June 24, 1930. H. L. PHILLIP 1,765,444

DISHWASHING MACHINE

Filed Oct. 12, 1927

Fig. 1.

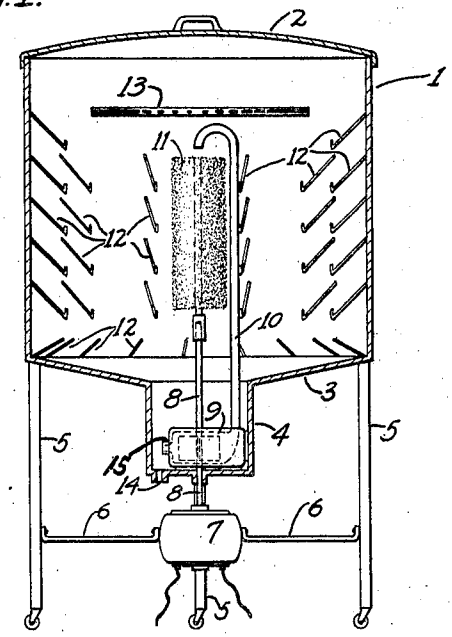
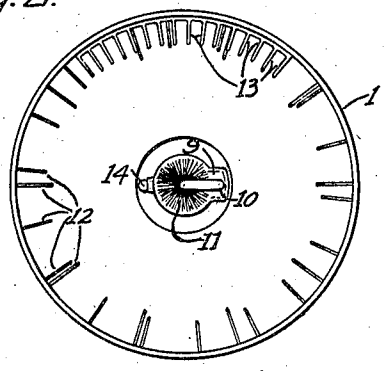


Fig. 2.



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DISHWASHING MACHINE

Application filed October 12, 1927. Serial No. 225,767.

The invention relates to dish washing machines, and has for its object to provide a machine of such type by means of which dishes, cutlery, and other articles may be quickly and effectively cleansed, and in which no handling of the articles is necessary during the cleansing operation. A further object is to provide in connection with such a machine a rotating brush onto which water is discharged and thrown by the brush with much force against the articles to be cleansed, and means carried by a receptacle housing the brush adapted to support the articles arranged about the brush at a distance so as to more or less receive the splash of the water, and whereby the splash of the water directly hitting the wall of the receptacle between the spacings of the articles reaches the parts of the articles not directly exposed to the spray produced by the rotating brush. A still further object is to provide a motor having a shaft which carries the rotatable brush and also serves as a drive for an impeller or pump which delivers water to said brush.

With the above and other objects in view, the invention resides in the combination and arrangement of parts as hereinafter set forth, shown in the drawing, described and claimed, it being understood that changes in the precise embodiment of the invention as shown may be made within the scope of what is claimed without departing from the spirit of the invention.

In the drawing:

Figure 1 is a view of the dish washing machine showing the receptacle thereof in vertical section, and all other parts in elevation.

Figure 2 is a top view of the washer with the receptacle cover removed.

Referring to the drawing, the numeral 1 designates a receptacle, preferably cylindrical in form, provided with a cover 2, and having an inwardly sloping bottom 3 terminating centrally of the receptacle in a well 4 into which the water used in the washing operation drains for re-circulation. The well 4 is provided with an outlet 14, which may be closed by the use of an ordinary plug (not shown), or to which a hose may be attached for conveying water from the well to a floor drain or elsewhere, as may be desired.

The receptacle 1 is supported by a plurality of leg members 5, to which are secured arms 6 for supporting an electric motor 7 disposed beneath the well 4, and the shaft 8 of which extends vertically through said well. Disposed within the well 4 is a pump or impeller 9, from the casing of which extends a vertically disposed pipe 10, which pipe is return bent at its upper end so that water will be discharged therefrom downwardly onto the upper end of a vertically disposed brush 11 which is mounted on the end of the motor shaft 8. Said motor shaft 8 also extends through the impeller casing and on which the impeller blades are mounted, said casing being provided with an intake opening 15. Carried by and disposed about the inner sides of the receptacle and at various heights therein are a series of inwardly and downwardly inclined fingers 12, and provided with hooked ends and relatively spaced for holding the articles to be washed, such as plates, cups, saucers and other table ware. Disposed adjacent the upper end of the receptacle is a series of closely spaced fingers 13 suitable for receiving therebetween and supporting knives, forks, spoons, etc.

In operation, hot soapy water sufficient to fill the well 4 is poured into the receptacle, and the dishes and cutlery positioned on the fingers 12 and 13, and so arranged that the same will be most effectively exposed to the spraying action of the water thrown outwardly by the rapidly rotating brush driven by the motor, and to which the water is conducted by the impeller and pipe leading therefrom to a point above the brush. The water sprayed by the brush drains back into the well 4, and may be recirculated until such time as it is thought necessary for a cleansing of the articles, after which a new supply of clear water may be used for rinsing purposes. It will be noted that simplicity of structure is obtained and the number of moving parts minimized by utilizing the motor shaft both for rotating the brush and for operating the impeller, which is a salient feature of the in-

vention. It is intended that the water be thrown in a radial direction with considerable force by the rapidly rotating brush so as to effectively remove all foreign matter from the articles to be washed by such action which does not too firmly adhere thereto. Due to the brush being disposed centrally of the receptacle and the provision of considerable space between the brush and the article holding fingers, such articles on which foodstuffs have been allowed to dry and to firmly adhere thereto, may be manually and handily brought in brushing contact with the rotating brush to remove such matter before placement on the supporting fingers, when the normal operation of the washer will complete the cleansing operation. From the foregoing it will be seen that a dish washing machine is provided which is simple in construction, involving a minimum of moving parts, and with which dishes and cutlery can be rapidly and thoroughly cleansed.

What is claimed is:—

1. A dish washing machine comprising a receptacle, means for supporting dishes therein, a high speed motor having a shaft extending vertically in said receptacle, a brush, connected to said shaft within said receptacle, and means for discharging liquid on said brush, said motor rotating said brush at high speed whereby the liquid discharged on the brush is thrown outwardly to cause a spray.

2. A dish washing machine comprising a receptacle, means for supporting dishes therein, a brush rotatably mounted in said receptacle, means for discharging liquid on said brush, and means for rotating said brush at high speed whereby liquid discharged on said brush is outwardly thrown therefrom by centrifugal force to form a spray.

In testimony whereof I affix my signature.

HOMER L. PHILLIP.

CERTIFICATE OF CORRECTION.

Patent No. 1,765,444. Granted June 24, 1930.

It is hereby certified that the name of the patentee in the above numbered patent is erroneously written and printed as "Homer L. Phillip", whereas said name should have been written and printed as Homer L. Phillips; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 7th day of October, A. D. 1930.

(Seal) M. J. Moore,
Acting Commissioner of Patents.