

APPLICATION FILED AUG. 13, 1910.

Patented Apr. 18, 1911.

Inventor.

Fig. 1.

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Witnesses
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990,020.

3 SHEETS--SHEET 2.

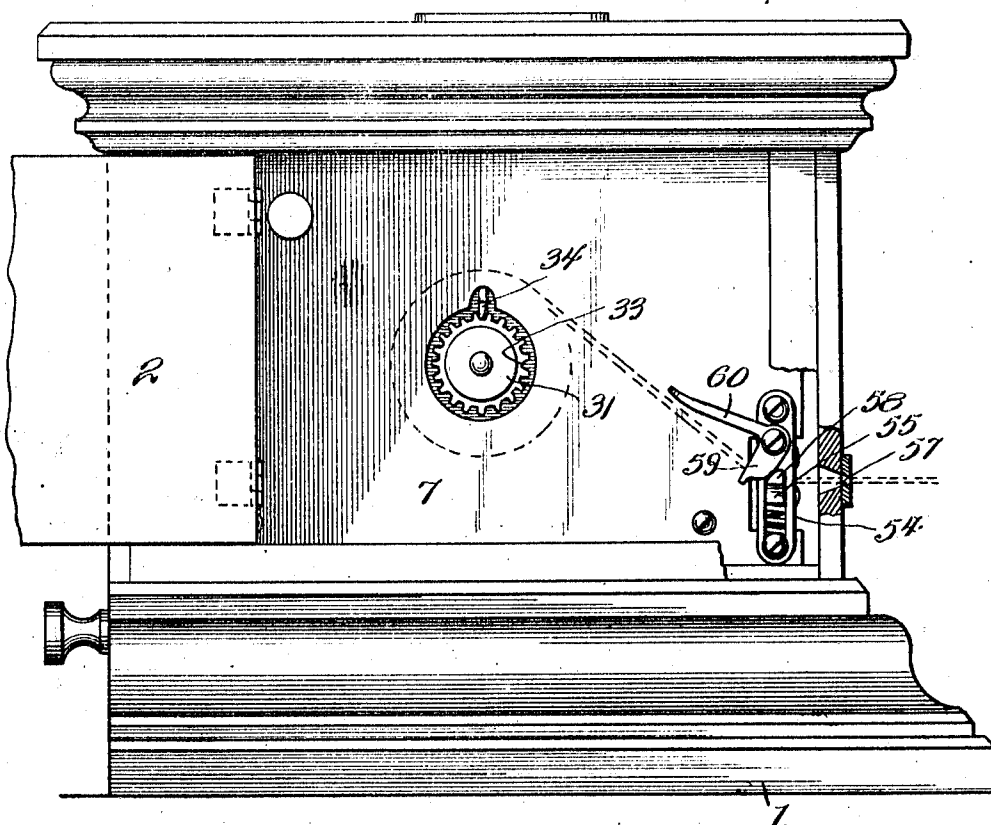


Fig. 2

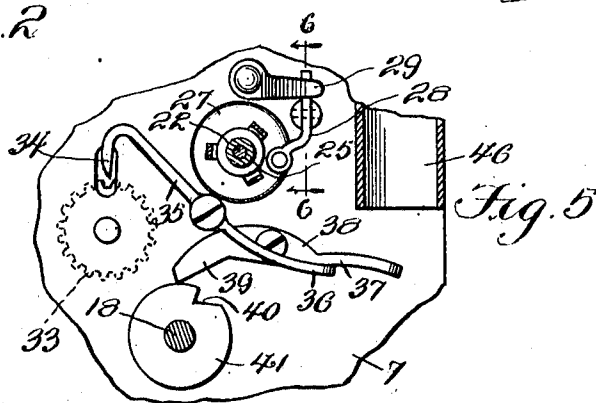


Fig. 5

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 AUTOMATIC VENDING MACHINE FOR POSTAGE STAMPS.
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3 SHEETS-SHEET 3.

Fig. 3.

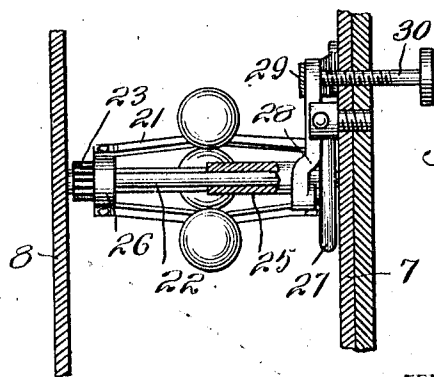
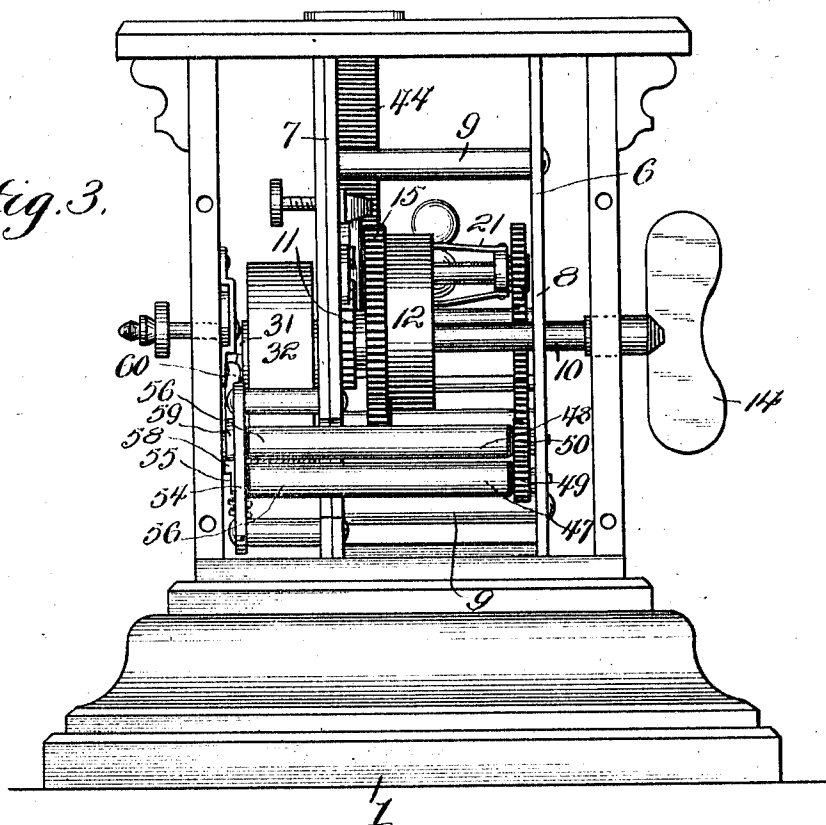


Fig. 6.

Witnesses

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UNITED STATES PATENT OFFICE.

THEOPHILUS W. SUGGS, OF ARBA, NORTH CAROLINA, ASSIGNOR OF ONE-HALF TO
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AUTOMATIC VENDING-MACHINE FOR POSTAGE-STAMPS.

990,020.

Specification of Letters Patent.

Patented Apr. 18, 1911.

Application filed August 13, 1910. Serial No. 576,986.

To all whom it may concern:

Be it known that I, THEOPHILUS W. SUGGS, a citizen of the United States of America, residing at Arba, in the county of Greene and State of North Carolina, have invented new and useful Improvements in Automatic Vending-Machines for Postage-Stamps, of which the following is a specification.

10 This invention relates to automatic vending machines for postage stamps or the like, and it consists of improved mechanism for feeding the tape in predetermined amounts on deposit of a coin, the particular object of
15 the invention being to provide novel supporting means for stamps of tape form, and automatically operated means controlled on the deposit of a coin for releasing the tape and for feeding the same accurately.

20 In the drawings, forming a portion of this specification and in which like numerals of reference indicate similar parts in the several views:—Figure 1 is a detail longitudinal section through my improved vending apparatus. Fig. 2 is a detail side elevation
25 thereof showing the door of the casing in an open position and showing parts of the casing broken away. Fig. 3 is a front elevation of the apparatus showing the front of the casing removed. Fig. 4 is a detail horizontal section taken on the line 4—4 of Fig. 1. Fig. 5 is a detail elevation of the trip mechanism showing the motor and reel-releasing elements in their released positions. Fig. 6
30 is a detail vertical section illustrating the governor brake.

The casing for my improved vending apparatus may be of any approved construction which may be found best adapted for
40 the purpose intended. As illustrated, such casing consists of a base member 1 having one of its sides provided with a hinged closure 2 so that access can be conveniently gained to the interior mechanism of the casing. The casing is formed to provide a compartment in which a coin-drawer 3 is removably mounted. The wall 4 of the compartment is formed to provide a passage 5 for a purpose to be hereinafter described. A
50 frame 6 is located within the casing and it preferably consists of spaced members 7 and 8, which are connected with each other by suitable bracing and spacing sleeves 9. A drive shaft 10 has its ends journaled in the

side members of the frame 6 and as shown, 55 the said shaft is provided with a suitable ratchet detent mechanism 11. The shaft is driven by a suitable spring motor 12 which is inclosed in a suitable drum or casing 13 on the shaft 10. One end of the spring is 60 secured to the drum and the other end is secured to the shaft as in the usual manner of connecting the terminals of a spring in a motor of this character. One end of the shaft is extended through one side of the 65 casing and it is threaded for the reception of the correspondingly threaded socket of a winding key 14. The drum or casing of the motor is provided with a gear wheel 15 which meshes with a smaller gear wheel 16 70 on a driven shaft 17. The shaft 17 is connected with the shaft 18 by the intermeshing gears 19 and 20. A governor 21 has its shaft 22 provided with a gear wheel 23 which meshes with the relatively large gear 75 wheel 24 on the shaft 18, which is geared with the shaft 10. This governor may be of any suitable well known construction but it is preferably of the type wherein the weight-carrying arms have their terminals opera- 80 tively connected with the fixed and movable elements 25 and 26 respectively, the movable element being provided with the usual brake disk 27 with which the pivoted brake shoe 28 is engaged. A spring 29 serves to hold 85 the shoe disengaged with the disk and as illustrated, a tension screw 30 is employed to bear against the arm of the shoe so as to move the shoe against the tension of the said spring. 90

A revolubly mounted sleeve 31 is supported by the member 7 of the frame 6. This sleeve is designed for the reception of the tape 32. The sleeve 31 has secured thereto a toothed member 33 with which is normally 95 engaged the tooth 34 of a pivoted locking member 35. The locking member 35 is supported by the member 7 of the frame 6 and as illustrated, the extremity 36 of its tail extends beneath the arm 37 of the locking 100 member 38. The nose 39 of the said member 38 is relatively large so that the part of the locking member forwardly of its pivot will overbalance the part rearwardly of the pivot so as to cause the nose to fall by gravity to normally assume its locked engage- 105 ment in the recess 40 of the locking disk 41. This disk is secured to the shaft 42 and

as illustrated, such shaft is provided with a gear 43 which meshes with the gear 19 of the driven shaft 17.

A coin chute 44 has its upper open end 5 portion disposed in line with the coin slot 45 in the top of the casing 1. The opposite end of the chute extends rearwardly and it opens into the pivoted coin-conveying tube 46. The lower open end of the tube 46 is disposed immediately above the arm of the locking member 38 so that on discharge of the coin from the tube it will fall directly onto the arm to release it from the recess 40 in the locking disk 41. On release of the 15 disk the hereinbefore described motor will be released so as to feed the tape in a manner to be presently described. It may be stated at this time for the purpose of clearness that when the locking member 38 is moved to its 20 released position the member 35 will be correspondingly released to permit withdrawal of the tape.

The tape-feeding mechanism consists of companion feed rollers 47 and 48. These 25 rollers are provided with the intermeshing gear wheels 49 and 50 which are driven by the driving shaft 51. The shaft 51 has secured thereto a gear wheel 52 which meshes with the gear wheel 15 of the shaft 10. At 30 the opposite end the shaft 51 is provided with a gear wheel 53 which meshes with the gear wheel 50 of the feed roller 48. At one end the feed roller is mounted in the member 8 of the frame 6 and at the opposite end 35 the roller is mounted in a support 54, the said support being provided with a yieldingly supported box 55 in which one end of the feed roller 47 is mounted. This construction is such that the rollers are yield- 40 ingly engaged with each other to insure an accurate feed of the tape. The rollers 47 and 48 are provided with rubber feed surfaces 56 and in advance of the point of engagement of such surfaces with each other 45 and formed in the front wall of the casing 1

is a discharge slot 57. The box 55 is provided with a lug 58 against which the arm 59 of the pivoted lever 60 may be engaged so as to move the roller 47 away from the roller 48 when it is desired to insert the free 50 end of the stamped tape between such rollers.

The construction of the apparatus herein described and illustrated is extremely simple and the tape on deposit of the coin will 55 be ejected for delivery to the purchaser, it being understood that the disk 41 may be of any desired size according to the amount of tape to be discharged.

While the mechanism is designed particularly for use as an automatic vender of 60 stamps it will be obviously apparent that it may be used in equally an effective manner as a container for other analogous articles, such as soda checks, theater tickets or the 65 like.

I claim:—

In vending apparatus, a revolubly mounted support for a roll of tape, a motor, feed 70 rollers geared to the motor and operating to draw the tape from the support on operation of the motor, a pivoted dog, means in the motor mechanism normally engaged by the pivoted dog to hold the motor against operation, and a movable locking member having 75 a portion engaged normally with the roll support to hold the support against movement, the said locking member having a portion disposed in the path of movement of the dog so that on release of the dog the 80 locking member will be simultaneously released to permit operative movement of the roll support on operation of the motor.

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

THEOPHILUS W. SUGGS.

Witnesses:

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