

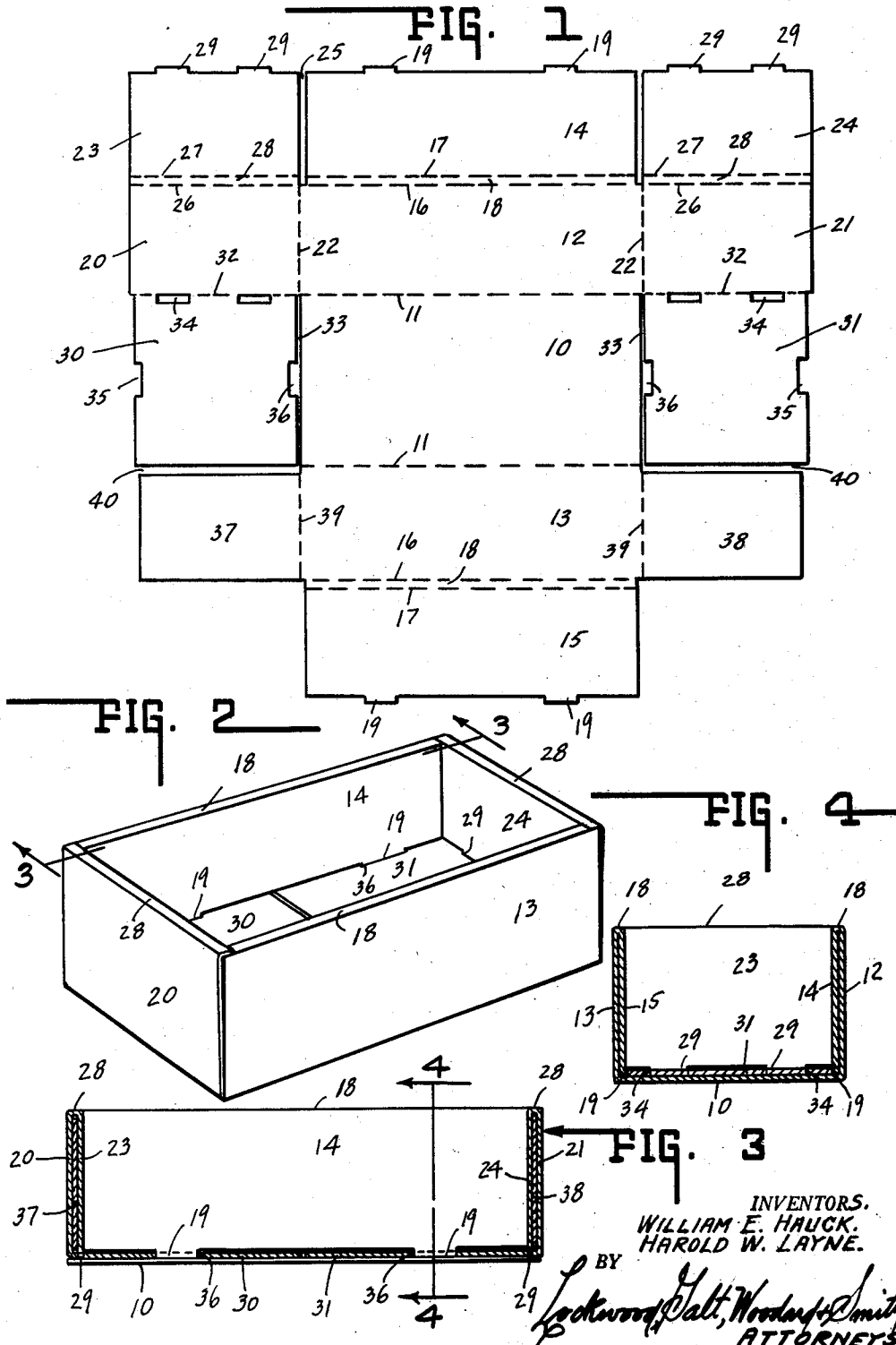
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FIBREBOARD CONTAINER

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FIBREBOARD CONTAINER

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1 Claim. (Cl. 229—34)

This invention relates to a fibreboard container wherein from a single sheet of fibreboard a structure may be cut and erected to provide interlocked reinforced bottom and side walls from a minimum amount of material, and which is particularly adapted for use as a basket or carton for containing foods and produce.

It is the particular object of the invention to form from a single blank of fibreboard a structure that when erected will provide a reinforced bottom, double side walls, triple end walls, all interlocked, and a smooth all around folded-over top edge rail.

One feature of the invention resides in so constructing a blank of corrugated fibreboard that when erected into container formation, the corrugations will extend vertically about the side and end walls for providing the ultimate stack securing strength.

A further feature of the invention resides in the folding over and interlocking of the side and end walls coupled with inwardly extending inner bottom panels, all of which may be readily erected from a flat blank into a reinforced container having smooth uninterrupted surfaces, strength and rigidity, together with the minimum amount of effort in erecting.

Other features of the invention will be made more apparent from the following drawings and description.

The full nature of the invention will be understood from the accompanying drawings and the following description and claim:

Fig. 1 is a plan view of the processed blank of fibreboard.

Fig. 2 is a perspective view of a container erected from the blank of Fig. 1.

Fig. 3 is a longitudinal section through the erected container taken on the line 3—3 of Fig. 2.

Fig. 4 is a transverse section through the container taken on the line 4—4 of Fig. 2.

In the drawings, for illustrating one modification of the invention in the form of a basket container, there is shown a blank of fibreboard processed by cutting and creasing to provide the following panels. The outer bottom of the container is indicated at 10. Hinged to opposite sides thereof by the creases 11 there is a pair of outer side walls 12 and 13, respectively. Hinged to the far side of the outer side walls there are inner side walls 14, 15, respectively. The said side walls are hinged to the outer side walls by a pair of spaced creases 16, 17, for providing an intermediate ledge portion 18. The far edges of the inner side walls 14, 15 are formed with integral locking ears 19 herein shown in longitudinally spaced relation.

At each end of the side wall 12, and hinged thereto there are outer end walls 20, 21 integrally connected with the ends of the outer side wall 12 by the creases 22. The outer end walls 20, 21 each has hinged to one side thereof the inner end walls 23, 24, respectively. Said inner end walls are hingedly connected with said outer end walls to initially extend opposite the respective ends of the inner side wall 14 by a slot or gap 25, their

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hinged connection being provided by the spaced creases 26, 27 to form an intermediate ledge portion 28 extending in alignment with the ledge portion 18. Each of said inner end walls is provided with a pair of spaced projecting ears 29.

Hinged to the opposite side of said outer end walls 20, 21 there are provided inner bottom sections 30, 31 of the same width as the outer bottom 10, said inner bottom sections being hinged to their respective outer end walls by the crease 32, and being separated from the ends of the outer bottom 10 by a cut indicated at 33. Said inner bottom sections are each provided with a pair of spaced notches 34 formed inwardly thereof to lie adjacent the hinge crease 32. Said sections are further provided with centrally disposed notches 35, 36 midway of their width. The notch 35 is formed adjacent the outer edge thereof and the notch 36 adjacent the inner ends of the outer bottom 10.

At each end of the outer side wall 13 there are provided the middle end panels 37, 38, respectively, each being hinged adjacent the end of the outer side wall by the crease 39. Said end panels are of slightly less width than the outer side walls to provide a slotted gap 40. They extend outwardly from the ends of the side wall coextensive and in alignment with the inner edge of the notches 35.

In erecting the container into the form shown in Fig. 2, the side wall 12 is bent upwardly about its hinged crease 11 to extend vertically from the outer bottom 10. The outer end wall 20 is then swung inwardly about its hinge crease 22 carrying the bottom section 30 inwardly and over the bottom 10. The same procedure is followed with respect to the opposite outer end 21 and bottom section 31. Thereupon the middle end panels 37, 38 are each folded about their hinge creases 39 to extend upwardly at right angles to the outer side 13. The outer side 13 with the upwardly extending end panels is then swung upwardly about its hinge crease 11 into side wall formation. Following this operation the inner end walls 23, 24 are folded over and downwardly about their hinge creases 26, 27 into overlapping relation with the middle end panels 37, 38, respectively, until their locking ears 29 engage and lock into the notches 34 of the bottom sections.

In the foregoing manner the container will have been erected to provide a bottom with superimposed reinforcing inner bottom sections, and the ends of the container will be interlocked therewith to provide triple thickness end walls. With the container thus erected, with reinforced bottom and interlocked triple thickness end walls with their upper ledge portion, it may be employed as a carton. When thus erected to provide a carton, the inner side walls 14, 15 may readily serve as a folded over lid or lids to provide a closure for such carton.

However, when the container is to be used as an open top basket or other open top container, said side walls 14, 15 are swung inwardly and downwardly about their hinge creases 16, 17 to lie adjacent the inner surface of the side walls 12, 13. When thus employed to provide inner side walls, their locking ears 19 engage and interlock with the opposed notches 35, 36 formed along the edges of the respective bottom sections 30, 31. When said inner side walls are folded over and locked in place, the ledge portions 18 provide a continuation of the ledge portions 28 of the end walls, so that a substantially continuous smooth top ledge is formed about the entire basket or open container.

While the invention has been disclosed and described in some detail in the drawings and foregoing description, they are to be considered as illustrative and not restrictive in character, as other modifications may readily suggest themselves to persons skilled in this art and within

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the broad scope of the invention, reference being had to the appended claim.

The invention claimed is:

An open top container formed of a single substantially rectangular blank of corrugated fibreboard, comprising a bottom panel having free ends and defined by longitudinal fold lines in the mid portion of said blank and extending from end to end thereof, outer side walls projecting from said longitudinal fold lines, an inner side wall hinged to the outer longitudinal edge of each outer side wall and of a breadth substantially equal to that of the latter but of a length slightly less than the length of said bottom, outer end panels hingedly connected to the outer ends of one of said outer side walls equal in breadth to the latter and of a length substantially equal to the breadth of said bottom panel, an inner end panel hinged to the outermost longitudinal edge of one of said outer end panels equal in breadth to the adjacent inner side panel and of equal length with its connected outer end panel, an inner bottom panel hingedly connected along one longitudinal edge to the inner edge of each of the aforesaid outer end panels and of a breadth substantially equal to the breadth of said bottom panel, a middle end wall hingedly connected at one end to each of the outer ends of the other of said outer side walls and of slightly less breadth than the latter, each inner

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bottom panel having spaced openings adjacent to its line of fold and notches midway its longitudinal edges, the outer longitudinal edges of said inner side walls having outwardly projecting locking tabs to engage in said notches when the inner bottom panels are moved to a position overlying said bottom panel, and locking tabs projecting from the outer edges of the inner end walls of the first named inner side wall spaced apart a distance equal to the spacing of said spaced openings in the said inner bottom panels to engage and interlock therein when said inner end walls are folded over said middle end walls and in parallelism with the adjacent outer end panels, the corrugations in said blank running at right angles to said longitudinal fold lines, whereby the double thickness side walls and the triple thickness end walls have the corrugations extending vertically.

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