

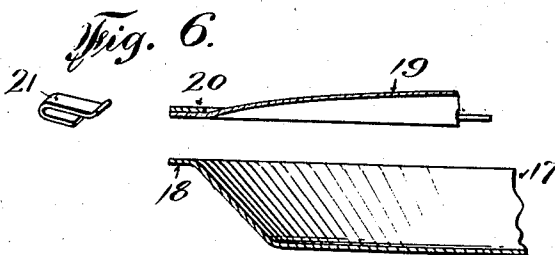
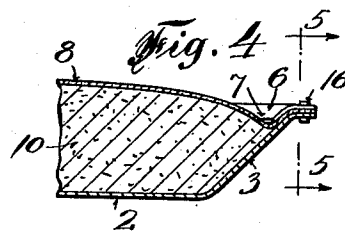
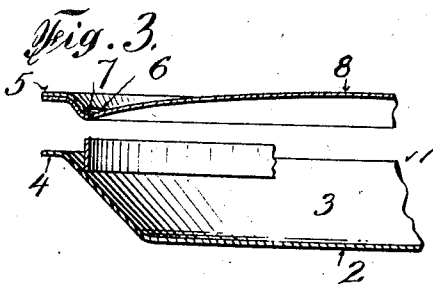
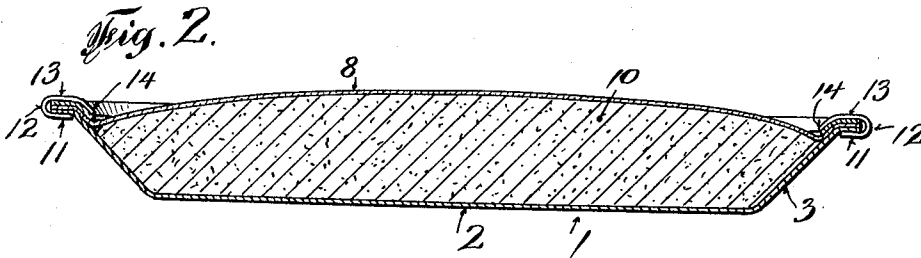
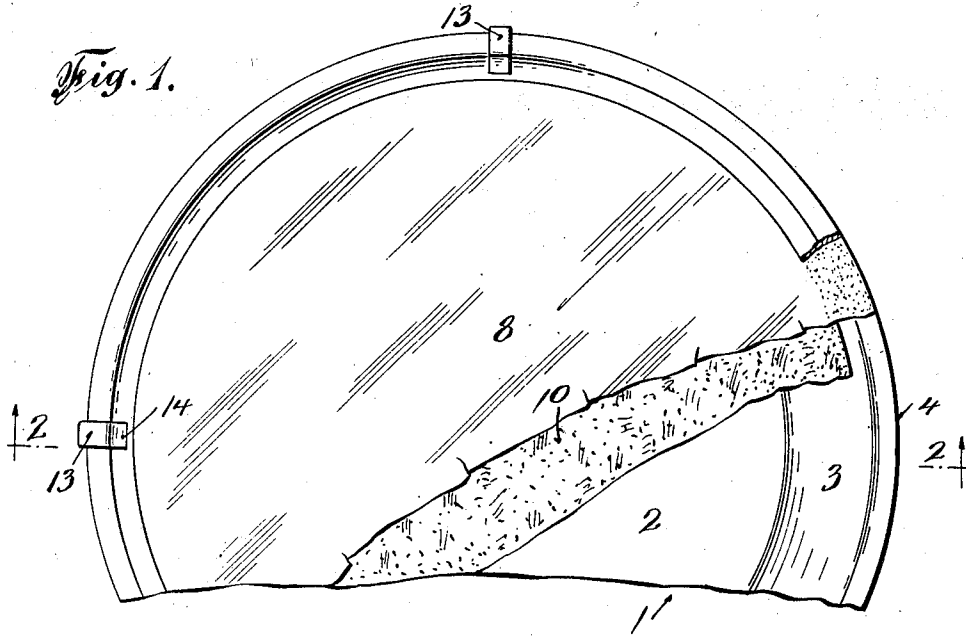
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G. S. FROST

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PACKAGE

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PACKAGE

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2 Claims. (Cl. 206—44)

My present invention relates to packages, and more especially to packages for enclosing and protecting various foods and in such manner as to permit the food to be observed through a transparent sheet. While my invention is adapted for containing all kinds of foods, I have chosen to illustrate it in the form of a package for holding pies.

In my U. S. Patent No. 1,903,212, dated March 28, 1933 I have shown a stiff member or plate with a sheet of transparent material to cover the top of the food, with a ring attached to the flange of the plate and engaging the outer portion of the transparent sheet between the flange of the plate and the ring and with stitches passing through the flange, the ring, and the edge of the transparent sheet to hold the parts assembled. In my copending application Serial No. 647,580 I showed another improvement containing the same broad subject matter.

In some cases, especially in small bakeries where the output is relatively small, it may not be desirable or economical to have a stitching machine for assembling the parts of the package and yet the smaller bakery may be desirous of using the type of package referred to. One object of the present invention is to provide a package which may be closed by small clips which may be attached to the package by hand or with a small tool.

While this method of closing the receptacle may not be as rapid as with the automatic stitching machine, it permits a small bakery to obtain the advantages of the type of receptacle shown herein without having to purchase a stitching machine. While the present package makes this possible, nevertheless the present package may also be closed by stitching the same with a stitching machine. There is a saving even where the package is assembled on the stitching machine because the operator does not have to handle the transparent sheet or cellophane separately from the ring and plate; or, in other words, one operation in the assembly of the package may be eliminated.

In order to accomplish the results referred to above, the transparent sheet is factory assembled with the rings, preferably by adhesively securing the outer portion of the transparent sheet to the ring. The bakery will, therefore, receive the plates as one unit and the ring and the assembled transparent sheet thereon as a second unit. After placing the food product in the plate the ring and the transparent sheet, which are handled as a unit, may be applied to the plate and

the two units may be assembled by attaching small clips at intervals around the plate by hand or with a small tool.

When the package is utilized under this method it is obvious that a stitching machine is not necessary to complete the package. If, on the other hand, the baker desires to use a stitching machine to complete the package, there is a saving of one operation because the transparent sheet and ring are factory-assembled in one unit and these two members are applied in their assembled condition to the plate, ready for stitching.

While the present invention may be incorporated with the features shown with either of the above-mentioned applications, it is also possible to use flat rings in the present case as distinguished from rings having beads, as shown in the first mentioned application, and rings having conical flanges, as shown in said second application.

Whereas a flat ring cannot be successfully used without employing something to create a bight in the transparent sheet where the sheet and the ring are supplied in separate or detached form, it is possible with the present article to employ a flat ring because the transparent sheet is adhesively attached around the ring; or, in other words, it is attached at all points around the ring so that clips or stitches applied at intervals around the package will hold the same closed. By adhesively attaching the transparent sheet around the ring the sheet will not pull out from between the flange of the plate and the ring, even though the clips or stitching appears only at intervals around the package.

Further advantages will be set forth in the detailed description of my invention.

In the drawing forming part of this application,

Figure 1 is a plan view of a portion of a package containing my invention, with parts broken away to show the various members of the package,

Figure 2 is a cross sectional view taken on the line 2—2 of Figure 1,

Figure 3 is a sectional view of a portion of the two units of a package about to be assembled,

Figure 4 is a sectional view showing the same type of package but with the parts secured by stitching,

Figure 5 is a sectional view taken on the line 5—5 of Figure 4, and

Figure 6 is a sectional view of a modified form of the invention with the clip adapted to be used

in connection with the same shown in perspective.

The relatively stiff member in the package is shown in the drawing in the form of a plate 1 which may be and preferably is made of pulp or cardboard; and it consists of a bottom wall 2 and preferably frusto conical wall 3 surrounding the bottom wall and contiguous therewith. In the form of the invention shown in Figures 1 to 5 inclusive, which will be first described, the plate also has an annular flange 4 projecting horizontally from the top edge of the conical wall 3. This comprises what might be called one unit of the package.

15 The second unit consists of the following: There is an annular ring 5 of the same size as the flange of the plate with which it is adapted to co-operate. This flange in the form shown in Figures 1 to 4 has an inwardly and downwardly
20 turned portion 6 which is adapted to extend down against the inner surface of the wall 3 of the plate, so that the edge 7 will form a bight for the transparent sheet. The member 8 comprises a sheet of transparent material, such as cellophane, which
25 is flexible and which is transparent to permit the food product which is enclosed in the package to be observed and examined visually. This sheet is generally circular and of such size that its outer rim extends under the ring 5 and preferably terminates at or approximately at the outer edge of
30 this ring. In my said co-pending applications this sheet was attached to the ring only when the parts of the package were finally assembled. In the present case, however, this transparent sheet is attached to the under surface of the ring 5 by
35 means of some adhesive material or by means of heat applied to the sheet if the latter is of a material which becomes adhesive upon the application of heat.

40 The purpose is to form a seal between the outer rim of the transparent sheet 8 and the under surface of the ring 5 in order that these two parts will become an assembled unit as shown in Figure 3, so that they may be handled as one piece
45 at the bakery or wherever the package is to be assembled with the food product. In other words, the transparent sheet and the clamping ring are factory assembled where the packages or the parts of the packages are made. The adhesive connection between the transparent sheet and the clamping
50 ring should be such as to exclude air and dust from entering the package between these two parts. If desired, these two members may be assembled and pressed together in suitable dies very much like a stamping operation, so that the
55 forming of this unit may be rapidly executed.

If desired, the transparent sheet may be arched as shown in Figure 3 in order to conform to the top surface of the food product and for this purpose a suitable mould or die may be used to hold
60 the transparent sheet in the arched form while the pasting or gluing operation between the sheet and the ring is being carried out. The baker or whoever is putting up the food products in the present type of package will receive the parts of
65 the package in two units, one of which is the plate or stiff member and the other or second unit is the clamping ring with the sheet of transparent material adhesively attached thereto. There
70 will therefore be but two units to be handled in the bakery.

75 The food product 10 whatever it may be, is placed in the plate 1 and then the second unit consisting of the transparent sheet and clamping ring is placed over the top of the food product and

moved down until the clamping ring presses down on the flange 4 of the plate with the outer portion of the transparent sheet clamped between the clamping ring and the flange of the plate.

The two units are then secured together. This may be done by hand or by machine. Where it is desired to secure the parts together by hand operation, as in small shops where it is not convenient to purchase a stitching machine, the operator may apply clips such as are shown in Figures 1 and 2. These consist of small pieces of metal bent in substantially U shape with one portion 11 engaging under the flange of the plate, with the loop 12 extending around the edges of the plate flange, the transparent sheet, and the
15 clamping ring, and with the top portion 13 pressing against the top of the clamping ring.

Where the clamping ring is of the form shown in Figures 1 and 2 the last mentioned arm of the clamping member is turned downwardly as shown 20 at 14 in order to press against the cone portion 7 of the clamping ring to fit snugly thereto and to hold this portion of the ring pressed against the wall 3 of the plate. Four or any other number of these clamps may be applied at intervals 25 around the package, as shown in Figure 1. They may be rapidly snapped into place by hand or a suitable tool may be used to apply the clamps to the package. Where clamps of this type are used it will be apparent that a stitching machine 30 is not required to assemble the package.

Owing to the fact that the transparent sheet and clamping ring are factory assembled, the baker does not have to handle the transparent sheet as a separate member, which is a decided
35 advantage because it saves one operation and this operation is the most tedious in the assembling of the package. Although the clips are arranged at intervals around the plate, all portions of the outer edge of the transparent sheet are closely 40 sealed to the clamping ring so that these parts do not separate and allow air and dust to enter the package.

The clamping ring, being comparatively stiff if made of fibre or cardboard, allows the second unit to be more carelessly handled than if the
45 parts were separate and it allows the package to be quickly assembled by merely bringing the two units together and applying the clips.

It will be understood that the member here 50 called the plate may be made in various shapes and depths and the wall 3 may stand vertically instead of being cone shaped according to the various food products to be packed in the package.

If desired, the two units of the package may be 55 stitched together in the same manner as described in my said co-pending applications. As shown in Figures 4 and 5, the two units are assembled in the same manner as described above, and wire stitching or staples 16 may be forced through the
60 clamping ring, the adjacent portion of the transparent sheet, and through the flange of the plate, after which the stitching is turned or clenched as shown in Figure 5. The stitching operation may be performed upon a suitable stitching machine. 65

It is apparent, therefore, that the present package is adapted to be used either in conjunction with a stitching machine or with the hand applied clips described above. In both cases the transparent sheet and the clamping ring are adhesively 70 ly attached together to form a factory made unit.

In Figure 6 I have illustrated a plate 17 corresponding with the plate mentioned above, and having the horizontal flange 18 at the top of the plate. The second unit consists in part of the 75

transparent sheet 19 corresponding with the sheet 8 in the above described form. In this form of the invention, however, the clamping ring 20 consists of a flat, annular member with the conical portion 6 omitted.

The outer portion or rim of the transparent sheet is adhesively secured to the under surface of the clamping ring 20 the same as before, so that the transparent sheet and the clamping ring form a unit. In this combination the second unit is applied to the plate the same as before, so that the outer portion of the transparent sheet rests against the top surface of the flange 18 of the plate and is clamped between the clamping ring 5 and the plate flange. The clip shown in Figure 6 may be applied by hand over the edges of the several members of the package for the purpose of securing the two units together. It will be obvious that the two units may be stitched together 10 if desired. Whereas the portion 6 shown in Figure 3 is necessary to form a bight in the transparent sheet where the sheet and the clamping ring are not adhesively attached together, in the present case this conical portion may be omitted because 25 the adhesive material serves to mechanically attach the sheet to the clamping ring.

Having described my invention, what I claim is:

1. A package including a plate or similar receptacle composed of relatively stiff material, said 30 receptacle having a chamber adapted to hold a

food product therein and having a lateral flange at the top thereof, a sheet of pliable, transparent material adapted to extend across the food product contained in said receptacle, a relatively stiff 5 ring to which the outer portion of said transparent sheet is adhesively secured all around said ring, said ring adapted to rest face to face against said flange of the receptacle and having a downwardly turned inner edge adapted to form a bight 10 in said transparent sheet, and means for attaching said ring to said flange of the receptacle whereby the outer portion of the transparent sheet is clamped between said ring and said flange of the receptacle.

2. A package including a plate or similar receptacle composed of relatively stiff material and having a chamber therein, and having a lateral flange at the top thereof, a sheet of pliable transparent material adapted to extend across the product contained in said receptacle and across 20 said flange, and a relatively stiff annular ring to which the outer portion of said transparent sheet is adhesively secured around said ring, and metal clips for attaching said ring to said flange whereby the outer portion of the transparent sheet is 25 clamped between said ring and said flange, said clips engaging against the top of said ring and the under side of said flange and passing around the edges of said ring and flange.

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