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PATENT SPECIFICATION

DRAWINGS ATTACHED

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COMPLETE SPECIFICATION

An improved Container

We, REXALL DRUG AND CHEMICAL COMPANY, a Corporation organised and existing under the Laws of the State of Delaware, United States of America, of 8480 Beverly Boulevard, Los Angeles 54, State of California, United States of America, do hereby declare the invention for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:—

The invention relates to containers and is particularly concerned with a container for storing cheese, butter or the like in a refrigerator.

The invention provides a container for perishables and the like, including a base having a substantially flat top surface, a continuous downwardly directed side wall integral with the periphery of said top surface and maintaining the top surface elevated above a supporting surface on which the base is placed, a continuous flange extending outward from and encompassing said side wall; at least two opposed handles affixed to said base for lifting the base; a cover having a top wall with a continuous downwardly directed side wall, a peripheral flange affixed to and extending outwardly from the lower edge of the side wall of the cover; the lower portion of said cover side wall slidably and releasably engaging the side wall of said base; and the flange on said cover abutting the continuous flange on said base.

The invention provides also a container having a base comprising a raised top surface or platform with a continuous side wall extending downwardly from the edge of the platform and a continuous flange extending outwardly from the side wall below the level of the platform, and a cover comprising a top wall, a continuous side wall extending downwardly from the top wall and a peripheral flange extending outwardly from the lower edge of the side wall, the lower portion of the side wall of the cover being a sliding fit with the side wall of the base and the peripheral flange on the cover abutting the continuous flange on the base there being two opposed handles on the base for lifting the container and the peripheral flange on the cover being cut away to receive the handles. Preferably at least one of the handles is curved upwardly from the flange on the base, the curvature being concave towards the platform and in which the corresponding portion of the peripheral flange on the cover is engageable in the concave curvature for rocking movement to form a hinge about which the cover may be raised. The peripheral flange may be partly cut away where it engages the handle, whereby stops are provided which by engagement with the handle limit movement of the cover along the hinge axis.

It is further preferred that the side wall of the base and the side wall of the cover taper outwardly downwardly to permit such hingeing movement.

In one embodiment said side wall on the base is polygonal; said side wall on the cover is a corresponding polygon; the lower portion of the cover side wall resiliently engaging the base side wall at the angles on the polygon and the cover side wall portions between the angles being stretched tight to engage the base side wall.

A specific embodiment of a container according to the invention will now be described with reference to the accompanying drawings in which:—

Figure 1 is an exploded perspective view of the container,

Figure 2 is an end view of the container,

Figure 3 is a side view of the container,

Figure 4 is a cross-section taken on the line 4—4 in Figure 3,

Figure 5 is a side view of the container in the open position,

Figure 6 is a scrap cross-section taken on the line 6—6 in Figure 2, and

Figure 7 is an enlarged scrap cross-section taken on the line 7—7 in Figure 4.

The container comprises a base and a cover. The base comprises a flat top surface 10

[*Price 4s. 6d.*]

having a pebbled surface 11 consisting of hemispherical extensions protruding slightly above the flat surface and in random orientation as best shown in Figures 1 and 7. The surface 10 has a downwardly directed peripheral side wall 12 to which is affixed an outwardly extending peripheral flange 13 which in turn is supported by a downwardly directed continuous leg 14 forming a base to stand on a supporting surface. This arrangement provides rigidity in the base. Preferably the base is moulded from polypropylene but it may be moulded from other plastics which give it sufficient rigidity.

There is a handle 15 integral with the flange 13 at each of the ends of the base. The handles 15 curve upwardly and outwardly thereby permitting the insertion of a user's fingers beneath the handles, for lifting the container from a supporting surface. If the handles extended directly outwardly in the same manner as the flange 13 it would be extremely difficult to grasp the handles and lift the container from the supporting surface. The outer curved surfaces of the handles are preferably knurled or provided with ridges to provide a good grip for the user's fingers.

The cover is a hollow, box-shaped member having a top wall 16, end walls 17 and side walls 18. The juncture of the walls is preferably rounded to permit easy cleaning of the surfaces of the cover.

A continuous, outwardly extending flange 19 is integral with the lower edge of the end walls 17 and side walls 18. This flange extends outwardly by substantially the same distance as the flange 13 on the base. The flange 19 is recessed at 20 at both ends of the cover to permit the handle 15 to extend above the flange 19 in the manner shown in Figures 3 and 6.

The cover may be lifted directly upwardly off from the base in the manner shown in Figure 1 or it may be swung upwardly as shown in Figure 5. It should be particularly noted in Figure 5 that the cover is constructed to swing upwardly about one of the handles 15 and rest in stable equilibrium on a supporting surface. The extensions of ~~flanges~~ flange 19 on each side of recess 20 engage the edges of flange 13 when the cover is in the position shown in Figure 5. The cover is easily swung downwardly onto the base from the position shown in Figure 5.

The cover is preferably moulded from regular or low density polyethylene thereby giving a flexible resilience to the cover whereby it may be slipped over the base with the lower inside surface of the walls 17 and 18 engaging against the continuous side wall 12 of the base. The walls 12 are oversize and the opening in the bottom of the cover must be forcibly pushed onto the base thereby providing a seal between the inside surfaces of the walls 17 and 18 and the wall 12 of the base. It should be noted particularly that the contact area between walls 12 and walls 17, 18 is large, and the taper of the wall 12 and the inside surface of the walls 17 and 18 is a locking taper (about 0.5°) thereby insuring that even when the base is supporting cheese or the like, the top cannot be shaken off from the base.

The bottom surface of flange 19 also engages the top surface of flange 13 to form a secondary seal between the flanges (and the base and cover).

The pressure contact points for the cover on the base are at the four corners of the base. The corner walls 17 and 18 are tightly stretched between the four corners to maintain the inside surfaces of walls 17 and 18 tightly in engagement with base wall 12 between the corners thereby providing an effective seal along the entire wall 12.

The pebbled surface 11 shown in Figure 7 effectively resists scratching or marking resulting from using the base as a cutting board for the contents of the container. This surface also aids in minimising sliding of the contents on the base. When items such as cheese or butter are placed on the base, small vacuums are formed between a flat surface on the item and many of the recessed areas between the "pebbles" on surface 11. This "vacuum effect" also aids in minimising movement of the item on the base.

The hollow underside of the base permits free flow of cold air therein to rapidly cool cheese or the like positioned on surface 11.

The container described is designed for the storage of perishables such as elongated pieces of cheese, butter, meat, bread or the like, but obviously it can be used for storing other materials.

WHAT WE CLAIM IS:—

1. A container for perishables and the like, including a base having a substantially flat top surface, a continuous downwardly directed side wall integral with the periphery of said top surface and maintaining the top surface elevated above a supporting surface on which the base is placed, a continuous flange extending outward from and encompassing said side wall; at least two opposed handles affixed to said base for lifting the base, a cover having a top wall with a continuous downwardly directed side wall, a peripheral flange affixed to and extending outwardly from the lower edge of the side wall of the cover; the lower portion of said cover side wall slidably and releasably engaging the side wall of said base; and the flange on said cover abutting the continuous flange on said base.

2. A container having a base comprising a raised top surface or platform with a continuous side wall extending downwardly from the edge of the platform and a continuous flange extending outwardly from the side wall below the level of the platform, and a cover comprising a top wall, a continuous side wall

having a pebbled surface 11 consisting of hemispherical extensions protruding slightly above the flat surface and in random orientation as best shown in Figures 1 and 7. The surface 10 has a downwardly directed peripheral side wall 12 to which is affixed an outwardly extending peripheral flange 13 which in turn is supported by a downwardly directed continuous leg 14 forming a base to stand on a supporting surface. This arrangement provides rigidity in the base. Preferably the base is moulded from polypropylene but it may be moulded from other plastics which give it sufficient rigidity.

There is a handle 15 integral with the flange 13 at each of the ends of the base. The handles 15 curve upwardly and outwardly thereby permitting the insertion of a user's fingers beneath the handles, for lifting the container from a supporting surface. If the handles extended directly outwardly in the same manner as the flange 13 it would be extremely difficult to grasp the handles and lift the container from the supporting surface. The outer curved surfaces of the handles are preferably knurled or provided with ridges to provide a good grip for the user's fingers.

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A continuous, outwardly extending flange 19 is integral with the lower edge of the end walls 17 and side walls 18. This flange extends outwardly by substantially the same distance as the flange 13 on the base. The flange 19 is recessed at 20 at both ends of the cover to permit the handle 15 to extend above the flange 19 in the manner shown in Figures 3 and 6.

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The cover is preferably moulded from regular or low density polyethylene thereby giving a flexible resilience to the cover whereby it may be slipped over the base with the lower inside surface of the walls 17 and 18 engaging against the continuous side wall 12 of the base. The walls 12 are oversize and the opening in the bottom of the cover must be forcibly pushed onto the base thereby providing a seal between the inside surfaces of the walls 17 and 18 and the wall 12 of the base. It should be noted particularly that the contact area between walls 12 and walls 17, 18 is large, and the taper of the wall 12 and the inside surface of the walls 17 and 18 is a locking taper (about 0.5°) thereby insuring that even when the base is supporting cheese or the like, the top cannot be shaken off from the base.

The bottom surface of flange 19 also engages the top surface of flange 13 to form a secondary seal between the flanges (and the base and cover).

The pressure contact points for the cover on the base are at the four corners of the base. The corner walls 17 and 18 are tightly stretched between the four corners to maintain the inside surfaces of walls 17 and 18 tightly in engagement with base wall 12 between the corners thereby providing an effective seal along the entire wall 12.

The pebbled surface 11 shown in Figure 7 effectively resists scratching or marking resulting from using the base as a cutting board for the contents of the container. This surface also aids in minimising sliding of the contents on the base. When items such as cheese or butter are placed on the base, small vacuums are formed between a flat surface on the item and many of the recessed areas between the "pebbles" on surface 11. This "vacuum effect" also aids in minimising movement of the item on the base.

The hollow underside of the base permits free flow of cold air therein to rapidly cool cheese or the like positioned on surface 11.

The container described is designed for the storage of perishables such as elongated pieces of cheese, butter, meat, bread or the like, but obviously it can be used for storing other materials.

WHAT WE CLAIM IS:—

1. A container for perishables and the like, including a base having a substantially flat top surface, a continuous downwardly directed side wall integral with the periphery of said top surface and maintaining the top surface elevated above a supporting surface on which the base is placed, a continuous flange extending outward from and encompassing said side wall; at least two opposed handles affixed to said base for lifting the base, a cover having a top wall with a continuous downwardly directed side wall, a peripheral flange affixed to and extending outwardly from the lower edge of the side wall of the cover; the lower portion of said cover side wall slidably and releasably engaging the side wall of said base; and the flange on said cover abutting the continuous flange on said base.

2. A container having a base comprising a raised top surface or platform with a continuous side wall extending downwardly from the edge of the platform and a continuous flange extending outwardly from the side wall below the level of the platform, and a cover comprising a top wall, a continuous side wall

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extending downwardly from the top wall and a peripheral flange extending outwardly from the lower edge of the side wall, the lower portion of the side wall of the cover being a sliding fit with the side wall of the base and the peripheral flange on the cover abutting the continuous flange on the base there being two opposed handles on the base for lifting the container and the peripheral flange on the cover being cut away to receive the handles.

3. A container as claimed in claim 2 in which at least one of the handles is curved upwardly from the flange on the base, the curvature being concave towards the platform and in which the corresponding portion of the peripheral flange on the cover is engageable in the concave curvature for rocking movement to form a hinge about which the cover may be raised.

4. A container as claimed in claim 3 in which the peripheral flange is partly cut away where it engages the handle, whereby stops are provided which by engagement with the handle limit movement of the cover along the hinge axis.

5. A container as claimed in claim 3 or claim 4 in which the side wall of the base and the side wall of the cover taper outwardly downwardly to permit such hingeing movement.

6. A container as claimed in any of the preceding claims wherein said top surface on the base is pebbled to resist scratching or marking and minimise movement of perishables placed on said surfaces.

7. A container as claimed in any of the preceding claims wherein said base is moulded from polypropylene and said cover is moulded from polyethylene.

8. A container as claimed in any of the preceding claims wherein said base is hollow on its underside to provide a free air space therein.

9. A container as claimed in any of the preceding claims wherein said side wall on the base is polygonal; said side wall on the cover is a corresponding polygon; the lower portion of the cover side wall resiliently engaging the base side wall at the angles on the polygon and the cover side wall portions between the angles being stretched tight to engage the base side wall.

10. A container substantially as herein described with reference to and as shown in the accompanying drawings.

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