W. P. TIPPIT.

WASHING MACHINE.

APPLICATION FILED JULY 12, 1909.

972,736. Patented Oct. 11, 1910.

Fig. 1.

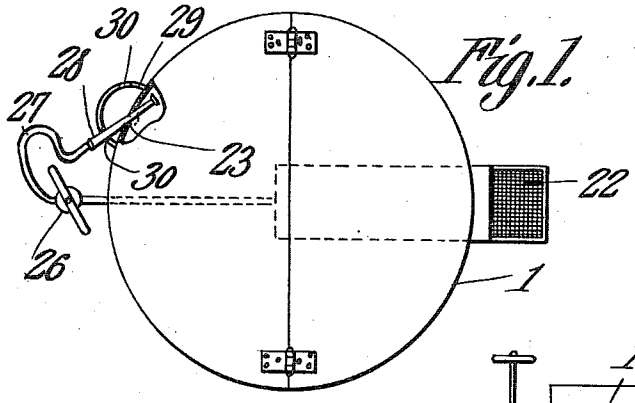


Fig. 2.

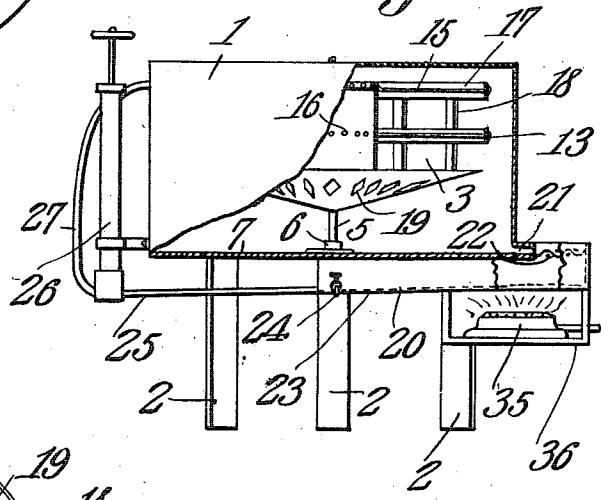


Fig. 3.

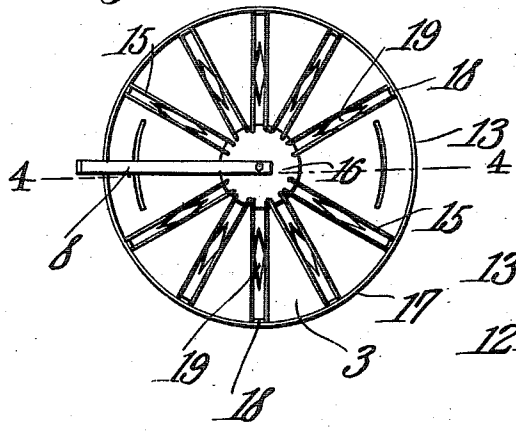
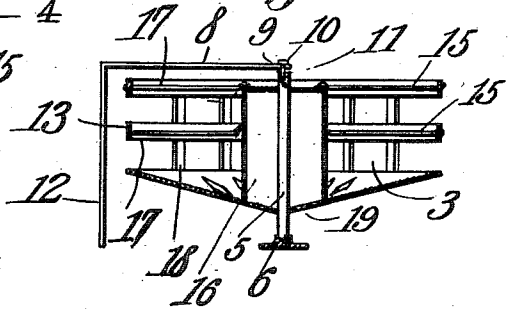


Fig. 4.



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WASHING-MACHINE.

972,736. Specification of Letters Patent Patented Oct. 11, 1910.

Application filed July 12, 1909. Serial No. 507,153.

To all whom it may concern:

Be it known that I, WILLIAM P. TIPPIT, a citizen of the United States, residing at Fayette, in the county of Howard and State of Missouri, have invented a new and useful Washing-Machine, of which the following is a specification.

My invention relates to washing apparatus, more particularly to such apparatus as is used to clean dishes, table ware, etc., the object of the invention being to provide improvements in a machine of this character whereby the articles are cleansed by the action of hot water thereon, the water imparting rotary motion to the dish-carrying rack.

A further object contemplates drawing the dirty water from around the dishes, and filtering it, thus making it possible for it to be used several times; and heating the water thoroughly during the process.

A secondary object is that after the completion of the washing process, the dishes may be thoroughly dried without removing them from the machine.

With the above and other ends in view, the invention consists in the construction, combination and arrangement of parts, all as hereinafter fully described, specifically claimed, and illustrated in the accompanying drawings, wherein,

Figure 1 is a top plan of my machine, showing the wire gauze filtering device, parts being broken away. Fig. 2 is a side elevation, parts being broken away and sectioned. Fig. 3 is a top plan of the rotatable dish rack. Fig. 4 is a transverse section of the dish rack on the line 4—4 of Fig. 3, parts being shown in elevation.

Referring to the drawings, 1 designates the cylindrical tank or main reservoir, which constitutes the body of the machine and in which the articles are cleansed. This tank rests on a series of legs or supports 2, attached to the sides thereof by any suitable means, and of sufficient height to admit the heating apparatus 35 and the secondary reservoir 20 under the same. To provide for the revolution of the dishes, there is rotatably mounted in the tank 1, the circular dish rack 3, having an orifice in the center of its base, toward which the base slopes in which orifice the shaft 5 is rigidly secured, the latter being journaled in the socket 6, attached to the interior of the base 7 of the tank. The upper end of this shaft is rotatably carried by a supporting arm 8, by means of a pin 10, engaging orifices 9 and 11 in the supporting arm and shaft respectively.

The arm 8 is bent to form a standard 12, by means of which the arm is attached to the side of the tank 1 thus securing the shaft in upright position. The shelves 13 of the circular rack are composed of a series of slats 17 spaced vertically by the standards 18 disposed at regular intervals about the edge of the base of the rack 3, and between the slats the water has free access to the dishes that are placed between the guard wires 15, extending from the sides of the shelves 13 to the casing 16 carried on the base of the rack 3. Each dish is retained by two pairs of these wires, each pair being a sufficient distance from the adjacent ones to permit the unlimited passage of water about the dishes contained therein. A plurality of drainage openings 19 are supplied in the sloping base of the rack 3 through which water and dirt may pass to the base of the tank 1.

Carried by the under side of the tank 1, and extending part way across the same, is a rectangular secondary reservoir 20, having, adjoining the outlet 21 from the tank 1, the filtering wire gauze 22, through which all water must pass to enter said reservoir. The base 23 of the reservoir has a very slight slope toward the axis of the tank 1 and is drained by the outlet stop cock 24, and by the supply pipe 25 at the lower end thereof. This said supply pipe leads to the hand force pump 26, rigidly attached to the tank 1 and of sufficient size to throw a stream of water in proportion to the size of the machine to which it is attached. A hose 27 is fastened to the pump and is provided at its extremity with a nozzle 28, supported in the orifice 23 in the side of the tank and by a semi-circular arm 29. In order that an adjustment of the stream of water may be had, the supporting arm 29 is supplied with a series of notches 30 in which the nozzle rests when at the desired angle to the dishes contained in the rack 3. The base 7 of the tank has a very slight slope toward the out-

let 21 into the secondary reservoir, thus making it possible to entirely empty the tank.

From the foregoing it will be understood that the operation of this device is as follows: After the dishes have been placed between the guard wires in the rack 3, and the nozzle 28 extended into the tank and placed in the desired notch in the arm 29 a sufficient amount of water, soapy or otherwise, is poured into the secondary reservoir 20, and the pump 26 is operated, forcing a stream of water through the hose 27 and the nozzle 28, against one side of said dishes thereby rotating said rack. The water, by this operation, is allowed to play on and cleanse one side of the dishes but to repeat this process on the other side it is necessary to remove the nozzle 28 to the opposite notch 30, thus changing the angle to such a degree that the water will be forced against the opposite sides of the dishes. As soon as the water has flowed away from the dishes it passes through the drainage openings 19, in the base of the rack 3, through the outlet 21 of the tank 1, and back into the secondary reservoir 20, first passing through the filter 22. This operation may be repeated as often as desired, the water being kept thoroughly heated by a burner 35, carried on the under side of the secondary reservoir by the bracket 36. When the dishes are thoroughly cleansed by soapy water, the same may be drawn off through the stop cock 24 in the secondary reservoir and clear water placed therein, which, by being passed through the tank, rinses all soap or other foreign matter from the dishes. To dry the dishes the water is entirely drawn off through the stop cock 24, the pump 26 being then operated freely thus forcing air into the tank 1 against the dishes in a course similar to that taken by the water in the process of washing, the action thereof on the dishes causing the same to be thoroughly dried.

Having thus fully described my invention what I claim as new and desire to obtain by Letters Patent is:

1. A device of the class described comprising a tank; a dish rack rotatably mounted in the tank; and means for directing a stream of fluid directly against the dishes in the rack to secure a rotation of the rack, said means being shiftably mounted to direct the stream of fluid alternately against opposite sides of the dishes.

2. A device of the class described comprising a tank; a dish rack rotatably mounted in the tank; a nozzle positioned to discharge a stream of fluid directly against the dishes in the rack to secure a rotation of the rack in one direction; and means for holding the nozzle in a position to impinge the dishes at a different angle to secure a reverse rotation of the rack.

3. A device of the class described comprising a tank; a dish rack rotatably mounted in the tank; a nozzle positioned to discharge tangentially with respect to the rack to secure a rotation of the rack; and an arm carried by the tank and arranged to receive the nozzle to hold the same at different angles with respect to the rack.

4. A device of the class described comprising a tank; a dish rack rotatably mounted in the tank; a nozzle pivotally mounted intermediate its ends in the tank and arranged to discharge tangentially with respect to the rack to secure a rotation of the rack; and an arcuate arm terminally attached to the tank and having nozzle receiving elements whereby the angle of the nozzle may be adjusted with respect to the rack.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

WILLIAM PHILIP TIPPIT.

Witnesses:
CHAS. MYER,
E. W. CHAMPION.