

[54] **SET OF DIFFERENT DINNER-WARE ARTICLES**

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[57] **ABSTRACT**

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[51] **Int. Cl. A47g 19/00**

[58] **Field of Search 220/97 R, 23.6, 23.86, 220/23.83, 1 R; 206/4**

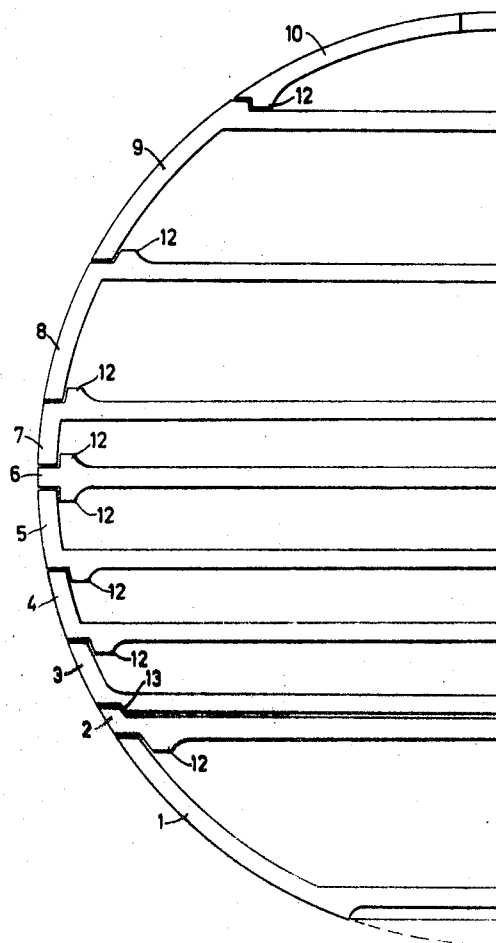
A set of dinner-ware articles such as saucers, plates and bowls is adapted to be stacked together to form a portable unit of a compact shape in which unit the articles are safe-guarded against relative lateral displacement and form a substantially closed shell.

[56] **References Cited**

20 Claims, 7 Drawing Figures

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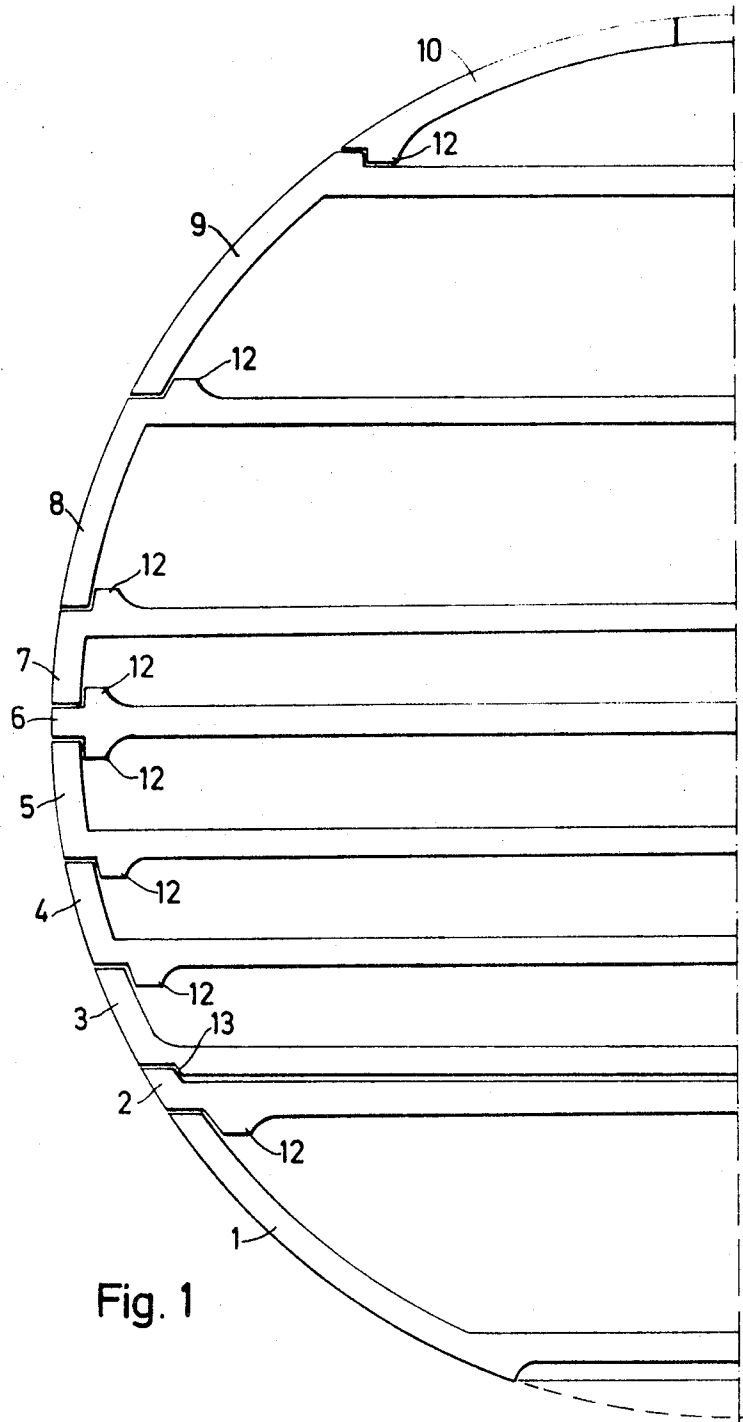


Fig. 1

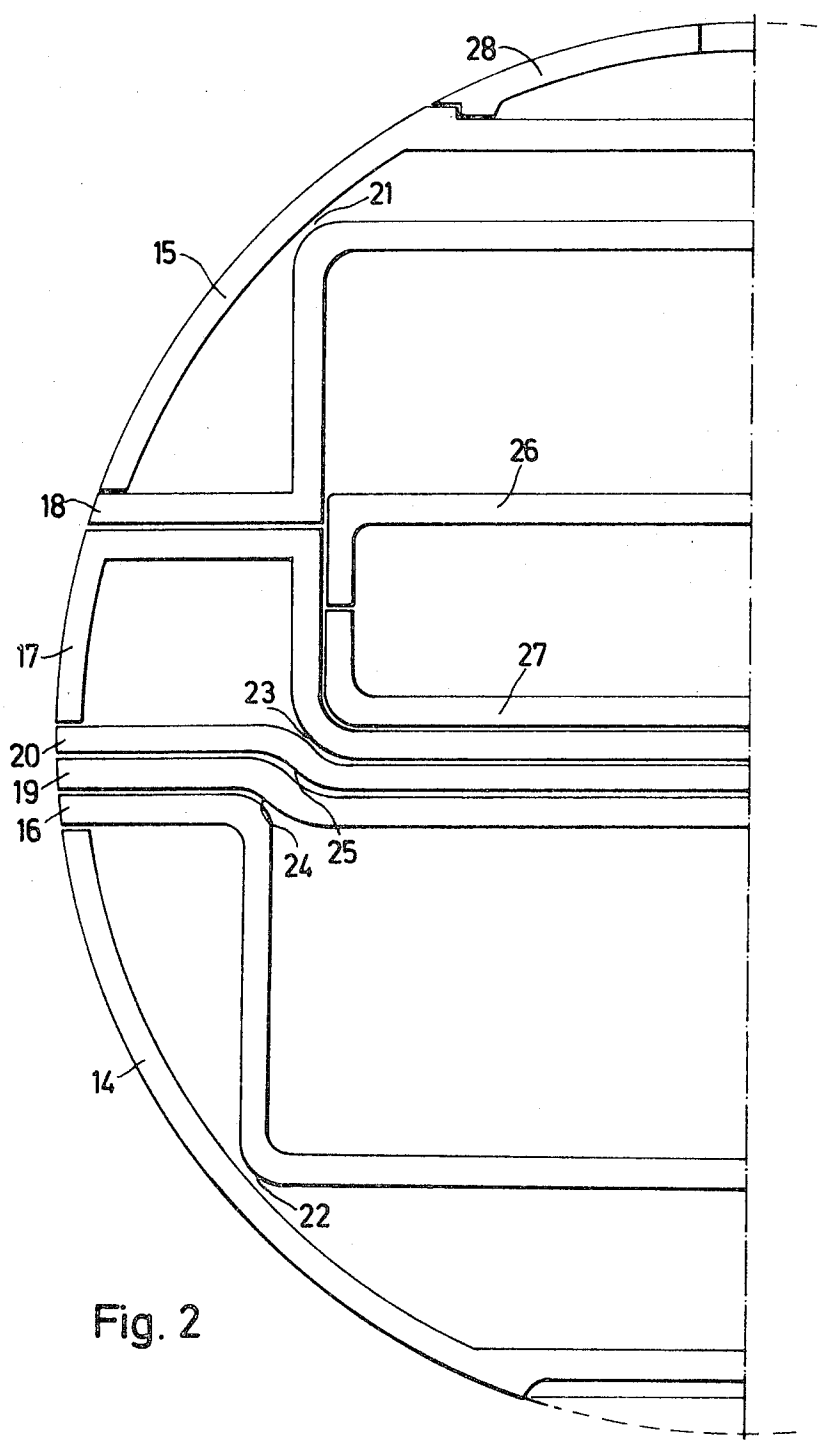


Fig. 2

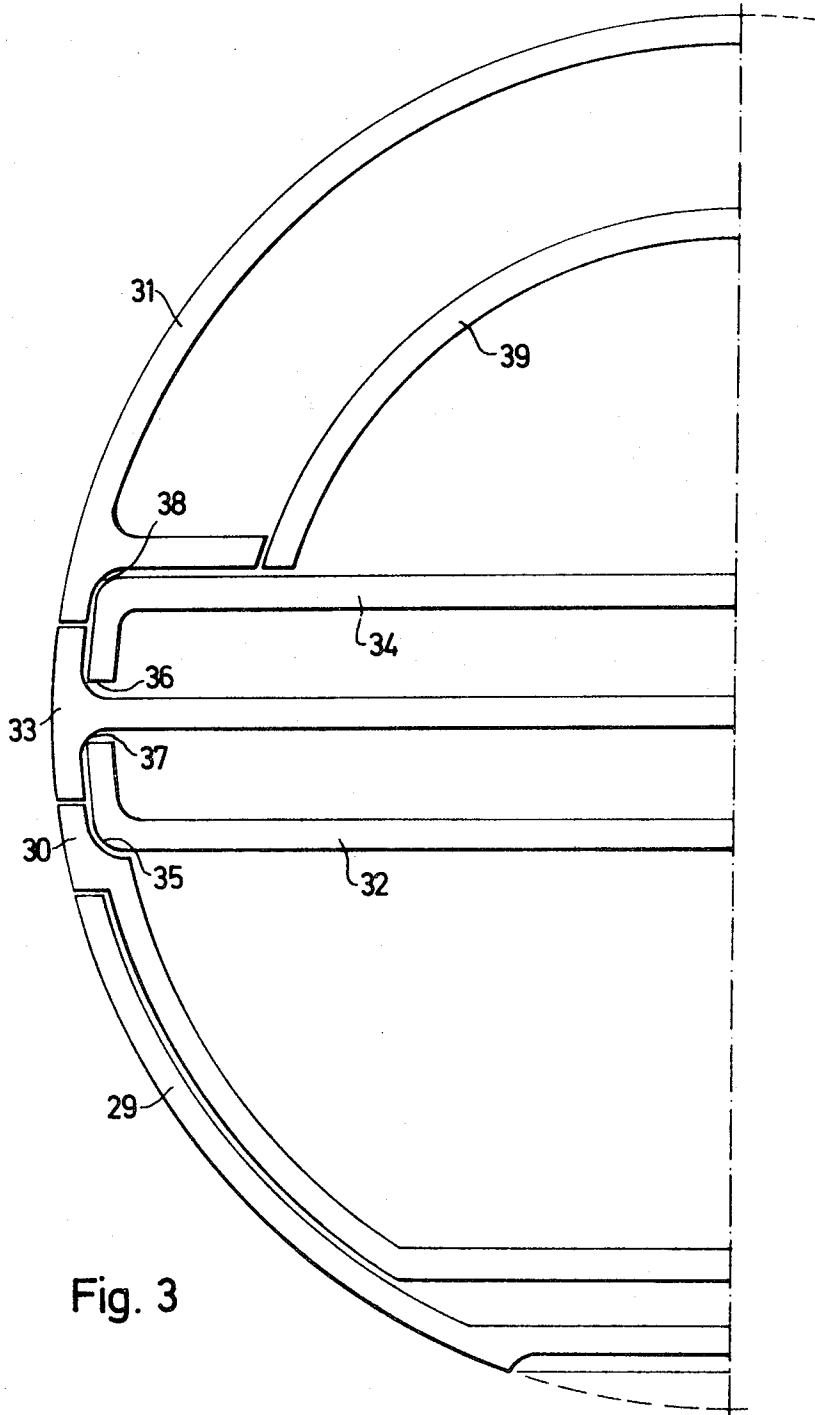


Fig. 3

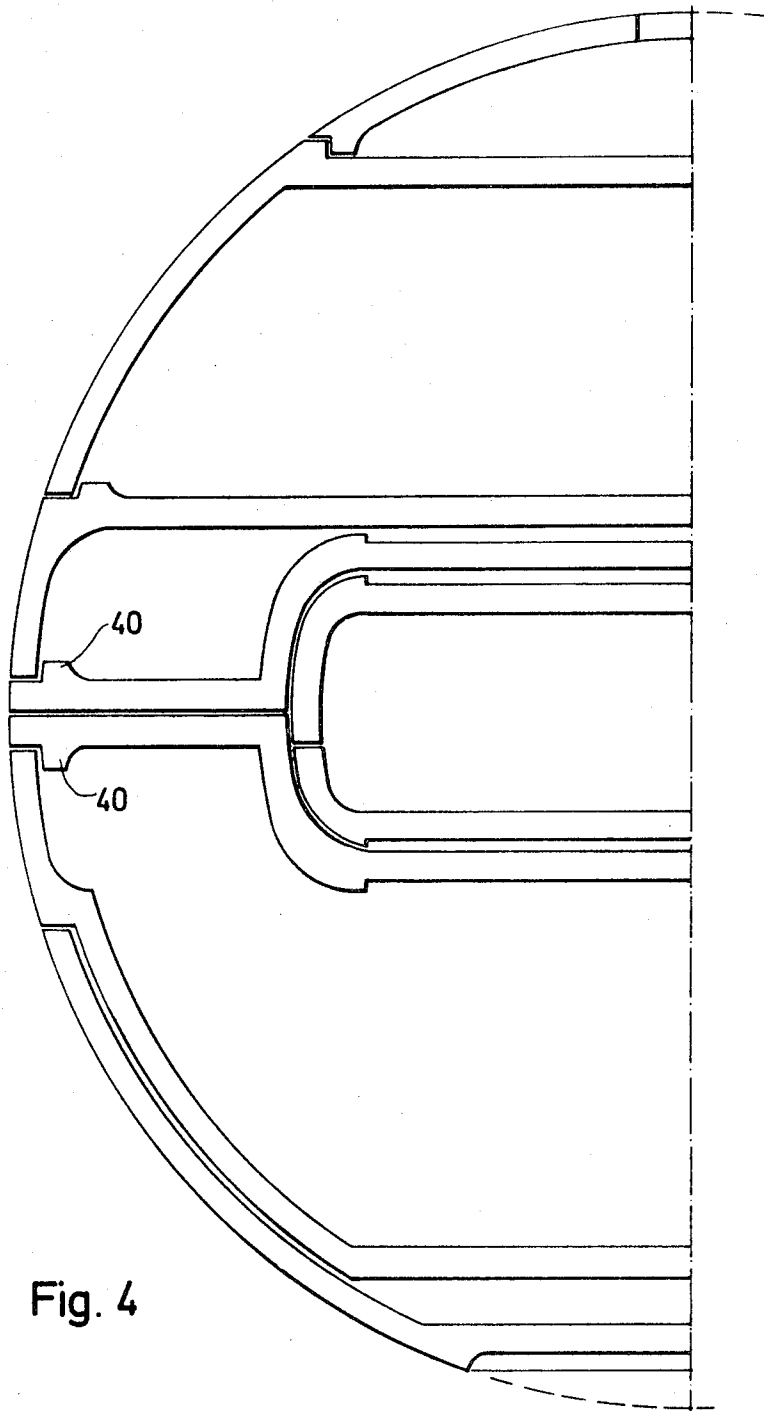


Fig. 4

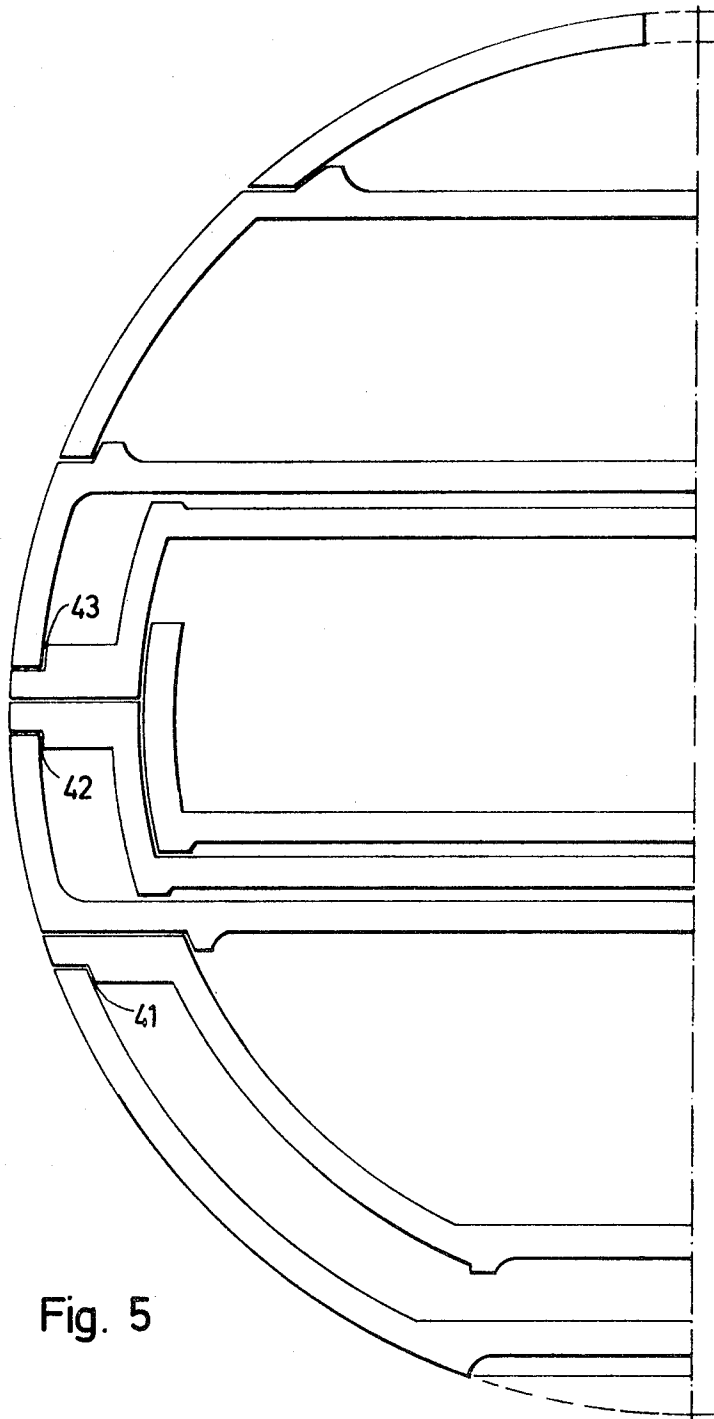


Fig. 5

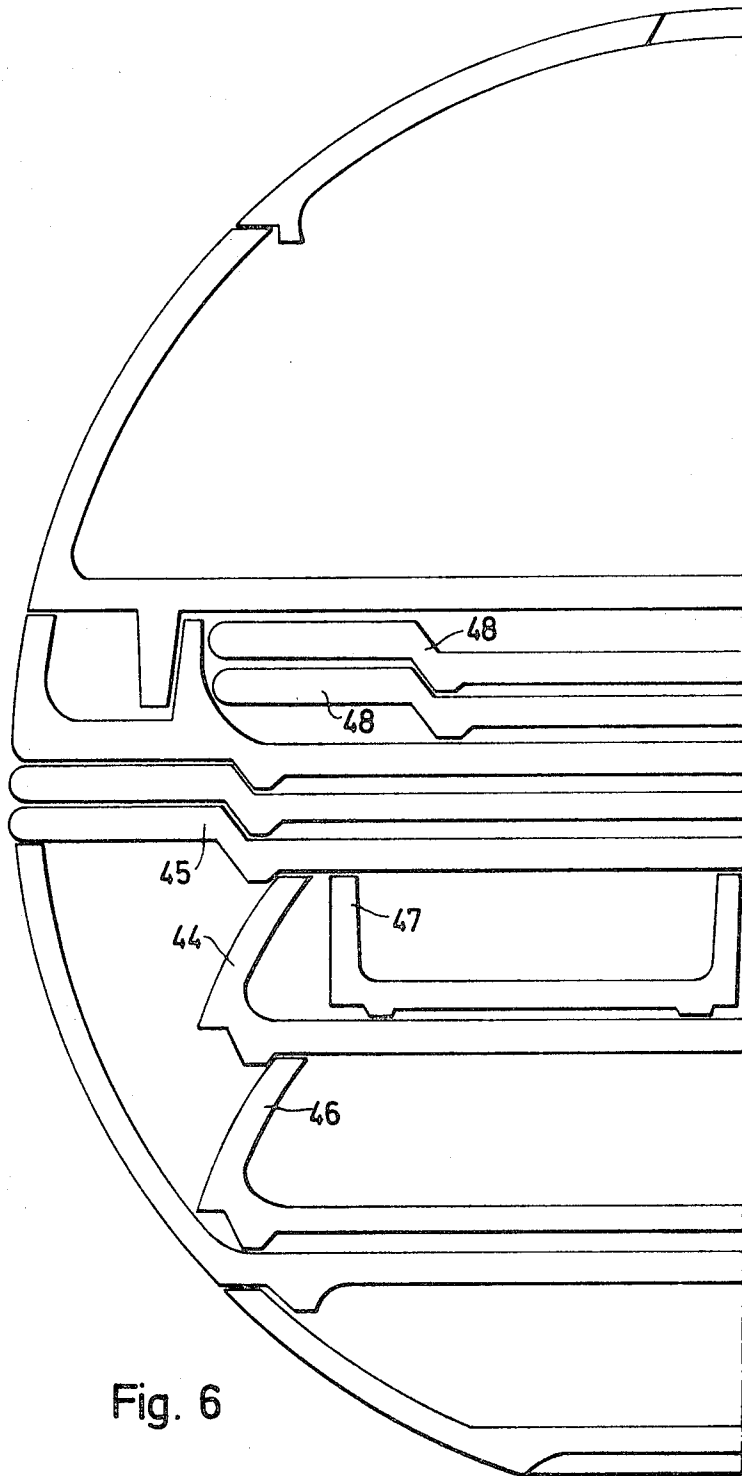


Fig. 6

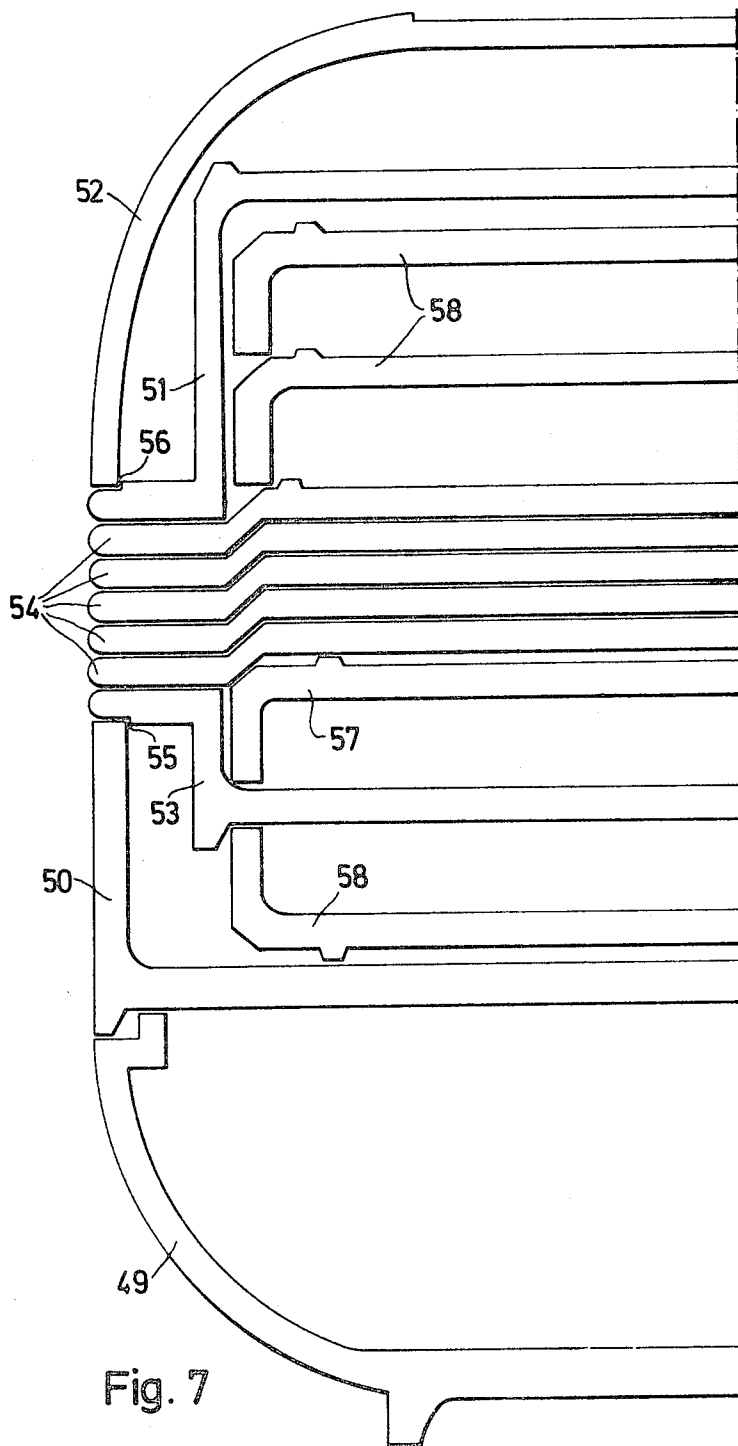


Fig. 7

SET OF DIFFERENT DINNER-WARE ARTICLES

BACKGROUND OF INVENTION

1. Field to which invention relates

The present invention relates to a set of different dinner-ware articles which can be stacked together to form a portable unit.

2. The Prior Art

Such sets of dinner-ware articles in the form of bowls or other dishes which can be put inside one another have been previously known. In such an arrangement one dish encloses the other dishes whose bottoms rest on the bottom of the underlying bowl. This technique of fitting or nesting the dishes inside one another, limits their shape and number considerably. When the unit is carried it is also not possible to avoid the inner parts rattling so that they may be damaged.

SUMMARY OF INVENTION

One aim of the invention is to reduce the work connected with the handling of dinner-ware. In particular it is intended to reduce or completely do away the work connected with the clearing up of the dinner-ware after washing up, putting it in the cupboard and removing it from the cupboard again. Such operations must be carried out individually for many articles of dinner-ware and involve a large number of movements of the hand. Such movements are made complicated and often difficult owing to the fact that the cupboard is generally at a substantially different level to the level of the table.

The present invention consists in a set of different dinner-ware articles adapted to be stacked to form a portable unit with the improvement that the stacked dinner-ware articles abut in a horizontal cross-section of the unit substantially exclusively near its periphery on a respective underlying article, means being provided for safeguarding the articles against lateral sliding, and peripheral parts of the articles being shaped to form a substantially closed shell of the unit which has a compact shape.

In accordance with this manner of construction it is possible to assemble a number of very different dinner-ware articles, for example a whole service, to form a unit, in which furthermore the individual parts are connected so securely and fixedly together that they are not endangered even when the unit is carried. The set of dinner-ware articles can thus be removed from the cupboard with one movement and placed on the dining table and in this respect there is a more secure handling of the dinner-ware than is the case with usual methods, in accordance with which the dinner-ware articles are stacked substantially individually on a tray and during carrying are always subject to the danger of sliding. Similarly the parts can be placed on top of one another on the draining board at a convenient height and can be placed in the cupboard as a whole with a single movement. However, economy the invention possesses still further advantages. A further and final aim of the invention is to avoid the tedious putting of the dinner-ware articles in the cupboard and removing them from it so that, as an additional advantage there is an economy in cupboard space. With the invention it is thus possible to pack a large quantity of dinner-ware in a small space and owing to the closed shell of the stack the dinner-ware does not become dusty, so that it can remain in the form of the unit in accordance with the

invention on a side table or the like without being in any way covered up or enclosed.

The putting together of the most various types of dinner-ware articles, such as those of a complete service so as to take up a very small space and in a compact shape is also of advantage before and during marketing of the articles. Owing to the substantial saving in space stocking the dinner-ware articles is in all respects made simpler and the fitting into each other of the individual parts allows the packing of the parts in the form of the unit simply by laying paper or the like between the articles so that there is an economy in the work involved and the space required.

A particularly significant feature is in the case of ceramic material the possibility in accordance with the invention of firing the ware at least partly in the form of the unit during first firing. In this case there is not only a significant economy in kiln space but there is also an economy as regards the use of refractory setters which also absorb a large amount of firing energy, since on placing the articles adapted to fit each other in accordance with the invention on top of one another, the one article can often serve as a refractory setter means for the one lying above it.

A substantially direct effect of the features in accordance with the invention is that the surface zone of the unit forms a stable support for the dinner-ware parts placed above any particular article. This support even withstands shaking. In order to avoid the dinner-ware becoming dusty the unit should at the same time form a substantially closed shell.

The possibilities of shaping the articles in accordance with the invention are extremely wide. A few principles of design mentioned in what follows are, however, particularly convenient and advantageous. They are mentioned individually but they can be combined to a substantial extent.

Thus, the articles of dinner-ware can have side walls, which are fitted together to form a substantially closed, for example spherical outer wall or shell of the unit. In this respect the articles can rest on top of one another at the edges of the side walls, that is to say in the outer wall. Between the edges it is also possible for a narrow gap to be left and the abutment face is arranged to be further inwards, though still close to the surface. This gap can, for example, be made with a substantial height for ornamental reasons so that a groove runs horizontally around the unit and the outer wall is interrupted in this respect, the gap then being covered by the side wall of another article lying behind it. The substantially closed shell of the unit does not need to consist alone of a substantially smooth, continuous outer wall, but it can comprise layers lying to the rear and serving for sealing. These layers do not even have to run parallel to the outer wall. Furthermore, plate rims or the like can extend as far as the surface of the unit and thus contribute to the formation of the shell of the outer wall. In this respect they can also be so bent that, like the side walls of bowls they form substantial sections of the surface of the unit.

In this respect as well the principle is to be followed that the articles of dinner-ware concerned do not have to abut at their rims; preferably, however, at least at those positions where two consecutive flat rims occur, the rims lie on top of one another. On the whole always at least three or four, however generally more dinner-

ware parts, will contribute to the formation of the outer wall.

In order to ensure that lateral sliding does not occur, there is the possibility of making the abutment faces with shoulders for fitting together. Furthermore, it is possible to provide stop faces separate from the abutment faces. It is especially convenient to provide such shoulders and stop faces on the side walls and/or feet of the dinner-ware articles. Furthermore, it is possible to incline the abutment faces themselves so far towards the horizontal cross-section, that is to say for example to make them conical, that there is a self-locking action which bars any lateral sliding.

In this respect it is also possible that some of the stops are formed by articles which are inserted in addition to the articles of the set coaxially in relation to the latter into the unit, these inserted articles having a smaller cross-section and therefore not abutting or resting at a position adjacent to the periphery of the concerned cross-section of the unit. These additional articles of dinner-ware are, in accordance with the wording used in the present specification and claims, not parts of the set but necessary accessory parts to it. Furthermore, in addition to the dinner-ware parts of the set which can be fitted together to form a unit and the necessary accessory parts it is possible to insert further parts into the unit in the cavities between the other parts. On the whole, however, the accessory parts and in particular the said further parts should be limited in number as compared with the supporting dinner-ware parts of the set, since they are generally less stable in the unit. This does however not exclude the possibility of the accessory and the said further parts having a supporting function at one position or another. It is also possible to cause one or more of the said further parts to a lesser extent to help in the formation of the surface, particularly at the upper part where such parts do not have to support any other parts or only have to support a few other parts.

Also as regards the assembly of dinner-ware articles there is a large selection of opportunities within the scope of the invention. It is particularly practical if the unit, including the accessory and the further parts is a complete service, suitable for at least a few persons, for example two. In this case it is possible as a further practical feature to arrange all the dinner-ware articles required for one person alone above the others, so that in case articles for only one person are needed only the upper part of the unit has to be lifted off and the unit does not have to be completely disassembled. There is, however, an advantage in arranging, for example, plates, bowls or the like together.

LIST OF SEVERAL VIEWS OF DRAWINGS

FIG. 1 shows a cross-section of the left half of dinner-ware articles in accordance with this invention, in assembled relationship; and

FIGS. 2-7 show similar views of other embodiments of dinner-ware articles according to the instant inventive concepts.

DESCRIPTION OF PREFERRED EMBODIMENTS

Starting from the bottom FIG. 1 shows a bowl 1, a platter 2, three plates 3, 4 and 5, a platter 6, a further plate 7, a deep plate or a bowl 8, a bowl 9 and a candle holder 10. The side walls of the bowls the plates and the platter 2 fit together and, respectively, with the edge of

the platter 6. They thus form a smooth closed outer wall and shell of the unit. All parts in this unit lie on the respective underlying part. They are held against lateral sliding by feet 12 or a shoulder 13.

In the case of the embodiment in accordance with FIG. 2 the shell of the unit is formed below and above, the latter with the exception of the top part, by the side walls of respective bowls 14 and 15 and therebetween by the rims of three bowls 16, 17 and 18 and of two plates 19 and 20. The bowls 15, 16 and 17 lie at the outside on the underlying part. The rims partially lie with their entire faces on top of one another; by thickening the rims in the outer part it would, however, be possible to arrange for the abutment faces to lie right at the outside. Against lateral sliding the bowls 15, 16 and 17 are held by stop faces which are formed on the one hand by the side walls of the bowls 15 and 14 and of the plate 20 and on the other hand by the lower outer edge 21 and 22, 23 of the bowls 18, 16 and 17 respectively. A lateral sliding of the plates 19 and 20 is barred by the shoulders, which merge in shape with the lateral walls 24 and 25. Sliding of the bowl 18 is barred by the side wall of a small bowl 26 which is inserted between the bowls 17 and 18 as a accessory article. A further small bowl 27 is inserted also as a accessory article, which makes indirect contribution to stopping sliding since it carries the bowl 26. The uppermost part is the candle holder 28. The rim of the bowl 17 is so bent over that it is not only its edge but a larger flat section which lies at the surface.

FIG. 3 again shows a set of dinner-ware articles which on the whole form a smooth outer wall of the unit with their side walls and abut against each other at the outside. The parts are three bowls 29, 30 and 31 and three plates 32, 33 and 34. The side walls of the plates 32 and 34 serve to bar lateral displacement but these plates are, in contrast to the bowl 26 (FIG. 2) having the same effect, parts of the set since they have their abutment faces adjacent to the periphery of the cross-section concerned, that is to say at the edges 35 and 36. The possibilities of use of the unit would not be restricted if the parts 31 and 33 were to abut instead of in the outer wall for instance at the edges 37 and 38 on the respective plates. Finally the unit also includes a small bowl 39.

FIG. 4 includes as a further element a small bead 40 which forms a shoulder for stopping lateral sliding and is not like the safeguarding elements previously mentioned a natural part of the article.

FIG. 5 shows at 41, 42 and 43 shoulders which are adjacent to abutment faces. These shoulders are in the form of notches or circular grooves in comparatively thick rims.

FIG. 6 shows as an additional dinner-ware part a deep plate 44 which stops a flat plate 45 above it from sliding sideways; at a position somewhat further removed from the periphery of the unit it lies on a plate 46 of the same depth. Further articles include four fruit dishes 47 arranged in the deep plate 44 and two smaller flat plates 48 which in the above-mentioned structure have neither a supporting nor a safeguarding function and therefore are further parts.

FIG. 7 shows in contrast to the previously described spherical units a unit which generally has a cylindrical form but which could also be made in the form of a cube. It includes four dishes 49 to 52, a bowl 53 and five flat plates 54, which form the supporting structure,

which at two positions is held against lateral sliding by shallower grooves 55 and 56 than in the case of FIG. 5 and by a deep plate 57 at one position. Three identical further deep plates 58 do not perform any structural function.

In the upper half there are substantially the same parts or articles as in the lower half so that if only two persons are to be served, only the upper half, for example starting at the second flat plate 54, needs to be taken off. This unit can also be inverted. In this case on removing the upper half the dish 53 is also available. It is selfunderstood that a set of dinner-ware according to the invention can be manufactured from any material suitable to the production of dinner-ware, especially ceramic and synthetic materials.

What I claim is:

1. In a set of different dinner-ware articles adapted to be stacked to form a portable unit the improvement that the stacked dinner-ware articles abut in a horizontal cross-section of the unit substantially exclusively near its periphery on a respective underlying article, means being provided for safeguarding the articles against relative lateral displacement, and peripheral parts of the articles being shaped to form a substantially closed shell of the unit which has a compact shape, said closed shell of the unit being formed by peripheral portions of at least three of the dinner-ware articles which are placed on top of each other.

2. A set in accordance with claim 1 in which the dinner-ware articles at least partially comprise side walls which at least partially fit together in the surface of the unit in an aligned manner.

3. A set in accordance with claim 2 in which the dinner-ware articles at least partially abut on the respective underlying article in the outer wall of the unit formed by said side walls fitting together.

4. A set in accordance with claim 1 in which the dinner-ware articles are safeguarded against relative lateral displacement at least partially by shoulders adjoining the abutment faces.

5. A set in accordance with claim 1 in which the dinner-ware articles are safeguarded against relative lateral displacement at least partially by stop faces separate from the abutment faces.

6. A set in accordance with claim 1 in which the dinner-ware articles are safeguarded against relative lateral displacement at least partially by abutment faces being sloped in relation to the horizontal so as to pro-

duce a selflocking action.

7. A set in accordance with claim 4 in which the shoulders are formed by side walls of the respective dinner-ware articles.

8. A set in accordance with claim 5 in which the stop faces are formed by sidewalls of the respective dinner-ware articles.

9. A set in accordance with claim 5 comprising additionally smaller dinner-ware articles arranged coaxially in the unit and not reaching as far as the outer wall of the unit, these additional accessory articles having the said stop faces which are preferably formed by side walls.

10. A set in accordance with claim 1 comprising further dinner-ware articles suitably arranged in cavities between the said articles of the set.

11. A set in accordance with claim 1 in which the unit is substantially spherical.

12. A set in accordance with claim 1 in which the unit has substantially the shape of a bee hive.

13. A set in accordance with claim 1 in which the unit has the form of a squat cylinder.

14. A set in accordance with claim 1 in which the unit is substantially cubic.

15. A set in accordance with claim 1 comprising a tray on top of the unit serving for smaller articles of dinner-ware, the tray preferably having recesses for safeguarding them against relative lateral displacement.

16. A set in accordance with claim 1 comprising a service for at least two persons.

17. A set in accordance with claim 1 in which the unit is divided into an upper half and a bottom half, each half having the necessary dinner-ware articles for at least one person.

18. A set in accordance with claim 17 in which the dinner-ware articles of a service for at least two persons are arranged substantially symmetrically with relation to the horizontal central plane.

19. A set in accordance with claim 4 in which the shoulders are formed by feet of the respective dinner-ware articles.

20. A set in accordance with claim 5 comprising additionally smaller dinner-ware articles arranged coaxially in the unit and not reaching as far as the outer wall of the unit, these additional accessory articles having the said stop faces which are preferably formed by feet.

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