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H. F. VOSHARDT
NOZZLE FOR DISHWASHERS

Filed June 29, 1927

1,752,316

Fig. 1

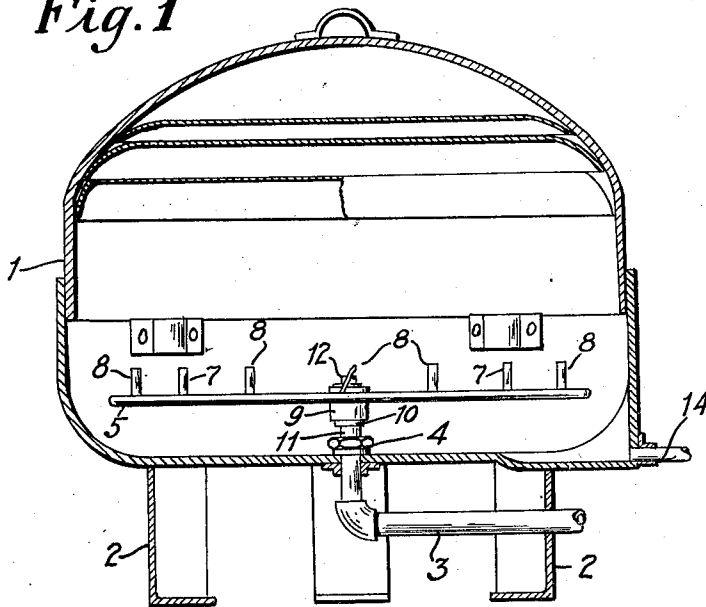


Fig. 2

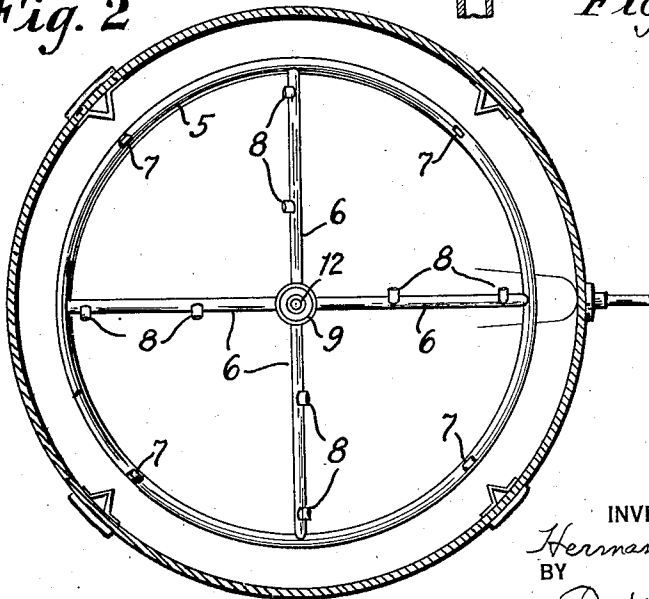
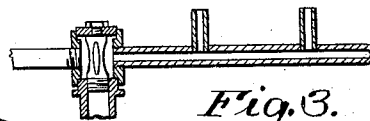


Fig. 3.



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NOZZLE FOR DISHWASHERS

Application filed June 29, 1927. Serial No. 202,244.

My invention relates to that class of dishwashers described in my copending application, Serial No. 170,464, and has for its object to provide a new and improved form of nozzle which will be much less expensive than any of the devices now employed for this purpose in the art.

It is well known that it is absolutely essential for the water, used for cleansing the dishes in the container, to be discharged in various directions, in order to penetrate to all parts of the interior of the container and so reach every exposed surface of the dishes which are to be cleansed. This is especially desirable where milk bottles or similar containers are to be washed.

Another very necessary feature is that the frictional resistance offered to the rotation of the nozzle be reduced to the minimum.

My invention has for its object to provide a very simple device, in which the smallest amount of frictional resistance will be offered to the rotation of the nozzle, and which by its construction will discharge the water in practically all directions within the container.

My means for accomplishing the foregoing object may be more readily understood by having reference to the accompanying drawings, which are hereunto annexed and are a part of this specification, in which—

Fig. 1 is a vertical sectional view of a dishwasher equipped with my improved nozzle;

Fig. 2 is a cross section of the same; and

Fig. 3 is a fragmentary detail view, partly in section, of the nozzle.

Similar reference numerals refer to similar parts throughout the entire description.

As shown in the drawings, the dishwasher is provided with a container or casing 1, such as is illustrated in my co-pending application hereinbefore referred to. This container 1 is mounted upon legs 2, or in any other suitable or convenient manner. A supply pipe 3, leading from a suitable source of water supply, is conducted into the interior of the casing 1, a suitable stuffing box 4 being provided to prevent leakage of the water from the interior of the container 1.

My improved nozzle comprises an annular tubular member 5, which is connected by radi-

ally extending tubular arms 6. As shown, these arms are four in number, but it will be obvious that my invention is not at all confined to any specific number of arms, as any suitable or desired number may be employed. Mounted upon the annular member 5 is a plurality of nipples 7, which are inclined from the vertical. Similar nipples 8, also inclined from the vertical, are mounted upon the arms 6, this inclination being clearly shown in the drawings. These arms 6 are connected to a hub 9 mounted upon a bearing 10, which is formed on the inner end 11 of the supply pipe 3. A suitable cap 12 is mounted upon the end of the pipe 3, and holds the hub 9 on the bearing 10. By inclining the nipples 7 and 8 from the vertical, it will be obvious, to persons skilled in the art, that the force of the water will produce rotation of the nozzle, and in this way the water will be projected therefrom and discharged in all directions as the nipples 7 and 8 are carried through their revolution. A suitable discharge pipe, 14, is provided to carry away the surplus water.

In practice I have found that by employing a nozzle of this construction I can remove even molasses from the inside of a milk bottle in a period of one minute, yet the friction is so reduced as to greatly decrease the amount of electricity required to operate the motor (not shown) for the purpose of projecting the water through the nozzle.

Having described my invention, what I regard as new, and desire to secure by United States Letters Patent, is:

1. In a dishwasher, the combination, of a nozzle, a water supply pipe leading to the nozzle, said nozzle being rotatably mounted upon the inner end of said pipe, said nozzle comprising an annular member, a hub, a plurality of radially extending arms connecting said hub and said annular member, there being passages through said hub leading to the interior of the arms and the annular member, and a plurality of discharge nipples mounted upon said annular member and said arms, said nipples being inclined from the vertical.

2. In a dishwasher, the combination, of a nozzle, a water supply pipe leading to the

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to said annular member, there being passages
through said hub leading to the interior of
said arms and said annular member, and a
plurality of discharge nipples mounted upon
said annular member and said arms, said nip-
ples being inclined from the vertical.

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