

May 9, 1933.

N. I. DE BIE

1,908,128

DISHWASHING APPARATUS

Filed Nov. 22, 1930

Fig. 1

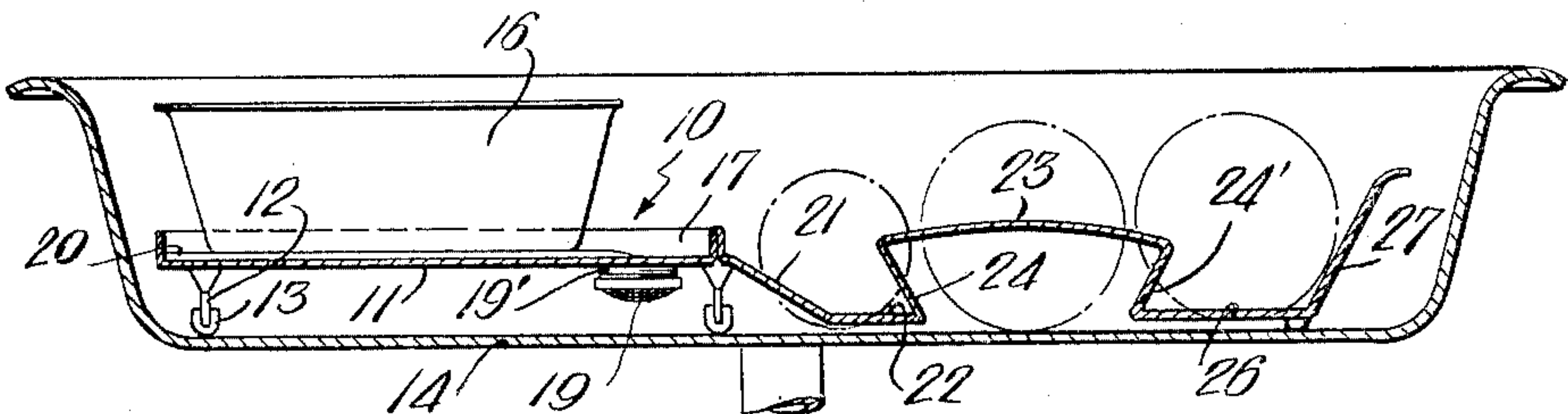


Fig. 2

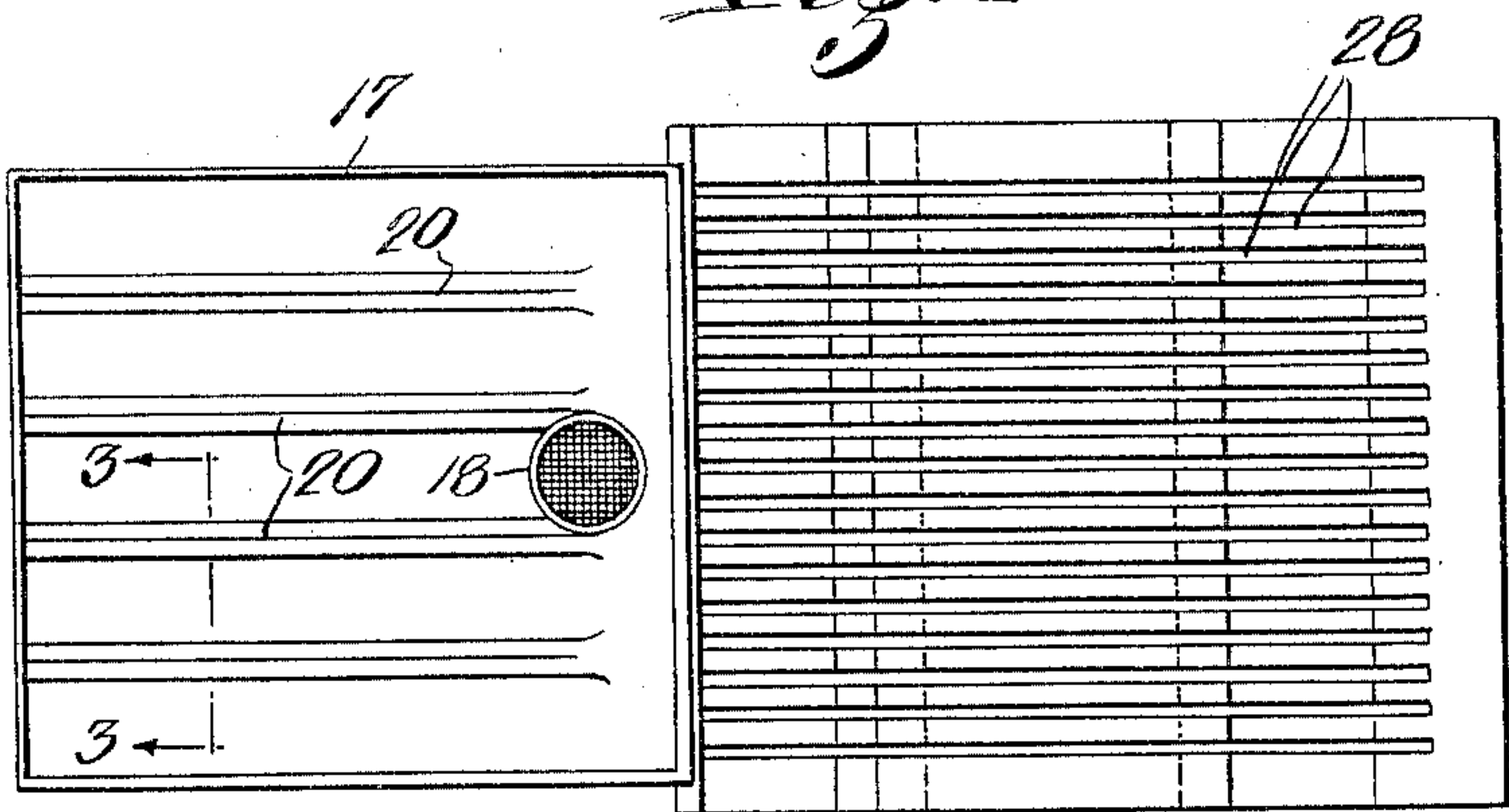
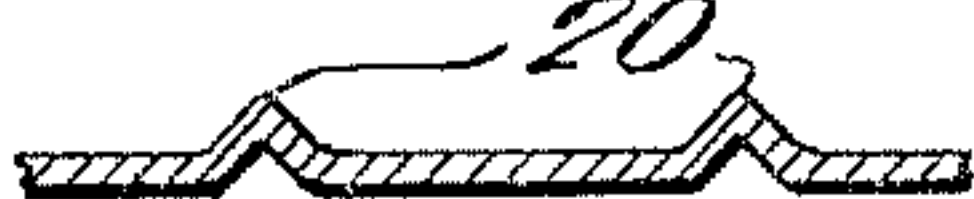


Fig. 3



Inventor
Naomi I. De Bie
By Robert C. Casanova & Co. Attys.

UNITED STATES PATENT OFFICE

NAOMI I. DE BIE, OF NEWTON CENTER, MASSACHUSETTS

DISHWASHING APPARATUS

Application filed November 22, 1930. Serial No. 497,375.

This invention relates to apparatus for use in washing objects which may be of various sizes and shapes, such as pieces of china, glassware, and the like, table silver, kitchen utensils and that miscellany of related articles which are useful in the preparation and serving of food and which are commonly referred to as dishes. It will be understood therefore that the term dishes as used herein is intended to include items of this general class.

When articles of this character are washed manually in the usual manner, as in a dish pan or like receptacle, the particles of food removed from the dishes in the process of washing remain in the washing water and when the water is emptied into the sink, these particles must be brushed or scraped together and removed from the usual sink strainer by hand, a process which is not by any means agreeable, while on the other hand, if the sink strainer be removed, and the particles washed down the pipe, they are liable to clog or at least to restrict the flow in the plumbing associated with a sink or other fixture in which this water may be discharged.

It is customary to provide racks for supporting washed dishes in suitably spaced upright or inclined positions to facilitate drainage thereof before drying. To expedite drainage and ease in drying, as well as to provide a maximum storage capacity for a given space, the relatively flat articles, such as plates, saucers, platters and the like should be supported in substantially vertical positions. However, when this is done with apparatus commonly provided for this purpose the larger pieces project to such a height as to make it necessary to raise each article after it is washed not only over the side of the dishpan but to whatever additional elevation may be required to clear other articles standing in a rack for example. This tends to fatigue a person doing this work and not infrequently results in damage to articles drained in this manner.

Objects of the present invention are to provide for overcoming these difficulties by providing improved means for straining the

washing water as it is discharged into a sink or other receptacle connected with the plumbing; to provide improved means for supporting relatively flat pieces in closely spaced substantially vertical positions and yet out of the normal path of other articles being removed from the pan; to provide apparatus of this character of simple and efficient construction consisting of relatively few parts which are inexpensive to manufacture and which will not damage a porcelain lined or other finely finished sink; and also to provide apparatus of the class described having an improved construction and relative arrangement of parts.

In the drawing:

Fig. 1 is a central longitudinal section through a combined stand and drainage rack disposed in a sink;

Fig. 2 is a top plan view of the combined stand and rack shown in Fig. 1; and

Fig. 3 is a section along the line 3—3 of Fig. 2.

The embodiment of the invention chosen for illustration, is in the form of a platform or stand 10 comprising a substantially horizontally disposed bottom member 11 which is equipped with supporting legs 12, the latter preferably being fitted with rubber pads or feet 13 to prevent slipping as well as to prevent scratching or marring of a fixture such as the sink 14 in which this apparatus may conveniently be disposed. The bottom member 11 may have any suitable configuration adapted to receive and support a receptacle such as the dishpan 16, but preferably this bottom member 11 is substantially rectangular. A vertically disposed water-retaining wall 17 projects upwardly from the edges or periphery of the top member and preferably extends substantially continuously around the same. At any convenient point within the space enclosed by the water retaining wall 17 the bottom member 11 is provided with a discharge orifice or opening 18. A cap or strainer 19 having a perforated or foraminous bottom is removably secured by means of a screw-threaded or other connection 19' to the under side of the bottom member 11 in registry with the open-

ing 18 for straining water passing through the latter.

The bottom member 11 is also formed with a number of stiffening ridges or corrugations 20 which are spaced to separate the top member into zones. While it is contemplated that the direction or courses of these ridges toward the drain 18 may be varied it is sometimes advantageous from a manufacturing point of view to form these ridges to extend in substantially parallel relation across the top member as shown.

Preferably the apparatus is of unitary construction, and is cast, bent, pressed, or otherwise formed to provide a rack portion having a part 21 extending laterally from the member 11 in integral continuation of a portion of the wall 17. This rack portion extends horizontally for a relatively short distance as indicated by the reference character 22, and from this point a part 24 extends upwardly preferably to a level above that of the bottom member 11. From this point the rack extends in an arcuate portion 23 to a downwardly directed portion 24', another horizontal portion 26, and finally at the extreme end thereof extends upwardly and outwardly as indicated by the reference character 27. It will be seen therefore that as viewed in section in Fig. 1 the drainage rack comprises the portion 21, the longitudinally spaced substantially horizontal portions 22 and 26 and the intervening portion comprising the outwardly directed walls 24 and 24' and the curved or arched section 23, connecting these walls. Obviously this rack may be continued to any desired length by merely continuing the formation illustrated. For supporting dishes in substantially upright relatively closely spaced positions, this rack is provided with a series of substantially parallel longitudinally disposed slots 28 which extend from a position in close proximity to the water retaining wall 17 to approximately the extreme outer or free end of the rack.

One manner of using the improved stand or rack is illustrated in Fig. 1 from which it will be seen that a dishpan may be disposed on the bottom member 11 to rest on the ridges 20 which, in addition to giving strength and rigidity to the top member provide a sort of track or line-contact support along which even a heavy pan filled with water and dishes may easily be moved to a position suitable to the user. The parts are preferably so proportioned that the pan is supported above the drainage rack at such an elevation as to make it possible to remove dishes from the pan and place them in the rack, when other dishes are already disposed in this rack, without raising a dish being removed to a greater elevation than that required to lift this dish over the edge of the pan. In other words, each dish, as it is re-

moved, is merely carried over the edge of the pan and then moved downwardly, thus requiring a minimum of effort on the part of the person doing this work. The slots 28 are conveniently disposed adjacent to the stand 10 to receive the dishes as they are removed. After the washing operation has been completed, or at least whenever it is desirable to discharge water from the pan 16, this water may be poured onto the bottom member 11 of the stand from which it is discharged through the drain 19 into the sink and thence into the plumbing associated with this fixture. To facilitate the flow of the water toward the drain 18, the ribs 20 may be discontinued near one side of the support 11, or at such other point or points as desired, so that the water may move transversely toward the drain. It will be evident that as the water passes through the strainer 19 the particles removed from the dishes in washing will be caught by this strainer. The cap or strainer 19 may then be removed and the solid material collected therein may be dumped into a suitable container, thus avoiding the usual operation of cleaning the sink strainer subsequent to dish washing.

It should be understood that the present disclosure is for the purpose of illustration only, and that the invention is not to be limited to the exact sizes, shapes or relative widths or depths of the constituent elements but includes all modifications and equivalents which fall within the scope of the appended claims.

I claim:

1. A portable kitchen utensil adapted to be set in a sink, said utensil comprising spaced supporting elements adapted to rest upon the sink bottom, a bottom member held in elevated position above the sink bottom by said supporting elements, the bottom member having an upstanding peripheral wall adapted to retain dish water, the bottom member also having a plurality of stiffening ribs and a drainage opening so disposed that water may flow freely over the surface of the bottom member toward said opening, a removable strainer device registering with said opening and disposed beneath the bottom member, and, in integral continuation of said peripheral wall, a part having an upwardly arched and slotted portion for positioning dishes while draining.

2. A portable kitchen utensil having cushioned supports adapted to rest upon the bottom of a sink, a substantially rectangular bottom member held in elevated position by said supports, retaining walls extending upwardly from said bottom member thereby to form with the latter a water retaining receptacle, the bottom member having a drainage opening and upstanding stiffening ribs so disposed as to permit free flow of wa-

ter toward the drainage opening, a removable strainer cap registering with said opening and disposed below said bottom member, and, in integral continuation of one of
5 said retaining walls, a member having a slotted portion constituting a rack for dishes to be drained.

Signed by me at Boston, Massachusetts,
this 20th day of November, 1930.

10
15
20
25
30
35
40
45
50
55
60
65
NAOMI I. DE BIE.