May 25, 1943. K. T. BUTTERY 2,319,974

CONTAINER

Filed Dec. 26, 1942 2 Sheets-Sheet 1

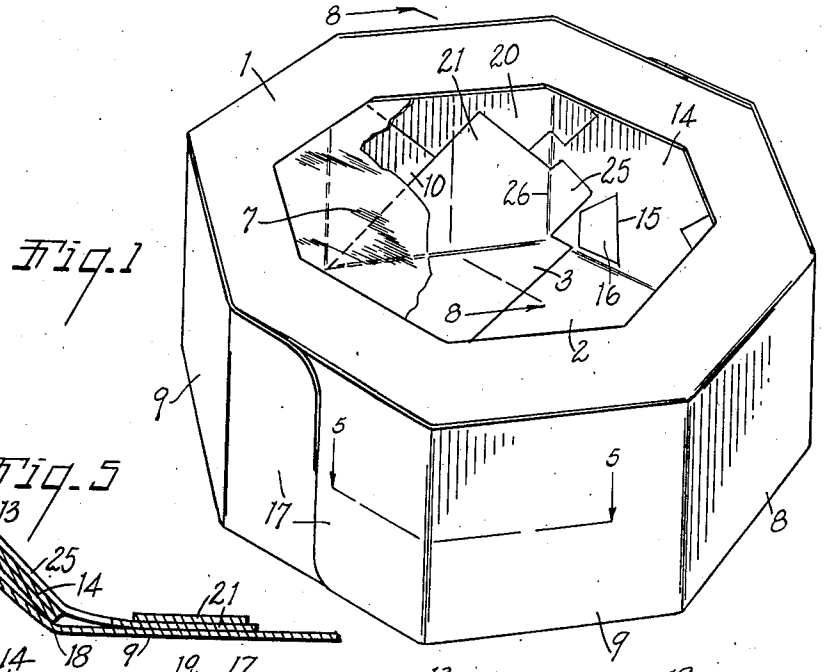


Fig. 1

Fig. 5

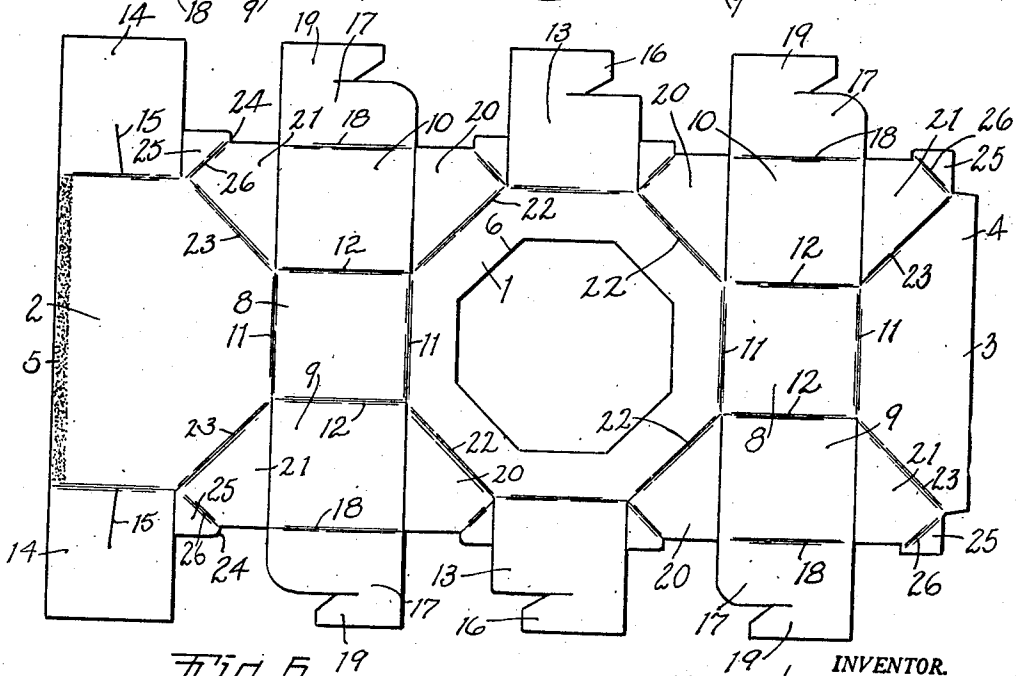


Fig. 6

INVENTOR.
Kenneth T. Buttery
BY
Earl G. Shaffell
attorney

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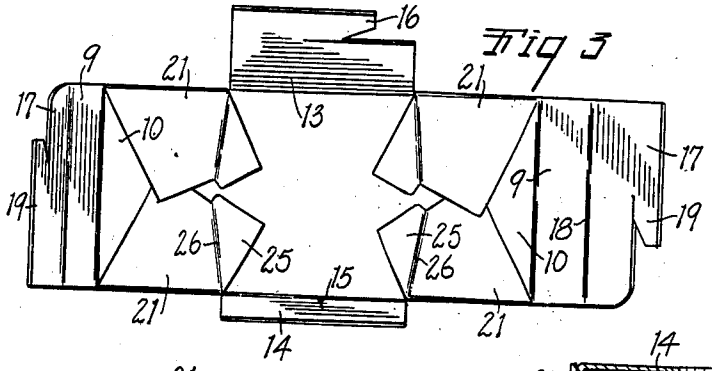


Fig. 3

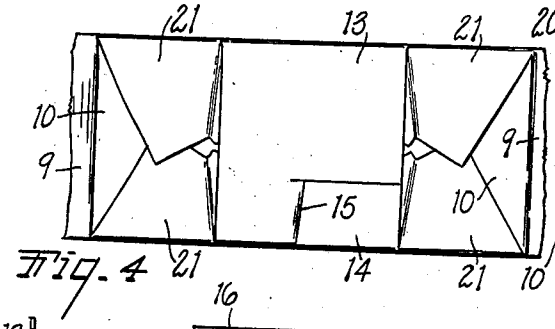


Fig. 4

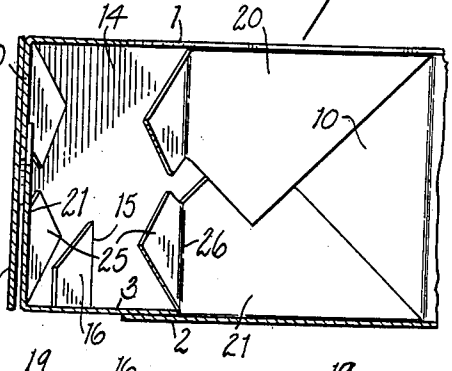


Fig. 6

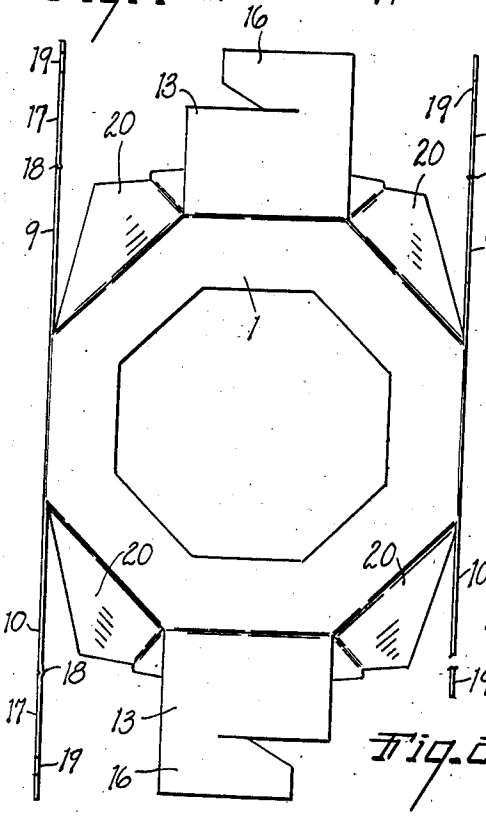


Fig. 2

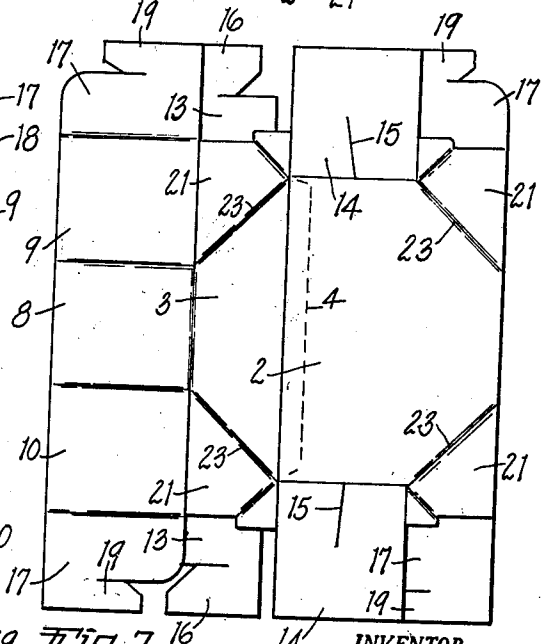


Fig. 7

INVENTOR.
Kenneth T. Buttery
BY
Earl F. Chappell
Attorney

Patented May 25, 1943 2,319,974

UNITED STATES PATENT OFFICE

2,319,974

CONTAINER

Kenneth T. Buttery, Kalamazoo, Mich., assignor to Sutherland Paper Company, Kalamazoo, Mich.

Application December 26, 1942, Serial No. 470,142

4 Claims. (Cl. 229—41)

This invention relates to improvements in containers.

The main objects of this invention are:

First, to provide a box or container which is well adapted as a carton for food products such as cakes or pies or for products such as ice cream which is frequent-packaged in circular cans.

Second, to provide an octagonal package which may be formed of a single blank, is easily and quickly set up or erected for the reception of the contents, and easily closed, and one which when erected is quite rigid even when formed of relatively light stock.

Third, to provide a container having these advantages which is economical in amount of material.

Objects pertaining to details and economies of the invention will definitely appear from the description to follow. The invention is defined in the claims.

A box or container embodying the features of the invention is clearly illustrated in the accompanying drawings in which:

Fig. 1 is a perspective view of a container embodying the features of the invention with the window partially broken away.

Fig. 2 is a plan view of the container partially erected.

Fig. 3 is a side elevation showing the parts in partially erected position and their relation in such position.

Fig. 4 is a fragmentary view of the parts shown in Fig. 3 illustrating further steps in the erection thereof.

Fig. 5 is an enlarged fragmentary section on line 5—5 of Fig. 1.

Fig. 6 is a plan view of the blank in extended form.

Fig. 7 is a view of the collapsed container.

Fig. 8 is an enlarged fragmentary section on line 8—8 of Fig. 1.

The present invention relates to the type of box shown in my application for Letters Patent filed January 9, 1942, Serial No. 426,169 and is in some respects an adaptation of certain features of the invention of that application and an improvement thereon.

The embodiment of the invention illustrated comprises a top 1 of octagonal shape and a bottom comprising complementary bottom members 2 and 3, the member 3 having a sealing flap 4 at one edge secured to the bottom 1 along the glue line 5 indicated in Fig. 6. The top 1 is provided with a window opening 6 having a transparent panel 7. It will be understood that the terms "top" and "bottom" are used as a matter of convenience and if the window is not present the top and bottom would be alike except that the part here designated as the bottom is made up of two members 2 and 3.

Between the members 1 and 2 and the members 2 and 3 are intermediate side wall members comprising three side walls 8, 9 and 10. The central side walls 8 are hingedly connected at 11 to the top and bottom members. The walls 9 and 10 of these side wall members are hingedly connected at 12 to the wall 8. The top 1 has side wall extensions 13 on its edges remote from the edges to which the side walls 8 are connected, while the bottom member 2 has side wall members 14 extending therefrom. These side wall members 13 and 14 are adapted to be brought into overlapping relation when the container is closed, the side wall members 14 having slits 15 therein adapted to receive tongues 16 on the side wall members 13. These side wall members 13 and 14 when in closed position constitute inner closure members coengaging to hold the box in erected closed position.

The side wall members 10 have interlocking side wall flaps 17 connected thereto by the score or hinge lines 18, these members 17 being adapted to be brought into overlapping relation over the members 13, 14 and interlocked, the members 17 being provided with interlocking tongues 19. It will be noted that the side wall members 10 are only connected at their inner ends to the side walls 8. To close the joints between these walls 10 and the top and bottom I provide joint flaps 20 and 21. The joint flaps 20 are hingedly connected at 22 to the edges of the top intermediate the edges to which the side walls 8 and the wall members 13 are connected. The joint members 21 are hingedly connected at 23 to the sections 2 and 3 constituting the bottom. When the box is erected the joint flaps are swung into overlapping relation as clearly shown in the drawings.

These joint flaps have opposed notches 24 in their edges and tab-like extensions 25 hinged to the joint flaps at 26. These tab extensions are of such length as to overlap the adjacent wall members 13 and 14 when the parts are in erected position. They are held in angular relation to the body portion of the joint flaps so that the notches which provide shoulders are in opposed relation and in position to sustain a crushing stress if the box is submitted to partially collapsing stresses. After the side wall members 13 and 14 are engaged the coacting pairs of locking side wall flaps 17 are engaged and this provides a very secure locking engagement for the parts of the container and a container which can be readily set up for

receiving the contents and quickly closed after the contents are introduced. A further advantage is that the box is very tight, that is, there are no open joints of any substantial size.

I have illustrated and described my invention in an embodiment which I have found very practical. I have not attempted to illustrate or describe other embodiments and adaptations which I contemplate as I believe the disclosure made will enable those skilled in the art to adapt the invention as may be desired.

Having thus described my invention what I claim as new and desire to secure by Letters Patent is:

1. A box or container formed of a blank comprising an octagonal top member positioned intermediately of the blank, complementary bottom members positioned at the ends of the blank and coacting to provide an octagonal bottom, and side wall members disposed between said top and bottom members each comprising three side walls hingedly connected to each other, the central side walls of said side wall members being hingedly connected to corresponding edges of said top and bottom members, said top member and one of said bottom members having overlapping side wall members on their corresponding edges remote from their edges to which said side wall members are hingedly connected, the inner of said overlapping side wall members being slotted to receive coacting locking tongues on the outer of said side wall members, said intermediate side wall members having coacting interlocking side wall flaps at the ends thereof overlapping the said coacting overlapping side wall members, the top and bottom members having joint flaps on their edges intermediate their edges to which said central side walls of said intermediate side wall members are hingedly connected and their edges to which said overlapping side wall members are connected, said joint flaps being disposed in opposed overlapping relation within the end side walls of said intermediate side wall members when the box is erected, said joint flaps having opposed notches and hinged tab portions extending beyond said notches and in lapping relation to the said overlapping side wall members.

2. A box or container formed of a blank comprising an octagonal top member positioned intermediately of the blank, complementary bottom members positioned at the ends of the blank and coacting to provide an octagonal bottom, and side wall members disposed between said top and bottom members each comprising three side walls hingedly connected to each other, the central side walls of said side wall members being hingedly connected to corresponding edges of said top and bottom members, said top member and one of said bottom members having overlapping side wall members on their corresponding edges remote from their edges to which said side wall members are hingedly connected, the inner of said overlapping side wall members being slotted to receive coacting locking tongues on the outer of said side wall members, said intermediate side wall members having coacting interlocking side wall flaps at the ends thereof overlapping the said coacting overlapping side wall members, the top and bottom members having joint flaps on their edges intermediate their edges to which said central side walls of said intermediate side wall members are hingedly connected and their edges to which said overlapping side wall members are connected, said joint flaps being disposed in opposed overlapping relation within the end side walls of said intermediate side wall members when the box is erected.

3. A box or container formed of a blank comprising an octagonal top member positioned intermediately of the blank, complementary bottom members positioned at the ends of the blank and coacting to provide an octagonal bottom, and side wall members disposed between said top and bottom members each comprising three side walls hingedly connected to each other, the central side walls of said side wall members being hingedly connected to corresponding edges of said top and bottom members, said top member and one of said bottom members having overlapping side wall members on their corresponding edges remote from their edges to which said side wall members are hingedly connected, the inner of said overlapping side wall members being slotted to receive coacting locking tongues on the outer of said side wall members, said intermediate side wall members having coacting interlocking side wall flaps at the ends thereof overlapping the said coacting overlapping side wall members, the top and bottom members having joint flaps on their edges intermediate their edges to which said central side walls of said intermediate side wall members are hingedly connected and their edges to which said overlapping side wall members are connected.

4. A box or container formed of a blank comprising an octagonal top member positioned intermediately of the blank, complementary bottom members positioned at the ends of the blank and coacting to provide an octagonal bottom, and side wall members disposed between said top and bottom members each comprising three side walls hingedly connected to each other, the central side walls of said side wall members being hingedly connected to corresponding edges of said top and bottom members, said top member and one of said bottom members having overlapping side wall members on their corresponding edges, the inner of said overlapping side wall members being slotted to receive coacting locking tongues on the outer of said side wall members, said intermediate side wall members having coacting interlocking side wall flaps at the ends thereof overlapping the said coacting overlapping side wall members, the top and bottom members having joint flaps on their edges adjacent their edges to which said central side walls of said intermediate side wall members are connected.

KENNETH T. BUTTERY.