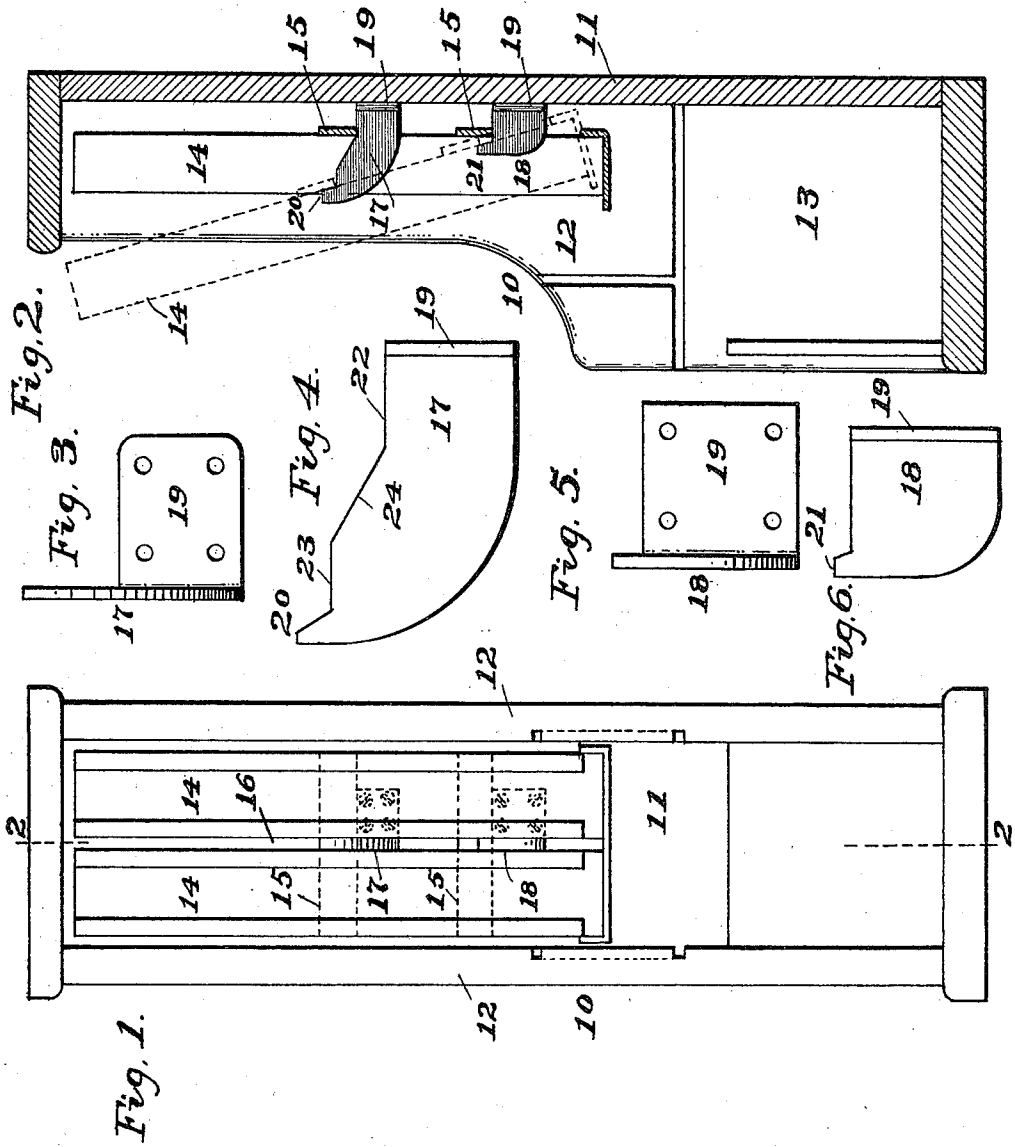
E. F. SPAULDING.

COIN CONTROLLED VENDING MACHINE.

APPLICATION FILED AUG. 12, 1910.

1,008,384. Patented Nov. 14, 1911.



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COIN-CONTROLLED VENDING-MACHINE.

1,008,384. Specification of Letters Patent. Patented Nov. 14, 1911.

Application filed August 12, 1910. Serial No. 576,810.

To all whom it may concern:

Be it known that I, ELIJAH F. SPAULDING, a citizen of the United States, and a resident of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Coin-Controlled Vending-Machines, of which the following is a specification.

The invention relates to improvements in coin-controlled vending machines, and consists in the novel features, arrangements and combinations of parts hereinafter described, and particularly pointed out in the claims.

The invention made the subject of this application is, as to its broader features, divided out from my application, Serial Number 478,839, filed February 19, 1909, (patented November 9, 1909 No. 939,563), and pertains more particularly to the cabinet of the machine and the means therein provided for supporting the vertical trays intended to hold the pieces of confection and the like to be sold.

The object of this invention is to provide novel supporting brackets for the frame of trays, said brackets permitting the frame to be tilted frontwardly at its upper end for convenience in replenishing the trays with goods. The brackets very firmly support the frame of trays and enable it to be tilted frontwardly with entire convenience and without danger of the frame slipping off from the brackets.

The invention will be fully understood from the detailed description hereinafter presented, reference being had to the accompanying drawings, in which:

Figure 1 is a front view of the cabinet with vertical trays supported upon the novel brackets of my invention, the front of the cabinet and the coin mechanism being omitted; Fig. 2 is a vertical longitudinal section of the same on the dotted line 2—2 of Fig. 1, the frame of trays being shown in its tilted position by dotted lines while still supported upon the brackets which hold the trays when in their operative position; Fig. 3 is an enlarged detached front edge view of the upper supporting bracket; Fig. 4 is a side elevation of the same; Fig. 5 is an enlarged detached front edge view of the lower supporting bracket, and Fig. 6 is a side elevation of the same.

In the drawings, 10 designates the cabinet as a whole, comprising a back 11, sides 12, a lower portion forming a chamber 13 for the coin-mechanism, not shown, and an upper removable front, not shown, of usual construction, standing in front of and protecting the upper or goods holding portion of the cabinet. Within the upper vertical portion of the cabinet is mounted a frame of vertical trays 14 composed of individual trays of customary form to hold the pieces of confections to be sold and, in the present instance, connected at their backs by means of transverse bars 15. I only illustrate two individual trays 14 in the drawings, but any number of the trays may be employed, as usual. The trays 14 are separated from each other by a space 16 (Fig. 1) and supported within the cabinet upon the bracket arms 17, 18 which are secured to the back 11 of the cabinet and project forwardly through the space 16 below the transverse bars 15 so that the latter by resting on said brackets may coöperate therewith in supporting the trays. The brackets 17, 18 are disposed one above the other, the lower bracket being near to the lower end of the frame of trays and the upper bracket being about the middle of the height of said frame. The brackets 17, 18, are preferably formed in integral pieces of sheet metal and with laterally extending inner ends forming ears 19 by which the brackets may be conveniently fastened by screws to the back of the cabinet. The brackets 17, 18 are formed with upwardly extending forward projections 20, 21, respectively, which incline downwardly and rearwardly to permit the tilting of the trays 14 forwardly at their upper portion and maintain an engagement with the bars 15, as shown in Fig. 2, whereby the frame of trays becomes so positioned without entire removal or detachment from the cabinet, that said trays may be conveniently replenished with the goods to be sold. The lower bracket 18 is shorter than the upper bracket 17, and hence on moving or tilting the frame of trays to the position shown by dotted lines in Fig. 2, the lower bracket operates substantially as a pivotal point to allow the upper portion of the frame of trays to be swung forwardly on the bracket 17 until the upper transverse bar 15 becomes arrested by the projection 20 of said upper bracket. The upper bracket 17 along its upper edge is pro-

vided with a rear level supporting surface 22, a front level supporting surface 23, and a downwardly and rearwardly inclined edge 24 leading from said front surface 23 to said rear surface 22.

When it is desired to replenish the trays 14, the frame of trays is pulled forwardly at its upper portion and the upper bar 15 is caused to ride upwardly along the inclined edge 24 and rest upon the front supporting edge 23 with its front face bearing against the inclined projection 20, in which position the frame of trays will be supported by the brackets and more particularly by the upper bracket 17, since with the elevation of the frame by riding up the inclined edge 24, the lower bar 15 becomes elevated from the level portion of the bracket 18 and simply has a bearing against the projection 21 of said bracket. After the trays have reached their inclined position, shown in Fig. 2, the upper ends of the trays become exposed to receive the goods to be sold, and after the trays have been replenished with the pieces of confection or the like, the upper portion of the frame of trays is simply pushed inwardly to its initial position shown by full lines in Fig. 2.

I regard the means for supporting the frame of trays and permitting them to be moved to the tilted position indicated by dotted lines in Fig. 2, to be of particular efficiency and utility, since they dispense with more complex and uncertain devices at present in use for supporting and permitting the tilting of trays in coin-controlled vending machines.

Since my invention is confined to the trays and their supporting means I do not illustrate in the drawings the mechanism to be rendered operative by the introduction of coins to the machine, nor the means for discharging the confections from the lower ends of the trays 14, but as an example of appropriate mechanisms for the purposes indicated I refer to my aforesaid Letters Patent No. 939,563, dated November 9, 1909.

The present invention is not confined to the employment on the upper bracket 17 of the front supporting surface 23 and inclined edge 24, since the upper edge of said bracket 17 may correspond exactly with the upper edge of the bracket 18, but I prefer to form the upper bracket 17 with the said supporting surface 23 and inclined edge 24.

What I claim as my invention and desire to secure by Letters-Patent, is:—

1. A vending-machine cabinet having a back, sides and top, and a plurality of side-by-side vertically elongated trays for holding the stacks of confections to be sold and to be suspended in said cabinet, said trays being open at their upper ends and having discharge openings at their lower ends and being connected together to form a rigid frame of trays suitably spaced from each other, and said trays also having upper and lower transverse bars extending across the space between them, combined with upper and lower bracket arms secured to the cabinet and extending forwardly below said transverse bars into the space between said trays, for supporting said trays vertically and also in forwardly tilted position when they are to be replenished, the upper bracket-arm being longer than the lower arm and both arms being provided at their forward ends with upwardly extending projections to retain said transverse bars, which projections incline downwardly and rearwardly at their rear edges; substantially as set forth.

2. A vending-machine cabinet having a back, sides and top, and a plurality of side-by-side vertically elongated trays for holding the stacks of confections to be sold and to be suspended in said cabinet, said trays being open at their upper ends and having discharge openings at their lower ends and being connected together to form a rigid frame of trays suitably spaced from each other, and said trays also having upper and lower transverse bars extending across the space between them, combined with upper and lower bracket arms secured to the cabinet and extending forwardly below said transverse bars into the space between said trays, for supporting said trays vertically and also in forwardly tilted position when they are to be replenished, the upper bracket-arm being longer than the lower arm and both arms being provided at their forward ends with upwardly extending projections to retain said transverse bars, and said lower bracket arm being near the lower end of the frame of trays, while said upper bracket arm is near the horizontal middle portion of said frame; substantially as set forth.

3. A vending machine cabinet having a back, sides and top, and a plurality of side-by-side vertically elongated trays for holding the stacks of confections to be sold and to be suspended in said cabinet, said trays being open at their upper ends and having discharge openings at their lower ends and being connected together to form a rigid frame of trays, and said frame having upper and lower transverse supporting bearings connected therewith, combined with upper and lower brackets secured to the cabinet and extending forwardly below and receiving said bearings for supporting said frame of trays vertically and also in forwardly tilted position when they are to be replenished, the upper bracket being longer than the lower bracket and provided at its forward end with an upwardly extending projection to arrest said frame when the latter at its upper portion is tilted for-

wardly to enable the replenishing of the trays; substantially as set forth.

4. A vending-machine cabinet having a back, sides and top, and a plurality of side-by-side vertically elongated trays for holding the stacks of confections to be sold and to be suspended in said cabinet, said trays being open at their upper ends and having discharge openings at their lower ends and being connected together to form a rigid frame of trays, and said frame having upper and lower transverse supporting bearings connected therewith, combined with upper and lower brackets secured to the cabinet and extending forwardly below and receiving said bearings for supporting said frame of trays vertically and also in forwardly tilted position when they are to be replenished, the upper bracket being longer than the lower bracket and provided at its forward end with an upwardly extending projection to arrest said frame when the latter at its upper portion is tilted forwardly to enable the replenishing of the trays, and said upper bracket having at its upper edge a rear supporting surface, a front supporting surface and a downwardly and rearwardly inclined section extending from said front to said rear supporting surface; substantially as set forth.

Signed at New York city, in the county of New York and State of New York, this 10th day of August A. D. 1910.

ELIJAH F. SPAULDING.

Witnesses:
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