Oct. 22, 1957 R. GUYER 2,810,476

CAN CONTAINING CARTON

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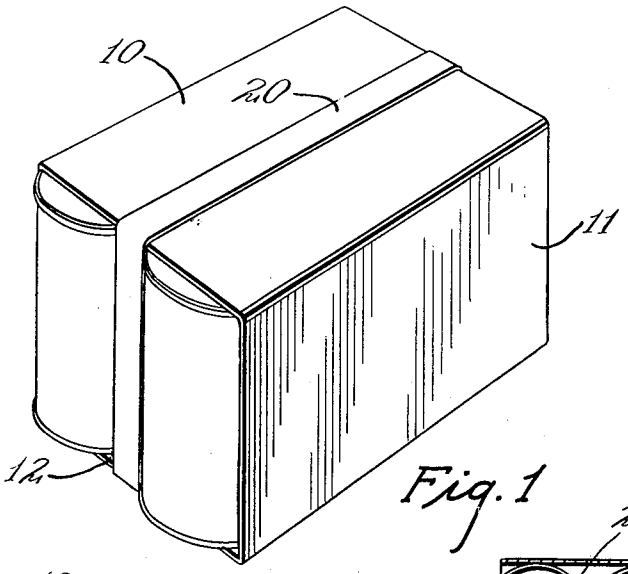


Fig. 1

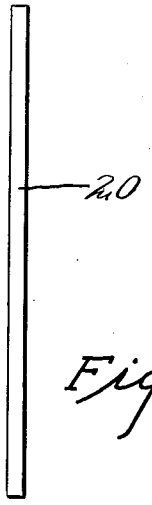


Fig. 5

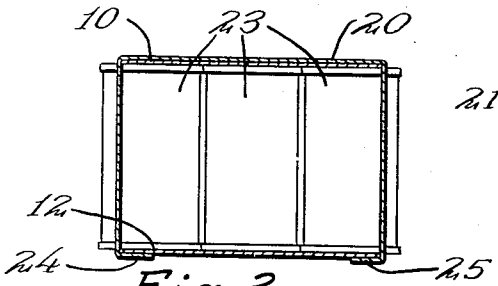


Fig. 3

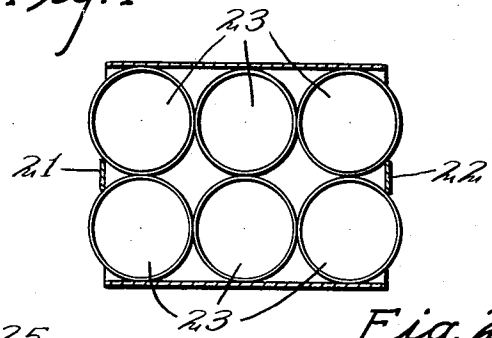


Fig. 2

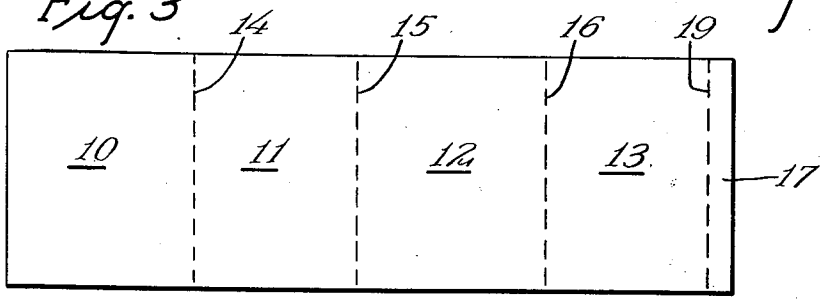


Fig. 4

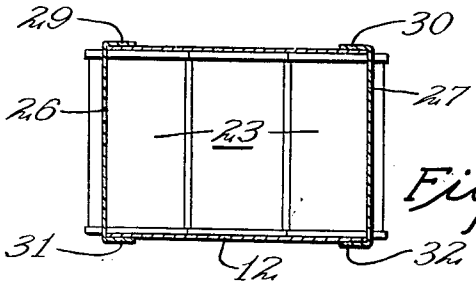


Fig. 6

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CAN CONTAINING CARTON

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5 Claims. (Cl. 206—65)

This invention relates to an improvement in can packages and deals particularly with an inexpensive carton capable of containing a plurality of cans.

During recent years the use of paperboard cartons for containing a series of cans has become increasingly popular. With such packages the tendency for a purchaser to buy a series of cans of goods is correspondingly increased. At the same time the cartons must be produced at low cost in order to avoid a substantial increase in the cost of the goods. The present carton is designed to accomplish this result. An object of the present invention lies in the provision of a sleeve capable of accommodating a plurality of cans arranged transversely of the length of the sleeve. For example, many such cartons contain six cans which are arranged in two side by side rows of three cans, the three cans of each row being longitudinally aligned. A connecting strip is provided at each end of the sleeve between the rows of cans to hold the cans from sliding through the open ends of the sleeves.

A feature of the present invention lies in the provision of a sleeve having open ends and preferably of a length somewhat less than the length of the aligned cans of each of two or more rows. A strip extends across each end of the sleeve between each adjoining pair of rows, the strip preventing the removal of the cans from the open ends of the sleeve without tearing or distorting the strip or sleeve.

A further feature of the present invention lies in the provision of a sleeve designed to encircle a plurality of rows of cans and in which a substantial portion of the surface of the end cans of the rows is visible. As a result the customer may see the labels on the cans and immediately recognize the product. At the same time the sleeve surface provides a substantial advertising space.

These and other objects and novel features of my invention will be more clearly and fully set forth in the following specification and claims.

In the drawings forming a part of the specification:

Figure 1 is a perspective view of a carton showing the general construction thereof.

Figure 2 is a sectional view through the carton on a plane normal to the axes of the cans.

Figure 3 is a perspective view through the carton between adjoining rows of cans.

Figure 4 is a diagrammatic view of the blank from which the sleeve is formed.

Figure 5 is a diagrammatic view of a strip of the type which may be employed in conjunction with the sleeve of Figure 4.

Figure 6 is a sectional view similar to Figure 3 showing a modified form of cans.

In the foregoing description the carton has been described as being designed for containing cans as the product has been normally used for this purpose. However, other objects usually of cylindrical shape may also be contained. Furthermore, with the present construction, cans having crown tops may be contained, although perhaps not as successively as fully cylindrical objects.

The carton is extremely simple in form and comprises a sheet of paperboard including four wall panels **10**, **11**, **12** and **13** which are foldably connected along parallel fold lines **14**, **15** and **16**. A glue flap **17** is hingedly connected to an end wall of the series such as the panel **13** along a fold line **19**. The sleeve is completed by gluing the glue flap **17** in surface contact with the panel **10**. When the sleeve has been formed, it is usually somewhat shorter than the combined diameters of the cylindrical objects of each row being contained. In the particular arrangement illustrated, the sleeve is designed to contain six cans which are arranged in two rows each containing three cans, the three cans extending longitudinally of the sleeve between the open ends thereof.

In order to hold the cans in place, an elongated strip **20** of paperboard or tape of a suitable character is adhered to the top panel which in the arrangement illustrated may comprise the panel **10**. The ends of the strip **21** and **22** are drawn down between the two rows of cans **23** so as to engage the cans outwardly of the line of separation between the two rows. As indicated in Figure 3 of the drawings, the ends **24** and **25** of the strip **20** are adhered to the surface of the bottom panel **12**.

When the tape or strip is in place the point of engagement between the strip and the cans is such as to produce end openings on the sleeve which are narrower than the diameters of the cans so as to securely hold the cans in the sleeve. In other words, the strip **20** is of sufficient width so that the distance between the edges of this strip and the parallel end edges of the sleeve are more narrow than the can diameter.

It is not necessary to limit the number of rows of cans to two rows. However, if more than two rows are provided a tape strip is provided between each pair of adjoining rows and the distance between the edges of the tapes will then be more narrow than the diameter of the cans. When the strips are in place, the cans cannot be removed without tearing either the strip or the sleeve.

In Figure 6 of the drawings I disclose a slightly modified form of construction. In this arrangement, in place of the strip **20**, two separate strips **26** and **27** are provided. Ends **29** and **30** of these strips overlie the top sleeve panel **10** while the opposite ends **31** and **32** of the strips underlie the lower panel **12** of the sleeve. The ends are adhered to the sleeves and the strips engage the surfaces of the end cans of the series at points outwardly spaced from the point of contact of the cans of the two rows so as to securely hold the cans from sliding from the open ends of the sleeves.

In accordance with the patent statutes, I have described the principles of construction and operation of my can containing carton, and while I have endeavored to set forth the best embodiment thereof, I desire to have it understood that obvious changes may be made within the scope of the following claims without departing from the spirit of my invention.

I claim:

1. A sleeve in combination with a series of generally similar cylindrical objects arranged with their axes in parallel relation providing a carton including four rectangularly arranged panels hingedly connected together with two of the panels extending normal to the axes of the cans, the sleeve being of proper width to accommodate a pair of said cylindrical objects in side by side relation contacting the adjacent panels of the sleeve, the plane of the end edges at one end of the sleeve being between a plane through the axes of the cylindrical objects and a parallel plane tangent to the outer peripheries of said objects, and a flexible strip secured to the first mentioned parallel panels and extending therebetween parallel to the axes of the cans, said strip being substantially narrower than the diameter of said objects, the portion of the

strip extending between the first mentioned parallel panels being substantially in the plane of the end edges of said panels at one end of said sleeve.

2. The structure described in claim 1 including a strip extending across the other end of the sleeve in parallel opposed relation to the first strip and connecting the first mentioned panels.

3. A can carton including a generally rectangular sleeve including four rectangularly arranged foldably connected panels, a plurality of similar cylindrical objects in said sleeve and arranged in rows in side by side relation with their axes normal to two parallel panels, said two parallel panels being substantially equal in width to the diameters of two of said cylindrical objects, said sleeve being substantially shorter than the sum of the diameters of the cylindrical objects of each row and tape strip means extending across each of the open ends of said sleeve between adjoining cylindrical objects and in the plane of the end edges of said panels at the open ends of said sleeve, said strip being substantially narrower than the diameter of said objects.

4. The structure described in claim 3 and in which said strips overlying opposite open ends of said sleeves are connected.

5. The structure described in claim 3 and in which the strips overlying opposite open ends of said sleeve are separate.

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