W. J. PAUL.

DISH WASHING MACHINE.

APPLICATION FILED NOV. 7, 1908.

942,926. Patented Dec. 14, 1909.

Fig. 1.

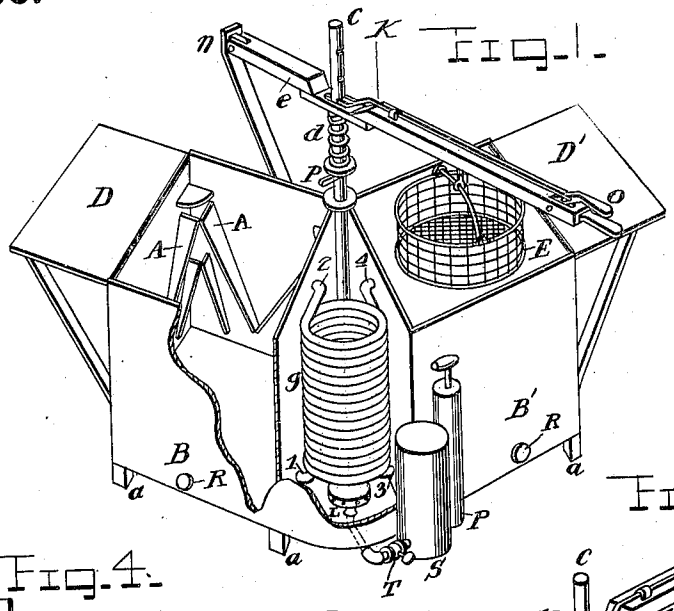


Fig. 3.

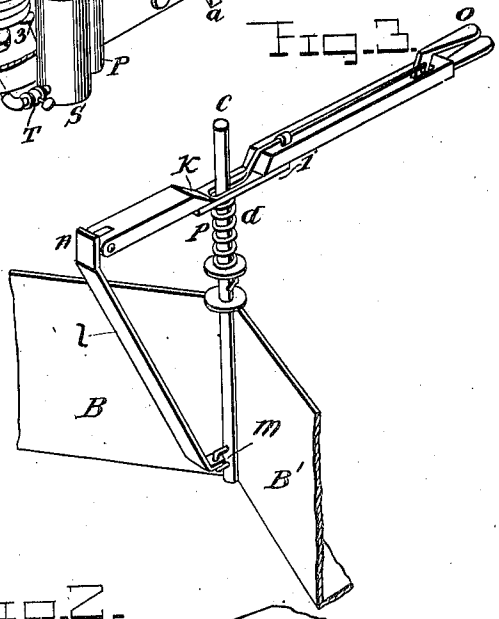


Fig. 4.

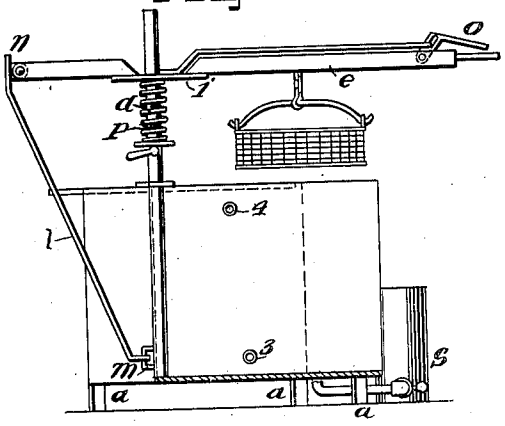
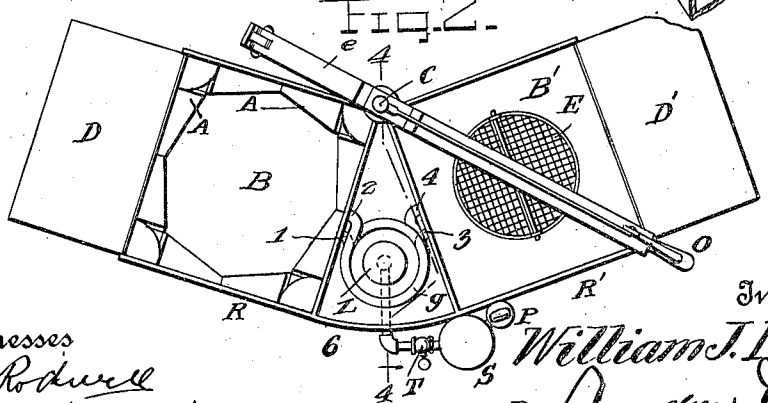


Fig. 2.



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UNITED STATES PATENT OFFICE.

WILLIAM J. PAUL, OF CINCINNATI, OHIO.

DISH-WASHING MACHINE.

942,926. Specification of Letters Patent. **Patented Dec. 14, 1909.**

Application filed November 7, 1908. Serial No. 461,548.

To all whom it may concern:

Be it known that I, WILLIAM J. PAUL, a citizen of the United States, resident of Cincinnati, county of Hamilton, State of Ohio, have invented a new and useful Dish-Washing Machine, of which the following is a specification.

This invention relates to improvements in dish washing machines.

The object of this invention is to provide a machine for washing dishes, in which the dishes are first placed in the washing fluid, causing the washing fluid to circulate freely about the dishes, removing the dishes from the washing fluid and thoroughly rinsing in clear water with the exercise of but little labor on the part of the operator.

The advantages of this machine are the absence of handling the dishes during the operation as well as reducing the chance of breakage to the lowest degree.

While the accompanying drawings illustrate this invention in the preferred form it is to be understood that minor detail changes may be made without departing from the scope of the invention.

Figure 1 is a perspective view of the complete machine with parts broken away. Fig. 2 is a top plan view. Fig. 3 is a detail view in rear elevation. Fig. 4 is a side elevation.

B and B¹ are two dish washing tanks placed at an angle to each other and secured at the adjacent edges. The tank B is intended to contain the dish washing fluid, and is provided on the inside with a series of triangular shaped projections A engaging the inner sides of the tank and tapered toward the bottom thereof. The tank B¹ is adapted to contain the clear water.

D and D¹ are shelves extended outward from the outer sides of the two tanks and flush with the tops thereof.

g is a double worm placed in the triangular opening between the tanks B and B¹. This double worm *g* consists of two worms placed one within the other, one worm being connected at top and bottom to one of the tanks and the other worm being connected at top and bottom to the other tank. The upper and lower extremities of one worm being in communication with the tank B at 1 and 2, and the upper and lower extremities of the other worm being in communication with the tank B¹ at 3 and 4.

L is a source of heat placed beneath the worm and may be of any form.

c is an upright post secured at the junction of the two tanks.

e is an operating lever provided with an aperture adapted to receive the post *c*.

l is a brace pivoted to the base of post *c* at *m* and forming a hinge joint with one end of the operating lever *e* at *n*.

i is a plate secured to the bottom side of lever *e* attached at either side of post *c* and provided with an aperture slightly larger than said post. The lever *e* is provided with cut away portions at each side of the opening as at K to allow a free movement of the lever arm up and down the post *c*. The upper portion of the post is provided with a series of slots or indentations adapted to be engaged by a catch secured to the arm *e* which catch is operated by a small lever O disposed above the handle on the free end thereof. A spiral spring *d* surrounds the post *c* below the lever *e* and engages at its upper end the plate *i*. A washer is placed about the post to engage the lower end of the spring, and is held in position by a pin inserted in one of a series of apertures *p* in the post.

E is a dish basket suspended from the free end of the lever *e*.

Tanks B and B¹ are provided with outlets R and R¹ at the bottoms thereof.

The operation is as follows: The dishes to be washed are placed on the shelf D. The arm is swung to suspend the basket E above the tank B, the dishes are placed in the basket E and the operator grasping the handle will move the basket up and down in the tank B containing the washing fluid. During this operation the inwardly extending projections within this tank will impart to the fluid a swirling motion causing it to circulate around and between all of the dishes, the basket is then withdrawn and swung over the tank containing the clear water. The basket is then moved up and down in this tank to thoroughly rinse the dishes. When this operation is complete the lever is engaged to the post *c* in its upper position by the catch and the dishes are removed therefrom and placed on the shelf D¹. As the coils of the double worm are in communication with both tanks and the source of heat is applied beneath the worm the fluids in both tanks will be heated, and

a continual circulation will be set up by the worm. The spring *d* will materially assist in the operation of the lever *e*, the tension of this spring being regulated by the position of the lower end thereof. The cut away portions of the lever at each side of the post *c* and the hinge connections at *n* and *m* will allow for both the vertical and horizontal movements of the lever *e*.

I claim:

1. In a dish washing machine a plurality of adjacent fluid tanks, an upright supporting member secured thereto, an operating lever rotatably mounted thereon and extended on each side of said supporting member and adapted to slide thereon, a connection between the lower portion of said supporting member and one end of the operating lever, the free end of the operating lever extending over said tanks and a dish receptacle supported therefrom and adapted to be reciprocated in said tanks.

2. In a dish washing machine a plurality of adjacent fluid tanks, a supporting member secured thereto and extending thereabove, an operating lever rotatably mounted on said supporting member and adapted to slide thereon, a brace pivoted to one end of said operating lever and at the opposite end to the lower portion of said supporting member, a spring surrounding said supporting member and normally exerting the upward pressure upon said operating lever, a dish receptacle suspended from the free end of the operating lever and adapted to be reciprocated in said tanks, and means carried by said operating lever to engage said supporting member to secure said operating lever in its raised position.

3. In a dish washing machine, a fluid tank, a plurality of internal deflectors upon the inner side thereof, a support extending above said tank, an operating lever mounted on said support and extending on each side thereof, a connection between one end of the lever and the base of the support, the free end of the lever extending over the tank and adapted to reciprocate a dish receptacle therein.

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