May 27, 1930. A. B. SCHMIDT ET AL 1,760,779

DISHWASHING MACHINE

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Fig. 1.

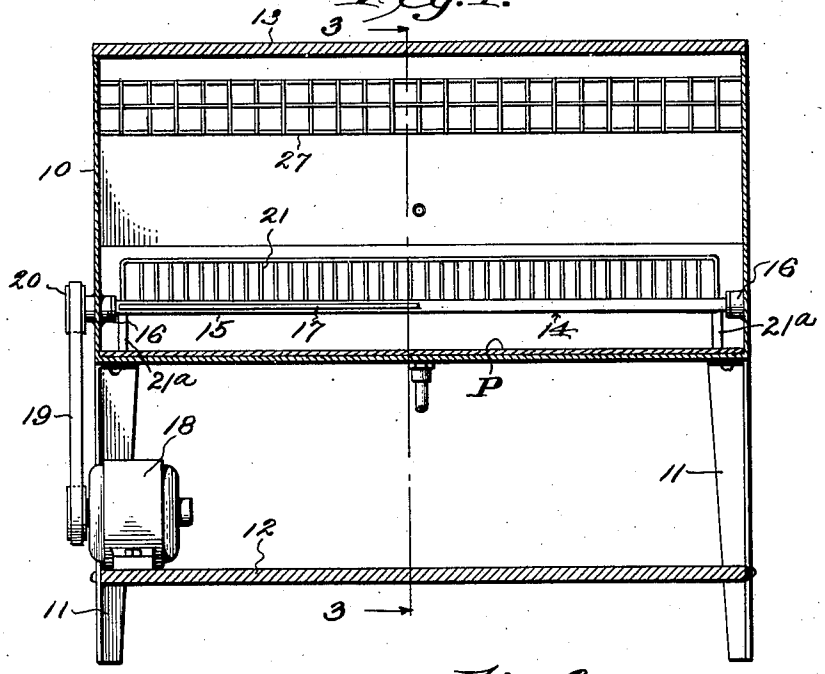


Fig. 2.

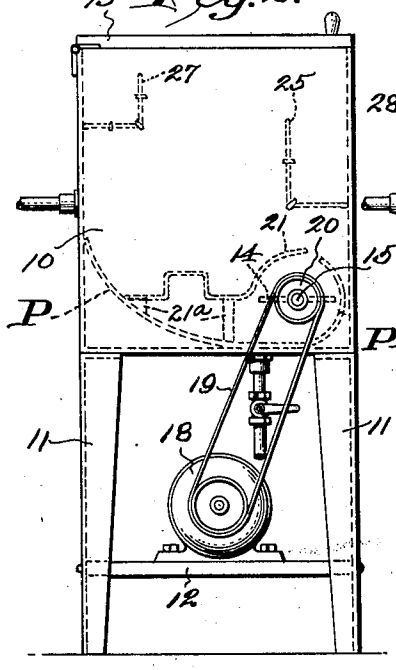
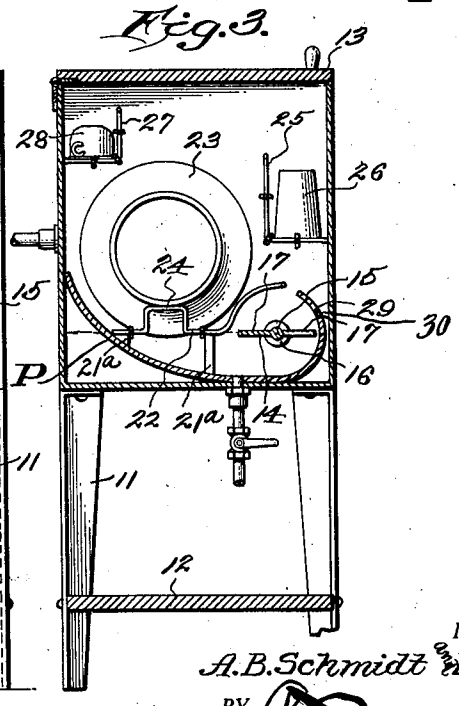


Fig. 3.



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Fig. 4.

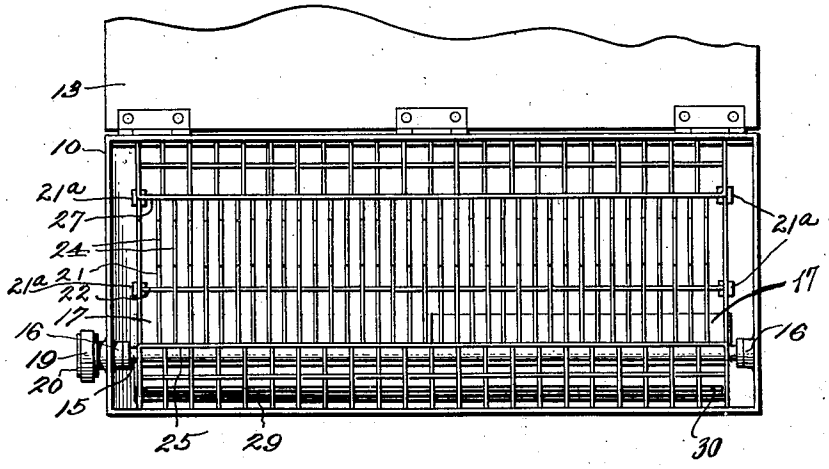
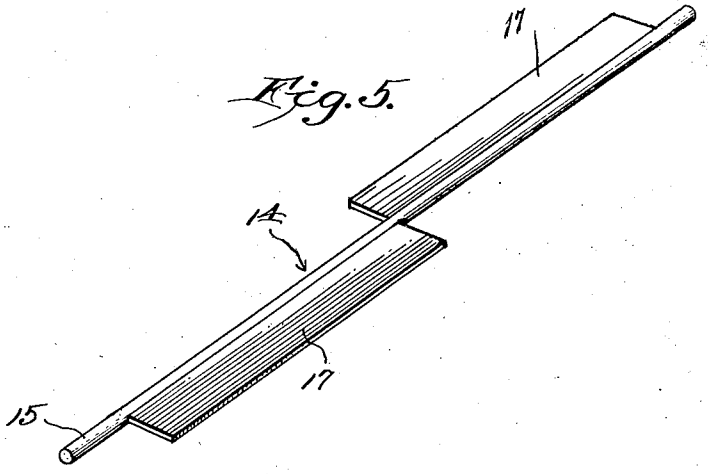


Fig. 5.



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DISHWASHING MACHINE

Application filed June 16, 1927. Serial No. 199,290.

This invention relates to a dish washing machine.

It is aimed to provide a generally improved construction and particularly one which is inexpensive to manufacture and with respect to its upkeep and one which is exceedingly compact so that for a given capacity it may be made considerably smaller and to the further end that the articles being washed may better be subjected to the direct force of the water and so that dead space is avoided which would offer cooling influence to the water.

The more specific objects and advantages will be pointed out or become apparent from a consideration of the description following taken in connection with accompanying drawings illustrating an operative embodiment.

In said drawings:

Figure 1 is a view in longitudinal section through the improved machine;

Figure 2 is an end elevation of the machine;

Figure 3 is a transverse sectional view taken on the line 3—3 of Figure 1;

Figure 4 is a plan view with the top or cover in open position and partly broken away, and

Figure 5 is a perspective view of the agitator.

Referring specifically to the drawings, 10 designates a suitably sized and shaped tank preferably of metal, which may be supported in any suitable manner for instance by four legs as at 11 joined by a shelf 12. The tank 10 is open at the top but normally closed by a removable cover or closure 13.

Disposed longitudinally within the tank 10 and adjacent one lower corner thereof, thus being eccentrically disposed, is an agitator generally designated 14. Such agitator comprises a shaft 15 which is journaled in appropriate water-proof bearings 16 in each end wall of the casing. Radiating from the shaft 15 within the tank 10 are a suitable number of vanes or blades 17, extending practically the length of the casing. This agitator 14 is driven in any suitable manner as from an electric motor 18 supported on the shelf 12 and having a belt 19 or the like driven from its main shaft and trained over a pulley such as 20, keyed on the shaft 15.

The tank 10 is adapted to contain water, preferably heated, and containing a detergent, as usual, up to the level shown. Within the tank, a suitable rack 21 is provided. This rack is preferably removable and rests on supporting members 21ª secured to a curved plate P adjacent the bottom of the tank and said rack 21 may extend relatively close to the agitator, for instance, one-half an inch. The rack may be of any particular construction but preferably is of wire and has longitudinal portions 22 to support plates or dishes such as 23, and upstanding portions 24 between which said plates or dishes may be disposed.

Practically directly above the agitator, a shelf or rack 25, of wire form, is provided and adapted to support articles such as glasses or tumblers 26, while being washed.

At the other side of the tank a rack 27 of wire form is provided and adapted to hold cups or the like such as 28.

In practice, the agitator 14 may be driven comparatively fast and the arrangement within the tank is such that all of the articles to be washed, namely, dishes 23, glasses 26, and cups 28, are relatively close to the agitator, the water or cleansing liquid will be thrown with great force against the same, not only rinsing them but forcibly ejecting particles of matter which would ordinarily adhere thereto. It will be seen that all of the articles are in the direct path in which the water is centrifugally thrown by the agitator and to assist toward this end a baffle may be provided within the tank 10 longitudinally thereof as at 29 and being a part of plate P.

Baffle 29 is provided with a longitudinal slotted opening 30 extending substantially the length thereof to drain water and sediment from the top of the baffle, and also to permit water to be thrown by the agitator upwardly to cleanse articles on the rack 25.

It is to be noted that all of the articles being washed are supported above the normal level of the water to the end that the water may efficiently drain therefrom.

Various changes may be resorted to pro-

vided they fall within the spirit and scope of the invention.

What is claimed is:—

A dish washing machine of the class described comprising a tank, an agitator rotatably mounted in said tank, a substantially upstanding curved baffle plate partly surrounding said agitator, a rack for the support of articles to be washed arranged substantially within the height of the edge portions of the plate and in the path of fluid thrown by the agitator, and another rack secured to the tank above the baffle plate, said baffle plate being adapted to direct fluid at the first mentioned rack and having a slot therethrough relatively close to the top through which fluid will be directed at the second mentioned rack.

In testimony whereof we affix our signatures.

ALBERT B. SCHMIDT.
LEWIS A. JAMES.