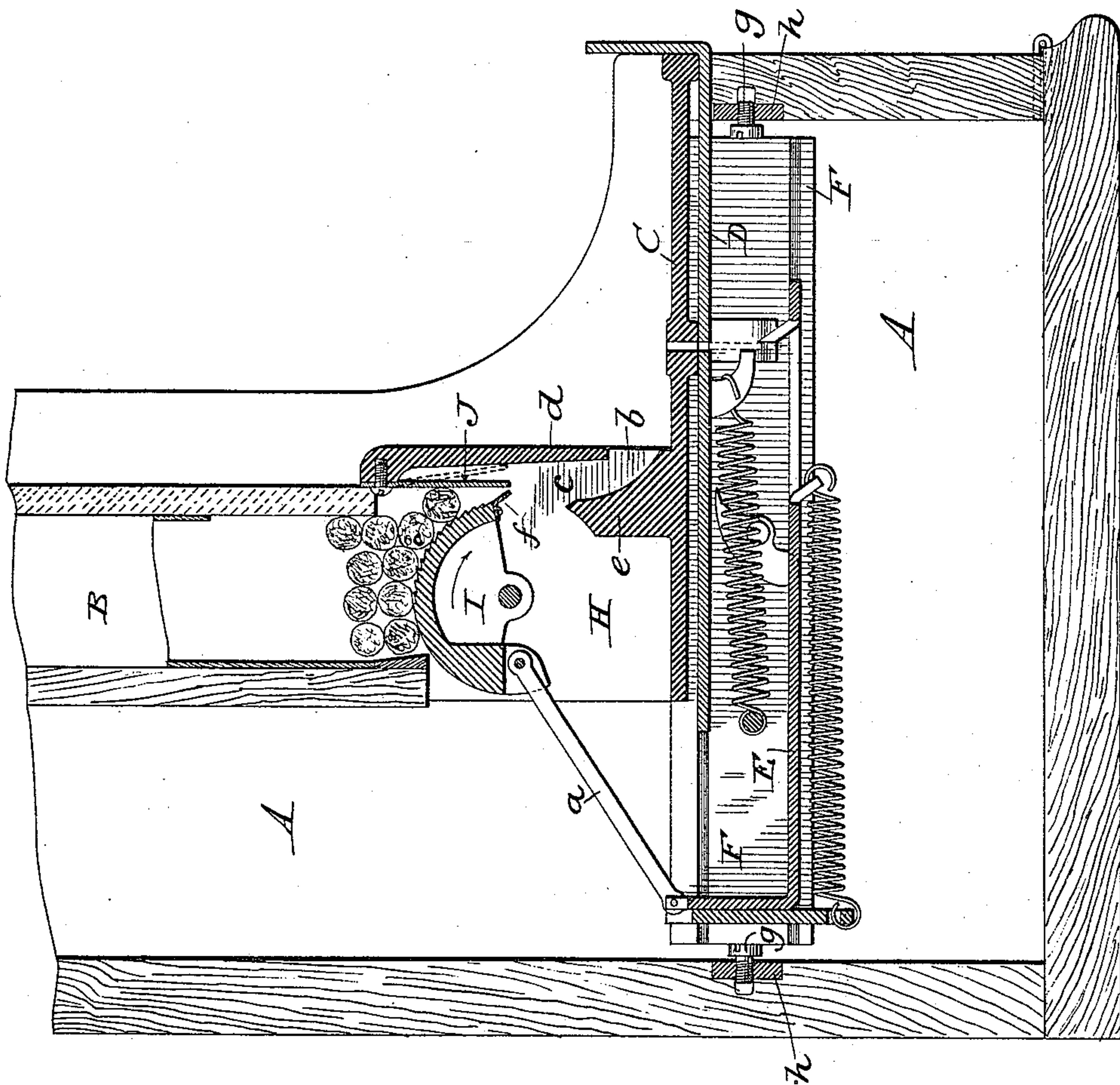


(No Model.)

J. A. WILLIAMS.
VENDING APPARATUS.

No. 440,983.

Patented Nov. 18, 1890.



Attest.

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UNITED STATES PATENT OFFICE.

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VENDING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 440,983, dated November 18, 1890.

Application filed May 23, 1890. Serial No. 352,881. (No model.)

To all whom it may concern:

Be it known that I, JOHN A. WILLIAMS, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Vending Apparatus, of which the following is a specification.

My invention relates to vending-machines, and has reference more particularly to that class of machines used for the purpose of selling cigars, cigarettes, and like articles.

In the drawing I have represented a vertical sectional view from front to rear of a machine constructed in accordance with my invention.

The machine in its general plan of operation resembles that shown in my Patent No. 430,498, granted June 17, 1890, and no claim is intended to be herein made to matters embraced in said patent.

A indicates a box or casing having at its base a receptacle to receive the coins, and an upright chute or channel B to receive the articles to be sold or the box containing the articles, and between the coin-receptacle and the chute is a horizontal plate C, to which the actuating mechanism is secured.

The actuating mechanism forms no part of the present invention, and may be varied as desired, without departing from the spirit of my invention so long as the proper motion is given to the feeder, hereinafter referred to.

For the purpose of illustration, I have shown an actuating mechanism comprising two slides D and E, adapted to be connected by a coin, substantially as in my patents, No. 402,374, granted April 30, 1889, and No. 414,787, granted November 12, 1889, the slides fitting into the grooved ways or guides F F, depending from the under side of plate C.

H indicates a hollow frame or block, which is located upon the upper face of the plate C, immediately beneath the chute B, and within this block is journaled an oscillating feeder I, which is connected with the slide E by means of a link a.

The block H is provided on its front face near its base with a discharge-opening b, the said opening forming the outlet of a passage or channel c, formed by the front wall d of

the block, and an internal short wall e, which are separated from each other, as shown. Secured to the upper edge of the front wall d, on its inner face, is a spring-plate J, which sets away from the aforesaid front wall except at the point of attachment, and extends downward to about on line with the axis of the feeder.

The feeder I comprises a semicircular shell having its front face or edge set away a distance from the plate J. The upper front face of the shell is grooved or corrugated longitudinally, and the said shell or feeder is provided on its front edge with a wing or plate f, which extends forwardly toward the spring-plate J, the upper edge of the internal wall e being cut away to permit the wing to pass as the feeder is oscillated. Now, when the parts are in the position shown, the wing effectually prevents the escape of the articles below the lower front edge of the feeder, and also prevents the withdrawal of said articles by the insertion of a wire through the opening b. If the feeder be oscillated in the direction of the arrow the abrupt faces of the corrugations will take hold of the cigarette or like article and draw or force it down between the spring-plate J and the feeder, and as the space between the plate J and the feeder is narrower than the thickness of the article to be sold, the latter, instead of being compressed, (as in the construction shown in my Patent No. 430,498,) will force the plate J away from the feeder, so as to permit the cigarette or like article to fall down into the channel c. This plan of operation is valuable where all tobacco, cigarettes, or cigars having a tender tobacco-wrapper are used, the use of the said wrapper precluding the compression of the articles to be delivered.

In order to adapt the operative mechanism to different styles of boxes or casings, or to compensate for inequalities in the fitting of the parts, I provide the box or casing with an adjustable stop g, which will advisably be made in the form of a screw.

Where the casing is made of very heavy material, the stop may screw directly into the wood; but, ordinarily, it will be found advisable to set into the casing a metallic plate h,

which will be tapped to receive the adjusting stop or screw *g*.

By preference there will be a stop *g* at the front as well as at the rear of the mechanism, so that the stops may bear at both ends against the depending guiding-walls *F F*, and serve to adjust the operative mechanism relative to the box or casing and hold it in its adjusted position.

10 Having thus described my invention, what I claim is—

1. In a vending-machine, the combination, with a box or casing *A*, of an operating mechanism, the upright chute or channel *B*, having the glass-front panel resting upon the operating mechanism, and an adjustable stop (such as *g h*) located between the mechanism and the box or casing, all substantially as shown and described.

20 2. In a vending-machine, the combination,

with a hollow block, frame, or casing, of an oscillating feeder mounted therein and provided with a wing *f* along its lower front edge.

3. In a vending-machine, the combination, with a hollow block, frame, or casing having a discharge-channel, of an oscillating feeder mounted therein, and a yielding plate *J* opposite the feeder and forming one wall of the discharge-channel, all substantially as shown.

4. In a vending-machine, the combination, with a hollow block, frame, or casing, of an oscillating feeder mounted therein, a yielding plate *J*, secured to the hollow block, and a wing *f*, secured to the feeder.

In witness whereof I hereunto set my hand in the presence of two witnesses.

JOHN A. WILLIAMS.

Witnesses:

GEO. W. SHERMAN,

WILLIAM F. BUTLER.