May 9, 1961 J. GLASER 2,983,427

PACKING

Filed Oct. 21, 1958

Fig. 1

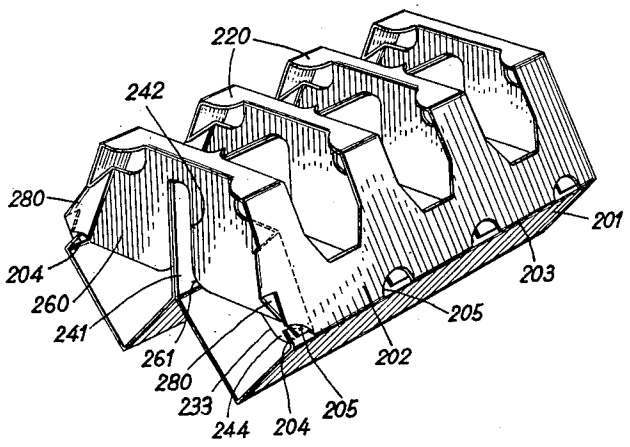
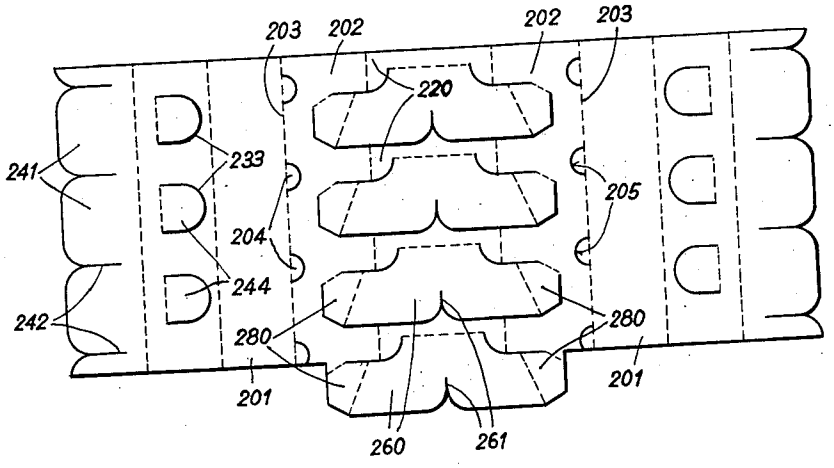


Fig. 2



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PACKING

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4 Claims. (Cl. 229—28)

The invention relates to a packing, constituted by folding together a carton blank, for holding a plurality of articles of substantially similar shape and size in at least one row of compartments formed by two side panels each connected along a crease with a floor portion, and by transverse partitions between said side panels.

Such packings are intended for holding a plurality of similar articles, such as eggs, fruit, and the like, for transportation and storage, and to protect them from damage. For obvious reasons they are therefore required to be strong, light, and cheap to produce.

Packings of this kind are already known to the art but they still fail to give complete satisfaction. Moreover, they have the drawback that the articles they contain can fall out.

The invention therefore contemplates a packing which will protect the packed articles, prevent them from falling out, and which can be stacked for storage without damage being done to their contents. Another object envisaged by the invention is to eliminate all waste in production and by cutting down the number of operations required in manufacture to reduce manufacturing cost to the utmost, apart from facilitating the packing procedure and thereby minimising the handling costs.

To this end the packing proposed by the invention is provided between the side panels with relatively spaced transverse bridge members each connected along a longitudinal crease on each side with a side panel and along a transverse crease with an upright transverse partition of which the sides are connected with the side panels by the formation on each side between said partition and the side panel of an inwardly folding flap which is folded during the simultaneous erection of side panels and transverse partition and doubled back flat against the inside face of the side panel, whereupon the floor panels are folded along their creases and fixed.

Another advantageous optional feature is that each side panel may form a surface which is broken along a crease extending longitudinally about half way up its side in such manner as to produce an outwardly projecting ridge, holding tabs formed by incisions cut into the upper portion, adjoining the bridge member, of each side panel projecting inwards from said creased ridge to engage the rear faces of the flaps formed by the doubled flap part of said portion of the side panel.

An illustrative embodiment of the invention will now be described by reference to the accompanying drawings in which

Fig. 1 is a perspective view of the proposed packing, and

Fig. 2 is a plan of the blank for producing the packing shown in Fig. 1.

In conventional packings the compartments have a rectangular section. However, if the articles to be packed are of elongate shape, as will apply for instance in the case of eggs or pears, then a different for example pentagonal cross section may be preferred. However,

when subjected to pressure, for instance when the packings are stacked, the side panels would tend to bulge outwards and the doubled flaps to pull away from the sides. If steps are taken to prevent this latter effect, then the packings will be unable to bulge. A suitable embodiment of the invention which deals with this problem is shown in Figs. 1 and 2. Fig. 1 shows the erected side panels 201—202, the floor panels 240 which are connected with the side panels along a crease, and the transverse partitions 260 erected between the side panels 201, 202, with two rows of compartments. The drawing also shows the bridge members 220 spaced at intervals between the side panels with which they are integrally connected along creased folded edges. The partitions are again bent down from the bridge members and their ends are connected with the side panels by the previously described doubled flap portions 280, said flaps being formed between neighbouring bridge members as the carton blank is erected, in such manner that when the side panels are folded down from the bridge members the flaps fold over inwards and pull down the partitions out of the plane of the bridge members until the flaps have been doubled back completely through 180° and bear against the inside face of the side panels, the floor portions being then folded and fixed in position.

The side panels are broken along a crease 203 extending longitudinally about half way up their sides in such manner as to form an outwardly projecting ridge on either side. Projecting inwards from this creased ridge 203 in each side panel are holding tabs 204 formed by incisions 205 cut into the upper portion of the side panel nearest the bridge members 202, said tabs engaging the surfaces of flaps 280 which have been formed by doubling back part of the same portion of side panel 202.

The two floor panels 240 located on either side of the median longitudinal plane of the packing are inclined in an upward direction towards one another. They are provided with upright lobed portions 241 with incisions 242 by means of which they are adapted to engage the transverse partitions 260. Moreover, the partitions 260 are themselves provided with cooperating incisions 261 for engaging the lobes.

The compartments thus formed have a cross sectional shape which is nearly that of a regular pentagon and they are especially well suited for the reception of eggs. To provide resilient support on the floor panels 240 the latter have U-shaped incisions 243 from which U-shaped elastic tabs 244 are formed, their bases being connected with the floor panels without causing the structure to be weakened.

Occasionally it may be found that the connection between the lobes which form the longitudinal dividing wall and the transverse partitions is not sufficiently strong for holding heavier articles, such as apples. When the packings are carelessly handled their floors may undo and open.

This difficulty can be overcome if the transverse partitions are provided with incisions for the reception of the lobes which extend upwards from the floor panels, and which form the longitudinal divisions, in such manner that these incisions are inclined alternately to the right and the left at an angle of at least 5° in relation to the transverse axis of the partitions.

If this is done, the lobes which form the longitudinal division will bind in the incisions sufficiently to prevent the floor of the packing from becoming undone in any normal conditions.

What I claim is:

1. A carton for holding a plurality of articles of substantially similar shape and size having two rows of containing compartments comprising side panels forming a surface broken along a crease to produce an out-

wardly projecting ridge, floor portions connected to said side panels, a longitudinal partition formed by lobed extensions connected to said floor portions, transverse walls between the side panels, bridge members connected to said transverse walls and to said side panels, inwardly folded flaps connected with the transverse walls and the side panels, said flaps being doubled back flat against the inside face of the side panels and engaged on their rear faces by tongues cut into the upper part of the side panels along said crease, and engaging the inner surfaces of said flaps to retain them in position.

2. A carton for holding a plurality of articles of substantially similar shape and size, comprising side panels, a floor portion connected to said side panels along a fold, transverse partitions connecting said side panels, transverse bridge members, each connected along longitudinal folds on either side to a side panel and along a transverse fold with a transverse partition, inwardly folded flaps connecting the sides of the transverse partition with the side panels, each side panel having a longitudinal fold along the medial portion thereof to form an upper and lower section which define an outwardly projecting ridge, holding tabs struck from the upper section of each side panel and projecting inwardly from the

ridge, the rear faces of the inwardly folded flaps engaging and being held in position by said tabs.

3. The carton of claim 2 wherein the floor portion has lobed extensions which are folded upwardly out of the plane of the floor and the ends of which extend in abutting flat contact upwards towards the bridge members.

4. The carton of claim 3 wherein the folded lobed portions define slits for engaging the partitions, said partitions also defining slits for engaging the lobes, said first named slits being disposed at an angle with the transverse axis of said partitions.

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