Nov. 7, 1933. P. WALKER 1,934,106

CIGARETTE DISPENSING DEVICE

Filed June 25, 1932 3 Sheets-Sheet 1

Fig. 2.

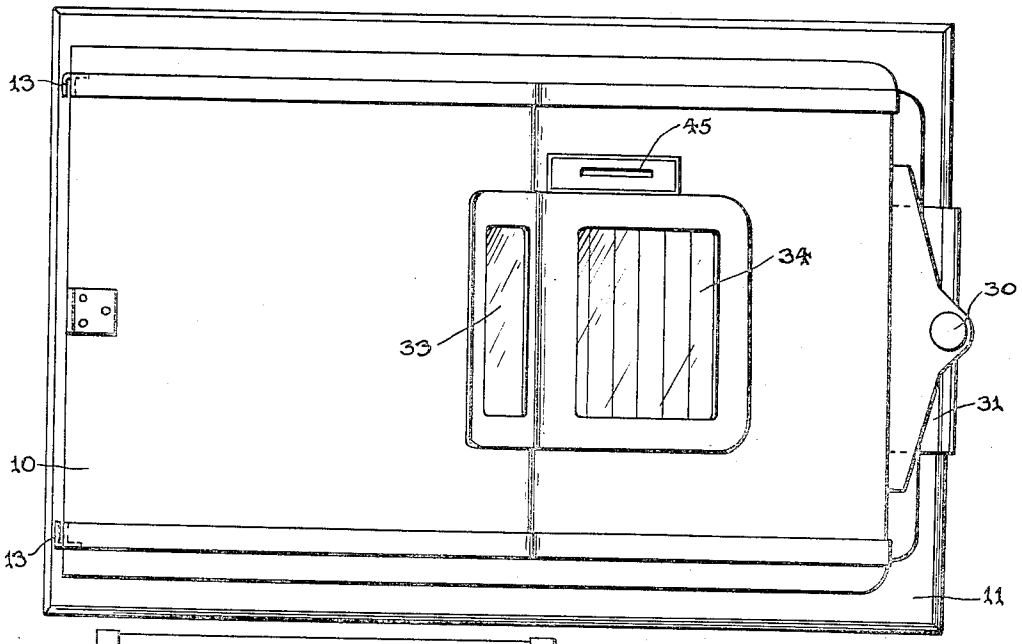


Fig. 1.

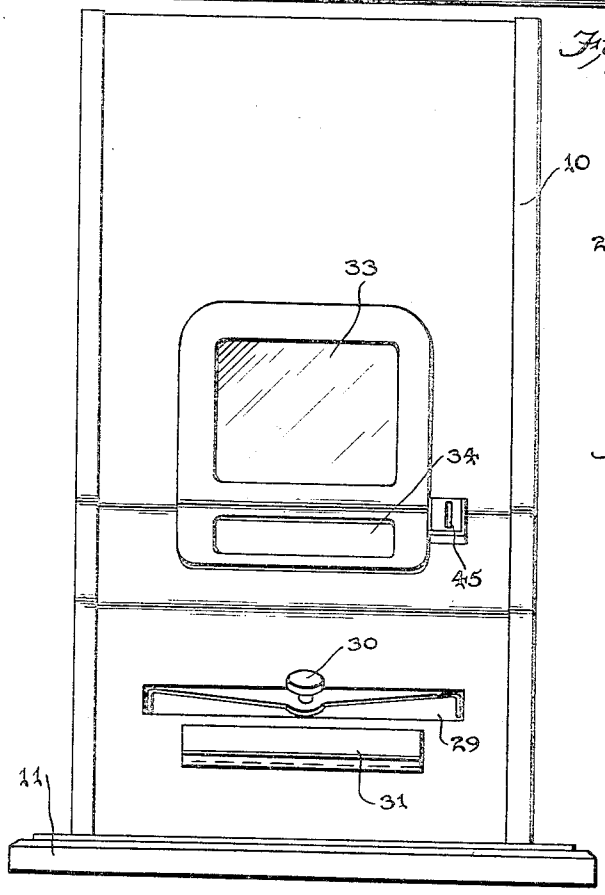


Fig. 11.

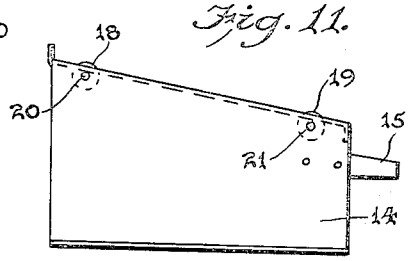
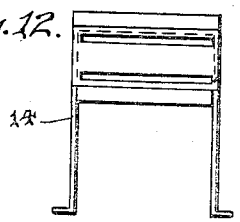


Fig. 12.



Inventor
Pressley Walker,
by
John P. Ellis.
Attorney

Nov. 7, 1933. P. WALKER 1,934,106

CIGARETTE DISPENSING DEVICE

Filed June 25, 1932 3 Sheets-Sheet 2

Fig. 3.

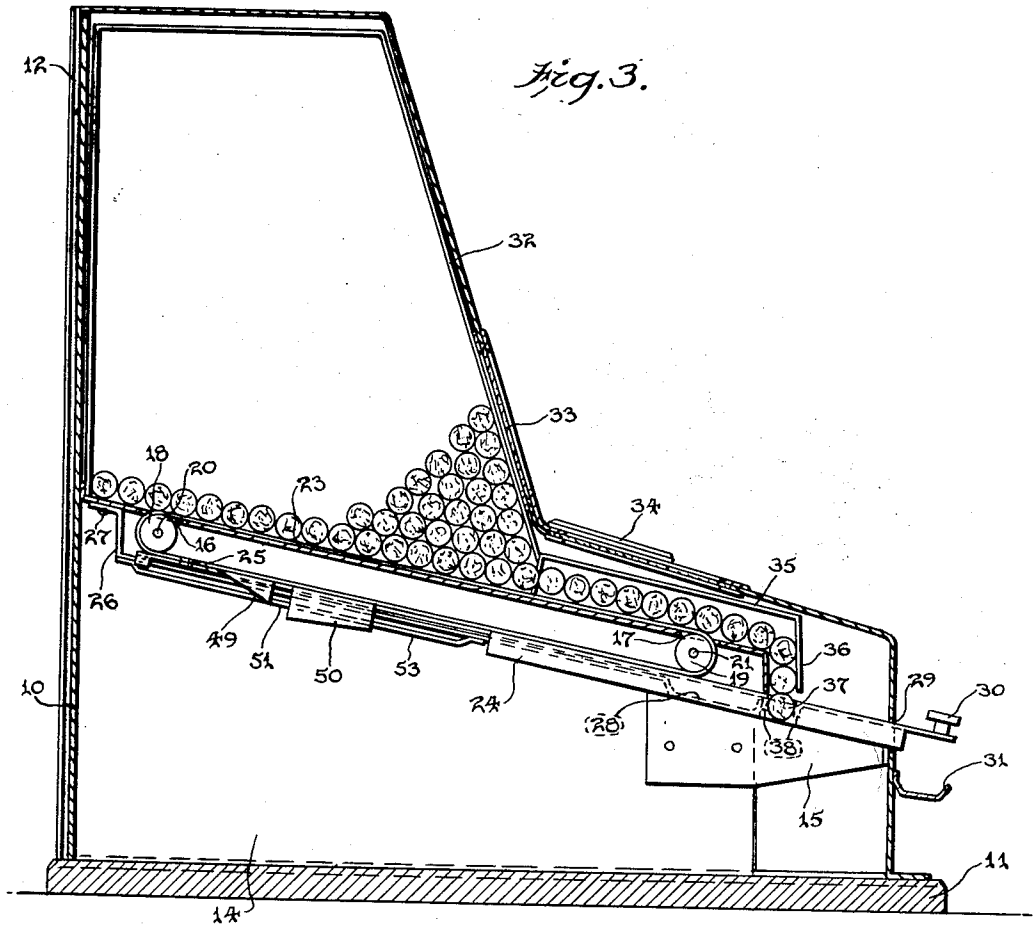


Fig. 6.

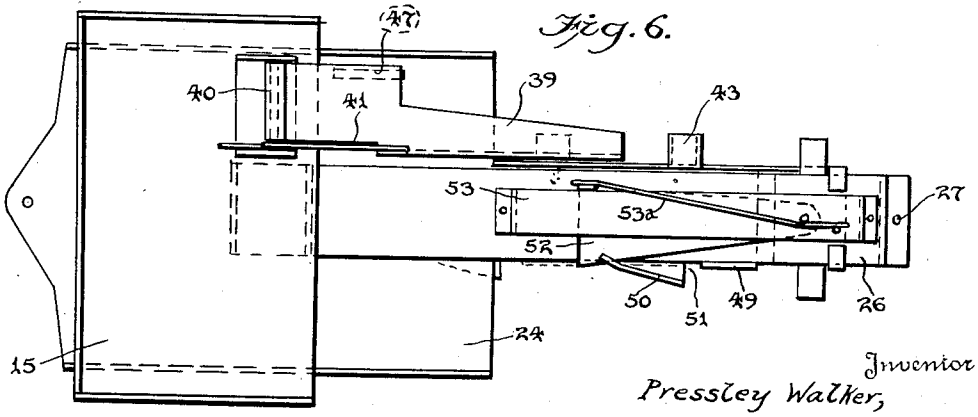
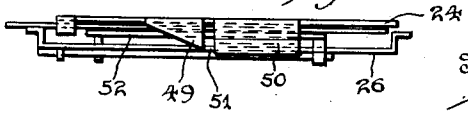


Fig. 10.



Inventor
Pressley Walker,

By John P. Ellis.

Attorney

Nov. 7, 1933. P. WALKER 1,934,106

CIGARETTE DISPENSING DEVICE

Filed June 25, 1932 3 Sheets-Sheet 3

Fig. 4

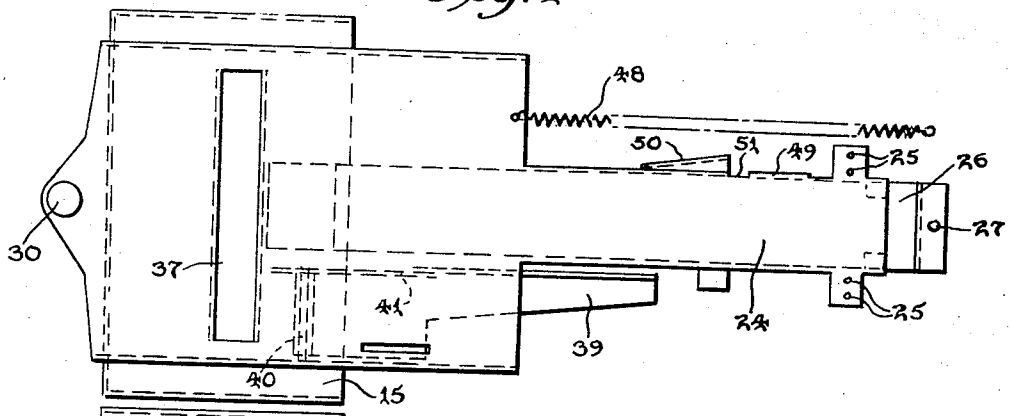


Fig. 5.

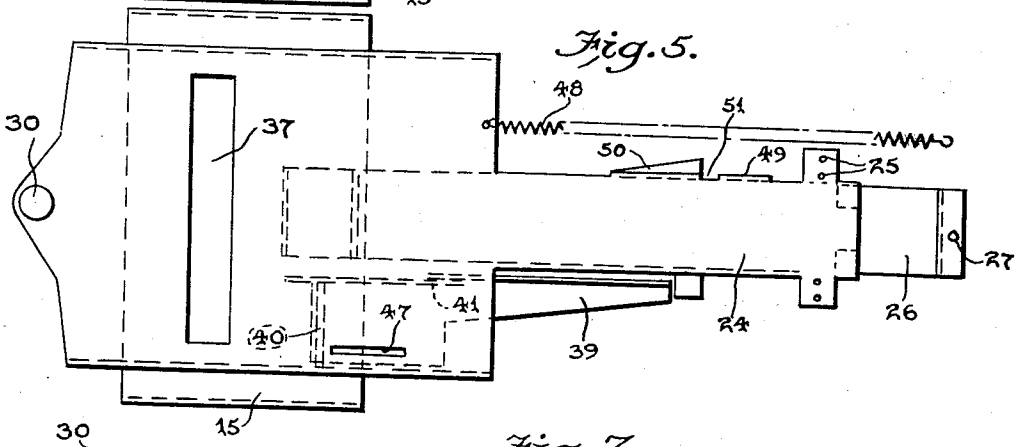


Fig. 7.

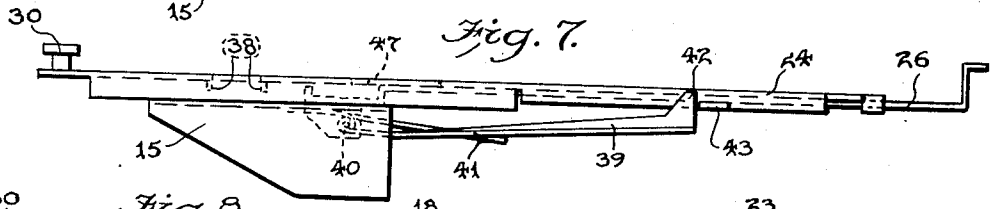


Fig. 8.

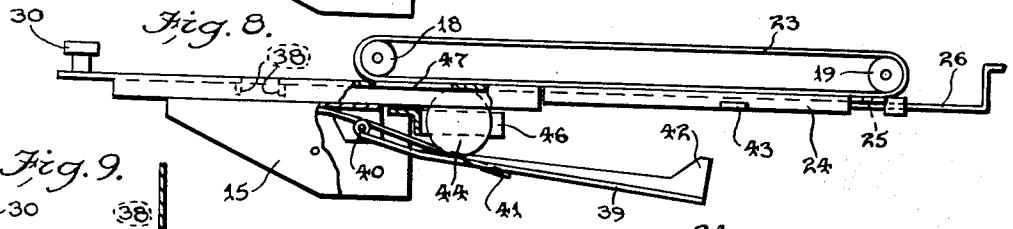
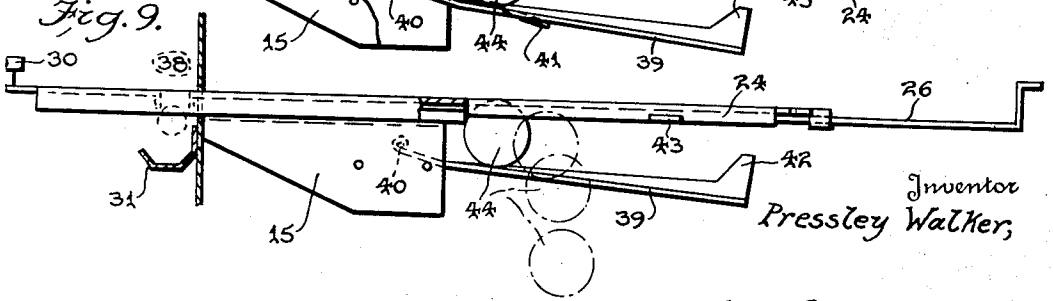


Fig. 9.



Inventor
Pressley Walker,

By John P. Ellis

Attorney

Patented Nov. 7, 1933 1,934,106

UNITED STATES PATENT OFFICE

1,934,106

CIGARETTE DISPENSING DEVICE

Pressley Walker, Atlanta, Ga.

Application June 25, 1932. Serial No. 619,287

3 Claims. (Cl. 312—80)

This invention relates to a cigarette vending machine and it has particular relation to a mechanism for vending individual cigarettes wherein novel means is provided for preventing the discharge of the coin utilized in actuating the device, by reason of improper manipulation of the device until a cigarette has been delivered.

It is well known that in devices of this character where an actuating handle is utilized, a person using the device often allows the handle to slip and thus causes the loss of his coin without his receiving the article he is seeking to purchase. The means here provided eliminates this annoying circumstance.

There is also provided novel means for aligning and feeding cylindrical articles to be dispensed.

One object of the present invention is the provision of mechanism for positively operating a coin controlled apparatus.

Another object is to provide a device of this kind which will not easily get out of order.

For a better understanding of the invention, reference may now be had to the accompanying drawings, forming a part of this disclosure, wherein:

Figure 1 is a front elevational view of a completely assembled device embodying the novel features of my invention;

Figure 2 is a plan view of the same;

Figure 3 is a side elevational view, partly in section, showing various operating parts of the device;

Figure 4 is a plan view of an ejector mechanism utilized in the device;

Figure 5 is a view similar to Fig. 4 with the parts advanced from the position shown in Fig. 4;

Figure 6 is a bottom plan view of the ejector mechanism and mechanism for preventing retrograde movement of the ejector when a coin is in position;

Figure 7 is an elevational view of the ejector mechanism in its normal position;

Figure 8 is a similar view, with the addition of a feeding and aligning belt, wherein the ejector is shown with a coin in operative position;

Figure 9 is a view similar to Fig. 7 with the ejector mechanism advanced;

Figure 10 is a side elevational view of a detail of the mechanism for preventing retrograde movement;

Figure 11 is a side elevational view of a frame utilized in the device, and

Figure 12 is a front elevational view of the same.

The embodiment of the invention illustrated in the accompanying drawings comprises a cabinet generally designated at 10, having a base 11 and a slidable door 12 provided with grooved runways 13.

A forwardly slanting frame 14 of substantially inverted U-shape and having a forwardly projecting shelf 15 is affixed to the base 11 within the cabinet.

A pair of slots 16 and 17 is provided in the top of the frame 14 and a pair of rollers 18 and 19 are revolubly mounted on axles 20 and 21 attached to the frame 14 in such manner that the rollers project a short distance through the slots 16 and 17, respectively.

An endless belt 23 which is preferably of cross-ribbed construction passes over the rollers 18 and 19 and is permanently attached to a slidable ejector 24, as indicated at 25, which ejector is slidably mounted upon a forwardly slanting supporting member 26 fastened at its upper end to the frame 14, as indicated at 27, and resting upon the shelf 15, as indicated at 28. The ejector 24 protrudes through an opening 29 in the front of the cabinet and has an operating handle 30 attached to its outer extremity. A trough or receptacle 31 is attached to the front of the cabinet immediately below the opening 29 for reception of the articles as delivered.

The upper portion of the cabinet 10 is shaped to accommodate a carton of cigarettes 32, which may be of any conventional design, and the carton is provided with a removable bottom (not shown). The cabinet is also provided with a window 33 for displaying the revenue stamp in accordance with legal requirement, and with a window 34 for displaying the articles to be dispensed as they pass from the container 32 into a runway 35 formed between the belt 23 and the forward end of the cabinet. This runway 35 terminates in a downwardly extending hopper 36 which normally registers with an opening 37 cut in the ejector 24 and which opening is provided with a pair of downwardly extending flanges 38.

A lock pawl 39 is hingedly connected to the under side of the shelf 15, as indicated at 40, and is normally held in a horizontal position, as indicated in Fig. 7, by means of a spring 41 and is provided at its outer end with a locking dog 42 normally held in locked engagement with a lock-lug 43 which is preferably made integral with the ejector 24. The pawl 39 is adapted to be moved downwardly when a coin 44 is inserted through a coin slot 45 provided in the cabinet through a U-shaped guide 46 fastened to the shelf 15 and through a

slot 47 provided in the ejector and in register with the slot 45.

The ejector 24 is normally held within the cabinet by means of a spring 48 interconnecting it and the rear of the cabinet.

A ramp-shaped forwardly and downwardly extending lock lug 49, preferably made integral with the ejector, extends from one side thereof and a guide member 50 having a rearwardly and outwardly extending flange is similarly mounted at a point slightly forward of the lug 49 and forms a pocket 51 therebetween.

A lock pawl 52 is pivotally mounted on the under side of the frame 26, is held in position by a guide-yoke 53 and is normally pressed outwardly against the lug 49 and guide 50 by a wire spring 53*a*.

In operating the device a coin 44 is inserted in the slot 45. It then passes through the slot 47 and guide member 46 coming to rest upon the pawl 39. The handle 30 is then drawn outwardly causing the coin 44 to be held in upright position between the rear edge of the slot 47 in the ejector 24 and the pawl 39 thus causing the latter to move downwardly and release the lock dog 42 from engagement with the lug 43 permitting the further forward movement of the ejector.

As one of the articles to be dispensed is already in the opening 37, as illustrated in Fig. 3, it will be brought forward and dropped into the trough 31 when the ejector is brought to its full outward position as shown in Fig. 9.

When the ejector is moved forwardly that portion of the belt 23 which is in contact with the articles is caused to move rearwardly, thus stirring and aligning the articles and upon the ejector being moved rearwardly by means of the spring 48 the belt moves forwardly causing the articles to be fed forwardly for the next operation.

To prevent the loss of a coin by the unintentional release of the handle 30 before a full outward stroke is made, the pawl 52 is caused to move into the pocket 51 by the spring 53 thus locking the ejector against any reverse movement. A further outward movement of the ejector causes the pawl 52 to move into place behind the lug 49, in the position as indicated by dotted lines in Fig. 6.

Upon the handle now being released the pawl 52 will ride downwardly over the lug 49 and then into the guide 50 and thence back to its original position.

Although but one form of the invention has been illustrated and that form has been described in detail it will be apparent to those skilled in the art that the invention is not so limited but that various minor modifications may be made therein without departing from the spirit of the invention or the scope of the appended claims.

I claim:

1. In a device of the class described, a casing, a stationary frame in the casing, an ejector reciprocable on the frame, a spring pressed pawl carried by the frame, a pair of projections carried by the ejector for coaction with the pawl, one of said projections being formed to permit limited forward movement of the ejector and then to act as a stop against retrograde movement while the pawl is in its normal plane, the second projection being formed to engage the pawl upon retrograde movement and after further forward movement of the ejector to move the pawl from its normal plane and thus permit complete retrograde movement of the ejector.

2. A device of the class described comprising a casing, a stationary frame in the casing, an ejector reciprocable on the frame, a spring pressed pawl carried by the frame, a projection carried by the ejector for coaction with the pawl to prevent retrograde movement of the ejector when the pawl is in its normal plane, a tapered guide carried by the ejector in spaced relation to the projection and formed to engage and move the pawl from its normal plane to prevent stopping engagement with the projection and thus permit retrograde movement of the ejector.

3. A device of the class described comprising a casing, a stationary frame in the casing, an ejector reciprocable on the frame, a spring pressed pawl carried by the frame, a projection carried by the ejector for coaction with the pawl to prevent retrograde movement of the ejector when the pawl is in its normal plane, a tapered guide carried by the ejector in spaced relation to the projection and formed to engage and move the pawl from its normal plane to prevent stopping engagement with the projection and thus permit retrograde movement of the ejector, said projection being formed to guide the pawl during retrograde movement of the ejector.

PRESSLEY WALKER.