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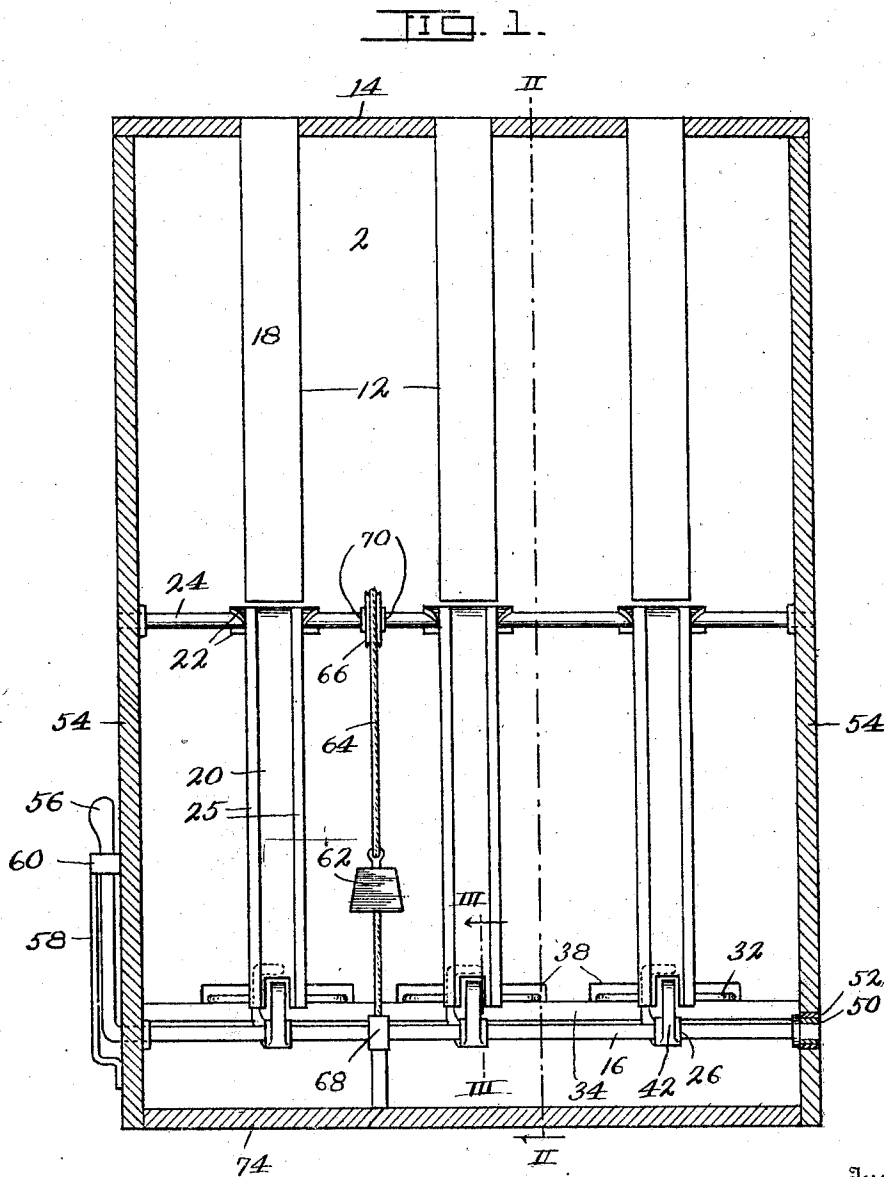
1,525,690

E. W. PETERSON

VENDING MACHINE

Filed May 18, 1923

2 Sheets-Sheet 1



Inventor:

Ernest W. Peterson,

Witness:

Fred C. Rieker.

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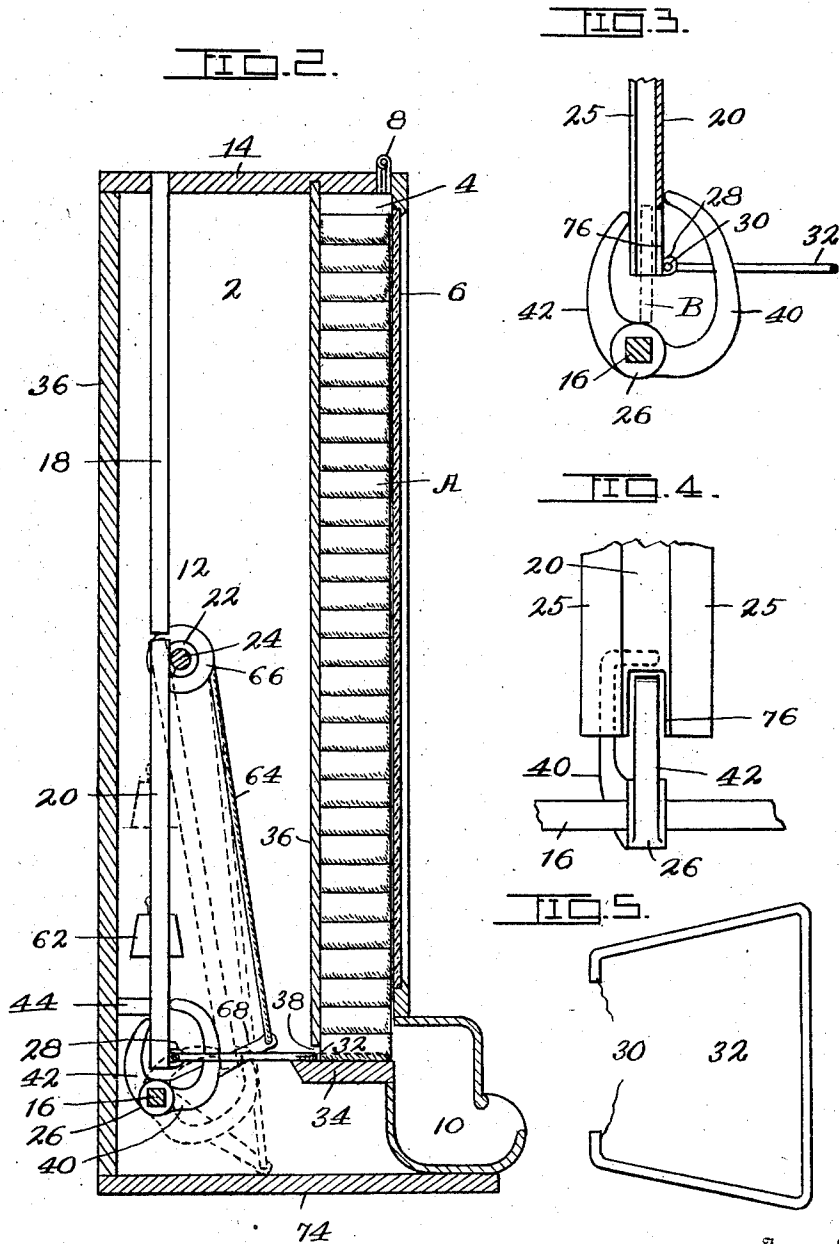
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UNITED STATES PATENT OFFICE.

ERNEST W. PETERSON, OF KANSAS CITY, MISSOURI.

VENDING MACHINE.

Application filed May 18, 1923. Serial No. 639,787.

To all whom it may concern:

Be it known that I, ERNEST W. PETERSON, a citizen of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented certain new and useful Improvements in Vending Machines, of which the following is a specification.

My invention relates to vending machines of that class in which different articles of merchandise, such as gum, chocolate, etc., may be independently vended in the same machine by depositing a coin and operating a single lever or its equivalent.

One object of the invention is to provide a machine of this character which is inexpensive to manufacture, compact in construction, and free from springs so that it will not be likely to get out of order.

A further object is to provide a vending machine in which a deposited coin is utilized to actuate the mechanism for the purpose of ejecting an article of merchandise from the machine, said coin being released after delivery of an article and the machine becoming inoperative until another coin is deposited.

Other objects will hereinafter appear, and in order that the invention may be fully understood, reference will now be had to the accompanying drawings, in which:

Fig. 1 is a vertical sectional view of the machine viewed from the rear.

Fig. 2 is a vertical cross section on line II—II of Fig. 1.

Fig. 3 is an enlarged fragmentary section on line III—III of Fig. 1.

Fig. 4 is a rear elevation of the parts disclosed by Fig. 3.

Fig. 5 is a detail plan view of one of the ejectors.

Referring now in detail to the various parts, 2 designates a case which in the present instance has a plurality of vertically-disposed compartments 4 in which the articles A are stacked. Access is had to the compartments 4 to load the same by a glass or other suitable door 6 connected to the top of the case by hinges 8. Any suitable lock, not shown, may be employed to secure the door 6 in closed position. The lower ends of the compartments 4 communicate with trays 10 into which the ejected articles are delivered and from which they can be readily removed by the vendee.

12 designates a plurality of coin chutes

equal in number to the compartments 4 and extending from the top wall 14 of the case 2 into close proximity with a rock-shaft 16 in the lower portion of said case 2. Each coin chute 12 comprises a stationary upper section 18 and a swingable lower section 20, which latter is provided with a bearing 22 loosely mounted upon a stationary shaft 24 extending across the inner rear portion of the case 2.

Each swingable coin chute section 20 is, preferably, open at its rear portion which is provided with inturned marginal flanges 25 for guiding a coin such as B downwardly upon the underlying boss 26 fixed upon the rock shaft 16. The lower front margin of each swingable coin chute section 20 has turned up portions 28 to receive the inturned rear terminals 30 of an ejector 32, the forward portion of which rests upon the bottom 34 of the compartments 4. The ejectors 32, for the sake of economy, are preferably made of wire of suitable gage and bent into, approximately, U-form and their forward portions normally rest adjacent to the rear portions of the lowermost articles A as best shown by Fig. 2. The rear wall 36 of the compartments 4 has slots 38 through which the ejectors 32 may pass when ejecting the lowermost articles A.

Each boss 26 carries integral front and rear arms 40 and 42, respectively, the former to normally hold the respective swingable coin chute section 20 back against a stop 44, and the latter to cooperate with the respective coin B in swinging said section 20 forwardly to eject an article.

The rock-shaft 16 is mounted in cylindrical bushings 50 journaled in bearings 52 in the side walls 54 of the case 2. One end of said rock shaft 16 extends outwardly through one of the side walls 54 and is bent upwardly to form a handle 56, the upper portion of which projects above a guard 58 fixed to said guide wall to protect said handle. The guard 58 has a stop 60 to limit the backward movement of the lever 56, the shaft 16, and the parts mounted upon said shaft 16.

The shaft 16 and the parts mounted thereon are normally held in backward position as shown by Fig. 2, by a counterweight 62 suspended from one end of a cable 64 running over a sheave 66 and attached at its opposite end to a lever 68 fixed to the rock-shaft 16. The sheave 66 is journaled on the

stationary shaft 24 and held from lateral movement by collars 70 fixedly mounted upon said shaft 24.

Briefly the operation is substantially as follows: On depositing a coin in one of the coin chutes 12, for instance the center coin chute, said coin descends until checked by the centrally-disposed boss 26. The vendee then grasps the handle 56 and swings the same forwardly until checked by the lever 68 contacting the bottom wall 74 of the case 2. The forward swing of the handle 56 rocks the shaft 16, together with the parts mounted thereon, causing the intermediate arm 42 to impinge against the coin and in turn force it against the front wall of the respective coin chute section 12, thereby swinging the same forwardly and causing the associate ejector 32 to push the article A in its path into the tray 10. On releasing of the handle 56 the counterweight 62 rocks the shaft 16 backwardly to normal position and causes the intermediate arm 40 to restore the actuated coin chute section 20 against its stop 44. The intermediate arm 42 also releases the coin B and permits the same to fall from the boss 26 into the bottom of the case 2. When the intermediate arm 42 rocks forwardly against the coin as above stated, the companion arms 42 are also rocked forwardly but as their associate coin chute sections 20 have no coins to impinge against, said arms 42 pass through recesses 76 in said sections 20 and thus fail to actuate the same and the associate ejectors 32. If the vendee desires to obtain three articles simultaneously

he places a coin in each coin chute, whereupon one operation of the handle 56 will effect the simultaneous delivery of the three articles.

From the foregoing description it will be understood that I have provided a vending machine embodying the advantages above pointed out, and while I have shown and described the preferred construction, combination and arrangement of parts, I reserve the right to make such changes as properly fall within the spirit and scope of the claim.

Having thus described my invention, what I claim and desire to secure by Letters Patent, is:

In a vending machine, a case for holding articles to be vended, an ejector for delivering the articles, a coin chute mounted in the case and consisting of an upper stationary section and a lower section swingably mounted at its upper end and pivotally connected at its lower end to said ejector to actuate the same, means for supporting a coin in said chute, a member to engage the supported coin and thereby advance the chute and the ejector on a delivery stroke and release the coin on the return stroke, and another member for returning the chute and the ejector to normal position on release of the coin.

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

ERNEST W. PETERSON.

Witnesses:

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F. C. FISCHER.