

M. McCULLOUGH.
 DEVICE FOR WASHING GLASSES AND CUPS.
 APPLICATION FILED OCT. 3, 1917.

1,257,902.

Patented Feb. 26, 1918.

Fig. 1.

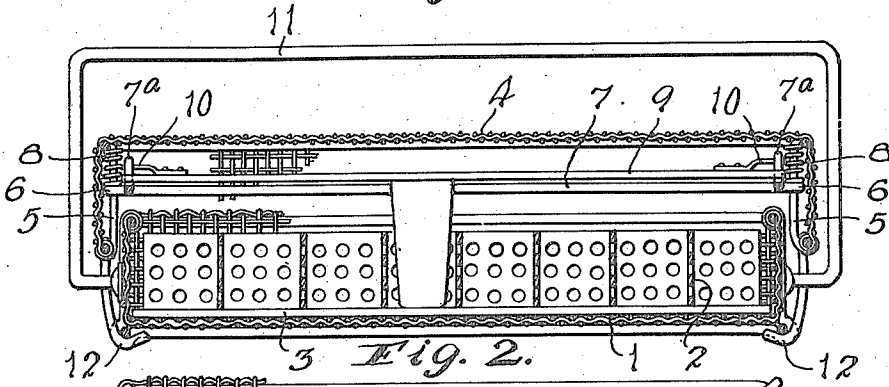


Fig. 2.

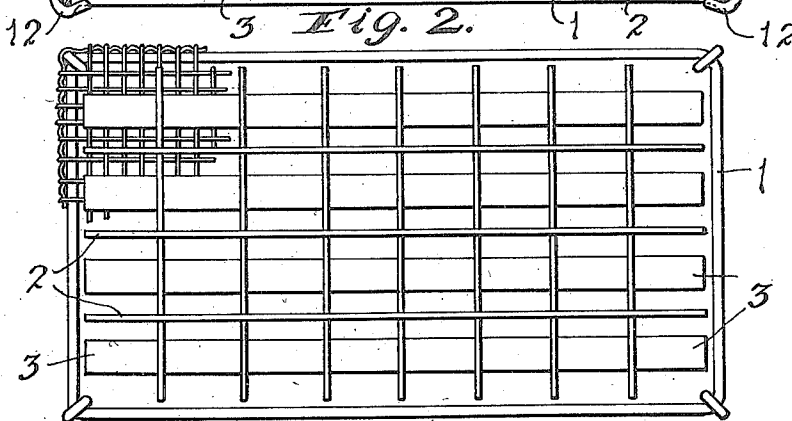


Fig. 3.

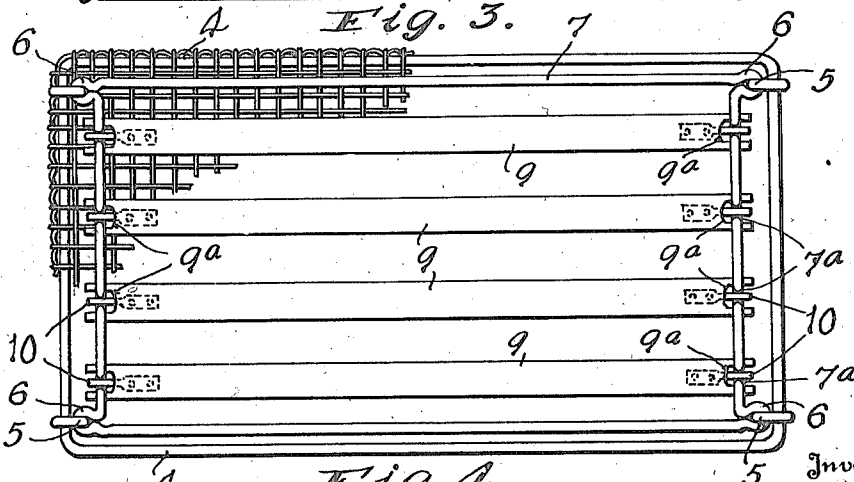
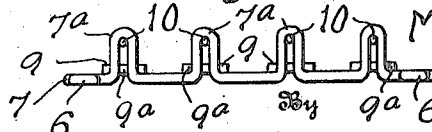


Fig. 4.



M. McCULLOUGH—

H. S. Kline

Attorney

UNITED STATES PATENT OFFICE.

MORGAN McCULLOUGH, OF LOS ANGELES, CALIFORNIA.

DEVICE FOR WASHING GLASSES AND CUPS.

1,257,902.

Specification of Letters Patent.

Patented Feb. 26, 1918.

Application filed October 3, 1917. Serial No. 194,484.

To all whom it may concern:

Be it known that I, MORGAN McCULLOUGH, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles, State of California, have invented a new and useful Device for Washing Glasses and Cups; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The present invention relates to a dish washing machine, and has for its object to provide a device of this character which embodies novel features of construction whereby large numbers of glasses and cups can be quickly and thoroughly cleansed with a minimum amount of labor.

Further objects of the invention are to provide a device of this character which is comparatively simple and inexpensive in its construction, which can be easily handled and manipulated by a single person, which has a skeleton formation and can be easily kept in a clean and sanitary condition, and which will enable the glasses and cups to be handled without danger of breaking or nicking the same.

With these and other objects in view, the invention consists in certain novel combinations and arrangements of the parts as will more fully appear as the description proceeds, the novel features thereof being pointed out in the appended claims.

For a full understanding of the invention, reference is to be had to the following description and accompanying drawings, in which:—

Figure 1 is a vertical longitudinal sectional view through a dish washing device constructed in accordance with the invention.

Fig. 2 is a top plan view of the tray with the cover removed.

Fig. 3 is a bottom plan view of the cover of the tray.

Fig. 4 is an end elevation of the presser frame removed from the cover.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

Referring to the drawings, which illustrate one embodiment of the invention, the numeral 1 designates a shallow tray which has a skeleton formation, being preferably

constructed of woven wire meshing and being of a sufficient size to receive a considerable number of the cups or glasses to be washed. In practice it has been found that a tray of proper size to receive about three dozen glasses or cups is very convenient and enables excellent results to be obtained. Fitted removably within the shallow tray 1 is a set of cells 2, said cells dividing the tray into individual pockets or compartments to receive the respective glasses or cups and serving to hold them properly positioned and in a spaced relation to each other. A series of parallel wooden slats 3 extend across the bottom of the shallow tray 1, one of the slats being arranged under each series of glass receiving cells so that the glasses or cups will not come into contact with the wire or metal portions of the tray, but will be engaged by the wooden slats, thereby avoiding possible nicking or injury of the glasses or cups in the event they should be carelessly dropped into position within the cells.

A flanged cover 4 is removably applied to the shallow tray 1, said cover also having a skeleton formation and being preferably constructed of woven wire meshing similar to that utilized in the construction of the body portion of the tray. The sides of the cover 4 are provided at points adjacent the corners thereof with vertical guide rods 5, said guide rods being slidably engaged by eyes 6 at the edges of a wire frame 7 which is loosely mounted within the cover. Coil springs 8 surround the guide rods 5 and engage the eyes 6 in such a manner as to press downwardly thereon. This wire frame 7 carries a series of wooden slats 9 which correspond to the slats 3 at the bottom of the tray, said slats being yieldably connected to the wire frame and serving to yieldably engage the upper ends of the cups or glasses within the cells 2 when the cover is applied to the tray. In the present instance opposite sides of the wire frame are shown as crimped at 7^a, while the extremities of the slats 9 are notched at 9^a for a loose engagement with the said crimps 7^a. Spring arms 10 which are applied to the ends of the slats 9 project into the crimped portions 7^a of the wire frame and engage the upper ends thereof to hold the slats yieldably in engagement with the frame. However, the slats are free to move upwardly a limited amount against the action of the spring arms, thereby enabling them to accommodate themselves to

the respective height of the glasses or cups which have been placed in the cells 2 of the tray 1. The frame 7 and yieldably mounted slats 9 carried thereby constitute what
 5 may be termed a presser frame for engaging the tops of the cups or glasses to hold them firmly in position within the cells 2 and prevent them from shaking about and becoming broken as the tray is manipulated and
 10 moved from place to place.

A suitable handle 11 may be provided for convenience in manipulating the tray, while any suitable fastening members such as the hooks 12 may be provided for holding the
 15 cover 4 in position upon the tray. It is contemplated to use several of these trays in connection with two tanks of water, one of the tanks containing hot soapy water, while the other tank contains clear water
 20 for rinsing the glasses. The cells 2 of the tray are first filled with glasses or cups, after which the cover 4 is applied to the tray and the glasses or cups yieldably engaged by the slats 9 of the presser frame in
 25 such a manner as to be held firmly in position within the cells. The tray is then immersed in the tank of hot soapy water and permitted to remain therein sufficiently long for any sugar or any other accumulations
 30 upon the glasses or cups to be dissolved or softened. Several of the trays may be permitted to stand in the hot water at the same time. The tray is then moved up and down within the hot soapy water to cleanse
 35 the glasses, and then removed therefrom and placed in the clear hot rinsing water. After being rinsed the tray is inverted upon a suitable table or support, the hook members 12 released, and the tray removed, leaving
 40 the glasses resting upon the cover 4. Where several of the dish washers are in use the operation is practically continuous, and a single operator can easily and thoroughly wash a large number of glasses and
 45 cups.

Having thus described the invention, what I claim as new and desire to secure by Letters Patent, is:—

1. A dish washer including a skeleton
 50 tray, cells fitted in the tray, a flanged cover for the tray, a movable frame yieldably mounted within the cover, and a series of yieldably mounted slats carried by the movable frame and adapted to engage the tops
 55 of the dishes within the cells.

2. A dish washer including a skeleton tray, cells fitted in the tray, a flanged cover for the tray, guide rods at the sides of the cover, a movable frame arranged within the cover and provided with guide eyes engaging the guide rods, and a series of yieldably mounted slats carried by the movable frame and arranged to engage the tops of the dishes within the cells.

3. A dish washer including a skeleton
 65 tray, cells fitted in the tray, a flanged cover for the tray, a movable wire frame yieldably mounted within the cover, opposite sides of the wire frame being formed with crimped portions, a series of slats extending
 70 across the frame and having the ends thereof notched for engaging the crimped portions of the frame, and spring arms projecting from the slats and engaging the crimped portions of the frame to hold the slats yieldably in position, said slats serving to engage
 75 the tops of the dishes within the cells.

4. A dish washer including a skeleton tray, cells fitted in the tray, a flanged cover for the tray, vertical guide rods at the sides
 80 of the cover, a wire frame arranged within the tray and formed with eyes slidably engaging the guide rods, opposite ends of the wire frame being crimped, springs yieldably engaging the frame to force it downwardly,
 85 a series of slats extending across the frame and having notched ends which loosely engage the crimps of the frame, and spring arms projecting from the slats and engaging the crimps to hold the slats yieldably in position,
 90 said slats serving to engage the tops of the dishes within the cells.

5. A dish washer including a skeleton tray, cells fitted within the tray, a series of slats extending across the bottom of the tray
 95 and arranged under the cells, a cover for the tray, a yieldably mounted frame arranged within the cover, and a series of slats corresponding to the slats of the bottom of the tray, the second mentioned slats being yieldably mounted upon the movable frame and
 100 serving to engage the tops of the dishes within the cells.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

MORGAN McCULLOUGH.

Witnesses:

R. H. LOENHOLM,
 N. M. HINSHAW.