J. L. WEED.

COIN CONTROLLED VENDING MACHINE.

APPLICATION FILED JUNE 5, 1908.

921,763. Patented May 18, 1909.

2 SHEETS—SHEET 1.

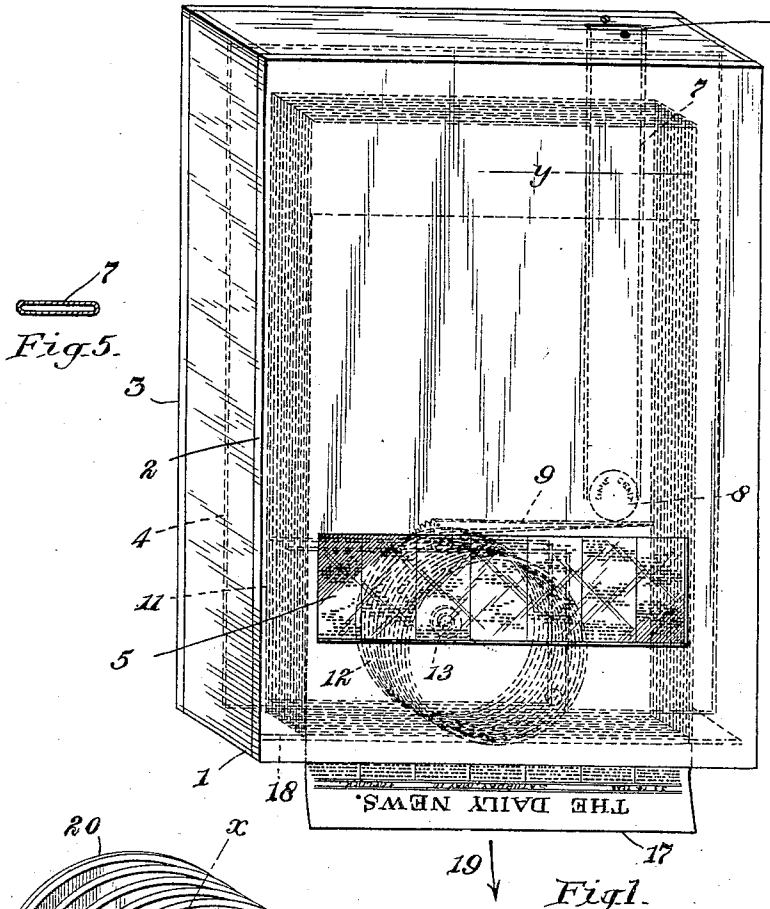


Fig. 1.

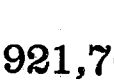


Fig. 5.

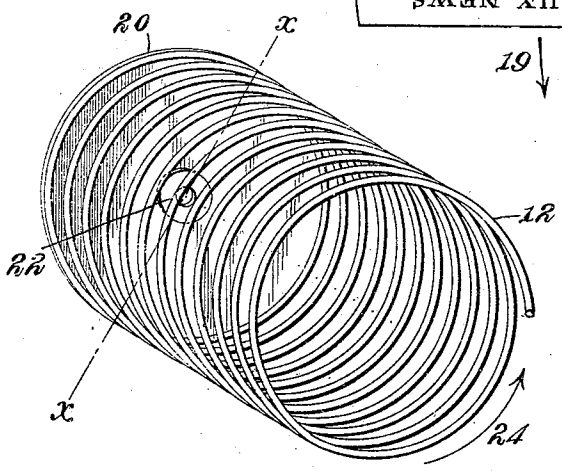


Fig. 3.

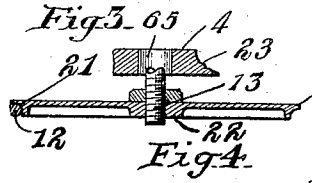


Fig. 4.

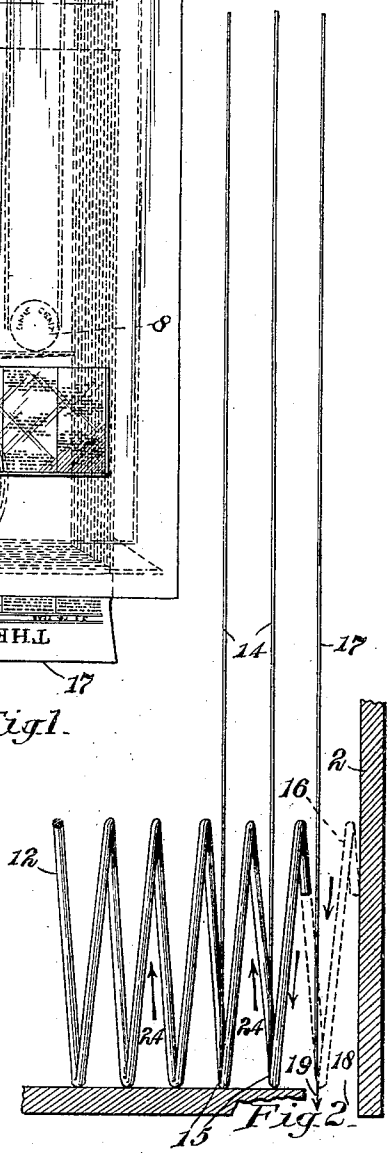


Fig. 2.

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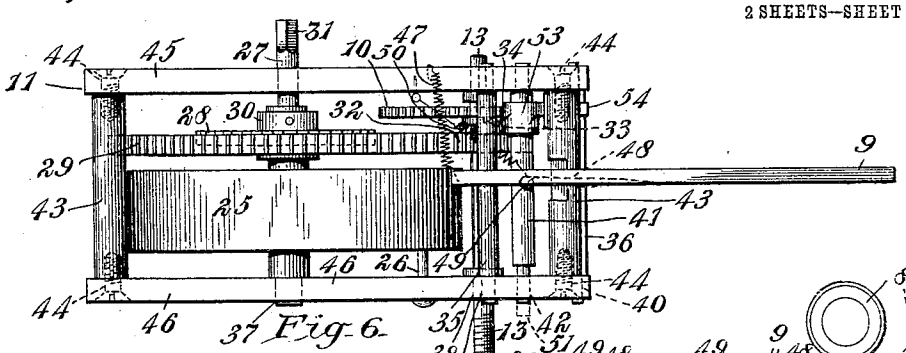


Fig. 6.

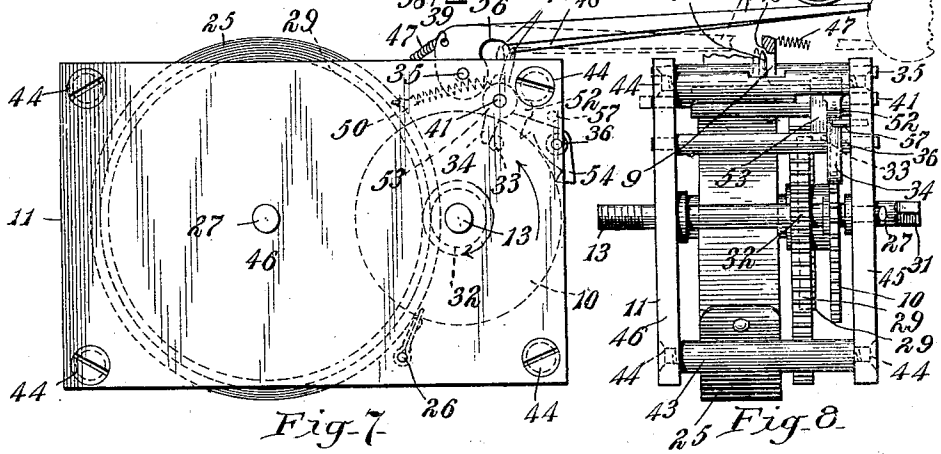


Fig. 7.

Fig. 8.

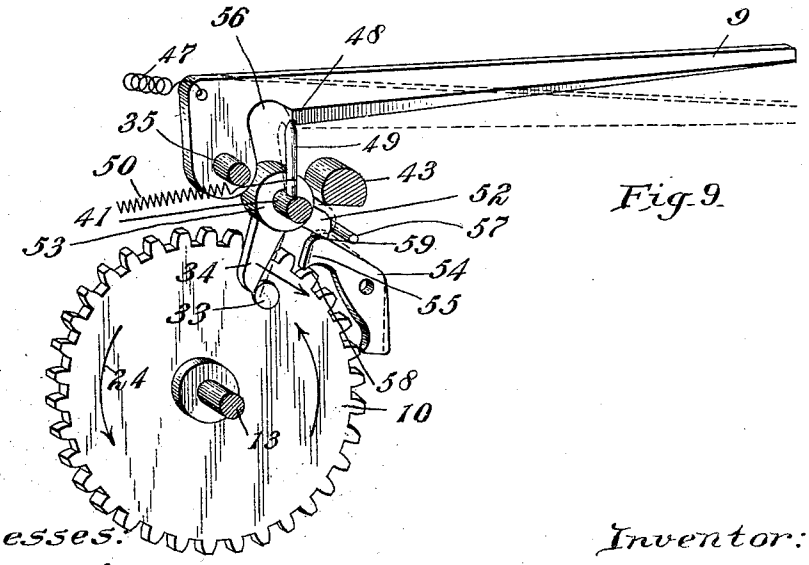


Fig. 9.

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UNITED STATES PATENT OFFICE.

JOSEPH L. WEED, OF WHEATON, ILLINOIS.

COIN-CONTROLLED VENDING-MACHINE.

No. 921,763. Specification of Letters Patent. Patented May 18, 1909.

Application filed June 5, 1908. Serial No. 436,917.

To all whom it may concern:

Be it known that I, JOSEPH L. WEED, a citizen of the United States, residing at Wheaton, county of Dupage, and State of Illinois, have invented certain new and useful Improvements in Coin-Controlled Vending-Machines, of which the following is a specification.

My invention relates to improvements in coin-controlled machines, and consists in an automatic machine for the vending of newspapers, magazines and the like.

My invention consists not only in the general design of the machine, but in details of construction which will be hereinafter clearly set forth.

The preferred form of my invention is illustrated in the accompanying drawings forming a part of this specification, and in which, Figure 1 is a perspective view of the complete machine, Fig. 2 is a detail side elevation of a wire coil and a vertical section of a portion of the machine casing, Fig. 3 is a detail perspective view, Fig. 4 is a central transverse section taken on the line *x* of Fig. 3, Fig. 5 is a detail transverse section taken on the line *y* of Fig. 1, Figs. 6, 7 and 8 are respectively top, side and end elevations of the operating mechanism, and Fig. 9 is a perspective view of a portion of the operating mechanism.

Referring to the drawings, 1 is a casing provided with front and rear portions, 2 and 3 respectively, and 4 a central partition. In the front portion 2 a glass 5 is provided whereby one may see at a glance whether or not the machine is supplied with papers. A coin slot 6 is adapted to register with a vertically depending flattened tube 7 arranged in the rear of the central partition 4. A coin 8 is adapted to fall through the tube 7, to make contact with the lever 9, and to depress the same. This action of the lever 9 causes the escape wheel 10 in the spring operated mechanism 11 to be released. The escape wheel 10 is allowed to make a single revolution at each time a coin contacts the operating lever 9, and as the wire coil 12 is rigidly connected with the same arbor 13 as the wheel 10, it also makes a single revolution. The wire coil 12 serves as a holder for papers 14 which rest in the coil 12 at the points 15. The dotted lines 16 represent the position of the coil 12 prior to a revolution of the same. During the revolution of the coil 12 the end of the coil is slightly retracted, due to its resiliency and the action of the paper and the paper 17 nearest the front portion 2 of the machine casing 1, is released and immediately falls through the slot 18 as indicated by the arrow 19. The coil 12 is soldered to a disk 20 at the point 21 making it integral therewith. A hub portion 22 in the center of the disk 20 is threaded and adapted to make rigid connections with the arbor 13. The direction of rotation of the coil 12 and the wheel 10, is shown by arrows 24.

In the spring operated mechanism 11 a main spring 25 is provided which is connected at the point 26 in the member 46 and is wound about and connected with the anbor 27. A ratchet wheel 28 is rigidly secured to the arbor 27, its hub 30 being pinned thereto. A squared portion 31 in the arbor 27 is adapted to receive a key for winding the spring 25. The main drive gear 29 is mounted on the arbor 27 and is driven by a pawl in mesh with the ratchet wheel 28. The pawl is not shown and the ratchet wheel 28 only partially shown, this construction being the same as in an ordinary clock. Meshing with the gear 29 is a pinion 32 secured to the arbor 13 which it is adapted to drive together with the escape wheel 10 also secured to the arbor 13. The escape wheel 10 is provided with a stop 33 rigidly secured in its side which prevents its rotation when the stop is in engagement with the arm 34. The arbors 27, 13, 35 and 36 are mounted in the bearings 37, 38, 39 and 40 respectively, and the arbor 41 slidably mounted in the bearing 42. Similar bearings at the other extremities of the several arbors are also provided. Rigid frame members 43 and screws 44 are provided for securing the side members 45 and 46.

The operating lever 9 is rigidly fixed to the arbor 35 and is adapted to have a limited movement as shown by dotted lines. The spring 47 is adapted to maintain the lever 9 in its normal or raised position. When the lever 9 is depressed by the coin 8, the beveled edge or cam 48 contacts with an arm 49 rigidly secured in the arbor 41, causing the same to slide transversely as shown by dotted lines at 51. This movement releases the engagement of the stop 33 with the arm 34. The escape wheel 10 then makes a complete revolution when the stop 33 again engages the arm 34 which arm has moved to its normal position by the action of the spring 50.

The arms 34 and 52 are integral with a hub 53 which is securely fixed to the arbor 41. The arm 52 is adapted to engage the member 54 at the point 59 and to force the pallet 55 against a tooth 58 of the escape wheel 10 locking same when the stop 33 makes engagement with the arm 34. This action is obvious since when the stop 33 engages the arm 34, the arbor 41 is slightly rotated. The notched portion 56 in the lever 9 gives clearance to the arm 49 when moved to the position indicated by dotted lines by the action of the spring 50 after the arm 34 has been released. The member 43 acts as a stop to limit the movement of the arm 52 by the action of the spring 50, and 57 is a stop for the member 54.

The operating mechanism 11 is arranged in the rear compartment of the casing 1 between the partition 4 and the rear portion 3 of the casing, the arbor 13 being adapted to extend through the aperture 65 in the partition to connect with the wire coil 12 in the front compartment of the casing 1.

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

In a device of the class described, a casing having a front wall, an arbor mounted in said casing, means for driving said arbor, a disk mounted upon the forward end of said arbor, a resilient coil interposed between said disk and said wall and normally abutting the latter and rigidly connected to the former, there being a discharge opening in said casing beneath the forward end of said coil, said coil normally closing said discharge opening and the end of said coil abutting said wall being adapted to be pressed back out of engagement therewith by the article being vended coming in contact with said wall, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOSEPH L. WEED.

Witnesses:
JANET E. HOGAN,
HELEN F. LILLIS.