

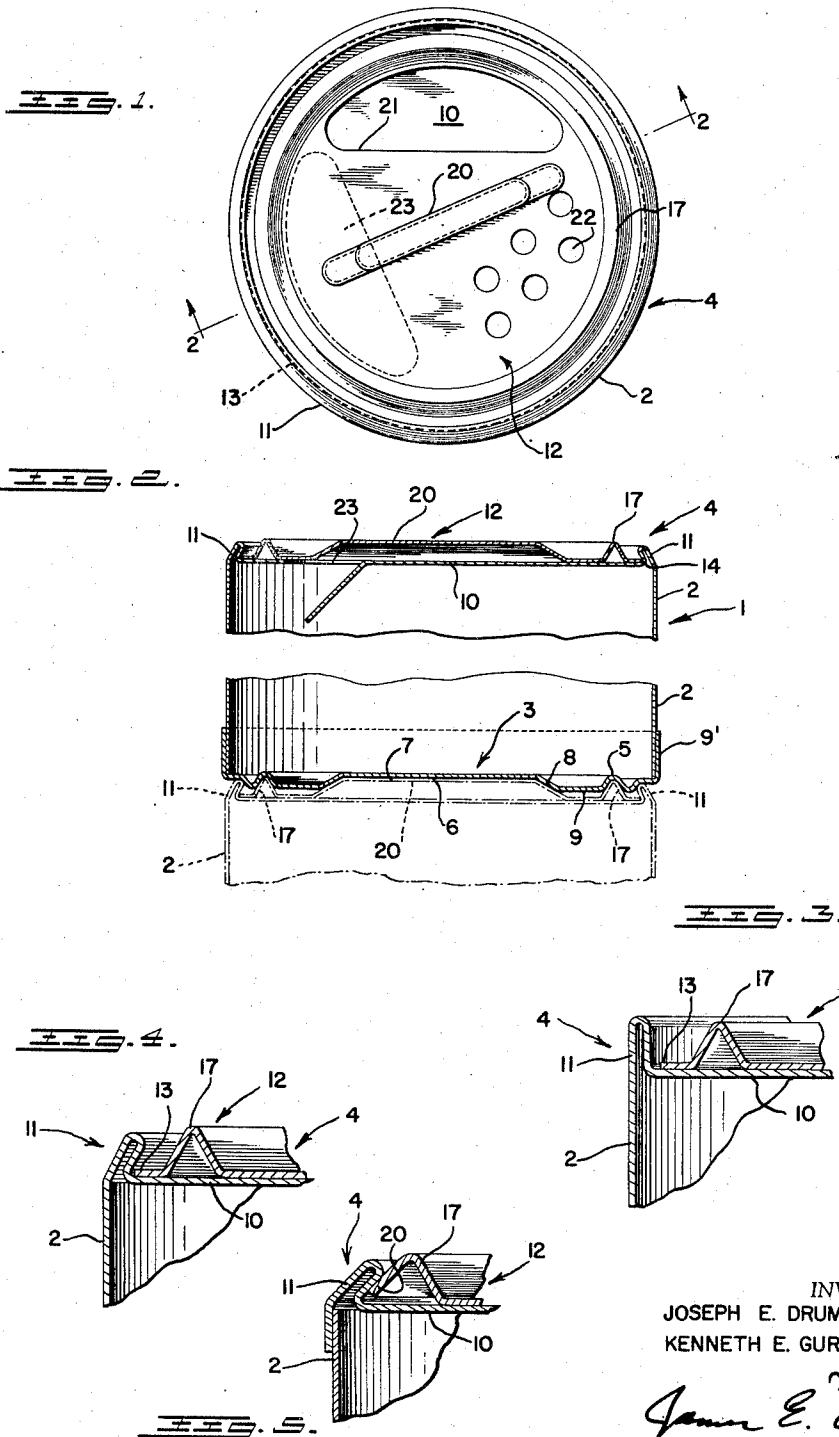
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DREDGE TOP DISPENSER NESTABLE WITH LIKE CONTAINERS

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DREDGE TOP DISPENSER NESTABLE WITH LIKE CONTAINERS

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This invention relates to containers of the type commonly employed for packaging and subsequently dispensing granular type food products, condiments, and like commodities and one especially adapted for the merchandising, handling, storage, and display of such products. More particularly, it is directed to an improved container for packaging such products, wherein the container is provided with a novel top and wherein novel means are also employed for superposing the containers one upon the other in non-slipping relationship.

Accordingly, it is a primary object of this invention to provide a dispensing container having novel means for stacking the container upon another container having similar characteristics during shipment, storage, and display of the same.

A further object of this invention is to provide a novel container having a rotatable cap element which is anchored to the container top in a unique fashion and with the container also being adapted to be stacked upon another container having similar characteristics regardless of the positions of the rotatable cap elements of either container.

A further object of this invention is to produce a novel container having rotatable cap element wherein the container is adapted to be stacked on another container of similar construction in such a way that there is a non-slipping interengagement between the two stacked containers regardless of the positions of the rotatable cap elements of either container.

These and other objects are attained by providing in a nestable dispensing container the combination of upstanding wall, bottom and top portions. The bottom portion in turn is provided with a continuous and upwardly directed rib adjacent the outer periphery thereof and a centrally disposed and inwardly directed dished section spaced a predetermined distance inwardly of the continuous rib. The top portion includes a perforated lid preferably formed integrally with the upstanding wall and a perforated cap mounted to rotate upon the lid. An inwardly and downwardly turned flange on the top margin of the wall portion serves to anchor the cap in place. The cap is also provided with a continuous upwardly directed rib adjacent the outer periphery thereof which is generally in vertical alignment with the upwardly directed rib on the bottom portion of the container. The cap is further provided with a diametrically arranged and elongated raised ridge element, the ends of which terminate a predetermined distance inwardly of the upwardly directed rib on the cap whereby when one container is nested upon another container having similar characteristics, the continuous rib on the bottom portion of one container will receive the continuous rib on the cap of the other container and the raised ridge element on the cap of one of the containers will be received regardless of its position within the dished section of the bottom portion of the other container.

Other objects and advantages of the instant invention will become more apparent by reference to the follow-

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ing detailed description when taken in conjunction with the accompanying drawings, wherein:

Figure 1 is a top plan view of a novel dispensing container of the instant invention;

5 Figure 2 is a broken cross-sectional view of the container shown in Figure 1 when taken along lines 2-2 thereof and with the container also being shown in nested arrangement with another container of similar construction;

10 Figures 3 and 4 are fragmentary enlarged sectional views of a portion of the top of the container of the instant invention showing one form of joint structure therefor and the various steps needed to form the same; and

15 Figure 5 is a fragmentary enlarged sectional view of a portion of the top of the container of the instant invention showing another form of joint structure therefor.

The container of the instant invention may be of a type which is generally used for grated food materials, such as grated cheese, condiments, or the like. It may be 20 comprised of an elongated cylinder 1 having a continuous annular upstanding wall portion 2, a bottom portion 3, and a top portion 4. The top portion 4 is advantageously integrally formed with the wall portion 2. The bottom portion or closure 3 includes a continuous annular and inwardly directed rib 5 located adjacent the outer periphery thereof, and an annular dish shaped section 6 which is concentrically disposed with respect to the rib 5 and is spaced a predetermined distance therefrom.

It will also be observed that rib 5 is advantageously 30 generally V-shaped in cross-section. The dish shaped section 6 is further defined by the flat wall section 7 and the annular and angularly disposed wall 8. Wall 8 is separated from the rib 5 by the web 9. Bottom closure 3 is snap fitted on wall 2 by sliding the flange 9' thereon 35 over the bottom margin of wall 2.

The top portion 4 of the container includes a lid 10 40 formed integrally both with the wall 2 and an inwardly and downwardly directed peripheral flange 11 of double thickness, flange 11 in turn being integral both with lid 10 and wall 2. Mounted on top of the lid 10 is a cap member 12 which is rotatable with respect to both the lid 10 and the flange 11 on upstanding wall 2. The cap 12 is anchored to the container in the following manner. The cap 12 is loosely placed upon lid 10 as indicated in 45 Figure 3. Thereafter, the flange 11 is turned or forced inwardly and downwardly about the peripheral edge 13 of the cap 12 as indicated in Figure 4. The peripheral edge 13 of the cap 12 while being anchored and enclosed within the flange 11 at the top margin of the upstanding wall 2 is still loosely enough held, whereby it is in freely 50 rotatable relationship with respect both to the lid 10 and upstanding wall flange 11.

The cap 12 is further provided with an upwardly directed annular continuous rib 17 located adjacent the 55 outer peripheral edge 13. It will also be noted that the rib 17 is generally V-shaped in cross-section or of a configuration approximating rib 5 on the bottom member 3 of the container. The cap 12 is further provided with at least one diametrically arranged, elongated raised ridge element 20 which can be engaged by the fingers of the 60 user for the purpose of turning the cap 12 in such a way that either the large perforation or opening 21 or the series of small perforations 22 may be brought into registry with an opening 23 in the lid 10 for the purpose of 65 dispensing the contents of the container as is conventional during the use of such a container.

As indicated in Figure 2 the construction of the container is such that it can be advantageously nested with a container of a similar structure during storage or ship- 70 ping. In this instance, the rib 17 of the cap 12 located at the top of the lowermost container is receivable within a similarly shaped rib 5 located at the bottom 3 of the

topmost container. The particular configuration of the cooperating ribs is of advantage in that it insures against slipping. It will also be noted that the dished section 6 at the bottom closure 3 of the supported container receives the raised ridge element 20 of the supporting container.

The configuration of the dish shaped section 6 of a supported container, in that it is annular and of a depth which approximates or is slightly greater than the height of the raised ridge element 20 of the supporting container is such that the dish shaped section 6 receives the raised ridge element 20 of the lower container regardless of the position of this ridge element. This is also due to the fact that the ridge element 20 terminates a distance from the rib 17 sufficient to permit its ready reception within the dish shaped portion 6 of the supported container.

It is also important that the rib 17 on the cap 12 and the rib 5 on the bottom 3 of each container be of such a height that they will provide for ready nesting of the containers without interference between the remaining portions of bottom closure 3 of the supported container and the top portion of the wall 2 of the supporting container. In any event, the construction of the container is such that upon nesting with another container having a similar construction, the raised ridge element 20 of the supporting container will be freely receivable within the dish shaped section 6 of the supported container regardless of the position of ridge element 20.

In a modified form of the invention as indicated particularly in Figure 5, the peripheral edge of the rotatable cap 12 may terminate at the bottom 20 of the rib 17 on the cap instead of a short distance therefrom. In this event it may also be necessary to relocate the rib 5 slightly on the bottom portion 3 of the container so that rib 5 and rib 17 will be in vertical alignment. In this case the rib 17 may also protrude a slight distance above the top of the flange 11 on the wall of the container to eliminate any interference with the flange 11 during stacking. When the cap 12 is formed in this manner the spring resistance of the rotatable cap 12 is used to advantage in maintaining a constant pressure lock between flange 11 and the cap 12 regardless of slight differences in tolerance that may exist between the two parts.

In certain applications, the body portion of the instant dispensing container may be formed with an elliptical or other cross-sectional configuration in which the nesting or stacking features of the invention would remain substantially unchanged. In addition, in some instances as indicated in Fig. 5, the top portion 4 may be formed separately from the wall 2.

It is obvious that various changes and modifications may be made in the instant device without departing from the spirit and scope thereof as defined by the appended claims, wherein what is claimed is the following:

1. In a nestable dispensing container of the type described, the combination of an upstanding wall, bottom and top portions, said bottom portion including a continuous, inwardly directed rib located adjacent the outer periphery thereof, and a centrally disposed and inwardly directed dished section, said top portion including a perforated lid and a rotatable perforated cap mounted upon said lid, flange means on said upstanding wall portion holding said cap in firm but rotatable engagement with the lid, said cap also being provided with a continuous, outwardly directed rib adjacent the outer periphery thereof and a diametrically arranged elongated raised ridge element, the ends of which terminate a predetermined distance from the said outwardly directed rib, whereby when one container is nested upon a container having a similar structure, the rib on the bottom portion of one container will receive the rib on the cap of the top portion of another container, and the raised ridge element on the top portion of one container will be re-

ceivable, regardless of its position, within the dished shaped section in the bottom portion of the other container.

2. A nestable dispensing container as set forth in claim 1, wherein the inwardly directed rib on the bottom portion and the outwardly directed rib on the cap are V-shaped in cross-section.

3. The dispensing container as set forth in claim 1, wherein the flange means, lid and wall portion are formed integrally with each other.

4. The dispensing container as set forth in claim 1 wherein the outer periphery of the cap is formed by the outer wall of the outwardly directed rib thereon.

5. In a dispensing device of the type described, the combination of an upstanding wall, bottom and top portions, said bottom portion being provided with a continuous and inwardly directed rib adjacent the outer periphery thereof and a centrally disposed and inwardly directed dished section spaced from said inwardly directed rib, said top portion including a perforated lid formed integrally with said wall portion and a rotatable perforated cap freely mounted upon said lid, means on the top margin of the wall portion holding said cap in place during rotation thereof, said cap also being provided with a continuous, outwardly directed rib adjacent the outer periphery thereof which is in vertical alignment with the inwardly directed rib on the bottom portion, and a diametrically arranged, elongated raised ridge element, the ends of which terminate a predetermined distance inwardly of the outwardly directed rib on the cap, whereby when one container is nested upon another container having similar characteristics, the rib on the bottom portion of one container will receive the rib on the cap of the other container and the raised ridge element on the top portion of one of the containers will be received, regardless of its position, within the dished shaped section of the bottom portion of the other container.

6. A device as set forth in claim 5, where said means on the top margin of the wall portion holding said cap in place during rotation thereof comprises a downwardly and inwardly directed flange of double thickness formed integrally both with said lid and said upstanding wall portion.

7. A dispensing device as set forth in claim 5 wherein the outer periphery of the cap is formed by an outer wall of the outwardly directed rib thereon.

8. A dispensing device as set forth in claim 5, wherein the inwardly directed rib of the bottom portion and the outwardly directed rib of the cap on the top portion are each generally V-shaped in cross-section.

9. A dispensing device as set forth in claim 5, wherein the upstanding wall portion and said lid are formed integrally with each other.

10. A dispensing device as set forth in claim 8 wherein the apex of the V-shaped rib on the cap extends a distance above the top end of the upstanding wall portion.

11. A dispensing device as set forth in claim 5, wherein said bottom portion is removable.

12. In a dispensing device of the type described, the combination of an upstanding wall, bottom and top portions, said bottom portion being provided with a continuous rib adjacent the outer periphery thereof and a centrally disposed and inwardly directed dished section spaced from said rib, said top portion including a perforated lid formed integrally with said wall portion and a rotatable perforated cap freely mounted upon said lid, means on the said top portion for holding said cap in place during rotation thereof, said cap also being provided with a continuous rib adjacent the outer periphery thereof which is in a predetermined vertical alignment with the inwardly directed rib on the bottom portion, and a diametrically arranged, elongated raised ridge element, the ends of which terminate a predetermined distance inwardly of the rib on the cap, whereby when one container is nested upon another container having simi-

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lar characteristics, the rib on the bottom portion of one container will nest with the rib on the cap of the other container and the raised ridge element on the top portion of one of the containers will be received, regardless of its position, within the dish shaped section of the bottom portion of the other container. **5**

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13. A dispensing device as set forth in claim 12, wherein said top portion is removably affixed to said wall portion.

No references cited.