FOOD CONTAINER UNIT

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This invention relates to containers, for food or other commodities, and more particularly to containers of this kind which are arranged in a circular group and supported on a rotary turntable, or rotary support, from which latter the containers are each removable individually without disturbing the others, whereby in effect a rotary compartment container is provided.

Generally stated, one object of the invention is to provide a novel and improved construction and arrangement whereby the containers are so arranged and mounted on the turntable, or on the rotary support, that each container can be grasped between the thumb and finger, with the thumb on the top of the container, and with the finger on the bottom thereof, and removed from the rotary support without letting go of the container, before the container is fully removed from the support.

Another object is to provide a novel construction and arrangement whereby the inner ends of the containers may slide over the ball bearing or raceway, when the containers are pushed toward the vertical axis of the rotary support, and whereby each container is correctly positioned on the rotary support, by means engaging the lower side edges of the container, and also engaging the lower outer edge of the container.

Another object is to provide a novel and improved construction and arrangement whereby the turntable or rotary support has a hole by which it may be supported on a hook, during the dipping of the turntable or support in the paint or enamel or other liquid with which it is to be coated, the said hole so located that the outer upstanding flanges of the rotary support, provided for keeping the containers against outward displacement, are all in such position that they will drain freely, and thereby not accumulate an undesirable amount of paint or enamel or other liquid thereon when the rotary support is hung up to dry.

Another object is to provide a novel and improved construction and arrangement whereby the group of containers, when in place on the rotary support, may be refrigerated, preferably by the use of a central receptacle adapted to be placed between the inner ends of the food containers, said receptacle being adapted to contain dry ice or any other refrigerating medium, and the top of the receptacle being preferably enlarged to extend over the tops of the food containers.

It is also an object to provide certain details and specific features of construction tending to increase the general efficiency and the desirability of a rotary food container structure, or structure for holding any other commodity, of this particular character.

To the foregoing and other useful ends, the invention consists in matters hereinabove set forth and claimed, and shown in the accompanying drawings in which—

Fig. 1 is a plan view of a rotary compartment container embodying the principles of the invention.

Fig. 2 is a perspective view of one of the food containers, or containers for other commodities.

Fig. 3 is a vertical section on line 3—3 in Fig. 1 of the drawings.

Fig. 4 is a plan view of a turntable or rotary support with the food containers omitted.

As thus illustrated, the invention comprises a sheet metal base 1, provided with an annular ball race 2, and with an outward-down-turned flange 3 formed to rest upon a flat support. A ball retainer in the form of a flat sheet metal disk 4 is provided, having holes for the balls 5 resting on top of the base 1, and the turntable 6 is held in place on said base, in engagement with said disk 4, by the central bolt 7, which latter forms the pivot or vertical axis of the turntable thus provided.

It will be seen that said turntable is formed with marginal notches 8, and is also formed with up-turned flanges 9 at its outer edges, together with radial ribs 10 on the upper surface thereof, all formed of one integral piece of sheet metal. The turntable or rotary support is also formed with an upper ball race 11 engaging the tops of said balls 5, whereby the turntable or rotary support is free to revolve easily and steadily on the ball bearing thus provided.

The food containers 12 may be of any suitable form or character, but are preferably wedge-shaped, as shown, so that they fit together when assembled on the turntable or rotary support, in the manner shown in the drawings. The ribs 10 engage the lower side edges of the food containers, thereby limiting the inward insertion of each container, toward the vertical axis of the turntable, these lower side edges of the containers being so formed that the flat sides of the containers will nevertheless come tight together. The outer and upstanding flanges 9 engage the outer lower edges of the food containers, when the latter are in place, and prevent outward displacement of the containers from the turntable or rotary support. It will be seen that the upper raceway 11 is so formed that it is flush with the
flat upper surface of the turntable, and hence the inner ends of the food containers 12 can slide over this raceway, when the containers are placed in position on the turntable.

The containers have flat top covers 13, preferably flat, as shown.

The sheet metal turntable or rotary support has a hole 14 for engagement with a hook or other device, whereby the sheet metal turntable may be dipped in the paint or enamel or other liquid with which it is to be coated. It will be seen that this hole is so located that when the turntable is taken out of the bath, and hung up to dry, all of the up-turned outer flanges 9 will be at such angles that they will drain freely and will not accumulate an undesirable amount of the liquid. When hung up in this way, to dry, there is no portion of the turntable that is in position to accumulate an undesirable quantity of the liquid.

As a matter of further and special improvement, a sheet metal receptacle, or a receptacle of any suitable or desired material, is formed with a lower vertical portion 14 adapted to fit in the conical central space formed between the inner ends of the food containers. This receptacle has an expanded or enlarged top portion 15, that extends over the flat top covers of the containers, and the receptacle itself has a suitable cover 16 to close the top thereof. A receptacle, such as dry ice, can be placed in this receptacle, thereby to keep the contents of the containers cool.

In the use of the rotary compartment container thus provided, it will be seen that the notches 8 in the outer edges of the turntable permit a finger to be placed on the bottom of each container, and permit the thumb of the same hand to be placed on top of the container, whereby the container can be raised over the flanges 9 and pulled outward, and this is done without letting go of the container before it is fully displaced from the turntable. In other words, the container is simply grasped between the thumb and finger, with the thumb on top of the container, and the container is thus lifted out without the necessity of letting go of it until it is placed on a table or other support.

It will be understood that the food containers 12, or containers for other commodities, may be of glass or other material.

It will be seen that the containers 12 have converging sides, formed on lines that are radial to the vertical axis of the turntable, and that these converging sides are preferably tight together when the containers are all assembled in place on the turntable. While five containers are shown, it will be understood that the invention is not limited to any particular number of containers, and that the number can be varied, by varying the angles of the converging sides of the containers, without departing from the spirit of the invention.

Looking down on the rotary support 6, it will be seen that the periphery is provided with depressions defining the vertical junctions or divisions between the outer sides of the containers, the latter having both their outer and inner edges arranged parallel with the vertical axis about which they revolve.

As shown more clearly in Fig. 4 of the drawings, it will be seen that the radial beads which are pressed upwardly in the sheet metal of the rotary support are each in line with the apex of a peripheral notch formed in the outer edge of the rotary support. Each notch has an immediately converging pair of upturned edges or flanges 8 co-operating with said radial beads to hold the containers in proper group arrangement. These notches, it will be herein said, in combination with the radial beads 9, define the radial divisions between the containers when the latter are viewed from above as shown more clearly in Fig. 1 of the drawings.

As shown, the notches or peripheral depressions 17 are not as deep as the notches or depressions 8 and may be of any suitable or desired depth, depending on the size and shape of the container sections, and the number of the latter, and each separate flange 9 is entirely within in the notch 17 to which it is allotted.

Thus, in effect, the container structure comprises a plurality of compartments, each compartment being removable independently, whereby the compartments form sections of the container construction as a whole.

What I claim as my invention is:

1. In a rotary container group, a flat rotary sheet metal support 6, a base upon which said support is pivoted to rotate about a central vertical axis, said sheet metal support having radial beads on the upper side thereof, defining the divisions between the containers, said beads being adapted for engaging the bottom of the container, said support having peripheral upperstanding container engaging means co-operating with said beads to removably maintain the containers in position.

2. A structure as specified in claim 1, said sheet metal support having peripheral notches whereby formed with said upturned edges opposite said beads.

3. A structure as specified in claim 1, said rotary support having peripheral notches therein, defining the divisions between the sections, with the apex of each notch in alignment with one of the plurality of radial beads on the upper surface of the rotary support.

4. A rotary support for a circular group of wedge-shaped containers, formed with peripheral notches opposite the radial divisions between said containers, and said with a separate upstanding flange for each side of each notch, entirely within in the notch, adapted to hold the containers against unintentional outward displacement.

5. In a food container, a turntable or rotary support adapted to receive and hold a plurality of wedge-shaped containers arranged in annular group formation thereon, with the converging sides of the containers opposing each other, said support having its outer edge formed with peripheral notches defining the vertical junctions between the containers, means on the upper surface of the support for positioning the containers thereon, said turntable having other notches for the outer edges thereof, one for the middle of the front of each container, to expose a portion of the bottom of each container, and means at opposite sides of each of said first-mentioned notches to hold the containers against outward displacement.

6. In a rotary container structure adapted to receive and support a group of circularly arranged containers, adjacent containers having opposed flat sides, the combination with a base, of a container support rotatively mounted on said base, the periphery of said container support being provided with notches forming re-entrant portions exposing a portion of the bottom of each container, and upstanding flanges on the periph-
ery of said support, alternating with said notches and adapted to engage the lower portions of the containers to resist outward movement of the latter.

7. A structure as specified in claim 6, each of said notches being located substantially at the middle of the outer side of its allotted container.

8. A structure as specified in claim 6, said notches being uniformly spaced apart, thus requiring containers of the same or uniform width.

9. A structure as specified in claim 6, and engaging means on the top surface of said support in the vertical planes of the opposing sides of said containers, for providing circumferential displacement of the containers on the support.

10. In a rotary food container group, a practically flat rotary support for a group of containers, and a base upon which said support is pivoted to rotate about a central vertical axis, said support having its outer edge provided with pairs of upturned flanges, arranged at angles to each other, for resisting both radial and circumferential displacement of the containers, with the outwardly converging ends of each pair of flanges spaced apart to permit the containers to project outwardly a distance between said ends, and the formation of the outer edge of the support exposing a portion of the bottom of each container at the middle of the outer end thereof.

11. A structure as specified in claim 10, the support being also formed with re-entrant portions at its outer edge, defining divisions between containers, and forming spaces between inwardly converging ends of flanges.

12. A structure as specified in claim 10, said support having a plurality of uniform maximum diameters at points between the outer ends of outwardly converging flanges.

13. In a rotary food container group, a base having a rotary support for a plurality of containers, said support having its outer edge formed with integral pairs of flanges, one pair for each container, the members of each pair converging outwardly, for engaging the bottom portion of the container, to prevent outward displacement of the containers, serving also to prevent circumferential displacement thereof, the outer edge of the support being interrupted at intervals to extend under the bottom of each container a distance back from the middle of the outer end of each container, exposing a portion of the bottom thereof.

14. In a rotary food container group, a practically flat rotary support for a group of containers, and a base upon which said support is pivoted to rotate about a central vertical axis, said support having its outer edge provided with pairs of outwardly converging upturned flanges, arranged with the members of each pair at an angle of not over ninety degrees to each other, for resisting both radial and circumferential displacement of the containers, with the outwardly converging ends of each pair of flanges uniformly spaced apart to expose the outer sides of the containers at the base thereof, the outer ends of said flanges being disposed a uniform distance from said axis and the formation of the outer edge of the support exposing a portion of the bottom of each container.

15. A structure as specified in claim 11, there being a separate pair of said flanges for each container, so that there are twice as many separate flanges as there are containers, with definite spaces between the pairs opposite the divisions between the containers.

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