

1,038,622.

Patented Sept. 17, 1912.

2 SHEETS—SHEET 1.

Fig. 1.

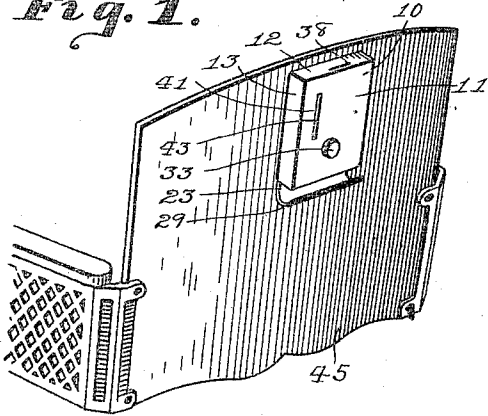


Fig. 2.

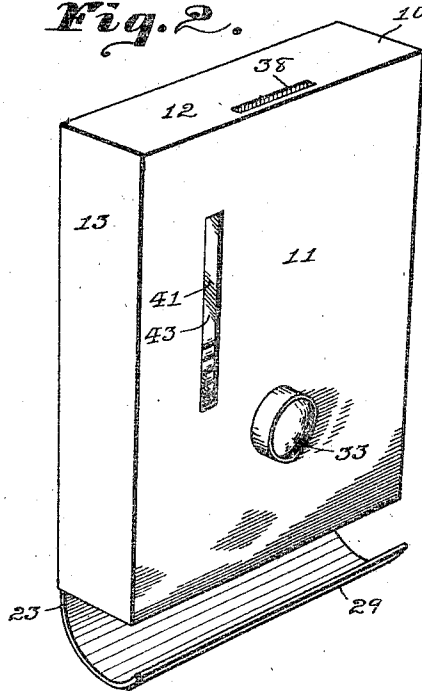


Fig. 3.

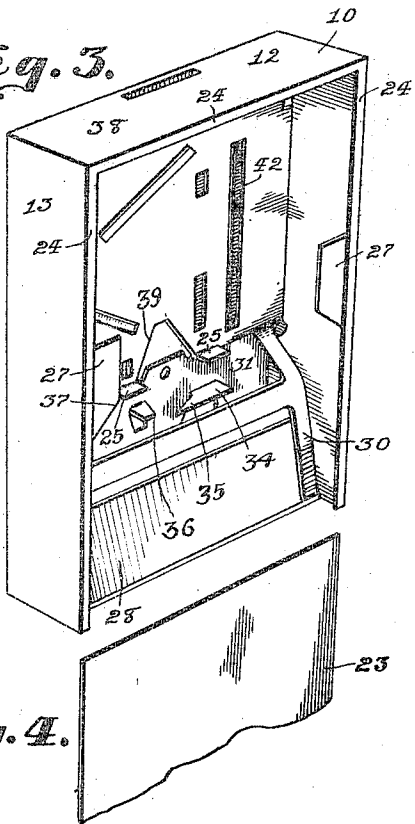
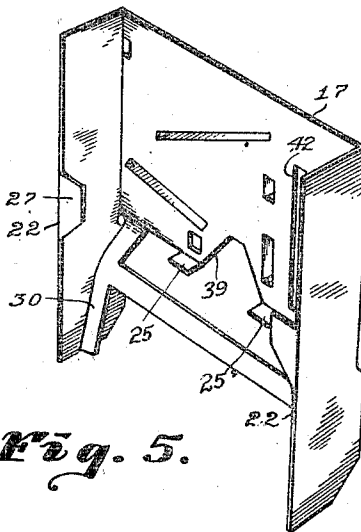


Fig. 4.

Fig. 5.



Witnesses.

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2 SHEETS—SHEET 2.

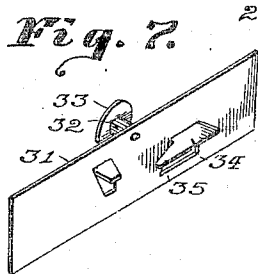
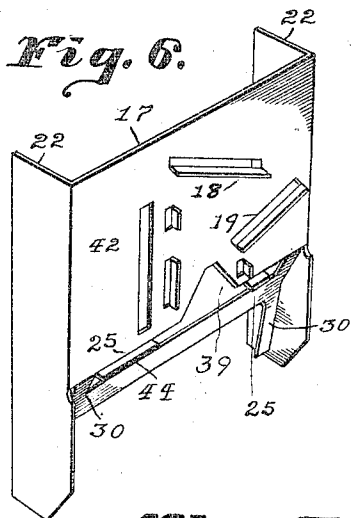
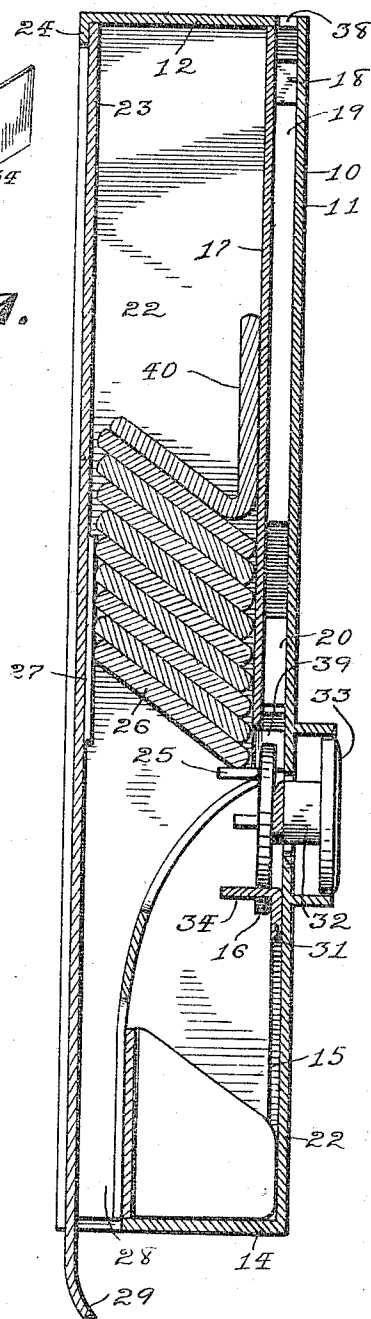
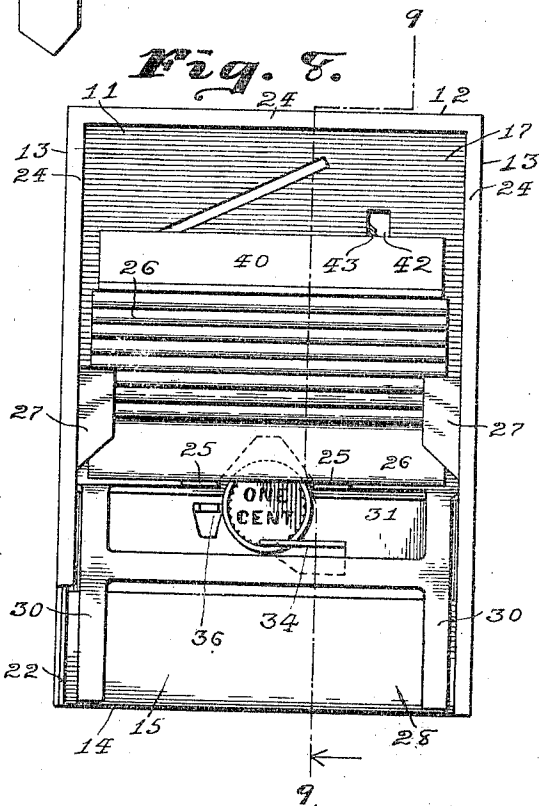


Fig. 7.



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LOUIS K. MEARKLE, OF PHILADELPHIA, PENNSYLVANIA.

VENDING-MACHINE.

1,038,622.

Specification of Letters Patent.

Patented Sept. 17, 1912.

Application filed March 16, 1912. Serial No. 684,232.

To all whom it may concern:

Be it known that I, LOUIS K. MEARKLE, a citizen of the United States, residing at the city of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Vending-Machines, of which the following is a specification.

The principal objects of my invention are first, to provide a machine of comparatively few parts or members operatively mounted in a housing, without the employment of rivets, screws, bolts or other fastening means; second, the provision of a machine in which the deposited coin aided by a support when actuated by a push-button causes the article angularly supported, to be positively released by the coin and delivered and following such, of the coin automatically being dropped into a receptacle therefor; third, the provision of a machine with a support for an article, at an angle thereto, and with a member movable past the support and adapted to receive a coin, the said support being so arranged as to permit the coin to engage the article so as to positively release the same from the support therefor and so as to be delivered, and following such, of the coin dropping into a receptacle provided therefor; fourth, the provision of a machine with channelways arranged so as to incline in opposite directions to a support beneath holding a coin at the end of its travel, and of a support above that for the coin to maintain articles at an angle, and with a member movable into a bellying condition to release the supported articles to be delivered, and of the coin automatically thereafter to drop into a receptacle arranged beneath to receive the same; and fifth, to the provision of a machine of the character described, having certain constructive arrangements of the details, all as hereinafter more fully described.

My invention stated in general terms, consists of a vending machine constructively arranged for operation in substantially the manner hereinafter described and claimed.

The nature, scope and particular characteristic features of my present invention will be more fully understood from the following description taken in connection with the accompanying drawings forming part hereof, in which—

Figure 1, is a perspective view, showing the front of the machine in the operative

relation of the several parts incased for use, applied to the back of an opera-chair, the same embodying main features of my said invention. Fig 2, is an enlarged detached perspective view of the machine in the same form as shown in Fig. 1. Fig. 3, is a perspective view of the rear of the machine, the front case plate being removed in order to show the inner working parts of the machine. Fig. 4, is a similar view of the rear plate of the machine in such position to register when assembled with the working parts of the machine, as shown in Fig. 3. Fig. 5, is a perspective view of the rear of inner portion of an internal part of the machine for supporting the article to be vended and a coin, as well as the incline for directing the release of the said article and permitting of the dropping of the coin between the incline and wall of the housing of Fig. 3. Fig. 6, is a perspective view, showing the front of the said internal part of the machine as shown in Fig. 5. Fig. 7, is a perspective view of the coin supporting resilient strip with its lugs or supports. Fig. 8, is a rear elevation of the machine, showing the internal workings in position and with the rear plate of the same removed so as to expose to view the said parts of the machine; and Fig. 9, is an enlarged, vertical sectional and elevational view through the machine, on the line 9—9 of Fig. 8.

Referring to the several figures of the drawings, in all of which like characters of reference designate like parts, the improved machine comprises, in part, a rectangular sheet-metal housing or casing 10, adapted to contain the working parts and a supply of strips of chewing gum, chocolate or other suitable articles. The casing 10, has an internal front wall 11, with a rearwardly extending top 12, side walls 13, and bottom 14, the latter being turned upward at the rear edge to form a pocket 15, for the reception of a coin 16, when deposited therein. An inner sheet-metal wall 17, is provided which is arranged inwardly of and parallel to the front wall 11, of the housing or casing 10, and is held in spaced relationship with the front wall by the provision of straight portions cut loose and flanged integrally forward, as indicated at 18, 19, 20 and 21. The inner wall 17, has its side edges turned backward to form side walls 22, while the inner wall 17, extends from the top 12, of the

casing 10, down only part way to the bottom 14. The side walls 22, extend the full vertical length of the housing or casing. The rear wall 23, of the housing or casing 10, is inserted upward into place and the side edges project between the flanges 24, of the side walls 13, and the rear edges of the inner side walls 22, while the upper edge passes upward inwardly of the flange 24, of the upper wall 12. The lower edge of the inner wall 17, is provided centrally with two rearwardly extending lips 25, and in placing a supply of strips of gum, chocolate or other suitable articles 26, in the machine, the first stick or piece is placed with the front or lower edge on the said lips and the rear or higher edge leaning rearwardly against inwardly extending wings 27, on the rear edges of the inner side walls 22, as shown in Figs. 8 and 9. The remaining strips or pieces of gum, chocolate or other articles 26, as shown in Fig. 9, rest upon one another and at the same incline as the lowermost one of the pile. When it is desired to release a stick or piece for delivery, the lower or front edge of the lower one is crowded or tripped rearward off of the lips 25, by means later shown; the strip or piece of gum or the like 26, falling downward beyond the coin pocket 15, through the outlet way 28, and dropping on the curved tray 29, formed preferably integral with the rear wall 23, of the housing or casing 10. The strip or piece of gum, chocolate or other article 26, is guided in its dropping movement by two inclining arms 30, and these arms prevent the strip or piece 26, from entering the coin pocket 15, as clearly shown in Fig. 8, of the drawings.

For deriving the releasing movement of a lower strip or piece 26, a coin supporting bar 31, is mounted across the inner surface of the front wall 11, of the casing 10, below the inner wall 17; the ends of the bar 31, are held forward against the front wall 11, by the side walls 22, of the inner wall 17. This bar 31, is made of resilient sheet-metal, so that its central portion lies normally against the front wall 11, and in order to press the central portion rearward for purposes later explained, it is provided with a short stem 32, projecting forward through the front wall 11, and having an extremal push-button 33. A horizontal supporting lug or shelf 34, is formed on the bar 31, by cutting out a small portion of the said bar and bending it downward and rearward, a portion of the lug or shelf being recessed or cut out at 35, and through and behind which the coin 16, supported on its edge drops. A co-acting fixed support 36, for the coin 16, is formed integral with the lower portion of the sheet-metal wall 31, by being struck up therefrom.

In operating the machine, a coin 16, is

deposited in the slot 38, in the upper wall 12, and is guided in its following movement in contact with the flanges 18 and 19, as clearly shown in Fig. 6, and dropping onto the inclined flange 20, as shown in Fig. 9. From this flange 20, the coin 16, rolls toward the center of the machine, dropping down between two small forwardly projecting wings 39, on the lower edge of the inner wall 17, and onto the supporting lugs or shelves 34 and 36, of the bar 31, as shown in Figs. 3, 8 and 9. In such position, the upper edge of the coin 16, projects above the level of the lower edge of the lower strip or piece 26, of gum, chocolate or other matter, so that by pressing in on the push-button 33, to thus spring the central portion of the bar 31 rearward the coin trips the lower edge of the strip or piece from its supporting lips 25, thus releasing and allowing the same to drop through the channelway 28, onto the tray 29, arranged to receive the same, as will be clearly understood from Figs. 2 and 9. In springing the bar 31, backward and producing the tripping movement of the coin 16, the coin is moved from over the co-acting support 36, so that as the strip or piece drops downward the coin will also be released from its supporting lugs or shelves 34 and 36, so as to drop into the coin pocket 15, as clearly shown in Fig. 9. When the lowermost strip or piece 26, is released for delivery, the remaining strips or pieces will each settle downward bringing again the lowermost strip or piece 26, into the position previously occupied by the released one on the supporting lips 25, and by releasing the pressure on the push-button 33, the bar 31, will spring backward against the front wall 11, to receive another coin 16. A weighted plate or the like 40, lies on top of the supply 26, to hold the same in a compact inclined form for delivering, as clearly illustrated in Fig. 9.

An opening 41, is cut in the front wall 11, of the housing or casing, in alinement with a similar opening in the inner wall 17, so that the supply of strips or pieces 26, may be observed and these openings may be closed against entrance or tampering by glass 43. This panel 43, is held in place between the front wall 11, and inner wall 17, by the top and side walls 12 and 13, and by the flanges 21 and 44.

In installing, for use of the machine, the rear wall 23, is fastened securely by any suitable means to the back 45, of an operachair or to any other suitable support, and when it is desired to open the machine or refill it with strips or pieces of gum or other suitable articles, the remaining portion of the machine is lifted in an upward direction from engagement with the wall 23.

The foregoing description is a full, clear

and exact explanation of the internal workings and parts of said machine and also of the manner of using the same; hence

What I claim as novel and new and desirable to secure by Letters Patent is:—

1. In a vending machine, an inclosing casing having an open lower end, a projecting means on the inner surface of a wall of said casing, said means adapted to support edgewise articles to be vended, while opposite edges rest against a wall of said casing, a resilient bar arranged crosswise of said casing for supporting a coin below the level of said projecting means and to permit said coin to trip singly said articles and means manually operated for actuating said bar, substantially as and for the purposes described.

2. In a vending machine, an inclosing casing open at its lower end, a projecting means on the inner surface of a wall of said casing, said means supporting one edge of strips or pieces to be vended while opposite edges rest against a wall of said casing, a resilient bar for supporting a coin below the level of said projecting means and a device to belly the central portion of said bar to cause a strip or piece to be released and thereby said coin automatically to be dropped into a receptacle.

3. In a vending machine, an inclosing casing open at its lower end, a projecting lip on the inner surface of a side wall of the casing, the lip being adapted to support one edge of a strip or piece of gum or the like, while the opposite edge of the strip or piece bears against the side wall, a resilient sheet-metal bar extending across the inner surface of the first-named wall of the casing below the lip, means on the bar to hold a coin in position and means, whereby the central portion of the resilient bar may be manually sprung away from said first-named wall.

4. In a vending machine, an inclosing casing open at its lower end, the casing containing an inner wall parallel with and spaced from one of its side walls, the upper

wall of the casing having an inlet slot communicating with the space between the first-named wall and the inner wall, the lower edge of the inner wall having a lip adapted to support one edge of the article, while the opposite edge bears against the wall of the casing, a coin support arranged on the inner surface of the first-named wall below the inner wall and adapted to hold a coin in position so as to project above the level of the lip of the inner wall and manually operated means to move the coin support toward the opposite wall, whereby the coin carried by the support trips the edge of the article from said lip.

5. In a vending machine, an inclosing casing open at its lower end, the casing containing an inner wall parallel with and spaced from one of the side walls, the upper wall of the casing having an inlet slot communicating with the space between the first-named wall and the inner wall, the lower edge of the first-named wall being turned inward and upward to form a pocket for a coin, the lower edge having means adapted to support one edge of an article with the opposite edge bearing against said casing, a resilient device arranged across the inner surface of said first-named wall, means on said bar to catch and hold a coin inserted in the inlet slot, the inner wall provided with guiding flanges to lead the coin to the supporting means of said bar, the holding means of said bar being arranged to so support the coin as that the upper portion projects above the lower edge of said article, said bar having a manual operating device extending through the first-named wall and means to cause the coin to be released from the holding means of said bar, when pressed inward from said first-named wall.

In witness whereof, I have hereunto set my signature in the presence of the two subscribing witnesses hereto.

LOUIS K. MEARKLE.

Witnesses:

J. WALTER DOUGLASS,
THOMAS M. SMITH.