

No. 647,997.

Patented Apr. 24, 1900.

W. H. TAYLOR.  
AUTOMATIC VENDING MACHINE.

(Application filed Nov. 10, 1898.)

(No Model.)

Fig. 1.

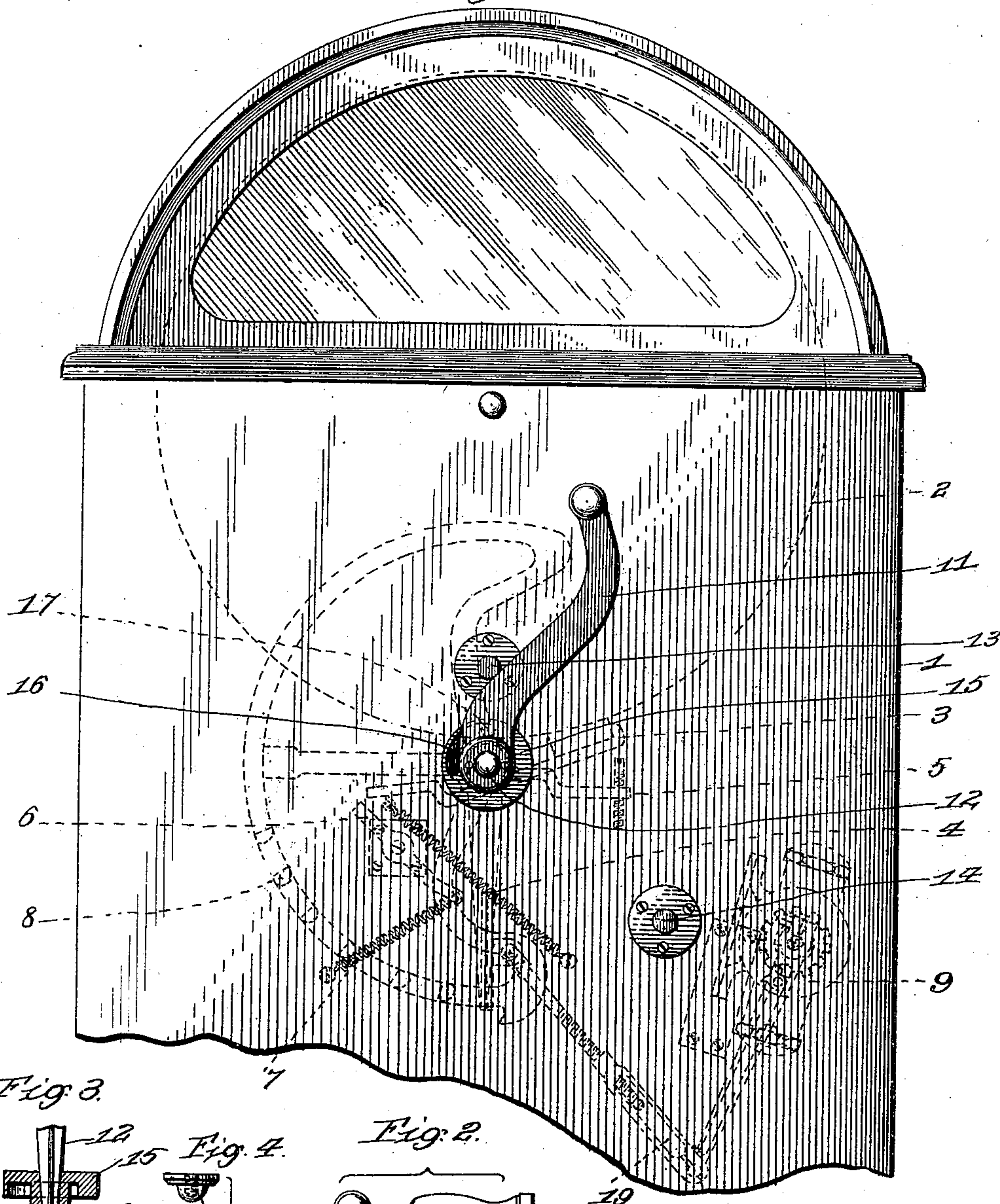


Fig. 3.

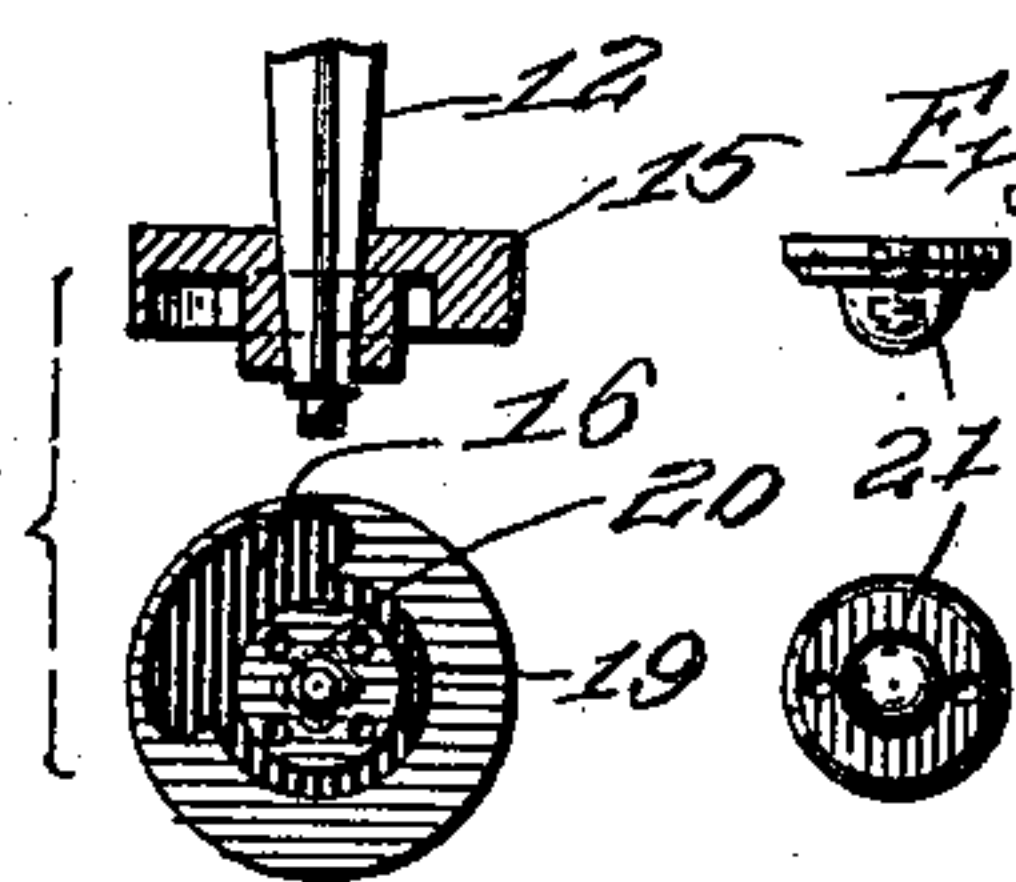


Fig. 4.

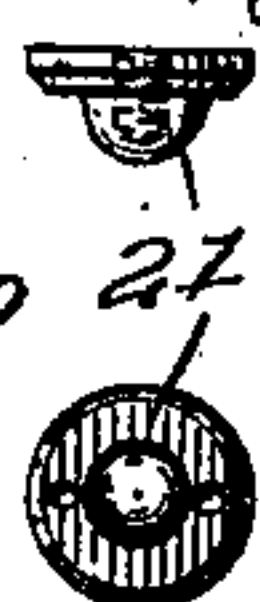


Fig. 2.

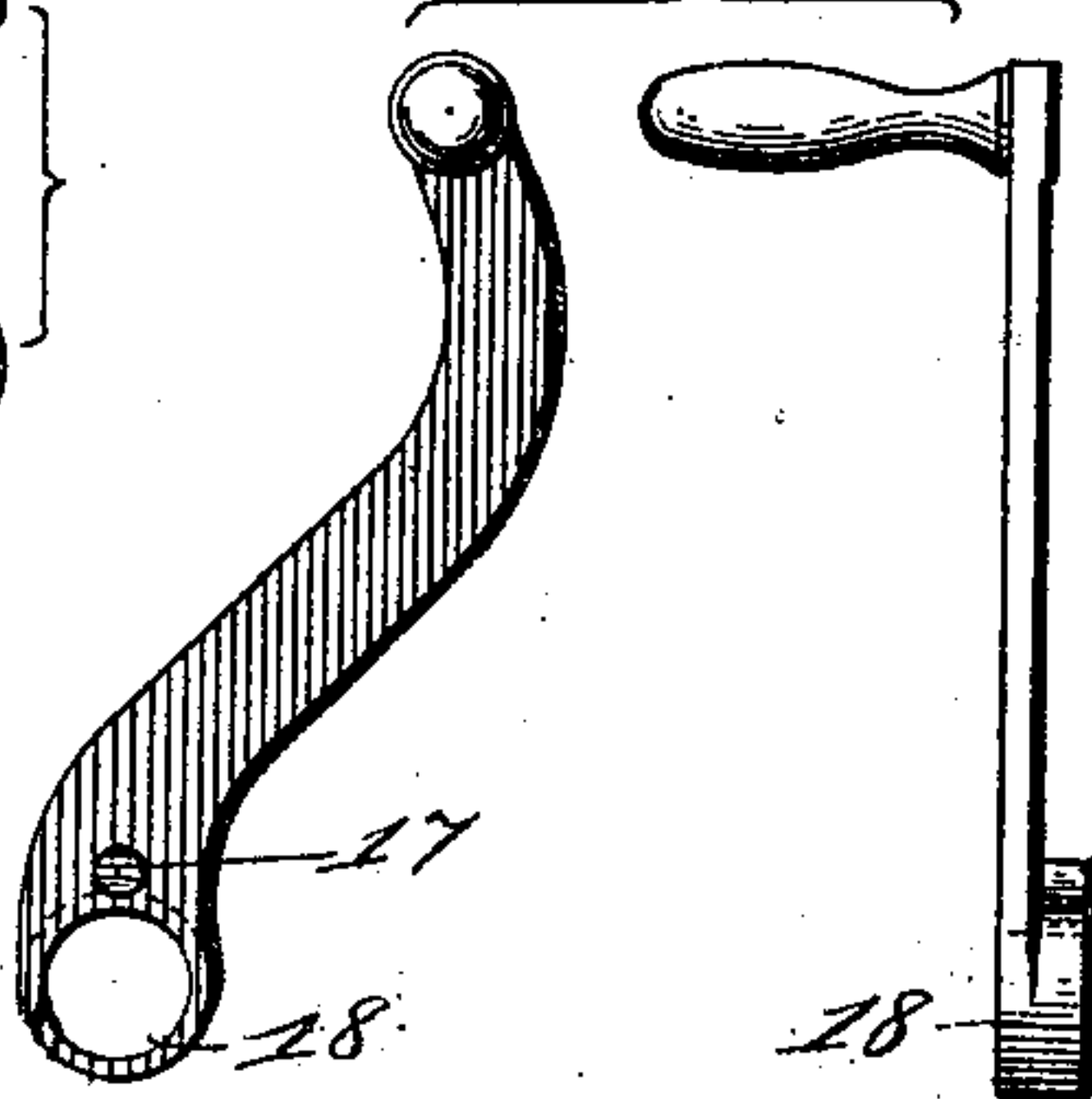


Fig. 5.

Witnesses:

Herbert Bradley  
Harry A. Knight

Inventor:  
Warren H. Taylor.

By Knight Bros.  
Attorneys.



# UNITED STATES PATENT OFFICE.

WARREN H. TAYLOR, OF STAMFORD, CONNECTICUT, ASSIGNOR TO THE  
YALE & TOWNE MANUFACTURING COMPANY, OF SAME PLACE.

## AUTOMATIC VENDING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 647,997, dated April 24, 1900.

Application filed November 10, 1898. Serial No. 696,079. (No model.)

*To all whom it may concern:*

Be it known that I, WARREN H. TAYLOR, a citizen of the United States, and a resident of Stamford, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Automatic Vending-Machines, of which the following is a specification.

My invention relates to automatic vending-machines in which the movement necessary to set them in operation is imparted by hand through a suitable lever, and more particularly to that class of vending-machines which operate to deliver one or another of certain articles contained therein, according to the point where the mechanism is arrested and which is generally determined by the character of the coin or token introduced. In machines of this character, as well as in other machines operating automatically, unauthorized control over the machine is sometimes exercised by back pressure or other manipulation of the actuating-lever.

The object of my invention is to provide an actuating-lever through the medium of which the intended operation may readily be effected, but which will exercise no retarding or other control over the machine after the parts are once moved to the point beyond which they operate automatically.

To these ends my invention consists in mounting the lever loosely upon the shaft of the mechanism which it is intended to operate and in establishing turning connection between said lever and the shaft or other part to be moved through the medium of a pin carried by one of the parts and a slot provided on the other.

My invention further consists in certain novel details in the construction of the parts whereby the above-mentioned features are suitably embodied in effective mechanism.

In the accompanying drawings, Figure 1 represents a partial side elevation of a vending-machine in which some of the automatically-operating parts are merely for purposes of illustration shown by dotted lines, while the parts wherein my invention lies are shown in full lines. Fig. 2 shows by face and edge views an operating-lever constructed in accordance with my invention. Fig. 3 shows

by face and sectional views the hub, which is fixed upon the shaft and which receives the operating-lever. Figs. 4 and 5 are views representing the retaining-nut and washer employed in carrying out my invention.

1 represents the casing or housing of a vending-machine of any character, which for purposes of illustration is assumed to be provided with a cylinder or reel 2 for supporting the goods to be vended, a detent or lever 3, which is held by a spring 4 into engagement with the reel to prevent its movement and which is limited in its movement by stop 5 and which is normally held against displacement by a dog 6, having a controlling-spring 7. I have also shown, as suggestive of apparatus to be controlled, a toothed segment 8, which is the part for controlling the movement of the delivery-reel and which is to be moved by the lever forming the subject of my invention to one limit of its movement and thereafter returned automatically to such a position as is previously determined by the coin or token introduced, such return movement being effected by the spring closing and checking device 9, which is connected to said segment through the medium of the arm and pitman 10. So much of the mechanism beyond being suggestive of parts to be operated, and the specific character of which may greatly vary in detail, forms no part of my present invention.

My invention comprises a suitable arm or lever 11, adapted for prehension and mounted upon a shaft 12, to which it may impart rotary movement in one direction to an extent determined by its limiting-stops 13 and 14.

15 represents a hub mounted by square bearing or otherwise fixed against rotation upon the shaft 12 and provided with a segmental and concentric slot 16, which receives a pin 17 on the lever 11 and extending concentrically about the shaft a distance equal at least to the arc through which the lever 11 swings.

From so much of the description it will be obvious that if the controlling toothed segment 8 is moved through the medium of the lever 11 and pin 17 engaging in slot 16 to a point where its movement becomes automatic it is obvious that the movement of said seg-



ment cannot thereafter be controlled by back pressure through the medium of the lever 11 or by other manipulation of said lever.

The specific construction of the connection  
5 between the lever 11 and shaft 12, whereby an initial movement may be imparted to the shaft through the lever, followed by a lost motion between said parts, will be more fully understood by reference to Figs. 2, 3, 4, and  
10 5. The lever is provided with an elongated cylindrical bearing 18, which enters the annular socket 19 surrounding the arbor 20, upon which the socket of the lever fits, while the segmental slot 16 intersects the annular  
15 socket and permits the pin 17 to be located contiguous to the bearing 18. The parts being thus accurately and firmly fitted together, the lever is held against displacement by means of nut 21, with interposed washer 22.  
20 Having thus described my invention, the following is what I claim as new therein and desire to secure by Letters Patent:

1. In combination with the shaft of a vending-machine, a lever for actuating said shaft,  
25 connected thereto by means of a hub, and a pin eccentric thereto on one of said parts and engaging the other, which permits the lever to impart to the shaft rotation in one direction only; substantially as and for the purpose set forth.  
30

2. In combination with the shaft of a vending-machine, a lever having a hub for actuating said shaft, mounted to turn thereon, and a pin eccentric to said hub for limiting the movement of the lever upon the shaft; substantially as and for the purposes set forth. 35

3. In combination with the shaft of a vending-machine, the hub 15 fixed against rotation upon said shaft and provided with the arbor 20 and concentric slot 16, and the lever 11 fitted to turn upon said arbor and provided with the eccentric-pin 17, substantially as and for the purposes set forth. 40

4. In combination with the shaft 12 of a vending-machine; the hub 15 fixed against turning thereon and formed with the central arbor 20, the surrounding socket 19 and the concentric slot 16; and the lever 11 provided with elongated cylindrical bearing 18 fitting  
50 the arbor 20 and the socket 19, and with the eccentric-pin 17 working in the slot 16; said lever being secured upon said hub by suitable means, substantially as and for the purposes set forth.

WARREN H. TAYLOR.

Witnesses:

SCHUYLER MERRITT,  
W. C. FELL.