

Aug. 13, 1940.

O. J. HAWLEY

2,211,061

VENDING MACHINE

Filed May 17, 1937

2 Sheets-Sheet 1

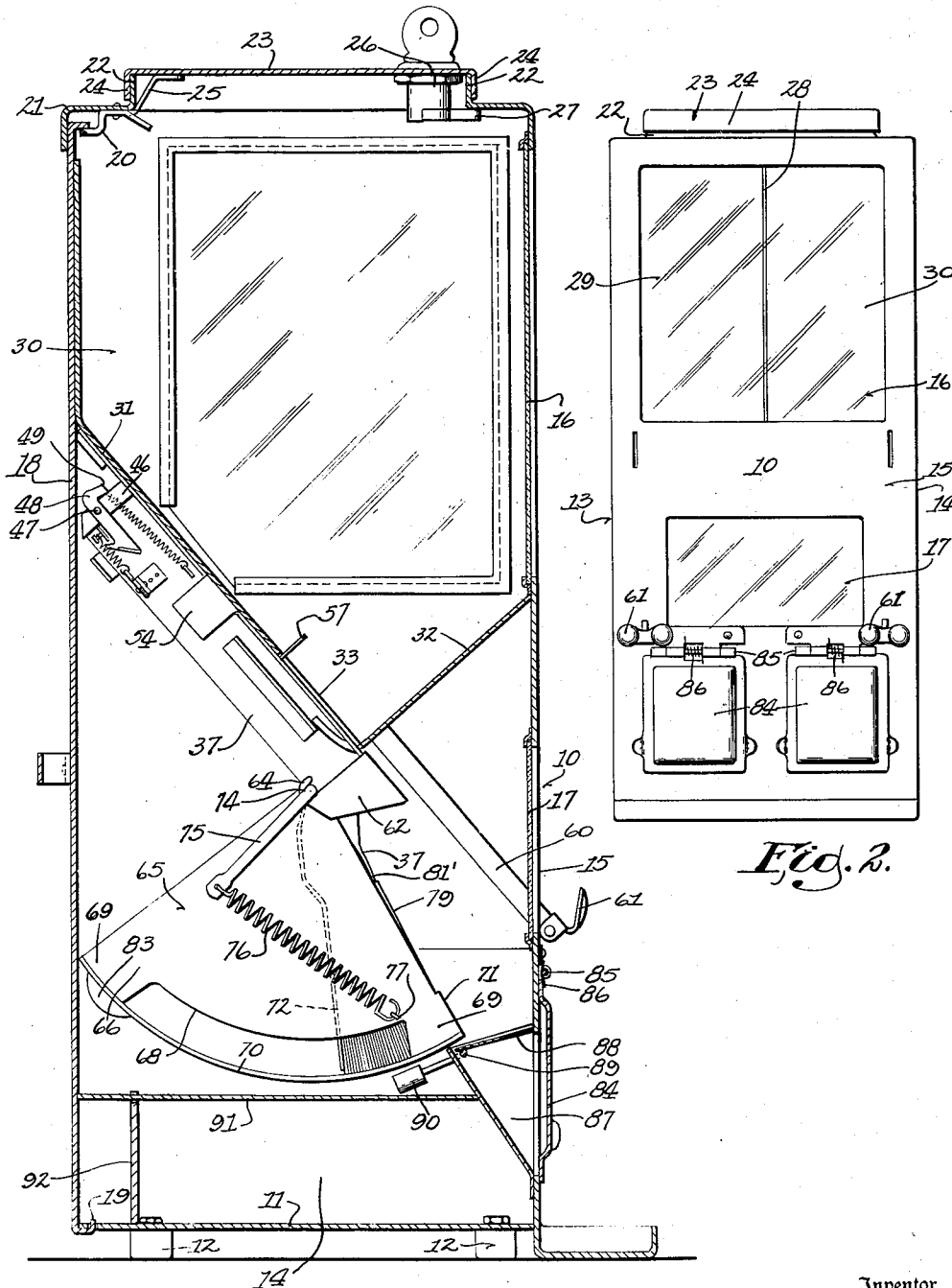


Fig. 1.

Fig. 2.

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2 Sheets-Sheet 2

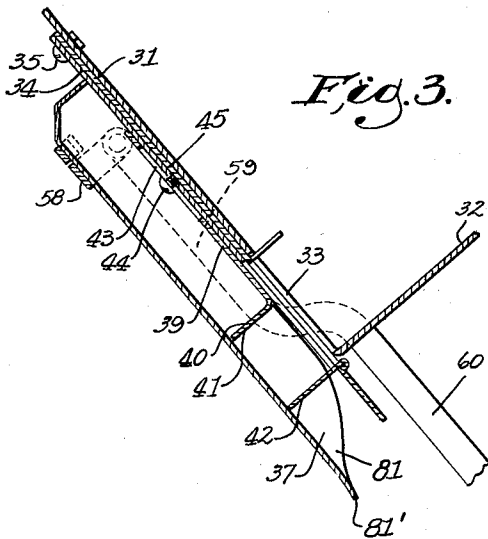


Fig. 3.

Fig. 4.

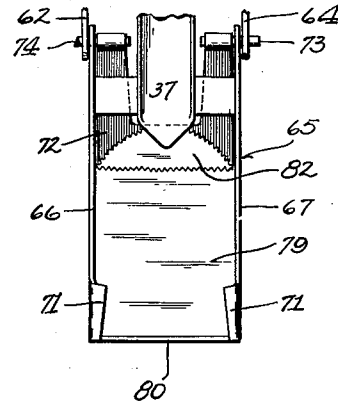


Fig. 5.

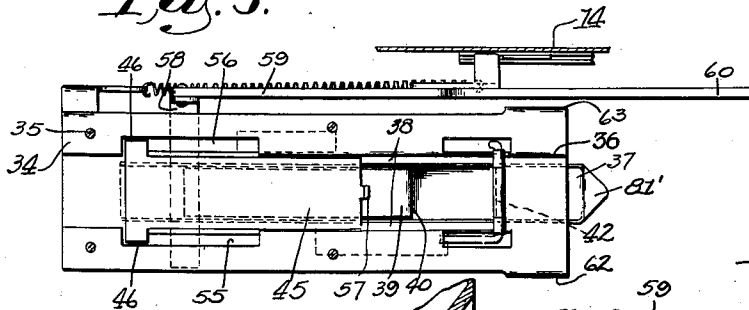


Fig. 7.

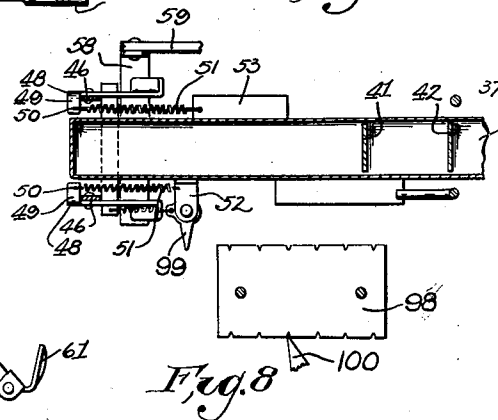


Fig. 6.

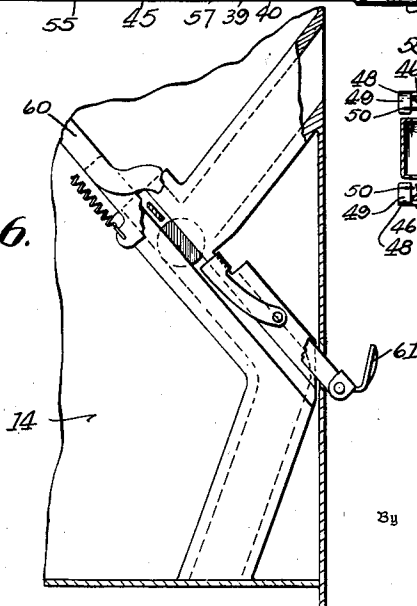


Fig. 8.

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UNITED STATES PATENT OFFICE

2,211,061

VENDING MACHINE

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Application May 17, 1937, Serial No. 142,951

3 Claims. (Cl. 226—49)

This invention relates to vending machines and more particularly to a novel vending machine of the type housing a bag filler operating in combination therewith.

5 An object of the invention is to provide a device of the type having a unitary bag magazine removable for filling thereof.

Another object of the invention is to provide a device of the type having a manually operable bag filler of a greater efficiency than is found in prior devices of the type.

Another object of the invention is to provide means in the dispensing mechanism of the device for accurately measuring quantities of a commodity in the process of vending thereof.

Other and further objects of the invention will be apparent as the description proceeds, reference being had to the accompanying drawings, in which:

20 Fig. 1 is a side view partly in section and partly in elevation of a vending machine embodying my invention.

Fig. 2 is a front view in elevation similar to Fig. 1.

25 Fig. 3 is a detail view, partly in section and partly in elevation of the filler chute.

Fig. 4 is a fragmentary front view in elevation of the filler chute and bag magazine.

30 Fig. 5 is a plan of the chute and measuring mechanism.

Fig. 6 is a fragmentary view of the machine, partly in elevation and partly in section, showing the coin release mechanism.

35 Fig. 7 is a fragmentary detail view, partly in elevation and partly in section, of a portion of the filler.

Fig. 8 is a plan view of the rack plate.

Referring more particularly to the drawings, the numeral 10 represents the device generally, having a bottom portion 11 equipped with conventional rubber feet 12. Attached to the bottom member 11 are the side walls 13 (not shown) and 14. A front wall 15 contains an upper pane of glass 16 and a lower pane 17. A rear wall 18 is hooked upwardly in the rear edge of bottom portion 11 at 19 thereof and held against downward retraction by the turn latch 20. Surmounting the front wall 15 the side walls 13 and 14 and the rear wall 18 is a cap frame member 21 having a substantially square central opening edged with upwardly directed flanges 22.

A cover 23 has a border flange 24 which contacts the outsides of the flanges 22 when the said cover is in closed position. The cover 23 is provided with downward and laterally projecting

strips 25 for retaining it in closed position at one edge thereof. A conventional lock 26 having the latch 27 is provided for the same purpose at the opposite edge of cover 23.

A vertical pane 28 separates a pair of hoppers 29 and 30 each bottomed by a rear sloping portion 31 and the relatively shorter front sloping portion 32. The rear portion 31 has an opening at 33 thereof for the release of the contents of the related hoppers.

10 A hanger plate 34 is affixed to the rear slope 31 by threaded or other means 35 and has attached to its under side the hanger tracks 36 slidably supporting the chute by means of flanges 38 extending outwardly at the upper edges thereof. A tongue member 39 is affixed to the under side of hanger plate 34 extending longitudinally centrally thereof and has a downward bend at 40. The bent portion 41 extends at right angles to hanger plate 34 downwardly into the chute to form one of four sides of a temporary container for the commodity to be vend-
15 ed. The opposite side of the container is formed by a gate 42 which normally extends downwardly into chute 37 parallel to said portion 41. The tongue 39 is slotted at 43 to accommodate the adjustment means 44 whereby the capacity of the temporary container may be modified at will. A check plate 45 has downwardly extending arms 46 which are pivoted at 47 to the dogs 48. In-
20 ward projections 49 on dogs 48 have the eyes 50 coupled with the coiled compression springs 51 which are in turn affixed to flanges 52 and 53 of the chute 37. The hanger plate 34 has on its side edges the inwardly bent stops 54. The hanger plate 34 is slotted at 55 and 56 to accom-
25 modate the downwardly extending arms 46. The check plate 45 has affixed to its front end the upstanding agitator 57. An arm 58 extends outwardly and upwardly from the bottom of the chute 37 and is pivoted thereto the forwardly and downwardly extending arm 59 terminating in the pull arm 60 and the handle member 61. At the lower end of hanger plate 34 are two downwardly extending members 62 and 63 hav-
30 ing the backwardly and upwardly directed hooks 64. A magazine assembly 65 is suspended from the said hooks comprising a pair of substantially triangular sides 66 and 67 having the lower edges 68 of curved formation with downwardly extending feet 69 at the lower corners thereof. A curved bottom 70 is affixed to the lower edges of feet 69. The forwardly disposed feet 69 have integrally with the front edges thereof the in-
35 wardly directed stops 71 which taper downwardly

to a reduced dimension. A gate 72 is suspended on a short axle 73 and axle 74 which is curved to form a side arm 75 connected by means of a coil compression spring 76 to a finger 77 on a side of the magazine. Bags 79 adapted to receive the commodity, are placed between the gate 72 and the stops 71 which latter impinge against the lower side edges of the bags 79 as they are forced forwardly by the spring loaded gate 72.

The curved bottom 70 is cut out at its forward edge 80 to permit the downward displacement of the first bag in the magazine as the chute 37 enter and pushes it downwardly. The lower end 81 of the chute 37 is pointed and tipped backwardly at 81' thereof, and normally presses against the unraised flap 82 of the first bag.

A weight 83 is affixed to the rear under side of the bottom 70 and serves to augment the pressure of the bag flap against the point of the chute 37 because of its effect on the free hanging magazine 65.

In the lower portion of the front wall 15 are a pair of spring loaded gates 84 hinged at 85 and having the coiled springs 86. The gates 84 serve to close the lower openings of the delivery chutes 87. The upper ends of the delivery chutes 87 are normally closed by the gates 88 pivoted at 89 and held in position by means of the weights 90. A plate 91 adjacent the bottom 11 of the casing, forms the top of a coin receptacle. Transversely disposed plate 92 forms the rear wall of the coin receptacle.

In use, the operator inserts a coin which serves to release the arm 69. The operator then grasps the handle member 61. A portion of the commodity held in the hopper is normally held in the chute 37 between the confines of the member 41 and the gate 42. When the handle 61 is pulled downwardly and forwardly, the chute 37 is pulled downwardly causing the plate 39 to seal the lower opening of the container, and causing the opening of gate 42 after the chute point 81 has entered the first of the bags 79. The portion of the commodity so segregated is then deposited into said bag. The gate 42 is held normally closed by means of a member 42a which forms the axis of said gate and has a rearwardly extending arm 93, which latter rides on the plate 94 attached on the side of chute 37. The member 42a also has a downwardly directed arm 95 on the opposite end thereof. After chute 37 has moved downwardly far enough to cause arm 93 to ride beyond plate 94, a similar plate 96 on the opposite side of the chute impinges against the arm 96, thus turning it on its axis to open the gate 42. The chute 37 in entering the bag,

causes a withdrawal of the lower corners thereof, from behind the members 71 and the chute continues downwardly to push the first bag and contents down through the cut out portion 80 into the delivery chute 87. The operator may then appropriate the bag and contents, by opening the spring gate 84.

It will be understood that the device is capable of many modifications in structure and design, without departing from the spirit of the invention, within the scope of the appended claims.

Having thus described my invention what I claim and desire to secure by Letters Patent of the United States is:

1. A paper bag magazine for use with a chute having a hook on each of its sides, composed of a container having sides of substantially segmental form and having a curved bottom provided with a bag delivery outlet, and also having an open front, with bag engaging stops, a pair of axes carried by the upper part of the container and having ends extending inwardly and outwardly from the container sides and having their outer ends engaged with the hooks so as to support the container from the hooks, a bag engaging gate in the container having a bifurcated upper end, and having its furcations connected to the inner ends of the axes, so as to support the gate from the axes, one of the axes being extended and formed with an arm which lies exteriorly of the casing, and a spring for tensioning the gate connected to said arm and to the container.

2. A paper bag magazine in accordance with claim 1, wherein the bottom edges of the container sides are curved, and wherein the curved bottom of the container is located spaced below said curved bottom edges of the container and is connected to the latter by feet.

3. A paper bag magazine for use with a chute having a hook on each of its sides, composed of a container having sides and a curved bottom provided with a bag delivery outlet, and also having an open front, with bag engaging stops axle means carried by the upper part of the container and having ends extending outwardly from the container sides and engaged with the hooks so as to support the container from the hooks, a bag engaging gate in the container connected to the axle means, so as to support the gate from the axle means, one of the ends of the axle means being extended and formed with an arm which lies exteriorly of the casing, and a spring for tensioning the gate connected to said arm and to the container.

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