No. 762,895. PATENTED JUNE 21, 1904.

W. S. FILLEY.

VENDING MACHINE.

APPLICATION FILED SEPT. 26, 1903.

NO MODEL. 3 SHEETS—SHEET 1.

Fig. 1.

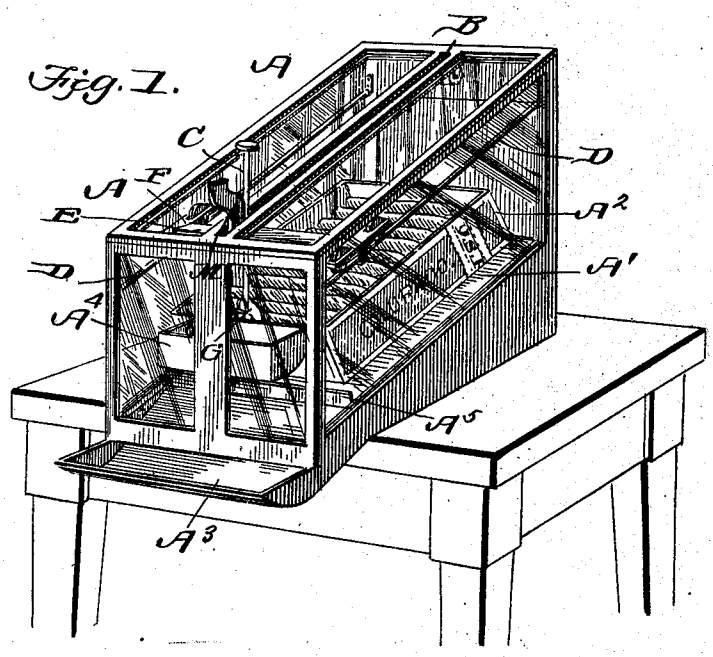


Fig. 2.

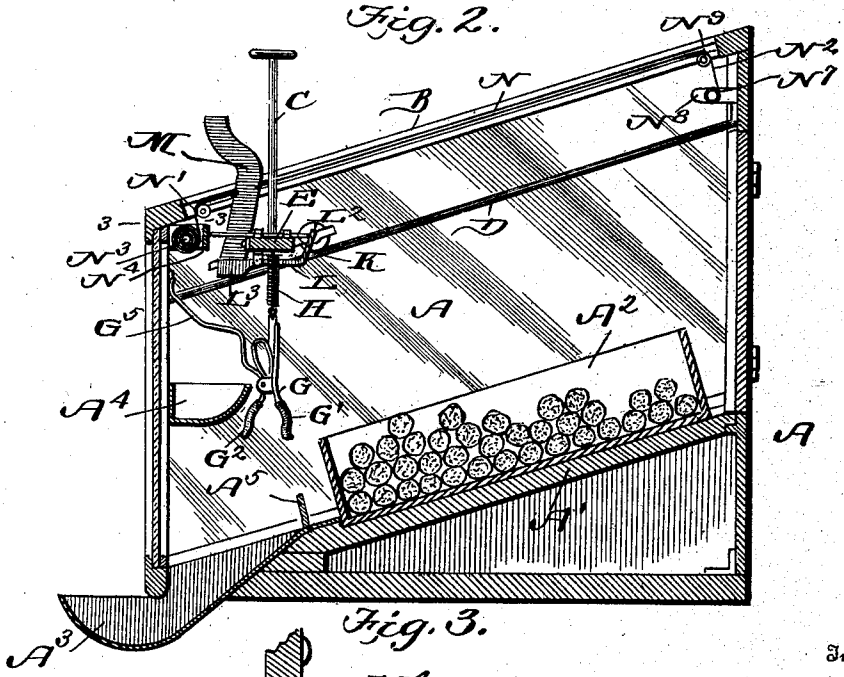
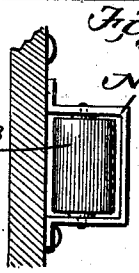


Fig. 3.



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Fig. 4.

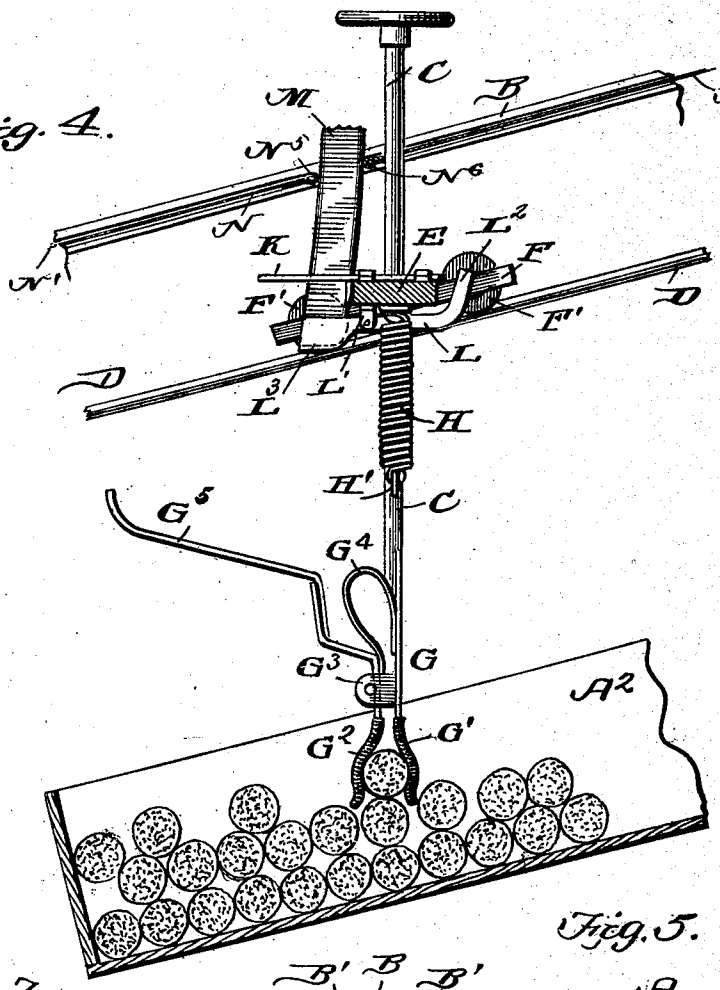


Fig. 5.

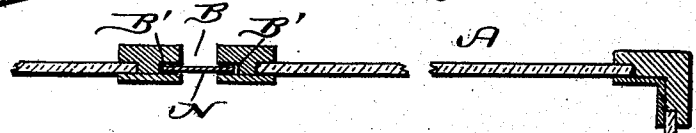


Fig. 7.

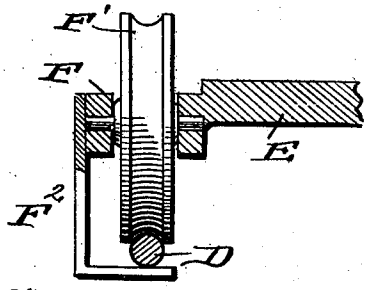
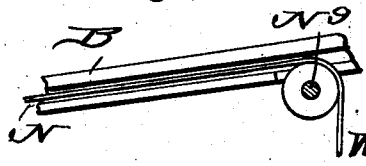


Fig. 6.



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Fig. 8.

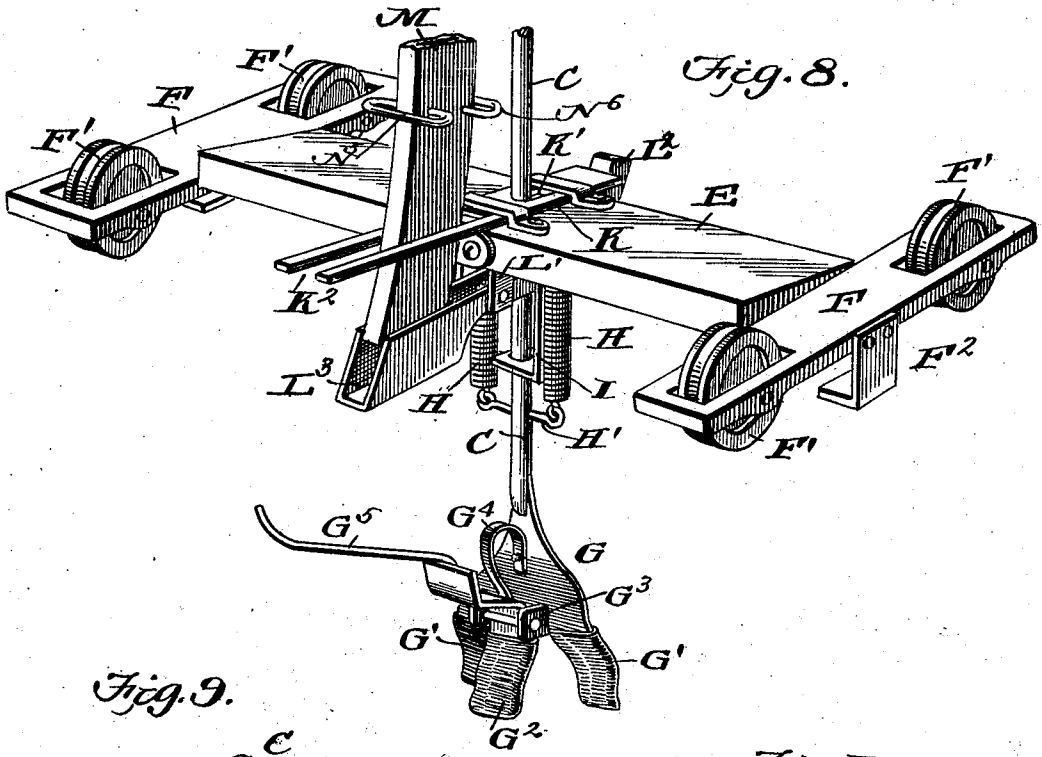


Fig. 9.

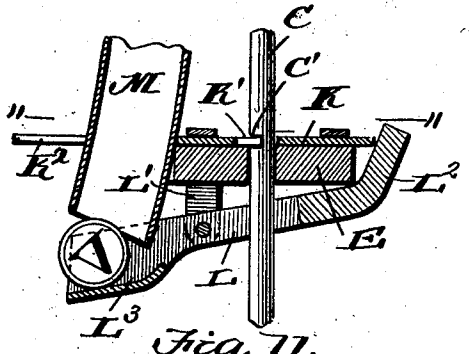


Fig. 10.

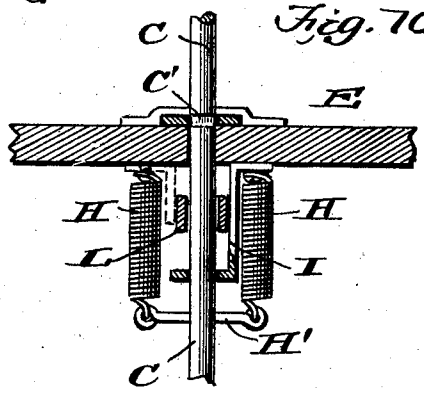


Fig. 11.

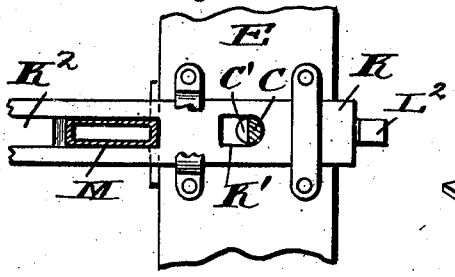
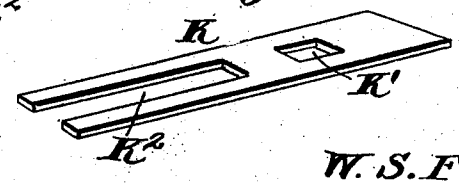


Fig. 12.



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No. 762,895. Patented June 21, 1904.

UNITED STATES PATENT OFFICE.

WILLIAM S. FILLEY, OF MONTPELIER, OHIO.

VENDING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 762,895, dated June 21, 1904.

Application filed September 26, 1903. Serial No. 174,770. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM S. FILLEY, a citizen of the United States, residing at Montpelier, in the county of Williams and State of Ohio, have invented a new and useful Vending-Machine, of which the following is a specification.

This invention relates generally to coin-operated vending-machines, and more particularly to one intended for vending cigars from the box, although it will be understood that the machine can be employed for vending other articles.

The object of the invention is to provide a coin-operated machine in which the purchaser can make a selection of the particular cigar or other article he desires to purchase.

With this and certain other objects in view the invention consists, essentially, in providing a case adapted to hold a box of cigars in the proper position, said case also having a track upon which travels a carriage carrying a coin-operated selecting-machine, said carriage being movable longitudinally, so that any particular cigar in the box may be selected.

The invention consists also in providing a movable coin-operated mechanism in which it is necessary to deposit the coin before the selection can be made and one which will be locked simultaneously with the discharge of the article vended.

The invention consists also in certain details of construction and novelties of combination and arrangement, all of which will be fully described hereinafter, and pointed out in the claims.

In the drawings forming part of this specification, Figure 1 is a perspective view of a vending-machine constructed in accordance with my invention. Fig. 2 is a vertical longitudinal sectional view of the same. Fig. 3 is a detail sectional view on the line 3 3 of Fig. 2. Fig. 4 is a detail view illustrating the position of the coin-operated mechanism when selecting a cigar or other article. Fig. 5 is a detail sectional view taken through the top of the case and illustrating the slot and curtain traveling therein. Fig. 6 is a detail view showing a portion of one of the curtain-guideways and the pulley over which the curtain travels. Fig. 7 is a detail view showing one side of the carriage, the wheel thereof being shown in elevation. Fig. 8 is a perspective view of the carriage of the coin-operated mechanism. Fig. 9 is a detail sectional view showing the position of the parts just prior to unlocking the plunger-rod. Fig. 10 is a detail sectional elevation showing the springs for normally projecting the plunger-rod upwardly and also the guide through which the plunger-rod works. Fig. 11 is a sectional plan taken on the line 11 11 of Fig. 9. Fig. 12 is a detail perspective view of the locking-slide.

In carrying out my invention I employ a case A, the sides of which may be of glass and the bottom A′ made inclined and adapted to receive a box of cigars A^2. At the forward end of the box is arranged a receptacle A^3, into which cigars or other articles are discharged after being selected from the box by the coin-operated mechanism. The top of the case A has a longitudinal slot B extending from the front to the rear and in which moves the push-rod C and the coin-chute M of the coin-operated mechanism, said coin-operated mechanism traveling upon the inclined track D, arranged within the case.

The carriage comprises the cross-beam E, having trucks F at each end, said trucks having the groove-wheels F′ journaled therein, said wheels traveling upon the inclined rails D, as before stated, and to prevent the carriage being misplaced I provide hanger-guides F^2 at the outer sides of each truck, the horizontal portions of each guide extending beneath the rail D, and thereby preventing the carriage being misplaced. By having the carriage movable longitudinally over the box of cigars the mechanism can be brought directly over the cigar the purchaser desires to select before depositing the coin. The plunger-rod carries a gripping device G at its lower end, said gripping device comprising a pair of stationary gripping-fingers G′ and a movable gripping-finger G^2, pivotally connected to the stationary fingers, said movable finger being pivoted between the pair of ears G^3, and the movable finger G^2 is normally held close to the fixed fingers G′ by means of a spring G^4, one end of which bears against the upper

portion of the gripping device G and the other end against the movable finger G′ above the pivotal point, and the movable finger G^2 has a tripping-rod G^5 extending forwardly and upwardly therefrom, which tripping-rod is adapted to engage the front portion of the case for the purpose of opening or supporting the gripping-fingers for the purpose of discharging the cigar selected and grasped between the fingers. The plunger-rod C is normally held elevated by means of coil-springs H, connected at their lower ends to a cross-pin H′ passing through the plunger-rod, the upper ends of said springs being connected to the cross-beam E of the carriage. The plunger works through a depending guide I, connected also to the cross-beam of the carriage, the purpose of said guide being to steady the movement of the rod. The plunger-rod is locked in its raised position by means of a locking-slide K, having an aperture K′, through which the plunger-rod works, said plunger-rod having a notch C′, which is engaged by the slide when said slide is in its rearmost position, as shown in Fig. 8. For the purpose of projecting the slide forwardly and unlocking the plunger-rod I employ a lever L, pivoted in the hanger L′, secured to the under side of the cross-beam E, the rear end L^2 being bent upwardly, so as to engage the rear end of the slide and project the said slide forwardly whenever a coin is deposited upon the end L^3 of the lever, said coin being guided to said end by means of the coin-chute M, attached to the carriage and projecting upwardly from the slot B. The forward end of the locking-slide is bifurcated, as shown at K^2, the coin-chute resting in said bifurcation, and it will be noted that the end L^3 of the lever is flanged or grooved for the purpose of receiving the coin deposited in the chute. Thus it will be seen that the coin-operated mechanism can be moved longitudinally within the case until the gripping device is brought directly over the cigar desired, and by depositing the coin in the chute M the lever L is tripped, throwing the locking-slide forwardly, disengaging the plunger-rod, which can be forced downwardly, and the cigar will be grasped between the gripping-fingers, as most clearly shown in Fig. 4, and thus, permitting the plunger-rod to be raised by the springs H, the carriage will descend by gravity toward the forward end of the case, and the tripping-rod G^5 will engage the front end of the case, separating the gripping-fingers and dropping the cigar into the chute or receptacle A^3. If desired, the coin may be deposited while the mechanism is in its lowest position, or that indicated in Fig. 2, in which case the coin will drop into the coin-receiver A^4, arranged at the forward end of the machine; but if the coin is deposited at any other time it will drop upon the bottom of the case, and a transverse ledge A^5 extends across the bottom of the box to prevent the coins falling into the chute or receptacle A^3.

For the purpose of closing the slot B and preventing anything being inserted in the said slot I employ a curtain N, made in two sections N′ and N^2, the section N′ being connected at its forward end to the spring-actuated lever N^3, mounted in the bracket N^4, arranged at the forward end of the case, and the rear end of this curtain-section N′ is connected to a bail N^5, rigidly connected to the forward side of the coin-chute. The rear section N^2 of the curtain is connected at its forward end to a bail N^6, rigidly connected to the rear side of the coin-chute, and at its rear end this curtain is connected to a spring-actuated roller N^7, journaled in a bracket N^8, arranged at the rear end of the case, said curtain traveling over a roller N^9, as most clearly shown, and by reference to Fig. 5 it will be noted that the sides of the slot B are grooved, as shown at B′, in which the curtain travels, so that it will be impossible to insert anything in the slot for the purpose of surreptitiously removing the cigars from the machine.

It will thus be seen that I provide an exceedingly cheap, simple, and efficient coin-operated vending-machine particularly adapted for vending cigars and one in which the gripping mechanism can be made to grasp the particular cigar desired.

The locking-slide is thrown into engagement with the plunger-rod by the forward end of the said slide contacting with the bracket N^4 or the forward end of the case.

The chute M is carried upwardly a short distance above the casing and curved zigzag fashion to prevent a wire or other means being inserted in the chute for the purpose of tripping the mechanism and securing a cigar without inserting a coin. Any desired means may also be employed to prevent the mechanism to be actuated by a coin of other than the required denomination.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A vending-machine comprising a case, a carriage movable within the case, a coin-operated mechanism carried by the said carriage, said coin-operated mechanism comprising a vertical movable plunger-rod having spring-actuated gripping-fingers, together with means for locking and unlocking the plunger-rod.

2. A vending-machine comprising a case adapted to receive a box of cigars, a carriage movable within the casing, a coin-operated mechanism carried by the carriage, said mechanism comprising a plunger-rod, a coin-chute, locking-slide and unlocking-lever, the plunger-rod having gripping-fingers at the lower end, for the purpose of gripping a cigar or other article.

3. A vending-machine comprising a casing,

having a longitudinal slot in the top, a carriage movable in the casing, said carriage having a coin-operated mechanism connected therewith, said mechanism comprising a coin-chute and lever, a plunger-rod and locking-slide, the gripping-fingers carried at the lower end of the plunger-rod, and means for setting the locking-slide and releasing the gripping-fingers.

4. In a vending-machine, a casing having a longitudinal slot in the top thereof, a coin-operated mechanism movable within the casing, the coin-chute of said mechanism working in the slot, and a spring-actuated curtain connected to the said chute, said curtain being adapted to travel in the slot, and normally close the same.

5. In a vending-machine, the combination with the case, having a track therein, and a slot produced in the top of said case, a carriage movable upon the track, a coin-chute carried by said carriage, the vertical movable spring-actuated plunger-rod connected with the carriage and projecting upwardly through the slot, the spring-actuated gripping device carried at the lower end of the plunger-rod, a tripping-rod extending forwardly from the gripping device, the locking-slide and the lever for releasing the said slot, substantially as described.

6. In a vending-machine the combination with the case having a slotted top, of the track arranged within the case, the carriage movable upon the track, the coin-chute connected to the carriage, the lever pivoted to the carriage, the spring-actuated plunger-rod passing through said carriage, the fixed and pivoted gripping-fingers carried at the lower end of the plunger-rod, the spring for holding the said fingers together, the tripping-rod for releasing the spring-actuated gripping-finger, the locking-slide carried by the carriage and adapted to lock the plunger-rod, said slide being released by the lever and set by engaging the forward side of the casing, and the spring-actuated curtains connected to the coin-chute, the opposite ends of the curtains being connected to the opposite ends of the casing, substantially as described.

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C. C. DRAKE.