Nov. 13, 1951 C. S. HOUGH ET AL 2,574,565

CONTAINER AND DISPENSER FOR STRIP MATERIAL

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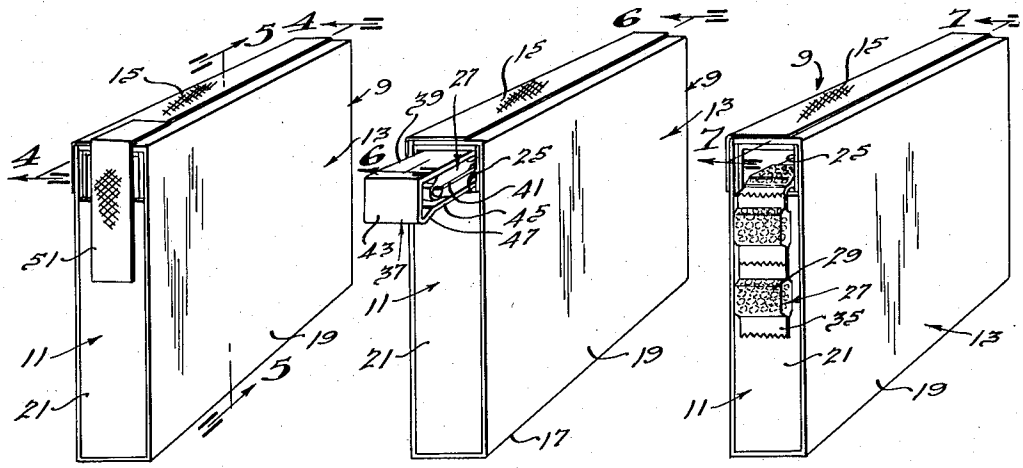


Fig. 1. Fig. 2. Fig. 3.

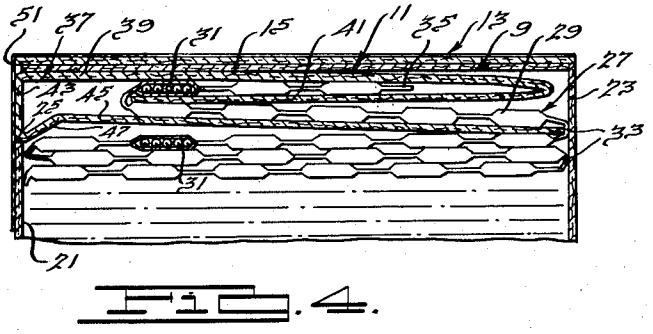


Fig. 4.

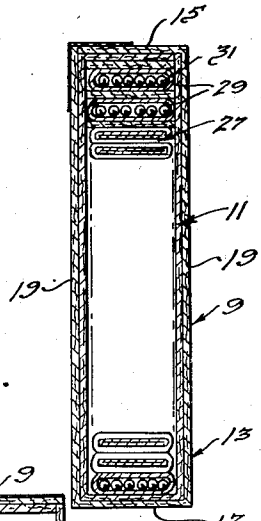


Fig. 5.

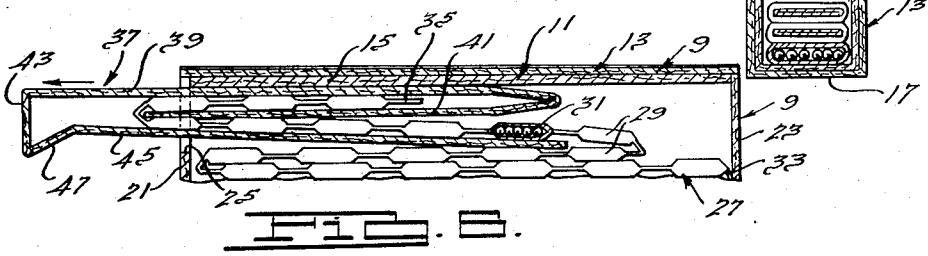


Fig. 6.

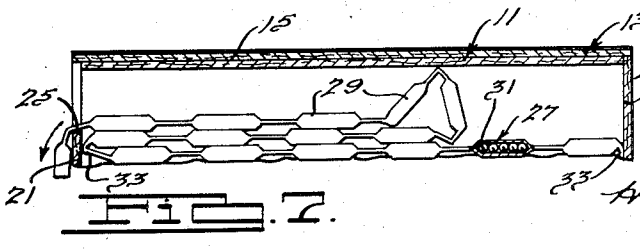


Fig. 7.

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CONTAINER AND DISPENSER FOR STRIP MATERIAL

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3 Claims. (Cl. 206—56)

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This invention relates to a container and dispenser and more particularly to a container and dispenser for strip material or a continuous strip of interconnected flat tube type packages containing small articles.

It has recently been found to be advantageous to package certain types of articles, such as shot for air rifles or the like, in an elongated relatively flat tube type of package or strip which is divided into individual pockets spaced from each other lengthwise of the tube or strip, such as shown in the copending patent application of Cass S. Hough and Robert O. Wesley for Improvements in Packaging for Shot and Method of Making the Same, Serial No. 45,678, filed August 23, 1948, now abandoned. While this flat tube type of package or strip has many advantages, it has been found necessary to devise a container and dispenser in which a relatively long continuous strip, in which the individual pockets are filled with shot, may be shipped and from which the individual pockets or strip portions containing shot may be conveniently and easily dispensed. For example, when air rifle shot is packaged in the aforementioned manner the retail merchant who is selling the shot in small quantities may desire to detach only one or two pockets of shot at one time from the strip, and if a convenient means of containing and dispensing the strip were not provided, this manner of packaging shot would not be convenient or practical.

It is, therefore, an object of this invention to provide a novel container and dispenser for strip material or packages of the aforementioned type which will permit articles to be transported, handled and shipped in the aforementioned strip or flat tube type of package, without damage, and which will permit easy dispensing of any desired number of pockets or portions of the strip or flat tube package.

It is a still further object of this invention to provide a container and dispenser of the aforementioned type, which is relatively inexpensive to manufacture, rugged in construction, and simple to use.

It is a still further object of this invention to provide a container and dispenser of the aforementioned type, in which a relatively long, continuous strip of the aforementioned type is reversely folded upon itself within the container a plurality of times in order to provide in effect a stack of horizontally disposed and interconnected strip portions and in which a removable filler and dispensing element is provided, to compact the

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stack of horizontally disposed strip portions in the container, so as to prevent relative shifting movement between such portions during transport and shipment, and to, when slidably removed from the container, withdraw one end of the strip from the container, whereby the strip may be dispensed from the container by pulling the exteriorly disposed strip portions, so that any desired number of pockets or strip portions can be detached from the strip, while the bulk of the strip remains in the container.

It is a still further object of this invention to provide in a container, a removable dispensing and filler element of the aforementioned type, which is removably connected with the upper portion of the continuous strip in such a manner that the compacted upper strip portion can be withdrawn from the container without tearing or breaking the continuous strip, which breaking would render the dispensing of the strip inconvenient and difficult.

It is a still further object of this invention to provide a neat, attractive container and dispenser which can be displayed by a retail merchant in his place of business.

These and other objects of this invention will become apparent from the following detailed description, taken in conjunction with the accompanying drawings, in which:

Figure 1 is a perspective view of the container and dispenser of this invention in its fully closed and sealed position;

Fig. 2 is a perspective view similar to Fig. 1, with the filler and dispensing element partly removed from the container;

Fig. 3 is a perspective view similar to Fig. 2, with the filler and dispensing element completely removed from the container so that the upper portion of a continuous strip is disposed exteriorly of the container;

Fig. 4 is an enlarged, fragmentary, sectional view of the structure illustrated in Fig. 1, taken along the line 4—4 thereof;

Fig. 5 is an enlarged sectional view of the structure illustrated in Fig. 1, taken along the line 5—5 thereof;

Fig. 6 is an enlarged fragmentary sectional view of the structure illustrated in Fig. 2, taken along the line 6—6 thereof; and

Fig. 7 is an enlarged, fragmentary sectional view of the structure illustrated in Fig. 3, taken along the line 7—7 thereof.

While a container of any suitable material, size, shape or construction may be employed to form the device of this invention, a cardboard

container 9 is illustrated in the drawings, which is of a rectangular shape and comprises an inner, folded, rectangular shaped cardboard structure or portion 11, having an open ended rectangular shaped cardboard portion 13 sleeved thereover, so as to provide a completed container structure which is easy to assemble and especially rugged in construction. The complete container 9 thus has a top wall 15, bottom wall 17, side walls 19, front end wall 21 and rear end wall 23. The front end wall 21 is provided with a rectangular opening 25 adjacent the upper end thereof.

In the particular embodiment illustrated in the drawing, a continuous, elongated, relatively flat tube type package or strip 27, which is divided into individual, detachably connected pockets 29, spaced from each other lengthwise of the strip, is disposed in the container. The strip 27, illustrated, is made of transparent plastic and each of the pockets 29 contains a plurality of air rifle shot 31 as illustrated and described in detail in the aforementioned copending patent application. The continuous strip 27 is loaded into the container 9 by being reversely folded upon itself a plurality of times to provide in effect a stack of horizontally disposed and interconnected strip portions 33. The opposite ends of each strip portion 33 substantially abut the front and rear walls 21 and 23 of the container and the continuous strip is cut off so that the upper free end thereof 35 is disposed adjacent the top wall 15 of the container, as will be hereinafter described.

A sheet cardboard filler and dispensing element 37 is removably positioned in the upper portion of the container 9 behind the front wall opening 25, in a manner that will be hereinafter described, so as to compact the stack of horizontally disposed strip portions 33 and prevent shifting of the strip 27 or the shot 31 in each of the pockets, which would tend to cause the pockets to separate from each other, or tend to cause the shot to break through the wall of the pocket, and to provide a convenient manner for dispensing the pockets of shot either one at a time or several at a time.

While the filler and dispensing element may be formed in various ways, and may be of various thicknesses and sizes, preferably the cardboard element 37 comprises an upper or first horizontal portion 39, which when the element 37 is positioned in the container, abuts the under side of the container top wall 15. The upper horizontal portion 39 is reversely bent adjacent its rear end to provide a second horizontal portion 41, which extends below the first horizontal portion 39, in spaced relation thereto, and the free end of which terminates adjacent to, but rearwardly of, the forward end of the portion 39. The forward end of the upper horizontal portion 39 is bent downwardly to provide a short vertically extending portion 43, which when the element 37 is fully inserted into the container, will substantially fit into and close the container front wall opening 25. The lower end of the vertical portion 43 is return bent so as to provide a third substantially horizontal portion 45 of the element 37. It will be noted that the forward end of the portion 45 is upwardly inclined at 47, so as to permit the forward end of the element 37 to be easily grasped by the fingers of a user to facilitate the withdrawal of the element 37 from the container through the opening 25.

When the container is being assembled and packed the upper portion of the strip 27 is removably connected with the cardboard element 37 so that when the element is slidably withdrawn from the container the upper portion of the strip 27 will likewise be withdrawn. This is accomplished in the manner illustrated in Fig. 4, wherein the upper portion of the strip 27 is reversely bent around the rear end of the horizontal portion 45 of the element 37, extended forwardly between the horizontal portions 45 and 41, reversely bent around the forward end of the intermediate horizontal portion 41, extended between the horizontal portions 41 and 39, so that the free end 35 thereof is disposed adjacent the rear end of the space between the element horizontal portions 39 and 41. The upper portion of the strip 27 is thus frictionally and detachably connected with the element 37 for dispensing purposes. When the container is completely assembled with the element 37 therein, as illustrated in Fig. 4, the horizontal portions 33 of the strip will be compacted in the container so as to prevent any shifting or relative movement of the portions of the strip, and the upper portion of the strip is detachably connected with the element 37 for dispensing purposes. If desired, a piece of tape or other suitable material 51 can be secured over a portion of the container top wall 15 and the front wall 21, so as to prevent any accidental displacement of the element 37.

It should at this time be noted that while the element 37 may be shaped and constructed in a somewhat different manner than illustrated in the drawing, the manner of construction illustrated in the drawing is preferred, as it compacts the horizontal strip portions far enough below the top wall of the container to permit each pocket 29 to turn on itself when being withdrawn from the container, either with the element 37, or after the element 37 has been removed, as illustrated in Fig. 7, without abutting the upper wall of the container so as to cause bending or breakage thereof.

After the container has been shipped to, for example, a retail merchant who desires to dispense the shot in the strip like package, the merchant can remove the tape 51 and grasp the front portion of the element 37 and sildably withdraw the element from the container through the opening 25. It will be apparent, as can be clearly seen in Fig. 6, that the withdrawal of the element 37 will cause the withdrawal of the upper portion of the strip 27, which is detachably connected therewith. It should also be pointed out that as the element 37 is being withdrawn from the container, so as to withdraw the upper portion of the strip, the pulling load will be distributed along the entire portion of the strip 27 which is compressed between the horizontal element portions 39 and 41, and 41 and 45, so as to prevent the concentration of the pulling load at any one point, which might cause the strip to break and make the dispensing thereof difficult or at least inconvenient.

When the element 37 has been fully withdrawn from the container 9, the upper portions of the strip 27 which were detachably connected therewith can be easily removed therefrom by merely sliding them out of engagement with the horizontal portions of the element. The element 37 may then be discarded and the retail merchant or other persons who desire to dispense the air rifle shot in the individual pockets, can tear off the pockets one at a time or any desired number

at a time. As more shot is needed the user can pull the upper strip portion, which is disposed exteriorly of the container, outwardly so as to always have at least one pocket disposed exteriorly of the container for dispensing. It will thus be appreciated that the strip **27** can be withdrawn through the container opening **25** by a simple pulling action and that the bulk of the strip **27** will be disposed in the container with only the necessary small portion disposed exteriorly of the container. Thus, the user has no difficulty in dispensing the pockets filled with shot or any other suitable article, and an attractive and convenient dispensing device is provided which the retail merchant can display at or near his selling counters, without any fear of the strip like package becoming broken, and the shot spilling out of its pockets.

The device of this invention thus provides an efficient container for shipping and transporting shot packaged in strip or flat tube type packages and provides an attractive and simple means for conveniently dispensing the articles packaged in the strip.

What is claimed is:

1. A container and dispenser including top, bottom, side and end walls, one of said end walls having an opening therein adjacent said top wall, an element normally disposed in said container behind said opening, said element including a substantially horizontal portion extending adjacent to said top wall and reversely folded intermediate its ends so as to provide a second horizontal portion which extends there-below, a vertical portion extending downwardly from the outer end of said first horizontal portion and adapted to fit into and normally substantially close said end wall opening and having its lower end folded inwardly so as to form a third horizontal portion extending into said container below said first two horizontal portions, whereby said vertical portion may be grasped and pulled outwardly so as to slidably withdraw said element from said container.

2. In combination a container and dispenser including top, bottom, side and end walls, one of said end walls having an opening therein adjacent said top wall, a continuous strip of material reversely folded upon itself a plurality of times to provide in effect a stack of horizontal strip portions disposed in said container, a sheet filler and dispensing element disposed in and behind said container end wall opening, said element including a substantially horizontal portion extending adjacent to said top wall and reversely folded intermediate the ends thereof to provide a second horizontal portion extending there-below, a vertical portion extending downwardly from the outer end of said first horizontal portion and adapted to fit in and normally substantially close said end wall opening and having its lower end folded inwardly so as to provide a horizontal portion extending into said container below said first two horizontal portions, the upper portion of said strip being reversely bent around the rear end of said third horizontal portion, extending between said second and third portions, reversely bent around the forward end of said second portion, extending between said second and first portions, with the free upper end of said strip disposed between said first and second portions so that said filler and dispensing element frictionally and detachably engages said strip, whereby the vertical portion of said element may be grasped and pulled outwardly relative to said container so as to slidably withdraw said element and the upper free end of said strip therefrom.

3. In combination a container and dispenser including top, bottom, side and end walls, one of said end walls having an opening therein adjacent said top wall, a continuous strip of material reversely folded upon itself a plurality of times to provide in effect a stack of horizontal strip portions disposed in said container, a sheet filler and dispensing element disposed in and behind said container and wall opening, said element including a substantially horizontal portion extending adjacent to said top wall and reversely folded intermediate the ends thereof to provide a second horizontal portion extending there-below, a vertical portion extending downwardly from the outer end of said first horizontal portion and adapted to fit in and normally substantially close said end wall opening and having its lower end folded inwardly so as to provide a horizontal portion extending into said container below said first two horizontal portions, the upper portion of said strip being reversely bent around the rear end of said third horizontal portion, extending between said second and third portions, reversely bent around the forward end of said second portion, extending between said second and first portions, with the free upper end of said strip disposed between said first and second portions, said element being of such a thickness as to compact said strip in said container so as to normally prevent relative shifting movement between said strip portions and said strip and container, and so as to compact the upper strip portions far enough below the top wall of said container that the portions of said strip will not heavily engage said top wall when being withdrawn from said container, and so that said filler and dispensing element frictionally and detachably engages said strip, whereby the vertical portion of said element may be grasped and pulled outwardly relative to said container so as to slidably withdraw said element and the upper free end of said strip therefrom.

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