

No. 746,134.

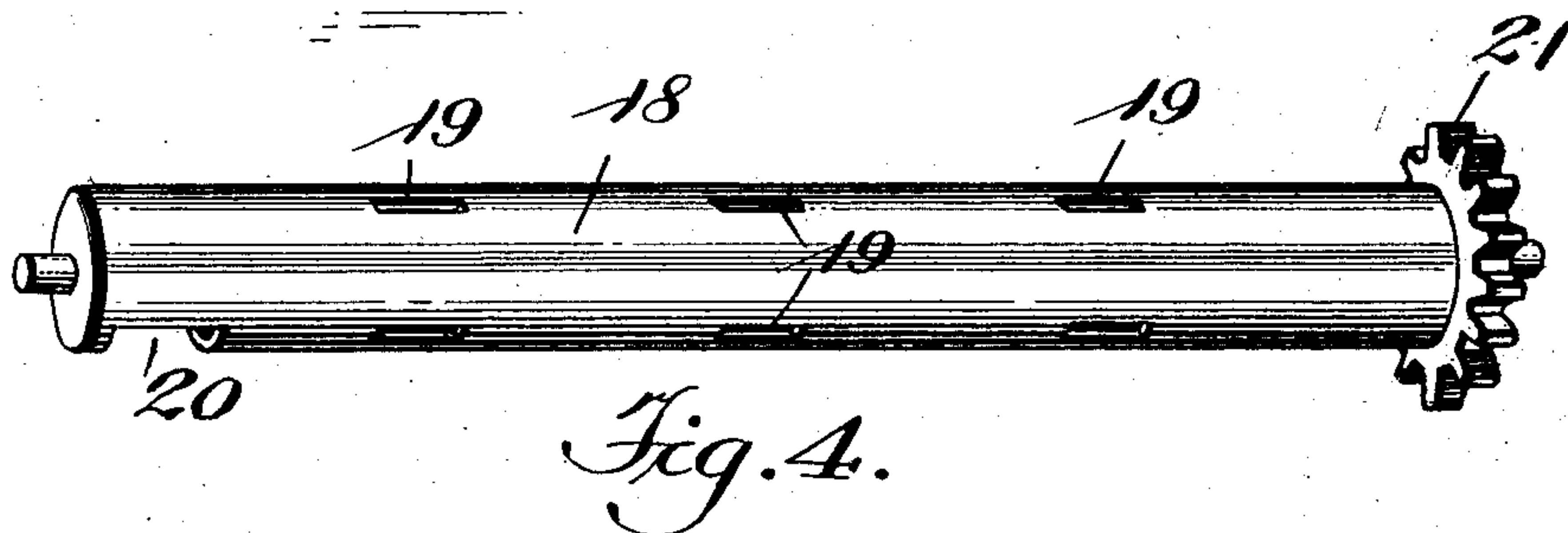
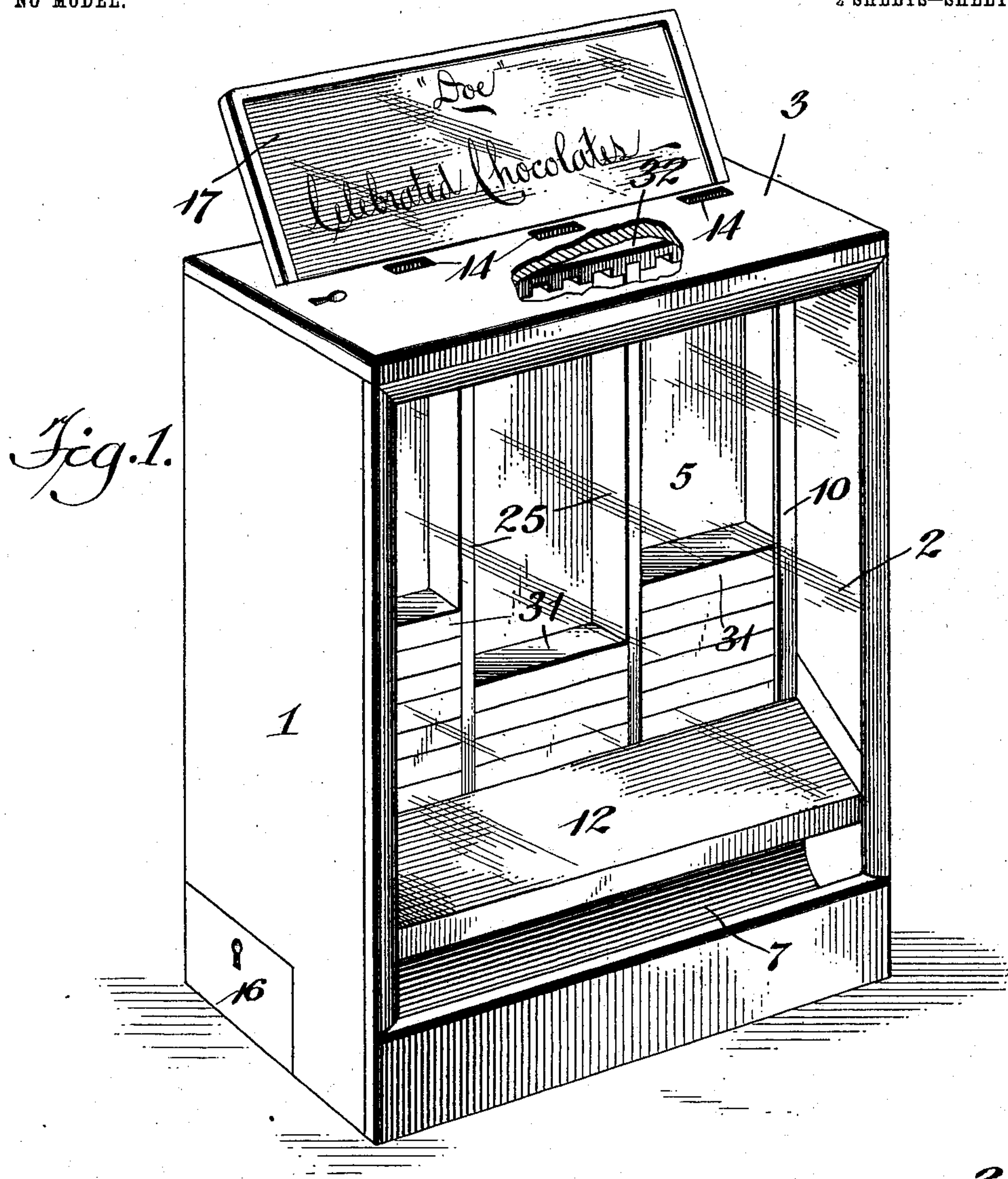
PATENTED DEC. 8, 1903.

C. J. NETH.
VENDING MACHINE.

APPLICATION FILED MAY 8, 1903.

NO MODEL.

2 SHEETS—SHEET 1.



Witnesses
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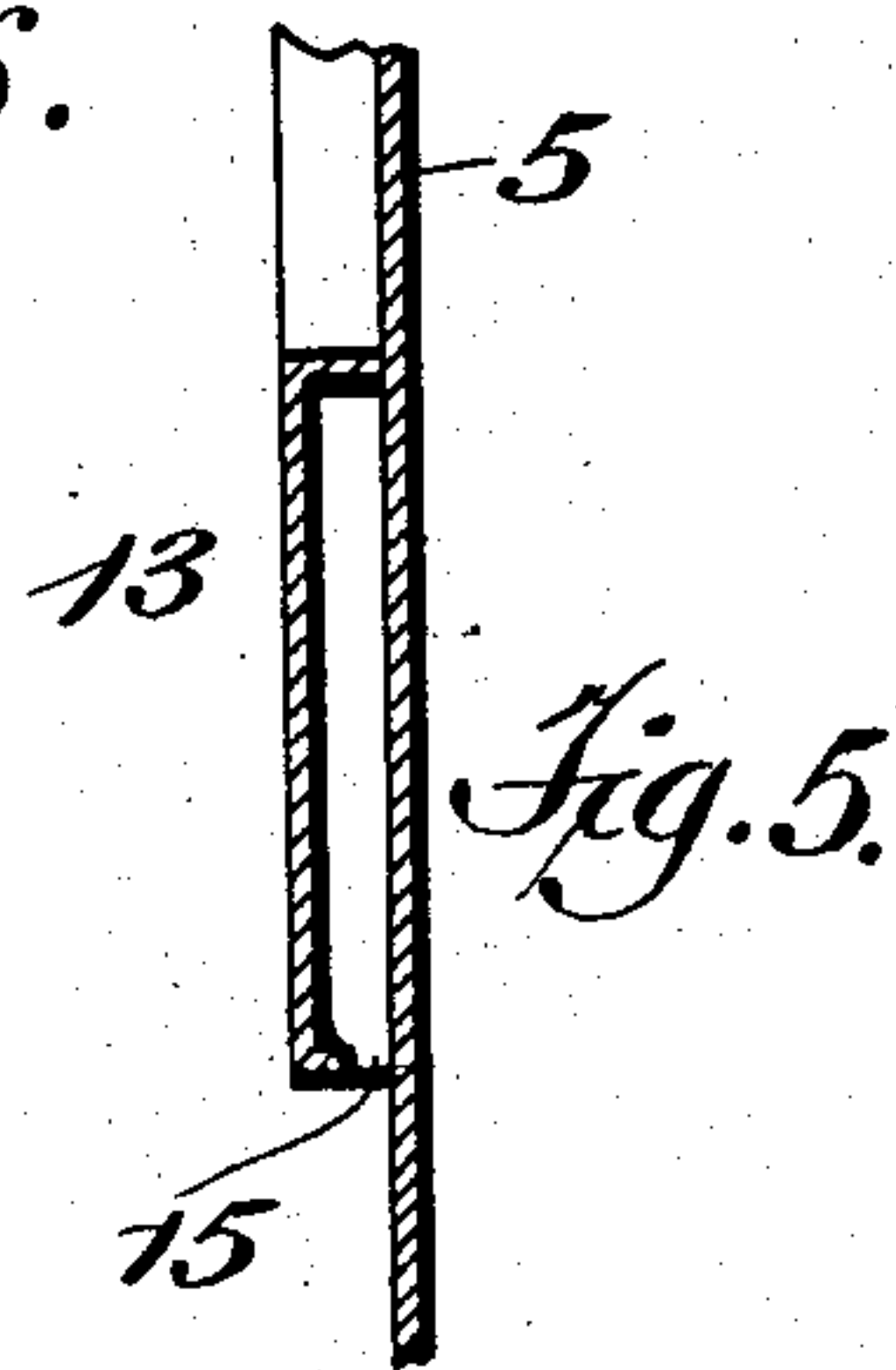
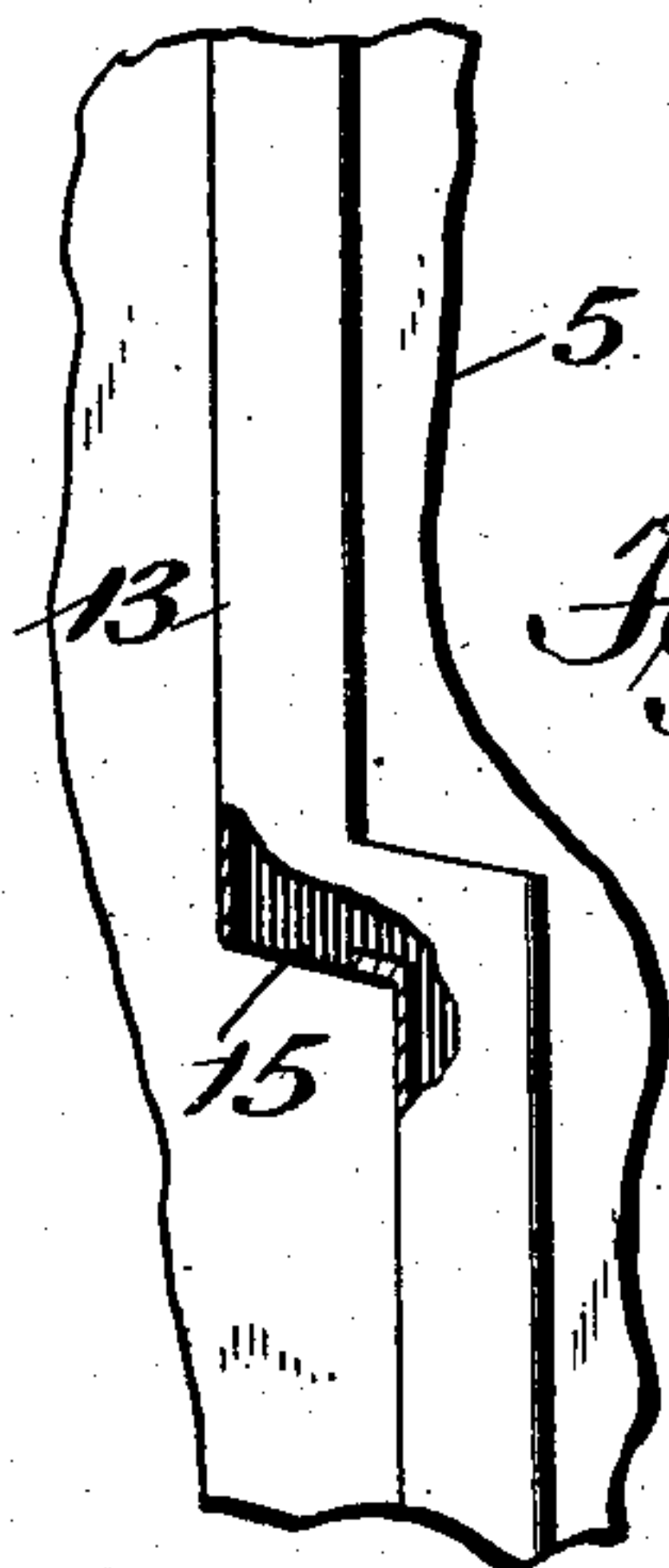
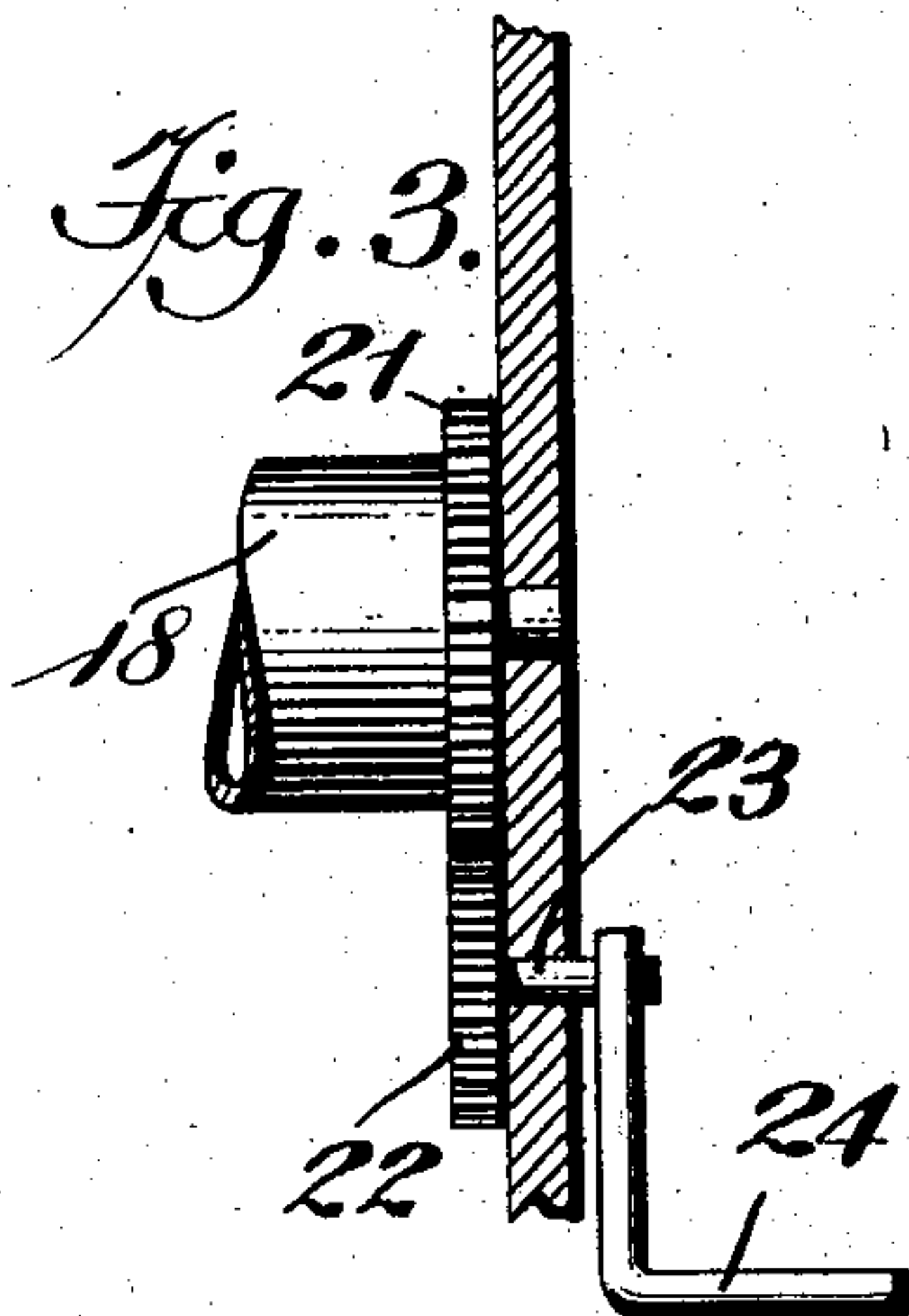
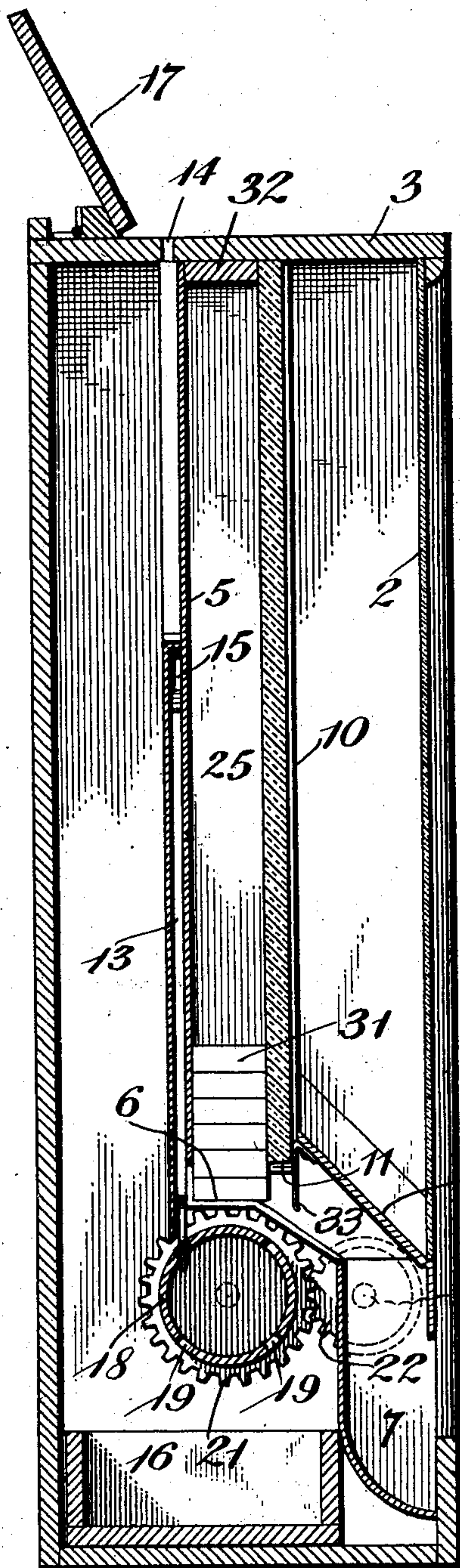


Fig. 2.

Fig. 6.

Fig. 5.

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UNITED STATES PATENT OFFICE.

CLARENCE J. NETH, OF WEST NEWTON, PENNSYLVANIA, ASSIGNOR OF TWO-THIRDS TO SAMUEL F. WEST AND JOHN WATSON NETH, OF WEST NEWTON, PENNSYLVANIA.

VENDING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 746,134, dated December 8, 1903.

Application filed May 8, 1903. Serial No. 156,237. (No model.)

To all whom it may concern:

Be it known that I, CLARENCE J. NETH, a citizen of the United States, residing at West Newton, in the county of Westmoreland and State of Pennsylvania, have invented a new and useful Vending-Machine, of which the following is a specification.

This invention relates to certain improvements in coin-controlled vending-machines, and has for its principal object to provide a device in which the number of working parts are reduced to a minimum, thus permitting the construction of the machine at reduced cost and lessening the liability of derangement from wearing or breakage of the parts.

A further object of the invention is to provide an improved device of this character in which the goods are delivered from the machine through the direct intervention of the coin, the coin being delivered to a suitable receiver and thence moved while in the receiver into contact with one of the articles to be delivered.

A still further object of the invention is to provide in a device of this character for the passage of coins or other articles either thinner or of less diameter than the normal without operating the machine.

A still further object of the invention is to provide a device which may be readily adjusted for the delivery of articles of different shape and size and in which a single operating mechanism may be employed for the delivery of articles from a number of different receptacles.

A still further object of the invention is to provide a machine of this character of such construction as to permit of the ready renewal of the supply of goods when necessary and to notify the customers as soon as the supply becomes exhausted.

With these and other objects in view the invention consists in the novel construction and arrangement of parts hereinafter described, illustrated in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that various changes in the proportions, form, size, and minor details of the structure may be made without departing from the spirit or

sacrificing any of the advantages of the invention.

In the accompanying drawings, Figure 1 is a perspective view of a vending-machine constructed in accordance with the invention. Fig. 2 is a transverse sectional elevation of the same. Fig. 3 is a transverse sectional elevation of a portion of the mechanism. Fig. 4 is a detail perspective view of the slotted cylinder in which the coins are received and by which such coins are moved into contact with the articles to be sold. Fig. 5 is a detail view illustrating a portion of one of the coin-slots, illustrating the arrangement of the slot-opening through which coins thinner than the normal may pass without operating the machine. Fig. 6 illustrates the arrangement of one of the coin-chutes as viewed from the rear of the reservoir or magazine.

Similar numerals of reference are employed to indicate corresponding parts throughout the several figures of the drawings.

The general frame of the device comprises a casing 1, having a front portion in the form of a transparent panel 2, which may be readily removed when it becomes necessary to renew the supply in the magazine. The top 3 of the casing is hinged at one end and at the other is provided with a suitable locking means for securing it in position, the opening of the top permitting access to the magazine when it becomes necessary to renew the supply or to effect adjustment of the parts should it be desired to change the character of the goods being sold.

At or near the rear end of the casing is a plate 5, which may be formed of metal or other material and extends from side to side of the casing, terminating at a point somewhat above the bottom thereof and forming the rear wall of the goods-magazine. The bottom of the magazine is in the form of a plate 6, which is bent downwardly and forwardly in order to form a delivery-chute 7, leading toward the front of the machine. The front of the magazine is formed of a heavy sheet of glass, held in place by suitable guiding-flanges 10, projecting inwardly from the opposite sides of the casing, the plate being readily removed when the supply is to be renewed. The lower edge of

the plate rests on suitable shoulders 11 at a point slightly above the bottom of the reservoir, so as to leave a discharge-opening of sufficient height to permit the passage of single articles from the reservoir. In front of the lower portion of the reservoir in the delivery-chute is a guard-plate 12, which is preferably arranged at a slight angle and may contain advertising or other matter descriptive of the goods being sold, the name of the manufacturer, or directions for operating the machine.

On the rear side of the back plate 5 are secured coin-chutes 13, which extend from slots 14 in a plate on top of the casing to a point at or slightly below the bottom of such rear plate. Each of the coin-slots is so arranged that its lower portion is in a different plane from its upper portion, the two portions being connected by an inclined way, in which is a slot or opening 15, somewhat less in width than the thickness of a coin designed to operate the machine, and when a thinner coin or other article is dropped into the chute it will immediately pass through this opening and fall to the coin-receiving drawer 16 at the bottom of the casing. At the rear of the coin-slot is placed an inclined plate or panel 17, on which may be printed advertising matter or directions for operating the machine.

At a point below the lower ends of the coin-chutes is a cylindrical tube 18, provided with a plurality of slots 19, one or more of such slots being arranged in vertical alinement with each of the coin-chutes, and said slots are of a length slightly less than the diameter of a coin designed to operate the machine, so that if received therein the upper portion of the coin will project radially from the tube, or if a coin of less diameter is inserted in the machine such coin will pass through the coin-slot and will gradually work its way toward one end of the tube, where it may pass through an enlarged opening 20 to the coin-drawer. At one end of the tube is secured a gear or pinion 21, intermeshing with a similar gear 22, mounted on a crank-shaft 23, which extends outside the casing and is provided with an operating-crank 24, which may be turned to effect rotative movement of the tube. Both the rear walls and the bottom of the magazine are slotted in vertical alinement with the coin-receiving slots of the tube, the slots being of sufficient size to permit a coin projecting from one of the slots to come into engagement with the lowermost article contained in the magazine when the tube is turned and force such article to the delivery-chute, from whence it may fall to a point within convenient reach of the customer.

The machine, as illustrated, is designed more especially for the sale of articles contained in substantially oblong packages, such as chocolate sticks and the like; but it may be employed for the delivery of articles of any shape and size by suitable modification in the arrangement of the interior of the res-

ervoir. As one means of adjusting the device for the sale of articles of different length I have illustrated the employment of adjustable partitions 25 between vertical rows of goods. The lower ends of the partitions are held in place by the goods and the weights 31 usually employed for holding the goods down, while the upper ends of said partitions may be adjusted to any desired position in a grooved cross-bar 32, disposed at the top of the magazine and so arranged as to permit of ready adjustment of the partitions to any position in the machine, thus providing for the sale of goods of any desired length.

In the operation of the machine a coin is inserted in one of the slots and falls to the bottom of the chute. If no coin-slot of the tube happens to be in proper position to receive the coin, the latter will be held in an upright position between the rear wall of the coin-chute and the rear face of the articles in the magazine until on revolving the tube by means of the crank a coin-slot is brought into alinement with the coin, the latter then falling into the slot, and as the tube continues to turn the coin is brought into contact with the goods and forces the same outwardly toward the forward edge of the magazine bottom, whence the article falls or slides down the delivery-chute to a point within convenient reach of the customer.

In some cases pendent spring-fingers 33 may be secured to the lower portion of the front of the casing in order to prevent the removal of goods from the magazine by tipping the casing forwardly, the springs being yieldable in order to permit the ready discharge of the goods without mutilation when a coin is pressing an article forward to the discharge-point.

Having thus described the invention, what is claimed is—

1. In a device of the class specified, the combination with a reservoir of a revoluble tube adapted at times to form a support for the inserted coin, said tube having a plurality of coin-receiving slots, a chute for delivering the coin thereto, and means for revolving the tube, the tube having a discharge-opening near one end for the passage of small coins or tokens which may pass through or into the tube.

2. In a device of the class specified, a reservoir or magazine having a slotted bottom, a discharge-chute communicating with the reservoir, a revoluble tube having a coin-receiving slot for receiving and holding a coin in article-engaging position, and means for revolving said tube.

3. In a device of the class specified, the combination with a reservoir or magazine, of a revoluble tube having a coin-receiving slot, a chute for delivering a coin thereto, and a means for revolving the tube and forcing the coin into engagement with an article to be delivered from the reservoir.

4. In a device of the class specified, the

combination with a reservoir, of a slotted
tube, a coin-chute having its rear wall termi-
nating immediately above the tube and its
front wall being cut away to permit the en-
5 gagement of an inserted coin with the articles
in the reservoir, and means for revolving said
tube to effect the discharge of the articles,
substantially as specified.

10 5. The combination with a reservoir having
a slotted rear wall and slotted bottom, of a
delivery-chute in communication with the
bottom, a coin-chute having its rear wall ex-

tending below the bottom of the reservoir,
and a revoluble tube having means for re-
ceiving and holding the inserted coin in en- 15
gagement with the article to be delivered.

In testimony that I claim the foregoing as
my own I have hereto affixed my signature in
the presence of two witnesses.

CLARENCE J. NETH.

Witnesses:

WM. J. PEARCE,
W. C. LUPPOLD.