

Apparatus for use in the preparation and/or storage of foodstuffs.

THIS INVENTION relates to an apparatus for use in the preparation and/or storage of foodstuffs.

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It is known that various foodstuffs, such as vegetables, are best stored after being rinsed and cleaned. It is also known that the upper portion of a container sometimes remains unutilized since it is impractical to stack the foodstuffs on top of one another. In some cases soft fruits such as peaches can be damaged by such stacking.

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According to the present invention, there is provided apparatus for use in the storage and preparation of food, which apparatus comprises: an open receptacle defined by a base and oppositely positioned side walls and end walls terminating in a sealing rim; a cover for said receptacle, said cover presenting a peripheral sealing member adapted to mate with said sealing rim; a tray removably positionable in said receptacle; support arms on said tray; a pair of handle members each comprising a pair of oppositely positioned finger-grippable portions; pivot means on said handle members and support arms for pivotally attaching said handles to said support arms, said handle members being pivotable on said support arms between a first position wherein the tray is located on the base and a second position wherein the tray is located intermediate the base and the sealing rim; one of said finger-grippable portions on each of said handles being positioned adjacent said sealing rim in either of said first or second positions to facilitate insertion and removal of the tray from the receptacle.

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In a further aspect the invention provides a tray assembly, comprising a tray assembly comprising a tray connectable to adjustable support means and adjustable between at least two positions, a first in which the tray is disposed adjacent one end of the support means and a second position in

which the tray is disposed intermediate the length of the support means.

Thus, in various embodiments the invention has been found to provide a dual level grid assembly for a receptacle for use in the storage and preparation of various foodstuffs.

The grid assembly has conveniently positioned handles to facilitate removal of the grid assembly from a container.

A particularly advantageous arrangement provides a grid assembly for a hermetically sealable receptacle having handles pivotable between a first position wherein the tray is located on the receptacle base and a second position wherein the grid is located intermediate the base and sealing rim of the receptacle.

In order that the invention may be more readily understood, and so that further features thereof will be appreciated, an apparatus of the invention will now be described, by way of example, with reference to the accompanying drawings; in which:

FIGURE 1 is a top perspective view of a grid assembly with the tray at a mid-level position;

FIGURE 2 is a side elevational view of the grid assembly of Figure 1 with the tray at the mid-level position, located in a container assembly shown in cross-section;

FIGURE 3 is an end elevational view of the grid assembly and container shown in Figure 2 with the container assembly again shown in cross-section;

FIGURE 4 is a cross-sectional view of the grid assembly taken along line 3-3 of Figure 2 with the container assembly omitted for clarity;

FIGURE 5 is a cross-sectional view taken along the line 5-5 of Figure 4;

FIGURE 6 is a side elevational view of the grid assembly of Figure 2 with the tray in a low level position and the container assembly shown in cross-section;

5 FIGURE 7 is an end elevational view of the grid assembly and container shown in Figure 6 with the container assembly shown in cross-section;

10 FIGURE 8 is a cross-sectioned view taken along the line 8-8 of Figure 6 with the container assembly omitted for clarity;

FIGURE 9 is a cross-sectioned view taken along the line 9-9 of Figure 8;

15 FIGURE 10 is a fragmentary top plan view of one end of the grid assembly; and

FIGURE 11 is a cross-sectioned view of the grid assembly taken along the line 11-11 of Figure 10.

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Referring to the drawings and in particular to Figures 2, 3, 6 and 7 a container assembly 10 comprises an upwardly open receptacle 12 and a closure or cover 30. The receptacle 12 is generally rectangular and is defined by a base 14, with side walls 16 and end walls 18 extending upwardly therefrom. The side walls 16 and the end walls 18 terminate in an open upper end to define a continuous sealing rim 20. A stiffening and handling flange 22 is provided about the receptacle 12 and extends outwardly from the side and end walls, at a position slightly spaced from the sealing rim 20.

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30 The cover 30 comprises a central wall portion 32 having a sealing member 34 extending about the periphery thereof. The sealing member 34 includes a first or inner section 36, a second or outer section 38 connected at one end by a third or top section 40 to form a generally U-shaped groove. The sealing member 34 is adapted to fit over the sealing rim 20 such that an airtight seal can be created between the cover 30 and the receptacle 12. A lip 42 extends outwardly from the outer section 38 of the sealing member 34 to facilitate installation and removal of the cover 30.

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A grid assembly 50, that may be received within the container assembly 10, comprises a tray 60 and a pair of oppositely positioned handle members 80. As can best be seen in Figures 1 and 10 the tray 60 has a central rack portion 62 which presents a plurality of drainage slots 64. The drainage slots 64 each have a downwardly angling peripheral edge 66. The tray 60 is defined at its outer periphery by peripheral side ledges 68 and peripheral end ledges 70 which extend outwardly from the central rack portion in cantilever fashion. A pair of spaced-apart support arms 74 extend upwardly from each end of the tray at the termination of the respective peripheral side ledge 68. Thus each pair of support arms 74 form support means, the purpose of which will be explained later. The support arms 74 are generally rectangular in cross-section and have a pivot hole 76 formed in an upper region of the arm to receive a pivot pin 90. The support arms 74 also extend downwardly from the underside of the tray the downward projection being shaped to define an indented portion 98.

A plurality of reinforcing ribs 72, which provide strength to the tray and support for the central rack portion 62, also extend downwards from the underside of the tray.

The handle members 80 are generally rectangular and comprise oppositely positioned finger-grippable horizontal portions 82a and 82b. The finger-grippable horizontal portions 82a and 82b are connected via curved corner portions to oppositely positioned vertical leg portions 86. As best shown in Figure 5, each vertical leg portion 86 is generally rectangular in cross-section with a reinforcing rib 88 extending inwardly therefrom. Pivot pins 90 extend outwardly from the leg portions 86 and are adapted to mate with corresponding pivot apertures 76 in the support arms 74 to form pivot means. As shown in Figure 9, the horizontal portions 82a and 82b are also generally rectangular in cross-section with a reinforcing rib 84 extending perpendicularly inwardly therefrom.

On the finger-grippable horizontal portion 82b there is a protrusion 92 which is positioned to cooperate with an indented portion 94 on the end ledge 70 of the tray 60 to form a first position detent means. On each of the vertical leg portions 86 a protrusion 96 is provided at a position to cooperate with an indented portion 98 on the support arm 74 of the tray 60

to form a second position detent means. The purpose of each detent means 92,94 and 96,98 will be explained later.

As can best be seen in Figures 2, 3, 4 and 7, the tray handle members 80 are pivotable between two positions. In a first position, shown in Figure 6, the tray 60 is located adjacent the horizontal portions 82_b of the handle members 80, so that it can rest on the base 14 of the receptacle 12 providing maximum storage space in the container above the tray. As can best be seen in Figure 11 in this first position the central rack portion of the tray is carried above the container base 14 by the ribs 72 thus providing a space beneath the tray in which liquid can accumulate. In this position any foodstuffs on the tray 60 in the receptacle 12 will be held out of contact with the base 14 and thus out of contact with any moisture accumulated thereon. The finger-grippable horizontal portions 82_a of each handle are positioned adjacent the sealing rim 20 of the receptacle 12. Thus it is possible to grasp easily the finger-grippable horizontal portions 82_a of the handles 80 to lift the grid assembly 50 out of the receptacle 12 (best shown in Figures 6 and 7).

As can best be seen in Figures 8 and 9, the horizontal portion 82_b is positioned in close proximity to the end ledge 70. The protrusion 92 on the horizontal portion 82_b and the indented portion 94 cooperate to form a detent means which maintains the handles 80 in a substantially upright position. Slight flexure of the cantilevered end ledge as the handle 80 is rotated into position allows the protrusion 92 to nest in the indented portion 94. This is especially advantageous when the tray 60 is placed on a counter top or other support surface. It should be noted that when the grid assembly is placed in the receptacle 12 each handle 80 is adjacent to the end wall 18 such that rotation of the handle is prevented by engagement with the end wall 18. Thus the handles 80 will remain in a substantially vertical position even if the detent means is disengaged.

As best shown in Figures 2 and 3, the handles 80 are pivotable from the first position shown in Figures 6 and 7, to a second position wherein the tray 60 is located above the base 14 approximately midway between the base 14 and the sealing rim 20. In this position the tray 60 is supported on the vertical leg portions 86 and the finger-grippable horizontal portion 82_a

engages the base 14. This creates a dual level storage receptacle wherein items can be stored in the space below the tray 60 as well as on the tray 60. In this configuration the container assembly 10 and grid assembly 50 can be utilized for poaching foodstuffs such as fish wherein the steam from the liquid simmering rises to cook the foodstuffs positioned on the tray 60. The drain slots 64 in the tray 60 allow the steam to rise and surround the foodstuffs. The finger-grippable horizontal portion 82b of each handle 80 is positioned adjacent the sealing rim 20 of the receptacle 12 so that the grid assembly 50 can be easily lifted out of the receptacle 12.

As can best be seen in Figures 4 and 5, the protrusions 96 on the vertical leg portions 86 coact with the indented portions 98 on the support arms 74 to form a detent which maintains the handles 80 in a substantially vertical position. Slight flexure of the portion of the support arms 14 which includes the indentations 98 as the handle 80 is rotated into position allows each of the protrusions 96 to nest in the adjacent indented portion 98. As previously mentioned, this is especially advantageous when the tray 60 is placed on a counter top or other support surface. It should also be noted that in a preferred embodiment lateral stability is provided to the grid assembly 50 since the vertical leg portions 86 are positioned in very close proximity to the support arms 74 along the entire extent thereof. When the grid assembly 50 is positioned in the receptacle 12 each handle 80 is adjacent to the end wall 18 such that rotation of the handle 80 is prevented by engagement with the end wall 18. Thus the handles 80 will remain in a substantially vertical position even if the detent means become disengaged.



CLAIMS

1. Apparatus for use in the storage and preparation of food, which apparatus comprises: an open receptacle defined by a base and oppositely positioned side walls and end walls terminating in a sealing rim; a cover for said receptacle, said cover presenting a peripheral sealing member adapted to mate with said sealing rim; a tray removably positionable in said receptacle; support arms on said tray; a pair of handle members each comprising a pair of oppositely positioned finger-grippable portions; pivot means on said handle members and support arms for pivotally attaching said handles to said support arms, said handle members being pivotable on said support arms between a first position wherein the tray is located on the base and a second position wherein the tray is located intermediate the base and the sealing rim; one of said finger-grippable portions on each of said handles being positioned adjacent said sealing rim in either of said first or second positions to facilitate insertion and removal of the tray from the receptacle.
2. Apparatus according to claim 1, wherein each of said handle members comprises a pair of oppositely positioned leg portions which connect said oppositely positioned finger-grippable portions to one another.
3. Apparatus according to claim 1 or 2, wherein said support arms extend upwardly from said tray in spaced pairs for supporting each of said handle members.
4. Apparatus according to claim 2 or to claim 3 when dependent on claim 2, wherein said pivot means comprises a pivot pin positioned on each of said leg portions to cooperate with an aperture in each of said support arms.
5. Apparatus according to any one of claims 1 to 4, wherein said handle members and said tray include first and second detent means adapted to cooperate to maintain said handle members in said first and second positions, respectively.
6. Apparatus according to claim 5, wherein one of said finger-grippable



portions has a protrusion thereon and said tray has an indentation therein, said protrusion and said indentation coacting to form said first detent means.

5 7. Apparatus according to claim 5 or 6, wherein at least one of said leg portions has a protrusion thereon and at least one of said support arms has an indentation therein, said protrusion and said indentation coacting to form said second detent means.

10 8. Apparatus according to any one of claims 1 to 7, wherein a plurality of drainage slots are formed in the surface of said tray.

15 9. A tray assembly for use in the apparatus of any one of claims 1 to 8, comprising a tray connectable to adjustable support means and adjustable between at least two positions, a first in which the tray is disposed adjacent one end of the support means and a second position in which the tray is disposed intermediate the length of the support means.

20 10. Apparatus substantially as herein described with reference to and as shown in the accompanying drawings.

25 11. A tray assembly substantially as herein described with reference to and as shown in the accompanying drawings.

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