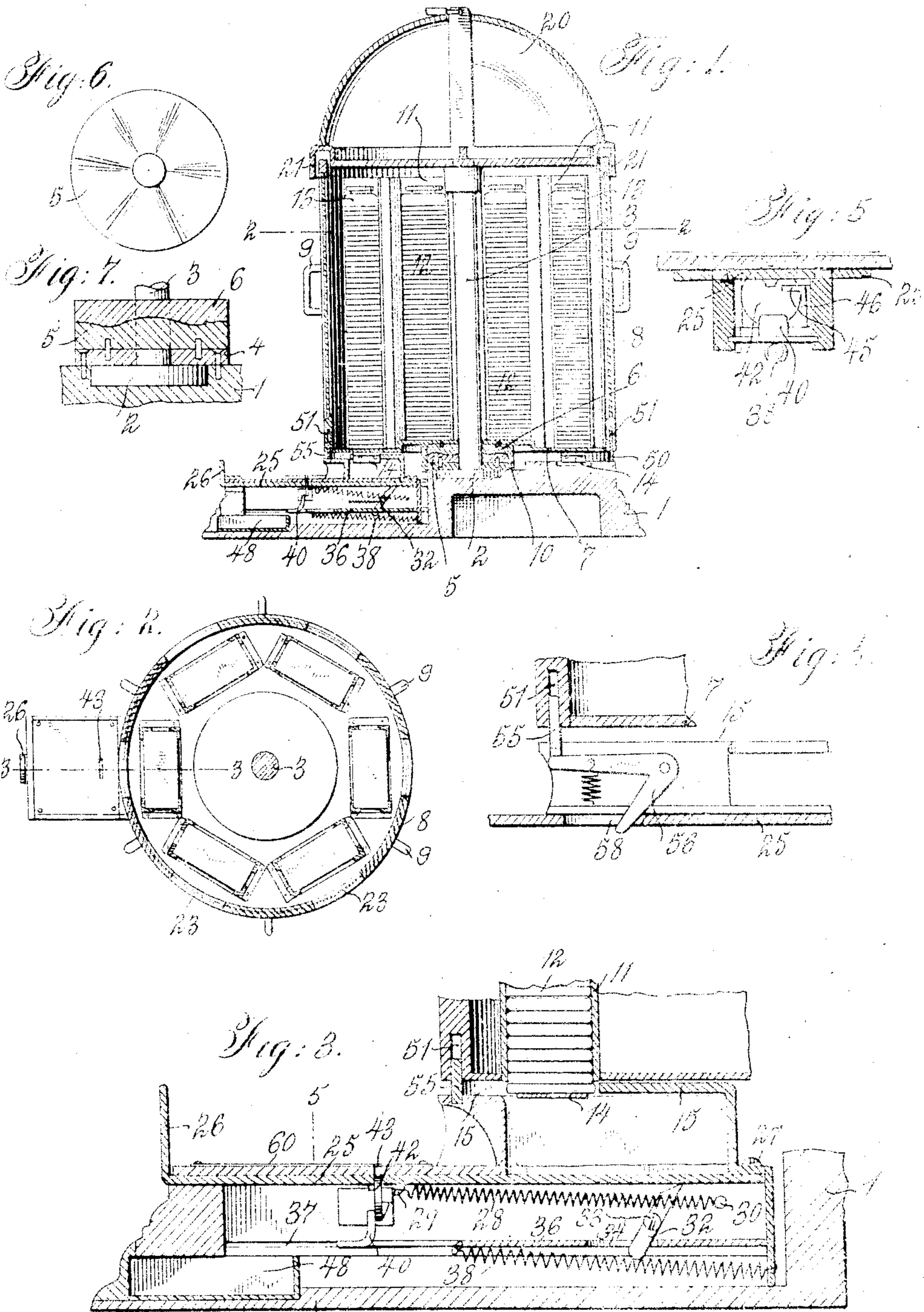


J. P. MUNCH.
SLOT MACHINE.

APPLICATION FILED DEC. 3, 1905.



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JOHN P. MUNCH, OF NEW YORK, N. Y.

SLOT-MACHINE.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JOHN P. MUNCH, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented new and useful Improvements in Slot-Machines, of which the following is a specification.

This invention relates to slot machines such as are adapted to be operated upon the insertion of a coin to deliver a package containing any suitable material.

10 The objects of the invention are to improve and simplify the construction of such machines; furthermore to increase their durability and efficiency in operation, as well as to decrease the expense attending their manufacture.

15 With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed as a practical embodiment thereof.

20 In the accompanying drawing forming part of this specification; Figure 1 is a vertical central section through a machine constructed in accordance with the present invention. Fig. 2 is a horizontal section on the line 2—2 of Fig. 1. Fig. 3 is an enlarged vertical section on the line 3—3 of Fig. 2. Fig. 4 is a sectional detail view. Fig. 5 is a vertical transverse section. Fig. 25 6 is a detail view of one of the plates for causing the revolving chamber to stop at the proper point over the stationary slot mechanism. Fig. 7 is a detail vertical section showing the base of the vertical shaft, and the cooperating cam plates.

Like reference numerals indicate corresponding parts in the different figures of the drawing.

35 The reference numeral 1 indicates a base member which may be of any suitable form and construction. Seated in the suitable depression formed in the base 1, as shown in Fig. 7, is a plate 2 to which is rigidly secured a vertical shaft 3. The plate 2 is held in position by means of a cover plate 4. Resting upon the plate 4, and securely fastened thereto in any suitable manner is a cam member 5 having an irregular upper surface as indicated in Figs. 6 and 7. Cooperating with the cam member or plate 5 is a similar cam member 6 which is securely fastened to the bottom 7 of a rotary receptacle 45 8 which surrounds the vertical shaft 3 and is adapted to be rotated thereon by means of suitable handles 9. The bottom 7 of the rotary receptacle 8 is formed with a depending annular member or ring 10 which surrounds the cam plates 5 and 6. The rotary receptacle 50 8 is formed with a plurality of vertical compartments such as 11 adapted to contain columns of packages 12 and provided with suitable weights 13 for forcing the packages downward. The lower end of each vertical compartment 11 is partially closed by a plate 14 which is so shaped that a suitable plunger 15 connected with the coin mechanism hereinafter described may move

across said plate 14 and force outward the lowest package 12, as hereinafter described. That is to say the two ends of each plate 14 are bent upward and riveted to the bottom 7 of the receptacle 8, as indicated in Fig. 1, 60 whereas the portion of each plate 14 intermediate the ends thereof is disposed about on a level with a ledge 17, formed on the base member as shown in Fig. 3, to receive the package which is forced out of the compartment by the plunger 15, in the manner hereinafter described. 65

Secured in any suitable manner to the upper end of the vertical shaft 3 is a dome 20 which is provided with a depending annular flange 21 fitting outside the upper end of the rotary receptacle 8. It will be understood 70 that the shaft 3 and the dome 20 are stationary and do not rotate with the receptacle 8.

As indicated in Fig. 2, the rotary receptacle 8 is provided with a narrow piece of glass 23 in front of each vertical compartment 11 so as to show at all times whether 75 or not the compartment is empty.

The stationary base member 1 is provided in one portion thereof with a suitable coin controlled mechanism by means of which a package may be withdrawn or extracted from any one of the compartments 11 which may 80 have been moved over said coin controlled mechanism by manually rotating the receptacle 8. While any suitable mechanism may be used for this purpose, it is preferred to employ a slide such as 25 having a handle 26. The plunger 15 is suitably secured to the rear end of the slide 25 as indicated at 27. The slide 25 is normally drawn into retracted position by means of a coil spring 85 28 secured at its forward end to a hook 29 on said slide 25 and at its rear end to a pin 30 suitably connected with the base 1. The slide 25 is locked in retracted position 90 by a lever 32 pivoted on the base 1 as shown at 33 and formed with a pointed upper end which engages any one of a series of teeth formed in the under-surface of the slide 25. The lower end of the lever 32 projects through a suitable slot 34 formed in an auxiliary sliding 95 plate 36 mounted to slide in grooves 37 formed in the base 1. The auxiliary plate 36 is nearly drawn into contracted position by means of a coil spring 38 mounted in manner similar to the coil spring 28. The plate 36 is formed with an upward projection 40. 100

It will be apparent to those skilled in the art to which this invention relates, that under normal conditions the lever 32 prevents the slide 25 from being drawn forward. When however a coin such as 42 is inserted through the slot 43 so as to lock the slide 25 and the 105 auxiliary plate 36 together in the old and well known manner, pulling movement upon the handle 26 causes both the slide 25 and the plate 36 to move forward simultaneously, the plate 36 of course rocking the lever 32 so that its upper end becomes disengaged from the slide 25 and permits said slide to be drawn forward. As the slide 26 is moved outward, the coin 42 comes in en- 110

gagement with the beveled or inclined edge 45 of a bracket 46 whereby the coin is forced out of engagement with the hook 40 and drops into a money drawer 48. The inclined member 45 by which the coin 42 is forced to one side, is old and well known in this art, and no specific claim is made thereto. The base member 1 is provided around its entire periphery, except at a point beyond the coin controlled mechanism, with annular flange 50 which extends upward into an annular groove 51 formed in the lower periphery of the rotary receptacle 8. At a point over the coin controlled mechanism, the stationary annular flange is discontinued, and in its stead is provided a vertically movable gate 55 shown in Fig. 4. The gate 55 is adapted to be forced upward into the annular groove 51, by means of a pair of bell crank levers 56 mounted on opposite sides of the ledge 17. The lower member of each lever 56 extends through a slot 58 formed in the slide 25. At the moment the slide 25 is drawn forward the levers 56 mounted at the opposite ends of the gate 55 are rocked, so as to push said gate upward and thus permit the plunger 15 to force the lowest package 12 out upon the ledge 17, so that it drops down on to the cover plate 60 of the slot mechanism. As soon as the slide 26 is drawn backward by the spring 28, the levers 56 permit the gate 55 to drop down so as to prevent the insertion of any instrument which might be used for surreptitiously withdrawing packages from the machine. The gate 55 when in its lowest position preferably rests in a groove formed in the ledge 17 as indicated in Fig. 3.

The plunger 15 preferably is formed of a length greater than the width of the packages 12 so that while it is forcing out the lower package, it upholds the remaining packages until it is completely withdrawn

from the compartment 11 by the rearward movement of the slide 25, after which the packages 12 descend so that a new package rests on the bottom plate 12.

It will be understood that the cam plates 5 and 6 shown in Fig. 7, are employed so as to cause the rotary receptacle 8 always to come to rest with one of the compartments 11 directly in position over the coin controlled mechanism.

Having thus described the invention what is claimed as new is:—

1. In a vending machine, an ejector, a cylindrical rotary receptacle having a circumferential groove at its lower edge, a base, a flange on the base extending up into the groove and having an interrupted part in register with the ejector, a gate preserving the continuity of the flange, and means interposed between the gate and ejector for opening the gate as the ejector is shifted to discharge an article.

2. A slot machine comprising a base, a stationary vertical shaft on said base, a stationary dome on said shaft, a depending annular flange on said dome, a rotary receptacle surrounding said vertical shaft and fitting at its upper end inside the depending flange of the dome, said rotary receptacle being formed at its lower end with an annular groove, a stationary annular flange on said base extending upward into the annular groove of the receptacle, a plurality of vertical compartments in the rotary receptacle, a closing plate at the bottom of each compartment, a ledge on said base adapted to receive packages forced out of the vertical compartments, a gate mounted on said ledge, angle levers for operating said gate, a slide for operating said angle levers, and a plunger connected with said slide for forcing out packages from said compartments on to said ledge.

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

JOHN P. MUNCH.

Witnesses:

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I. BALCH LOUIS.