

[54] **CONTAINER FOR A PIE OR THE LIKE**
[72] Inventor: **John MacManus**, 143-16-Twenty-Second
Road, Whitestone, N.Y. 11357
[22] Filed: **Feb. 19, 1970**
[21] Appl. No.: **12,695**

2,963,147	12/1960	Stagner.....	206/46 F
3,552,551	1/1971	Goldberg et al.....	206/52 F
2,129,198	9/1938	Crouch et al.....	206/52 F
1,856,634	5/1932	Hartig.....	99/180
628,859	7/1899	Sevigne.....	99/172
3,281,051	10/1966	O'Brien et al.....	206/46 F
2,404,776	7/1946	Ehrlich.....	99/172

[30] **Foreign Application Priority Data**
Mar. 7, 1969 Great Britain.....12,265/69
[52] **U.S. Cl.**.....**99/172, 99/171 PP, 206/46 F,**
206/45.32
[51] **Int. Cl.**.....**B65b 25/16**
[58] **Field of Search**.....99/172, 171 PP, 180 R, 181 R;
206/46 F, 45.32, 52 F

FOREIGN PATENTS OR APPLICATIONS

591,225 1/1960 Canada.....206/45.32

Primary Examiner—Tim R. Miles
Attorney—McCanna, Morsbach, Pillote & Muir

[56] **References Cited**

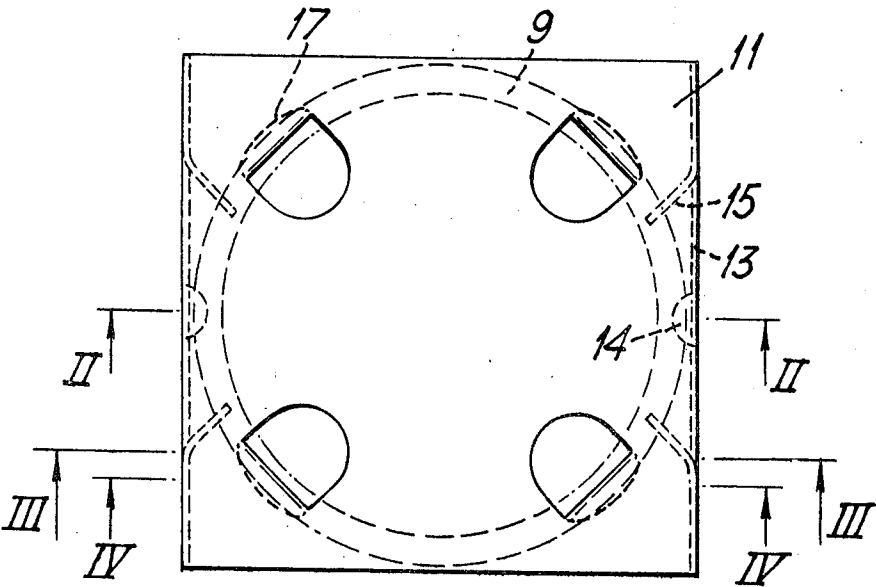
UNITED STATES PATENTS

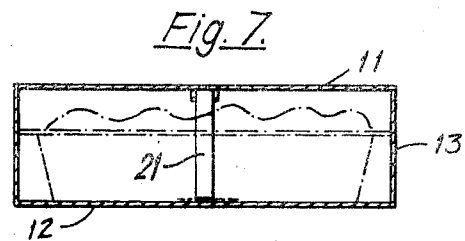
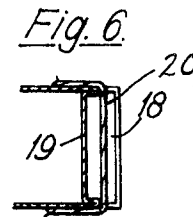
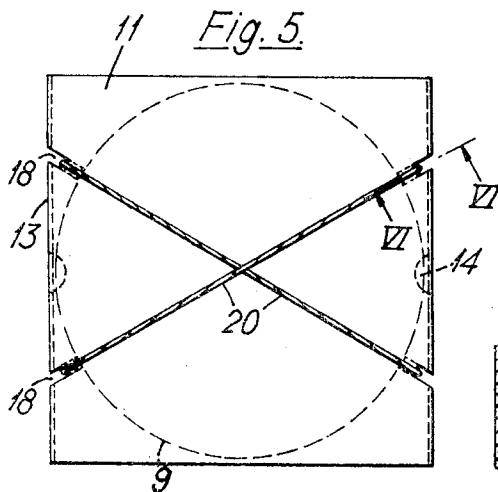
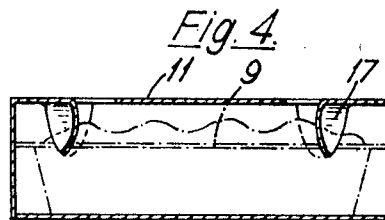
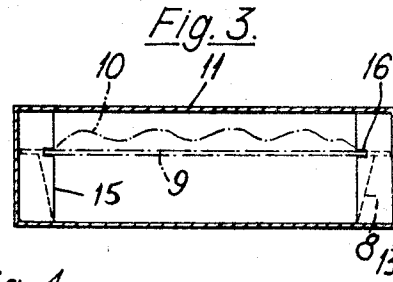
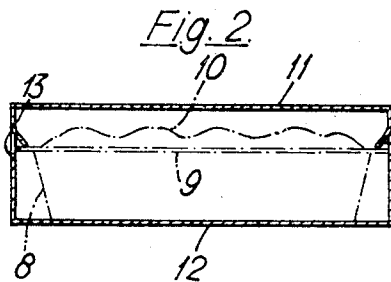
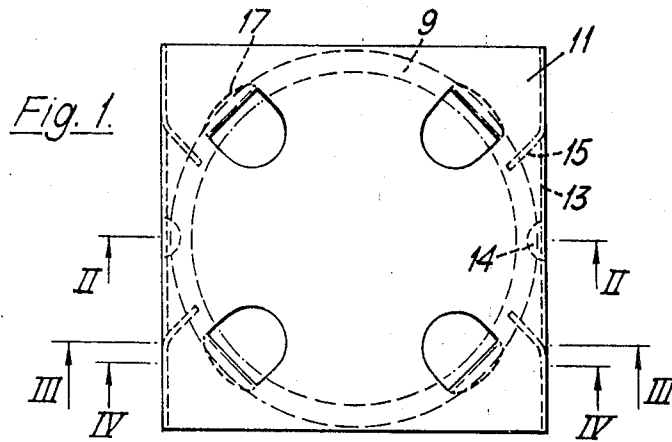
2,133,607	10/1938	Ehrlich.....	206/45.32
3,411,696	11/1968	Ayer et al.....	206/46 F
2,068,540	1/1937	Ehrlich.....	206/45.32
2,944,725	7/1960	Hayes.....	206/46 F

[57] **ABSTRACT**

The container includes an open-ended sleeve for receiving a flanged dish. Tabs are pressed out of the sleeve material to hold the dish against the bottom wall and also against longitudinal movement. A pair of elastic cords are received in diagonally opposite slots formed by pressing out material. An upright plastic peg extends from adjacent the bottom of the pie to the top wall of the sleeve to provide a spacer.

12 Claims, 7 Drawing Figures





Inventor
John MacManus
 By
McCanna, Mosbach, Pilote & Muir
 Attorney

CONTAINER FOR A PIE OR THE LIKE

The invention is concerned with packaging for edible frozen or nonfrozen products such as fruit or meat pies, cakes, and trifles, hereinafter referred to generally as "pies," which are sold in open topped dishes having an outwardly extending flange at their upper edge. Normally such pies are packed at the point of sale in cardboard boxes which are either tied with string or sealed with tabs and slots. The tying of the string or manipulation of the tabs is a time consuming occupation for the sales person and the package is unsatisfactory in that the customer has to be very careful to carry the box upright otherwise the crust or topping on the pie, which frequently extends above the upper edge of the dish, will be crushed against the top of the box.

The object of the invention is to provide an outer container into which a pie can be quickly packed and is then secure against crushing.

In accordance with the invention a container for a pie of the kind referred to comprises a sleeve of substantially rectangular section with a width substantially equal to the diameter of a pie dish to be contained in it and a length at least as great as its width, and tabs which are arranged to be pressed out of the sleeve material for engagement above the pie dish flange to hold the pie down against the bottom of the sleeve.

With this arrangement a pie is simply slid into an open end of the sleeve before or after the tabs are pressed out of the sleeve into overlying engagement with the dish flange. This is a very speedy operation. As long as means are provided for preventing a pie from slipping out of an end of the sleeve, the whole package can then be carried safely without any danger of the pie and dish coming away from the bottom wall of the sleeve. The topping or crust on top of the pie is then safe from being crushed on top of the wall of the sleeve.

The sleeve may have end flaps which cooperate to close the ends of the sleeve and in this case this will be sufficient to prevent the pie from slipping out of an end of the sleeve. Most simply however other means to be described are provided for this purpose and the two ends of the sleeve are open. The sleeves will then be stacked and transported prior to use folded flat with the top and one sidewall coplanar and in engagement with the bottom and other sidewall which are themselves coplanar. The sleeve is quickly squared manually or automatically to erect it, prior to insertion of the pie. The sleeve, with the pie inside, may be overwrapped with transparent or other film.

The tabs which engage the top of the dish flange and hold the pie and its dish down in the sleeve may be pressed out of the top or bottom wall of the sleeve but they are most simply pressed out of the sidewalls. Thus, they may be simple D-shaped tabs pressed into the sleeve about and below a horizontal hinge line across which they are connected to the corresponding sleeve sidewall, substantially midway along the length of the sleeve. Alternatively, or in addition, the tabs may be connected to the sleeve sidewalls across a vertical hinge line and when they are pressed into the sleeve a shoulder, for example the upper edge of a recess, at the free edge of the tab may be arranged to overlies the dish flange. In this case there will be four tabs, two pressed out of each sidewall.

As an additional safeguard to prevent the top wall of the sleeve from being pressed downwards and crushing the crust or topping on the pie, the pie may be provided with one or more vertical spacers, for example thin but rigid plastic posts, which extend, although disassociated, from the top wall down through the pie to the bottom crust and also project above the crust or topping, closely adjacent to the top wall of the sleeve. Any tendency for the top wall to be pressed inwards or the pie to bounce upwards will then be resisted by such posts.

The pie may be prevented from slipping out of the sleeve by tabs which are pressed out of the top wall of the sleeve and engage the edge of the pie flange. In this case there are preferably four such tabs two preventing slipping of the pie in each longitudinal direction of the sleeve.

Alternatively, or in addition, the sleeve may be provided with two pairs of slots, one adjacent each end of the sleeve on each side of the sleeve. Each slot extends down a sidewall and partly into the top wall and bottom wall of the sleeve. With this arrangement two endless cords or bands, preferably slightly elastic, can be quickly fitted into the slots so that they cross over one another over the top and bottom walls of the sleeve and are located in diagonally opposite slots. Not only does this provide very quickly a means for carrying the package, i.e., by slipping the two cords over the sleeve whereupon the hand can be placed under the two cords where they cross over on top of the sleeve, but provided the slots extend a reasonable distance into the top and bottom walls of the sleeve, the vertical portions of the cords set into the sidewalls of the sleeve, will prevent the pie from slipping out of either end of the sleeve. Each slot is preferably produced by providing a pair of substantially parallel cut or score lines extending down the sidewall of the sleeve and continuing partly into the top wall and bottom wall of the sleeve. The portion of the sleeve material between the cut or score lines is then pressed into the sleeve to form a slot. This is useful because the portion of the sleeve material pressed into the sleeve acts additionally to prevent longitudinal slipping of the pie and the edge of the slots in the top and bottom wall against which the carrying bands bear, is of double thickness and this resists tearing.

The invention is exemplified in the accompanying drawings in which:

FIG. 1 is a diagrammatic plan view of a pie in a sleeve which incorporates a number of the features of the invention;

FIG. 2 is a section taken on the line II—II in FIG. 1;

FIG. 3 is a section taken on the line III—III in FIG. 1;

FIG. 4 is a section taken on the line IV—IV in FIG. 1;

FIG. 5 is another diagrammatic plan view illustrating another feature of the invention;

FIG. 6 is a section taken on the line VI—VI in FIG. 5; and,

FIG. 7 is a view similar to FIG. 2 but of another pie in the sleeve.

The pie is shown in a dish 8 having an annular flange 9 above which a topping or crust 10 of the pie projects. The pie is shown in a rectangular open-ended sleeve having top and bottom walls 11 and 12 respectively and sidewalls 13. The sleeve may be made for example from a rectangular blank of silicone coated cardboard, which is bent to form the corner edges of the sleeve and the free edges of which are overlapped and stuck together to complete the sleeve.

Alternatively the sleeve may be made as an extrusion of plastics material, which may be transparent or translucent, the longitudinal corner edges of the sleeve providing lines of weakness about which the sleeve can, like a cardboard sleeve, be folded flat with the top wall and one sidewall coplanar and face to face with the bottom wall and other sidewall.

FIGS. 1 and 2 show D-shaped tabs 14 bent inwards to overlies the flange 9 and hold the pie down against the bottom wall 12.

FIGS. 1 and 3 show the tabs 15 bent inwards about the vertical hinge lines so that the flange 9 is received in a recess 16 in the free edge of each flange 15.

FIGS. 1 and 4 show tabs 17 bent downwards from the upper wall 11 and engaging the edge of the flange 9 to prevent longitudinal movement of the pie.

FIGS. 5 and 6 show four slots 18 formed by pressing a portion of the sleeve material 19 inwards, the slots 18 receiving crossed over elastic cords 20, both to prevent longitudinal movement of the pie and to provide for carrying of the package.

FIG. 7 shows the use of a plastic peg 21, which may be, but is not necessarily baked in the pie, and extends from adjacent the bottom of the pie, up through the topping or crust 10 to adjacent the top wall of the sleeve to provide positive spacing between the bottom crust and the top wall 11 of the sleeve to hold the bottom of the crust down against the dish, and the dish against the bottom of the wall 12 of the sleeve.

I claim:

1. A container for a pie or the like in a flanged dish, the container comprising interconnected top, bottom, and two sidewalls forming a sleeve; the sleeve having a substantially rectangular section with a width substantially equal to the diameter of a dish to be contained therein, a height greater than the height of the dish, and a length at least as great as its width; and a plurality of tabs located in the sidewalls of the sleeve and pressed out of the sleeve material, there being two tabs pressed out of each sidewall, and each tab being connected to its sidewall along a vertical hinge line and having a shoulder at the free edge of the tab which engages the top of the dish flange to hold the dish down against the bottom wall of the sleeve.

2. A container according to claim 1, wherein the tab has a recess at its free edge, and the shoulder is provided by the upper edge of the recess.

3. A container according to claim 1 wherein the sleeve is open-ended, and including means for preventing the dish from slipping out of the open ends of the sleeve.

4. A container according to claim 3, wherein the last-mentioned means comprises a plurality of additional tabs in the top wall of the sleeve, and which may be pressed into the sleeve to engage the edge of the dish flange.

5. A container according to claim 4, wherein there are four tabs in the top wall of the sleeve, two preventing slipping of the dish in each longitudinal direction of the sleeve.

6. A container for a pie or the like in a flanged dish, the container comprising interconnected top, bottom, and two sidewalls forming a sleeve; the sleeve being open-ended and having a substantially rectangular section with a width substantially equal to the diameter of a dish to be contained therein, a height greater than the height of the dish, and a length at least as great as its width; a plurality of tabs arranged to be pressed out of the sleeve material for engagement above the dish flange to hold the dish down against the bottom wall of the sleeve; means for preventing the dish from slipping out

of the open ends of the sleeve; the sleeve being provided with two pairs of slots, one adjacent each end of the sleeve on each side of the sleeve, each slot extending down a sidewall and partly into the top and bottom walls of the sleeve; and including two endless cords each fitted into diagonally opposite slots and crossing over one another over the top and bottom walls of the sleeve.

7. A container as set forth in claim 6 and including at least one generally upright spacer extending from adjacent the bottom of the pie, up through the pie, to adjacent the top wall of the sleeve.

8. A container according to claim 6, in which the tabs which engage the top of the dish flange to hold the dish down are located in the sidewalls of the sleeve.

9. A container according to claim 8, in which the tabs are substantially D-shaped tabs pressed into the sleeve about and below a horizontal hinge line across which they are connected to the corresponding sleeve sidewall substantially midway along the length of the sleeve.

10. A container according to claim 8, in which the tabs include four tabs, two pressed out of each sidewall, each tab being connected to its sidewall across a vertical hinge line and having a shoulder at the free edge of the tab for overlying the dish flange when pressed into the sleeve.

11. A container according to claim 6, wherein each slot is provided by a pair of substantially parallel cut lines extending down the sidewall of the sleeve and continuing partly into the top and bottom walls of the sleeve, and wherein material between the cut lines is pressed into the sleeve to provide the slot.

12. A container according to claim 11, wherein the material between the cut lines, when pressed into the sleeve, is arranged to engage the dish and thereby form said means for preventing the dish from slipping out of the open ends of the sleeve.

* * * * *

40

45

50

55

60

65

70

75