J. J. CROW.

DISH WASHING MACHINE.

APPLICATION FILED JAN. 23, 1915.

1,246,556.

Patented Nov. 13, 1917.

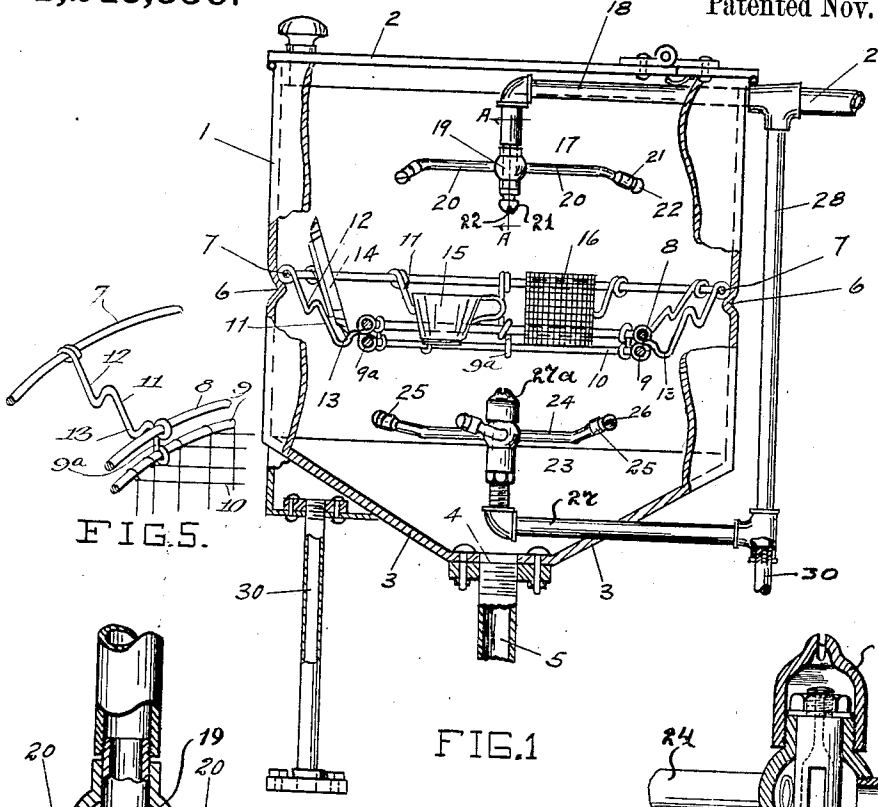


FIG. 1

FIG. 5.

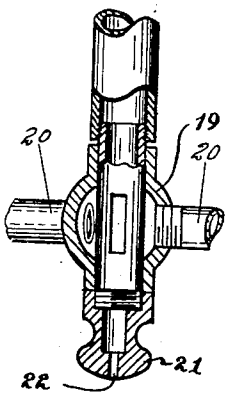


FIG. 3

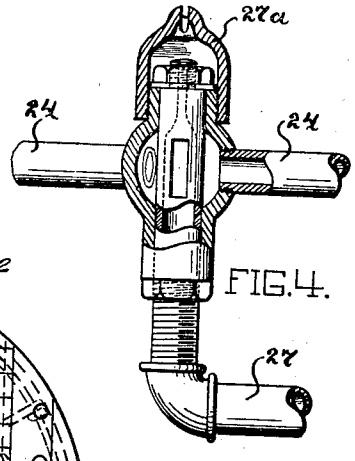


FIG. 4.

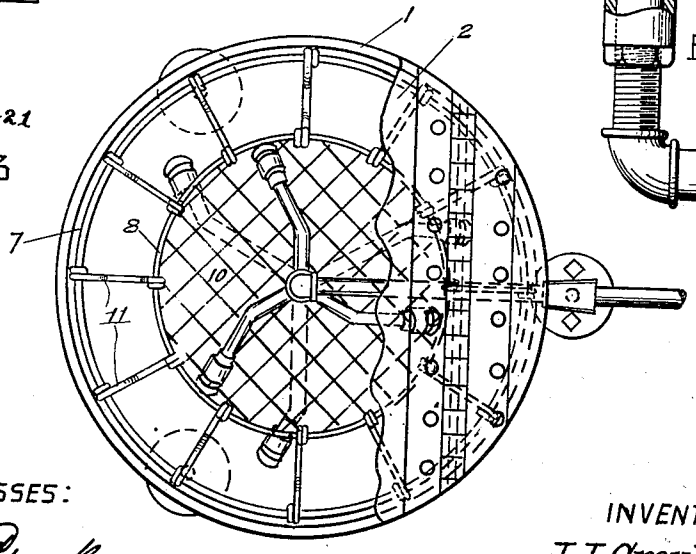


FIG. 2

WITTNESSES:

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DISH-WASHING MACHINE.

1,246,556. Specification of Letters Patent. Patented Nov. 13, 1917.

Application filed January 23, 1915. Serial No. 3,884.

To all whom it may concern:

Be it known that I, JESSE J. CROW, a citizen of the United States, residing at Dallas, in the county of Dallas and State of Texas, have invented a certain new and useful Improvement in Dish-Washing Machines, of which the following is a specification.

My invention has relation to an improvement in dish-washing machines and in such connection it relates more particularly to the novel construction and arrangement of parts forming such a machine.

In my present invention, the dishes to be cleaned are placed on and supported by a dish shaped platform the walls and base of which are so formed as to permit of water passing from above or below the platform passing freely through the platform, said platform being removably supported within a drum or chamber between an upper and a lower water discharging device rotating within the chamber or drum and supplied with water from a source outside the drum or chamber.

The principal object of my invention is to provide a dish washing machine of simple construction, the various parts of which are readily accessible for cleaning or repairs, the water discharging means being arranged to discharge upon the top and bottom of the tray or platform receiving the dishes.

The nature and scope of my invention will be more fully understood from the following description taken in connection with the accompanying drawings illustrating the invention and in which,—

Figure 1, is a side elevational view of a dish-washing machine embodying main features of my invention, the walls of the machine being partly broken away to disclose the interior and certain parts being sectioned to illustrate their construction.

Fig. 2 is a top or plan view of the same with the lid broken off to show the interior of the machine.

Fig. 3 is an enlarged vertical sectional view taken on the line *a*—*a* of Fig. 1, and illustrating in detail the revoluble connection between the upper spraying arms and the water supply pipe.

Fig. 4, is an enlarged sectional view of the lower spraying device.

Fig. 5 is a perspective view illustrating in detail the construction of the dish supporting tray.

Referring to the drawings, 1 represents a sheet metal drum or tank having a lid 2 at its top and a conical floor 3 at its base. The floor 3 terminates in an outlet opening 4 leading by pipe 5 to the sewer or other place adapted to receive the dirty water.

About midway between the top and bottom of the tank 1, the circular wall of said tank is annularly crimped or grooved to form on the interior of the tank a circular ledge or ridge 6 forming a support for the dish supporting tray. This tray consists essentially of an annular ring 7 formed preferably from stout wire, a second ring 8 concentric therewith and likewise formed preferably of stout wire, and a central platform consisting of an annular ring 9 of wire covered with wire mesh 10. The second ring 8 is secured to and supported by the first ring 7 by means of a series of wire fasteners 11 each bent as shown in Fig. 1 to form two ledges 12 and 13 to receive the edge of a plate or dish 14. The platform ring 9 is secured to and supported by the second ring 8 by means of a series of wire fasteners 9^a.

The platform is arranged to receive the cups 15 or hollow dishes and also a wire cage 16 in which the saponaceous or cleansing material may be placed.

Above the dish supporting tray is arranged a water spraying device 17 comprising essentially a water supply pipe 18 terminating and discharging within a bulb 19 from which radiates the outwardly and downwardly projecting sprayer pipes 20 each of which has at its outlet end a nozzle 21 provided with a transverse slit or opening 22. When water enters the arms or pipes 20 the bulb 19 revolves around the supply pipe 18, in the manner of a lawn sprinkler, the discharge from pipes 20 causing the bulb and arms to rotate more or less rapidly according to the pressure of water in arms 20.

Below the tray is arranged a water spraying device 23 constructed and arranged to operate similarly to the device 17 above the tray. The radial arms 24 of device 23 have upwardly extending discharge nozzles 25 slitted or slotted as at 26 and the main pipe 27 supplying the sprayer 23 has a nozzle 27^a centrally disposed with regard to the nozzles 25 to discharge directly upon the base of platform 10.

The pipes 18 and 27 terminate in a stand

pipe 28 to which water under pressure is supplied from water pipe 29. The water pipe 29 may lead from a source of hot or cold water supply as desired or it may be connected in any suitable manner to both hot and cold water supply pipes.

The drum or tank may be supported upon legs 30 of preferably piping—one leg serving also to support the stand pipe 28.

In the operation of the machine the hollow dishes 15 are placed on the reticulated platform 10 and the flat dishes 14 rest in the ledges 12 and 13 in an inclined position. Water entering stand pipe 28 supplies the upper and lower spraying devices 17 and 23 and water is discharged downwardly and upwardly upon the platform 10 and dishes supported by the tray of which platform 10 is the base.

The water from nozzles 21 and 25 is whirled around and around as the arms 20 and 24 of the two spraying devices revolve. As a result all surfaces of the dishes 14 and 15 are washed by the whirling and churning water circulating through the dish supporting tray, and are thoroughly cleansed in a short period of time.

Having thus described the nature and objects of my invention what I claim as new is,—

In a machine of the character described a drum, a tray consisting of an annular ring covered by reticulated wire to form a platform to receive hollow dishes, a second annular ring supporting said platform, a series of wire fasteners supporting said second ring, said fasteners being bent to form ledges to receive and retain the flat dishes in inclined position and an annular band supporting said fasteners, the interior wall of said drum being arranged to removably support said band.

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

JESSE J. CROW.

Witnesses:
G. C. WALCHOP,
G. SCHUMM.