

(No Model.)

C. HESS.
VENDING APPARATUS.

No. 465,373.

Patented Dec. 15, 1891.

Fig. 1.

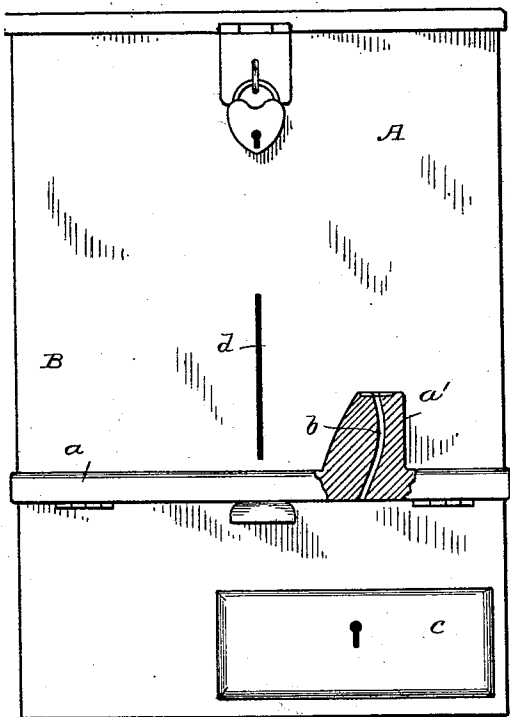


Fig. 2.

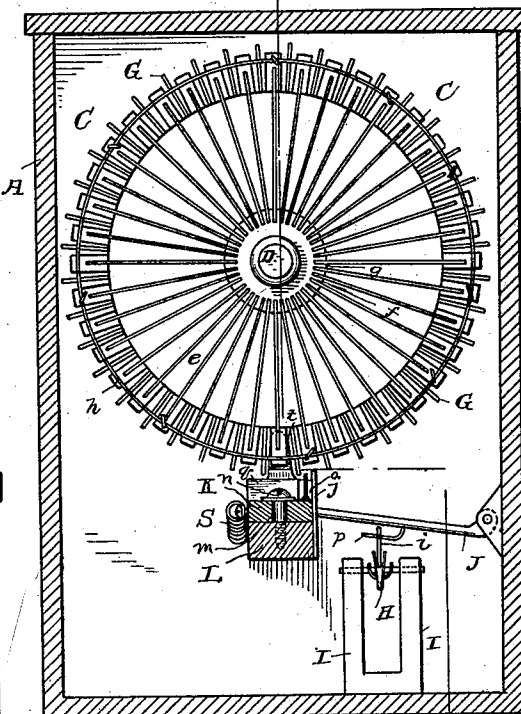


Fig. 3.

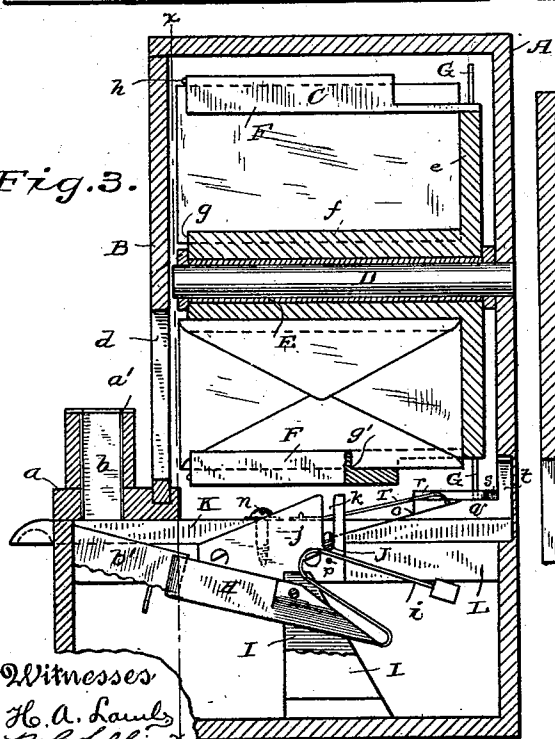
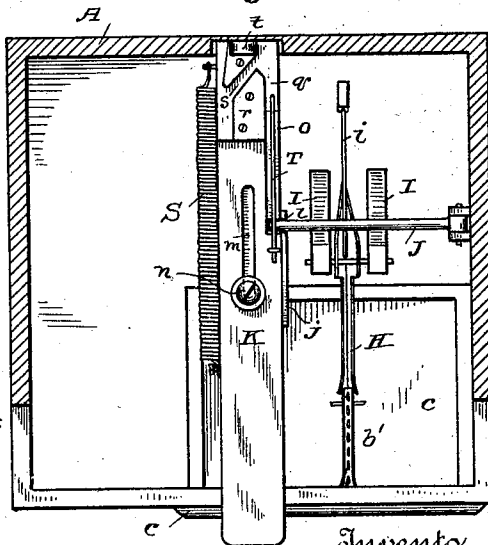


Fig. 4.



Witnesses
H. A. Lantz
Rob. Hall

Inventor
Christian Hess
By Chas. S. Sturtevant.
Attorney

UNITED STATES PATENT OFFICE.

CHRISTIAN HESS, OF STEELTON, PENNSYLVANIA.

VENDING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 465,373, dated December 15, 1891.

Application filed July 21, 1891. Serial No. 400,199. (No model.)

To all whom it may concern:

Be it known that I, CHRISTIAN HESS, a citizen of the United States, residing at Steelton, in the county of Dauphin and State of Pennsylvania, have invented certain new and useful Improvements in Vending Apparatus; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improved coin-operated vending apparatus particularly designed for selling stamped envelopes, letter-sheets, postal-cards, stamps, and such articles, though the same principle could be applied to the sale of other articles. Heretofore many devices for this purpose have been invented and some have been put upon the market. These are all more or less defective, however, by reason of very complicated mechanism, which renders them liable to get out of order and of course adds greatly to the cost. My object therefore is to provide a vending apparatus which shall be simple in construction, comparatively inexpensive to manufacture, and very effective in operation.

My invention therefore consists, primarily, in a vending apparatus comprising an article-carrier, a slide, a coin-operated detent for said slide, said slide being adapted to be grasped by the operator and in direct engagement with the carrier to give the same a step-by-step movement, and adapted also in its outward movement to positively deliver an article.

Finally the invention comprises various details of construction and arrangement of parts, all as hereinafter described, and referred to in the appended claims.

My invention is illustrated in the accompanying drawings, in which—

Figure 1 is a front elevation, partly in section. Fig. 2 is a front sectional elevation, the outer casing being removed, on line *x x* of Fig. 3. Fig. 3 is a section on line *y y* of Fig. 2. Fig. 4 is a plan view showing the operating mechanism, the rotatable carrier being removed.

While I have herein shown an apparatus adapted to the sale of envelopes, it will be understood that I do not limit myself in this

respect, since the same general construction will suffice equally as well for the sale of stamps, letter-sheets, postal-cards, tickets, newspapers, and other articles.

In the drawings, A represents the outer casing inclosing the operating mechanism of my apparatus. This can be made of wood, metal, or any other desired material. As herein shown, the lower part projects beyond the upper part, forming a ledge, upon which is hinged the lid *a*, provided with the coin-slot *a'* and curved chute *b* therefor. An opening is provided in the lower part of the box for the reception of a drawer *c*, into which the coins after performing their work are deposited. This drawer can be locked in any suitable manner. The front of the box or casing is provided with a movable panel B, resting at its lower end in a groove formed in the hinged lid *a* and adapted to be secured by a padlock or any other suitable means to the top of the box or casing. This removable panel has a suitable slot *d*, through which the articles are delivered to the purchaser.

The carrier for the articles is shown in Fig. 2 in front elevation, (marked C.) It rotates upon a suitable axle D, secured at one end to the rear inner face of the casing. This carrier C is made of different thicknesses to correspond with the lengths of the articles to be delivered, and the number of compartments vary according to the number of articles it is desired to deliver before renewing. The said carrier is herein shown as composed of a suitable sleeve E, fitting upon the axle D. At one end of this sleeve is attached the disk *e*. Secured upon this sleeve E (though the two may be in one piece) in front of the disk *e*, and preferably extending its whole length, is the sleeve *f*, provided with a number of longitudinal slots *g* to hold one edge of the article to be sold. Attached to the periphery of the disk *e* at one end and at the other end supported by an annulus *h* of wire are strips F, having slots *g'* corresponding to the slots *g* in the sleeve *f*. The articles to be sold are thus held in position by the slots *g* and *g'*. The top surface of the strips F are cut away at the rear of the carrier, so that the envelopes or other articles project beyond the slots *g'* in position to be acted on by the slide, hereinafter described, and pushed out through

the delivery-slot in the front panel. From the periphery of the circular disk *e* project pins *G*, so arranged that the slide which forces out the article can pass between them and the cam on the slide can act to give the carrier a step-by-step movement.

Beneath the coin-chute *b* is an inclined coinway *b'*, supported from the casing and opening at its inner end into a second inclined pivoted coin-trough *H*. This trough is pivoted at its inner end between two uprights *I I*, attached to the bottom of the casing, and is closed at its inner end to prevent the escape of the coin. This coin-trough *H* is normally held in position to register with the inclined way *b'* by means of a weight secured on the end of a wire *i*, bent, as shown, to bear normally against the under side of a detent *J*. This detent comprises a suitable rod pivoted at one end to the side of the casing and at the other end normally engaging a notch *l* in the slide *K*, shortly to be described. The detent *J* is guided in its upward movement by means of a slot *k*, formed in the plate *j*, attached to a supporting-bar *L*, extending across the casing. The weight of the rod and the weight on the end of the wire *i* are such that the inclined coin-trough *H* is normally against the inclined way *b'*, and the detent *J* is normally in engagement with the notch *l* in the slide *K*. When a coin of proper weight is dropped in, however, the inclined coin-trough will swing downward on its pivot and raise the end of the detent *J* from its engagement with the notch in the slide, thereby allowing the same to be pulled forward. This slide is marked *K*. As shown, it extends through to the exterior of the casing, being provided on its outer end with convenient means for catching hold of it. It is provided with a suitable longitudinal slot *m*, through which passes a set-screw *n* into the supporting-bar *L*, the slide being guided by said set-screw and slot in its forward and backward movement. This slide *K* is, as above specified, provided with the notch *l*, in which the end of the detent *J* normally rests. Extending to the rear of this notch is an upward incline *o*, formed on the slide, adapted, when the slide is pulled forward, to cause the end of the detent *J* to ride up on it, thereby raising the detent beyond the point to which it has been raised by the weight of the coin. This additional movement of the detent is communicated to the inclined coin-trough located over the money-drawer through the wire *i*, which, while normally bearing upon the under side of the detent *J*, is itself elevated in the movement of the detent up the incline by means of the arm *p* extending down from the detent-rod and below the wire. The rear part of the slide is thickened and provided with a raised portion *q* of a width just sufficient to pass between any two of the pins on the periphery of the rotatable carrier. Secured to this rear part is a plate *r*, having an inclined slot *s* extending transversely there-

through. The part in rear of the slot *s* projects slightly to one side and acts in the forward movement of the slide to guide the pins into the slot, and in the further movement to force the wheel one step to the left. In rear of this slot is a projection *t* on the slide adapted to come in contact with the rear of the envelope or other article and force it through the delivery-slot. The slide is returned to normal position by a suitable spring *S*, the part of the plate *r* in front of the inclined slot *s* being pointed to prevent the pins catching against the same in the backward movement. A rod *T* on the slide *K* serves to guide the end of the detent *J* in its movement up the incline and prevent its vertical displacement.

Many changes and modifications may be made in the construction of the parts of my apparatus without departing from the spirit of my invention. For example, the details of construction of the slide may be changed, the main part and parts acting on the pins of the carrier may all be made in one piece, or the two parts in front and rear of the inclined slot may be two separate pieces. So, also, all the special parts may be changed in a variety of ways, and I therefore do not wish to limit myself in any way to such details of construction.

The operation of the device is as follows: The coin dropping through the chute traverses the inclined way *b'* and falls into the pivoted inclined trough *H*, depressing the same, and by reason of the bent wire *i*, bearing against the rod of the detent *J*, raises said detent out of the notch in the slide *K*. The slide *K* is thereupon pulled forward, the detent *J* riding upon the incline *o*, whereby the arm *p* on the detent lifts up the wire *i* and tilts forward the coin-trough, dumping the coin into the drawer *C*. At the same time one of the pins on the carrier is forced through the inclined slot *s*, thereby moving the wheel one step, and in the continued movement of the slide the projection *t* acts against the rear end of the envelope to force it out from the compartment through the delivery-opening.

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

1. A vending apparatus comprising a suitable movable carrier for the articles, a slide adapted to be grasped by the operator and in direct engagement with the carrier for giving a step-by-step movement to the same, said slide provided, also, with means whereby in its outward movement it acts against an article for delivering the same, and a coin-operated detent for said slide, substantially as described.

2. A vending apparatus comprising a rotatable carrier having pins upon its periphery, a slide adapted to be grasped by the operator and in direct engagement with the pins to rotate the carrier, a coin-operated detent

engaging said slide, and a projection carried by said slide for forcing out the articles from the carrier, substantially as described.

3. A vending apparatus comprising a rotatable carrier having pins or projections upon its periphery, a slide adapted to be grasped by the operator, a coin-operated detent for said slide, said slide having an inclined slot for the passage of the pins and acting directly on said pins, whereby the carrier is rotated, and a projection on the end of the slide, adapted in the outward movement thereof to force out the articles from the carrier, substantially as described.

4. A vending apparatus comprising a rotatable carrier having pins or projections upon its periphery, a slide adapted to be grasped by the operator and in direct engagement with the pins, a coin-operated detent for said slide, a plate or plates on said slide, having an inclined slot formed therein for the passage of the pins, whereby the carrier is rotated, and a projection on the end of the slide, adapted in the outward movement thereof to force out the articles from the carrier, substantially as described.

5. In the described apparatus, a suitable rotatable carrier having a slotted sleeve or hub to fit over the axis, and peripheral strips slotted correspondingly and cut away at the inner end, in combination with a suitable coin-operated slide provided with means for forcing out the articles from the slot, substantially as described.

6. In combination with the casing, the axle attached thereto, the carrier having a slotted sleeve fitting over said axle, a disk at the inner end of said sleeve, slotted strips extending beyond the plane of the periphery of the disk at their front but at the rear flush therewith, the articles being held in said slots and at the rear projecting beyond said slots, pins arranged on said disk behind and upon either side of the projecting edge of the articles, a suitable coin-operated slide provided with a cam for rotating the carrier, and a projection for engaging the projecting edge of the article and forcing out the same, substantially as described.

7. In a vending apparatus, a coin-chute, a pivoted trough normally registering with the end thereof, a rearward projection on said trough, a slide having a notch, a detent engaging said notch and pivoted at the opposite end to the casing and extending over the projection on the trough, an arm projecting from said detent and extending beneath the projection on the trough, a carrier, means upon the slide for operating the carrier and delivering the article, and an incline on the slide for raising the detent and thereby tilting the trough, substantially as described.

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

CHRISTIAN HESS.

Witnesses:

GEO. L. CLARK,

CHAS. L. STURTEVANT.