

J. W. THOMPSON.
 VENDING MACHINE.
 APPLICATION FILED MAY 1, 1911.

1,064,941.

Patented June 17, 1913.

3 SHEETS—SHEET 1.

Fig. 1.

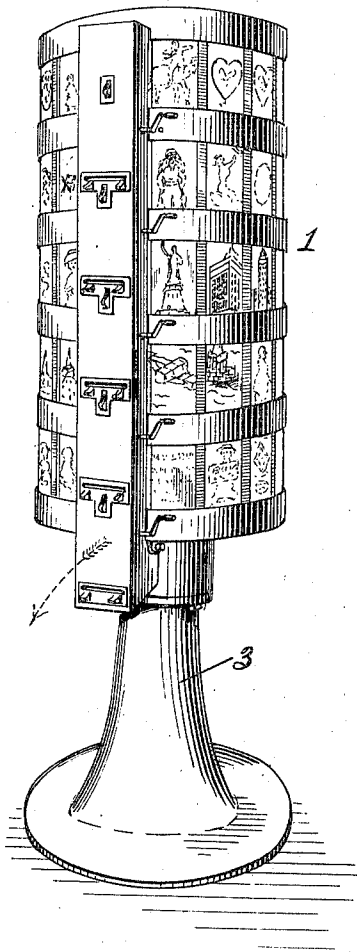
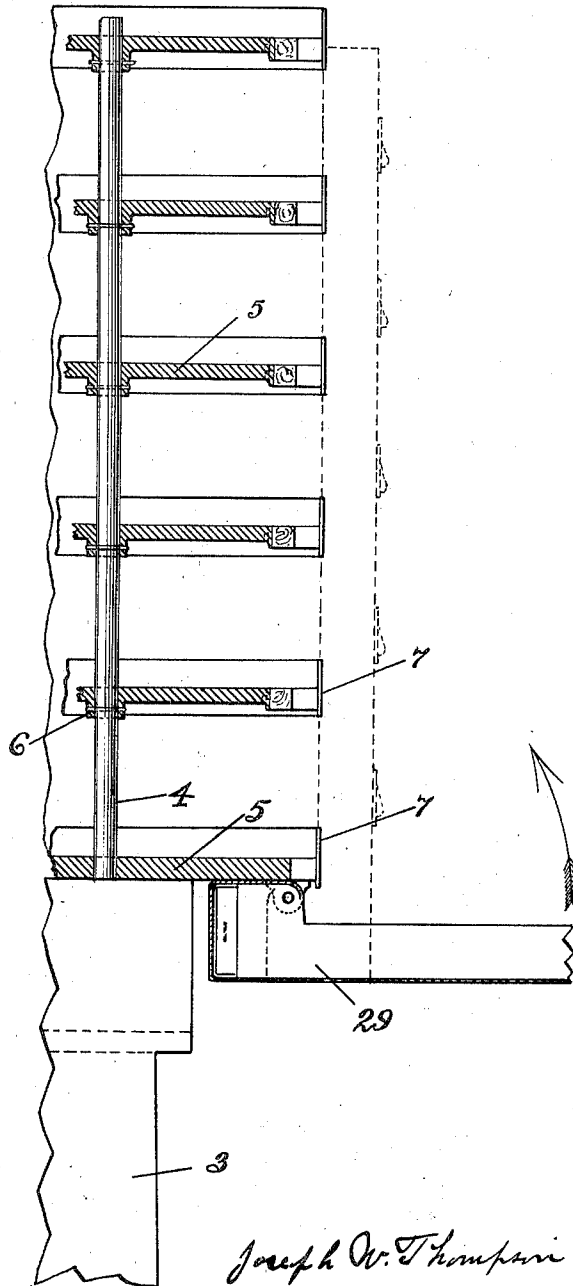


Fig. 2.



Witnesses:
A. M. Chubberty
S. R. Warrick

Joseph W. Thompson
 Inventor
Stewart & Stewart
 By Attorney's

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3 SHEETS—SHEET 2.

Fig. 3.

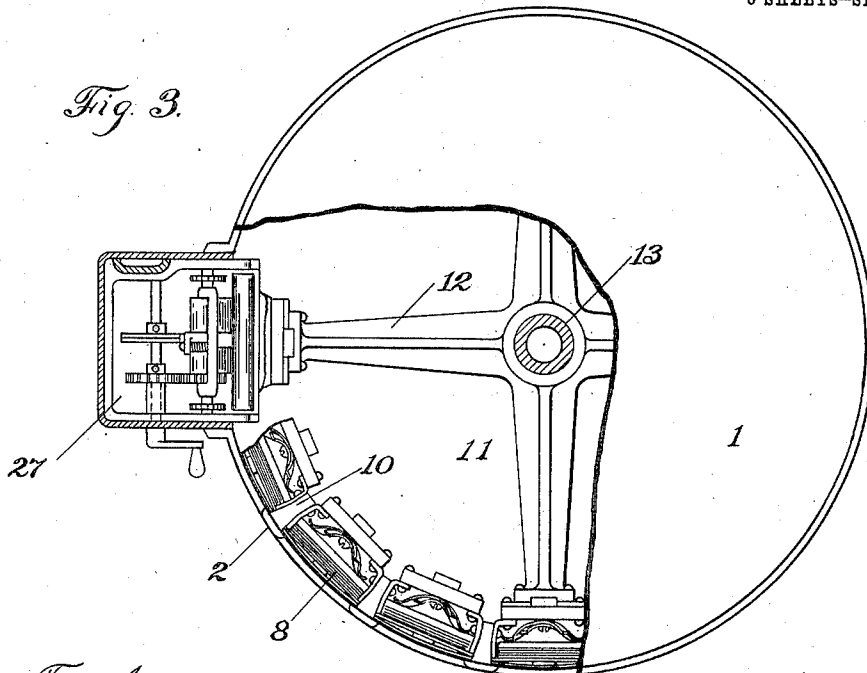
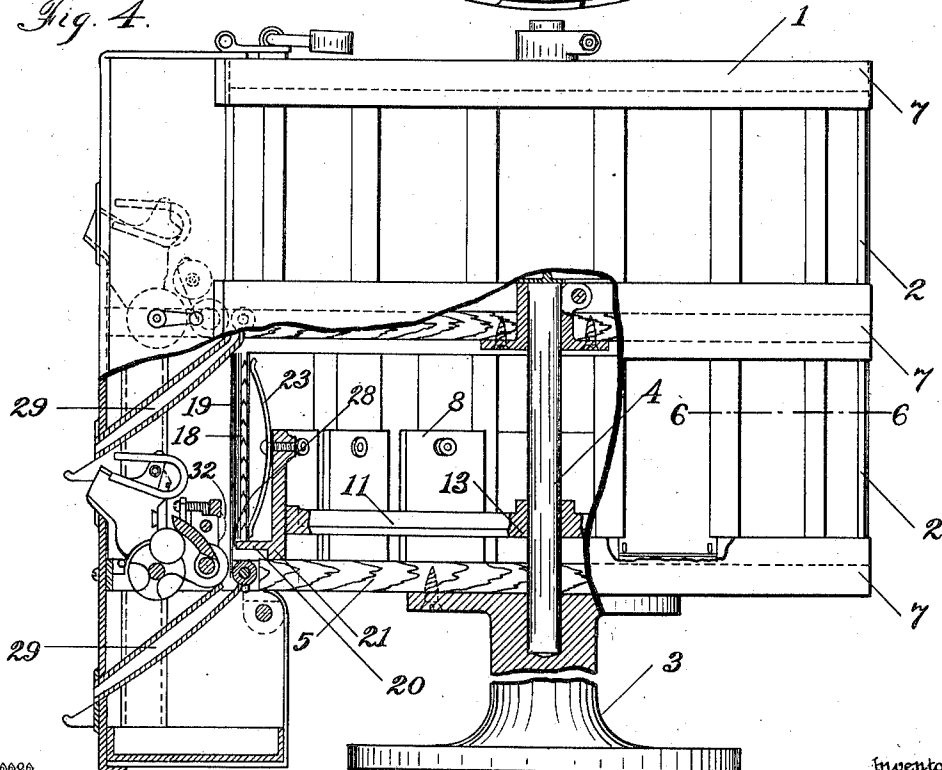


Fig. 4.



Witnesses
 A. W. C. Fluharty
 S. R. Warrick

Inventor
 Joseph W. Thompson
 by S. Stuart & Stewart
 Attorneys

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3 SHEETS—SHEET 3.

Fig. 5.

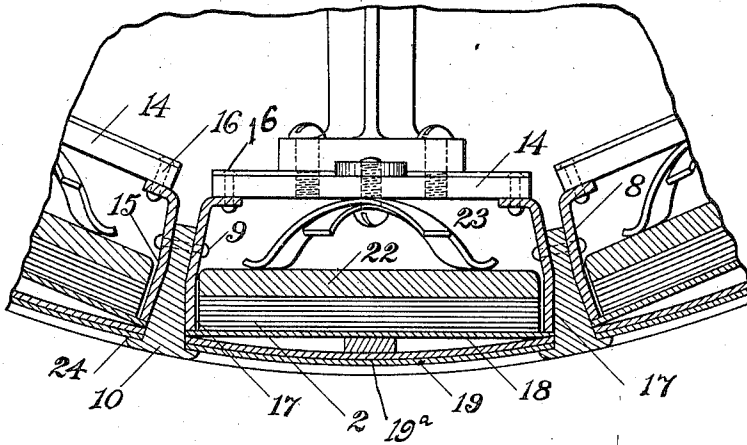


Fig. 6.

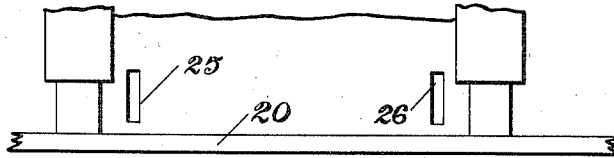


Fig. 7.

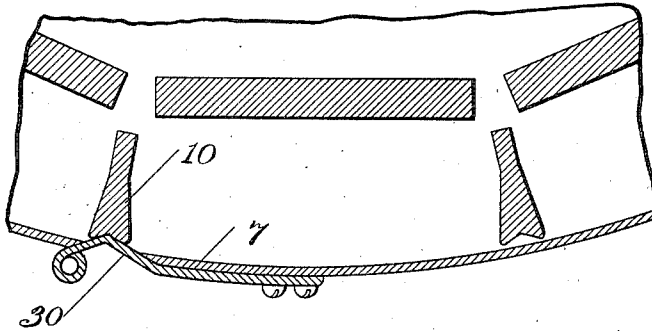
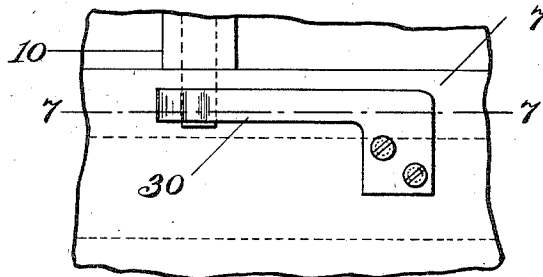


Fig. 8.



Inventor

Joseph W. Thompson
by

Stewart & Stewart

Attorneys

Witnesses

A. M. C. Fluharty

S. R. Waruker

UNITED STATES PATENT OFFICE

JOSEPH W. THOMPSON, OF NEW YORK, N. Y., ASSIGNOR TO UNIVERSAL VENDING MACHINE COMPANY, A CORPORATION OF ARIZONA.

VENDING-MACHINE.

1,064,941.

Specification of Letters Patent.

Patented June 17, 1913.

Original application filed November 28, 1910, Serial No. 594,494. Divided and this application filed May 1, 1911. Serial No. 624,416.

To all whom it may concern:

Be it known that I, JOSEPH W. THOMPSON, a citizen of the United States of America, residing at city, county, and State of New York, have invented certain new and useful Improvements in Vending-Machines, of which the following is a specification.

This application is a division of the one filed by me under date of November 28th, 1910, Serial No. 594,494, entitled "Vending machine".

It relates to the dispensing apparatus which forms a part of the machine described in my original application.

Described in general terms, my apparatus, in its preferred form, consists of one or more rings or cylinders mounted to rotate upon an upright shaft. Each of these rings is formed of a plurality of card containers, each adapted to hold a pack of cards, and provided with an exhibition window at which one card, as a sample of those in that particular container, may be exposed to the view of the customer. The bottom of each container is slotted near one wall, and resilient means is provided to press the cards toward the wall beyond the slot so that one card is always free to move through the slot when the friction between that card and the wall and the remainder of the pack, caused by the pressure of the resilient means referred to, is overcome. Preferably, there is a front wall back of the window and just beyond the slot, separating the exhibition card from the rest of the pack, and the front card of the pack, which is outermost radially of the cylinder, is in registration with the slot.

In the preferred form of my invention I provide extracting mechanism, which is in multiple form to correspond to the number of rings or cylinders composing the dispensing apparatus. These extractors, as shown, extend parallel to the axis along one side of the main cylinder formed by the one or more small cylinders or carrier rings, composed each of a circularly placed set of containers, to which I have referred, so that when a card has been selected, the container in which it is placed may be swung into registration with the extractor and the latter operated by a suitable means, as coin controlled mechanism, and a card thus removed from the container.

A vending machine embodying the dispensing apparatus of my invention is shown in the accompanying drawings.

Figure 1 is a perspective view of my vending machine in its complete form. Fig. 2 is a fragmentary, vertical, central section of the frame, the rings of containers being removed and the extractor mechanism being shown in dotted lines and in open position in full lines. Fig. 3 is a plan view of the vending machine, the top being broken away to show the dispensing apparatus and extractor mechanism in plan. Fig. 4 is an elevation of the vending machine, a portion of the casing being broken away to show the dispensing apparatus and extractor in vertical, central cross-section. Fig. 5 is an enlarged, horizontal cross-section of portions of three containers forming part of a ring. Fig. 6 is a fragmentary elevation of a single container. Fig. 7 is a fragmentary section on the line 7, 7, Fig. 8, through a container ring. Fig. 8 is a fragmentary elevation showing the positioning means.

The vending machine consists of a cylinder indicated in a general way by reference character 1 and composed of one or more carrier rings 2 of card containers. It rests upon a pedestal 3 in which is mounted an upright shaft 4. Resting upon the top of the pedestal 3 is a circular plate or table 5, through the center of which the shaft 4 passes. If the dispensing apparatus includes more than one carrier ring or cylinder, several tables 5 are provided. These are placed one above the other concentric with the shaft 4 and rigidly secured thereto by any suitable means as pins 6. Encircling each table is an upright band 7 which is discontinued opposite the extractor mechanism as herein-after described. These bands are shown in elevation in Fig. 2. Resting upon each plate or table 5 to rotate thereon about the shaft 4 is a ring 2 of containers 8. These containers are secured together to form rings by any suitable means as rivets 9, and, as shown, are spaced apart by radial blocks 10 which may be tapered to conform to the sides of the containers 8. Each carrier embodies a spider 11 consisting of four or more arms 12 which radiate from a hub 13 which is journaled upon the shaft 4. The arms, at their extremities, are secured to the back or inner walls of the adjacent containers.

The containers or boxes consist each of an upright, inner or back wall 14, side walls 15 are secured thereto in any suitable manner as by rivets 16. These side walls, as shown, have their inner portions parallel to the

radii of the carrier ring, and their outer portions are at right angles to the back and front walls so as to give a receptacle for the cards, having parallel walls as at 17. The front of the container, as shown, consists of a plate 18 beyond which is a transparent sheet 19, shown as bowed outward to form a cylindrical surface concentric with the shaft. An exhibition card 19^a is placed behind the transparent window 19. The bottom of each container, as shown, consists of a plate 20 integral with the back 14 and at right angles thereto. The front edge of the plate 20 is spaced backward a short distance from the lower edge of the front plate 18 so as to leave a slot 28 for the exit of the top card of the pack when acted upon by the extractor mechanism. This bottom plate is preferably provided with a depending runner or flange 21 which has a bearing on the circular table or plate upon which the carrier ring rests. In each container is a sliding block or follower 22 to engage the rear of the pack. This is free to move between the parallel portions 17 of the side plates 15, and is pressed forward by means of bowed springs 23 against the pack of cards.

As shown, the front plate 18 and the window plate 19 are held in position by beads 24 on the spacing blocks 10. These take over the edges of the said plates when the carrier ring is set up. Spacing blocks 10 are cut away, as shown in Fig. 6, to form a groove for the rings 7, and the latter are discontinued opposite the extractor mechanism to permit access of the card engaging means carried by the latter to the cards in the carrier. The front plate of each container is slotted at 25 and 26 (see Fig. 6), and the extractor 27, which is fully described in my original application, is provided with friction wheels 32 which, when properly actuated, enter these slots and engage the top card of the pack, and by their rotation move it downward from its position in the container through the slot 28 in the bottom wall 20 and the front plate. It is then delivered by way of chute 29. To position the carrier rings in exact registration with the extractor, I notch each spacing block 10 and provide a spring detent 30 on the ring 7 to cooperate therewith.

In the operation of the apparatus, packs of cards, of each variety of those on sale, are placed one in each container. The machine may consist of as many carrier rings as desired placed in the form of a cylinder. Thus cards of any number of varieties desired, may be placed upon exhibition. The purchaser rotates each container or moves

around the cylinder to inspect all the cards displayed. When he chooses one, he rotates the carrier ring, of which the container carrying the cards of that particular variety forms a part, and when such container registers with the extractor mechanism, the latter is actuated by any suitable means and the card removed.

I have thus described in minute detail a single embodiment of my invention in order that its operation may be clearly understood. However, I do not limit myself to the particular features described. The specific terms herein are used in their descriptive rather than in their limiting sense, and the scope of the invention is defined in the claims.

I claim—

1. In a card vending apparatus, a dispensing cylinder consisting of a plurality of rotary carrier rings, each ring consisting of card containers, each container having an exhibition pocket and a chamber for a pack of cards, each pocket having a transparent window, said window forming the cylindrical surface of the ring overlying the corresponding container, means for pressing a pack of cards toward one wall of the container, the container being slotted adjacent the wall to release the front card of the pack and an extractor mechanism with which each container may be brought into operative relation, the container being apertured to admit the operative portion of the extractor.

2. In a card vending apparatus, a dispensing cylinder consisting of a plurality of rotary carrier rings all mounted to rotate about a common axis, of substantially the same diameter and placed adjacent each other, each ring consisting of card containers, each container having an exhibition pocket having a transparent window, said window forming the cylindrical surface of the ring overlying the corresponding container, and a spring to press a pack of cards toward one wall of the container, the container being slotted adjacent the wall to release the front card of the pack, and an extractor mechanism with which each container may be brought into operative relation, the container being apertured to admit the operative portion of the extractor.

Signed by me at New York city N. Y., this 18th day of April 1911.

JOSEPH W. THOMPSON.

Witnesses:

EVAN L. TAMBLYN,
CHARLES D. EDWARDS.