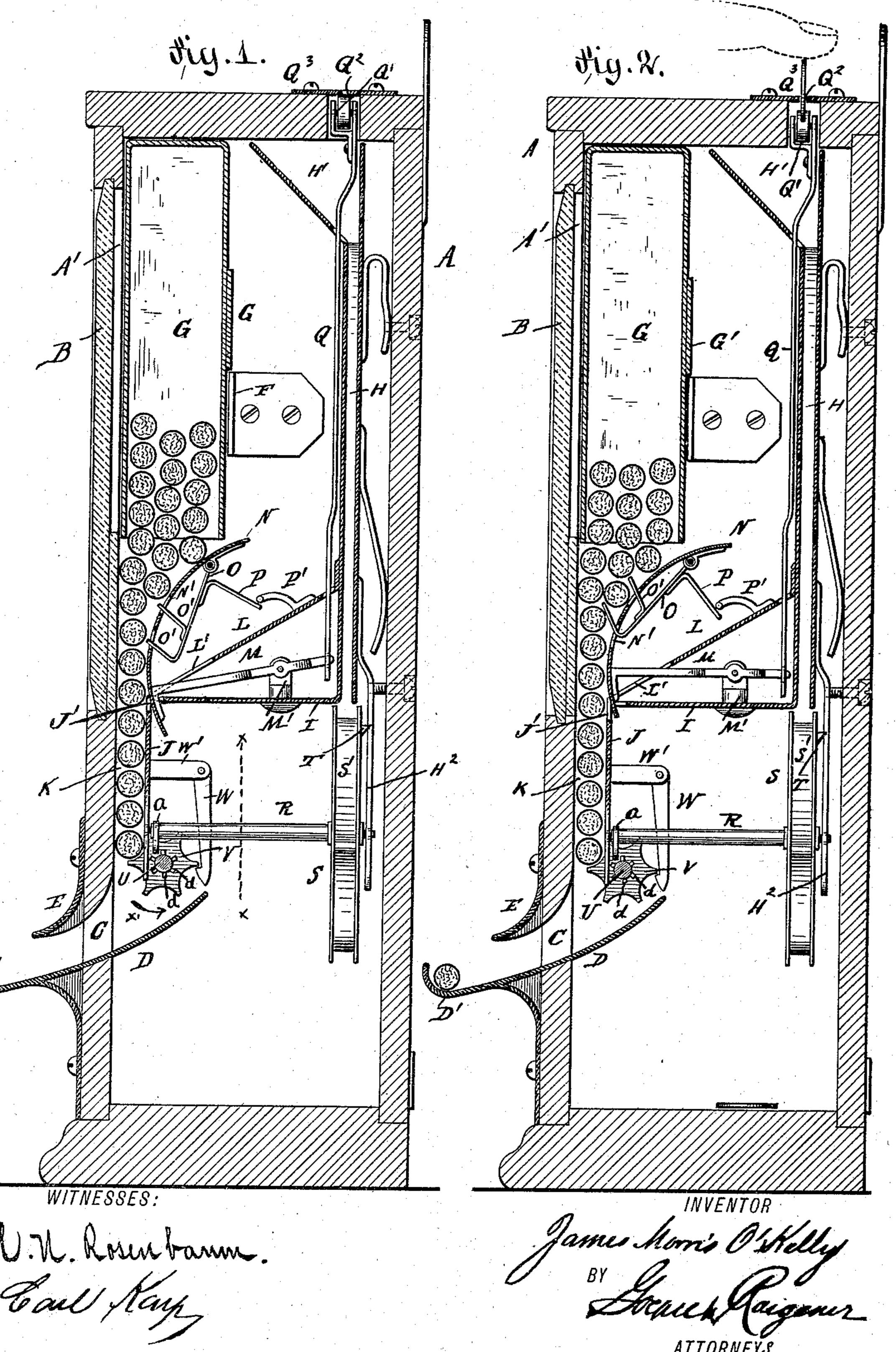
J. M. O'KELLY. SELLING MACHINE.

No. 406,593.

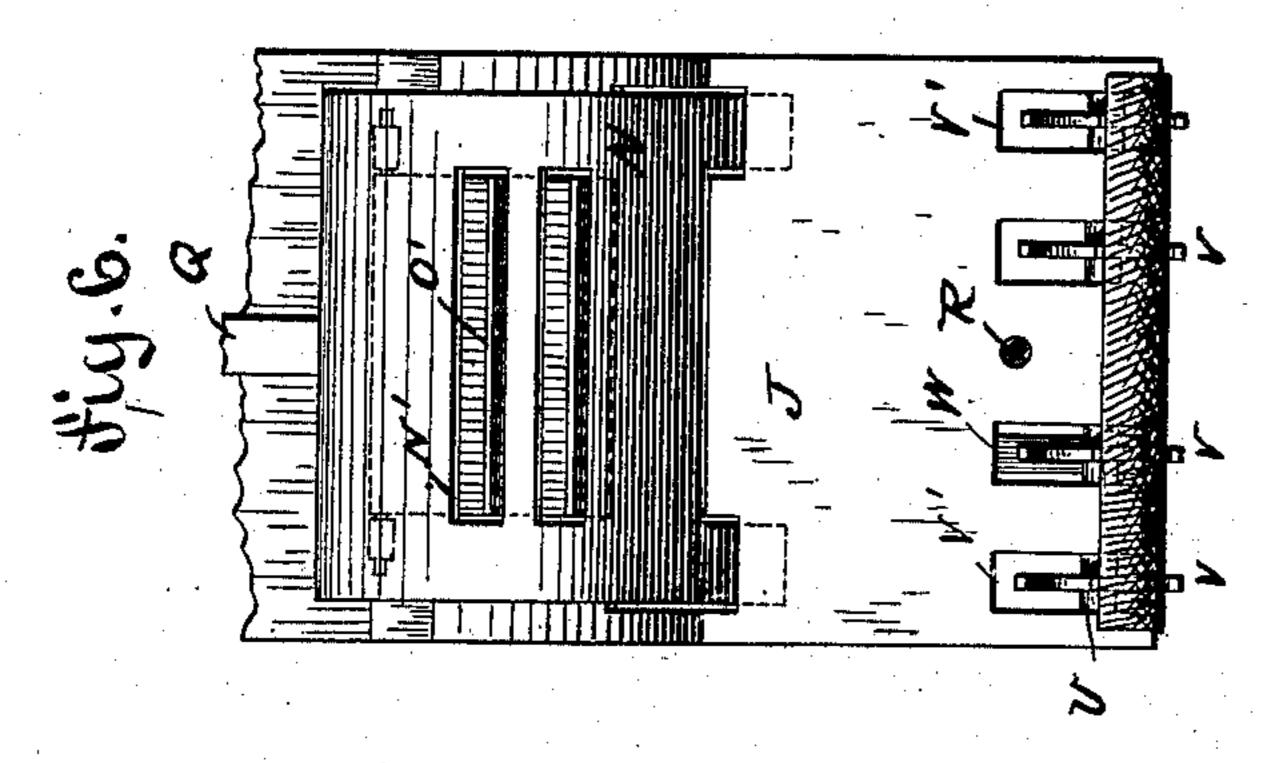
Patented July 9, 1889.

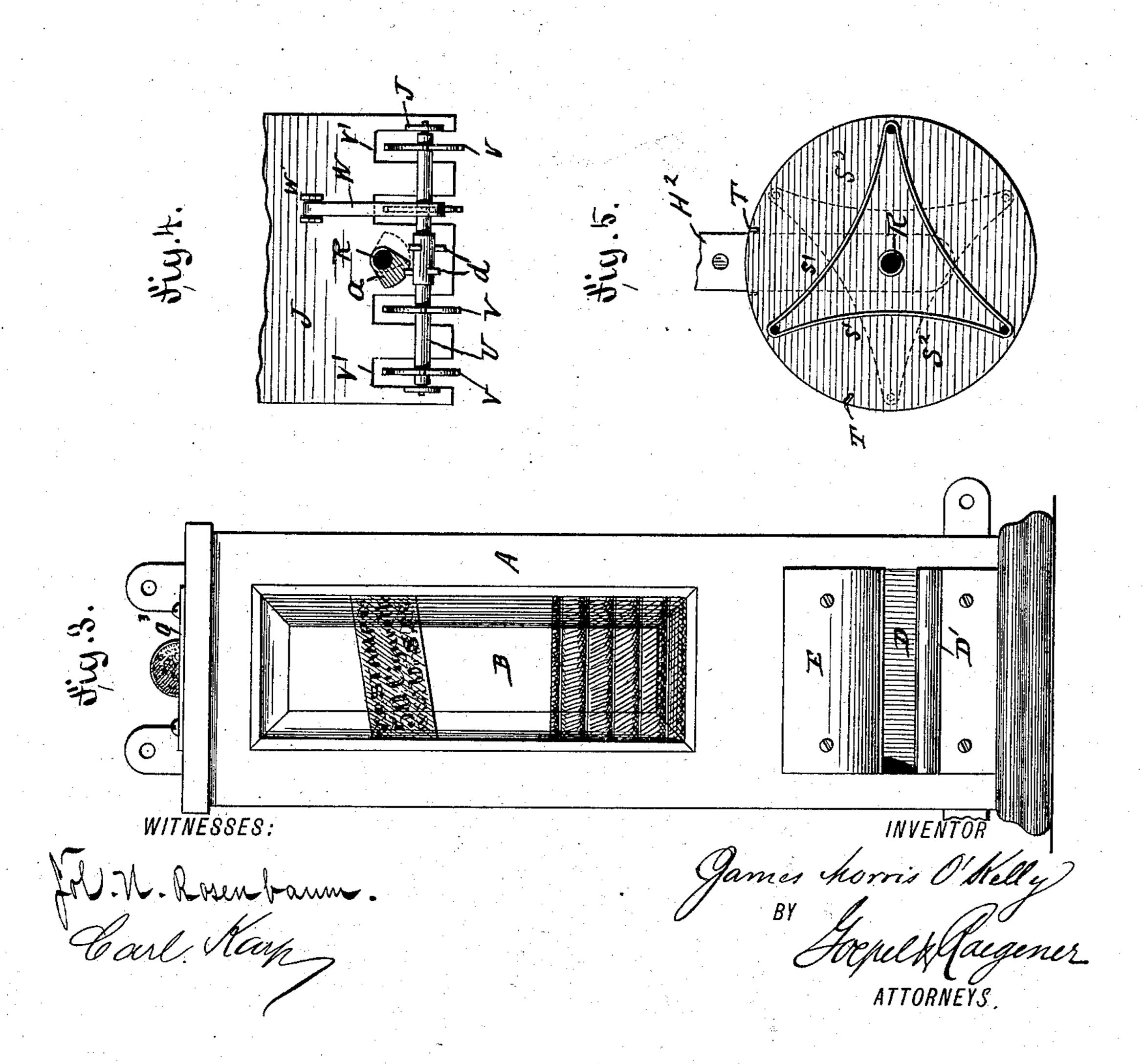


SELLING MACHINE.

No. 406,593.

Patented July 9, 1889.





United States Patent Office.

JAMES MORRIS O'KELLY, OF NEW YORK, N. Y., ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, TO THE AUTOMATIC VENDING BOX COMPANY, OF NEW YORK.

SELLING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 406,593, dated July 9, 1889.

Application filed November 14, 1888. Serial No. 290,845. (No model.)

To all whom it may concern:

Be it known that I, James Morris O'Kelly, of the city of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Selling - Machines, of which the following is a specification.

This invention relates to improvements in that class of machines in which an article is delivered automatically upon depositing a coin; and this invention relates especially to machines for selling cigarettes, cigars, or like articles.

The object of my invention is to provide a new and improved selling-machine of this kind which is simple in construction and reliable in operation.

In the accompanying drawings, Figure 1 is a vertical transverse sectional view of my improved selling-machine, showing the parts in their normal position. Fig. 2 is a similar view showing the parts in the positions they have at the time the coin is being inserted. Fig. 3 is a front elevation of the same. Fig. 4 is a longitudinal vertical sectional view on the line x x, Fig. 1, looking toward the front. Fig. 5 is a vertical longitudinal sectional view on the same line, looking toward the rear. Fig. 6 is an elevation of the inner wall of the cigarette-way.

Similar letters of reference indicate corre-

sponding parts.

The box or casing A is provided in its front with an opening A', closed by a glass plate B, 35 and below said glass plate it is provided with a transverse slot C, on the bottom of which a delivery-plate D is fixed, said plate projecting from the inner and outer surfaces of the front of the box, and being inclined from its inner 40 to its outer edge and provided at its outer edge with an upwardly-curved flange D'. Over the upper edge of the slot C the curved guard-plate E is fixed, which projects from the front of the casing. From the inner surface 45 of one side of the box an arm F projects about one-third of the height of the box from the top and serves to support a pasteboard box G, containing the cigarettes, which box is open at the bottom and provided on one side 50 with an exterior projection G', resting on the

arm F. The vertical coin-chute H is located a short distance in front of the rear wall of the box or easing A, and is provided at its upper end with a funnel-shaped enlargement H'. From the front wall of said coin-chute 55 the plate or arm I projects horizontally at the lower end to within a distance from the front of the casing slightly greater than the diameter of a cigarette, and from the free end of said plate or arm I the plate J extends down-60 ward, forming with the inner surface of the front of the casing the vertical cigarette-

way K.

An inclined plate L above the plate I is inclined downward from the front of the coin- 65 chute to the front edge of the plate I, and is provided at its lower part with longitudinal slots L', through which the front ends of the lever M can pass, which is preferably forked, said lever being pivoted to the standard M' 70 on the upper surface of the plate I. A curved plate N is secured near its lower edge to the front ends of the lever M, and can pass into the slot J' in the corner formed by the plates I and J. A plate O is hinged to the inner sur- 75 face of the curved plate N near the upper edge, and is provided at its swinging end with two prongs O', extending almost the entire width of the plate N and adapted to pass through slots N' of said plate N. The arm P, 80 projecting from the plate O, rests against a fixed arm P' on the inclined plate L. A bar Q has its lower end rested on the shorter arm of the lever M and extends up in front of the coin-chute H, its upper end being passed 85 through the funnel-shaped enlargement H' of the coin-chute. On the upper forked end of the bar Q a roller Q' is mounted directly below the slot Q² of a plate Q³ in the top of the casing. A rock-shaft R extends from front 90 to rear of the casing, and is mounted in the plate J near the lower edge of the same and in an arm H² projecting downward from the coin-chute.

Directly below the lower end of the coin- 95 chute a casing S is rigidly mounted on said rocking shaft R, which is formed of two disks a short distance from each other, and between said disks curved plates S' are secured, forming the two pockets S² and S³, said plates S' 100

forming the curved bottoms of said pockets. Parts of one of the plates are nicked or bent to form the projecting stops T, that can strike against the arm H2, thus limiting the move-5 ments of said casing. In lugs J² on the inner surface of the plate J a shaft U is mounted, carrying four notched wheels V, which can rotate in slots V' in the lower edge of the plate J. The notches in said wheels are about 10 equal to half the circumference of a cigarette, so that a cigarette can rest in one row of notches, as shown in Figs. 1 and 2. A pawl W, hinged to an arm W' of the plate J, engages the teeth of one of said notched wheels. on the rocking shaft R the plate a is fixed. From the shaft U as many pins d project as there are notches in the wheels V, said pins being arranged in two circumferential rows, the pins being fixed alternately in one row 20 and then in the other, so that when the plate a turns it will rest against a pin d of one row and then against a pin d of the next row, and so on. The pins d and plate a thus form

an escapement. The operation of the machine is as follows: The box G, containing the cigarettes, is placed into the box or casing A with the stamp to the outside, so that the same will show through the glass front B. The cigarettes slide down 30 through the curved plate N and through the cigarette-way K, and the lowest cigarette rests in the notches of the wheels V, the prongs of which notches project into the cigarette-way sufficiently to prevent the cigarette dropping upon the curved plate D. The weight of the cigarette tends to turn the wheels V in the direction of the arrow x', Fig. 1, and thus one of the pins d is pressed against the plate a. If a coin is passed through the slot Q² and pressed 40 downward, it acts on the roller Q' and presses the bar Q downward, whereby the inner end of the lever M is pressed downward and the outer end raised and the curved plate N is brought into the position shown in Fig. 2. 45 The arm P of the hinge-plate O, resting against the fixed arm P', causes the plate O to swing into the position shown in Fig. 2 and a cigarette to pass in between the plates O', whereby it is lifted and brought into proper 50 position to slide down the curved plate N and the cigarette-way. The coin when dropping

from the lower end of the coin-chute strikes

one of the curved plates S' of the casing S |

and swings said casing to the right or left, according to the position of the casing. As 55 the casing S is fixed on the shaft R, said shaft also turns, as does the plate a, and thus for every time that the casing S swings in one direction or the other the plate a will swing sufficiently to release one pin d of one circumficiently to release one pin d of one circumforther row. During the intervals between the disengaging of one pin by the plate a and the engaging of another the shaft V is revolved one-sixth of a turn, thus permitting one eigarforther to drop upon the plate D and roll out to the front end of the same.

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

1. The combination, with a casing, of an 70 arm projecting parallel with the front of the casing from the inner surface of one side wall and of a removable receptacle for the article to be sold, which receptacle fits in between the front of the casing and said arm and is 75 provided with a projection on its rear wall, said projection resting on the above-mentioned arm, whereby the receptacle is held and supported in vertical position behind the front of the casing, substantially as set forth. 80

2. The combination, with a box or casing, of a coin-chute, a bar projecting through the upper end of the same, a lever actuated by the lower end of said bar, a curved plate secured to said lever, a cigarette-adjusting plate 85 pivoted to said curved plate and having prongs forming a pocket, which prongs project through slots in the curved plate, an arm on said pivoted cigarette-adjusting plate, and a fixed arm against which the arm on the pivoted cigarette-adjusting plate abuts, substantially as set forth.

3. The combination, with a box or casing, of a coin-chute, a bar projecting into the upper end of the same, a lever actuated by the 95 lower end of said bar, a curved plate on said lever, and a cigarette-adjusting plate pivoted on said curved plate, substantially as set forth.

In testimony that I claim the foregoing as 100 my invention I have signed my name in presence of two subscribing witnesses.

JAMES MORRIS O'KELLY.

Witnesses:

CARL KARP, JOHN A. STRALEY.