J. L. BLANKS.

DISH WASHING MACHINE.

APPLICATION FILED FEB. 27, 1917.

1,281,493.

Patented Oct. 15, 1918.

2 SHEETS—SHEET 1.

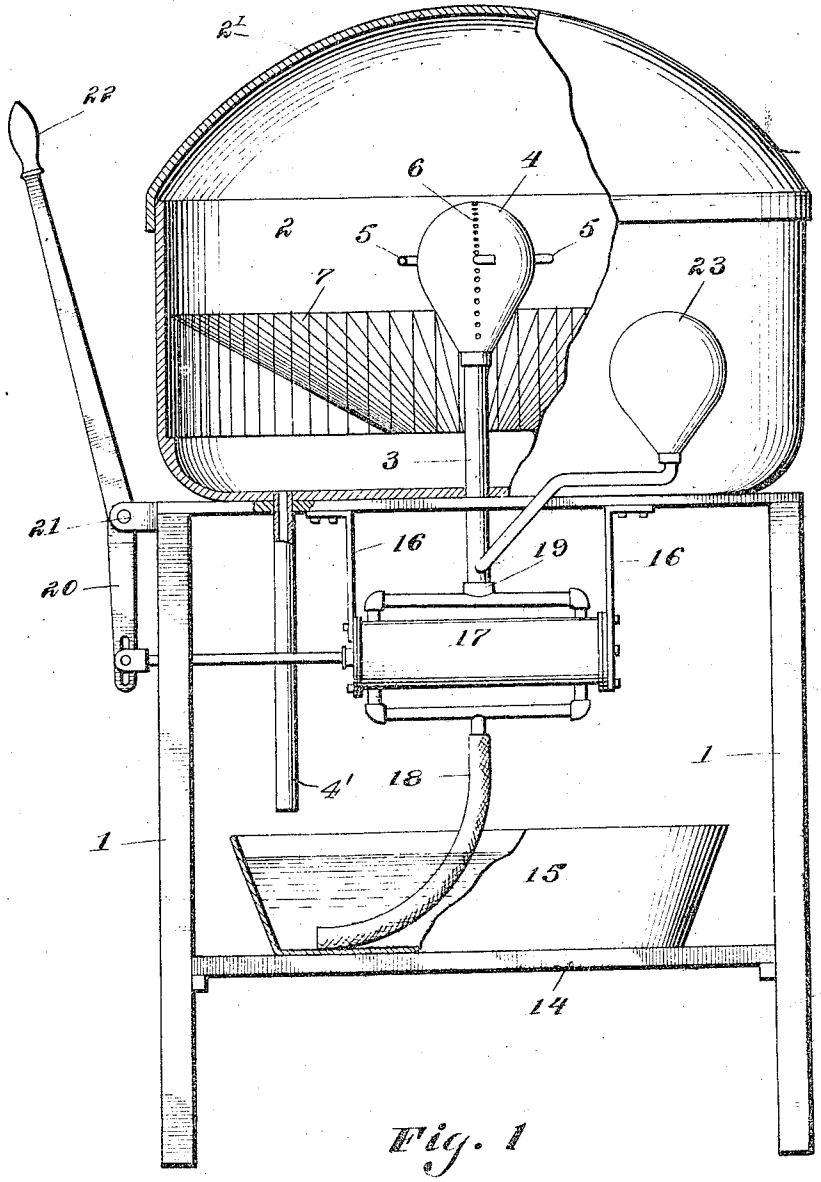


Fig. 1

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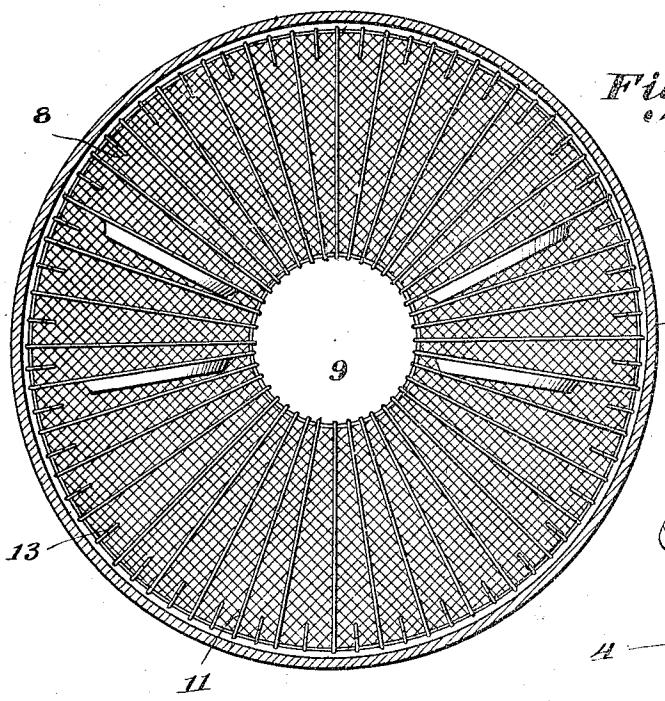


Fig. 2

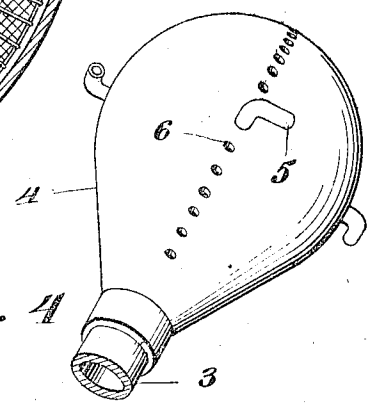


Fig. 4

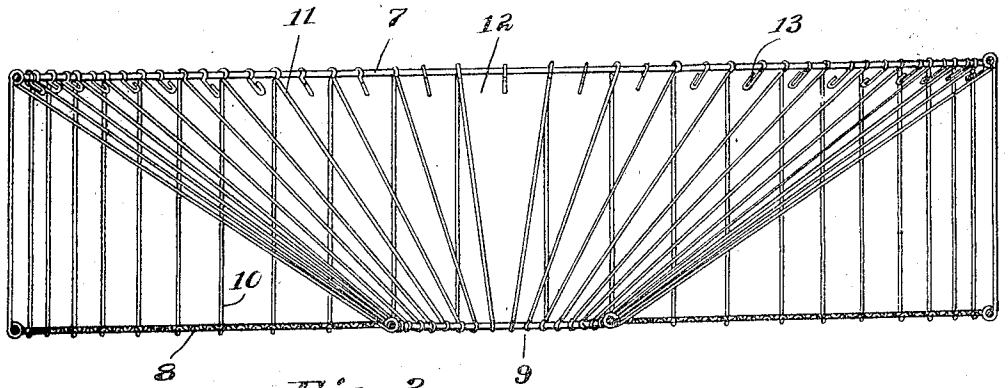


Fig. 3

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DISH-WASHING MACHINE.

1,281,493. Specification of Letters Patent. Patented Oct. 15, 1918.

Application filed February 27, 1917. Serial No. 151,294.

To all whom it may concern:

Be it known that I, JAMES L. BLANKS, a citizen of the United States, residing at Beresford, in the county of Union and State of South Dakota, have invented new and useful Improvements in Dish-Washing Machines, of which the following is a specification.

This invention relates to certain novel and useful improvements in machines for washing dishes.

In carrying out the present invention, it is my purpose to provide a machine of the class described whereby the dishes may be thoroughly washed and subsequently dried and wherein the component parts will be so arranged and correlated as to reduce the possibility of derangement to a minimum.

It is also my purpose to provide a dish washing machine which will embody in its construction, among other features, a receptacle adapted to hold the dishes to be washed, and a sprinkler head in the receptacle capable of rotary motion therein and having propelling nozzles thereon through which the water may pass to impart rotation to the head, and a plurality of apertures through which the water may be thrown against the dishes in the rotation of the head under the action of the water issuing through the nozzles, thereby effectively cleansing the dishes in the receptacle.

With the above and other objects in view, the invention consists in the construction, combination and arrangement of parts hereinafter set forth in and falling within the scope of the claim.

In the accompanying drawings:

Figure 1 is a view in side elevation of a dish washing machine constructed in accordance with the present invention, the receptacle being shown in section.

Fig. 2 is a horizontal sectional view through the receptacle showing the basket therein carrying the dishes.

Fig. 3 is a vertical sectional view through the basket removed from the receptacle.

Fig. 4 is a perspective view of the sprinkler head removed from the receptacle.

Referring now to the drawings in detail, 1 designates a supporting stand of any appropriate construction. Mounted upon the stand 1 is a receptacle 2 preferably, although not necessarily, cylindrical in cross section and designed to contain the dishes to be washed and having the upper end thereof open to facilitate the insertion and removal of the dishes. The open end of the receptacle 2 is preferably closed by means of a removable dome shaped cover 2'. Connected to the bottom of the receptacle 2 and projecting into the receptacle approximately centrally thereof is a supply pipe 3 and swiveled upon the upper end of the supply pipe 3 is a sprinkler head 4. From the bottom of the receptacle an outlet pipe 4' is provided to carry off the water after being used. In the present instance, the sprinkler head 4 is substantially oval in shape and has the small extremity connected to the pipe 3. Formed on the side wall of the sprinkler head 4 and spaced apart thereabout circumferentially thereof are reaction nozzles 5 through which water is adapted to pass and as the water passes through the nozzles, such water reacts upon the nozzles to rotate the head 4, as is readily understood by those familiar with the reaction turbines. Also formed in the side and top walls of the head 4 are rows of apertures 6 arranged at right angles to each other and through these apertures the water is adapted to be thrown against the dishes in the receptacle in the rotation of the head under the action of the water flowing through the nozzles 5.

7 designates a wire basket or rack mounted within the receptacle 2 and adapted to hold the dishes and comprising a bottom wall 8 formed centrally with an opening 9 to accommodate the head 4, and a vertical cylindrical side wall 10 uprising from the marginal edge of the bottom wall 8. Radiating from the opening 9 and secured to the inner edge of the bottom wall 8 and having the outer ends thereof fastened to the side wall 10 are division wires 11 dividing the receptacle into a series of radially extending compartments 12 adapted to receive the dishes, and support the same on edge and constructed so as to hold the dishes with their surface exposed to the action of the water coming from the sprinkler head as it rotates, as clearly illustrated in Figs. 2 and 3 of the drawings. These compartments are designed to receive plates, saucers and analogous dishes, while secured to the upper edge of the side wall 10 and disposed within the upper portions of the respective compartments 12 are cup holders 13 whereby cups and similar articles may be supported.

In this embodiment of my invention, I have shown the supporting stand 1 as pro-

vided with a shelf 14 below the receptacle 2 and mounted upon the shelf 14 is a water receptacle 15, while depending from the top portion of the stand 1 below the receptacle 2 thereon are hangers 16 and mounted within the hangers 16 is a double acting pump 17 having the inlet nozzle connected with a tube 18 submerged in the water in the receptacle 15, and an outlet nozzle connected by means of a pipe 19 with the lower end of the supply pipe 3. The piston rod of the pump 17 is pivotally connected with the lower end of a lever 20 fulcrumed between its ends upon a bracket 21 secured to one of the legs of the stand 1 and the upper end of this lever 20 is equipped with a handle 22 whereby the lever may be actuated to reciprocate the piston in the cylinder of the pump 17. In this rectilinear movement of the piston under the action of the lever water is drawn continuously from the receptacle 15 and forced through the pipes 19 and 3 and through the nozzles 5 and openings 6 in the head 4, thereby revolving the head and causing the water to be thrown against the dishes in the basket 7. The outlet side of the pump is preferably connected with an air dome 23 so as to insure an even and unifrom delivery of water to the sprinkler head.

Although I have shown and described the pump 17 as connected with the pipe 3, I wish it to be understood that the pump 17 may be dispensed with when the water under pressure is available and such water fed directly to the pipe 3 and when the pump is employed any suitable mechanism may be used for operating the same.

After the dishes have been washed, the tube 18 may be withdrawn from the receptacle 15 and the pump operated to force air through the head 4 to facilitate the drying of the dishes.

While I have herein shown and described one preferred form of my invention by way of illustration, I wish it to be understood that I do not limit or confine myself to the precise details of construction herein described and delineated, as modification and variation may be made within the scope of the claim without departing from the spirit of the invention.

I claim:

A dish washing machine comprising a support, a receptacle disposed upon the lower portion thereof and serving as a reservoir, a casing disposed upon the top of said support, a lid upon said casing, a pump secured upon said support, a pipe communicating with said pump and extending into said reservoir receptacle, a second pipe communicating with said pump and extending upwardly into said casing, a spray nozzle on the upper end of said second named pipe, and a discharge pipe communicating with the bottom of said casing and terminating above said receptacle.

In testimony whereof I affix my signature.

JAMES L. BLANKS.