

May 14, 1935.

C. W. VOGT

2,001,478

SHIPPING PACKAGE

Filed Feb. 1, 1934 2 Sheets-Sheet 1

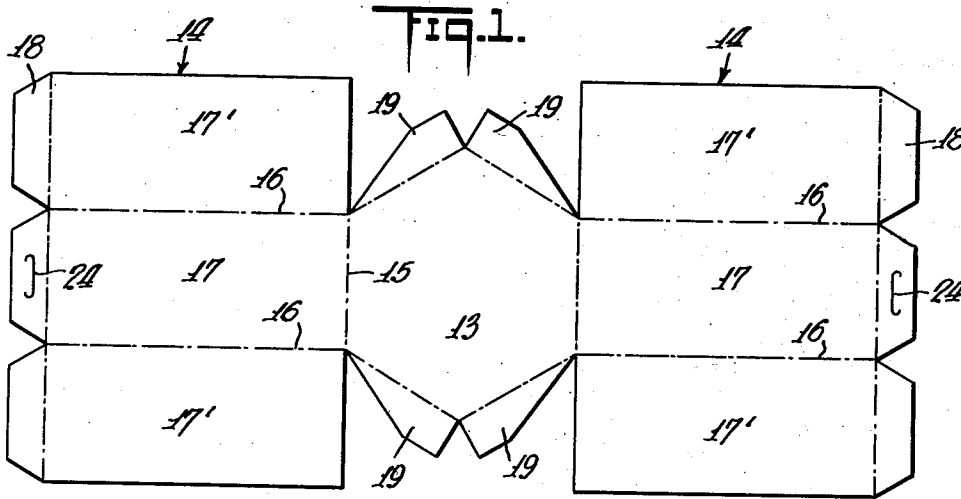


FIG. 2.

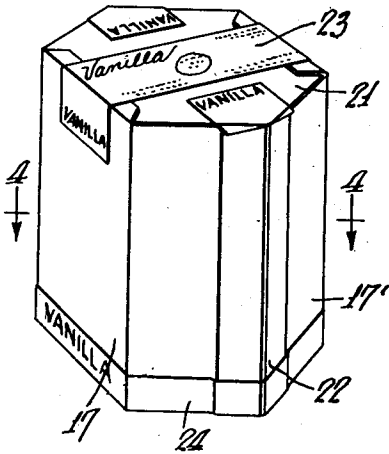


FIG. 4.

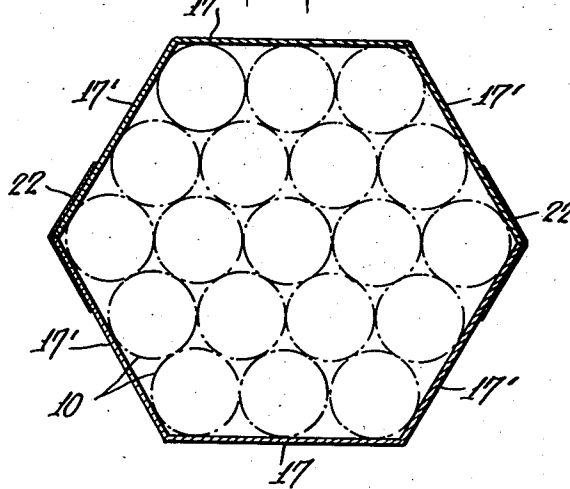


FIG. 3.

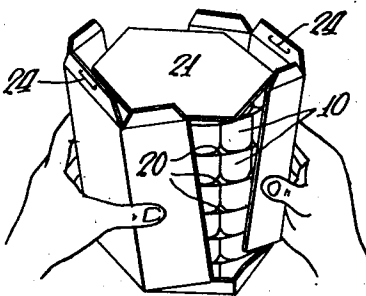
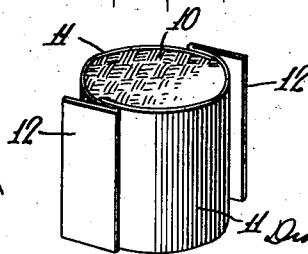


FIG. 5.



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FIG. 6.

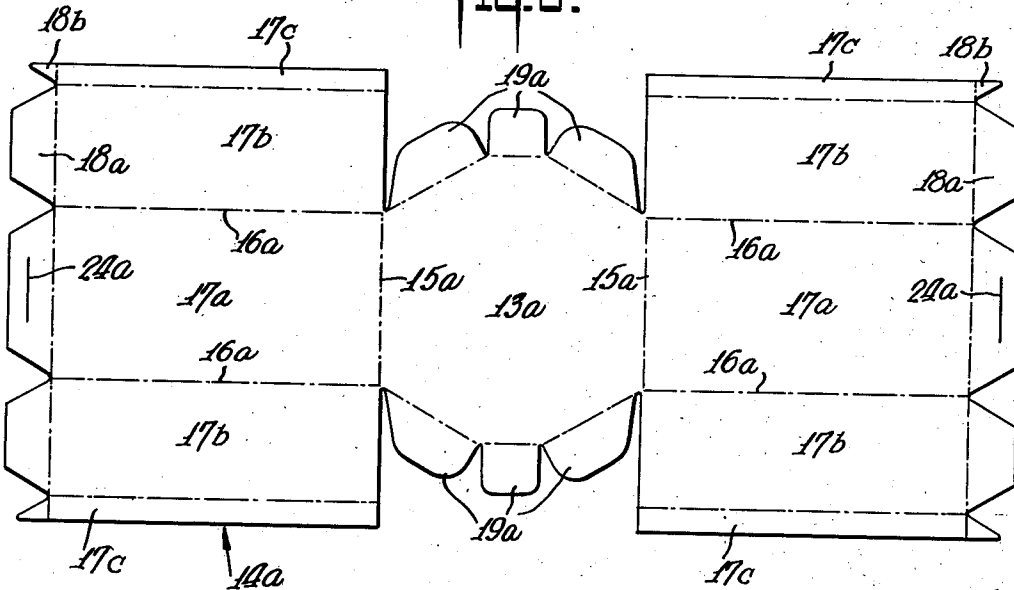


FIG. 7.

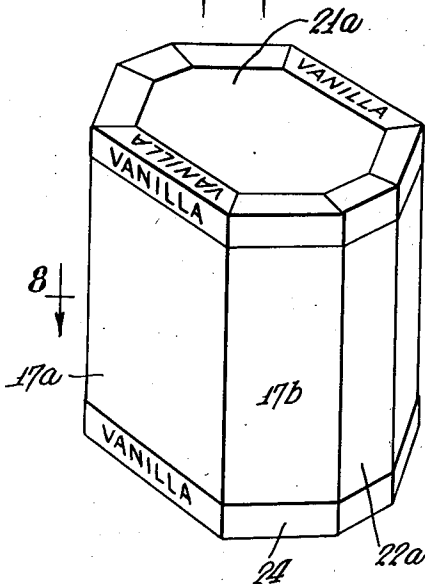
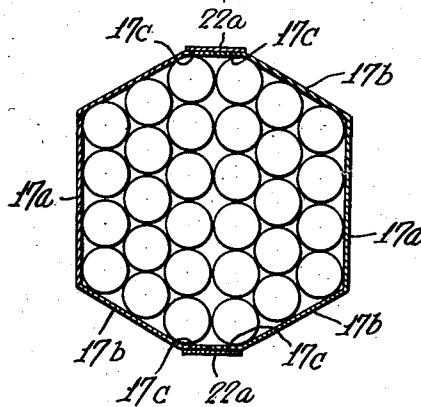


FIG. 8.



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2,001,478

SHIPPING PACKAGE

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mesne assignments, to Vogt Processes Incorporated,
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Application February 1, 1934, Serial No. 709,245

15 Claims. (Cl. 206—46)

This invention relates to the packaging of a plurality of small portions or units of ice cream or other commodity and preferably of a size and character adapted to serve as individual service portions.

The invention involves an improved package formed by folding or bending the preformed container or casing blank of stiff sheet material around the stack of said units to hold them snugly in position. The individual portions or packages for which the container is particularly adapted and designed may be such as those disclosed and claimed in my Patent 1,906,183 and in various pending applications.

The invention also involves an improved package of individual service portions of ice cream or other frozen comestible, liquid at ordinary room temperature, and in which each individual portion of the frozen comestible is completely enclosed and protected so as to prevent evaporation of moisture, contamination, and deformation of the units during shipment. The individual service portions or blocks are easily removed from the casing for dispensing, and may be almost instantly unwrapped for service.

As one important feature the portions of the frozen comestible are substantially cylindrical blocks disposed in a series of superposed layers separated by interleaves, and each block has a wrapping around only the periphery thereof. The blocks are set on end, and the wrapping terminates substantially flush with the ends of the blocks so that the wrapping and the interleaves taken together completely enclose the several blocks and protect them from evaporation or dehydration, and against any material leakage if they should warm up and slightly soften during shipment or storage. The wrapping, rather than merely the blocks of ice cream, aids in supporting the upper interleaves and the superposed blocks, and prevents crushing or deformation of the lower blocks from the superposed load. The blocks or portions of ice cream being cylindrical afford spaces into which the fingers may be inserted to lift the blocks from the casing, and without contacting with the ice cream itself during such handling, even though the blocks when removed have their ends exposed. When removed from the casing the wrapping is only around the periphery, so that by grasping a free projecting end of the wrapping material, the latter may be peeled from the block as the latter is being dropped into or deposited in or on a plate, glass, ice cream cone, or the like.

As a result the consumer may be quickly and

easily served with a hygienic, uniform size portion without the use of a dipper or other utensil, the dispenser avoids the repeated washing or rinsing of a dipper or other dispensing tool, such as is commonly employed with bulk ice cream, and avoids the partial melting or softening of the ice cream and the reduction of overrun by the action of the warm or freshly washed dipper. The dispenser also avoids dipping losses and serves a portion of such preformed volume and size that it easily fits into a soda glass, sundae dish, or edible cone.

Another object is to provide a casing or container which is inexpensive to manufacture, easy to assemble and form about the stacked contents, rugged and durable against ordinary handling in storage and transportation, and so formed as to effectively protect the contents thereof against tampering during storage or transport.

As a feature of the invention, the casing or container is formed around the assembled portions or units and from a blank of stiff sheet material consisting of a base portion adapted to support a stack of a plurality of layers of blocks or units and side forming portions integrally connected to the base, and adapted to be folded upwardly around the stacked material. These side forming portions are on opposite edges of the base and each is divided into sections by score lines so that when the side forming portions are folded upwardly and the edge sections are folded about the stacked material, the edges of adjacent side forming portions will substantially abut. The center and edge sections being at an angle to each other, thus form stiff walls.

These opposed or abutting edges are preferably sealed by strips of adhesive material and the side forming portions have flaps at their upper ends for supporting and retaining a separate suitably shaped top or cover. The sealing strips for the side edges may also seal these flaps down, although a separate strip of adhesive material may also be applied and serve as a label to indicate the character or kind of the contents.

In accordance with a preferred embodiment of the invention the individual blocks are of cylindrical contour, wrapped only on the periphery. These blocks are arranged in layers with interleaved paper sheets between them, each layer consisting of an identical number of individual portions, identically arranged and with the individual portions abutting each other and the layers cooperatively forming a polygonal stack. With the container snugly folded and sealed

about this stack, the container itself is internally braced by the individual packages which it contains and the individual packages are securely held by the container against relative displacement.

The invention may be more fully understood from the following description in connection with the accompanying drawings wherein:

Fig. 1 is a plan view of a container forming blank,

Fig. 2 is a perspective view of the package,

Fig. 3 is a perspective view illustrating the manner in which the sides of the casing or container may be folded upwardly around the stack of individual packages to be encased, this view being on a somewhat reduced scale,

Fig. 4 is an enlarged horizontal sectional view on the line 4-4 of Fig. 2,

Fig. 5 is an enlarged perspective view of one of the individual service portions of ice cream which are enclosed in the casing,

Fig. 6 is a view similar to Fig. 1, but illustrating a modified form of blank,

Fig. 7 is a perspective view of the complete package formed from the blank of Fig. 6, and

Fig. 8 is a transverse sectional view on the line 8-8 of Fig. 7.

Both types of containers are particularly adapted for use in the shipment and storage of individual portions of ice cream typically a portion such as that shown in Fig. 5. Each of these portions includes a cylindrical block 10 of ice cream with a wrapper around the periphery formed of two sections 11 of paper or other sheet material. Each section extends around slightly more than one-half of the periphery of the block so that it overlaps the end of the other section and terminates at one edge in a flap or extension 12. These two extensions are at approximately diametrically opposite sides so that by grasping them and pulling them in opposite directions the wrapper is readily peeled off without bringing the hands in contact with the ice cream and without the use of special implements. This is merely one form of peripherally wrapped block which may be conveniently packaged in accordance with the present invention.

The blank from which the container of Fig. 4 is formed is preferably of cardboard or other sufficiently stiff inexpensive sheet material. This blank (Fig. 1) includes a central or base portion 13, here illustrated as of hexagonal conformation and at two opposite edges of which are integral rectangular side wall forming sections 14. A fold line 15 separates the sections 14 from the center or base section 13 and each section 14 is divided by longitudinal fold lines 16 into three individual panels 17, 17' and 17' of equal width and length, the outer panels 17' being in the nature of foldable wings or flanges. Thus each section forms a plurality of side walls integral along vertical corners of the package and one side wall of each group is integral with the base.

The outer end of each panel is provided with an inwardly bendable tab 18. Those edges of the hexagonal center section 13 which are not directly connected to the blank sections 14 are also provided with upwardly foldable tabs 19. In folding this container, the flaps 19 may be first turned upwardly to vertical position, and the rectangular sections 14 folded into vertical position on the fold lines 15. The sections are folded on the fold lines 16 so that the panels 17 form a hexagonally shaped section. If desired the lower ends of the panels 17' may be

secured to the tabs or flanges 19 by staples or otherwise, but ordinarily this is not at all necessary. The tabs or flanges 19 may be on the outside instead of the inside, but if no fastening is employed it is better to have them on the inside.

Before this folding is effected however, a stack of the individual units to be packaged and the base section 13 are brought into proper juxtaposition. The stack includes a plurality of layers of units or service portions such as shown in Fig. 4 and between successive layers as well as beneath the bottom layer and on the top layer are interleaves or sheets of paper 20 which prevent contact between the ice cream exposed at the ends of the individual units with superjacent or subjacent units, or with the base 13, or with the box top 21 which is subsequently applied.

The individual units may be placed in position one at a time or one layer at a time, or the entire stack is first made up and then placed on the base. Preferably the assembly is effected by the mechanism and in the manner illustrated in copending application Serial No. 658,264, filed Feb. 23, 1933.

After the stack and the base have been properly juxtaposed, the blank is folded into position around the contents in the manner illustrated in Fig. 3. This may be done by hand or by suitable apparatus. When the two sections 14 are folded into vertical position and the outer panel sections 17' folded on lines 16, the stack will be completely laterally encased with the outer edges of the outer panels 17' of each section 14 abutting the corresponding edges of the corresponding panels of the other section 14. These two lines of abutment, which occur at diametrically opposite sides of the hexagonal container thus formed, are closed and concealed in the finished package by adhesive sealing strips 22 of paper or other suitable material. It is not essential that the edges actually abut as they may be spaced to a variable extent depending upon how closely the walls are pressed against the sides of the stack and also depending on variations in the size of the stack. The sealing strips bridge over any gap between the edges and keep the side walls from spreading apart.

The hexagonal cover 21, which may be of the same kind of material as the blank, is placed in position on the stack. Preferably the tab of each center section 17 is folded over the top 21 and the tabs of the other four sections 17' are folded under the top. Thus the cover is supported by the side walls 17'. The ends of the sealing strips 22 which are long enough to lap over onto the top 21 hold the cover down on the underfolded tabs 18. The overfolded tabs are pressed down against the box top and held by an adhesive label or tape 23 which spans the top of the package and extends along center panels for a short distance and completes the package.

The package which I have described is not only a shipping container and storage container, but one or more of such packages stacked one upon the other are adapted to replace the cans of bulk ice cream commonly employed at soda fountains. The cylindrical units of necessity afford finger spaces between them which will permit any individual block or unit to be conveniently grasped and lifted out of even a full layer, so that dispensing of the units may be readily effected.

For convenience in lifting or carrying the packages certain of the flaps may be provided with cut-outs or slits 24 to afford a convenient finger grip. The flaps 19 when bent up inside of the side walls prevent foreign matter from entering the package even though the package is slid upon a soiled support surface. The adhesive strips and the label blank may conveniently bear legends identifying the flavor of the ice cream which is contained within the package and may also bear the trade-mark and name of the manufacturer. The sealing may be made more effective by a strip of sealing paper or tape adhesively secured around the peripheral edge of the bottom and overlapping both the bottom and the side walls. This prevents any escape of cold air at the bottom from the frozen units or any direct air circulation through the package which might warm or evaporate moisture from the contents.

In Figs. 6, 7 and 8 I have illustrated a package which is of different shape, but which embodies the same principles of construction and may be closed and sealed in substantially the same manner as the container of Figs. 1 to 4. This package is of octagonal cross section with certain of the sides narrower than others in order to accommodate the particular arrangement of individual service portions illustrated in Fig. 8.

The blank of Fig. 6, like the blank of Fig. 1, includes a base portion 13a which in this case is octagonal, the longest pair of opposite edges of which are integrally connected to the intermediate portions of generally rectangular blank sections 14a, fold or score lines 15a being provided along the lines of union between the base 13a and the sections 14a. Sections 14a are scored as at 16a to divide them into a center panel 17a and wing panels 17b, the central panel 17a in this instance being wider than the two contiguous panels 17b.

The outermost panels 17b have relatively narrow half panel sections 17c integral therewith and adapted to coact to define narrow panels. When the side forming portions of this carton are folded upwardly, the lines of separation do not occur between adjacent panels but occur at the center of the narrow panels cooperatively defined by two of the sections 17c.

Those edges of the octagonal base 13a which are not directly connected to the side forming blank sections 14a are each provided with a laterally extending tab 18a, these tabs being folded upwardly inside of the wall forming sections 14a in the completed package. Tabs 18a corresponding to the tabs 18 are provided at the upper edges of the panels 17b and tabs 18b are provided at the upper edges of the half panel sections 17c.

The manner of folding this carton about a stack of individual units is generally similar to that previously explained, tabs 18a being tucked in and the panel forming sections 17a, 17b and 17c being folded into upright position and about the octagonal pile of units to be packaged. The free lateral edges of the half panel sections 17b of the two wall forming blank portions 14a lie in substantial abutment and are connected by a relatively wide sealing strip 22a which conceals the lines of abutment. This strip is preferably wider than the narrow panels defined by sections 17c and not only seals the line of abutment of two of these panel forming sections, but may extend laterally beyond the panels which it forms and overlaps the adjacent panels 17b.

An octagonal top 21a corresponding to top 21 is placed in position with the tabs 18a of the widest panel 17a folding over this top while all of the remaining tabs 18a and 18b fold under it. The unsecured tabs 18a which lie over the top are then held down by a seal or label 23a which instead of extending diametrically across the top may be similar to the sealing strip 24 and follow the periphery of the top and in conjunction with the other sealing strips, hermetically seal the package. The sheet material of the main blank may be paraffin coated or include a layer of asphalt or otherwise rendered moisture and air tight.

If desired the central panels of each side forming blank section 14a may be provided with finger receiving slits or the like indicated at 24a for the purpose of conveniently lifting an open container about or removing a partially empty container from an ice cream cabinet.

The package shown in Fig. 7 may be of the same general dimension as that shown in Fig. 2, but is adapted to receive thirty individual portions in each layer instead of nineteen and each portion is correspondingly smaller in diameter.

Cognate subject matter is disclosed in my earlier filed applications Serial Nos. 585,745 and 629,776 and the invention common to this application and either or both of said earlier filed applications is broadly claimed herein.

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

1. A shipping package of ice cream or other frozen comestible consisting of a plurality of superposed layers of blocks of frozen comestibles, each having a peripheral wrapping, a plurality of interleaves between the successive layers and serving as end walls for the wrappings of said blocks, and a casing enclosing all of said blocks and holding them in predetermined relative positions in said layers, and including a base member upon which said stack may be supported, a pair of oppositely projecting extensions integral with the base member and adapted to be folded upwardly into engagement with opposite sides of the stack to form side walls, each extension having side flanges bendable inwardly toward each other to form the remaining side walls, and a cover member upon the top of the stack secured to the upper ends of all of said side walls to prevent outward movement of the side walls and hold them in firm engagement with the stack.

2. A casing for a stack of comestible packages, including a base member upon which said stack may be supported, a pair of oppositely projecting extensions integral with the base member and folded upwardly into engagement with opposite sides of the stack to form side walls, each extension having side flanges bent inwardly toward each other to form the remaining side walls, and a cover member upon the top of the stack disposed between the upper edges of the side walls and secured thereto so that outward radial movement of the side walls is prevented and they are held in firm engagement with the stack.

3. A blank for a casing to be used in forming a package, said blank having a polygonal base portion, and extensions upon opposite sides thereof, each extension having a width substantially equal to one-half the periphery of the base portion and scored to subdivide the same into a plurality of panels, one panel of each extension being connected to a corresponding side of the base by a scored line, whereby the extensions may be folded upwardly, and each wrapped par-

tially around the contents in forming the package.

4. A package including a stack of a plurality of superposed layers of units of a comestible, and a casing including a polygonal base and side walls encircling said stack, said side walls being formed of two sections each including a plurality of panels of widths corresponding to the side edges of the base, one panel only of each section being integral with said base, and the remaining panels of the sections being integral with the first mentioned panel along vertical corner edges of the package.

5. A shipping package including a plurality of superposed layers of units of a comestible, and a casing formed of comparatively stiff sheet material, said casing including a polygonal base, a plurality of side walls corresponding in number to the sides of the base, said side walls comprising two groups having integrally connected side walls and having one side wall directly connected integrally with the base, a cover, and sealing strips for holding said side walls and cover in close juxtaposition to said stack.

6. A shipping package including a plurality of superposed layers of units of a comestible, and a casing formed of comparatively stiff sheet material, said casing including a polygonal base, a plurality of side walls corresponding in number to the sides of the base, said side walls comprising two groups having integrally connected side walls and having one side wall directly connected integrally with the base, a cover, and sealing strips encircling the periphery of the cover and the periphery of the base and secured to said side walls.

7. A shipping package including a plurality of superposed layers of units of a comestible, and a casing formed of comparatively stiff sheet material, said casing including a polygonal base, a plurality of side walls corresponding in number to the sides of the base, said side walls comprising two groups having integrally connected side walls and having one side wall directly connected integrally with the base, a cover, and sealing strips connecting juxtaposed edges of said groups.

8. A shipping package including a plurality of superposed layers of units of a comestible, and a casing formed of comparatively stiff sheet material, said casing including a polygonal base, a plurality of side walls corresponding in number to the sides of the base, said side walls comprising two groups having integrally connected side walls and having one side wall directly connected integrally with the base, a cover, sealing strips encircling the periphery of the cover and the periphery of the base and secured to said side walls, and sealing strips connecting juxtaposed edges of said groups whereby the package is sealed substantially air tight.

9. A container blank cut from stiff sheet material and having a central approximately hexagonal base portion, oppositely extending projections, each having a substantially rectangular body portion of a width substantially equal to one side of said hexagon, and side flanges extending lengthwise thereof and adapted to be bent in respect thereto to form substantial portions of side walls disposed at an angle of substantially 120° to the side walls formed by said rectangular body portions, said base, rectangular body portions and flanges having intervening weakened lines.

10. As a new article of manufacture a package

including a stack comprising a plurality of layers of portions of wrapped comestibles, and a container formed around said stack and comprising a base member having more than four side edges upon which said stack is supported, a pair of opposite side walls integral therewith and in engagement with opposite sides of the stack, each of said side walls having edge flanges of uniform width throughout their length and extending the full length of said side walls and disposed at an angle to said side wall and integral therewith and each forming portions of the remaining side walls, a cover on top of said stack and disposed between the upper edges of said first mentioned side walls, and means for securing said cover member and said side walls together to prevent outward radial movement of said side walls and to hold them in firm engagement with said stack.

11. As a new article of manufacture a stack comprising a plurality of layers of portions of wrapped comestible, and a container formed of a sheet of comparatively stiff material, said container including a substantially polygonal base supporting said stack, upwardly extending flanges along certain edges of said base, a pair of side walls integral with said base at diametrically opposite edges of the latter and having inwardly extending flanges at their upper ends, additional side walls at opposite edges of each of said first mentioned side walls and disposed in planes at an angle to said first mentioned side walls and integral with the latter along vertical corner angles and having their lower edges juxtaposed to and substantially parallel with said first mentioned flanges, and a cover member above said stack, said cover and said second mentioned flanges being secured together in overlapped relationship.

12. As a new article of manufacture a stack comprising a plurality of layers of portions of wrapped comestible, and a container formed of comparatively stiff sheet material, said container including a substantially polygonal base having more than four edges supporting said stack, a pair of side walls integral with said base at diametrically opposite edges thereof, flanges of uniform width throughout their length integrally connected to the edges of the first mentioned walls constituting additional side walls similar to the first mentioned side walls and disposed in planes at an angle to said first mentioned side walls and integral therewith along vertical corner angles, a cover member above said stack and supported by said walls, and means connecting said cover member and side walls to prevent radial movement of the side walls.

13. A shipping package of ice cream or other frozen comestible liquid at body temperature, including a plurality of superposed layers of substantially cylindrical blocks of the frozen comestible, each having a wrapping covering only the periphery thereof, with the ends substantially flush with the ends of the block, a plurality of interleaves between the successive layers and serving as end walls for the wrappings of said blocks so that each block is substantially entirely enclosed in wrapping material, and a casing enclosing all of said blocks and holding them in predetermined relative positions in said layers.

14. A shipping package for ice cream or other comestible, including a stack made up of a plurality of superposed layers of blocks of comestible, a plurality of interleaves between the successive layers, and a casing snugly enclosing the stack and holding the blocks in predetermined relative positions in said layers, said casing including a

base having more than four sides and composed of comparatively stiff sheet material provided with extensions upon two opposite edges thereof folded into engagement with opposite sides of the stack and secured together at their upper ends, and each of said extensions having flanges along its vertical edges of the same length as the extensions and of uniform width through their length also folded into engagement with the stack to form the other sides of the casing.

15. A shipping package of ice cream or other frozen comestible liquid at body temperature, including a plurality of substantially cylindrical blocks of the frozen ice cream, each having sub-

stantially flat top and bottom end walls, wrapping material extending around the periphery only of each block, the wrapping material for each block having a tab along the side facilitating the ready peeling of the wrapping from the block, and being of a length substantially equal to the length of the block, said blocks being arranged in a plurality of superposed layers, interleaves of non-absorbent sheet material disposed between successive layers and in direct contact with the top and bottom ends of the individual blocks, and a casing enclosing all of said blocks and holding them in predetermined relative positions.

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