

(No Model.)

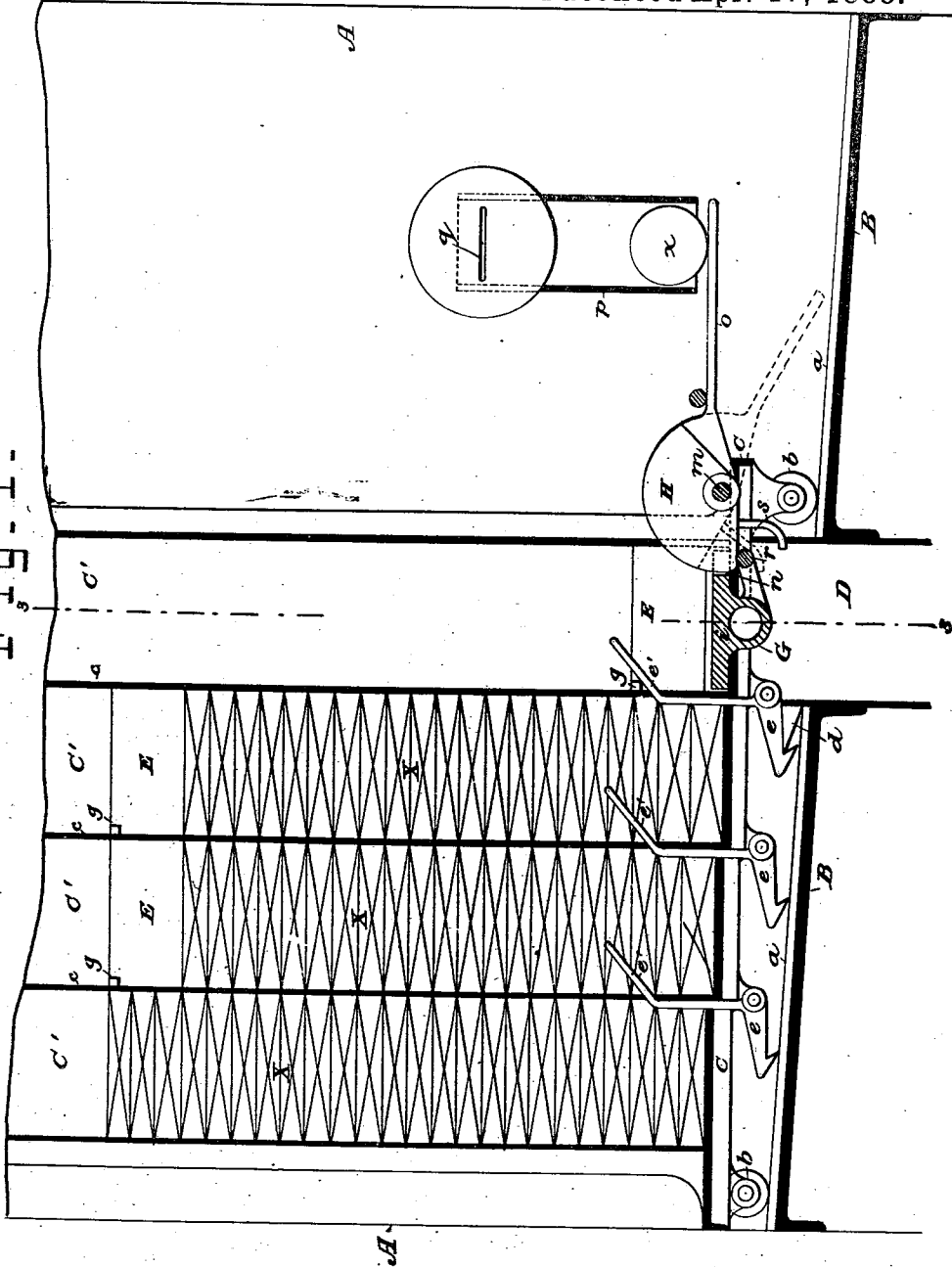
3 Sheets—Sheet 1.

R. MARELLE.
VENDING APPARATUS.

No. 381,397.

Patented Apr. 17, 1888.

Fig. 1.



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(No Model.)

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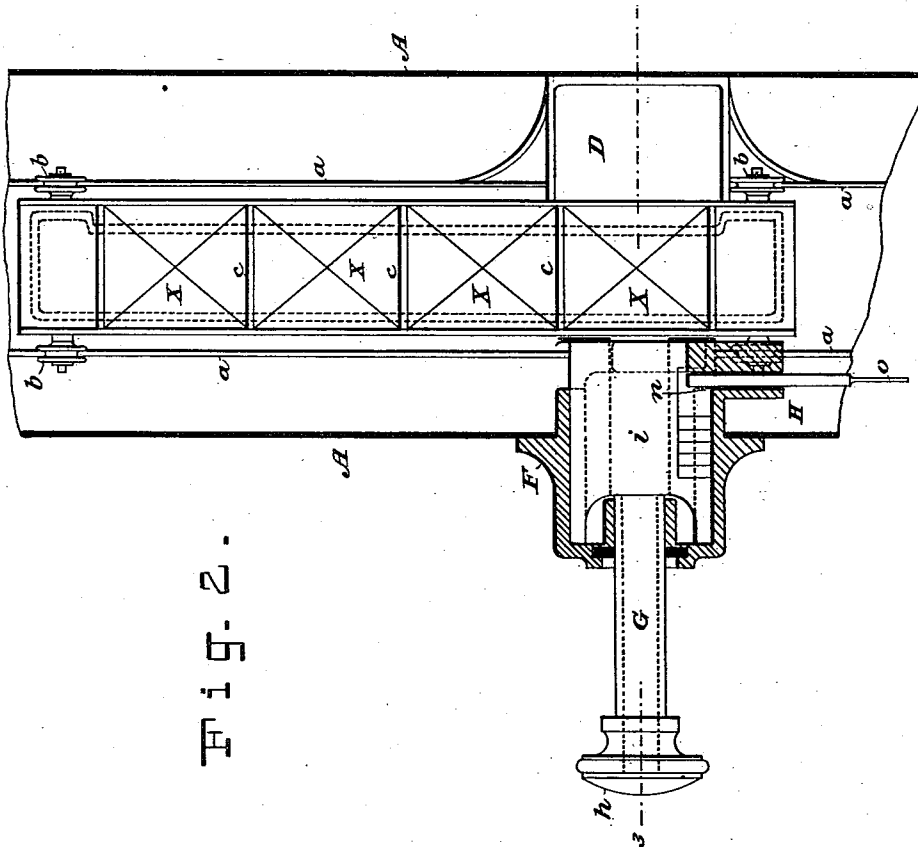


Fig. 2.

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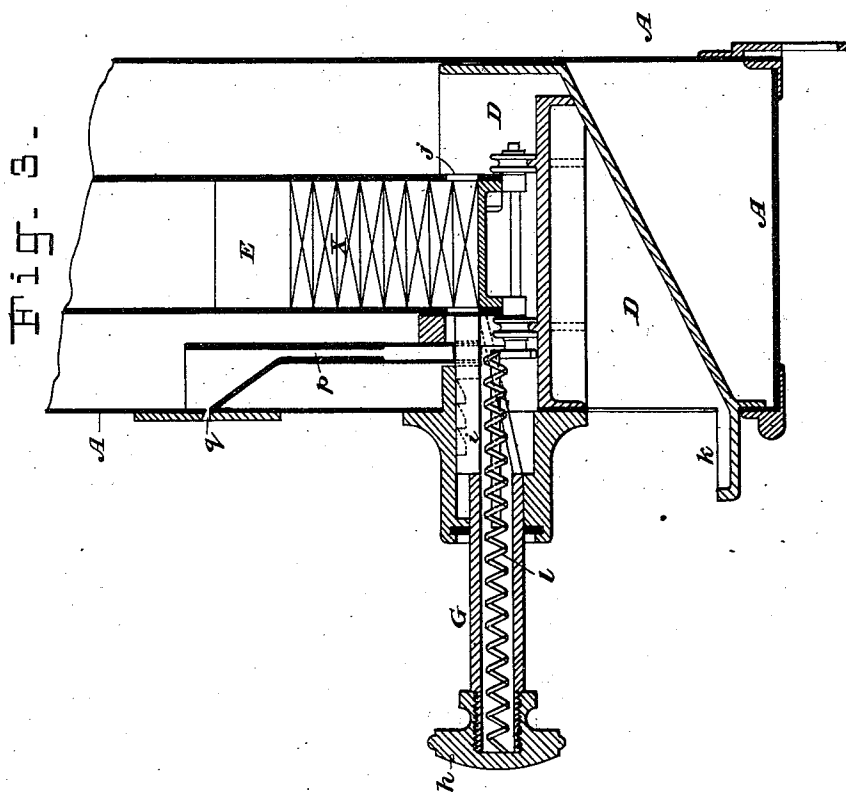
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No. 381,397.

Patented Apr. 17, 1888.



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UNITED STATES PATENT OFFICE.

RÉNÉ MARELLE, OF PARIS, FRANCE.

VENDING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 381,397, dated April 17, 1888.

Application filed November 22, 1887. Serial No. 255,863. (No model.)

To all whom it may concern:

Be it known that I, RÉNÉ MARELLE, a citizen of the French Republic, and a resident of Paris, (Department of the Seine,) France, have invented certain new and useful Improvements in Vending Apparatus, of which the following is a specification.

My invention belongs to that class of apparatus employed for retailing small articles—such as chocolates, cigars, chewing-gum, cigarettes, &c.—either singly or in small parcels, the purchaser being only required to insert a suitable coin, which serves to unlock or unfasten the device, whereby the purchaser may segregate or part off one of the articles to be sold from the others; and the invention consists, partly, in certain improvements in the holder for the goods, which is divided into compartments, each of which is brought successively to the delivery-outlet by automatic means, and partly in the delivery mechanism, which is actuated by the hand of the purchaser after it has been unlocked by the inserted coin.

My invention will be hereinafter fully described, and its novel features carefully defined in the claims.

In the drawings which serve to illustrate my invention I have only shown in sectional views that portion of the apparatus embodying the operative parts constituting the invention.

Figure 1 is a sectional elevation of the operative part of the apparatus. Fig. 2 is a sectional plan of the same. Fig. 3 is a sectional elevation taken at right angles to Fig. 1, and substantially on line 3 3 in Figs. 1 and 2.

A represents a part or fragment of the outer box or casing, which may be of any kind and of any dimensions, so far as my invention is concerned. Within this box is an inclined platform, B, on which are laid track-rails *a a*. On these rails are mounted the wheels *b b* of a carriage, C. The box-like receptacle of this carriage is divided into compartments *C' C'* by partitions *c c*, and in these compartments are piled the articles or parcels, *X X*, to be sold and delivered. In the drawings I have shown four compartments *C'*; but any number may be employed. One object of my invention is to bring each of these compartments in succession over the delivery-chute D, in such a manner that when the last package *X* is delivered

from a compartment the weight E, which rests on the packages, will automatically release the carriage C and allow it to roll down the inclined rails *a* until the next compartment stands over the delivery-chute. This I effect by mounting a catch or stop, as *d*, on one of the rails *a* at the proper point, and providing the carriage with a series of latches or hooks, *e e*, one for each compartment, less one, and arranged to catch against the stop *d*. Each latch has a tail, *e'*, a part of which stands inclined and in the path of a stud or projection, as *g*, on the weight E, and when the last package shall have been delivered from the compartment over the chute D this stud *g* will press down on the inclined part of the tail of the latch *e* in a manner to lift the latter and free it from the stop *d*. The carriage C will then roll down the incline until the next latch *e* catches on the stop *d*, when the next full compartment *C'* will stand over the chute D. Of course the latches will be so spaced and arranged as to allow the carriage to move just the right distance each time. When the last latch (that at the left in Fig. 1) is disengaged from the stop *d*, the carriage will roll down until one of its wheels *b* is stopped or blocked by stop *d*. Of course the form of the latches and stop is not important, so long as they do their work properly. In Fig. 1 the position of the parts shows the first compartment *C'* as just emptied and the weight E as in the act of releasing the first latch *e* from stop *d*. No weight E is needed in the last compartment *C'*.

I will now describe the other feature of my invention, whereby the package or article is delivered.

In a guide, F, in the side of the box A is mounted a sliding stem, G, provided with a button, *h*, on its outer end and a pusher, *i*, on its inner end. This latter is in the form of a block of about the width of a compartment *C'*, and of the proper thickness to strike and push out the bottom package or article, *X*, from the compartment without disturbing the next article above it. This pusher is in line with the compartment and over the delivery-chute D. When the purchaser applies pressure to the button *h* and presses pusher *i* home, the bottom parcel or article is pushed out of the compartment through an aperture, *j*, in

the wall of same, and falls into the delivery-chute D, down which it slides to the shelf *k*. (Seen in Fig. 3.) The stem G, carrying the pusher, is retracted by a spring, *l*. (Seen best in Fig. 3.)

In order that the pusher may be held fast until the proper coin to pay for the article is inserted, I provide a dog or detent, H, (see Fig. 1,) pivoted at *m* and arranged to engage a notch, *n*, in the pusher *i* normally. This will prevent the pusher from being pressed in. On this dog H is a lever or arm, *o*, which stands under the mouth of a coin-chute, *r*, leading down from a coin-slit, *q*, in the wall of box A. When the purchaser inserts a coin, (as *x* in Fig. 1) at the slit *q*, it slides down the chute *r* and strikes on and depresses the lever *o*, thus raising the dog H and setting the pusher free. This position of the dog and lever is indicated by broken lines in Fig. 1.

The dog and lever will be so constructed that they will stand in stable equilibrium in each of the two positions, as represented in Fig. 1. Thus the dog stands raised after a coin has lifted it until it is brought back "over the center" by the pushing in of the pusher *i*. This is effected by means of an inclined rod or part, *r*, carried by the stem G, which acts as a wedge or inclined plane on a stem or hook, *s*, carried by the dog H, to draw the latter back or over to near its normal position, when it will fall by gravity into the notch in the pusher when the latter is retracted.

In order to better illustrate the relative positions of the several parts, I have shown the coin-slit in Fig. 1, although it is in reality in front of the plane of the section. In Fig. 3, also, I have represented the coin slit and chute in section in their proper relative positions to the other parts; but they are in front of the plane of the section.

Having thus described my invention, I claim—

1. In a vending apparatus, the combination, with an inclosing-box having an inclined track and a delivery-outlet, and a carriage mounted on said track and bearing the several receptacles for the articles to be sold, of weights on

the articles and the detents for holding the carriage against rolling down said track, said detents being actuated by said weights, substantially as and for the purpose set forth.

2. In a vending apparatus, the combination, with the inclosing-box provided with a coin slit and chute and a delivery-outlet, and the receptacle for the stack or pile of articles to be sold and delivered, arranged over said delivery-outlet, of the self-retracting pusher arranged in guides and adapted to traverse said receptacle, the vibrating dog normally in engagement with a notch in the retracted pusher and with its lever standing under the discharging end of the coin-chute, and the retractor for said dog, substantially as set forth.

3. In a vending apparatus, the combination, with the inclosing-box, as A, having an inclined track, as *a*, a stop, as *d*, and a delivery chute or outlet for the articles sold, of a carriage mounted on said track and carrying a series of receptacles, as C' C', the latches *e e*, carried by said carriage and provided each with an inclined tail, *e'*, and adapted to engage said stop *d*, and the weights E in the respective receptacles C', each weight having a projecting stud, *g*, to engage the tails *e'* on the latches and lift the latter, substantially as and for the purposes set forth.

4. In a vending apparatus, the combination, with the outer box provided with a coin slit and chute and a delivery-chute, and a receptacle for the articles arranged over said delivery-chute, of a pusher, *i*, provided with an operating-stem and retracting-spring, and a notch, *n*, to receive the dog, the pivoted dog H, provided with an arm or lever, *o*, which stands under the outlet of the coin-chute, and a retractor for said dog, carried by said pusher, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

RÉNÉ MARELLE.

Witnesses:

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AUG. VINCK.