

PATENT SPECIFICATION (11)

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(54) IMPROVEMENTS IN OR RELATING TO A SERVING PLATE SET

(71) We, DART INDUSTRIES INC., a company organized and existing under the laws of the State of Delaware, United States of America, of 8480 Beverly Boulevard, Los Angeles, California, 90048, 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:—

This invention relates to a serving plate set, and more particularly to a serving plate set, the elements of which are adapted for interengagement.

According to this invention there is provided a plate set comprising a first plate member having a bottom wall and an upstanding peripheral wall terminating at a first peripheral lip, a second plate member having a bottom wall and an upstanding peripheral wall terminating at a second peripheral lip, and a seal member having a central wall with a first peripheral rim and a second substantially oppositely directed offset peripheral rim, said rims having free edges, said first peripheral lip being adapted to fit against the inside face of said first peripheral rim in liquid-tight sealing relationship and said second peripheral lip being adapted to fit against the inside face of said second rim in liquid-tight sealing relationship, the arrangement being such that the plate set, when assembled, provides a container for consumables and when disassembled each plate member of the set may be used as a separate plate.

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

Figure 1 is an exploded top perspective view of a serving plate set in accordance with the present invention;

Figure 2 is a top perspective view of the serving plate set of Figure 1 shown in assembled form;

Figure 3 is a top plan view of the serving plate set of Figures 1 and 2;

Figure 4 is a part side elevational and part cross-sectional view of the assembled serving plate set taken along line 4—4 of Figure 3;

Figure 5 is an enlarged cross-sectional view of the circled segment 5 of Figure 4; and

Figure 6 is an enlarged cross-sectional view similar to the circled segment 5 of Figure 4 except that in Figure 6 the seal member is not employed.

Referring to the drawings, a serving plate set 10 (see Figure 1) includes a first plate member 12, a second plate member 14, and a seal member 16 which in assembled form (Figure 2) produce a container having two separate and distinct storage compartment sections. While each of these members 12, 14 and 16 are illustrated as being semi-ovate in shape, it should be understood that such may take any other suitable shape depending upon the contemplated end usage of the device.

Each of the plate members 12 and 14 are of a similar structural arrangement and respectively incorporate bottom walls 18 and 20, upstanding peripheral sidewalls 22 and 24, which terminate in first and second peripheral lips 26 and 28.

The sealing member 16 comprises a dished central wall, 30, 32 having an integral peripheral outwardly extending flange 38. Two oppositely directed peripheral rims 34, 36 are integral with and extend from the flange 38. As is apparent in Figures 4 and 5, the rims 34, 36 are slightly offset with respect to one another, and incorporate inwardly directed faces 40, 41, which are slightly slanted and are adapted firmly to engage in a liquid sealing fashion against the exterior surfaces of the peripheral lips 26 and 28 respectively of the plate members 12 and 14.

The respective plate members 12 and 14 vary slightly in their respective depths (see Figure 4) and the peripheral lip 28 of the plate member 14 is positioned and flared outwardly such that its upper edge defines a geometrically similar but slightly greater

area than the corresponding upper edge of the peripheral lip 26 of the plate member 12. This arrangement has been found advantageous with regard to the interengagement of the respective plate members with the sealing member 16. In particular, as will be apparent from Figure 5 when the plate members and sealing member are interengaged, the plate members being sealed by engagement of the outer surfaces of the respective lips 26, 28 with the corresponding inwardly directed faces 40, 41 of the rims 34, 36 of the sealing member 16, and the upper edges of the lips 26 and 28 being slightly offset relative to one another, the sealing pressure applied by each of these respective upper edges of the lips 26, 28 will be translated through the sealing member 16 in bending moment fashion to enhance the sealing effect between the sealing member and the respective plate members.

The bending moment forces act such that the pressure applied between the lip 26 and the rim 34 tends to produce an upward movement of the flange 38 in a pivotal fashion around point A. This results in the rim 36 being urged inwardly against the outer surface of the peripheral lip 28. Likewise, the sealing pressure applied between the peripheral lip 28 and the rim 36 tends to produce a similar but oppositely directed pivotal movement of the flange 38 which tends to urge the rim 34 against the lip 26 of the plate member 12.

Preferably, the plate members are formed from rigid plastics materials such as high density polyethylene or polypropylene, while the separating seal member is preferably formed of less rigid plastics materials such as low density polyethylene materials.

It will be appreciated therefore, that the serving plate set serves a dual purpose. Primarily, when assembled the set functions as a closed container having two separate compartments for food storage and secondly, when disassembled the food contained therein can be appropriately consumed directly from the plate members themselves. It should however, be appreciated that either of the plate members may be used alone with the sealing member until additional storage capacity is required. This single receptacle usage, of course, minimizes the space requirements used in such food storage.

Finally, it should be appreciated that the design and construction of the serving plate set facilitates the selective use of only the plate members 12 and 14 in the storage of foodstuffs. This is accomplished as shown in Figure 6, since the lips 26, 28 are formed so as

to be interengageable, the peripheral lip 28 being able to be slipped over the lip 26 to form a sealed receptacle. Thus, should it be desired not to use the sealing member 16, these two plate members alone can be employed effectively to containerize appropriate foodstuff products and depending upon the quantity of consumables to be stored, either of the plate members 12, 14 may be employed as the principal receptacle in this relationship.

WHAT WE CLAIM IS:—

1. A plate set comprising a first plate member having a bottom wall and an upstanding peripheral wall terminating at a first peripheral lip, a second plate member having a bottom wall and an upstanding peripheral wall terminating at a second peripheral lip, and a seal member having a central wall with a first peripheral rim and a second substantially oppositely directed offset peripheral rim, said rims having free edges, said first peripheral lip being adapted to fit against the inside face of said first peripheral rim in liquid-tight sealing relationship and said second peripheral lip being adapted to fit against the inside face of said second rim in liquid-tight sealing relationship, the arrangement being such that the plate set, when assembled, provides a container for consumables and when disassembled, each plate member of the set may be used as a separate plate.

2. A plate set according to claim 1 wherein said seal member has a dish-shaped central wall and is usable as a plate after said plate members have been separated from said seal member.

3. A plate set according to claim 1 or claim 2 wherein the inside face of each said rim is slanted inwardly toward said central wall.

4. A plate set according to claims 1, 2 or 3 wherein said peripheral rims extend from a radially outwardly extending flange that is integral with said central wall.

5. A plate set substantially as herein described with reference to and as illustrated in the accompanying drawings.

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