

Witnesses
A. L. Haugh
A. L. Haugh

Inventor
John L. Taylor.
By Franklin N. Haugh
Attorney

J. L. TAYLOR.

VENDING MACHINE.

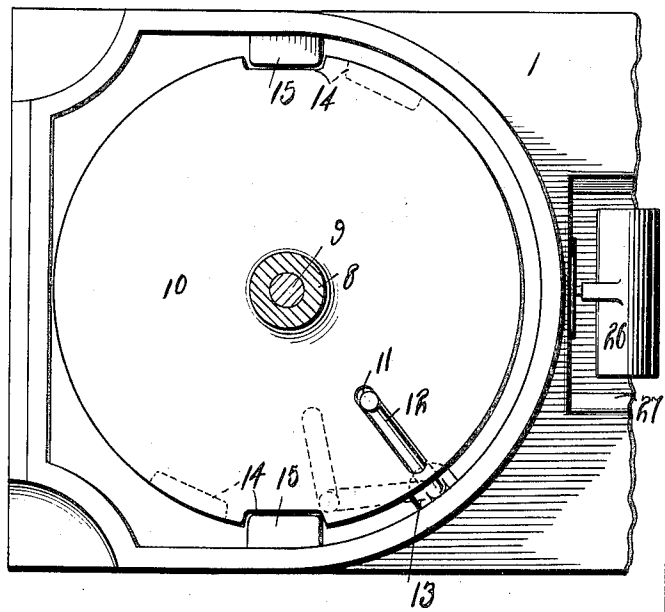
APPLICATION FILED FEB. 28, 1914.

1,107,462.

Patented Aug. 18, 1914.

7 SHEETS—SHEET 5.

FIG. 12.



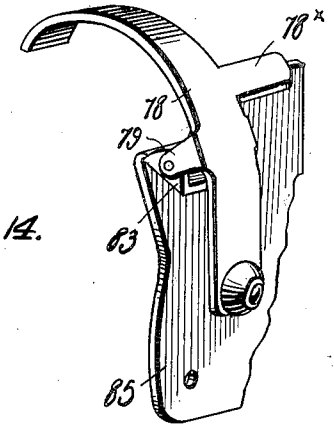


FIG. 14.

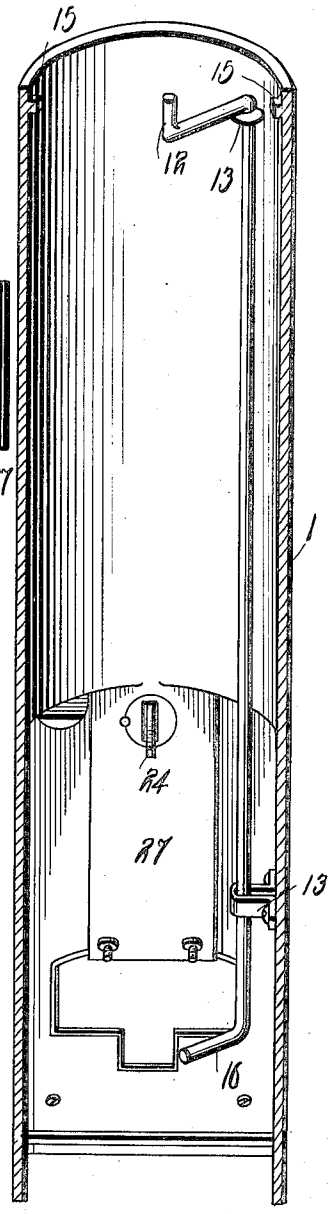
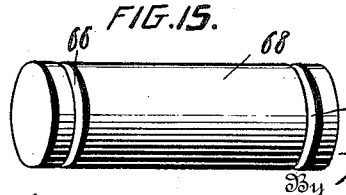


FIG. 13.

FIG. 15.



Witnesses
W. F. Doyle.
A. L. Hough

Inventor
John L. Taylor,
By Franklin D. Hough
Attorney

J. L. TAYLOR.

VENDING MACHINE.

APPLICATION FILED FEB. 28, 1914.

1,107,462.

Patented Aug. 18, 1914.

7 SHEETS—SHEET 6.

FIG. 16.

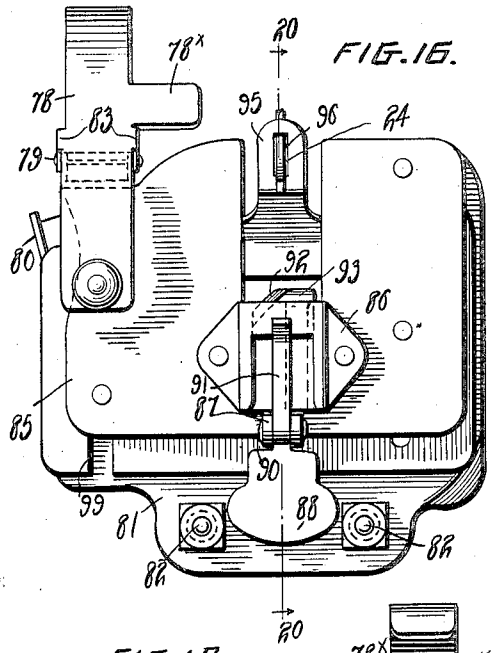


FIG. 17.

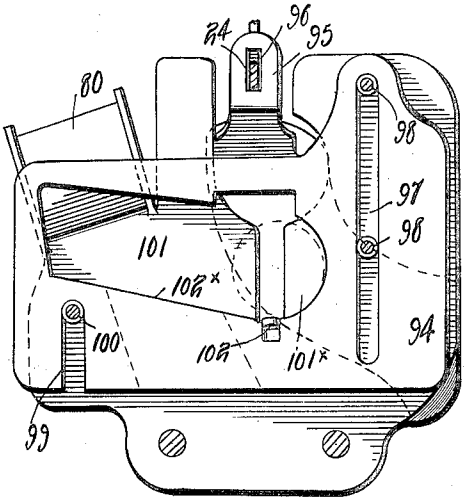


FIG. 18.

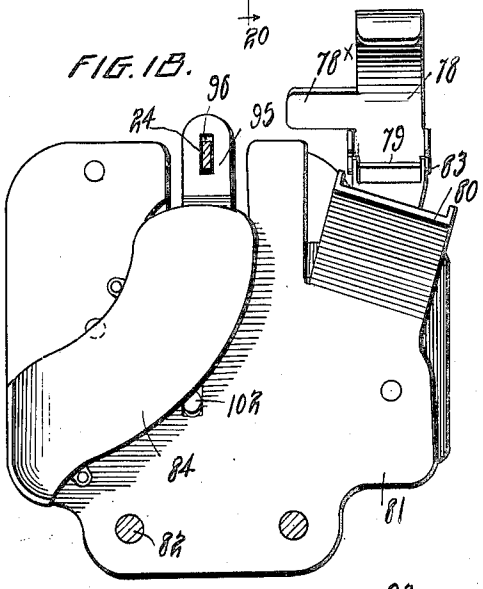


FIG. 19.

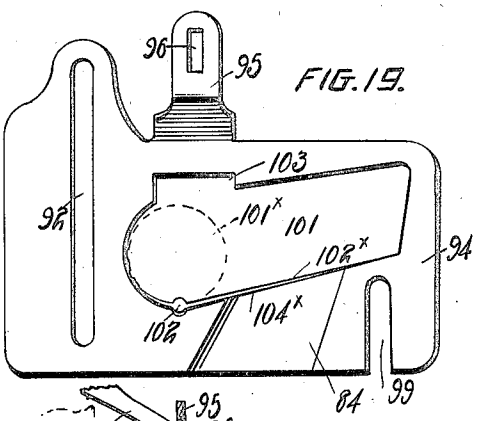


FIG. 20.

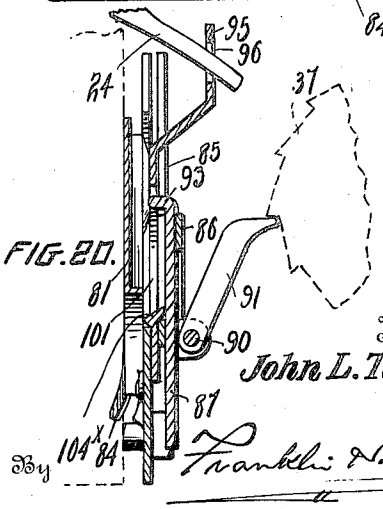
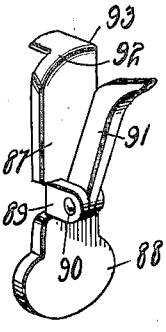


FIG. 21.



Witnesses:

W. F. Hoyle.

A. L. Hough

Inventor

John L. Taylor,

By Franklin N. Hough

Attorney

J. L. TAYLOR.

VENDING MACHINE.

APPLICATION FILED FEB. 28, 1914.

1,107,462.

Patented Aug. 18, 1914.

7 SHEETS—SHEET 7.

FIG. 22.

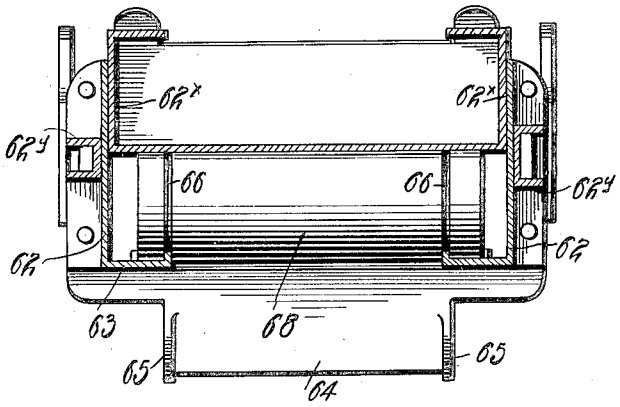


FIG. 23.

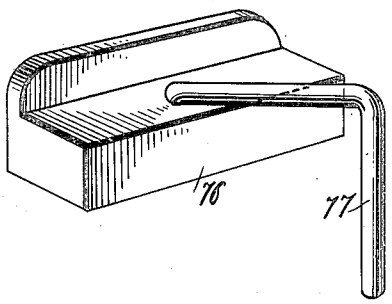


FIG. 24.

Witnesses:
W. F. Rayle.
A. L. Hough

Inventor
John L. Taylor,
By Franklin P. Hough
Attorney

UNITED STATES PATENT OFFICE.

JOHN L. TAYLOR, OF CHICAGO, ILLINOIS, ASSIGNOR TO HARRY D. YERXA, OF CHICAGO, ILLINOIS.

VENDING-MACHINE.

1,107,462. Specification of Letters Patent. Patented Aug. 18, 1914.

Application filed February 28, 1914. Serial No. 821,793.

To all whom it may concern:

Be it known that I, JOHN L. TAYLOR, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in check-controlled vending apparatus, designed especially for dispensing chewing gum or other articles.

The present invention consists essentially in the provision of a check-controlled machine in which a double magazine is provided whereby, when the contents of one compartment has been dispensed, another series of articles to be delivered will be automatically shifted to position to be delivered singly.

Another feature of the invention consists in the provision of a means whereby the delivery of more than one article at a time may be effectually prevented by a positive lock mechanism.

Other features of the invention comprise various details of construction, combinations and arrangements of parts which will be hereinafter fully described, shown in the accompanying drawings and then specifically defined in the appended claims.

My invention is illustrated in the accompanying drawings, in which:

Figure 1 is a perspective view of the casing within which are contained the operative parts of the invention. Fig. 2 is a longitudinal vertical section through the apparatus. Fig. 3 is a central vertical section taken in a plane at right angles to the plane on which Fig. 2 is taken. Fig. 4 is a sectional view on line 4—4 of Fig. 2. Fig. 5 is a sectional view on line 5—5 of Fig. 2. Fig. 6 is an enlarged sectional view through the delivery wheel and the adjustable frame through which the same is mounted. Fig. 7 is a side elevation of the part shown in Fig. 6. Fig. 8 is a detail view showing the means for preventing more than one article being delivered at a time. Fig. 9 is a detail perspective of another view of the mechanism for causing the articles to be delivered singly. Fig. 10 is a cross sectional view centrally through the magazine, showing part of the articles delivered from one compartment with the other compartment full and in readiness to be shifted automatically after the articles in the first compartment have been dispensed. Fig. 11 is a central sectional view showing the mechanism shifted to bring the articles in the second compartment in readiness to be delivered. Fig. 12 is a sectional view on line 12—12 of Fig. 2. Fig. 13 is a detail perspective view of the means for locking the cover to the casing. Fig. 14 is a detail perspective view of a means for closing a coin slot to prevent coins being deposited therein. Fig. 15 is a detail perspective view of a tilted weighted member adapted to rest upon the pile of articles to be delivered. Fig. 16 is a view in elevation of the mechanism coöperating with the coin to effect the delivery of an article. Fig. 17 is a similar view with one of the plates shown in Fig. 16 removed. Fig. 18 is a view of the reverse face of the mechanism shown in Fig. 16. Fig. 19 is a view of a coin lifting plate. Fig. 20 is a sectional view on line 20—20 of Fig. 16. Fig. 21 is a detail perspective view of a ratchet and weighted member which is engaged by a coin. Fig. 22 is a cross sectional view through the two magazines. Fig. 23 is a detail perspective view of a weighted member with angled rod attachment, and Fig. 24 is a detail perspective view of a chute through which the articles fall after being removed from the magazines.

Reference now being had to the details of the drawings by numerals, 1 designates a casing which may be of any suitable size or shape and provided, preferably, with a closure 2 at the top and a removable bottom 3, which, in the present instance, is shown as being hinged as at 4 and provided with a lock 5 requiring a key to unlock the same to give access to the interior of the casing. The top of the casing has a flange 7 fitted over the top of the body portion of the casing and a central downwardly projecting lug 8 which is interiorly threaded for the re-

ception of a screw 9 which holds a disk 10 in the position shown in Fig. 2 of the drawings. Said disk has a slot 11 (Fig. 12) adapted to receive the upper angled end of the locking rod 12, which latter is pivotally mounted in suitable eyes 13 formed in the inner surface of the wall of the casing. Said disk has lugs 14 projecting therefrom at points diametrically opposite and which are adapted to engage the lugs 15 integral with and projecting from the inner surface of the casing. Said rod has its lower end bent at an angle as at 16, forming means whereby an operator, by rocking said rod, may cause its upper end 12 to be held in a locked or unlocked relation with said disk 10.

In Fig. 2 of the drawings, I have shown a convenient means whereby the casing may be attached to a wall and in which flanged bosses 17 are held to the wall 18 by means of screws 19, the heads of which screws are countersunken in the hollow portions 20 of the bosses 17, which latter are circumferentially threaded and engage a threaded hole 21 formed in the casing, a suitable nut 22 being mounted upon the threaded boss to hold the same in place. Other means of any suitable kind may be employed of course for supporting the casing and which forms no part of the present invention.

The casing has a delivery opening 23, shown in Fig. 1 of the drawings, at which the articles delivered may be picked up by the fingers of a person inserted through said opening. An operating lever, designated by numeral 24, is pivotally mounted upon a pin 25, (Fig. 5) and a crosspiece 26 upon said lever and positioned in the recess 27, forms a convenient means whereby the operator, after depositing a coin in the slot 28, may tilt the lever to cause the apparatus to be actuated and an article to be delivered.

Referring to Figs. 6 to 8 inclusive will be seen a delivery wheel made up of a plurality of sections and comprising two complemental parts 29 and 30 of identical construction, having ratchet teeth 31 and 32 respectively thereon. A ratchet disk, designated by numeral 33, is fastened to the inner face of the section 29 and has ratchet teeth 34 upon the circumference thereof, and a similar ratchet disk, designated by numeral 35, is fastened to the face of the section 30 and is provided with ratchet teeth 36. The said ratchet teeth, however, upon the disks 33 and 35 are arranged in reverse order, the teeth upon one disk being diagonally opposite those of the other, as shown clearly in Fig. 8 of the drawings and which arrangement is necessary to produce certain action in the operation of the apparatus which will be hereinafter described.

Intermediate the two disks 33 and 35 is a ratchet disk 37 and which is of smaller diameter than the ratchet disks 33 and 35. The several parts making up the wheel, shown in Fig. 6 of the drawings, are held together by means of bolts 38 and the parts, thus fastened together making up the delivery wheel, are loosely mounted upon the shaft 39 which is held in apertures 40 in the sides 41 comprising the frame for supporting the delivery wheel.

Upon reference to Fig. 7 of the drawings, it will be noted that the sides 41 are provided with diagonally disposed slots 42 which are adapted to receive the headed lugs 43, secured to the wall of the casing by means of screws 44. Upon reference to Fig. 6 of the drawings, it will be noted that the sides of the frame supporting the delivery wheel have laterally projecting lugs 45 which have threaded apertures for the reception of the screws 46 and which pass through the slots 47 formed in the plate 48, thus forming an adjustable means whereby the sides may be held different distances apart in order to adapt the same to the size of the casing in which the same are to be mounted. The two sides 41, it will be noted, have apertures 49 adapted for the reception of the lugs 50 which project from the inner face of the casing and serve as a means for securely holding said sides in place within the casing.

Projecting upward from the plate 48 are the lugs 51 which are apertured as at 52 for the reception of the rocking shaft 53 which has an angled arm 54 with a weight 55 at its end. One of said lugs 51 extends longer, as at 51^x, than the other and is contracted and serves as a means for engagement with the slot in the space intermediate the two ratchet disks 33 and 35 and serving to center the wheel. Said shaft has a pin 56 pivotally mounted in an aperture therein and the ends of which project beyond the circumference of the shaft and serve as a means for preventing a longitudinal movement to the shaft in one direction by said pin coming against a lug 51, as shown in Fig. 6.

A second pin, designated by numeral 57, is mounted in a hole in the shaft 53 and the ends of said pin, designated respectively by numerals 58 and 59, project in opposite directions sufficiently to engage the two sets of ratchet teeth 34 and 36, one set of teeth 36 serving, as they come in contact with the end 59, to cause the shaft 53 to rock in its bearings and throw the opposite end 58 against a tooth 34 upon the other disk, serving as a positive lock to prevent the wheel turning only so far but, in a further rotary movement of the delivery wheel and after the teeth 36 pass by the end 59 of the pin 57, the weight 55 upon the angled end of the shaft will cause the latter to return to its normal position. By this mechanism it will be noted that it will be possible for the delivery wheel to make only a partial and

intermittent rotary movement, sufficient to deliver a single article.

Upon reference to Fig. 6 of the drawings, it will be noted that the upper ends of the plates 41 have inwardly bent portions 60 and each of said projecting portions 60 has an upwardly bent lug 61, which are provided for the purpose of receiving and holding in proper position the magazines, designated respectively by numerals 62 and 62^x, one being stationary and the other swinging, details of which are shown in Figs. 10 and 11 of the drawings. Said magazine 62 is open at its top and bottom and provided with flanges 63 along the opening in one face, while its lower end is provided with a laterally projecting shelf 64 having lugs 65 projecting upwardly from the upper face thereof. Upon the outer faces of the sides of the magazine are the trough-shaped guideways 62^y, of different widths, designed to receive lugs 63^x of different diameters, corresponding to the width of the trough-shaped guideways and serving as a means for insuring the magazines being inserted in the casing properly. When the magazines are inserted within the casing, the lower ends of said trough-shaped guides are adapted to receive the lugs 61, the weight of the magazines resting upon the laterally bent portions 60 of the sides 41. It will be noted that the lower ends of the sides of the magazines have projections 60^x which serve as means for supporting a pile of articles to be delivered within the magazines temporarily until the magazines are inserted in the casing, after which the weight of the pile of articles is relieved from said projections and thrown upon the serrated circumference of the delivery wheel.

The flanges at the edges of the opening in the magazine are bent at angles as at 66 and are adapted to engage the grooves 67 formed in the cylindrical weighted member 68, adapted to rest upon the pile of gum or other articles to be delivered, thereby causing the articles to be fed down as they are delivered singly by means of the ratchet teeth upon the delivery wheel.

The swinging magazine 62^x is pivotally mounted upon a rod 69 carried by the walls of the magazine 62 and is open at its top and bottom and has flanges 71 along the marginal edges of the opening 72. Mounted in projections 73 of the side walls of the magazine 62 are the two antifriction rollers 74 and 75, the latter being mounted at a slightly higher elevation than the former in order to effect an important function in the successful operation of the apparatus, namely the causing of the magazine 62^x to shift from the position shown in Fig. 10 to that shown in Fig. 11, after the articles have all been delivered from the magazine 62. A weighted member, designated by numeral 76, is mounted within the swinging magazine and is adapted to rest upon the top of the pile of articles to be delivered and is provided with an angled arm 77 extending downward and which, as the weight lowers a certain distance, is designed to contact with a lateral projection 78^x of the lever 78, pivotally mounted upon a pin 79 carried by the plate 83 and which is designed to close over the coin chute 80 after the last article has been fed from the swinging magazine.

The parts of the apparatus which coöperate with the coin to effect the delivery of the articles singly are shown in Figs. 16 to 20 inclusive and comprise the plate 81 which is secured to the wall of the casing by fastening means 82. Said plate 81 has the coin-reception chute 80 which receives the coin as it is dropped in the slot 28 and a delivery chute 84. Upon reference to Fig. 18 of the drawings, it will be noted that a second plate, designated by numeral 85, is held to and spaced apart a slight distance from the plate 81, a plan view of the plate 85 showing in Fig. 16 and which has a strap 86 fastened thereto, forming a means for the reception of the sliding member 87, a detail of which is shown in Fig. 21 of the drawings and which has a weighted lower end 88, and lugs 89 struck up therefrom, carrying a pivotal pin 90 in which the pawl 91 is mounted and which, as shown in Fig. 20 of the drawings, is adapted to engage the teeth of the ratchet disk 37 to impart an intermittent rotary movement to the delivery wheel after a coin has been deposited in the apparatus in the manner presently to be described. Said member 87 has a laterally projecting portion 93 which is inclined as at 92, said inclined portion being provided for the purpose of causing a second coin to roll down the incline and into the chute in the event of two coins being inserted in the chute at the same time. It will be understood in such a contingency, that is of two coins being dropped in the slot the same time, the first coin will operate in the usual way and the second coin will be raised upon the inclined surface and run back into the position formerly occupied by the first coin after the latter is deposited from the apparatus. Said lateral projection 93 extends over the position that the coin assumes when in the apparatus and adapting the same for a successful operation for the delivery of an article when the handle 26 upon the lever 24 is pushed down.

A plate 94, shown in Fig. 19, is provided with a lug 95 having an elongated slot 96, designed for the reception of the end of the tilting lever 24 and forming means whereby, when the handle 26 is tilted down, the lever 24 will cause the plate 94 to be raised. This, however, may not be accomplished until a coin is first deposited in the apparatus.

Said plate 94 is provided with an elongated slot 97 adapted to receive lugs 98, serving to guide the plate 94 in its vertical movements. Another slot, designated by numeral 99, is formed in the lower edge of the plate 94 and is adapted to receive a lug 100, shown in Fig. 17 and serving as a further means for guiding the plate 94. An elongated opening 101 is formed diagonally in the plate 94, as shown clearly in Figs. 17 and 19, and the lower inclined edge 102^x of said opening, shown in Fig. 19, forms a track for the coin to roll upon after being inserted in the chute 80. The coin, when it reaches an operative position, will rest in the position shown in dotted lines in Fig. 17 upon the lateral projection 102 which is integral with the plate 94. Leading from the upper marginal edge of the opening 101 is an offset 103 and through which the laterally extending projection 93 of the member 87 extends and over the position that a coin would assume when resting upon the lug 102, so that, when the plate 94 is raised through the medium of the tilting lever 24, the member 87 will be raised by the coin contacting with the under edge of said projection 93. As the member 87 is raised, the pawl 91 carried thereby, which is in engagement with a tooth of the ratchet disk 37, will impart a partial rotary movement to the delivery wheel, thereby delivering an article from the lowermost of the pile of articles in one or the other of the magazines accordingly as the articles in one or the other of the magazines are positioned in readiness to be delivered.

The lower inclined edge 102^x of the opening 101 is preferably beveled slightly as at 104^x (Fig. 19) in order to cause a coin, after having been raised by the plate 97 and when the coin comes opposite the opening 104, to fall therein and thence into the exit chute 84. A chute 105, an enlarged detail of which is shown in Fig. 24, is positioned within the casing and underneath the delivery wheel and down which the articles slide after being delivered singly. A lateral projection 106 upon the frame of said slide is positioned at the end of the exit chute 84 and serves as a means for guiding the coin so that it will fall into the bottom of the casing, or casing within the latter to receive the same. Immediately above the chute 105 is a partition 107 which extends underneath the operative parts of the apparatus and provided for the purpose of preventing any object being inserted therethrough to tamper with the apparatus.

The operation of my invention will be readily understood and is as follows: The parts being inserted in place within the receptacle, the pile of articles to be delivered and extended within the stationary compartment of the magazine will rest upon corresponding ratchet teeth upon the circumference of the delivery wheel, while the pile of articles in the swinging compartment will rest upon the two rollers which are journaled side by side, one slightly above the other, as shown in Fig. 2 of the drawings. It will be noted that any depression of the handle 26 upon the tilting lever 24 will have no effect upon the operative parts of the apparatus without a coin or disk of the size of a coin is inserted in the slot, the tilting of the lever 24, in the absence of a coin or disk of similar size, serving merely to cause the plate 94 to be raised and lowered which will in no way effect the parts of the apparatus. A coin, however, being dropped in the slot 28 will fall into the chute 80 and, running down the inclined edge 102^x of the opening 101, will rest upon the lug 102 and then, when the handle 26 of the lever 22 is pushed down, the coin will be raised by the plate 94 and, as the upper edge of the coin comes in contact with the laterally projecting portion 93 of the member 87, the said member 87 will be raised and with it the pawl 91 which, being in engagement with the ratchet disk 37, will cause a partial rotary movement to be imparted to the delivery wheel, causing the lowermost of the pile of articles to be fed forward and drop upon the chute 105 where it is accessible from the opening 23. When a partial rotary movement is given to the delivery wheel, it will be noted that one end 58 of the pin 57, traveling upon the inclined edge of a tooth 36, will cause the weighted shaft 53 to rock to throw the other end 59 of the pin in the path of a tooth 34, thus offering an obstruction to the further rotary movement of the delivery wheel and insuring the delivery of only a single article. After the end 58 of the pin passes by the end of a ratchet tooth upon the wheel 36, the weight 55 upon the angled end of the rock shaft will cause the latter to tilt back to its normal position. This operation may be repeated each time a coin is inserted in the slot and the operating lever 34 tilted in the manner described. As the last of the articles in the stationary magazine has been delivered, the cylindrical roller, which has served as a weight upon the top of the pile, comes opposite a cutaway portion in the open face of the stationary magazine and opposite the lugs 65, said roller rolling down the inclined projection 64 and the grooves of the roller will engage said projection 65 and will arrest the further outer rotary movement of said roller. Immediately after the cylindrical roller has rolled from the magazine, the weight of the pile of articles in the swinging magazine and which articles rest upon the two rollers with inclined relation to each other will cause the swinging magazine to be thrown from the position shown in Fig. 10 to that shown in Fig. 11,

in which position the second series of articles in the swinging magazine will be positioned so that the bottom of the pile of articles will rest upon the delivery wheel and a further dropping in the slot and operation of the tilting lever will cause, without interruption or further adjustment of the apparatus, the articles to be delivered from the second or swinging magazine. By this arrangement, it will be noted that means is afforded whereby two magazines full of articles may be delivered, the articles in one magazine being automatically positioned for delivery after the last of the series in the first pile has been dispensed. When the articles from both magazines have been delivered, the top of the casing may be removed and the magazines replenished and replaced.

In the event of two coins being inserted in the slot at the same time, no clogging of the machine will be caused thereby for the reason that, when the first coin is inserted, it will operate the apparatus in the usual manner, the second coin also being raised but will fall back after the first coin is delivered to the position upon the lug 102 in readiness to deliver another article when the lever is again tilted.

As a slight space intervenes between the chute 80 and the adjacent face of the plate 94, any attempt to insert a thin slug, to effect an operation of the apparatus, will fail for the reason that thin slugs will fall through said space and, in the event of a slug being of less diameter than the diameter of the coin adapted for use in the apparatus, the article will not be delivered for the reason that a disk of a certain diameter is necessary to be utilized in the successful operation in order to cause the member 87 to be raised sufficiently high to cause an intermittent movement to be imparted to the delivery wheel.

What I claim to be new is:—

1. A vending machine, comprising a casing having a stationary and a swinging magazine therein, a delivery wheel having serrations upon the circumference thereof and upon which the articles in the magazines are adapted to rest, means for operating the delivery wheel locking means for preventing but one article to be delivered at a time, and means for automatically actuating the swinging magazine to delivery position, as set forth.

2. A vending machine, comprising a casing having a stationary and a swinging magazine therein, a delivery wheel having serrations upon the circumference thereof and upon which the articles in the magazines are adapted to rest means for operating the delivery wheel, locking means for preventing but one article to be delivered at a time, means for automatically actuating the swinging magazine to delivery position, rollers upon which the pile of articles in the swinging magazine rest and forming means for moving the magazine to delivery position, as set forth.

3. A vending machine, comprising a casing having a stationary and a swinging magazine therein, a delivery wheel having serrations upon the circumference thereof and upon which the articles in the magazines are adapted to rest means for operating the delivery wheel, reversely arranged ratchet disks upon said delivery wheel and spaced apart from each other, a suitably journaled rock shaft with a weighted end, means carried by said shaft and actuated by the teeth of said ratchet disk and cooperating therewith for preventing more than one article being delivered at a time, and means for automatically throwing the swinging magazine into delivery position after the articles in the stationary magazine have been delivered, as set forth.

4. A vending machine, comprising a casing having a stationary and a swinging magazine therein, a delivery wheel having serrations upon the circumference thereof and upon which the articles in the magazines are adapted to rest means for operating the delivery wheel, two ratchet disks positioned parallel to and spaced apart from each other upon the delivery wheel, the teeth of the two disks being reversely and alternately arranged, a suitably journaled rock shaft having an angled portion with a weight thereon, a pin carried by said shaft, each end of which is adapted to engage and be actuated by the inclined ratchet teeth upon one disk, causing the shaft to rock and raising said weighted end, while the other end of the pin is projected in the path of a tooth upon the other ratchet disk to prevent further movement of the delivery wheel until the shaft returns to its normal position, as set forth.

5. A vending machine, comprising a casing having a stationary and a swinging magazine therein, a delivery wheel having serrations upon the circumference thereof and upon which the articles in the magazines are adapted to rest means for operating the delivery wheel, two ratchet disks positioned parallel to and spaced apart from each other upon the delivery wheel, the teeth of the two disks being reversely and alternately arranged, a suitably journaled rock shaft having an angled portion with a weight thereon, a pin carried by said shaft, each end of which is adapted to engage and be actuated by the inclined ratchet teeth upon one disk, causing the shaft to rock and raising said weighted end, while the other end of the pin is projected in the path of a tooth upon the other ratchet disk to prevent further movement of the delivery

wheel until the shaft returns to its normal position, and means for centering the delivery wheel, as set forth.

6. A vending machine, comprising a casing having a stationary and a swinging magazine therein, a delivery wheel having serrations upon the circumference thereof and upon which the articles in the magazines are adapted to rest, means for operating the delivery wheel two ratchet disks positioned parallel to and spaced apart from each other upon the delivery wheel, the teeth of the two disks being reversely and alternately arranged, a frame in which the delivery wheel is mounted, projections upon said frame, one of which serves as a means for centering the delivery wheel, a rock shaft journaled in said projections, said rock shaft being angled and a weight fastened to said angled end, a pin carried by the rock shaft and having projecting ends, one being adapted to ride upon the inclined surface of the teeth upon one disk to cause the shaft to rock and throw the other end of the pin in the path of the teeth upon the other ratchet disk, as set forth.

7. A vending machine, comprising a casing having a stationary and a swinging magazine therein, a delivery wheel having serrations upon the circumference thereof and upon which the articles in the magazines are adapted to rest, means for operating the delivery wheel two ratchet disks positioned parallel to and spaced apart from each other upon the delivery wheel, the teeth of the two disks being reversely and alternately arranged, a frame in which the delivery wheel is mounted, projections upon said frame, one of which serves as a means for centering the delivery wheel, a rock shaft journaled in said projections, said rock shaft being angled and a weight fastened to said angled end, a pin carried by the rock shaft and having projecting ends, one being adapted to ride upon the inclined surface of the teeth upon one disk to cause the shaft to rock and throw the other end of the pin in the path of the teeth upon the other ratchet disk, the upper ends of said frame adapted to support said magazines, as set forth.

8. A vending machine, comprising a casing having a stationary and a swinging magazine therein, a delivery wheel made up of two sections having serrations upon the circumference thereof, ratchet disks, one spaced apart with teeth reversely arranged and a ratchet wheel intermediate said ratchet disks, a pawl engaging said ratchet and means for operating the delivery wheel locking means for preventing but one article to be delivered at a time, and means for automatically actuating the swinging magazine to delivery position, as set forth.

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

JOHN L. TAYLOR.

Witnesses:

FRANK A. GLENNON,

D. J. DIXON.