July 19, 1927. 1,636,508

C. H. GOODYEAR

FOLDABLE CELLULAR CARTON

Filed Jan. 9, 1926

Fig. 1.

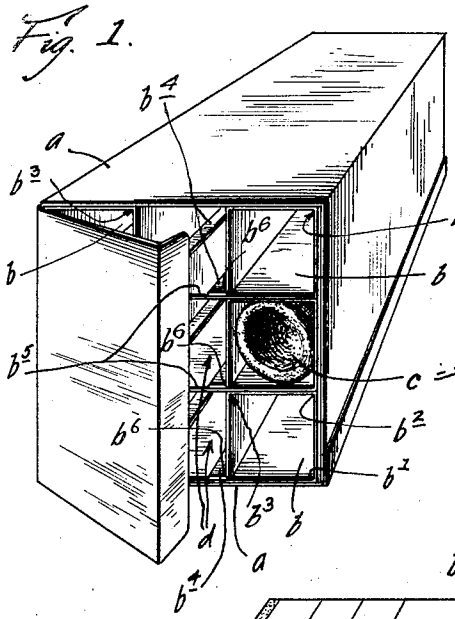


Fig. 2.

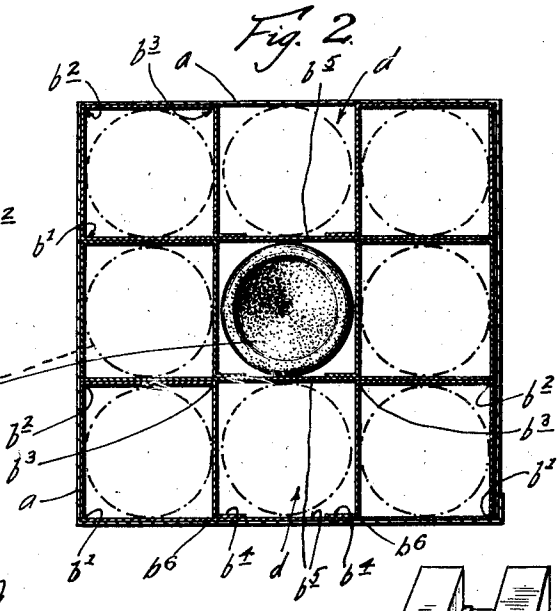


Fig. 3.

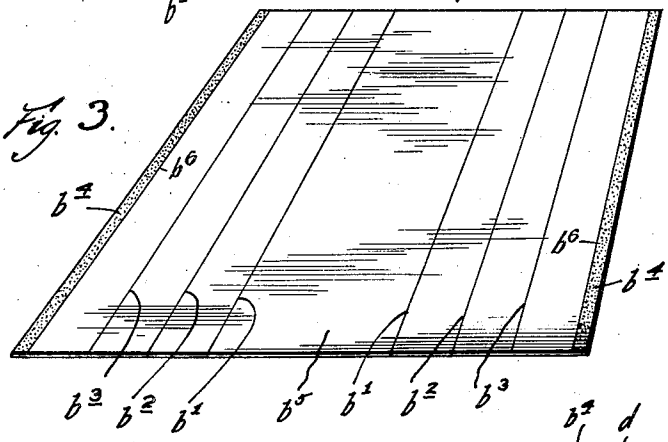


Fig. 4.

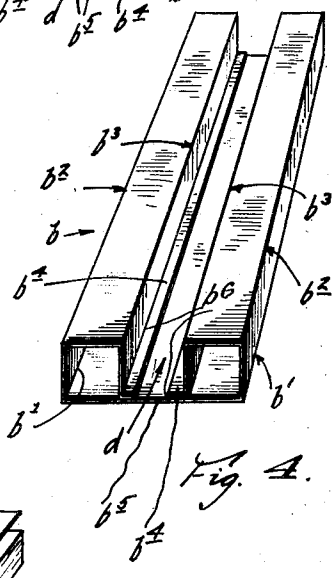
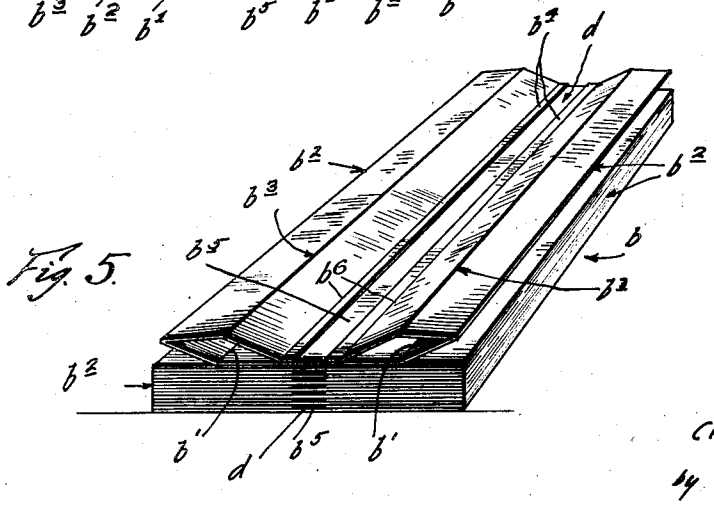


Fig. 5.



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UNITED STATES PATENT OFFICE.

CHARLES H. GOODYEAR, OF PORTLAND, OREGON.

FOLDABLE CELLULAR CARTON.

Application filed January 9, 1926. Serial No. 80,269.

The object of my invention is to provide an inexpensive foldable package, which in its collapsed state may be reduced to a small unit convenient for shipping the packages in bundles; and when set up will provide a plurality of rectangular cellular pockets having firmly held spaced walls, whereby the pockets are rendered especialy suitable for holding fragile articles—for example ice-cream cones, Christmas ornaments, glassware—for shipment to a distant point.

I attain my object in a combination comprising an outer container and a plurality of filler sections, each composed of a single sheet of relatively stiff cardboard, the lateral ends of which are scored and folded, and have their extremities secured in place to form cellular, spaced, collapsible pockets adapted to assume a rectangular cross-section when set up, and to be arranged flatwise with the unscored portion of the sheet when collapsed.

Preferably the space between the box is arranged to correspond substantially with the space between the side walls of the box, so as also to constitute three walls of a pocket. The filler sides are arranged with their pockets in alinement, so that, that portion of the filler section intermediate its pockets constitutes the closure for the space between the pockets of the adjacent filler section; and said outer container is adapted to receive said filler sections and hold them in their set-up state.

The details of construction and use of my invention are hereinafter described with reference to the accompanied drawings, in which:

Fig. 1 is a perspective view of my improved foldable cellular carton, showing the outer container opened at one end, and containing a plurality of filler sections and illustrates an article packed in one of the pockets;

Fig. 2 is a cross section through said container and through the filler sections, showing the manner in which the articles are packed in said pockets;

Fig. 3 is a perspective view of the sheet of material from which said filler sections are formed, said sheet being shown scored and having adhesive applied to the edge flaps;

Fig. 4 is a perspective view of a filler section when folded to form pockets in which an article may be packed; and

Fig. 5 shows a perspective view of a stack filler section collapsed to form a compact bundle for shipping.

My foldable cellular carton comprises a container a in which a plurality of filler sections b are arranged in tiers, being stacked one upon the other. Said container a is preferably made of a relatively stiff cardboard or other paper product which is not easily crushed or broken. Said filler sections are preferably made of thinner material, but also preferably of some relatively stiff paper product.

Said filler section is made of a single sheet of material as shown in Fig. 3 which is longitudinally scored as b', b^2, and b^3 and b^6. To the longitudinal edges b^4, adhesive is applied, and when said sheet is folded inwardly on the scoring marks b^2, said edges b^4 are arranged adjacent each other and are pressed tightly against said sheet so as to cause them to adhere thereto. In this form, said filler sections are flat, as shown in the stack in Fig. 5, and may be conveniently shipped by the manufacturer to the place where they are to be used as cartons or packages.

When said filler sections are to be used to pack articles, such as the ice cream cones c, they are folded inwardly on the scoring marks b', b^2, b^3, and b^6, as shown in Fig. 5, until they assume cellular pockets as shown in Fig. 4, separated by a space d which is similar in cross section to the spaces thus formed. Said filler sections d can then be packed longitudinally with articles such as the ice cream cones c and then can be inserted end wise into the container a. Succeeding filler sections can then be packed and inserted into said container on top of the first filler section and thus said articles are arranged in tiers one upon the other.

The section b^5 of the sheet b, encloses one side of the space d and the pockets formed on each side enclose the two opposite sides and the other side thereof is open. When said holding devices are packed in the box-like container, however, the section b^5 of the holding device above will close the open side of the space below.

Said holding devices are proportioned to fit tightly into said container a and thus the walls thereof serve to maintain the pockets so formed in said filler sections, upright. Said filler sections are made of material sufficiently stiffened to prevent said articles from being crushed when being shipped in said

package and thus I provide a safe and economical foldable cellular carton for shipping fragile articles.

I claim:

1. In combination with an enclosing outer container, a plurality of filler sections each composed of a single sheet of relatively stiff cardboard, the lateral ends of which are scored, and folded and have their extremities secured in place to form cellular, spaced collapsible pockets adapted to assume a rectangular cross-section when set up, and to be arranged flatwise with the unscored portion of the sheet when collapsed, and the filler sections being arranged with their pockets in alinement whereby that portion of one filler section intermediate its pockets constitutes the closure for the space between the pockets of the adjacent filler section; said outer container holding said filler sections in their set-up state.

2. In combination with an enclosing outer container, a plurality of filler sections each composed of a single sheet, of relatively stiff cardboard, the lateral ends of which are scored, and folded, the extremities of said lateral ends being turned inward and cemented to the scored portion of the sheet, thereby to form cellular, spaced collapsible pockets adapted to assume a rectangular cross-section when set up, and to be arranged flatwise with the unscored portion of the sheet when collapsed, and the filler sections being arranged with their pockets in alinement whereby that portion of one filler section intermediate its pockets constitutes the closure for the space between the pockets of the adjacent filler section; said outer container holding said filler sections in their set-up state.

3. In combination with an enclosing outer container, a plurality of filler sections each composed of a single sheet of relatively stiff cardboard, the lateral ends of which are scored, and folded, and having their extremities secured in place to form cellular, spaced collapsible pockets adapted to assume a rectangular cross-section when set up, and to be arranged flatwise with the unscored portion of the sheet when collapsed, the space between the pockets when set up corresponding substantially with the space between the side-walls of the pocket, and the filler sections being arranged with their pockets in alinement whereby that portion of one filler section intermediate its pockets constitutes the closure for the space between the pockets of the adjacent filler section; said outer container holding said filler sections in their set-up state.

CHARLES H. GOODYEAR.