UNITED STATES PATENT OFFICE.

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DISH-WASHING-MACHINE RECEPTACLE.

1,380,310.


To all whom it may concern:

Be it known that I, FRANK E. WOLCOTT, a citizen of the United States, residing at Hartford, in the county of Hartford and

State of Connecticut, have invented a new and useful Improvement in Dish-Washing-Machine Receptacles, of which the following is a specification.

Covers for the tanks of mechanically and electrically operated apparatus for washing dishes, culinary utensils, and similar household implements must so fit the tanks that the cleansing liquid when violently agitated during the process of washing will not splash out around the edges and wet surrounding objects to the annoyance of the users, and at the same time, of course, it is desirable that the covers should be as light in weight and cheap in construction as possible, and should open and close easily after long use as well as when new. It is somewhat difficult to make light, cheap and durable covers which will be tight and yet easily opened and closed.

The object of this invention is to provide a construction for the tanks and covers of such apparatus which will render it unnecessary to use extreme care and incur large expense in manufacture in order to have light, cheap and easily opened covers that fit water-tight in the tanks and prevent the escape of water when it is agitated for washing the contents of the tanks.

This object is attained by providing the upper edges of the tanks with ledges and the covers with baffling lips which fit together in such manner that the passage between them for any water which attempts to escape is so circuitous that none can pass out, and also shaping the tank walls below the ledges so that water thrown up by the operation of the machines will be directed away from the joints between the covers and the tanks.

In the accompanying drawings Figure 1 shows a view of a dish washing machine with the tank and cover constructed according to this invention. Fig. 2, on much larger scale, shows a section of a portion of the tank and cover illustrating the manner in which they fit together. Fig. 3 is a view similar to that shown in Fig. 2 with a cover of modified construction lifted from the tank.

The tanks of this type of apparatus are commonly made of sheet metal bent, folded or stamped to the desired shape, usually rectangular. The tank shown is supported on angle-iron legs. In the embodiment of the invention illustrated the tank near its upper edge in the interior has a substantially horizontal seat with a substantially vertical wall above and a substantially vertical wall below the seat. Of course these walls above and below the seat need not necessarily be exactly vertical. The rim of the tank is curled over to form an ornamental stiffening and finishing bead. Below the vertical wall beneath the seat is an inwardly extending ledge, and below this ledge the wall slopes outward to the full size of the main wall of the tank. This shape extends entirely around the tank and may be made by rolling the metal to the desired conformation while in sheet form and before it is bent, folded or otherwise put together to complete the tank.

The cover shown is formed of two sheets of thin metal, a top sheet 8 and a bottom sheet 9. The top sheet has its edge all around bent downward to form a flange 11 which fits loosely within the vertical wall 4 of the tank, and the bottom sheet is formed so as to have a downwardly extending lip 12 that loosely fits the vertical wall 5 of the tank, and an upwardly extending flange 13 that is soldered, brazed or otherwise fastened to the flange 11 around the top sheet. The lip 12 depends such a distance that it rests upon the ledge 7 when the cover rests upon the seat 3. If desired, the lip may be formed of a separate piece, as shown in Fig. 3. In this case the edge of the bottom sheet 14 is turned down and entered and fastened between two sections of the lip strip 15, the edge 16 of which is turned up and secured to the flange 11 that extends down from the edge of the top sheet 8. A filling piece 17 of wood or other suitable material may be placed inside the metal sheets before they are fastened together, for adding strength and durability to the structure, as shown in Fig. 3. The formation of the bead at the upper edge, the inwardly extending seat lower down, and the ledge still lower down adds rigidity and ruggedness to the upper portion of the tank, while the lip on the under side of the cover strengthens the cover and if it is filled with wood aids in preventing the wood from warping out of shape.

Such a cover as described may be made
cheaply, it is light in weight, and it fits the tank loosely so as to open and close easily, and yet when closed down on a tank thus shaped the only path for the escape of water is over the ledge, around and up back of the lip, across the seat and up and over the outer rim, a path so tortuous that no matter how violently the water in the tank is agitated none escapes. Furthermore by inclining the walls of the tank below the ledge the water which is thrown upward is directed away from the joint between the cover and the tank rather than toward it.

The invention claimed is:

1. A dish washing machine receptacle comprising a tank having its side walls shaped to provide an inwardly extending cover seat below its upper edge and an inwardly extending ledge below said seat, and a cover fitting into the tank with its under surface resting upon said seat, said cover having a lip that extends downward below the seat to said ledge.

2. A dish washing machine receptacle comprising a metal tank having its side walls shaped to provide an inwardly extending cover seat and an inwardly extending ledge below said seat, and a metallic cover fitted within the side walls of the tank with its under side adapted to rest on said seat and having a folded lip adapted to fit the side walls and rest on said ledge when the cover rests upon said seat.

3. A dish washing machine receptacle comprising a tank having an inwardly extending cover seat below its upper edge, an inwardly extending ledge below said seat and its side walls sloping outward and downward below said ledge, and a cover loosely fitting into the tank, said cover shaped to rest upon said seat and provided with a lip that extends below the seat and rests on said ledge when the cover rests on the seat.

4. A dish washing machine receptacle comprising a tank having its side walls shaped to provide a substantially horizontal cover seat below its upper edge, and a cover loosely fitting into the tank, said cover shaped to rest upon said seat and fit the side walls of the tank above and also below said seat, the side walls of the tank below the bottom of the cover being extended inward beyond and closing the lower edge of the joint between the cover and side walls of the tank.

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