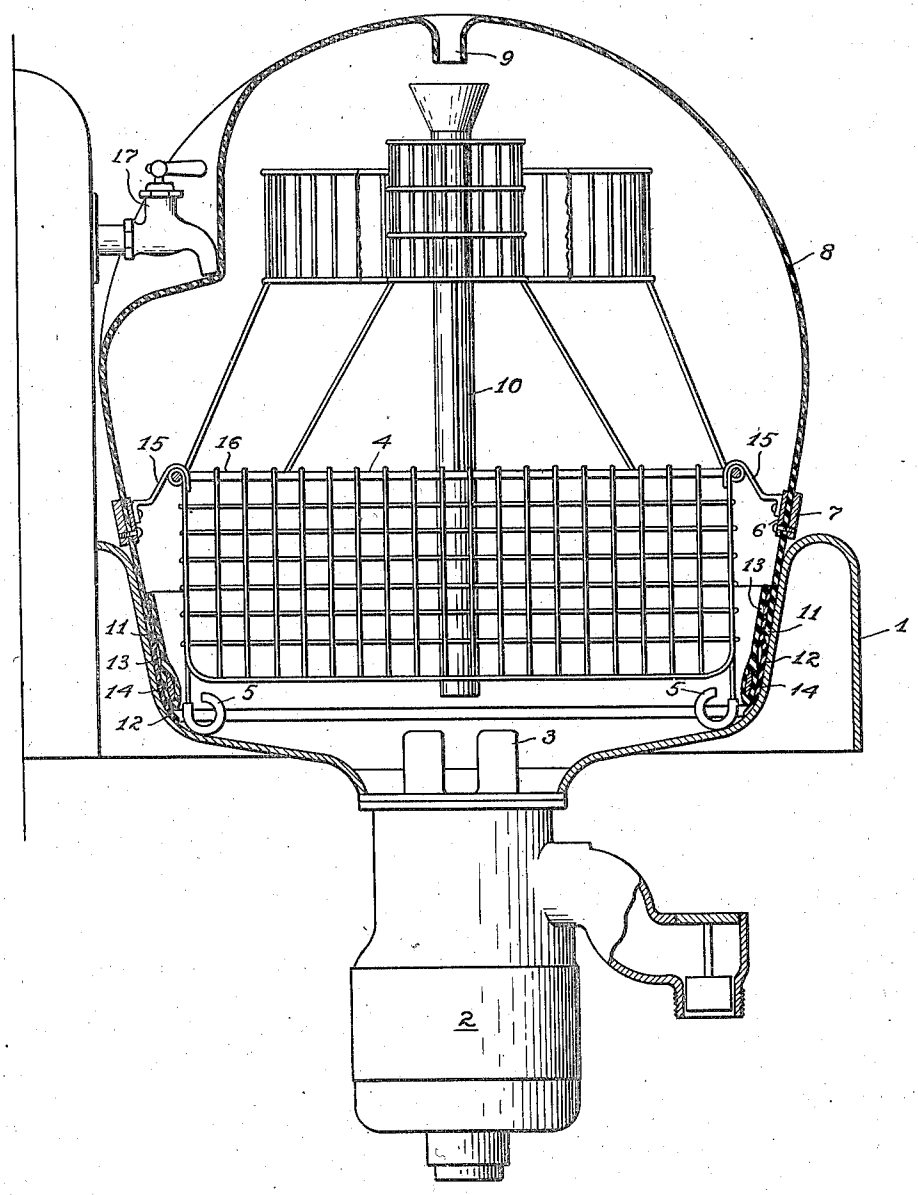
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DISHWASHING MACHINE

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DISHWASHING MACHINE

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This invention relates to dishwashing machines and in particular to means whereby the ordinary standard kitchen sink may be converted to a dishwasher.

To date it has been the practice to provide dishwashers either as a unit entirely separate from the kitchen sink or as a unit formed adjacent the kitchen sink but integral therewith. In both instances special equipment is required the cost of which is beyond the means of the average individual.

In general the object of my invention is the provision of means whereby any sink and in particular any standard kitchen sink can be made to perform both its normal function as well as the function of a motor driven dishwasher.

More specifically the object of the invention is the provision in combination with a sink, and a rack disposed therein, of a deformable fabricated hood adapted to cover the dish rack and its load and to conform about the ordinary obstructions associated with the sink such as faucets etc.

Another object of the invention is the provision of means whereby the hood used to cover the sink and its load may be detachably and effectively sealed to the sink.

Still another object of the invention is the provision of means whereby water may be introduced through the hood into the water circulating system within the sink, in advance of the point where the circulating system contacts the load therein.

The invention possesses other advantageous features, some of which with the foregoing, will be set forth at length in the following description where that form of the invention which has been selected for illustration in the drawing accompanying and forming a part of the present specification is outlined in full. In said drawing, one form of the invention is shown, but it is to be understood that it is not limited to such form, since the invention as set forth in the claims may be embodied in a plurality of forms.

Referring to the drawing:

The single figure is a vertical section taken through a standard sink and in which the objects of my invention have been embodied.

As shown in the single figure the sink 1 has secured to its base by any suitable means a motor 2 which drives an impeller 3. The impeller may be made to extend either through the usual drainage opening provided in the sink or a separate opening for this purpose may be cut in the sink. Disposed within the sink is a dish rack 4 provided with legs adapted to rest on the floor of the sink.

Secured between two annular metal bands 6 and 7 is a deformable rubberized hood 8 provided at its upper portion with a water intake 9 adapted to register with the upper cutwardly flaring end of a pipe 10 supported by or secured to the silverware compartment of the dish rack 4. The lower end of the pipe 10 terminates directly above the impeller 3 and it will therefore be seen that by running a hose from the faucet 17 to the inlet 9 clean water may be supplied to the impeller 3. As an alternative method of introducing water into the sink an intake can be provided through the motor casing in the manner as shown in United States patent to Snyder #1,938,302 of Dec. 5, 1933.

The lower peripheral edge 11 of the hood 8 is provided with means for sealing the hood to the inner walls of the sink 1. This means comprises a thin flexible annular band 12 secured to the peripheral edge of the hood in any suitable manner such as for example by sewing and which is adapted when wet to adhere to the inner walls of the sink. An annular skirt 13 weighted by suitable weights 14 is also secured to the peripheral edge of the hood and serves to hold the band 12 against the inner sloping walls of the sink 1 thereby serving to seal the lower edge of the hood to the sink walls. To the band 6 is secured a number of spaced brackets 15 the free ends of which are formed into hooks adapted to engage the ring 16 of the rack 4 and to thereby detachably support the hood 8 from the rack 4.

The hood 8 is preferably made of a rubberized material and at all events should be made of a deformable or flexible material so that it may readily conform about the faucets 17 as clearly shown in the drawing and about any other obstruction associated with the sink such as soap containers. This feature is of great importance for although kitchen sinks are standardized to some extent, there is a great variation in the type of faucets used and in their location. This discrepancy in the type and location of the faucets is of course immaterial when a flexible hood is used for the hood will conform about any irregularity but it can be readily appreciated that if an attempt were made to use a hood of non-conformable material, a special hood would have to be made for practically every installation. In this connection it is to be noted that the back of a sink sometimes itself constitutes an obstruction. Another advantage of a flexible hood is that when

not in use it can be folded and stored in a relatively small space.

For obvious reasons material from which the hood is made should also be capable of withstanding the action of chemical cleaning reagents as well as the action of steam and boiling water.

In operation the rack 4 together with its load is placed within the sink. The hood 8 is then placed over the rack and its load and supported by means of the brackets 15 on the ring 16 as above described. Water and chemicals may then be introduced into the sink either by means of the inlet 9 provided in the hood or by means of nozzles such as shown in the Snyder patent above referred to and preferably in advance of the point at which the cleansing water contacts the dishes in the rack. When the motor 2 is set into operation the impeller 3 throws a spray of water upwardly against the dishes and with sufficient force to inflate the hood 8 to a certain extent. When the dishes have been washed and rinsed the water may be drained from the sink either by means of a drain associated with the casing of the motor as shown in the drawing or by means of a separate drain provided in the sink.

From the above disclosure it will be seen that I have provided means whereby a standard kitchen sink may be utilized as a dishwasher irrespective of the type of sink used and irrespective of the type and location of the faucets or other obstructions associated with the sink. It will also be seen that in using a flexible or deformable hood the problem of storage has been overcome, together with the problem of sealing to any sink.

I claim:

1. In combination: a sink; a motor driven impeller secured adjacent the floor of the sink and a dish rack disposed therein; a pliant hood detachably secured to and supported by said dish rack; and means for sealing said hood to the sink.

2. In combination; a sink; a motor driven impeller secured adjacent the floor of the sink and a dish rack disposed therein; a deformable hood detachably secured to and supported by said dish rack; and means comprising a weighted flexible skirt associated with the peripheral edge of the hood for sealing the hood to the sink.

3. In combination: a sink; a motor driven impeller secured adjacent the floor of the sink and a dish rack disposed therein; a deformable hood detachably secured to and supported by said dish rack; and means comprising a relatively thin band of flexible material secured to the peripheral edge of the hood and adapted when wet to adhere to the sink to thereby seal the hood to the sink.

4. In combination: a sink; a motor driven impeller secured adjacent the floor of the sink and a dish rack disposed therein; a deformable hood detachably secured to and supported by said dish rack; and means for sealing the hood to the sink comprising a relatively thin band of flexible material secured to the outer peripheral edge of the hood and adapted when wet to adhere to the sink; and a weighted skirt associated with the inner peripheral edge of the hood for holding said thin band against the walls of the sink.

5. A dishwasher comprising a sink; a motor driven impeller disposed in the base of the sink; a hood adapted to cover said sink; an inlet in said hood; a basket within the sink; and a conduit supported by said basket intermediate said inlet and the impeller.

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