Dec. 16, 1958 H. N. HOLCOMBE 2,864,493

DISPENSING CONTAINERS

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FIG. 1.

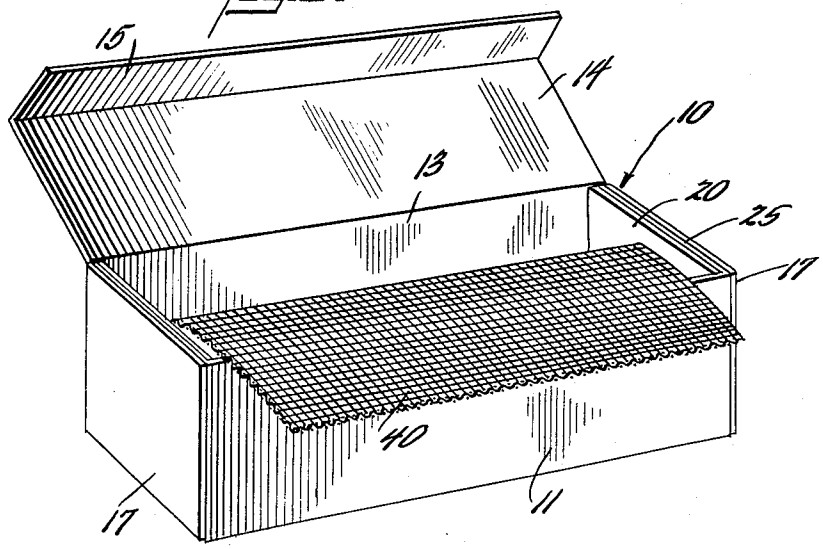


FIG. 2.

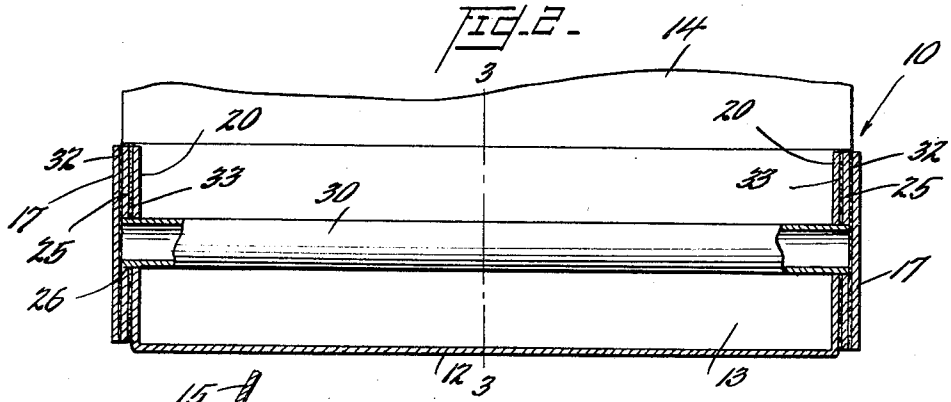
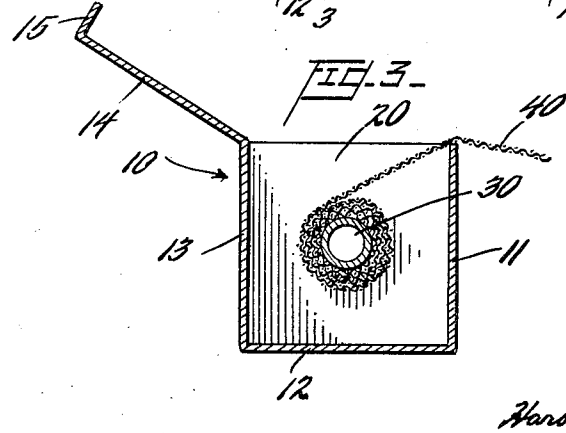


FIG. 3.



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FIG. 5.

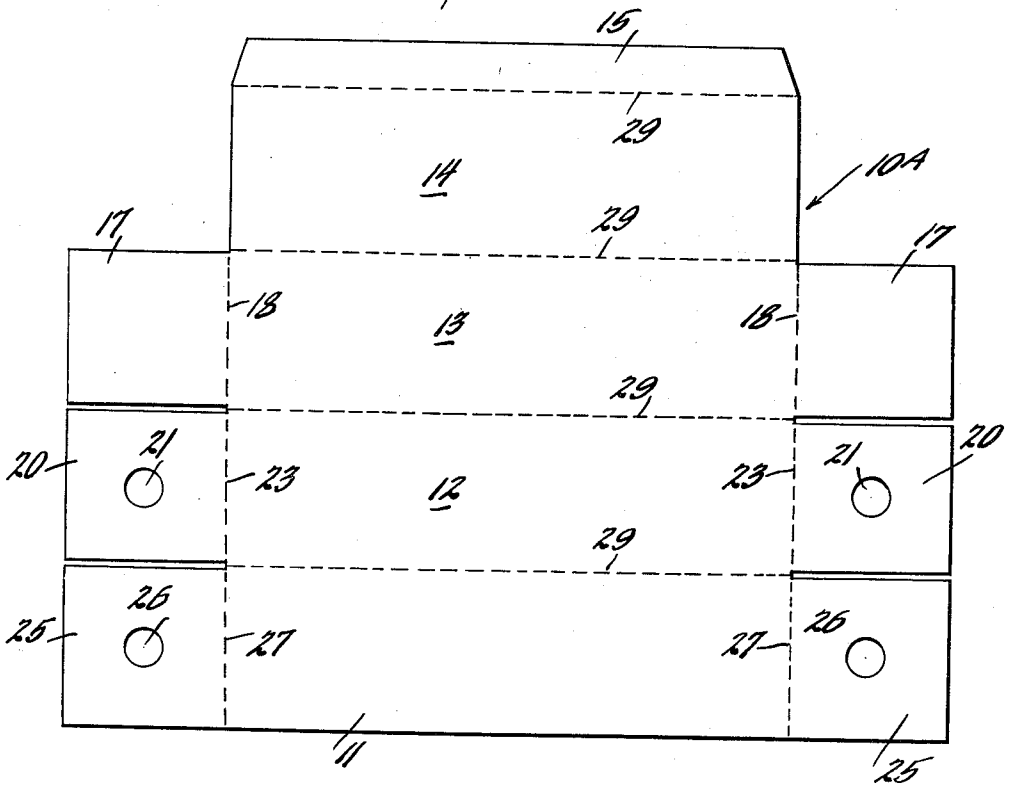
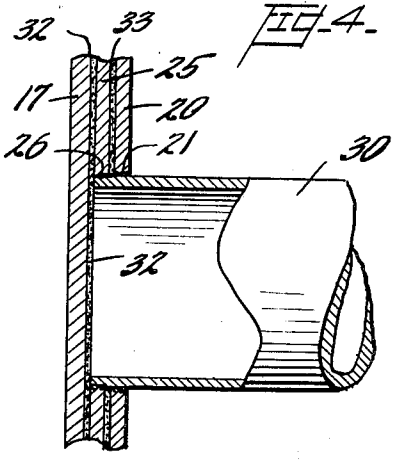


FIG. 4.



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DISPENSING CONTAINERS

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Application September 4, 1957, Serial No. 681,965

3 Claims. (Cl. 206—52)

This invention relates to containers and more particularly to boxes adapted for the transportation and dispensing of rolls of web material.

The general object of the invention is the provision of a novel and improved dispensing container of this class, which is economical in construction and well adapted for the convenient and safe enclosure of screen wire or the like, and for the direct dispensing of any desired lengths from a roll of such wire mesh without removal of the roll from the container in which the material is shipped to the consumer or retailer.

In its preferred embodiment, the invention contemplates the provision of a box having the shape of a rectangular parallelepiped, the box being formed from a blank which is also involved in the novelty evinced by the present invention. The novel blank comprises a series of four panels preferably hinged together by scored creases at their junction lines, the panels providing successively the front, the botom, the back, and the lid of the box. The lid may be provided with a flap which is tucked in when the box is closed, and the other three panels are each provided with a pair of projecting flaps or extensions which are hinged thereto at the respective ends thereof, but severed from each other. At least one, and preferably two, of these end flaps are provided with central openings therethrough, but the third is imperforate.

When the blank is erected to form the box or dispensing container, the three end flaps, which are preferably square and of equal area, are brought together and superposed to form the end wall at the respective ends of the container. A suitable adhesive is applied to the contacting conterminous surfaces of the flaps to secure them firmly together.

The perforated flap or flaps are disposed inwardly of the erected structure, with the imperforate flap covering the other two. The openings in the inner end flaps provide recesses or sockets for the reception of the opposite ends of an axle or core element which extends axially of the box to receive the web material, such as wire screen in rolled up form.

By preference, when two of the flaps are provided with socket-forming openings, the opening in the inner flap is of a very slightly larger diameter than the diameter of the core, while the opening in the more remote flap is of about the same diameter as that of the core requiring a force fit therein when the core is applied.

Also, the adhesive which cements the flaps together serves also to firmly anchor the ends of the core in the sockets.

Other objects and features of novelty will be apparent from the following specification when read in connection with the accompanying drawings in which one embodiment of the invention is illustrated by way of example.

In the drawings:

Figure 1 is a perspective view of a box embodying the principles of the invention, with the lid or cover raised and the contents arranged for dispensing;

Figure 2 is a vertical sectional view through the box with a portion of the axle member shown in elevation;

Figure 3 is a transverse vertical sectional view taken on line 3—3 of Figure 2;

Figure 4 is an enlarged fragmentary sectional view showing to better advantage the anchoring of the end of the axle or core in the end wall structure of the box; and

Figure 5 is a plan view of a blank from which the novel container is formed.

In the drawings the container is given the general reference character **10** and is shown in general asembled form in Figure 1, but an understanding of the construction and arrangement of the container may be best understood by begining with a description of the blank **10A** shown in Figure 5 of the drawings.

In the blank the panel which is to form the front panel of the box is designated **11**, the bottom panel **12**, the back or rear panel **13**, and the lid cover or top panel **14**. This top panel is provided with a flap **15** which is tucked into the folded structure when the box is assembled and closed.

All of the main panels of the box are provided with end flaps except the top panel **14**. The end flaps **17** of the back panel **13** are imperforate and are hinged to the panel **13** at the weakened hinge lines **18**.

The end flaps of the bottom panel **12** are designated **20** and are provided with central openings **21**, the flaps being hinged to the panel **12** as at the creases **23**.

The front panel **11** has end flaps **25** which are provided with central circular openings **26**. These flaps are hinged to the front panel **11** as by means of the weakened creased lines **27**.

The panels and flaps **11—15** are hinged together by the weakened crease lines **29** in a manner well known in the art.

In erecting and securing the box or container the panels are folded along the lines **29** and the end flaps **17**, **20**, and **25** tucked in in overlapping relationship. In this interleaving of the end flaps the imperforate flap **17** must be on the outside and either of the perforated flaps **20** and **25** in the inenrmost and intermediate positions. However, in the example shown in the drawings the flap **20** of the bottom panel **12** is placed innermost and the flap **25** of the front panel **11** disposed in the intermediate position.

Whatever the innermost flap may be, the opening therein (in this case the opening **21** in the bottom flap **20**) is of a diameter approximating the outer diameter of the central axle member **30** (which may be of tubular construction as shown) so that the axle member **30** has a snug fit within the opening **21**.

The opening **26** in the intermediate flap **25** is of a diameter which is initially preferably very slightly less than the outside diameter of the axle member **30**, so that the end of the axle **30** has to be forced firmly into the opening **26**, even though there may be some slight distortion of the margin of the opening or the end portion of the axle, or both of these parts.

The three overlapping flaps are secured together by the intervening layers of adhesive **32** and **33** and very obviously in applying the adhesive some of it will flow into contact with the end portions of the axle **30** and aid in securing the axle to the end structure of the box.

When used for containing and dispensing web material such as the screen mesh **40**, the material is wound upon the axle member **30** to the full extent of the capacity of the box and may be dispensed therefrom as clearly shown in Figures 1 and 3 of the drawings. After the required length has been cut off of the roll, the protruding end of the web may be tucked inside of the box and the top or lid **14** closed with the flap inserted within the front panel **11**.

Various changes and modifications may be made in the embodiment illustrated and described herein without departing from the scope of the invention as determined by the subjoined claims.

Having thus described the invention, what is claimed as new and desired to be secured by Letters Patent is:

1. A storage and dispensing container for rolled web materials or the like comprising, in combination, a hollow enclosure of substantially the configuration of a rectangular parallelepiped, and having at least three laterally extending wall panels, namely a front wall panel, a bottom wall panel, and a rear wall panel, each of said panels having integral end flaps extending therefrom and secured together in overlapping contacting conterminous relation, an outer overlying flap at each end of the container being imperforate but at least one of the inner underlying flaps having a circular opening extending through it, a fixed cylindrical axle member extending substantially axially of said container and having its opposite ends seated snugly in said respective openings and in abutment with the inner face of the outermost flap, and adhesive material applied to the overlapping and contacting surfaces of said flaps and covering the entire mutually facing surfaces thereof, some of the adhesive at the margin of the circular opening also serving to secure together the contacting surfaces of the axle and the end flap in which the opening is formed, whereby the axle is secured in rigidly fixed relation to the end flaps of the container so that the rolled web material may freely rotate upon unwinding but is held in axially aligned position within the container during dispensing thereof.

2. A storage and dispensing container for rolled web materials or the like comprising, in combination, a hollow enclosure of substantially the configuration of a rectangular parallelepiped, and having at least three laterally extending wall panels, namely a front wall panel, a bottom wall panel, and a rear wall panel, each of said panels having integral end flaps extending therefrom and secured together in overlapping relation, the outermost flap at each end of the container being imperforate but the two inner flaps each having a circular opening extending through it, a fixed cylindrical axle member extending substantially axially of said container and having its opposite ends seated snugly in said respective pairs of openings and in abutment with the inner face of the outermost flap, the opening in the innermost flap being of a diameter approximating that of the axle and the opening in the intermediate flap being of a diameter very slightly smaller than that of the axle, the material of which the container is made being somewhat distortable, whereby forcing the end of the axle into said last named opening distends the opening and the axle is gripped securely, whereby the rolled web material may freely rotate upon unwinding but is held in axially aligned position within the container during dispensing thereof.

3. The storage and dispensing container as set forth in claim 2 in which the flaps are secured together by means of adhesive material applied to their overlapping and contacting surfaces, the adhesive material being applied to the entire mutually facing surfaces of the flaps whereby some of the adhesive adjacent the margins of the circular openings also serves to secure together the contacting surfaces of the axle and the end flaps.

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