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(54) **MULTI-BASIN SINK**

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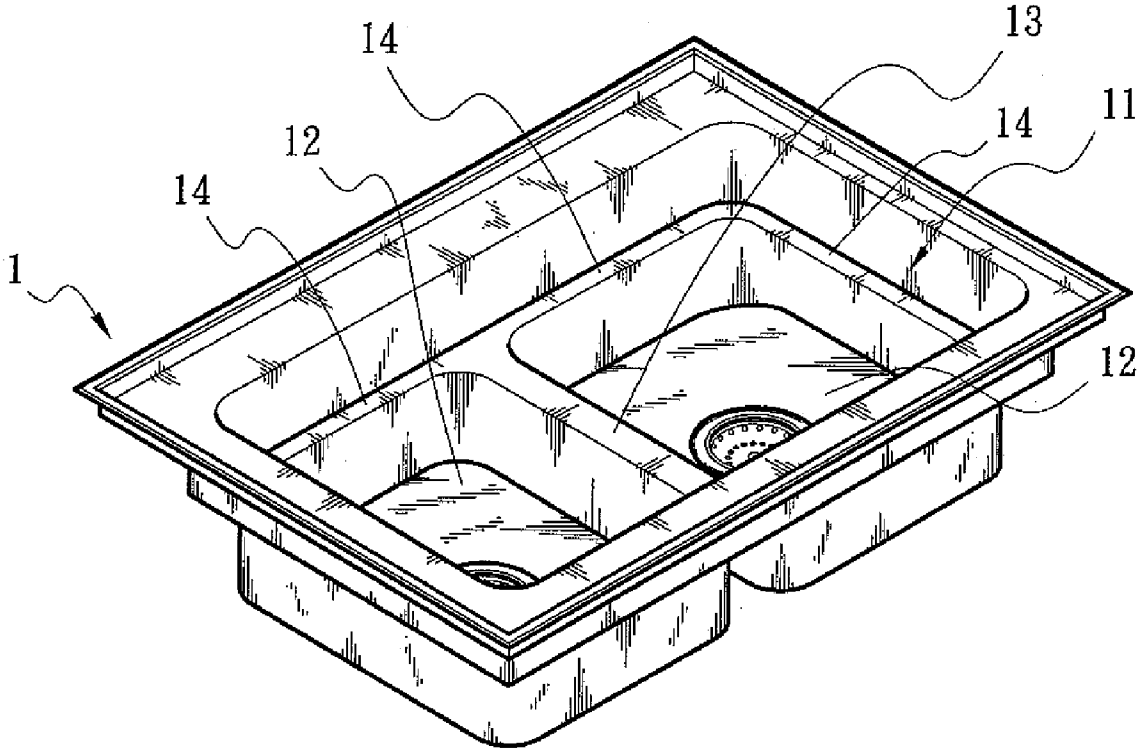
(57) **ABSTRACT**

A multi-basin sink includes a sink and an accommodation space recessed in the sink and segregated into multiple basins; one or a plurality of horizontal flange protruding toward interior of the accommodation space being disposed at a depth approximately one fourth up to three fourths below a middle section of the accommodation space at where closer to an opening of the basin to reinforce strength sideway of the entire sink; a board or disk laterally striding over the horizontal flange; a mobile partition being provided in and to adjust height of the partitioning portion in the sink.



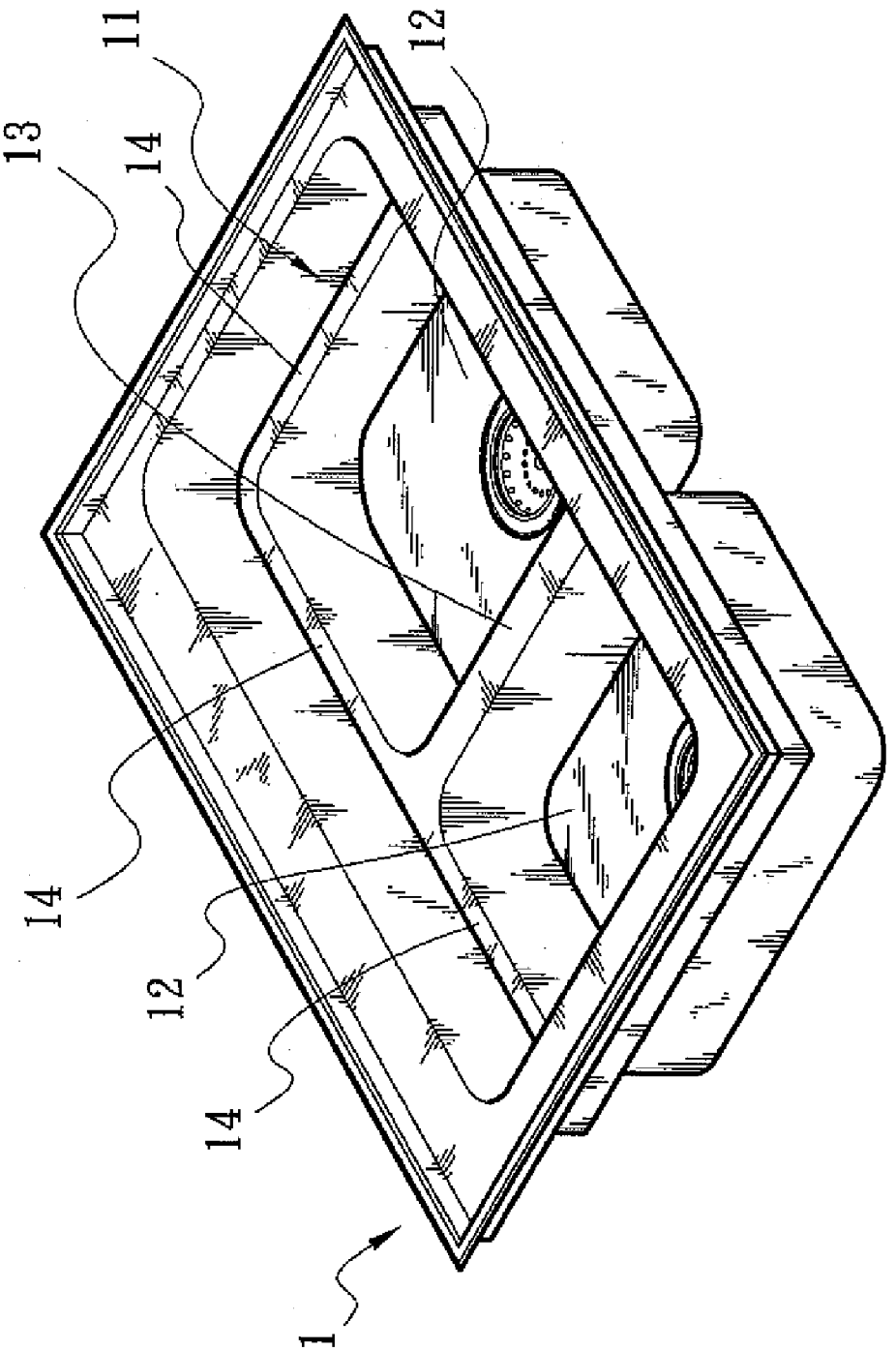


Fig. 1

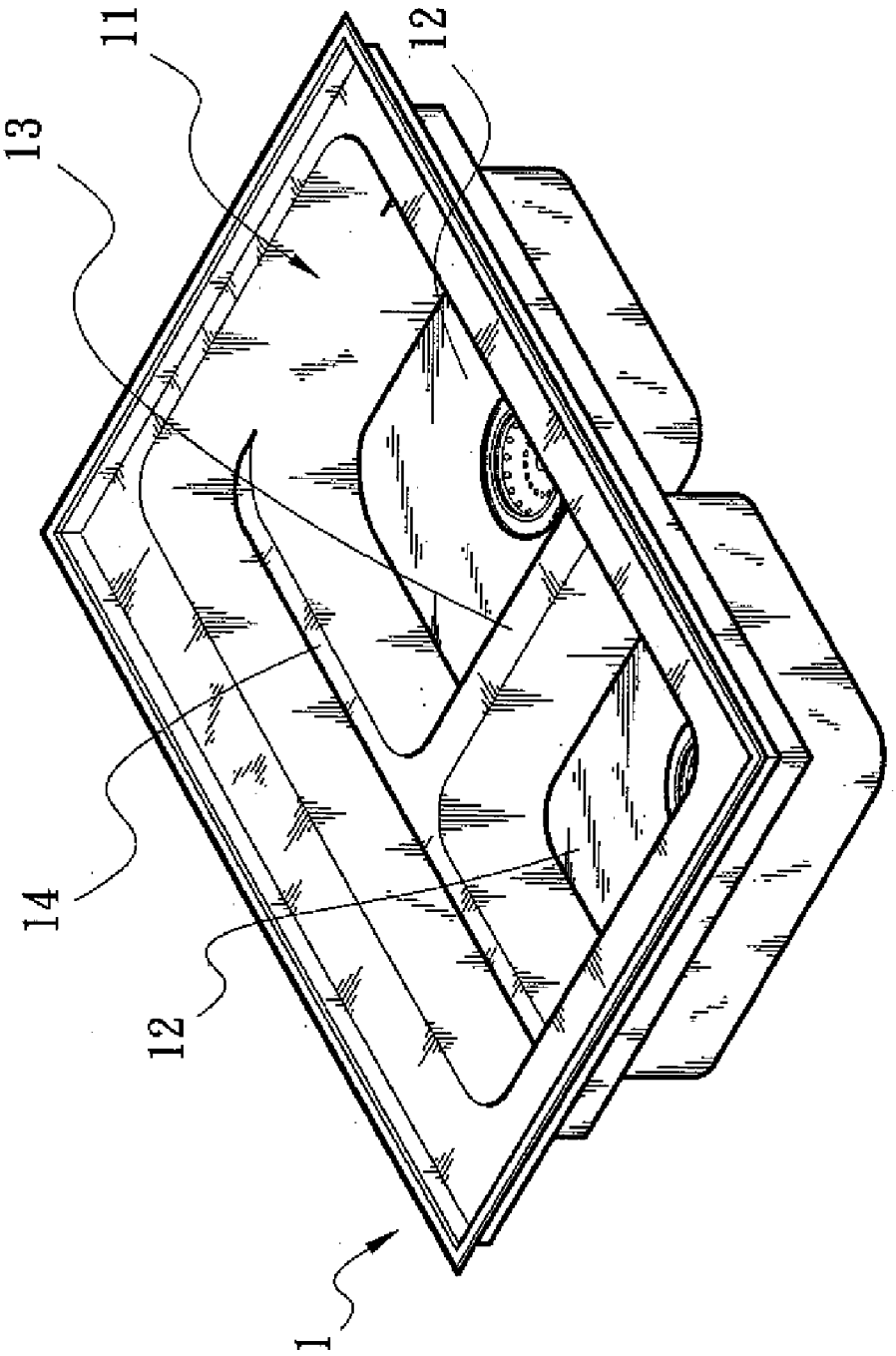


Fig. 1A

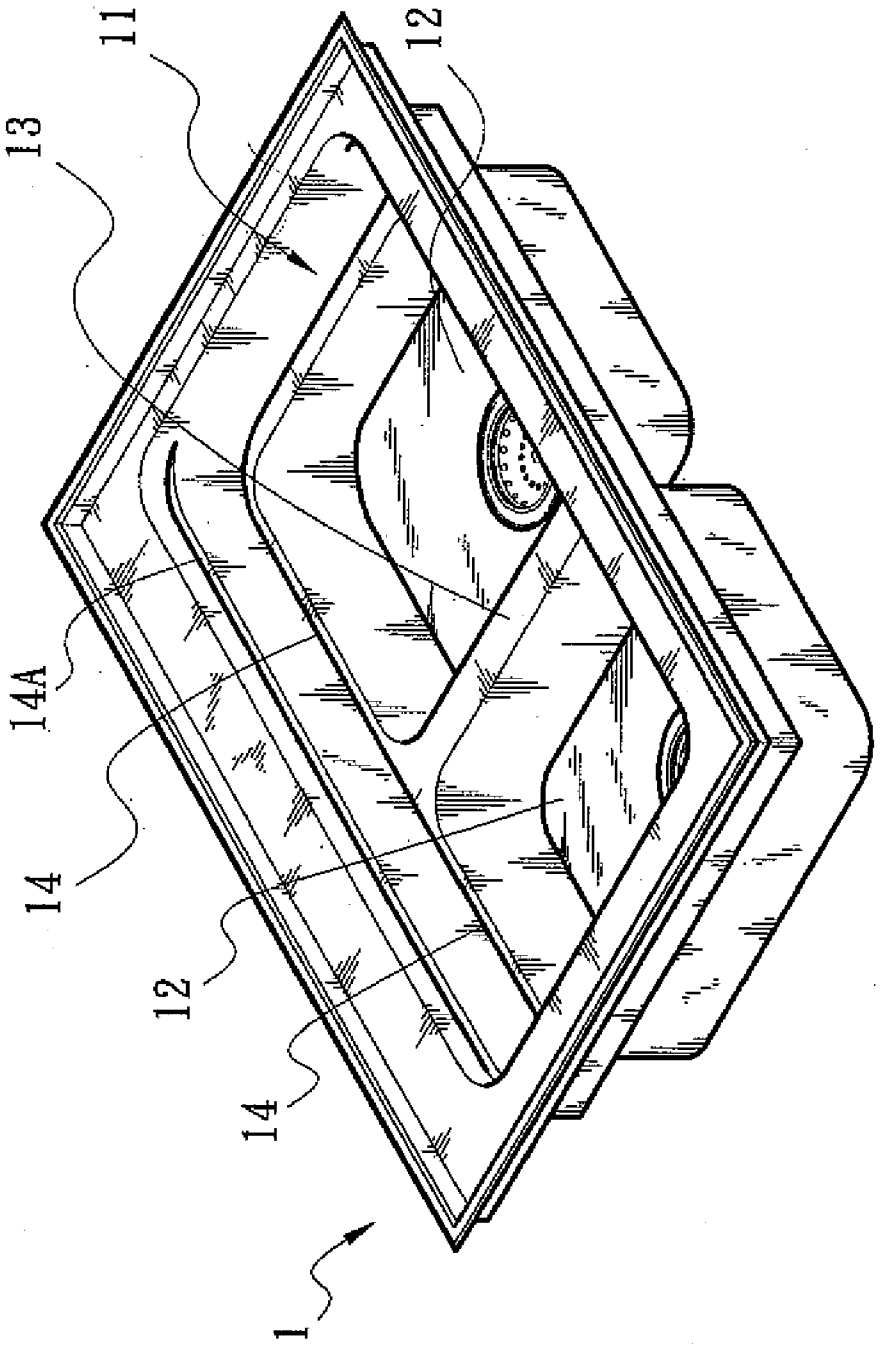


Fig. 1B

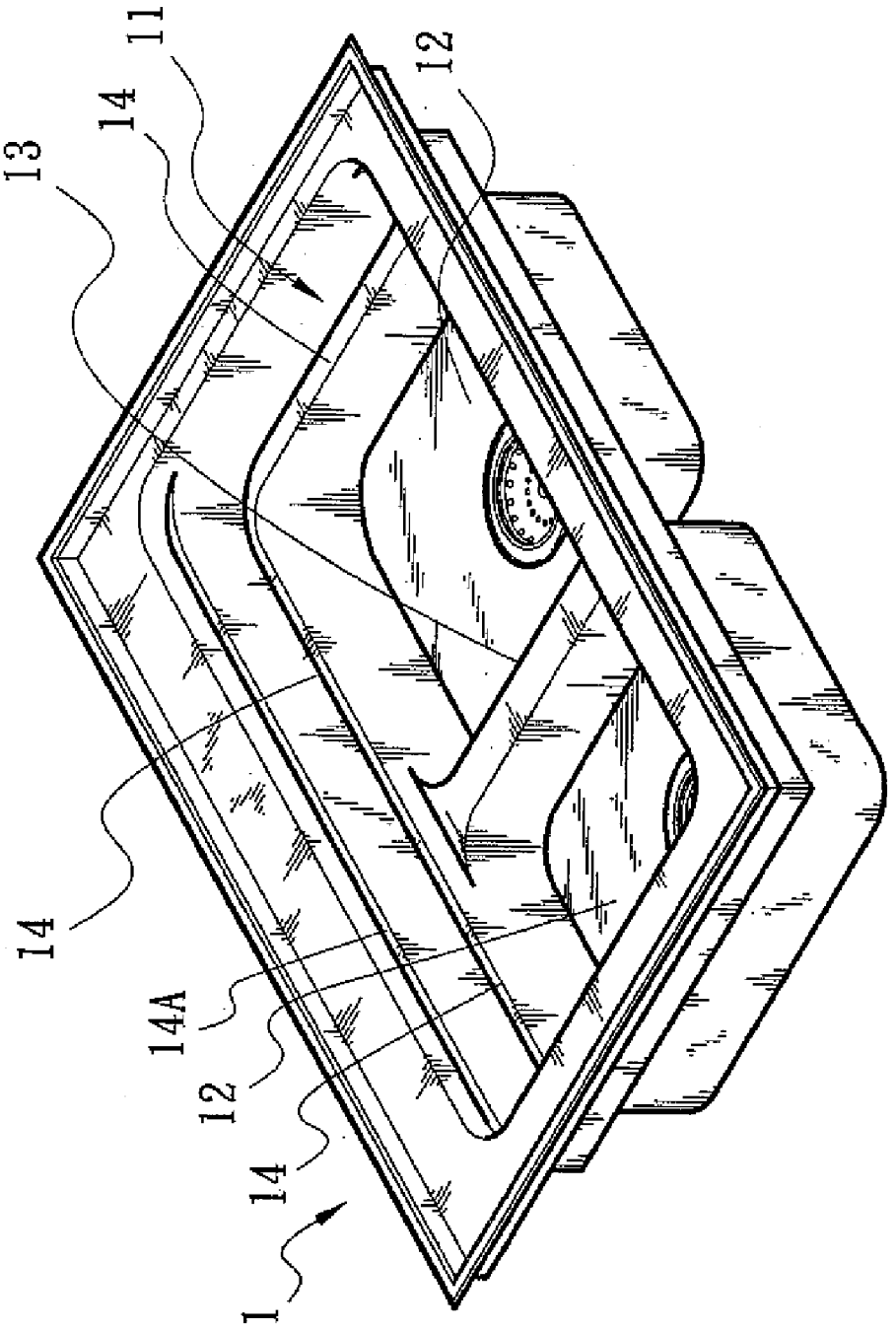


Fig. 1C

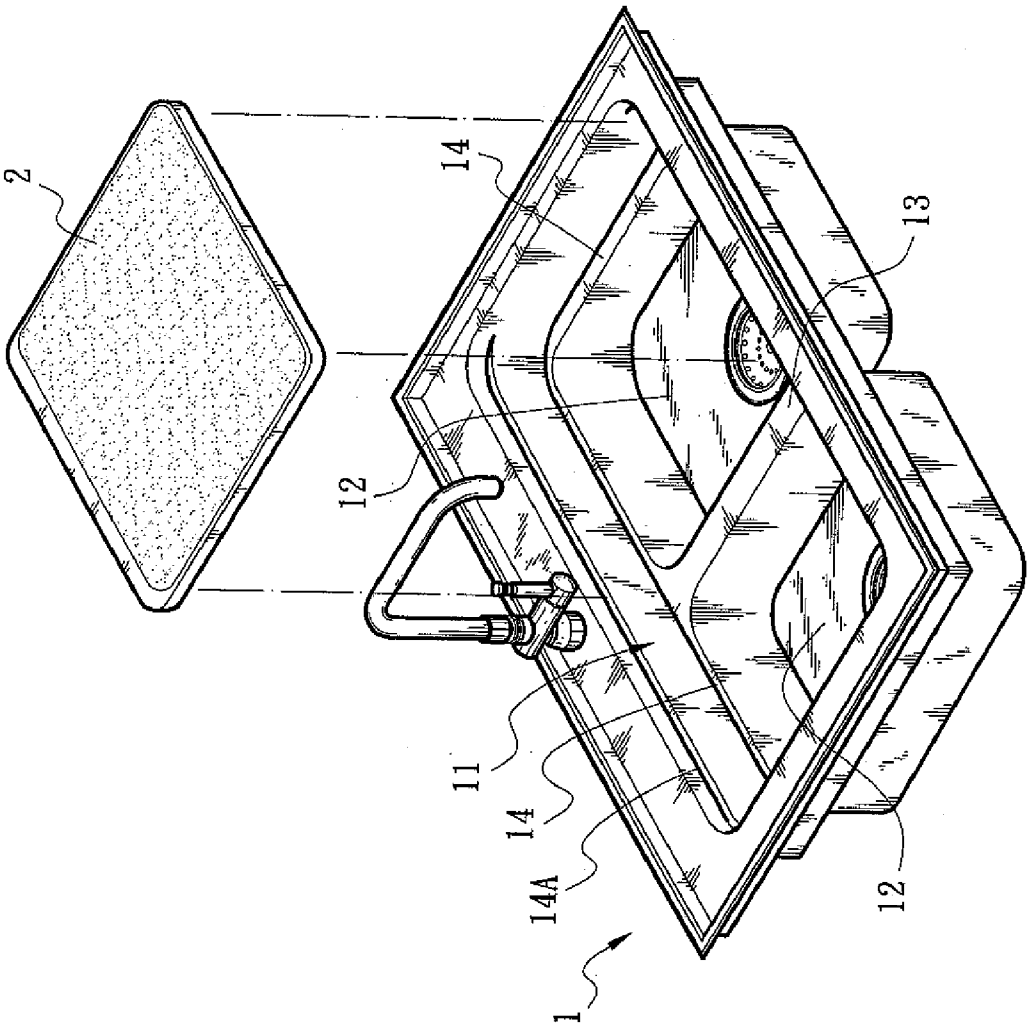


Fig. 2

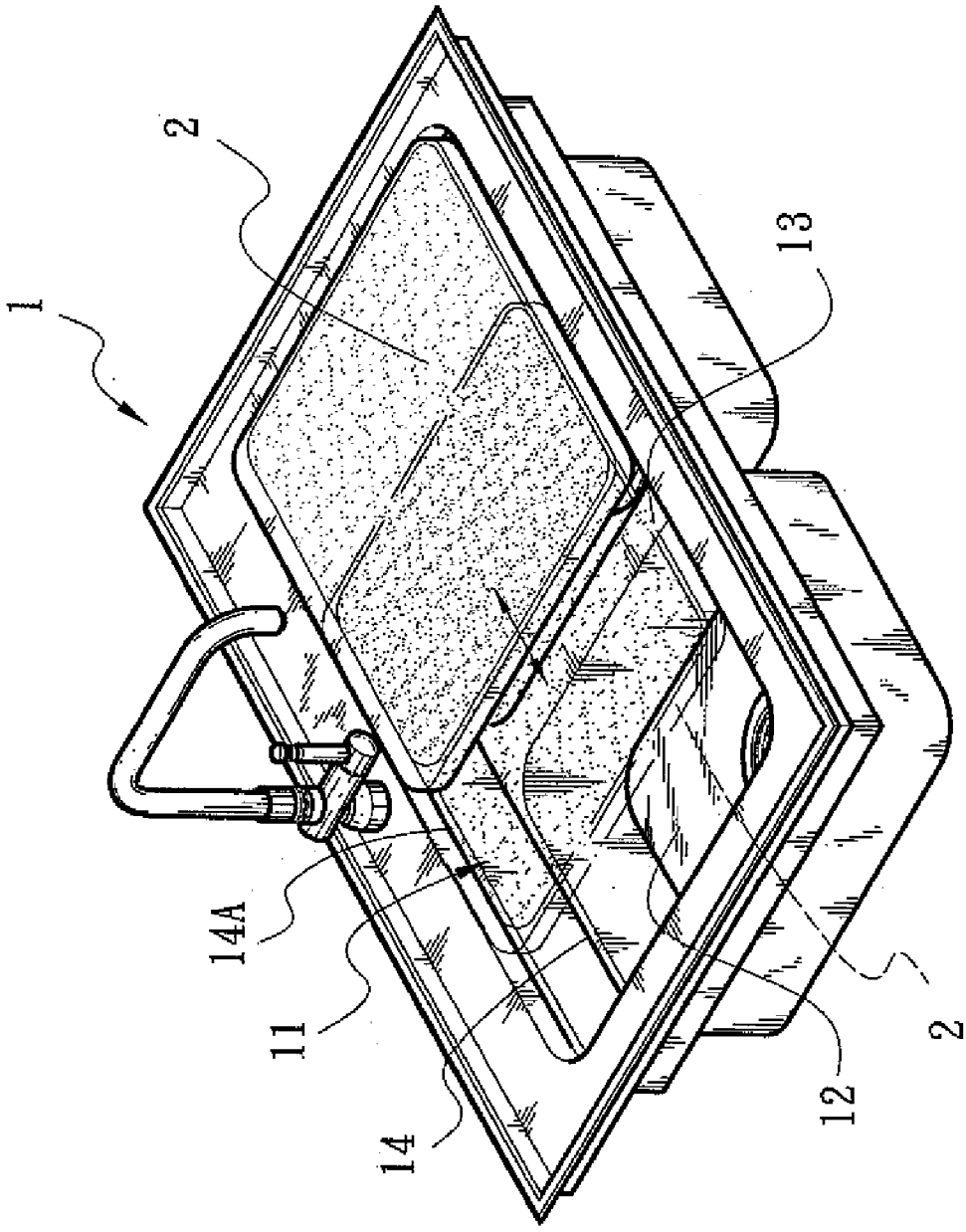


Fig. 2A

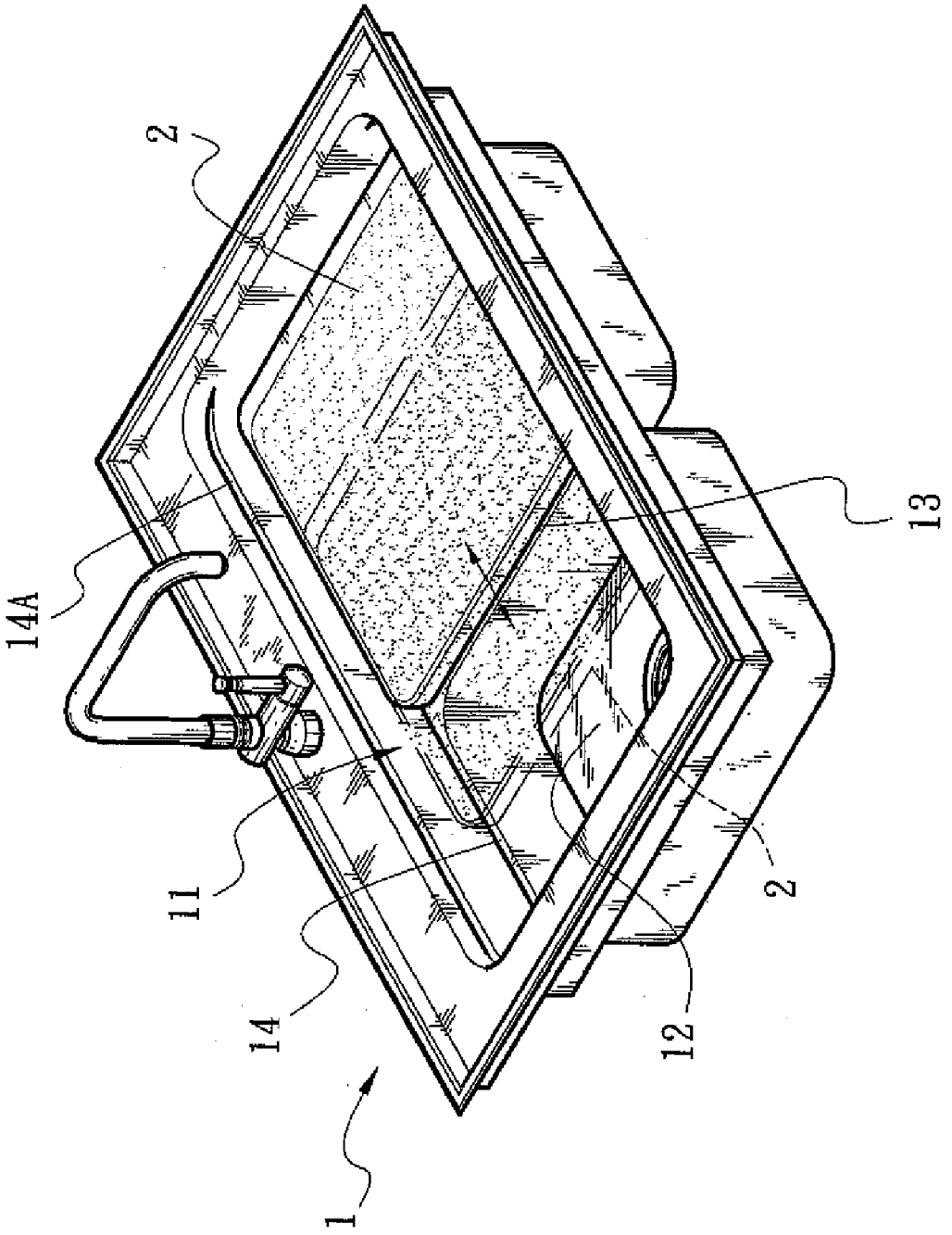


Fig. 2B

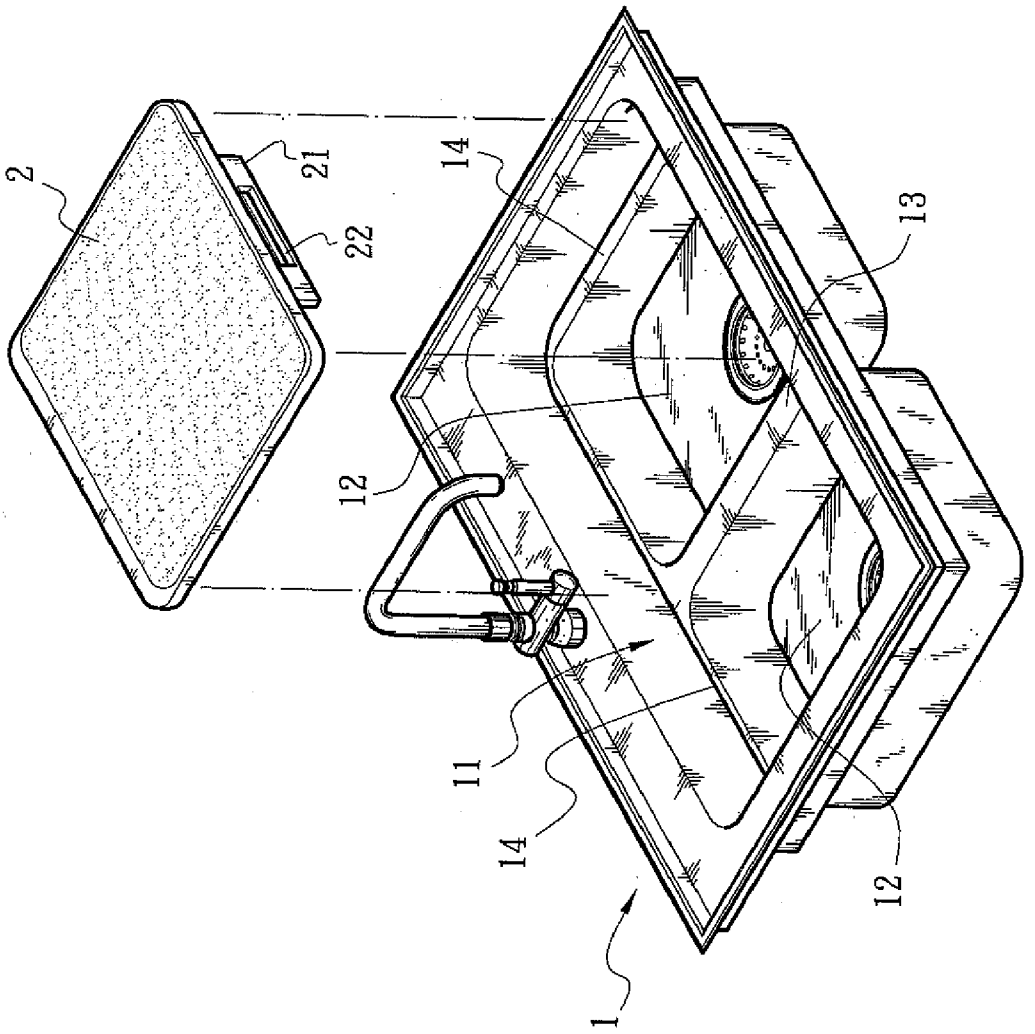


Fig. 3

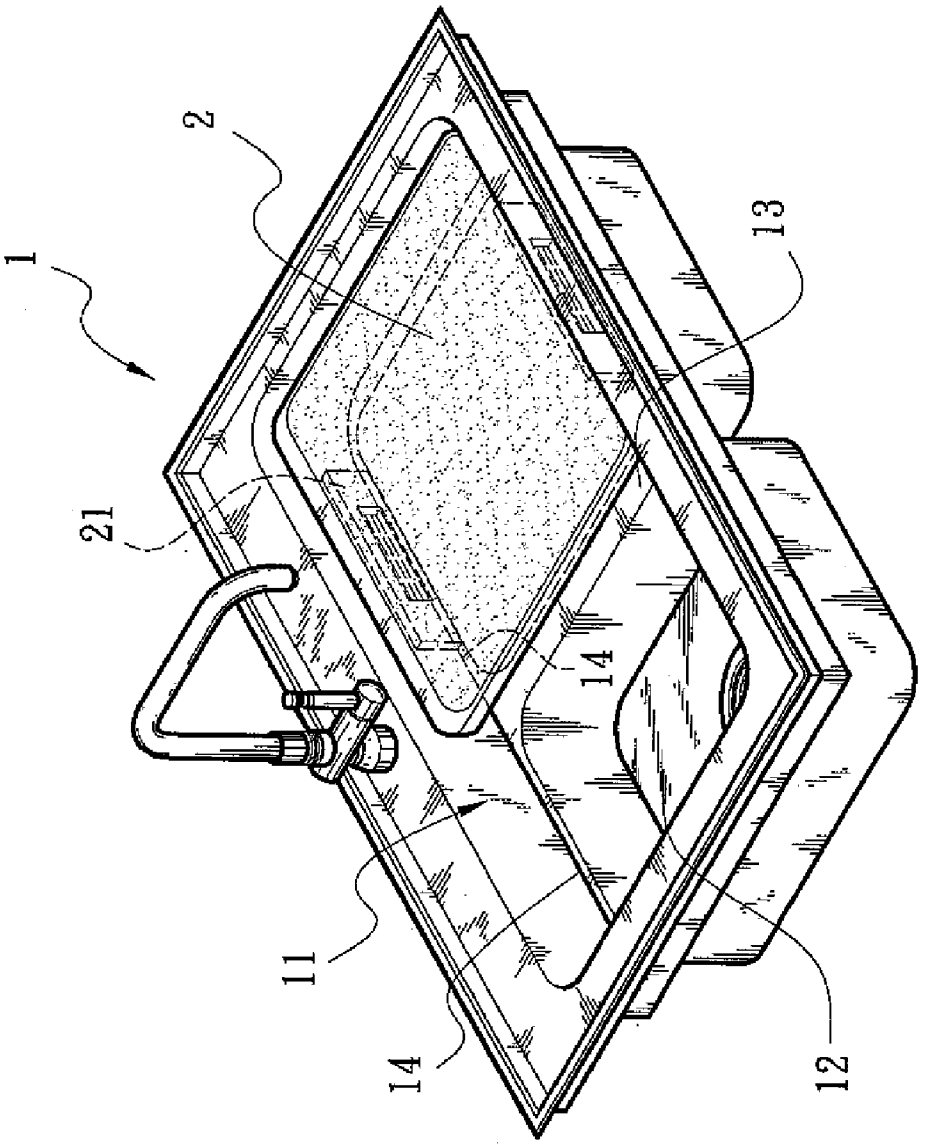


Fig. 3A

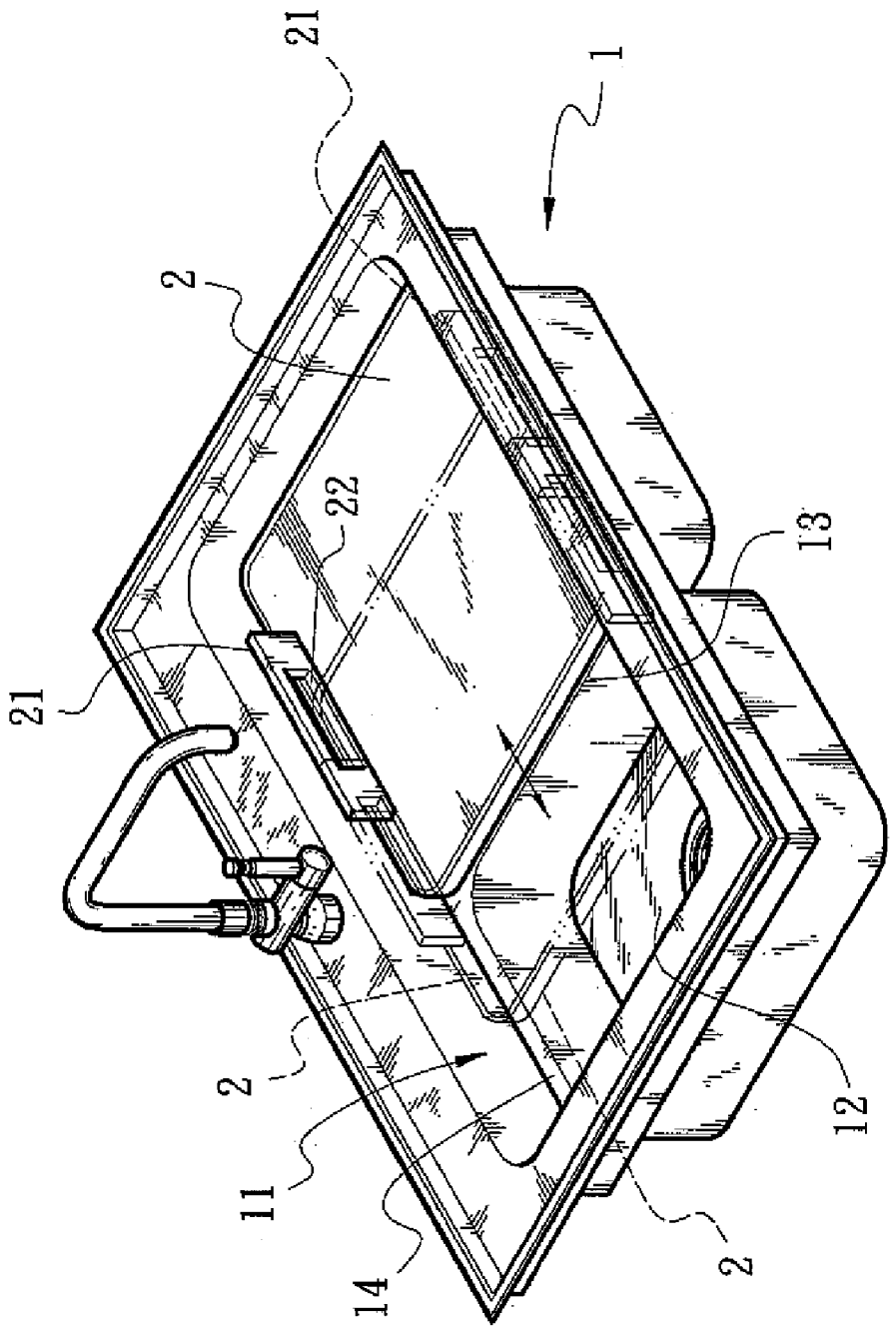


Fig. 3B

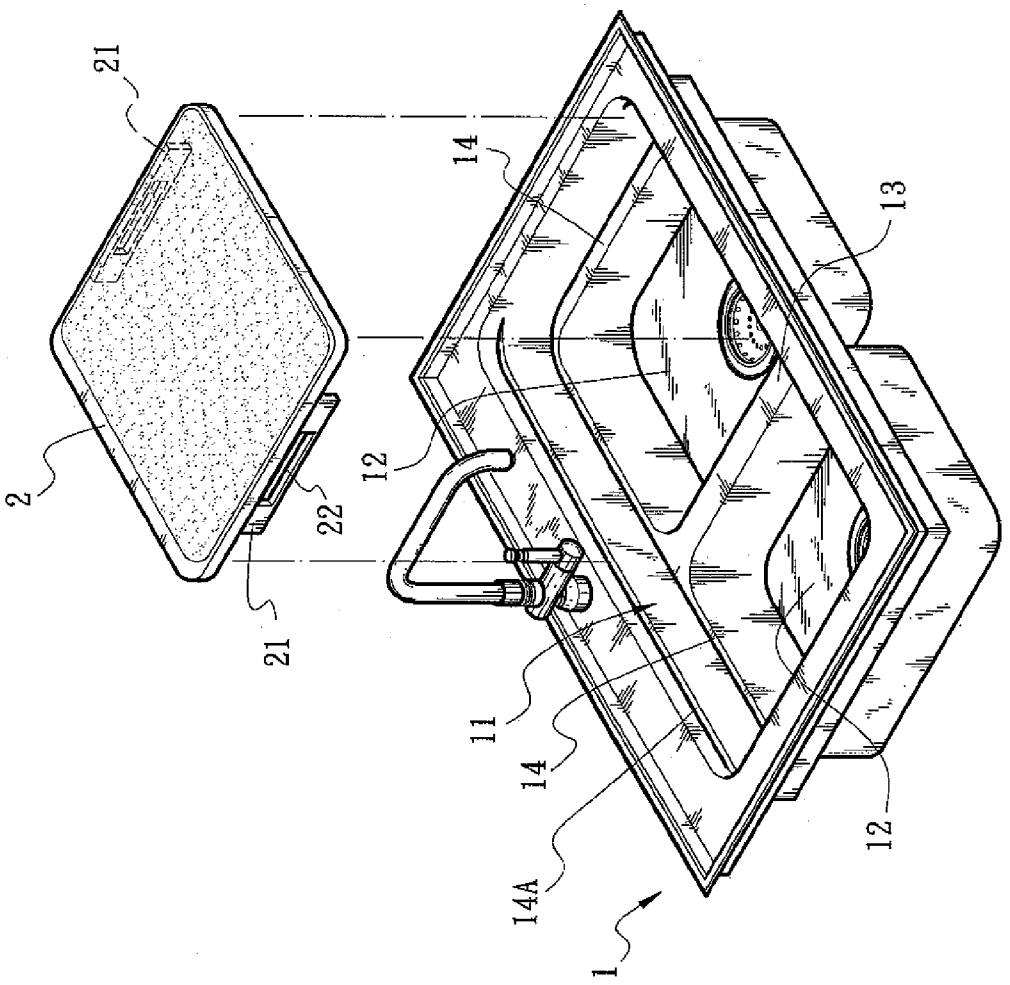


Fig. 4

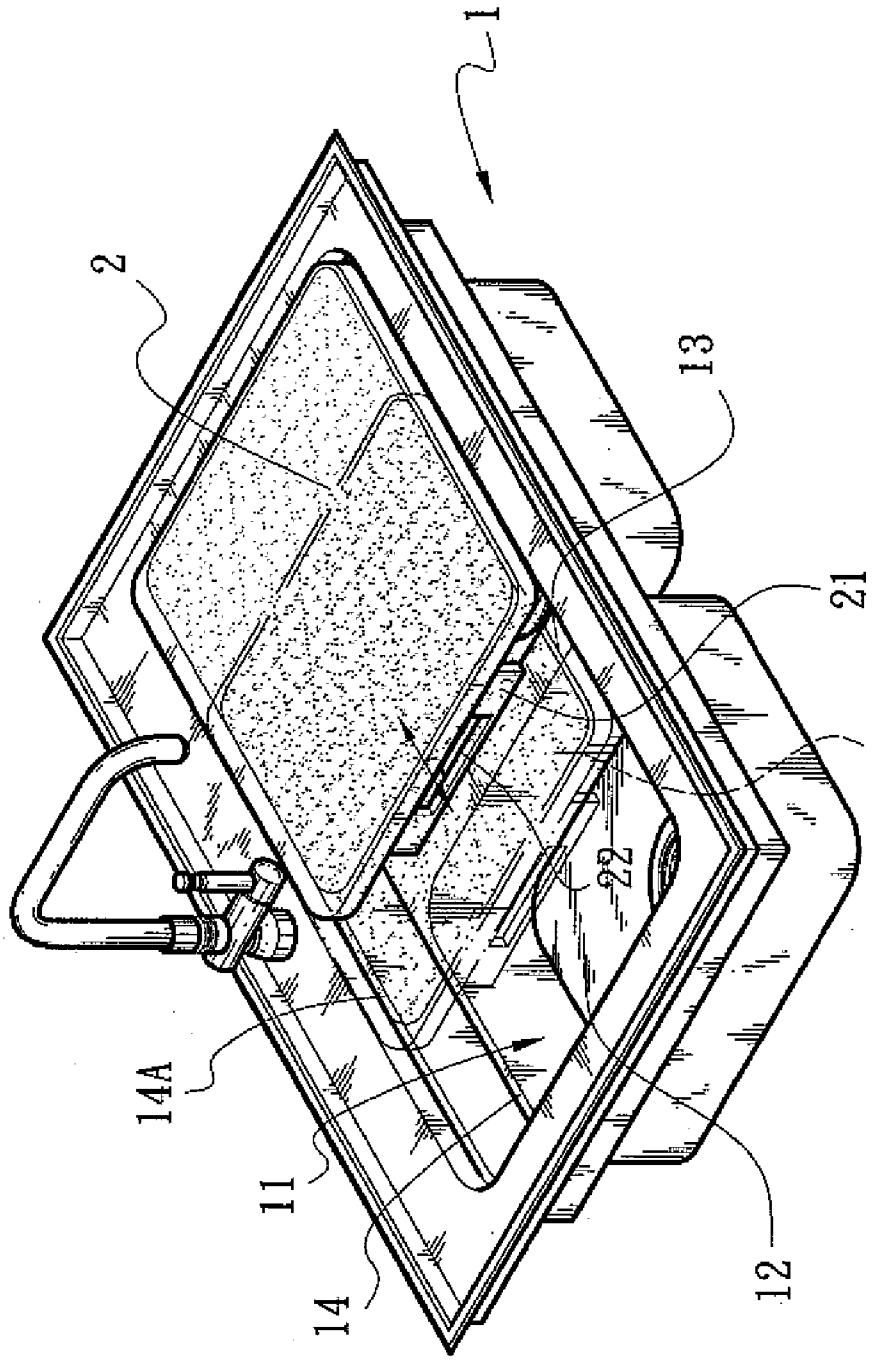


Fig. 4A

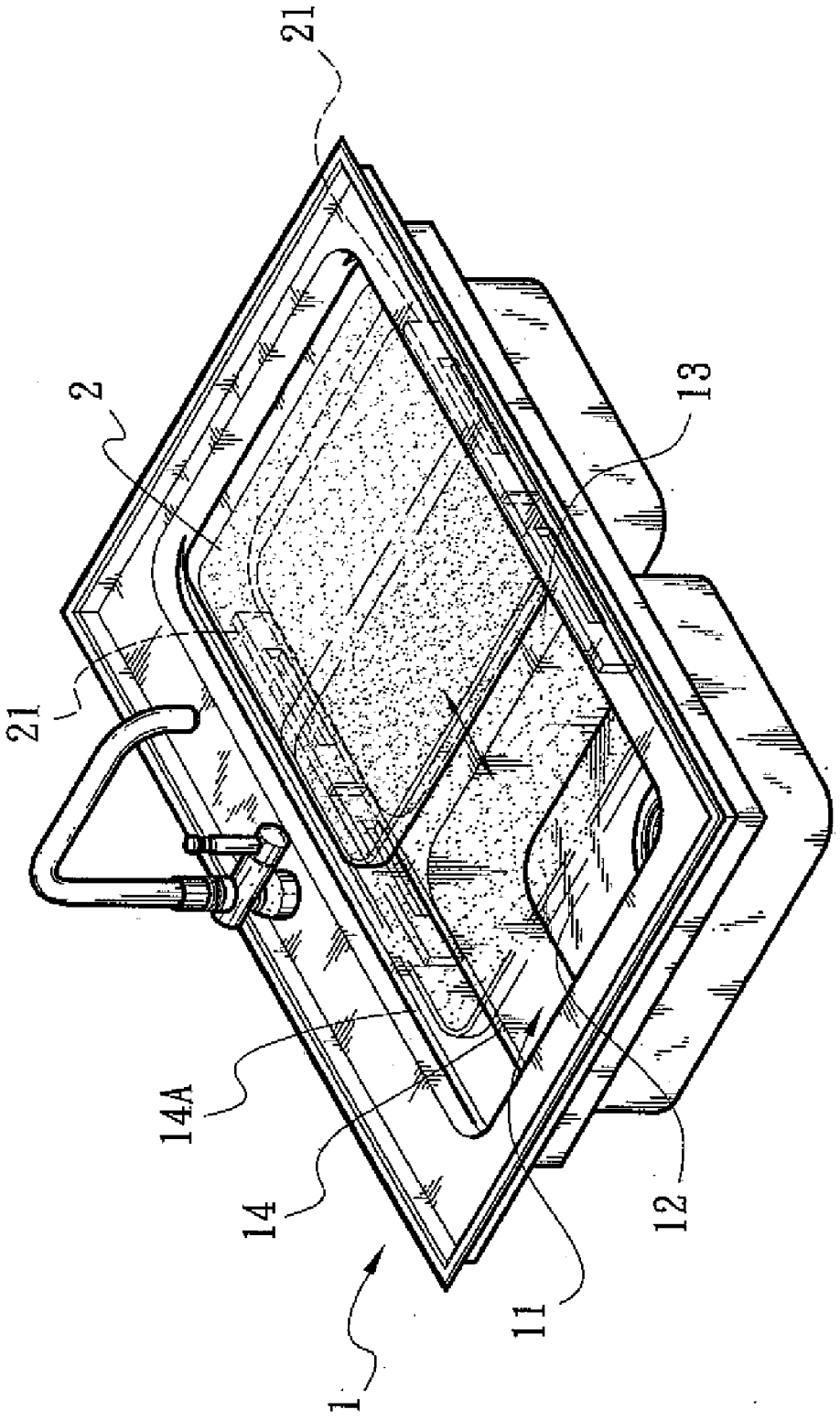


Fig. 4B

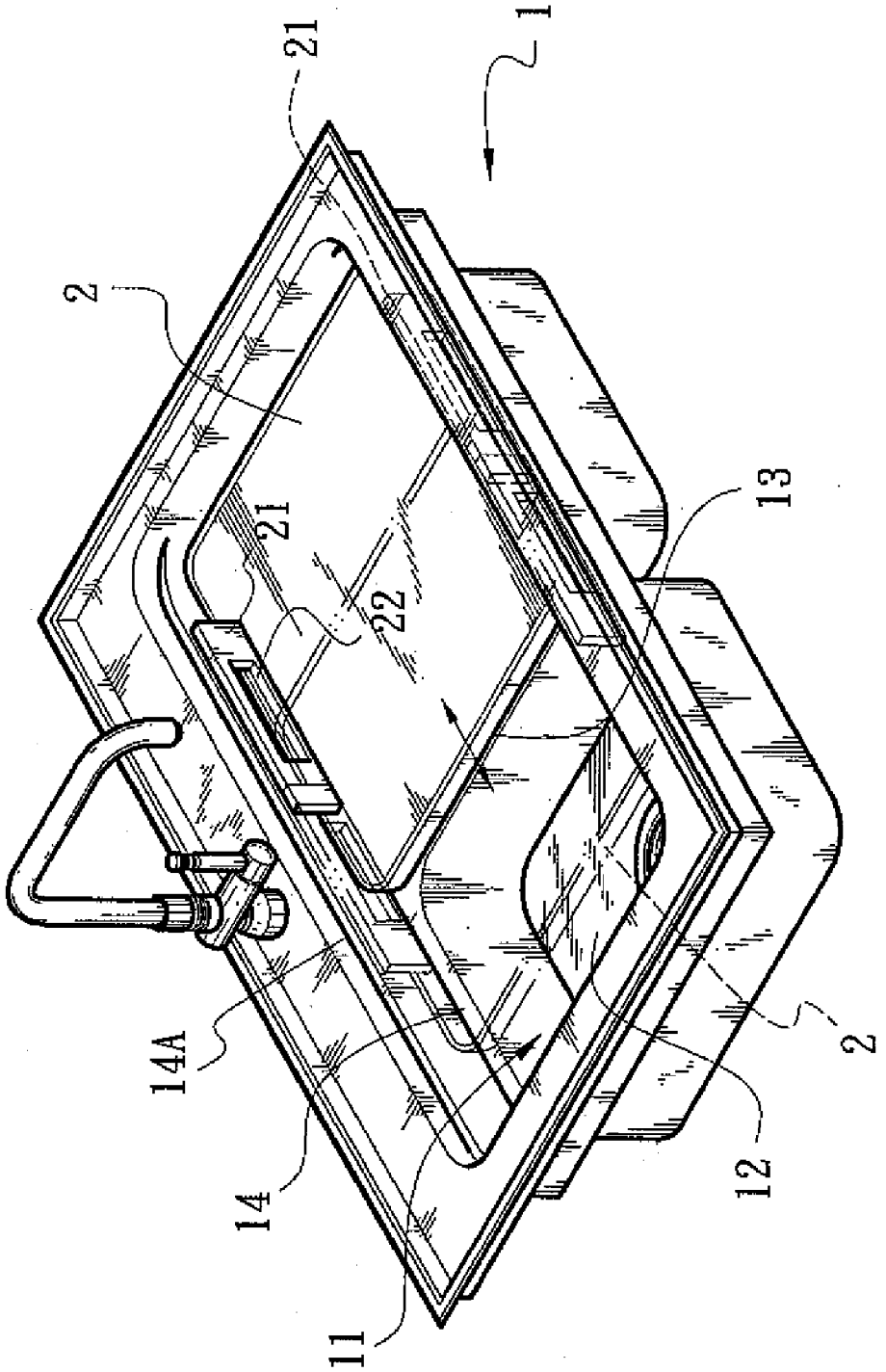


Fig. 4C

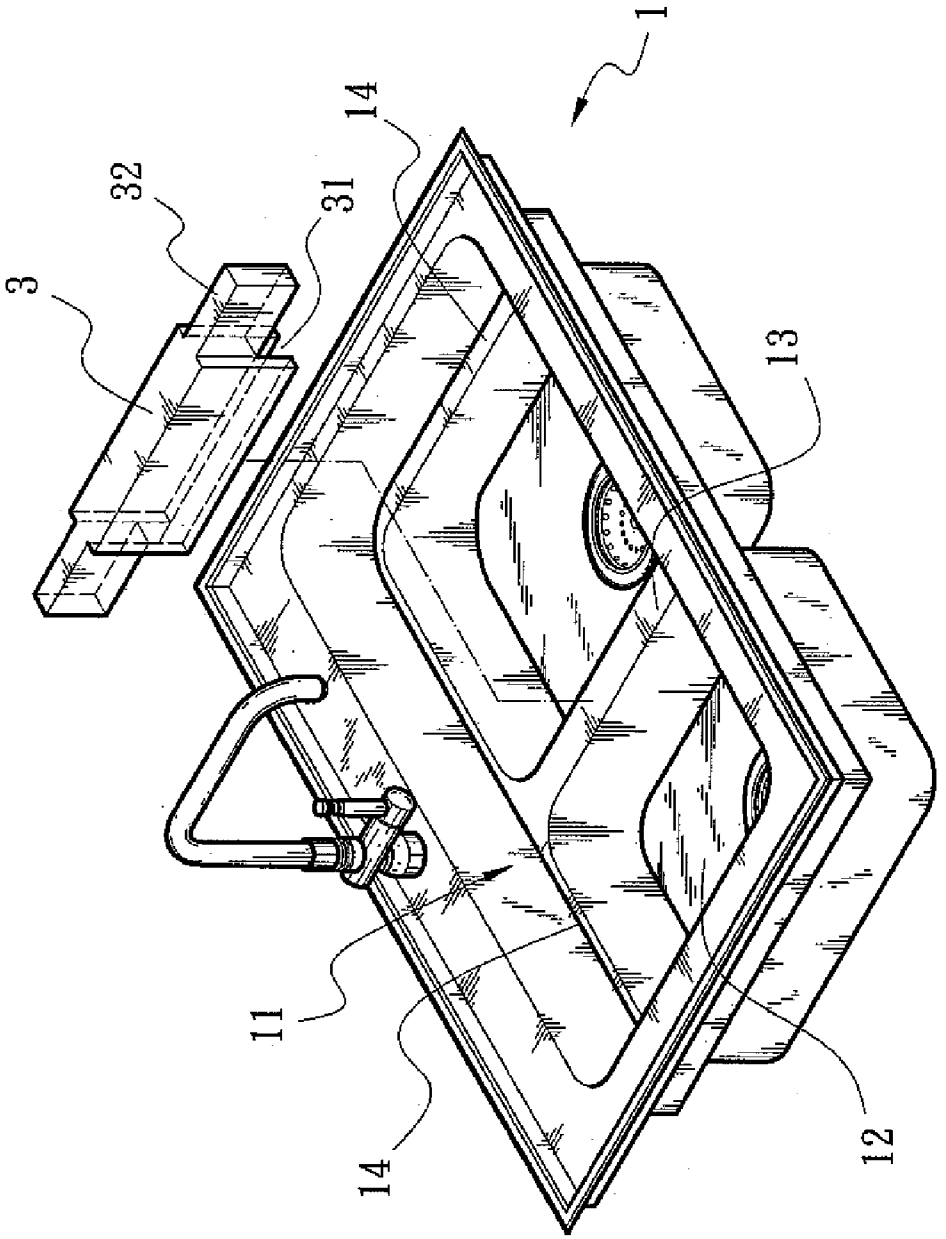


Fig. 5

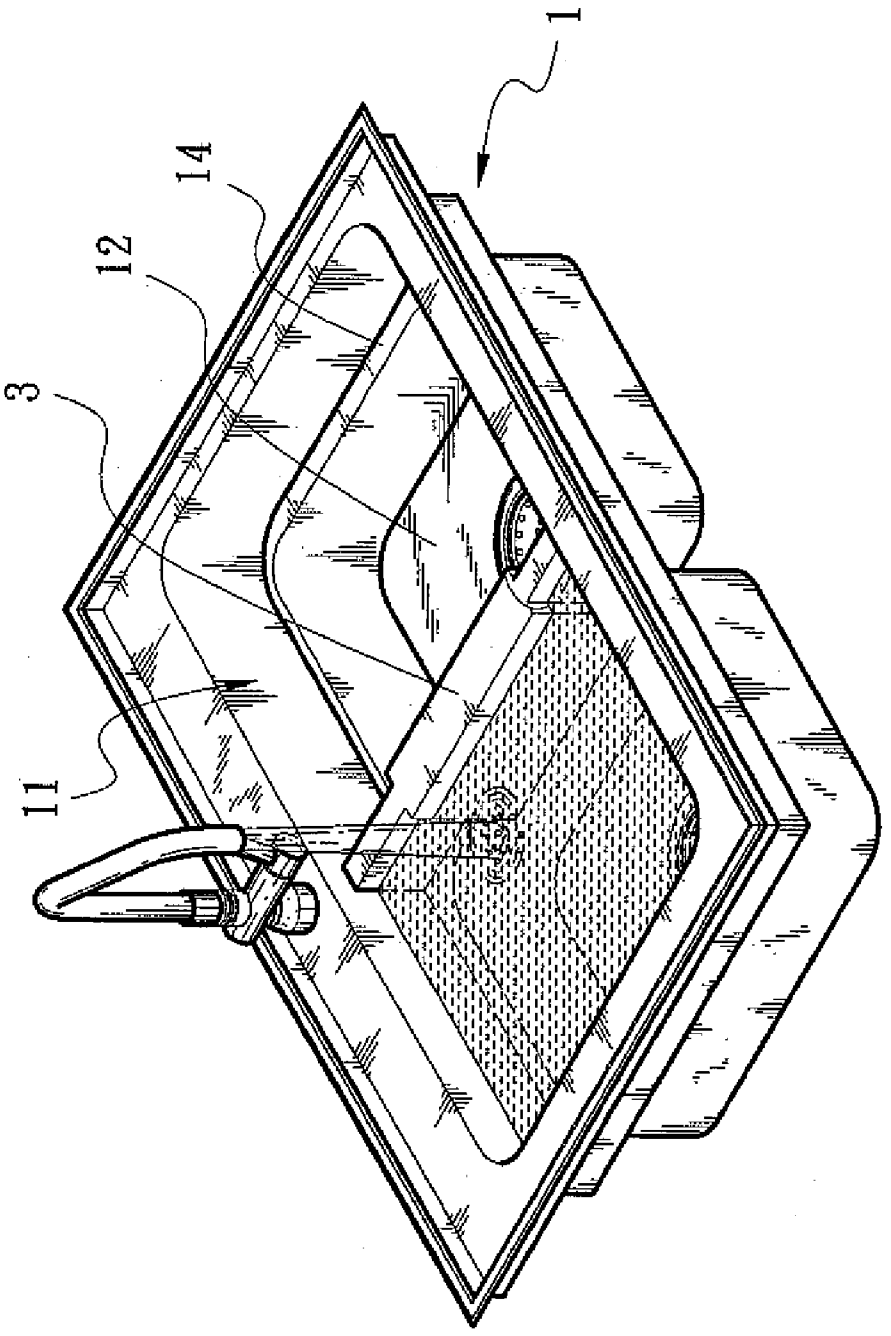


Fig. 5A

MULTI-BASIN SINK

BACKGROUND OF THE INVENTION

[0001] (a) Field of the Invention

[0002] The present invention is related to a multi-basin sink, and more particularly, to one that allow changed water storage area and water level.

[0003] (b) Description of the Prior Art

[0004] Whereas more functions are demanded on a sink, kitchen sinks generally available in the market offer various constructions and functions. As disclosed in U.S. Pat. No. DES. 295065 titled "SINK", a sink including two basins completely separated from each other permits its user to select either basin in case of small area of washing is needed for achieving a basic function of saving water consumption; a slope is disposed to one side of either or both basins to facilitate food preparation as taught in U.S. Pat. No. DES. 259439 titled "FOOD PREPARATIONSINK"; in U.S. No. Pat. DES. 324264 titled "SINK", a graded flange is disposed to an outer peripheral over a 2-basin sink to facilitate placement of a chopping board or other objects while restricting the chopping board or other objects to move only at where above two basins for easy chopping or preparing food before forthwith pushing the prepared food into either basin to rinse; and a kitchen leftover disposal sink is further provided to a twin-basin sink to collect and guide leftovers into a kitchen leftover disposal mechanism as disclosed in U.S. No. Pat. DES. 431286 titled "SINK".

[0005] However, in a common constructional feature among those four US Patents described above, two basins are completely separated from each other (a separation mechanism disposed between both basins are flushed with total depth and height of each of both basins). Accordingly, a major flaw exists since either basin serves its use only to prevent from combining both basins into a single one in coping with a larger area rinsing as may be needed. The graded flange on the outer peripheral over the sink to allow placement of a board tends to edge extra food or object out of the peripheral of the sink and to spill water jet out of the sink in the course of rinsing because that the board when placed with food or objects is supported at top edge of an opening of the basin, i.e., at the higher level of the peripheral of the sink.

[0006] To cope with large area rinse, an improvement has been made as taught in another U.S. Pat. No. D518561S "SINK" by having laterally provided a separation portion at a height approximately of one half of that of the sink in the middle of a basin covering a large area to define two independent basins in case of lower water level (lower than half of the height of the sink), or a sink covering larger area in case of higher water level (above half height of the sink). However, it fails to satisfy its is purpose when application of a deeper and smaller basin is required.

[0007] Sinks of the prior art including those described above features the same extremely thin and fragile construction of any of those sinks at where between a highest point and a deepest point of a concave of the sink leading to that the sink is vulnerable to be dented and damaged by pressure in the course of transportation or use.

SUMMARY OF THE INVENTION

[0008] The primary purpose of the present invention is to provide a multi-basin sink disposed with one or a plurality of horizontal flange inwardly protruding into the basin at where approximates one fourth up to three fourths depth in a containment of the sink to reinforce the strength of a concave of the entire sink.

[0009] Another purpose of the present invention is to provide a multi-basin sink disposed with a slide board at a depth approximately half of each basin for placing thereon food and/or other objects to effectively prevent the food in process or other objects from falling out of the sink by taking advantage of inner edge of the basin.

[0010] Another purpose yet of the present invention is to provide a multi-basin sink allowing changed water storage mode as desired for the sink to change area of use and water level as applicable.

[0011] To achieve those purposes, the present invention provides a recessed accommodation space to the sink; one or a plurality of erected partitioning portion is disposed in the accommodation space to segregate it into multiple basins; one or a plurality horizontal flange protruding toward interior of the sink is disposed at a depth approximately one fourth up to three fourths below a middle section of the accommodation space at where closer to an opening of the basin to reinforce strength of sidewalls of the entire basin. Furthermore, if required, a board to place objects thereon is supported on the horizontal flange so to define a retainer in conjunction with a local inner wall of the sink for the retainer to create proper blocking function for preventing objects from being pushed to fall off.

[0012] A mobile partition is further provided to sit on the erected partitioning portion in the accommodation space and both sides of the mobile partition hold tightly against two opposite inner walls of the accommodation space for the mobile partition to provide an even higher partition in coping with use of an deeper and smaller basin.

[0013] Furthermore, one or a plurality pair of handles is disposed on one side of the board at where in relation to the horizontal flange protruding toward interior of the sink for easy portability while providing support on the horizontal flange to facilitate creating support for another height for the board.

BRIEF DESCRIPTION OF THE DRAWINGS

[0014] FIG. **1** is a schematic view showing a construction of preferred embodiment of the present invention.

[0015] FIG. **1**A is a schematic view showing a construction of another preferred embodiment of the present invention.

[0016] FIG. **1**B is a schematic view showing a secondary horizontal flange is disposed at where closer to a top edge of a general accommodation space of the present invention.

[0017] FIG. **1**C is a schematic view showing a horizontal flange is disposed at where higher than a partitioning portion of the present invention.

[0018] FIG. **2** is an exploded view showing a configuration of another preferred embodiment yet of the present invention adapted with a board.

[0019] FIG. **2**A is a schematic view showing that an assembly having the board illustrated in FIG. **2** placed on a secondary horizontal flange at where closer to the top edge of the accommodation space.

[0020] FIG. **2**B a schematic view showing that an assembly having the board illustrated in FIG. **2** placed on a secondary horizontal flange in the vicinity of a peripheral of an opening of a basin.

[0021] FIG. **3** is an exploded view showing another configuration of another preferred embodiment yet of the present invention adapted with a board.

[0022] FIG. **3**A is a schematic view showing an assembly of the preferred embodiment of the present invention as illustrated in FIG. **3**.

[0023] FIG. **3**B is a schematic view showing an assembly of the preferred embodiment illustrated in FIG. **3** having the board placed upside down.

[0024] FIG. **4** is an exploded view showing the board of the preferred embodiment illustrated in FIG. **3** is applied near the top edge of the sink at where the secondary horizontal flange is provided.

[0025] FIG. **4**A is a schematic view showing a status of the preferred embodiment illustrated in FIG. **4** having the board placed the secondary horizontal flange at where closer to the top edge.

[0026] FIG. **4**B is a schematic view showing a status of the preferred embodiment illustrated in FIG. **4** having the board placed by two shoes on the horizontal flange.

[0027] FIG. **4**C schematic view showing a status of the preferred embodiment illustrated in FIG. **4** having the board placed upside down on the horizontal flange.

[0028] FIG. **5** is an exploded view showing a mobile partition is placed on the partitioning portion of another preferred embodiment yet of the present invention.

[0029] FIG. **5**A is a schematic view showing an assembly of the preferred embodiment illustrated in FIG. **5**.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0030] Referring to FIG. **1** showing a basic construction of the present invention, the present invention is essentially comprised of a sink **1** and an accommodation space **11** recessed from top of the sink **1**; one or a plurality of partitioning portion **13** is disposed on and upwardly extending from a bottom of the accommodation space **11** in a depth approximately one fourth up to three fourths of that of the accommodation space **1** to segregate a lower half of the accommodation space **11** into multiple basins **12**; one or a plurality of horizontal flange **14** protruding toward interior of the sink **1** is disposed in the accommodation space **11** at where closer to a peripheral of an opening of those basins **12**; and as applicable, the horizontal flange **14** may be provided on a full peripheral as illustrated in FIG. **1** or a local part of the peripheral as illustrated in FIG. **1**A.

[0031] As illustrated in FIG. **11**B, a secondary horizontal flange **14**A extending inwardly is disposed at where between a top edge of the sink **1** and the horizontal flange **14** based on the construction as illustrated in FIG. **1**; and a level of the partitioning portion **13** between any two abutted basins **12** is preferred not to be higher than that of the horizontal flange **14** as illustrated in FIG. **1**C.

[0032] FIG. **2** shows an exploded view of another preferred embodiment of the present invention adapted with a board **2**. As illustrated in FIGS. **2**A and **2**B, the board (e.g., a chopping board) is placed on the horizontal flange **14** or the secondary horizontal flange **14**A. When each of all basins **12** is disposed with the horizontal flange **14** or the secondary horizontal flange **14**A, the board **2** may be placed on the horizontal flange **14** or the secondary horizontal flange **14**A over any basin **12**. The board **2** may be designed in a rectangular board for it to merely fit when placed with its longer sides on the horizontal flange **14**A as illustrated in FIG. **2**B or with its shorter sides on the secondary flange **14** as illustrated in FIG. **2**A to achieve a purpose of placing the board **2** at different heights. When the board **2** is moved to where above a basin for food preparation, the food including vegetables in larger volume on the board **2** is prevented from falling off the board **2** since it is blocked by inner walls of the accommodation space **11**; and the food finished with preparation may be forthwith pushed into another basin not covered up with the board **2** to be rinsed with fresh water, thus to effectively improve flaw and inconvenience in application of a sink of the prior art.

[0033] Now referring to FIGS. **3**, **3**A, **3**B, **4**, **4**A, **4**B, and **4**C, another preferred embodiment yet of the present invention has multiple, two opposite to each other in the preferred embodiment, shoes **21** disposed below one or a plurality of edge of the board **2** and each shoe **21** is provided with one or a plurality of portable slot **22**. Accordingly, the board **2** may be placed on the basin **12** with both shoes **21** resting on the horizontal flange **14** as illustrated in FIG. **3**A or **4**A or with both shoes **21** facing up and the board **2** resting on the horizontal flange **14** as illustrated in FIG. **3**B or **4**C; or alternatively, the board **2** may be placed on the basin with both shoes **21** resting on the secondary flange **14**A or with both shoes **21** facing up and the board **2** resting on the secondary flange **14**A to allow the board **2** be placed on different heights as desired.

[0034] In another preferred embodiment yet of the present invention as illustrated in FIGS. **5** and **5**A, a mobile partition **3** having at its bottom disposed with a track **31** is further provided to the sink **1**. The track **31** has a sectional recess same as that of the partitioning portion **13** for the mobile partition **3** to firmly stride over the partitioning portion **13**. An end portion **32** is each extending from both sides of the mobile partition **3** so to tightly hold against inner walls of the accommodation space **11** when the mobile partition **3** rides on the partitioning portion **13**. The partitioning portion **13** is therefore properly raised by means of the mobile partition **3** to define a comparatively higher segregation between any two abutted basins **12** in the sink **1** when a deeper but smaller basin **12** is needed; however, it is preferred that the partitioning portion **13** adapted with the mobile partition **3** is not higher than the surface of the opening of the accommodation space **11**.

[0035] The present invention by allowing changed water volume as needed in a basin for economic benefit, preventing food during and after preparation from falling oft and providing optimal use of a sink adapted with a board meets patent requirements of novelty, industrial utility, and progressiveness.

[0036] However, it is to be noted that the preferred embodiments disclosed in the specification and the accompanying drawings are not limiting the present invention; and that any construction, installation, or characteristics that is same or similar to that of the present invention should fall within the scope of the purposes and claims of the present invention.

I claim:

1. A multi-basin sink comprising a sink and an accommodation space recessed in the sink; one or a plurality of partitioning portion being disposed in the accommodation space at a depth close to one fourth up to three fourths of that of the sink; the accommodation space being segregated into multiple basins by means of the partitioning portion; and a horizontal flange protruding toward interior of the sink being disposed in the accommodation space at where close to an opening of the sink.

2. The multi-basin sink as claimed in claim 1, wherein the partitioning portion is at a height lower than that of the horizontal flange.

3. The multi-basin sink as claimed in claim 1, wherein a mobile partition is provided to mount on the partitioning portion to raise the height of the entire partitioning portion.

4. The multi-basin sink as claimed in claim 2, wherein a mobile partition is provided to mount on the partitioning portion to raise the height of the entire partitioning portion.

5. The multi-basin sink as claimed in claim 3, wherein a track is disposed on a bottom of the mobile partition; the mobile partition strides over the partitioning portion of the sink; and both ends of the mobile partition tightly holding against inner walls on both sides of the accommodation space.

6. The multi-basin sink as claimed in claim 4, wherein a track is disposed on a bottom of the mobile partition; the mobile partition strides over the partitioning portion of the sink; and both ends of the mobile partition tightly holding against inner walls on both sides of the accommodation space.

7. The multi-basin sink as claimed in claim 1, wherein a secondary horizontal flange protrudes inwardly at where closer to a top edge of the accommodation space.

8. The multi-basin sink as claimed in claim 3, wherein a secondary horizontal Range protrudes inwardly at where closer to a top edge of the accommodation space.

9. The multi-basin sink as claimed in claim 5, wherein a secondary horizontal flange protrudes inwardly at where closer to a top edge of the accommodation space.

10. The multi-basin sink as claimed in claim 1, wherein a board is placed in the accommodation space; and each of one or two opposite sides of the board is in a length for the board to merely stride over the horizontal flange.

11. The multi-basin sink as claimed in claim 3, wherein a board is placed in the accommodation space; and each of one or two opposite sides of the board is in a length for the board to merely stride over the horizontal flange.

12. The multi-basin sink as claimed in claim 5, wherein a board is placed in the accommodation space; and each of one or two opposite sides of the board is in a length for the board to merely stride over the horizontal flange.

13. The multi-basin sink as claimed in claim 7, wherein a board is placed in the accommodation space; and each of one or two opposite sides of the board is in a length for the board to merely stride over the horizontal flange.

14. The multi-basin sink as claimed in claim 8, wherein a board is placed in the accommodation space; and each of one or two opposite sides of the board is in a length for the board to merely stride over the horizontal flange.

15. The multi-basin sink as claimed in claim 9, wherein a board is placed in the accommodation space; and each of one or two opposite sides of the board is in a length for the board to merely stride over the horizontal flange.

16. The multi-basin sink as claimed in claim 7, wherein a board is placed in the accommodation space; and each of one or two opposite sides of the board is in a length for the board to merely stride over the secondary horizontal flange.

17. The multi-basin sink as claimed in claim 8, wherein a board is placed in the accommodation space; and each of one or two opposite sides of the board is in a length for the board to merely stride over the secondary horizontal flange.

18. The multi-basin sink as claimed in claim 9, wherein a board is placed in the accommodation space; and each of one or two opposite sides of the board is in a length for the board to merely stride over the secondary horizontal flange.

19. The multi-basin sink as claimed in claim 10, wherein one or a plurality of side of the board is disposed with a shoe at where closer to an edge of the side of the board.

20. The multi-basin sink as claimed in claim 11, wherein one or a plurality of side of the board is disposed with a shoe at where closer to an edge of the side of the board.

21. The multi-basin sink as claimed in claim 12, wherein one or a plurality of side of the board is disposed with a shoe at where closer to an edge of the side of the board.

22. The multi-basin sink as claimed in claim 19, wherein a portable slot is disposed on the shoe.

23. The multi-basin sink as claimed in claim 20, wherein a portable slot is disposed on the shoe.

24. The multi-basin sink as claimed in claim 21, wherein a portable slot is disposed on the shoe.

25. The multi-basin sink as claimed in claim 13, wherein one or a plurality of side of the board is disposed with a shoe at where closer to an edge of the side of the board.

26. The multi-basin sink as claimed in claim 14, wherein one or a plurality of side of the board is disposed with a shoe at where closer to an edge of the side of the board.

27. The multi-basin sink as claimed in claim 15, wherein one or a plurality of side of the board is disposed with a shoe at where closer to an edge of the side of the board.

28. The multi-basin sink as claimed in claim 25, wherein a portable slot is disposed on the shoe.

29. The multi-basin sink as claimed in claim 26, wherein a portable slot is disposed on the shoe.

30. The multi-basin sink as claimed in claim 27, wherein a portable slot is disposed on the shoe.

31. The multi-basin sink as claimed in claim 16, wherein one or a plurality of side of the board is disposed with a shoe at where closer to an edge of the side of the board.

32. The multi-basin sink as claimed in claim 17, wherein one or a plurality of side of the board is disposed with a shoe at where closer to an edge of the side of the board.

33. The multi-basin sink as claimed in claim 18, wherein one or a plurality of side of the board is disposed with a shoe at where closer to an edge of the side of the board.

34. The multi-basin sink as claimed in claim 31, wherein a portable slot is disposed on the shoe.

35. The multi-basin sink as claimed in claim 32, wherein a portable slot is disposed on the shoe.

36. The multi-basin sink as claimed in claim 33, wherein a portable slot is disposed on the shoe.

* * * * *