

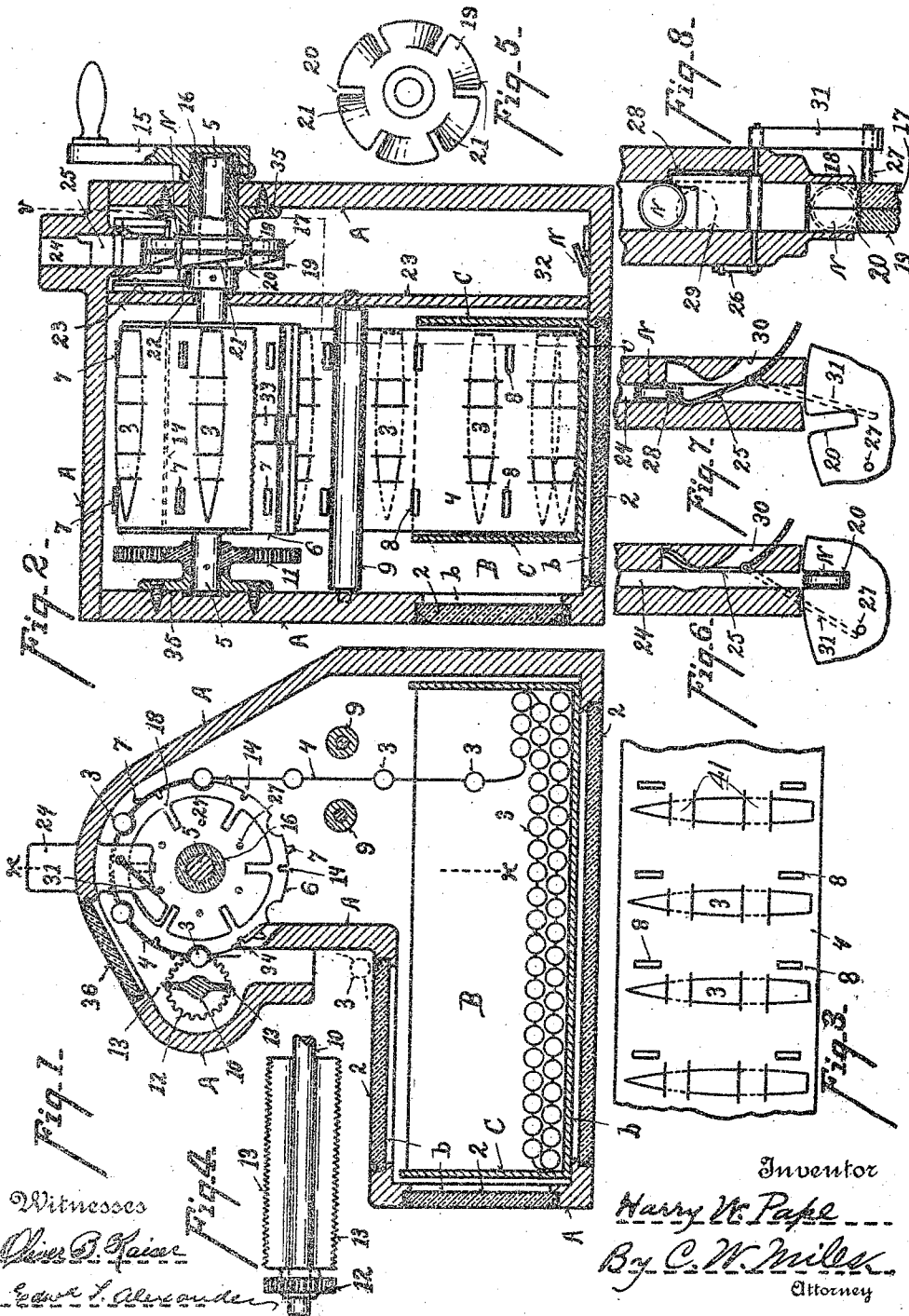
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Patented Nov. 6, 1900.

H. W. PAPE.
VENDING MACHINE.

(Application filed Dec. 23, 1899.)

(No Model.)



Witnesses
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UNITED STATES PATENT OFFICE.

HARRY W. PAPE, OF CINCINNATI, OHIO.

VENDING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 661,130, dated November 6, 1900.

Application filed December 23, 1899. Serial No. 741,377. (No model.)

To all whom it may concern:

Be it known that I, HARRY W. PAPE, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Vending-Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in vending-machines.

One of its objects is to provide an improved and reliable vending-machine adapted to vend cigars, cigarettes, and other objects without injury thereto.

Another object is to provide an improved manner of packing the articles to be vended.

My invention also consists in certain detail arrangements and combinations, all of which will be fully described in connection with the accompanying drawings, in which—

Figure 1 is a sectional diagram taken on line *vv* of Fig. 2. Fig. 2 is a section on line *xx* of Fig. 1. Fig. 3 is a plan view of a section of the paper cigar-feeding ribbon. Fig. 4 is a plan view of the ribbon-severing blades. Fig. 5 is a plan view of one of the coin-connected clutch-disks. Figs. 6, 7, and 8 are detail views of the coin-chute and its coin-selective mechanism.

A represents the casing or frame of the machine, which has a compartment B to receive the cigar-box and is provided with openings *b*, through which the box or package may be examined. These spaces may be left open, but are preferably closed by glass panels 2. The cigars 3 are mounted upon a ribbon 4 and packed in the box C, as shown in Fig. 1. The main shaft 5 carries a roller 6, over which the ribbon is drawn and fed forward by the revolution of the shaft, preferably by means of teeth 7 engaging slots or openings 8 in the ribbon.

9 represents guide-rollers between which the ribbon passes.

10 represents a secondary shaft driven by means of gears 11 and 12 from the main shaft.

13 represents blades upon opposite sides of the shaft 10, which as the shafts are turned

enter slots 14 in the roll 6 and sever the ribbon, allowing the cigars successively to drop down to the position shown in dotted line, Fig. 1, where they may be reached by the consumer.

The shafts 5 and 10 are preferably turned to discharge a cigar by the following coin-controlled instrumentalities.

15 represents a crank-arm secured to the outer end of the sleeve 16, which at its inner end carries a clutch-disk 17, provided with a series of notches 18, located in the face thereof. This sleeve, disk, and crank-arm are normally free to turn upon the shaft 5 without turning the shaft.

19 represents a clutch-disk secured to the shaft 5 to turn therewith. This disk is provided with notches 20, registering with the notches 18 and having beveled faces 21, as shown in Figs. 2 and 5.

22 represents a spring-pawl secured to the partition 23 and with its free end resting against the beveled faces 21.

24 represents a coin-chute adapted to receive the coins N—say nickels.

As shown in Figs. 6, 7, and 8, 25 represents a gate pivoted at one side of the coin-chute and normally occupying the position shown in Figs. 7 and 8, in which position it is normally held by spring 26, but from which position it is moved by the pins 27 into the position in Fig. 6.

When the parts are in the position shown in Figs. 7 and 8, if a nickel is dropped into the chute it lodges, as shown in full lines, being arrested by the ear 28. If a smaller coin—a cent, for instance—is dropped into the chute, it is not arrested by the ear 28, but slips down, as indicated at 29 by dotted lines, and passes out through the side opening 30. A nickel having been dropped into the chute and arrested, as shown, it will upon turning the crank-arm be released at the proper instant by the pin 27 engaging the lever 31 to shift the gate 25, whereupon the coin drops into the slots 18 20 in the clutch-disks and locks them together, so that the further forward movement of the crank-arm feeds the shafts 5 10 forward a sufficient distance to sever a section of the ribbon and deliver the cigar or cigars. As the disk 19 turns, the spring-pawl

23 rides up the inclined face 21, and at the proper point the pawl springs into the notch containing the coin and knocks the coin out sidewise, so that it falls into the coin-compartment 32, and the clutch-disks are again disconnected.

33 represents a groove in the face of the roll 6, into which the tongue 34 of the casing projects to assist or insure the stripping of the ribbon from the roll.

35 represents metal journal-bearings secured to the inside of the casing.

36 represents a window through which the article about to be delivered can be examined.

15 The ribbon is preferably composed of paper and may be variously modified to hold the articles without departing from the principle of my invention. As shown in Fig. 3, the articles are held in place on the ribbon by means of one or more straps 41, which are preferably looped over the articles and secured to the main ribbon by paste. It will also be apparent that the blades may be employed to sever or release the article from the ribbon instead of severing the ribbon, if de-

sired, without departing from the principle of my invention.

Having described my invention; what I claim is—

1. In a vending apparatus a ribbon to which the articles to be vended are secured, a roller over which the ribbon is fed, means for actuating the roller, and means substantially as shown and described for successively cutting the ribbon so as to free the articles, substantially as specified.

2. In a vending apparatus, a compartment adapted to receive and display the original package, a ribbon to which the articles to be vended are secured, a roller over which said ribbon is fed, and means substantially as specified for successively severing the ribbon and delivering the articles, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

HARRY W. PAPE.

Witnesses:

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