

[54] CLOSABLE DINNER SERVICE

[75] Inventors: **Paul K. Schilling; Thomas H. Eckdahl**, both of St. Paul, Minn.

[73] Assignee: **Plastics, Inc.**, St. Paul, Minn.

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[51] Int. Cl. **A45c 11/20, B65d 21/02**

[58] Field of Search..... **206/4, 72, DIG. 9; 220/23.83, 23.86, 31 S, 97 R**

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Primary Examiner—William I. Price

Assistant Examiner—Steven E. Lipman

Attorney, Agent, or Firm—Wicks & Nemer

[57] **ABSTRACT**

A closable dinner service device including a case having a body and a cover adapted to close said body and be opened relative to said body and in open position forming a serving tray, an opening formed in a wall of said body through which a food tray is inserted when the device is closed, the opening being closed by a side wall of the cover when the device is opened into tray formation, the side wall of the body and the side wall of the cover being hinged and an insert tray adapted to be received in the cover in overlying relation to the food tray with the cover closed upon the body, the service providing a substantially rigid tray when in opened extended condition.

10 Claims, 14 Drawing Figures

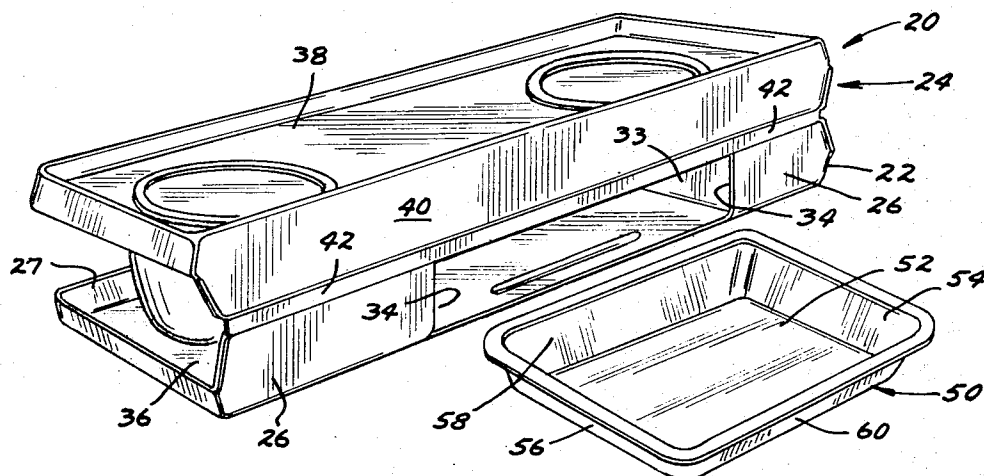


FIG. 1

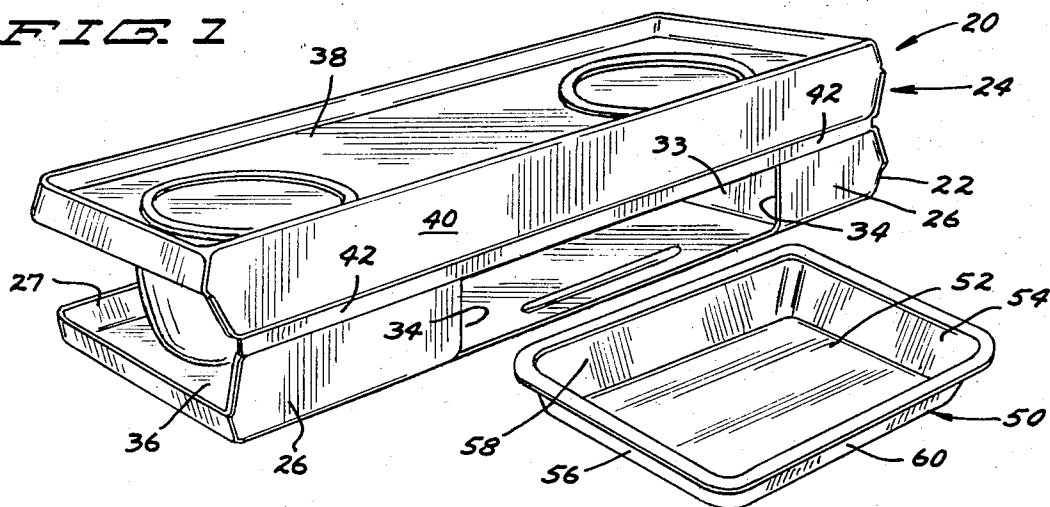


FIG. 2

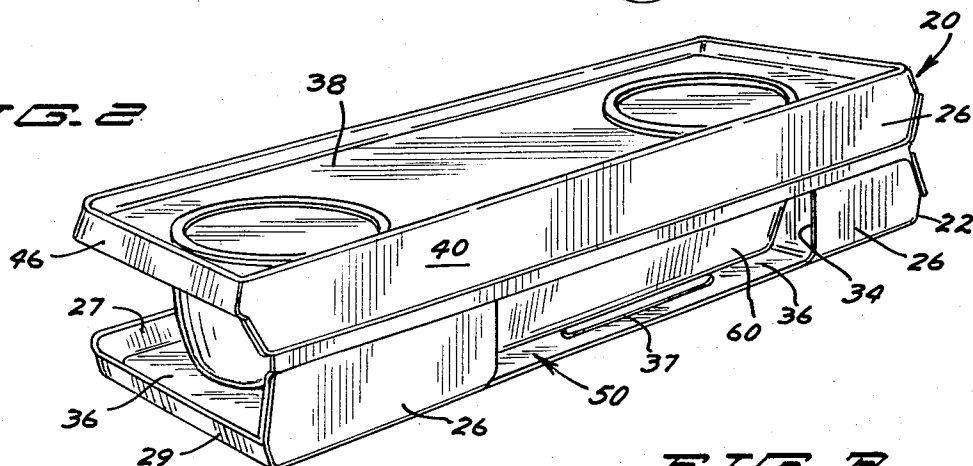
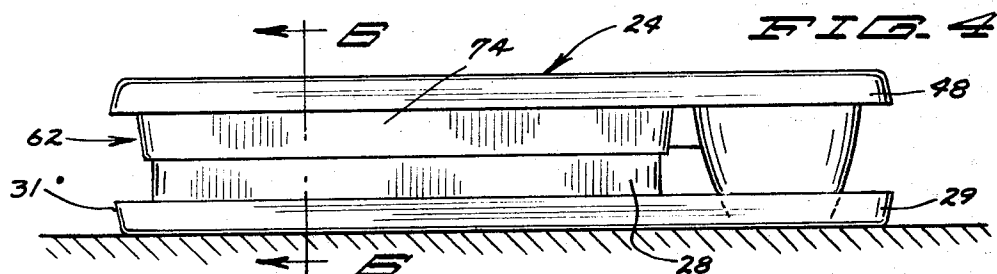
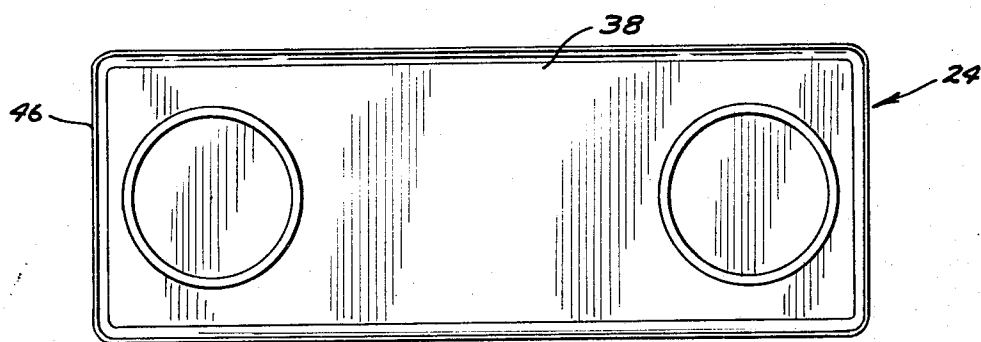
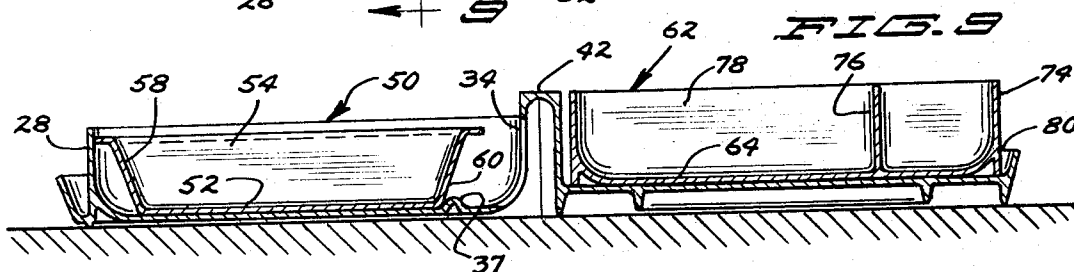
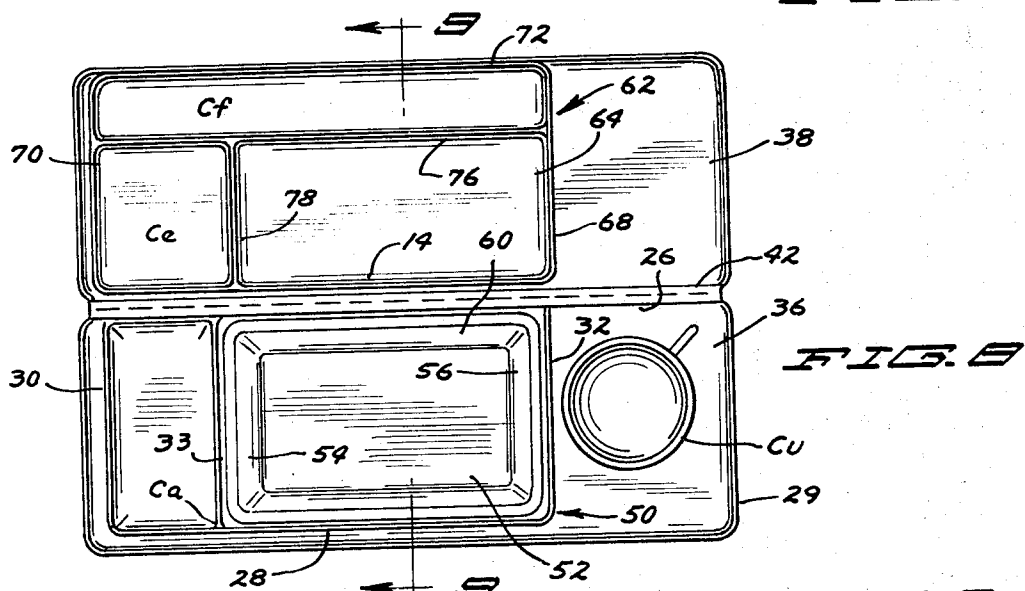
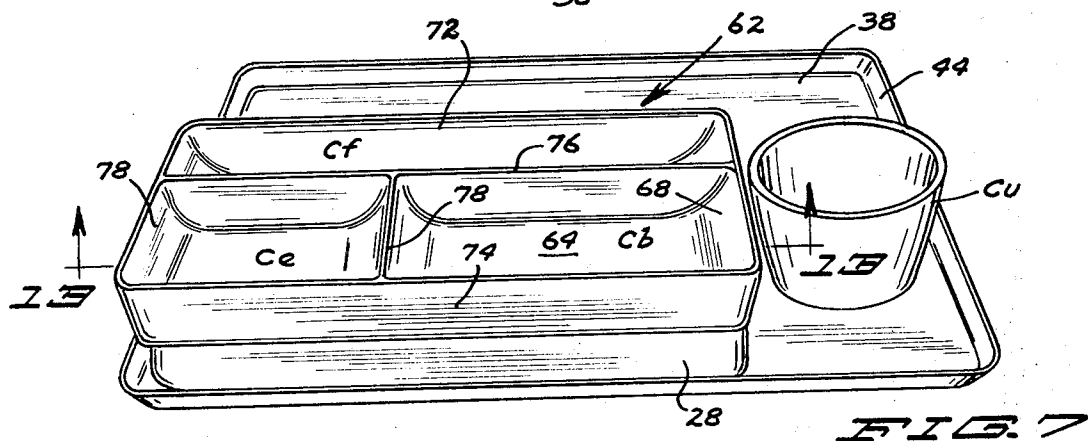
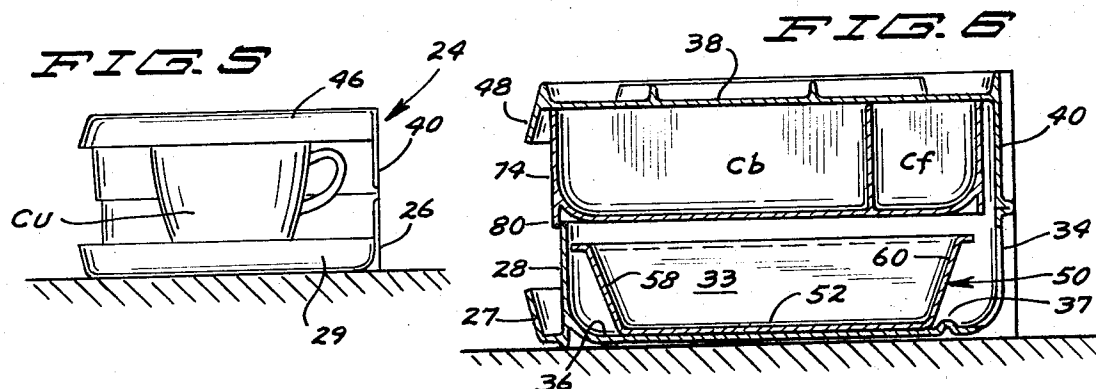
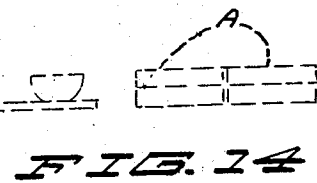
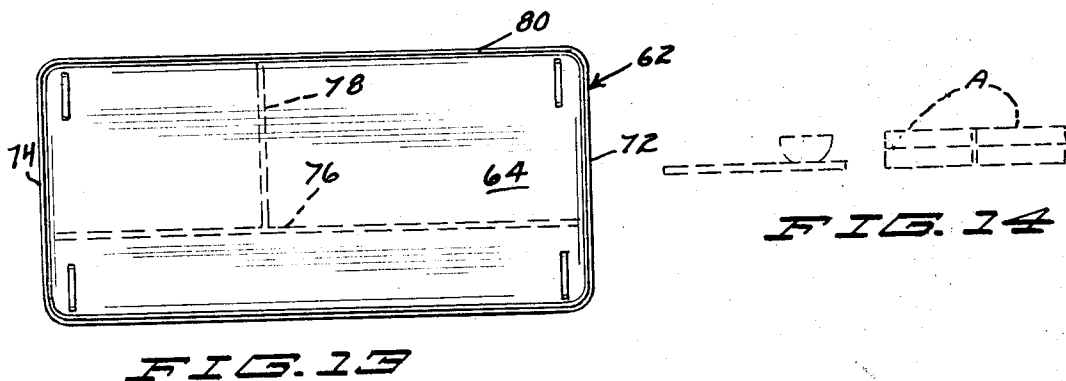
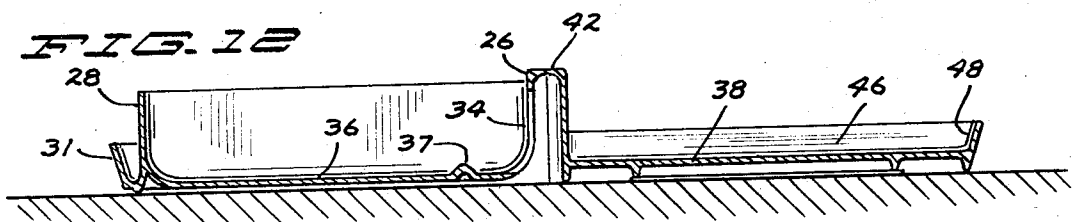
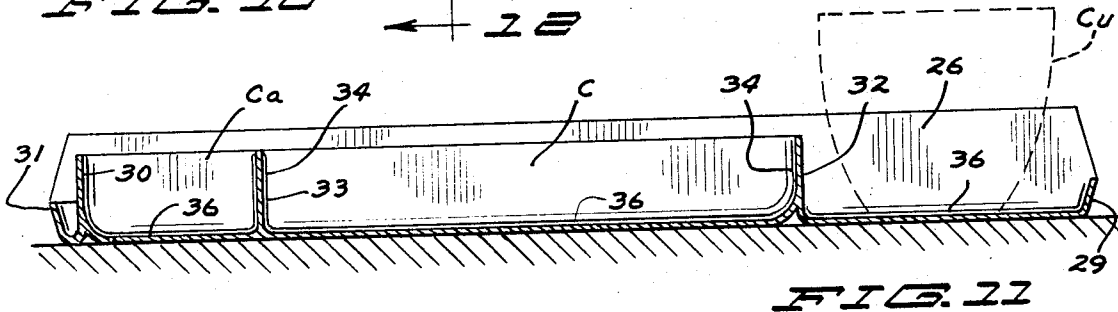
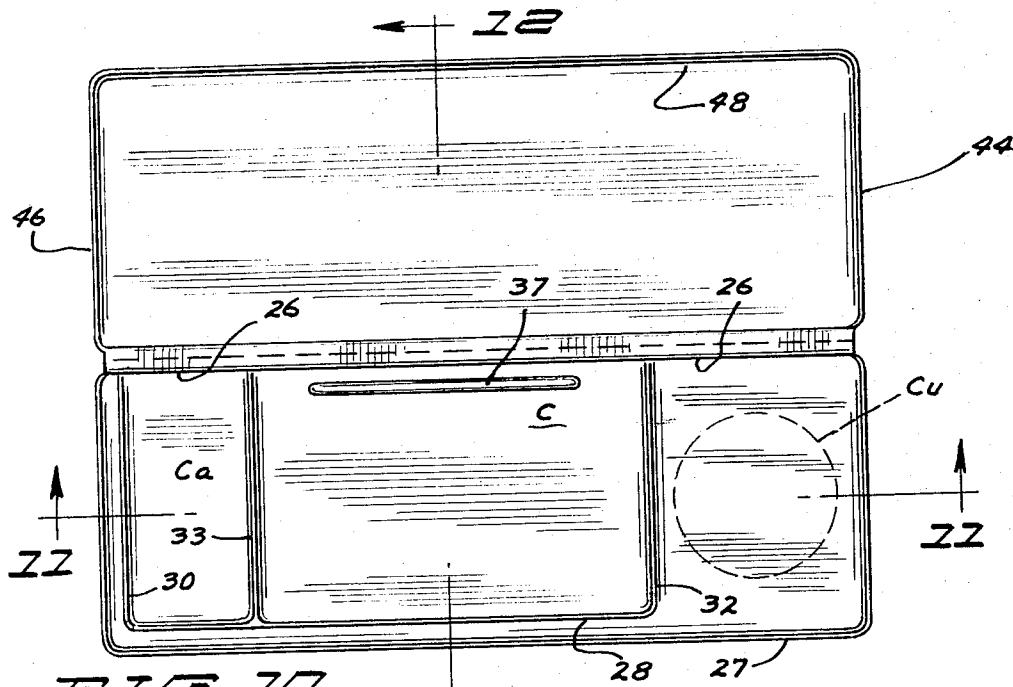


FIG. 3







CLOSABLE DINNER SERVICE

SUMMARY OF THE INVENTION

The invention relates to a dinner service device for serving a meal on an airplane where storage space is at a premium. With conventional known rigid flat trays for dinner service each supports a coffee cup thereon thereby giving the service tray a given vertical dimension due to the necessary cup together with the horizontal dimension of the tray. It is an object of the invention to provide a closable dinner service tray including a coffee cup which when two trays are closed the same occupy one half of the space occupied by two conventional flat trays with a coffee cup on each of the same. It is a further object of this invention to provide a closable dinner service which is compact and which allows carrying and handling of the same without the chance of the coffee cup and trays therein falling therefrom. With the service device in an opened extended condition the same provides a substantially rigid tray which may be easily handled and from which a meal may be eaten.

In the drawings forming part of this application:

FIG. 1 is a perspective view of a device for dinner service in folded closed position with the food tray in position for entry into the device embodying the invention.

FIG. 2 is a view similar to FIG. 1 in which the food tray is in position in the device.

FIG. 3 is a top plan view.

FIG. 4 is a side elevational view of the device.

FIG. 5 is an end view thereof.

FIG. 6 is a sectional view on the line 6—6 of FIG. 4.

FIG. 7 is a perspective view in opened extended position with the insert tray in stacked unmoved position.

FIG. 8 is a top plan view of the device in opened extended position with the insert tray in usable position within the tray.

FIG. 9 is a sectional view on the line 9—9 of FIG. 8.

FIG. 10 is a top plan view of the device in open position with the food tray and the insert tray removed.

FIG. 11 is an enlarged sectional view on the line 11—11 of FIG. 10.

FIG. 12 is an enlarged sectional view on the line 12—12 of FIG. 10.

FIG. 13 is a bottom plan view of the insert tray.

FIG. 14 is a broken line drawing in outline form illustrating the space occupied by two of the subject devices as compared with one conventional tray with a cup thereon.

Referring to the drawings in detail, the dinner service device A includes the case 20 which includes the body 22 and the cover 24. The body 22 has the side wall 26 and the side wall 27 together with the end walls 29 and 31. The side wall 26 is formed with the opening 34. Further provided is the bottom 36 to which the side walls and end walls are connected and an upstanding partition 28 is connected to the bottom 36 which is spaced from and parallel to the side wall 26. The partition 28 is connected to the first and second transverse walls 32 and 33 which are disposed inwardly of the end walls 29 and 31 and which connect with the side wall 26 and form a first compartment C. The transverse wall

32 is spaced from the end wall 29 sufficiently to allow a cup Cu between the wall 32 and the wall 29. A third transverse wall 30 is spaced from the wall 33 to form a second compartment Ca. The wall 30 is spaced inwardly of the end wall 31 and the partition 28 is spaced inwardly from the side wall 27.

The cover 24 includes the top portion 38 including the side wall 40 connected thereto. The side wall 40 is the same height as the side wall 26 with the edges of the side walls hingedly connected by the membrane portion 42 which is thinner than the walls 26 and 40. The cover also includes the end walls 44 and 46 and the side wall 48.

The numeral 50 designates a food tray including the bottom 52, the end walls 54 and 56 and the side walls 58 and 60. The bottom 36 of the body 22 is formed with the rib 37 which is so positioned that when the food tray 50 is in storage position it engages the rib which prevents displacement of the tray out the opening 34, particularly FIGS. 2, 6, and 10. Also provided is the removable insert tray 62 including the bottom 64, the end walls 68 and 70, the sidewalls 72 and 74, the longitudinally extending partition 76 and the short transverse partition 78 connected to the partition 76 and the side wall 74 thereby forming the compartments Cb and Ce. The length of the tray 62 is substantially equal to the distance between the wall 32 and the wall 30 whereby the end wall 68 of the insert tray 62 is in alignment with the wall 32 which allows the cup Cu in the position as illustrated in FIGS. 1, 2, 5, and 7. The partition 76 connecting the end walls 68 and 70 forms the longitudinally extending compartment Cf for receiving a spoon, knife and fork and the like. The compartment Ce is used for a roll and butter and the compartment Cb is usually for a salad. The side wall 74 of the insert tray is formed with the depending flange 80 which engages the partition 28 to prevent lateral movement of the insert tray when it is stored upon the partition 28, the transverse wall 32 and the transverse wall 30, particularly FIG. 6. The end walls 68 and 70 of the tray 62 are formed with the depending flanges 72 and 74, respectively, which engage the walls 30 and 32 to prevent longitudinal movement of the tray, FIG. 13. It will be seen that with the coffee cup in position upon the bottom 36 and the cover closed, the flange 44, the flange 29 and the flanges 27 and 48 prevent displacement of the cup from the device.

As an example of use of the device the same is used by placing the dessert portion of the service in the compartment Ca and an empty coffee cup upon the bottom 36 between the transverse wall 32 and the wall 29 as illustrated FIGS. 5, 7, and 8 and in broken lines in FIG. 10 and 11 in particular. The insert tray 64 is then loaded by placing a roll and butter and the like in the compartment Ce, a salad or the like in compartment Cb and knife, fork and spoon in the compartment Cf. The tray 64 is then placed upon the walls 28, 30 and 32 as in FIGS. 6 and 7 in particular. The cover is then moved to a position upon the body 22 in a closed position, FIGS. 1, 2, 4, and 6. Thus the uneaten portions of the dinner are stored in the device A and said group may then be refrigerated. When the unit is to be used, it is removed from refrigeration, and the food tray 50 with hot food thereon is removed from a heated unit. The tray 50 is then inserted through the opening 34 of the wall 26 and into the enclosed storage position as shown from FIG. 1 to FIG. 2 in particular where it is re-

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tained in the body portion by the rib 37 and the partition 28. With unit A so loaded it is easily carried in a compact condition ready for use and without fear of the trays and the coffee cup falling therefrom.

The cover is then opened to the position of FIG. 7 and then the insert tray is lifted and placed upon the cover 20 particularly as in FIG. 8 and in such condition the dinner may be partaken of. With the device A in the condition of FIG. 8 the same may be easily held in the extended condition due to the fact that the hinged side walls 26 and 40 hang and position together to form a reinforced backbone member for the entire device. It will also be seen that from a vertical dimension consideration that two service units A occupy one half that which is occupied by conventional flat trays with coffee cups thereon. In other words two flat conventional trays one upon the other with a coffee cup on each occupies space that accommodates four of the present devices. Similarly, two of the devices A in folded condition occupy the same space as one conventional flat tray with coffee cup thereon as illustrated in broken lines in FIG. 14.

We claim:

1. A closable dinner service comprising:

- a. a case having
- b. a body,
- c. said body having sidewalls, endwalls, and a bottom,

d. one of said sidewalls having an opening formed therein,

e. a cover having sidewalls, endwalls, and a top, said sidewall of said body having the opening being hingedly connected to a sidewall of said cover whereby the cover is closable upon said body,

f. a food tray being positioned in said body insertable through said opening when the cover is closed,

g. an insert tray being mounted in an overlying relation upon and above the plane of said food tray and within said cover with said cover upon said body,

h. said sidewall of said body having said opening and said sidewall of said cover hingedly connected thereto being of the same height, and

i. said opening being closed by the sidewall of the cover when the case is opened.

2. A dinner service according to claim 1 in which:

- a. the opening in the side wall of the case body extends substantially to the
- b. bottom of the case.

3. A dinner service according to claim 1 in which:

- a. the body and cover are made of plastic material and the hinge means includes a strip of the material thinner in thickness than the thickness of the side walls of the body and cover.

4. The dinner service according to claim 1 in which said insert tray includes means for limiting movement of the same upon said body and within said cover.

5. The device of claim 1 in which

- a. the top of said cover has a lip on one side and on each end thereof, and
- b. said bottom of said body has a lip on one side and each end thereof.

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6. The device of claim 5 in which

a. the space for the food tray extends from one sidewall of the case body to

b. a partition parallel to said sidewall and is terminated at one end by a transverse partition disposed inwardly of an endwall of the body and meeting the one sidewall and the partition.

7. The device of claim 1 in which

a. the top of said cover has a lip on one side and on each end thereof,

b. said bottom of said body has a lip on one side and each end thereof,

c. the space for the food tray extends from one sidewall of the case body to

d. a partition parallel to said sidewall and is terminated at one end by a transverse partition disposed inwardly of an endwall of the body and meeting the one sidewall and the partition.

8. A closable dinner service comprising:

a. a case having

b. a body,

c. said body having an opening formed therein,

d. a cover closable upon said body

e. a food tray insertable into said body through said opening when the cover is closed and

f. an insert tray for mounting in an overlying relation upon and above the plane of said food tray and within said cover with said cover upon said body,

g. wherein the body has

h. side walls and

i. end walls and

j. said opening is formed in one of said side walls, and

k. wherein the space for the food tray extends from one side wall of the case body to

l. a partition parallel to said side wall and is terminated at one end by a transverse partition disposed inwardly of an end wall of the body and meeting the one side wall and the partition.

9. A dinner service according to claim 8 in which:

a. the space in said body into which the food tray is inserted is terminated by a partition normal to the wall having the opening therein and

b. one end of the insert tray terminates at substantially the same location as the transverse partition when inserted into the case to form a space for a cup between said tray and transverse partition and the end wall.

10. A dinner service according to claim 9 in which:

a. the food tray falls short of is end of the body at which the cup space is disposed and

b. another transverse partition extending from said side wall to said parallel partition and forming another compartment,

c. said insert tray covering the above named compartment and the compartment receiving the food tray when the case is closed and

d. partitions in said insert tray forming compartments for miscellaneous articles.

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