June 21, 1949. H. P. COMPTON 2,474,142

COIN CONTROLLED PACKAGE VENDING MACHINE

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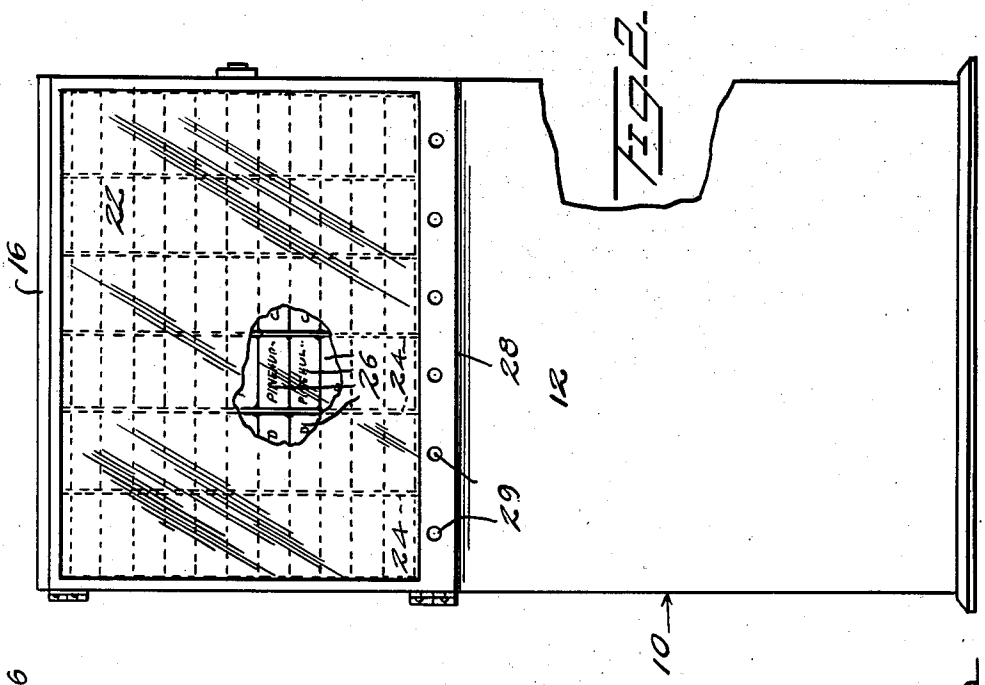

FIG. 2.

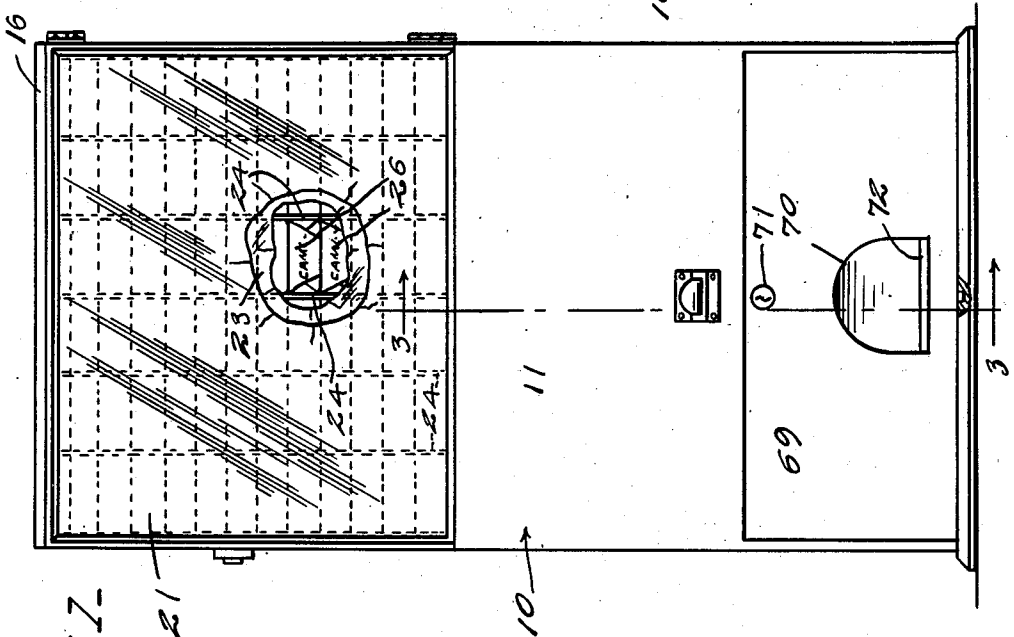

FIG. 1.

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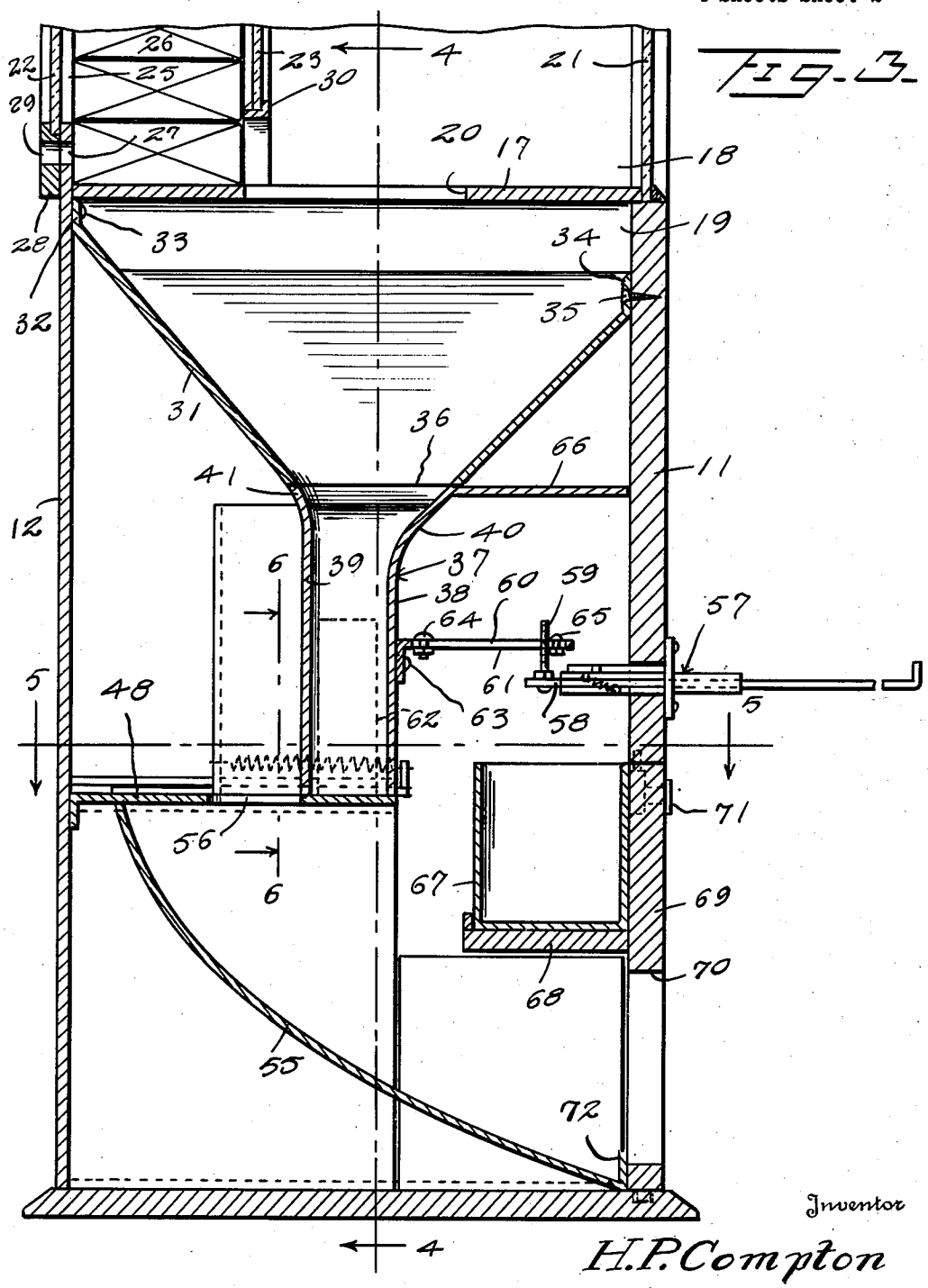
Fig. 3.



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COIN CONTROLLED PACKAGE VENDING MACHINE

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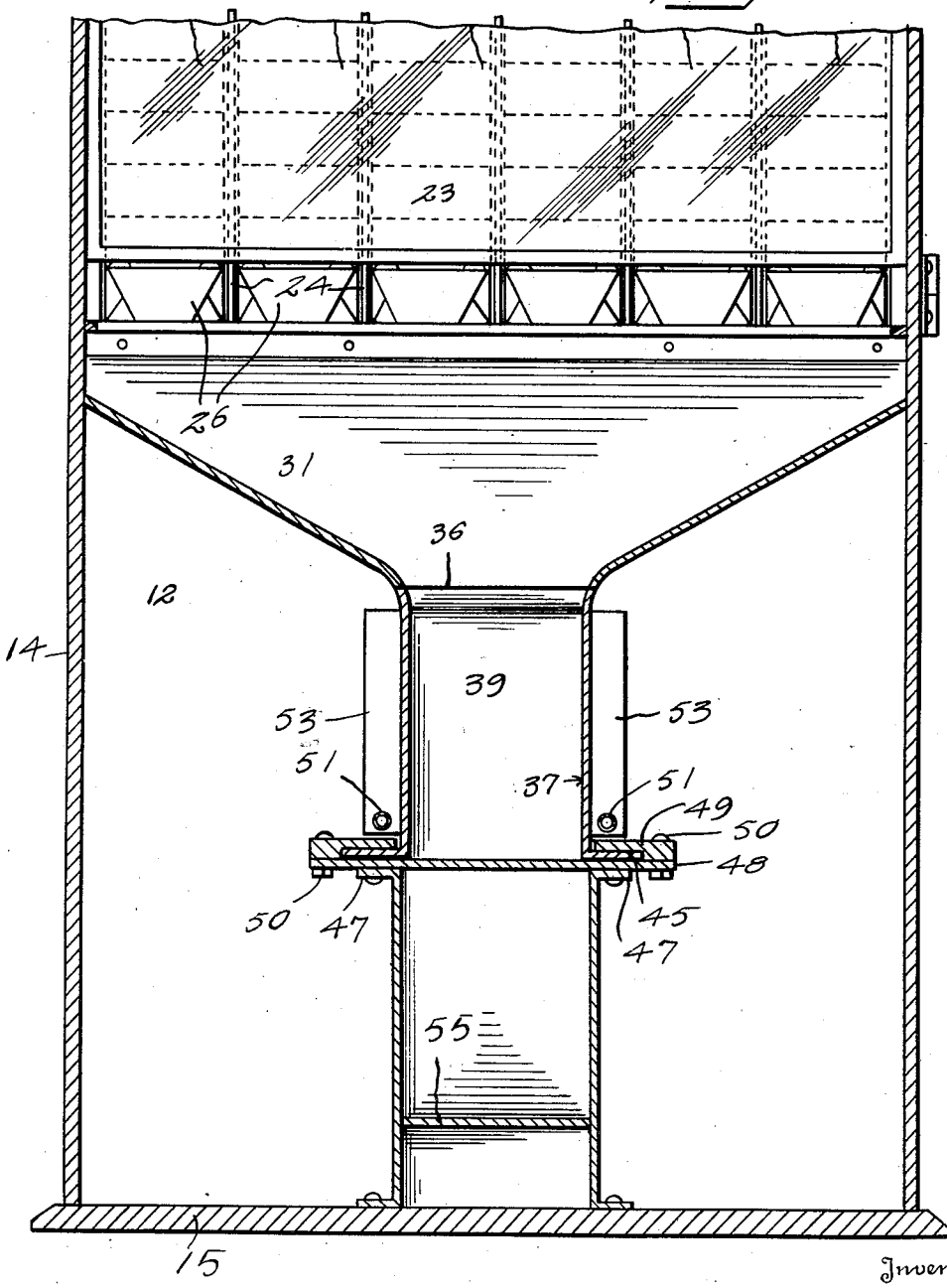
Fig. 4



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COIN CONTROLLED PACKAGE VENDING MACHINE

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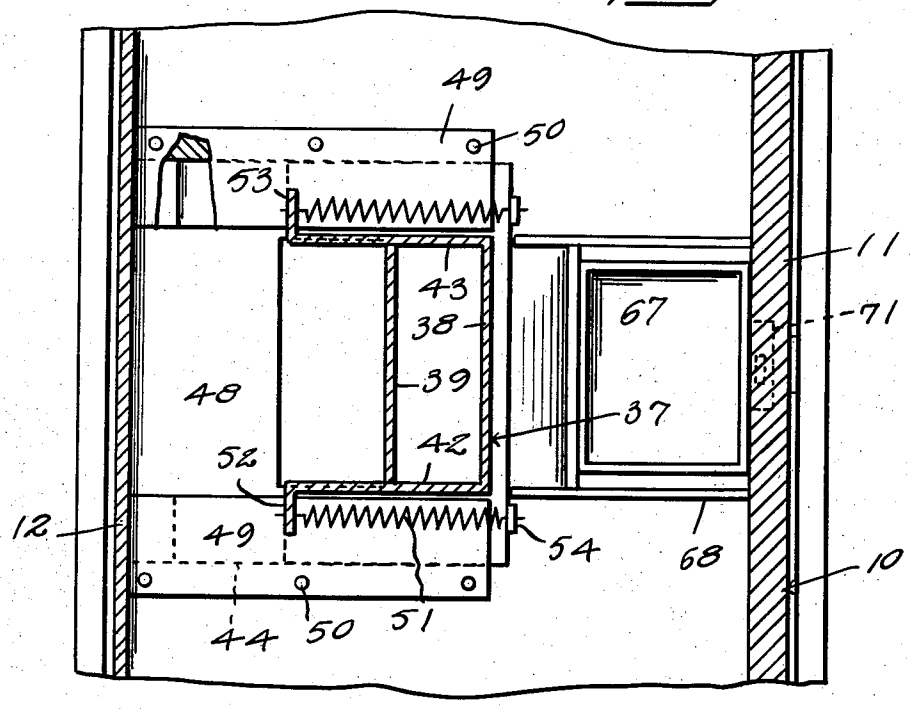
Fig. 5.



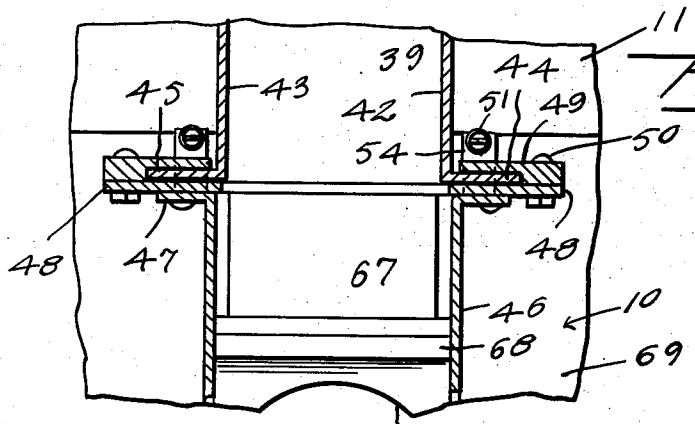


Fig. 6.

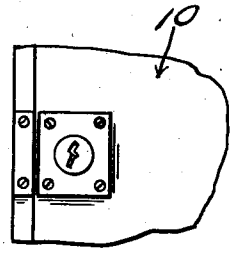


Fig. 7.

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Patented June 21, 1949 2,474,142

UNITED STATES PATENT OFFICE

2,474,142

COIN CONTROLLED PACKAGE VENDING MACHINE

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Application November 29, 1946, Serial No. 712,922

5 Claims. (Cl. 312—35)

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This invention relates to package dispensing or vending devices.

An object of this invention is to provide a package dispensing device for dispensing as an example, packages of cigarettes, wherein the merchant or dealer will select the kind of article to be dispensed and the customer may remove the article by operation of a coin controlled means.

Another object of this invention is to provide a package dispensing machine which is of simple construction and contemplates the initial manual selection of the desired package from a series of magazines, and the coin controlled mechanism for releasing the selected package from the machine.

A further object of this invention is to provide a package dispensing machine of this kind which embodies a dispensing slide connected to the coin controlled mechanism and a delivery chute below the slide, the slide including a cut-off for preventing the dispensing of more than one package at a time.

With the above and other objects in view, my invention consists in the arrangement, combination and details of construction disclosed in the drawings and specification, and then more particularly pointed out in the appended claims.

In the drawings,

Figure 1 is a detail front elevation, partly broken away, of a dispensing or vending machine constructed according to an embodiment of this invention,

Figure 2 is a detail rear elevation, partly broken away, of the device,

Figure 3 is a fragmentary sectional view taken on the line 3—3 of Figure 1,

Figure 4 is a fragmentary sectional view taken on the line 4—4 of Figure 3,

Figure 5 is a fragmentary sectional view taken on the line 5—5 of Figure 3,

Figure 6 is a fragmentary sectional view taken on the line 6—6 of Figure 3,

Figure 7 is a fragmentary front elevation of the lock for the front door of the device.

Referring to the drawings, the numeral 10 designates generally a housing which includes front and rear walls 11 and 12, opposite side walls 13 and 14, a bottom wall 15, and a top wall 16. The housing 10 has mounted therein a horizontally disposed intermediate or dividing wall 17 which divides the interior of the housing into an upper magazine chamber 18 and a lower dispensing or vending chamber 19. The divided wall 17 is formed with an opening 20 through which the

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packages are adapted to pass as will be hereinafter described.

The upper chamber 18 includes a transparent front panel 21, a transparent rear panel 22, and a transparent inner panel 23. A plurality of partitions 24 are disposed between the opposite side walls 13 and 14, thereby dividing the rear portion of the upper chamber 18 into a plurality of magazine chambers 25.

A stacked series of packages 26 are adapted to be disposed in each magazine chamber normally supported on dividing wall 17 and in order to provide for removal of the lowermost packages, the rear wall 12 of the housing 10 is formed with a plurality of openings 27 confronting the lowermost package 26. The rear transparent panel 22 may be mounted in a bezel or frame 28 secured to the rear wall 12, and the lower bar or member of the bezel or frame 28 is formed with openings 29 aligning with the openings 27. In this manner a member, such as a pencil or finger, may be inserted through the openings 29 and 27 so as to thereby push the lowermost package 26 from its magazine chamber forwardly on the wall 17 through opening provided beneath the lower frame member 30 which supports the transparent panel 23 to a position over the opening 20. The released package 26 is then adapted to drop through the opening 20 and will slide downwardly into a hopper 31 which is disposed in the upper portion of the lower chamber 19.

The hopper 31 at its upper rear end is formed with a vertical flange 32 secured by fastening means 33 to the inner side of the rear wall 12. The hopper 31 is also formed with a vertical flange 34 at its forward edge, secured by fastening means 35 to the inner side of the front wall 11. The lower end of the hopper 31 is open, as indicated at 36, so that the dropping package may freely pass through the lower end of the hopper into a vertically elongated tubular coin operated slide or delivery member generally designated as 37.

The delivery member 37 includes a pair of vertically disposed parallel walls 38 and 39 which are flared outwardly at their upper ends, as indicated at 40 and 41 respectively. The two walls 38 and 39 are secured between a pair of side walls 42 and 43 and these side walls are formed at their lower ends with outwardly extending flanges 44 and 45. A slide supporting means is also disposed in the lower chamber 19 and includes upright members 46 which are disposed in spaced apart relation and are formed at their upper ends with outwardly extending flanges 47 on which a plate

48 is fixedly secured. A guide bar 49 is secured to the plate 48 on each side by fastening means 50 and the inner edges of the guide bars 49 are adapted to engage over the flanges 44 and 45 of walls 42 and 43.

The flange 45 is slidingly mounted in the same manner as the flange 44. The slide or delivery member 37 is constantly urged to a forward position, which is the receiving position shown in full lines in Figure 3, by means of a pair of springs 51 which are secured at their rear ends to laterally extending flanges 52 and 53 carried by the walls 42 and 43. The forward ends of the springs 51 are secured to upstanding lugs 54 which are carried by the slide or supporting structure 46. A downwardly and forwardly inclined wall or chute 55 extends from the slide support or plate 48 to the lower end of the front wall 11 and is positioned at its upper end rearwardly of an opening 56 which is formed in the plate 48 at a point rearwardly of the normal forward position of the slide or delivery member 37. In this manner the package to be delivered and dispensed will rest within the delivery member 37 engaged on the upper side of the plate 48, forwardly of the discharge opening 56.

In order to provide for operation or movement of the delivery member 37 by a customer upon insertion of the proper coins, I have provided a coin operator generally designated as 57. The coin operator 57 is of the same type as that embodied in prior Patents Nos. 1,908,380, issued May 9, 1933; 1,908,752, issued May 15, 1933; and 2,373,014, issued April 3, 1945. This coin operator includes an elongated bar 58 which is disposed on the inside of the front wall 11 and has an upstanding bolt or lug 59 secured thereto. The bolt 59 loosely engages in an elongated slot 60 formed in a horizontally disposed bar 61 having a downwardly extending inner end 62 secured by fastening means 63 to the front wall 38 of the delivery member 37. A bolt 64 is disposed through the slot 60 and is adapted to be adjusted lengthwise of this slot so as to provide for the proper movement of the delivery member 37 when the bar 58 is pushed inwardly.

A second or outer bolt 65 may also be extended through the slot 60 at the forward end thereof to provide for the timed forward movement of the delivery member to package receiving position. In order to prevent the delivery of more than one package at a time, I have provided a horizontally disposed plate 66 which is carried by the delivery member 37 and extends forward of the upper end of the inclined upper portion 40 of the front wall 38. This plate 66 is adapted to engage beneath the discharge opening 36 of the hopper 31 when the delivery member is moved inwardly to package delivering position.

A coin receptacle 67 is disposed below the coin operator 57 on the inside of the front wall 11 of the housing 10, being supported on a supporting member 68 which is carried by a lower door or removable panel 69. The door or panel 69 is formed with a delivery opening 70 so that the delivered package sliding down the chute 55 may be removed from the chute by the customer operating the coin operator 57. The door 69 is adapted to be locked by means of a conventional lock 71.

In the use and operation of this device, the packages which may be cigarettes or the like, are placed in the magazines and preferably different kinds of cigarettes are placed in the various magazines. When the customer desires a package of cigarettes, the dealer will insert an instrument through the aligned openings 29 and 27 to push the selected package from the bottom of the stack into the opening 20 of the bottom forming plate 17. The package will then drop downwardly through the hopper 31 into the delivery member 37. The customer will then insert the necessary coins in the coin operator 57 and push the bar 58 inwardly so as to move the delivery member 37 from its receiving position to the delivery position which is overlying the opening 56 of the plate 48. The package will then drop out of the delivery member 37 and slide along the chute 55 to the lower forward end thereof, which may be upturned as indicated at 72, so as to retain the package in the forward end of the chute.

I do not mean to confine myself to the exact details of construction herein disclosed, but claim all variations falling within the purview of the appended claims.

What I claim is:

1. A package vending machine comprising a housing, a plurality of package magazines in said housing, a common hopper below said magazines, an upright tubular package delivery member below said hopper, means slidably supporting said delivery member, a stationary delivery chute below said delivery member, and coin controlled means for effecting movement of said delivery member to delivering position.

2. A package vending machine comprising a housing, a plurality of package magazines in said housing, a common hopper below said magazines each magazine including a rear wall having a lower opening through which a member may be inserted for pushing a lower package from said magazine into said hopper, a package delivery member below said hopper, means slidably supporting said delivery member, a delivery chute below said delivery member, and coin controlled means for effecting movement of said delivery member to delivering position.

3. A package vending machine comprising a housing formed of upright front and rear walls, upright side walls, and top and bottom walls, an intermediate horizontal wall in said housing having an elongated opening and dividing said housing into an upper magazine chamber and a lower delivery chamber, a plurality of upright magazines in said upper chamber, said rear wall having openings therethrough at the lower ends of said magazines whereby a member may be inserted through a selected opening to thereby push a lower package into said opening, a hopper in said lower chamber for receiving the package dropping through said opening, a package delivery slide below said hopper, means mounting said slide for horizontal sliding movement, a spring constantly urging said slide forwardly to receiving position, a plate carried by said mounting means having a discharge opening rearwardly of the normal forward position of said slide, a delivery chute below said discharge opening, and coin controlled means carried by said front wall correlated with said slide for moving said slide from a receiving to a delivering position.

4. A package vending machine comprising a housing formed of upright front and rear walls, upright side walls, and top and bottom walls, an intermediate horizontal wall in said housing having an elongated opening and dividing said housing into an upper magazine chamber and a lower delivery chamber, a plurality of upright magazines in said upper chamber, said rear wall having openings therethrough at the lower ends of said

magazines whereby a member may be inserted through a selected opening to thereby push a lower package into said opening, a hopper in said lower chamber for receiving the package dropping through said opening, a package delivery slide below said hopper, means mounting said slide for horizontal sliding movement, a spring constantly urging said slide forwardly to receiving position, a cut-off plate carried by said slide for closing the lower open end of said hopper when said slide is in delivering position, a plate carried by said mounting means having a discharge opening rearwardly of the normal forward position of said slide, a delivery chute below said discharge opening, and coin controlled means carried by said front wall correlated with said slide for moving said slide from a receiving to a delivering position.

5. A package vending machine comprising a housing, an intermediate horizontal wall in said housing having an elongated opening and dividing said housing into an upper magazine chamber and a lower delivery chamber, a plurality of upright magazines in said upper chamber, one wall of said housing having openings therethrough at the lower ends of said magazines whereby a member may be inserted through a selected opening to thereby push a lower package into said opening, a hopper in said lower chamber for receiving the package dropping through said opening, a package delivering slide below said hopper, means mounting said slide for horizontal sliding movement, means normally urging said slide to receiving position, a plate carried by said mounting means having a discharge opening removed from the receiving position of said slide, a delivery chute below said discharge opening, and coin controlled means carried by one wall of said housing correlated with said slide for moving said slide from a receiving to a delivering position over the discharge opening.

HENRY PURL COMPTON.

REFERENCES CITED

The following references are of record in the file of this patent:

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