May 21, 1935. D. H. PATTERSON, JR 2,001,850

CARTON

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Fig. 1

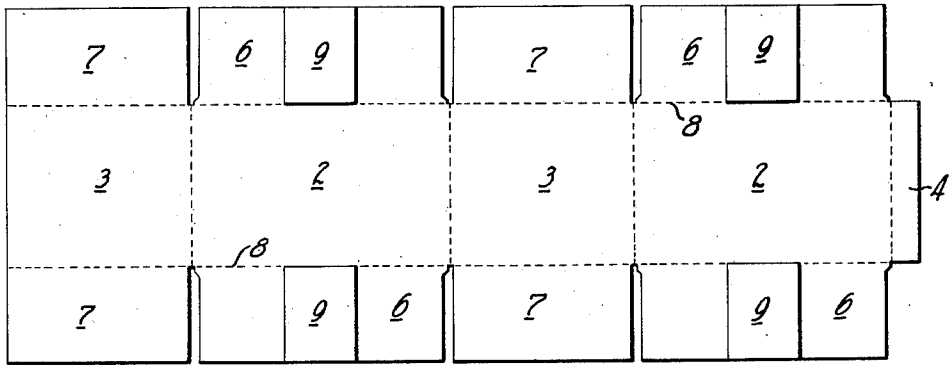


Fig. 2

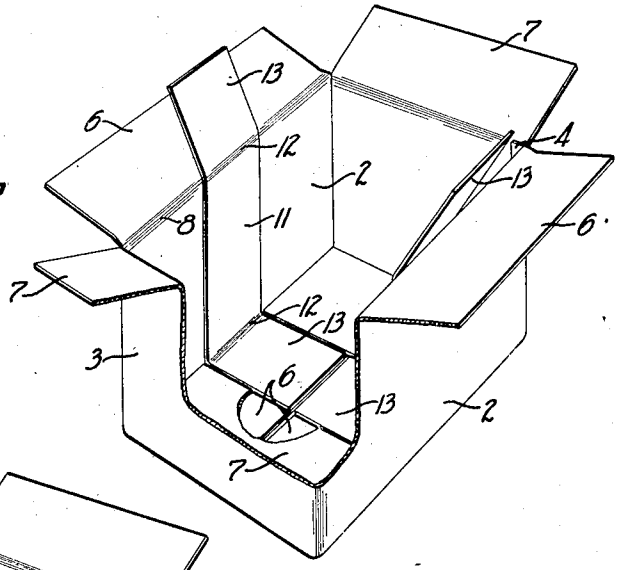
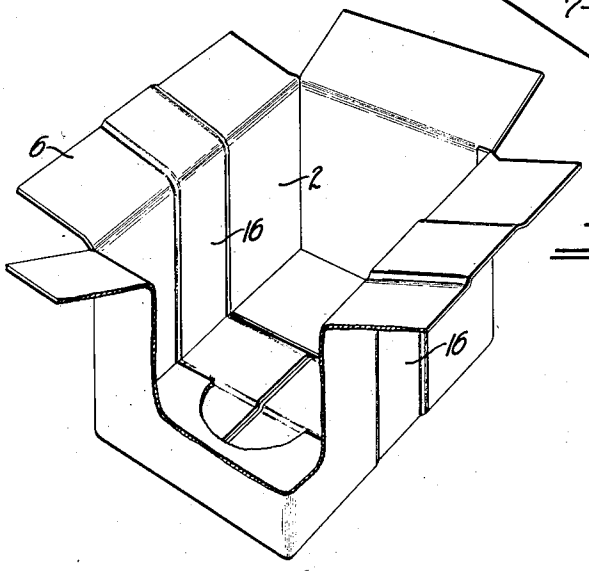


Fig. 3



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CARTON

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11 Claims. (Cl. 229—37)

My invention relates to packing devices and particularly to a fiberboard carton.

An object of the invention is the production of a carton which may be cut from the parent sheet of fiberboard without loss of stock; and which presents a continuous plane inner surface, so that the articles in the carton are evenly supported.

The invention possesses other objects and features of advantage, some of which, with the foregoing, will be set forth in the following description of my invention. It is to be understood that I do not limit myself to this disclosure of species of my invention, as I may adopt variant embodiments thereof within the scope of the claims.

Referring to the drawing:

Figure 1 is a plan view of the blank from which a carton embodying my invention is formed.

Figure 2 is a perspective view of a carton embodying another form of my invention, a portion being shown cut away to show the arrangement of the parts.

Figure 3 is a perspective view of another embodiment of the invention, a portion being shown cut away to show the arrangement of the parts.

Broadly my invention comprises a fiberboard carton having the usual inner and outer cover flaps to form the top and bottom of the carton, and having raised panels or pad means arranged on some of the flaps to fill in to the same level the gaps on the top and bottom inner surfaces.

In greater detail my invention comprises a carton, preferably formed from a single, generally rectangular sheet of fiberboard, corrugated board or other suitable material. The sheet is cut and creased to form side walls 2, and end walls 3 which are preferably shorter than the side walls. A narrow tab 4 is provided at the exposed end of the one side wall 2; and in the formation of the carton, this tab is secured to the end wall 3, as shown in Figure 2, in any suitable manner such as by stapling or an adhesive.

Extending from opposite edges of the side walls 2 are side flaps 6, each having a length approximately equal to one-half the length of the end wall. When folded inwardly to provide the bottom and cover of the carton, the side flaps abut in a longitudinal median plane, and constitute the outer or wide cover flaps of the carton. End flaps 7 are also provided on opposite edges of the end walls 3 to form the inner or narrow cover flaps. The inner flaps 7 are preferably of the same length as the outer flaps 6, to permit cutting the blank from the parent sheet without loss of material; and the flaps fold on the walls along the creases 8. Reference to Figure 1 will show that the blank is cut with practically no waste.

The combined lengths of the two inner cover flaps are less than the length of the carton (width of the outer cover flaps), so that a gap or space occurs between the ends of the inner flaps. Because of this, an uneven inner surface results, so that when rows of cans or bottles are packed in the carton, the rows positioned in the gap are lower than those resting on the inner cover flaps. Should a row of cans or bottles rest partly on the inner cover flap and extend into the gap, that row is unevenly supported, and tends to tip at an angle to the bottom of the carton. In either case an uneven, insecure and unattractive packing occurs; and the danger of breakage or mutilation of the contained goods is increased. It is not feasible to increase the length of the inner cover flaps to prevent the formation of the gap, because of the waste involved in cutting the blank which would be required.

To overcome these difficulties, I provide an extension preferably in the form of a filler pad 9, which is suitably mounted on the inner surface of each outer cover flap, so that when the carton is closed, the pads lie in and fill the gap between the ends of the inner cover flaps, thus providing on the inner surfaces of the top and bottom of the carton, a continuous plane surface, as shown in Figures 2 and 3 in connection with other embodiments of my invention. The pads 9 are preferably applied during the cutting and creasing operation and may be adhesively secured to the flap, or they may be held in position by staples or stitches. The length of each pad is equal to the length of the flap on which it is mounted; and its width is that of the gap it is intended to fill. The pads on the abutting cover flaps are of course aligned with each other.

The cartons before use may be stacked or shipped in the form of a flat two-layer package in the same manner as if the pads were not included. Since the pads are securely held in place on the flaps they cannot become displaced or lost and the packer proceeds as usual in the setting up of the blank and the filling of the carton.

The invention is capable of a number of different embodiments; and in Figure 2, I have shown another desirable form, in which a strip 11 extends transversely across each side wall 2 and its attached cover flaps 6, from one edge of the blank to the other. This strip has the same width as the pads 9. Creases 12, coinciding with the creases 8 which separate the cover flaps from

the side walls, extend across the strip to facilitate folding in of the end portions 13 corresponding to the pads 9.

The central portion is preferably secured to the side wall in any suitable manner such as by an adhesive or with staples. Due to the difficulty of folding two pieces of relatively thick stock when secured together, I have found it best not to secure the ends 13 to the flaps against which they lie. The ends are held in their operative position in the gaps by the immovable central portion of which they are an integral part, and the contents of the carton against which they bear.

This construction insures the continuous planar surface on the inside of both top and bottom, and desirably strengthens and reenforces the side walls of the carton.

Another embodiment of the invention is shown in Figure 3 in which the filler strip comprises an embossed panel 16, which functions in the same manner as the added strip of Figure 2. This panel extends clear across the blank from edge to edge, so that the portions on each side 2 and contiguous flaps 6 are aligned and continuous. The embossed panel construction has the advantage of being integral with the carton sides and flaps. Such a carton is somewhat lighter in weight, and the manufacture is attended with a small advantage in cost over other forms. The embossed side walls present a factor of additional strength as well as of distinctive appearance.

I claim:

1. A carton comprising side and end walls, a pair of wide cover flaps, a pair of narrow cover flaps having a gap between the ends thereof, and an extension permanently secured on the carton and lying in said gap.

2. A carton having oppositely disposed pairs of wide cover flaps, oppositely disposed pairs of narrow cover flaps having a gap between the ends thereof, and extensions fixed on the wide flaps and lying in said gap.

3. In a carton having outer cover flaps, and having inner cover flaps the ends of which are spaced apart to form a gap, a filler pad fixed on the inner surface of each outer flap and lying in said gap.

4. In a carton having outer cover flaps on the side walls, and having inner cover flaps on the end walls the ends of the inner flaps being spaced apart to form a gap, a separate pad fixed on the inner surface of the side walls and having ends lying in said gap.

5. In a carton having outer cover flaps on the side walls, and having inner cover flaps on the end walls the ends of the inner flaps being spaced apart to form a gap, an embossed panel the width of said gap and aligned therewith extending across the side walls and contiguous outer flaps.

6. In a carton having outer cover flaps on the side walls, and having inner cover flaps on the end walls the ends of the inner flaps being spaced apart to form a gap, an embossed panel arranged on said outer flaps in position to fill said gap.

7. In a carton comprising a sheet of fibrous material cut and folded to form side and end walls, the side walls being longer than the end walls, a top and bottom closure comprising outer cover flaps extending from said side walls and in closed position abutting along a longitudinal line, inner cover flaps extending from said end walls and in closed position having a gap between the ends thereof, and fixed filler means on the inner side of the outer cover flaps and lying in said gap to provide a continuous plane inner surface for the carton.

8. A carton blank comprising a generally rectangular sheet of material cut and creased to form side and end walls with flaps extending from each side of said walls to form inner and outer cover flaps, said outer cover flaps having a length equal to one-half the width of the end wall and a width in excess thereof, said inner cover flaps having a length less than one-half the width of the outer cover flaps, and filler means on the inner surface of the side walls and outer cover flaps and having a width equal to the difference between the width of the outer flaps and the combined lengths of the inner flaps.

9. A carton blank comprising a generally rectangular sheet of material cut and creased to form side and end walls with flaps extending from each side of said walls to form inner and outer cover flaps, said outer cover flaps having a length equal to one-half the width of the end wall and width in excess thereof, said inner cover flaps having a length less than one-half the width of the outer cover flaps, and filler means provided in fixed position on the inner surface of the outer cover flaps and having a width equal to the difference between the width of the outer flaps and the combined lengths of the inner flaps.

10. A carton having side and end walls, a pair of wide cover flaps, a pair of narrow cover flaps having a gap between the ends thereof, and a filler pad fixed to the inner surface of the carton and lying in said gap when the carton is closed.

11. A carton having oppositely disposed pairs of wide cover flaps, oppositely disposed pairs of narrow cover flaps having a gap between the ends thereof when the carton is closed, and a raised panel fixed to the inner surface of the carton and positioned to fill in said gap as the carton is closed.

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