

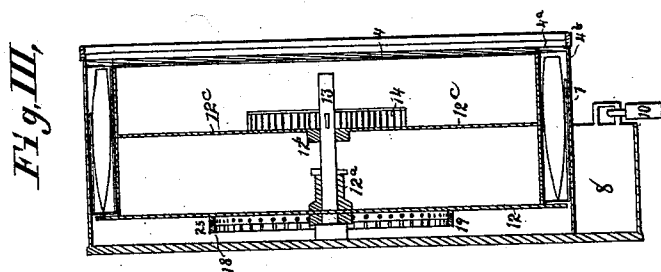
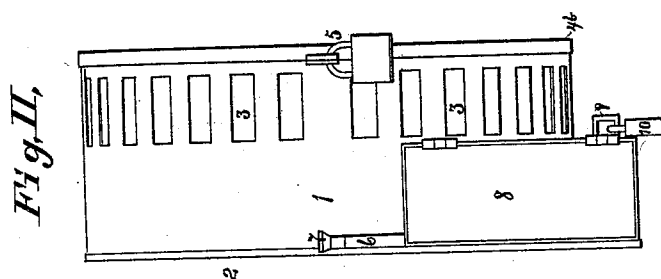
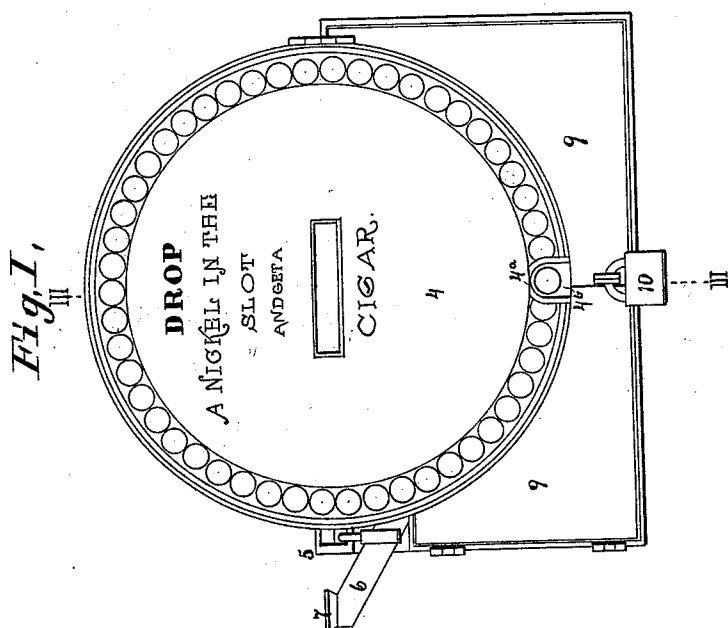
(No Model.)

2 Sheets—Sheet 1.

A. J. KLETZKER & J. RANZ.
CIGAR VENDING MACHINE.

No. 508,725.

Patented Nov. 14, 1893.



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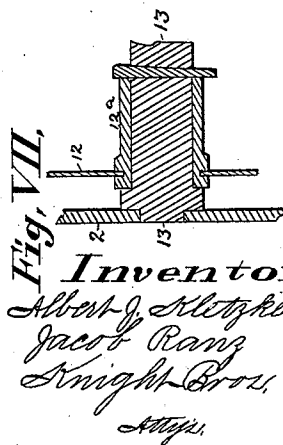
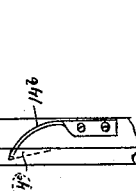
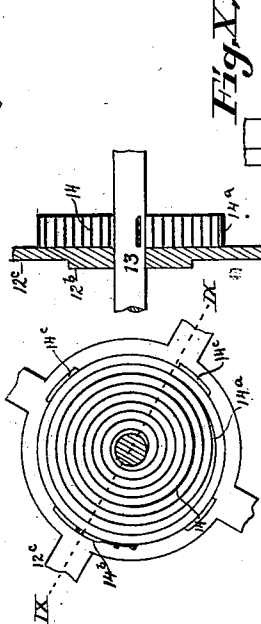
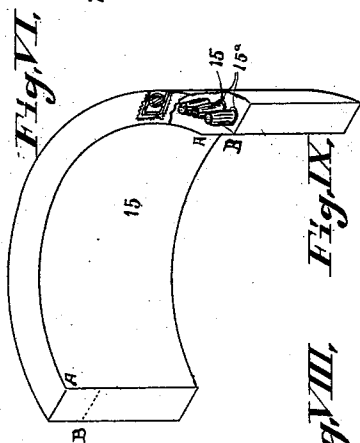
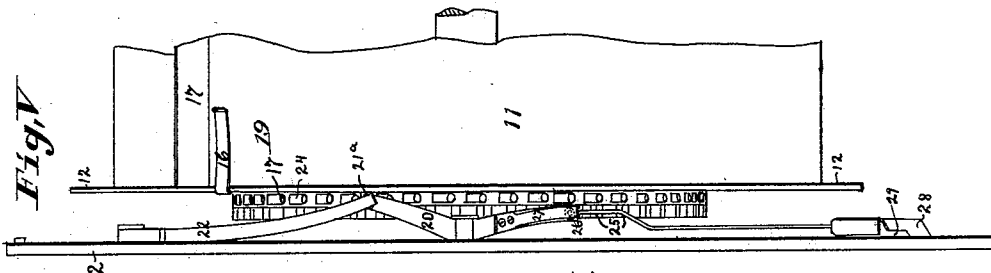
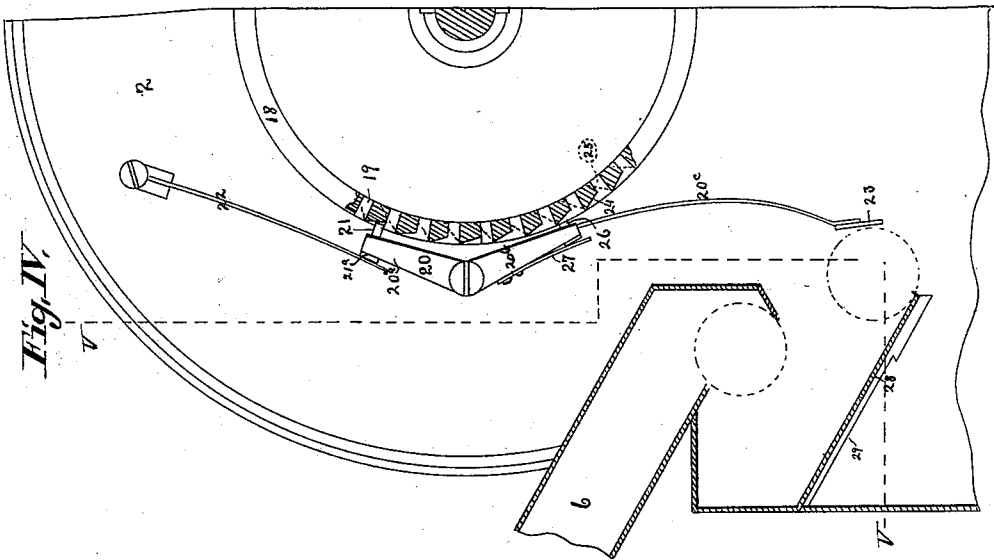
(No Model.)

2 Sheets—Sheet 2.

A. J. KLETZKER & J. RANZ.
CIGAR VENDING MACHINE.

No. 508,725.

Patented Nov. 14, 1893.



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UNITED STATES PATENT OFFICE.

ALBERT J. KLETZKER AND JACOB RANZ, OF ST. LOUIS, MISSOURI; SAID RANZ
ASSIGNOR TO SAID KLETZKER.

CIGAR-VENDING MACHINE.

SPECIFICATION forming part of Letters Patent No. 508,725, dated November 14, 1893.

Application filed April 3, 1893. Serial No. 468,945. (No model.)

To all whom it may concern:

Be it known that we, ALBERT J. KLETZKER and JACOB RANZ, of the city of St. Louis, in the State of Missouri, have invented a certain new and useful Improvement in Cigar-Vending Machines, of which the following is a full, clear, and exact description, reference being made to the accompanying drawings, which form part of this specification.

The object of our invention is the construction of a coin controlled machine for vending cigars, so constructed and arranged that the laws concerning the sale of cigars may not be violated, together with certain details of construction, which will be hereinafter fully set forth and pointed out in the claims.

Figure I is a front elevation of the machine, filled with cigars and ready for operation, a cigar being shown in position for removal after the coin operated mechanism has operated. Fig. II is a side elevation of the machine. Fig. III is a vertical section through the center of the machine, taken on line III—III, Fig. I. Fig. IV is an enlarged elevation, illustrating the coin operated mechanism in elevation, and the coin passage way, and a portion of the cigar holding drum in vertical section. Fig. V is a vertical section, taken on line V—V, Fig. IV. Fig. VI is a perspective view of one of the cigar cases. Fig. VII is an enlarged section of the drum shaft and hub. Fig. VIII is an elevation of the drum hub, propelling spring and ratchet spring. Fig. IX is a section taken on line IX—IX, Fig. VIII. Fig. X is an edge view of the ratchet spring, showing it in engagement with one of the notches in the drum hub.

Referring to the drawings:—1 represents the cylindrical case of the machine, connected to a supporting plate 2.

3 are openings perforating the case 1.

4 is a hinged door, preferably of glass, provided with padlock or other fastening, as seen at 5; the door 4 is preferably transparent for an inch around its edge, in order that the cigars may be seen from the front of the machine, and the remainder of the door may be opaque to be used as a space for advertising the operation, and description of the articles contained in the machine.

At one side of the cylinder 1, and attached to the back plate 2, is a coin receiving tube 6, which has at its upper end a slot of suffi-

cient size to allow a coin equal to the retailing value of the article dispensed, to be admitted, the end of the tube having a hopper 7, that acts as a guide to the slot. Beneath the inner, lower end of the tube 6 is a cash box 8, provided with a hinged door 9, and a lock 10.

Within the case 1 is a drum 11, and 12 is a rear plate secured to said drum. This drum 11 and the plate 12, revolve upon the shaft 13, on their respective hubs 12^b and 12^a.

12^c are the drum supporting spokes.

14 is a clock spring by which the drum 11 is revolved, said spring having one end secured to the shaft 13, and its other end secured in a barrel 14^a, carrying a ratchet spring 14^b, the free end of said spring 14^b bearing in notches 14^c in the hub 12^b of the drum. This arrangement is provided for winding the spring 14, which winding is accomplished through the turning of the barrel 14^a, the spring 14^b traveling over the notches 14^c and engaging in one of said notches when the spring is fully wound. Surrounding this drum are placed the cigar cases 15 of semi-cylindrical shape, as illustrated in Fig. VI. These cigar cases are made of paper, or other suitable light material. Inside the cases 15 are a number of partitions, (see dotted lines, Fig. VI,) which partitions are perforated with a series of openings 15^a of a size that will receive the cigars or other articles to be dispensed. These partitions are placed so that the openings 15^a are opposite each other in all the partitions and form a receptacle for the cigars or other articles. One edge of the case 15, down to the first partition is made preferably of thinner paper than the remainder of the case, and over this edge and down the outside to a point past the partition is the revenue stamp attached. When it is desired to insert a case of cigars in the machine, a knife is run round the lines A and B of the case 15, destroying the revenue stamp, allowing the thin portion of paper to be removed, and leaving the ends of the cigars in view, and free to be extracted; the case is then placed upon the drum 11, and is held securely in position by clips 16 and partition 17.

At the lower side of the door 4 is a small opening 4^a, and 4^b is an opening in the bottom of the case 1. As the drum 11 revolves, the ends of the cigars in the cases 15 pass the opening 4^a, and one by one the cigars may be

withdrawn, one cigar being brought to the opening each time a coin is dropped into the machine.

Attached to the back of the drum 11 is a ring 18, provided with a series of perforations 19, the number of perforations corresponding to the number of spaces provided around the circumference of the drum 11 for cigars. Pivoted to the back plate 2 is a two arm lever 20, in the arm 20^a of which is a set screw or pin 21, of such size as to readily enter the perforations. The set screw 21 secures to the arm 20^a an extension 21^a against which the free end of a spring 22 bears, to give pressure on the arm 20^a to hold the pin 21 in contact with the ring 18, and press it into the next perforation after it has been withdrawn from the preceding perforation through the insertion of coin. Arm 20^b carries a plate or bar 20^c to whose lower end is attached a platen 23 against which the coins strike when they enter the machine through the tube 6. Each of the perforations 19 has an incline 24, at one side down to the perforations to guide the pin 21 as it enters the perforation. On the rear side of the ring 18 are ratchet teeth 25, corresponding to the number of spaces provided for cigars in the machine, and on the lever arm 20^b is a pin 26, which engages in said ratchet teeth; this pin is loosely inserted in the lever arm 20^b, and is held in place by a spring 27, which allows a limited movement of the pin. The sides of the teeth 25 being inclined on one side and straight on the other, the drum 11 is free to revolve forward, when a coin has released the pin 21, (the bevel side of the teeth 25 striking the pin 26 and ratcheting past,) but retrograde movement is prevented, and the spring 22 forces the pin into a perforation, and returns the platen 23 into position to receive another coin.

When a coin is dropped into the hopper 7, it rolls down the tube 6 and drops to the incline 28, depending from the tube 6. This bottom 28 is provided with a slot 29, which may in the operation of some coins be narrower than the thickness of a coin with which the machine is operated and through which a thinner coin will drop. The coin striking the platen 23 moves it forward, and the lever-arm 20^a of the lever 20 is moved away from the ring 18, withdrawing the pin 21 from a perforation 19. The spring 14 causes the drum 11, carrying the cigar cases 15, to revolve until the pin 21 enters into engagement with the next perforation 19, through pressure of the spring 22 being brought to the opening 4^a through which it may be withdrawn.

The cigar cases 15 may be constructed in one piece to go entirely around the drum 11, or they may be made in two or more sections, as preferred, and any desired number of cigars may be used to fill the cases, so long as the number corresponds to the perforations and ratchet teeth of the ring 18.

The case 1, is preferably of metal, and is lined around the rim with a transparent material such as celluloid or glass, which lining closes the orifices 3 on the inside, thus producing closed sight spaces around the case 1, through which the revenue stamps on the cases 15 may be seen.

We have described our invention for use in vending cigars, but do not wish to confine ourselves to its use for this article, it being evident that it may be used for many other commodities, such for instance as cheroots, cigarettes, &c.

We claim as our invention—

1. In a vending machine, the combination of a suitable case, a revolving drum within said case, means for imparting motion to said drum, a ratchet wheel secured to said drum, a pivoted lever provided with spring pins at its opposite ends for engaging in the ratchet teeth and moving the drum forward and preventing its retrograde movement, a spring for holding one end of said lever normally into engagement with said ratchet wheel, a coin operated arm projecting from the opposite end of said lever, and the coin chute leading to said arm, substantially as set forth.

2. In a vending machine, the combination of a case, a revolving drum within said case, means for imparting motion to said drum, a ring on said drum, stops and ratchet teeth carried by said ring, a coin operated lever, a catch engaging in said stops, a spring, 22, bearing on said lever, a movable pin engaging said ratchet teeth, and a spring, 27, bearing on said pin; substantially as and for the purpose set forth.

3. In a vending machine, the combination of a case, a revolving drum within said case, means for imparting motion to said drum, and a continuous case of two or more sections secured around said drum; substantially as and for the purpose set forth.

4. In a vending machine, the combination of a suitable case a revolving drum within said case, means for imparting intermittent movement to said drum and a continuous case formed of two semi-cylindrical boxes provided with separate receptacles for holding cigars or like articles, said case being secured around said drum by suitable means, substantially as set forth.

5. In a vending machine, the combination of a suitable case, a revolving drum within said case, means for imparting intermittent movement to said drum, semi-cylindrical boxes provided with separate receptacles and fitting around said drum, and clips 16 and partitions 17 for holding the boxes in place on the drum, substantially as and for the purpose set forth.

ALBERT J. KLETZKER.
JACOB RANZ.

In presence of—

A. M. EBERSOLE,
E. S. KNIGHT.