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COIN-ACTUATED ARTICLE DISPENSING PACKAGE

Filed July 13, 1950

2 SHEETS—SHEET 1

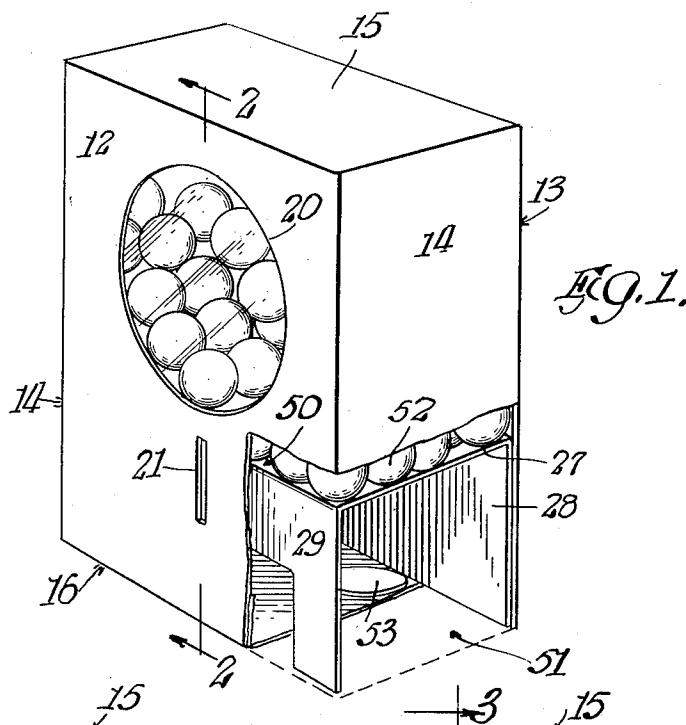
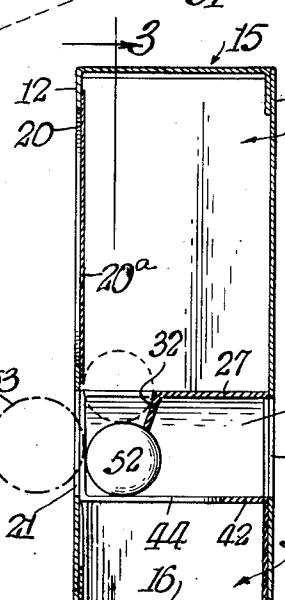
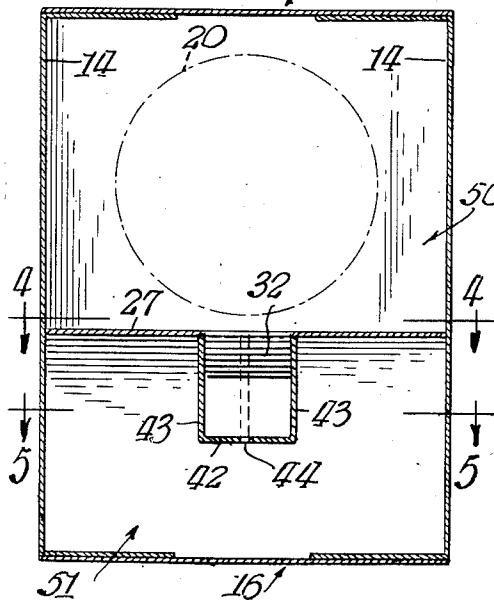


FIG. 3.



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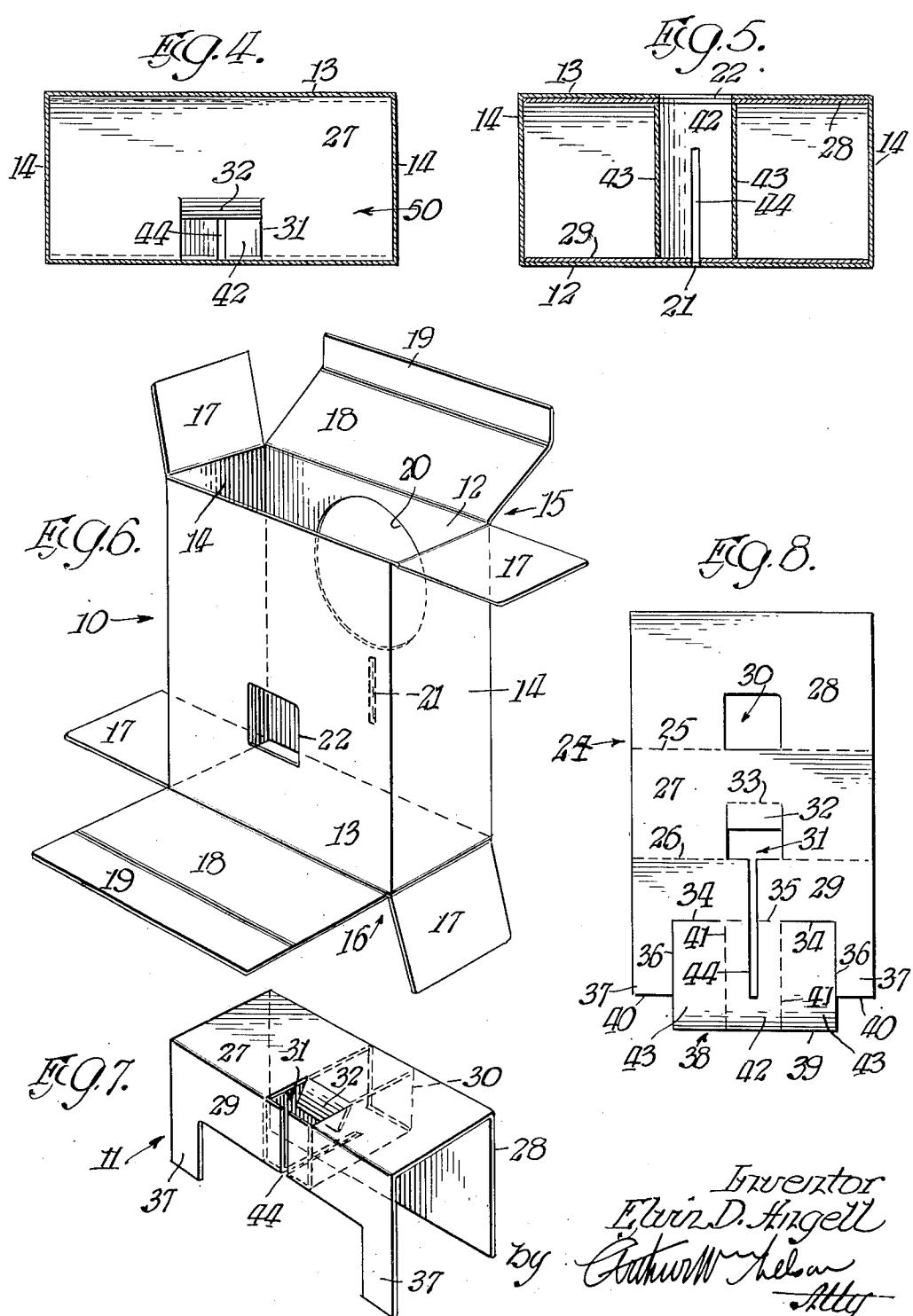
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2 SHEETS—SHEET 2



UNITED STATES PATENT OFFICE

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COIN-ACTUATED ARTICLE DISPENSING PACKAGE

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9 Claims. (Cl. 194—2)

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This invention relates to improvements in coin actuated article dispensing packages and it consists of the matters hereinafter described and more particularly pointed out in the appended claims.

One of the objects of the invention is to provide a novel package for holding certain types of articles, preferably those desired by children, and which package upon insertion of a coin into a slot provided therein, will dispense one of said articles for use and will retain the inserted coins.

Another object of the invention is to provide an article filled package of this kind which is intended to be sold as a unit, and which when empty must be destroyed against reuse in order to obtain the retained coins used in actuating the package.

A further object of the invention is to provide a package of this kind which is simple and inexpensive to produce from but two pieces of sheet material, such as paper board.

Also it is an object of the invention to provide a package of this kind, which requires no springs or other mechanical devices in its make up.

Again, it is an object of the invention to provide a package of this kind especially adapted for use in the home by children, for their amusement as well as for promoting thrift.

The above mentioned objects of the invention as well as others together with the advantages thereof will more fully appear as the specification proceeds.

In the drawings:

Fig. 1 is a perspective view of a coin actuated article dispensing package, embodying the preferred form of the invention, with parts thereof broken away for a better illustration of the interior thereof, said view being on substantially a full sized scale.

Fig. 2 is a front to rear vertical sectional view through the package as taken on the line 2—2 of Fig. 1.

Fig. 3 is a side to side vertical sectional view through the package as taken on the line 3—3 of Fig. 2.

Figs. 4 and 5 are horizontal sectional views through the improved package as taken on the lines 4—4 and 5—5 respectively of Fig. 3.

Fig. 6 is a perspective view of an opened up carton blank from which the body of the improved package is made; on a scale less than that of Figs. 1 to 5 inclusive and as viewed from the back thereof.

Fig. 7 is a perspective view of an insert associated with the carton blank of Fig. 6 in producing the improved package.

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Fig. 8 is a plan view of a cut and scored blank of sheet material, which when folded into set-up form, provides the insert appearing in Fig. 7.

The improved package, which is particularly adapted for home use, is one filled with confectionery articles, preferably of spherical form, much desired by children, and from which said articles may be dispensed individually, each time a coin is inserted into the package, the package retaining the accumulated coins. When the articles have all been dispensed from the package, the same must be broken beyond reuse in recovering said coins.

Referring now in detail to that embodiment of the invention illustrated in the drawings, the improved package, exclusive of its article contents, is made up of a carton body 10 such as shown in Fig. 6 and an insert 11 such as shown in Fig. 7, both of cut and scored pieces of suitable sheet material, as for example paper board.

The body 10 comprises upright front and rear walls 12 and 13 respectively, side walls 14—14 and top and bottom walls 15 and 16 respectively. The top and bottom walls 15 and 16 are each composed of side flaps 17—17 hinged to the ends of the side walls and end flaps 18—18 at opposite ends of the front and rear walls, and each flap 18 includes a hinged tab 19.

On the vertical center line of the front wall 12, near the top end thereof is a circular window opening 20 which is covered from the inside by a sheet of thin transparent plastic sheeting 20a which best appears in Fig. 2 and through which the articles of the package are visible. Below this window opening, on said center line of said front wall, is a vertical coin receiving slot 21, and on the vertical center line of the rear wall is an article outlet opening 22, said opening being preferably of a rectangular shape, with its top and bottom edges flush with the top and bottom ends of the slot 21 in the front wall.

The insert 11 is made from a cut and scored blank 24 such as appears in Fig. 8. This blank is generally of a rectangular shape and has a width that corresponds to that of the body 10. Said blank is scored transversely along the lines 25—26, to provide a center panel 27 having an area and shape approximating the horizontal cross section of the body 10 and end panels 28 and 29 respectively. The panel 27 forms the top partition for the insert 11 and the panels 28 and 29 form the back and the front respectively for said insert.

On the longitudinal center line of the blank and having one edge coincident with the score line 25, there is provided in the back panel an open-

ing 30 of the same shape and size as the opening 22 in the back wall 13 of the carton body and with which it is adapted to register in the package. Beginning at the score line 26 and extending back into the center panel is an opening 31, one half of which is occupied by a tongue 32 that is joined to the panel by a score line 33.

The front panel 29 is provided with a pair of laterally spaced slits 34-34 one on each side of the longitudinal center line of the blank and these slits, which are parallel with the line 26 are connected by a score line 35. Said front panel is further provided with longitudinal slits 36-36 which divide the panel into a pair of leg sections 37-37 and a central trough or channel forming section 38, the free end edge 39 of which is spaced from the free end edges 40 of the leg sections 37-37 which form a part of the panel 29. In the trough section are laterally spaced score lines 41 which divide the section 38 into a center portion 42 and side portions 43-43. A slot 44 is provided in the longitudinal central line of the panel 29, which begins at the score line 26 and extends into the central portion 42 of the trough section to stop in the plane of a line connecting the edges 40 of the legs 37.

The score lines 41-41 are spaced apart so as to line up with the lateral edges of the openings 39 and 31 respectively. The panels 28-28 are the same in length and the trough section 38 have a length equal to that of the central panel.

In setting up the blank into the condition appearing in Fig. 7, the end panels 28 and 29 are folded downwardly along the lines 25-26 into substantially parallel relation. The portions 43-43 of the trough section are then folded upwardly along the lines 41-41 to impart a trough-like formation to the section 38 as a whole, which is then folded upwardly along the line 35 after which the tongue 32 is folded downwardly along the line 33. In this condition the free end edges of the portions 43-43 engage the inner surface of the section 28 and the trough-like cross section thereof registers with the opening 30 therein.

The blank 25 when folded as above described provides an insert which may be conveniently entered into the body 10 from its open bottom end with a relatively snug fit which holds the insert in its set up form. If desired, before this insert is entered into the open bottom end of the body 10, adhesive may be applied to the outer surface of the front and back thereof so as to adhere the same to the front and back walls of the body 10 when disposed in operative relation therein. When the insert is in its final position in the body, the free edges of the legs 37 and of the panel 28 will be flush with said bottom and the mid panel 27 will be disposed in the plane of the top end of the slot 21. Also the portion 42 will be disposed in the plane of the bottom 42 will be disposed in the plane of the bottom end of said slot and the tongue 32 will be directed downwardly and forwardly of the trough as provided by the portions 42-43. Thereafter the flaps 17-17 at the bottom end of the body 10 are folded inwardly and the flap 18 folded over the same and the tab 19 is then tucked in between the front wall and the adjacent edges of the tabs 17-17. This closes the open bottom of the body and at this time the insert divides the body, as best shown in Fig. 1, into an upper article receiving chamber 50 and a lower coin receiving chamber 51, the former having the greater volume.

The articles of confectionary with which the

chamber 50 is filled is illustrated as being of a spherical shape and are indicated by the numeral 52. Each article will have a diameter and be of such weight as to permit its passage from said chamber through the opening 31 into that end of the trough adjacent the front of the body 10 and against which it is yieldingly held by the flexible action of the tongue 32 which engages the article from behind. As by way of illustration and not by way of limitation the article to be dispensed are illustrated as a confection known as "gum balls."

After the compartment has been loaded with the articles, the flaps 17-18 and 19 at the top end of the body are folded into a condition to form the closure for the open top of the body and the articles composing the contents of the compartments are visible through the window sheet 20a. On the loading of the receiving and holding compartment one of the articles will drop down into the position shown in Fig. 2.

To dispense an article from the package, a coin, token or other suitable member 53 is inserted into the slot 21 from the front of the package. In this instance the member may be a one cent piece or "penny," the slot 21 being of such height or vertical length as to "take" the same. When the penny is inserted into the slot 21 it engages the article 52, as shown in Fig. 2, and pushes the same rearwardly so that the article "brushes" past the finger 32 which swings upwardly and rearwardly for this purpose. Said tongue returns to its normal position after the article has passed the same, ready to hold the next article entering the trough through the opening 31 in position, as appears in Fig. 2.

After the article has passed the finger, it rolls along the trough to pass through the outlet 22, in the back of the carton body, and is now available for use. After the article has passed the finger under the push imparted thereto by the penny, the latter enters that part of the slot 44 in the portion 42 and, upon release, falls into the compartment 51 where it is retained.

As soon as one article is dispensed, as mentioned, another one enters the trough by gravity through the opening 31 ready for the next operation of inserting a penny, token or the like in the slot 21.

When the supply of articles 52 in the chamber 50 is exhausted, there should be the same number of coins in said chamber as there were articles in the chamber.

To retrieve the coins, the empty package must be broken and this is generally into such a state or condition that prohibits its reuse and it is then discarded.

The package and the manner in which the articles are dispensed, is attractive, affords enjoyment for children and assists in teaching the habit of thrift.

I claim as my invention:

1. A coin actuated article dispensing package embodying therein a closed carton-like body having spaced upright wall portions, a substantially horizontal partition in and dividing the body into an upper chamber for holding the articles to be dispensed and a lower compartment for receiving coins, a trough having a bottom arranged in said body below said partition and extending between said wall portions, one of which has a vertical coin slot therein and the other of which has an article discharge outlet, said slot and outlet being in communication with the ends of said trough, there being an opening in said partition

for the passage of articles, one at a time therethrough from said upper compartment into said trough, means for engaging the article in said trough for releasably holding the same against movement toward said outlet opening, said trough having an opening in its bottom for the passage of the actuating coin therethrough and into said lower compartment after it has passed through said slot.

2. A coin actuated article dispensing package embodying therein a closed carton-like body having spaced upright wall portions, a substantially horizontal partition in and dividing the body into an upper chamber for holding the articles to be dispensed and a lower compartment for receiving coins, a trough having a bottom arranged in said body below said partition and extending between said wall portions, one of which has a vertical coin slot therein and the other of which has an article discharge outlet, said slot and outlet being in communication with the ends of said trough, there being an opening in said partition for the passage of articles, one at a time, therethrough from said upper compartment into said trough, and yieldable means carried by said partition and extending into the trough for engaging the article therein for releasably holding the same against movement toward said outlet opening, said trough having an opening in its bottom for the passage of the actuating coin therethrough and into said lower compartment after it has passed through said slot.

3. A coin actuated article dispensing package embodying therein a closed carton-like body having spaced upright wall portions, a substantially horizontal partition in and dividing the body into an upper chamber for holding the articles to be dispensed and a lower compartment for receiving coins, a trough having a bottom arranged in said body below said partition and extending between said wall portions, one of which has a vertical coin slot therein and the other of which has an article discharge outlet, said slot and outlet being in communication with the ends of said trough, there being an opening in said partition for the passage of articles, one at a time therethrough from said upper compartment onto said trough, a tongue carried by a part of the structure and extending into a position in said trough for releasably holding the article on the bottom of said trough against movement toward said outlet opening, said trough having an opening in its bottom for the passage of the actuating coin therethrough into said lower compartment, after it has passed through said slot.

4. A coin actuated article dispensing package embodying therein a closed carton-like body having spaced upright wall portions, a substantially horizontal partition in and dividing the body into an upper chamber for holding the articles to be dispensed and a lower compartment for receiving coins, a trough having a bottom in said body below said partition and extending between said wall portions, one of which has a vertical coin slot therein and the other of which has an article discharge outlet, said slot and outlet being in communication with the ends of said trough, there being an opening in said partition for the passage of articles, one at a time therethrough from said upper compartment into said trough, means formed from a part of said partition and depending into said trough for engaging the article therein for releasably holding the same against movement toward said outlet opening, said trough

having an opening in its bottom for the passage of the actuating coin therethrough into said lower compartment after it has passed through said slot.

5. A coin actuated article dispensing package embodying therein a closed carton body having sides and front and rear walls and top and bottom walls, a partition in the body dividing the same into an upper chamber for holding the articles to be dispensed and a lower compartment for receiving coins, a trough having a bottom arranged below said partition between said front and rear walls and which walls have a vertical coin slot and an article outlet opening respectively, said slot and outlet being in communication with the ends of said trough, said partition having an opening therein for the passage of articles one at a time therethrough from said upper compartment into said trough adjacent the slot in said front wall, means forming a part of said partition and extending into said trough for engaging the article and for releasably holding the same against movement therein toward said outlet opening, said trough having an opening in its bottom for the passage of the operating coin therethrough and into the lower compartment after said coin has passed through said slot.

6. A coin actuated article dispensing package embodying therein a closed carton body having sides and front and rear walls and top and bottom walls, a horizontal partition in the body dividing the same into an upper chamber for holding the articles to be dispensed and a lower compartment for receiving coins and having portions at the front and rear thereof engaged with the front and rear walls of the carton body, supporting means carried by said partition and engaged at the bottom upon the bottom wall of said body, a trough having a bottom arranged below said partition and extending between said front and rear walls of the body, and which walls have a vertical coin slot and an article outlet respectively, said slot and outlet being in communication with the ends of said trough, said partition having an opening therein for the passage of articles, one at a time, therethrough into said trough, means depending from the partition and extending into said trough for engaging the article thereon from the rear for releasably holding the same against movement toward said outlet opening, a part of said trough having an opening in its bottom for the passage of the operating coin therethrough into said lower compartment after said coin has passed through said slot.

7. An insert member for use in connection with a carton body in forming a coin actuated article dispensing package, said member embodying therein a horizontal partition member and front and rear walls bent along the front and rear parallel edges of the partition into a depending vertical position, said partition having an article passing opening therein, a substantially horizontal trough arranged below said opening in said partition and extending between said front and rear walls and having a bottom, the rear wall having an opening therein in line with said trough, and said front wall having a vertical coin slot therein opening into said trough, said trough having a longitudinal slot in the front portion of its bottom that communicates with said coin slot in said front wall, and yieldable means carried by part of the member and extending into said trough for releasably holding the article against movement toward said rear wall opening.

8. A blank for forming into a set-up insert

member of the kind mentioned, and comprising a piece of sheet material longer than it is wide and including a central transversely extending partition section and front and rear wall sections joined to said partition section by score lines, said partition section having an opening therein, one edge of which is coincident with the score line joining said section to the front wall section and the rear end of which is defined by an integral bendable part formed from a part of the partition section, the rear wall section having an opening therein in line with the first mentioned opening and having its front edge coincident with the fold line that joins said section with said partition section, said front wall section including a portion between the sides thereof, which is as long as the partition section and which portion is defined at its sides and at parts of one end thereof by a slit and by a fold line, said portion also having longitudinal score lines therein, which are spaced apart the width of the first mentioned opening, there being a central longitudinal slot in the front wall section which opens into the first mentioned opening and terminates in said portion toward its free edge.

9. An insert member for use in connection with a carton body in forming a coin actuated article dispensing package, said member embodying therein a horizontal partition member and front and rear walls bent along the front and rear parallel edges of the partition into a depending ver-

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tical position, said partition having an article passing opening toward said front edge, which opening is defined at the rear by a forwardly and downwardly extending flexible tongue, a substantially horizontal trough arranged below said opening in said partition and extending between said front and rear walls and having a bottom, the rear wall having an opening therein between the bottom of said trough and said partition and the front wall having a vertical coin slot therein extending from said partition to said bottom of said trough, said trough having a longitudinal slot in the front portion of its bottom that communicates with said coin slot in the front wall.

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