

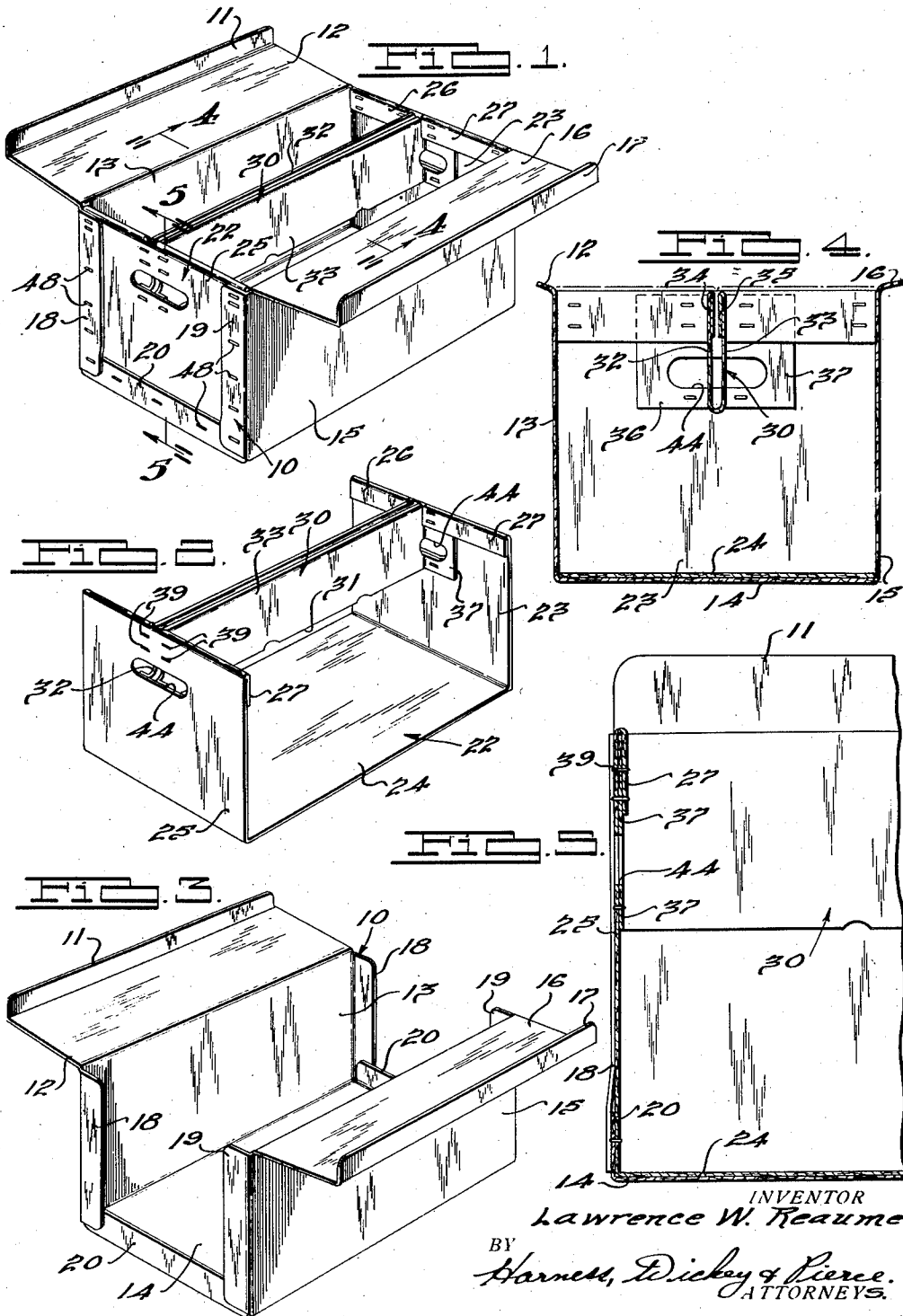
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CARTON STRUCTURE

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## CARTON STRUCTURE

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3 Claims. (Cl. 229—23)

The present invention relates to cartons of the type which are formed from cardboard or other laminated paper material, and particularly to cartons of the type mentioned which are adapted to hold beverage bottles and the like. Such cartons are subjected to rough usage and are returned to the bottler and repeatedly used. When filled with bottles containing a fluid, the contents of the carton are quite heavy, and it is essential that the carton have sufficient strength to sustain the entire load and withstand the rough usage to which it is subjected for a substantial length of time.

One of the principal objects of the present invention is to provide an improved carton of the type mentioned which is simple in construction, and so designed that it will readily withstand rough usage for a considerable length of time.

Another object of the invention is to provide a carton formed of a relatively few parts which may be readily assembled and in which each of the parts is, relatively simple to manufacture.

Another object of the invention is to provide a carton of the type mentioned which has a double thickness bottom, thereby providing a strong and rugged construction.

A further object of the invention is to provide an improved means in a carton of the type mentioned for securing the cover parts in closed relation.

Other objects of the invention will become apparent from the following specification, the drawing relating thereto, and from the claims hereinafter set forth.

In the drawing in which like numerals are used to designate like parts in the several views throughout;

Figure 1 is a perspective view of a carton structure embodying features of the present invention;

Fig. 2 is a perspective view of certain of the parts forming the carton illustrated in Fig. 1;

Fig. 3 is a perspective view of another part forming the carton structure illustrated in Fig. 1;

Fig. 4 is an enlarged cross-sectional view taken substantially along the line 4—4 of Fig. 1; and

Fig. 5 is an enlarged, fragmentary cross-sectional view taken substantially along the line 5—5 of Fig. 1.

Referring to the drawing, one body portion of the carton, generally indicated at 10, is preferably formed of a single sheet of laminated paper or cardboard provided with a plurality of crease lines which divide the sheet of material into a top flap 11, a half top member 12, a side wall 13,

a bottom wall 14, a side wall 15, a half top member 16, and a top flap 17. The side walls 13 and 15 are provided, respectively, with end flaps 18 and 19; and the bottom wall 14 is provided with corresponding flaps 20. When the sheet of material is folded into the form shown in Fig. 3, it is seen that a substantial portion of the box structure is provided in a relatively simple manner.

Another body portion of the carton, generally indicated at 22, is also preferably formed of a single sheet of laminated paper or cardboard provided with a plurality of parallel crease lines which divide the sheet of material into an end wall 23, a bottom wall 24, and an end wall 25. The end walls are also provided at their upper edges with a pair of flaps 26 and 27 for a purpose to be described hereinafter.

A longitudinal partition member, generally indicated at 30, is provided which extends longitudinally of the box midway of the sides. This partition member is preferably formed of a single sheet of laminated paper material and is folded along its lower edge 31 to provide a pair of spaced, adjacent partition members 32 and 33. These partition members 32 and 33 are preferably folded along their upper edges to provide downwardly directed flaps 34 and 35. The flaps 34 and 35 are spaced from each other to leave a space therebetween longitudinally of the partition member 30 for the reception of the top flaps 11 and 17 when the top halves 12 and 16 are in their closed position.

The ends of the partition member 32 are provided with a pair of flaps 36, one at each end; and the ends of the partition members 33 are provided with similar flaps 37. These flaps are bent at right-angles to the partition 30 into the plane of the end walls 23 and 25, whereupon the flaps 26 and 27 are folded over the flaps 36 and 37 and secured by means of staples 38 to the flaps and the end walls proper. The partition member serves to brace or strengthen the carton, as it is of four thicknesses along its top, and also serves as a simple and effective means for retaining the top members 12 and 16 closed by providing a pocket within which the flaps 11 and 17 are received.

Hand holes 44 are provided through the end walls 23 and 25, and also through the flaps 36 and 37 so as to provide openings through which hands may be inserted for the ready transportation of the carton.

In assembling the member 22 with the member 10 to complete the box structure, the member 22 is placed within the member 10 so that the bottom 24 is superimposed on the bottom 14. When in

this assembled position, the end walls 23 and 25 are secured to the flaps 18, and 19 and 20 by any suitable means, such as staples 40. A double bottom is thereby provided to provide a rugged and strong box structure. By providing the double bottom in combination with the longitudinal partition member, the box structure is reinforced longitudinally thereof at both the bottom and the top and a particularly strong box is provided.

While not shown, it is to be understood that the carton may be provided with the usual interlocking, transverse and longitudinal partition members to divide the interior of the box into a plurality of compartments, each of which is adapted to receive a single bottle or receptacle.

Formal changes may be made in the specific embodiments of the invention, without departing from the spirit and substance of the invention, the scope of which is commensurate with the appended claims.

What is claimed is:

1. A cardboard carton having side walls, end walls and a bottom wall connected together to form a box structure, top closure members connected to said side walls respectively having flaps along their inner edges, a longitudinally extending partition member connected to said end walls, said partition member being formed of a single sheet of material folded upon itself and so constructed as to provide an upwardly opening pocket longitudinally thereof, said pocket being adapted to receive said flaps to hold said top closure members closed.

2. In a cardboard carton construction, a first member forming side walls, top closure members and a bottom wall, said side walls and said bottom wall being provided with inturned flaps, said top closure members being provided with flaps along their inner edges, a second member forming end walls and a bottom, said members being arranged to provide a box structure with one of said bottom walls superimposed on the outer bottom wall to thereby provide a double bottom, said inturned flaps being connected to said end walls, a longitudinally extending partition member connected to said end walls, said partition member being formed of a single sheet of material folded upon itself and so constructed as to provide an upwardly extending, longitudinal pocket therein, said pocket being adapted to receive said flaps to retain said top closure members in closed position.

3. A cardboard carton having side walls, end walls, and a bottom wall connected together to form a box structure, a longitudinally extending partition member connected to said end walls to brace said carton, said partition member being formed of a single sheet of material folded upon itself and so constructed as to provide an upwardly opening pocket longitudinally thereof, the upper edges of said member being turned upon themselves so that said partition member is of four thicknesses along its upper edge and provides said upwardly opening pocket.

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