Dec. 9, 1969 M. L. WEISS 3,482,707

DISH WASHING RACK

Filed Sept. 27, 1967

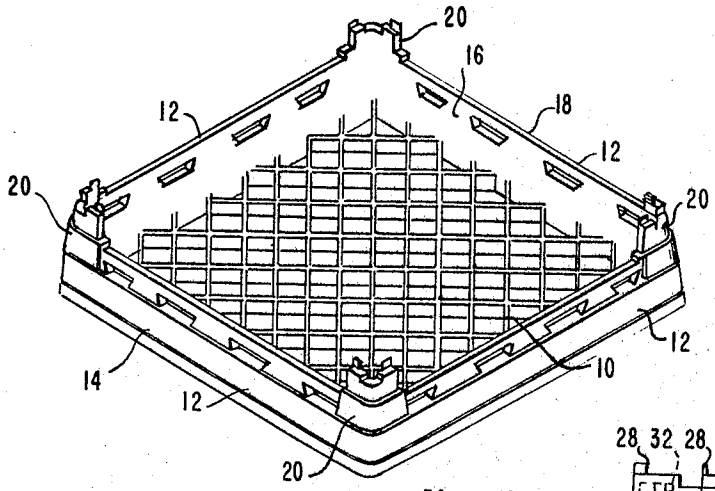
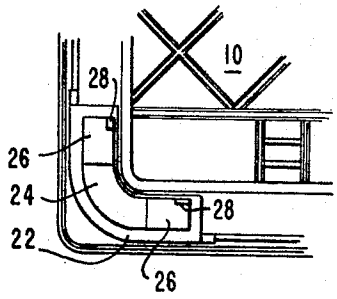


FIG. 1

FIG. 2



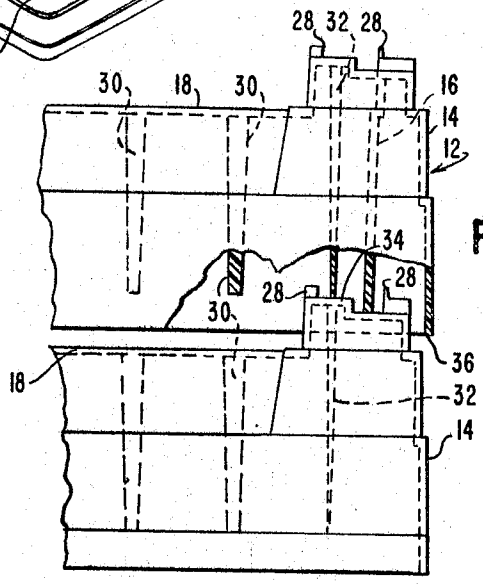


FIG. 4

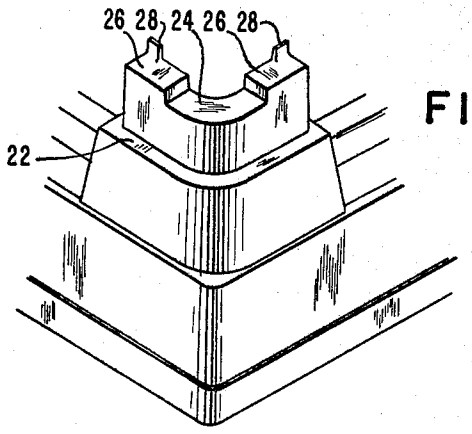


FIG. 3

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DISH WASHING RACK

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ABSTRACT OF THE DISCLOSURE

Dish rack comprising a substantially rectangular meshwork base and four walls tapering upwardly respectively from the sides of the base, each of the tapered walls having inner and outer panels upwardly inclined toward one another and a transverse rail joining the panels at the upper edge thereof so as to define a channel therebetween, adjacent pairs of the walls being joined to one another at the corners of the base and having at the corners respectively a post member superimposed on the walls, the post member having a plurality of inwardly and upwardly extending steps located above the transverse rails of the walls, and at least one transverse rib located within each wall channel below each post member and extending downwardly to a location spaced from the lower edge of the respective outer panels of the walls, whereby a plurality of dish racks of varying dimensions are stackable on one another by placing the lower edge of the transverse ribs of an upper one of the dish racks on top of at least one of the respective steps of the post members of a lower one of the dish racks.

My invention relates to dish racks especially for use in automatic dishwashers, for holding dishes, cups, flatware, glasses and other items to be washed and dried.

In commercial establishments serving prepared foods for consumption on the premises, a larger number of dish racks are employed for cleaning the dishes. They are filled with dirty dishes and passed successively through the dishwasher. When the dishes emerge from the washer after the drying cycle, they are very hot, and it is therefore convenient to store the rack in the open air until the dishes have cooled. To conserve space, the individual manufacturers of racks have given their racks a construction which will permit them to be stacked one on top of the other so as to thereby permit the dishes contained therein to cool off after leaving the washer. Similarly, when a reduced number of dishes require washing, those racks which are not in use can be stacked empty so as to conserve needed space.

It has been found, however, that racks made by one manufacturer are often not stackable with racks made by another manufacturer, so that the purchaser of racks initially from one manufacturer must continue to purchase racks from the same manufacturer only, if he wishes to conserve space by stacking the racks. This has often proven to be uneconomical, particularly when that manufacturer has increased the price of his racks or has gone out of business, and especially if racks of similar quality and equivalent or better construction can be obtained from other manufacturers at lower cost.

It is accordingly an object of my invention to provide a dish rack of such construction as will afford stacking with racks of varying dimensions, such as from different manufacturers and thereby prove to be economically advantageous.

With the foregoing and other objects in view, I accordingly provide a dish rack comprising a substantially rectangular meshwork base and four walls tapering upwardly respectively from the sides of the base, each of the tapered walls having inner and outer panels upwardly inclined

toward one another and a transverse rail joining the panels at the upper edge thereof so as to define a channel therebetween, adjacent pairs of the walls being joined to one another at the corners of the base and having at the corners respectively a post member superimposed on the walls, the post member having a plurality of inwardly and upwardly extending steps located above the transverse rails of the walls, and at least one transverse rib located within each wall channel below each post member and extending downwardly to a location spaced from the lower edge of the respective outer panels of the walls, whereby a plurality of dish racks of varying dimensions are stackable on one another by placing the lower edge of the transverse ribs of an upper one of the dish racks on top of at least one of the respective steps of the post members of a lower one of the dish racks.

Although the invention is illustrated and described herein as embodied in dish rack, it is nevertheless not intended to be limited to the details shown, since various modifications and structural changes may be made therein without departing from the spirit of the invention.

The construction and method of operation of the invention, however, together with additional objects and advantages thereof will be best understood from the following description of specific embodiments when read in connection with the accompanying drawings, in which:

FIG. 1 is a perspective view of a dish rack constructed in accordance with my invention;

FIG. 2 is a top plan view of a corner of the dish rack of FIG. 1;

FIG. 3 is an enlarged view of the lowermost corner of the dish rack as shown in FIG. 1; and

FIG. 4 is a fragmentary diagrammatic elevational view, partly broken away of corner portions of a pair of stacked dish racks in accordance with the invention.

Referring now the drawings, there is shown in FIG. 1 in perspective view, a dish rack according to my invention. The dish rack has a substantially rectangular meshwork base **10** which can be of any design as long as it permits suitable drainage of water from the rack. In the illustrated embodiment, the meshwork is made up of struts criss-crossing at right angles to define rectangular openings for water drainage. Four walls **12** extend upwardly from the edges of the base **10**, and, as seen more clearly in FIG. 4, taper in an upward direction and are made up of inner panels **16** and outer panels **14** inclined upwardly toward one another and connected at their upper edge by a transverse rail **18**.

A post member **20** is superimposed on the walls **12** respectively at each of the corners thereof where adjacent ones of the walls **12** are joined. Each of the post members **20** has a lower step **22** with an angular upper surface surmounted by an upper step **24** with a quarter-circle upper surface (FIGS. 2 and 3) at the ends of which a respective further step **26** having a substantially rectangular upper surface is located. An upwardly extending projection or step member **28** is provided at an inner corner of the upper surface of the uppermost steps **26**.

As seen in FIG. 4, spaced transverse reinforcement ribs **30** are located within the channel defined by the panels **14** and **16** and the rail **18** of each wall. A transverse reinforcement rib **32** also extends downwardly within the hollow corner post member **20** to a location **34** above the lower edge **36** of the outer wall panel **14**.

As further seen in FIG. 4, one dish rack constructed in accordance with my invention is stacked on another dish rack according to my invention. As is quite obvious from the figure, the lower edge **34** of the transverse ribs in each of the post members **20** of the upper dish rack is supported on the upper surface of one of the uppermost steps **26** of each post member of the lower

dish rack shown. The stop members **28** on the respective steps **26** of the lower dish rack prevent the transverse ribs **32** from slipping off the upper surface of the respective steps **26.**

When a dish rack of larger dimensions is to be stacked on a dish rack of smaller nominal dimensions, the transverse rib corresponding to the rib **32** of FIG. 4 or a similar projection might accordingly rest on the upper quarter circle surface of the step **24,** in which case the step **26** serves as a stop for preventing dislodgement of the upper dish rack from the lower dish rack.

If the upper dish rack is of even larger dimensions, then the transverse rib corresponding to the rib **32** of FIG. 4 could conceivably come to rest on the upper surface of the step **22,** in which case the steps **24** and **26** serve as stops for preventing the upper dish rack from slipping off the lower dish rack.

The dish rack according to my invention is molded of polypropylene but may be made of any other suitable plastic material or even of metal.

I claim:

1. Dish rack comprising a substantially rectangular meshwork base and four walls tapering upwardly respectively from the sides of said base, each of said tapered walls having inner and outer panels upwardly inclined toward one another and a transverse rail joining said panels at the upper edge thereof so as to define a channel therebetween, adjacent pairs of said walls being joined to one another at the corners of said base and having at said corners respectively a post member superimposed on said walls, said post member having a plurality of inwardly and upwardly extending steps located above the transverse rails of said walls, and at least one transverse rib located within each wall channel below each post member and extending downwardly to a location spaced from the lower edge of the respective outer panels of said walls, the next higher step of said post member serving as stop member for the transverse rib of another dish rack engageable with the upper surface of the next lower step, and including an upwardly extending projection located at an inner edge of the uppermost step and serving as stop member for the transverse rib of another dish rack engageable with the upper surface of the upper most step, whereby a plurality of dish racks of varying dimensions are stackable on one another by placing the lower edge of the transverse ribs of an upper one of the dish racks on top of at least one of the respective steps of the post members of a lower one of the dish racks.

2. Dish rack according to claim **1,** wherein the lowermost step has a right-angle shape, the next higher step is in the shape of a quarter-circle, and the uppermost step is substantially a rectangle.

3. Dish rack according to claim **1,** wherein the next lower step from said uppermost step is in the shape of a quarter-circle, and said uppermost step is substantially a rectangle in shape and is located at each end of said quarter-circular step, said upwardly extending stop member being located at a corner of each of said rectangles most distant from said quarter-circular step.

4. Dish rack according to claim **1,** wherein said transverse rib is one of a plurality of transverse ribs spaced along the respective walls within the channels thereof.

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