

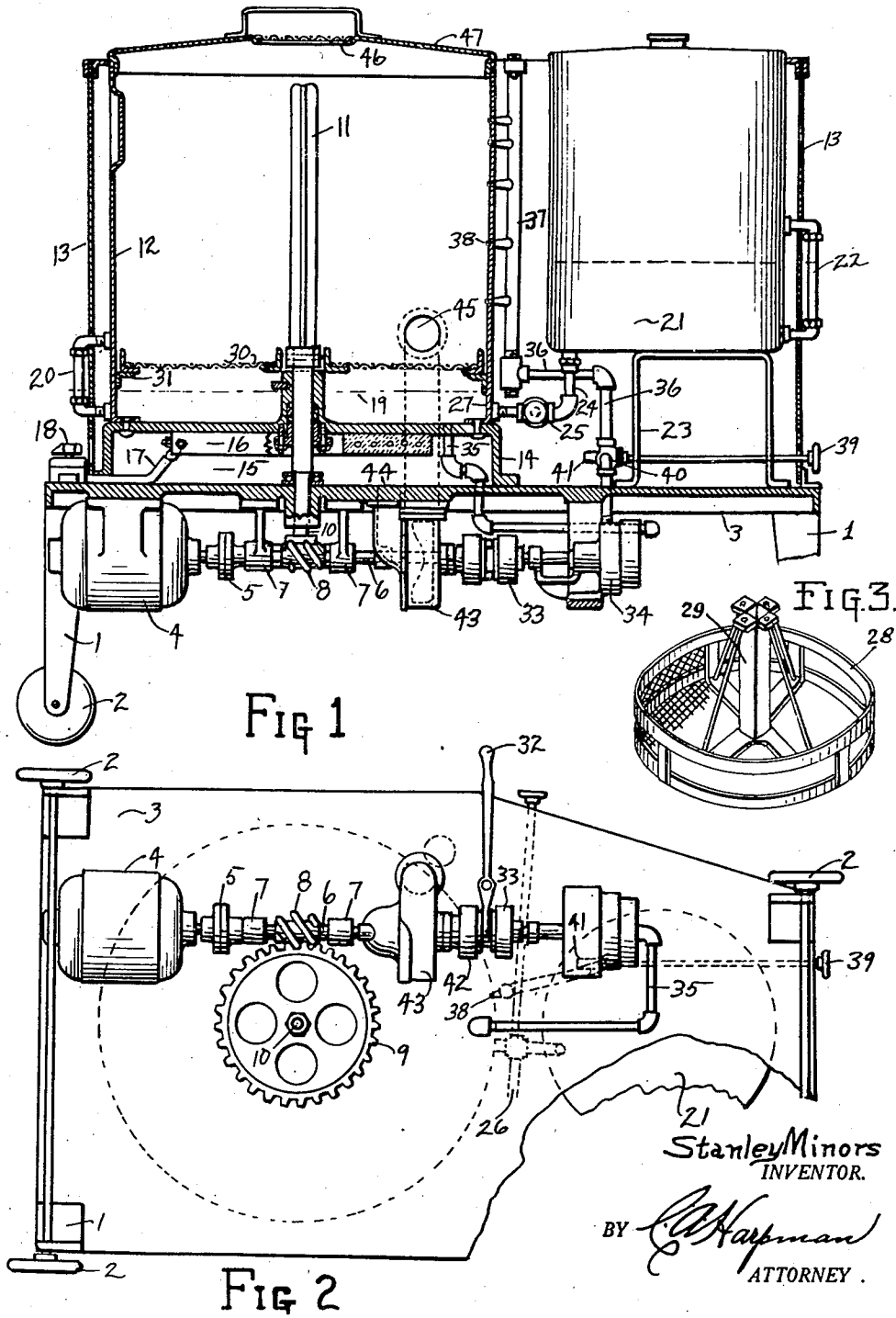
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KITCHEN UTILITY DEVICE

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KITCHEN UTILITY DEVICE

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2 Claims. (Cl. 141-9)

This invention relates to a kitchen appliance device.

The principal object of this invention is to provide a device which may be utilized in various ways.

A further object of the invention is to provide a machine for washing and drying dishes.

A further object of the device is to provide a heating element for heating water and for heating air used in washing and drying dishes, respectively.

A still further object is to provide means for rotating a tray carrying dishes past a plurality of jets forcing hot water inwardly upon the dishes.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed, can be made within the scope of what is claimed, without departing from the spirit of the invention.

The invention is illustrated in the accompanying drawing, wherein:—

Figure 1 is a side elevation of the device partly in cross section.

Figure 2 is a bottom plan view of the device.

Figure 3 is a perspective view of a dish tray.

By referring to Figures 1 and 2 it will be seen that the device is portable, being mounted upon legs 1 and carrying wheels 2. These legs 1 are secured to a base portion 3 to which is attached upon its under side a motor 4 provided with a flexible coupling 5 which couples to a shaft 6. This shaft 6 is held by means of supports 7. It will also be seen that this shaft 6 is provided with an endless screw member 8 which functions with a gear wheel 9. This gear wheel 9 is keyed to a vertical shaft 10 having its upper end 11 formed in a double T square and centrally positioned within a container 12 positioned within a casing 13. This container 12 is spaced apart from the base portion 3 by means of a support 14. This space forms a chamber 15. Positioned directly underneath the upper portion of the support 14 there is provided an electrical heating unit 16 with electrical wires 17 attached thereto and regulated by means of a thermostat 18. The purpose of this electrical unit is to provide heat for heating water in the lower portion of the container 12 and also for providing heated air to be forced into the interior of the container 12 when desired. When the device is used for the washing of dishes the water level may be ap-

proximately as indicated on line 19 and as shown in the water gauge 20. The manner in which the water is admitted and drawn from the interior of the container 12 and the manner in which hot air is forced into the container, in drying dishes and the like when the device is used for that purpose, will be hereinafter described.

By referring to Figure 1 it will be seen that there is provided a water tank 21 provided with a water gauge 22. This water tank 21 is supported upon a base member 23. This water tank 21 is provided with a tubular connection 24 having installed thereon a three-way valve 25. An inlet 26 of the three-way valve 25 may be utilized for the purpose of drawing water from a city water system if desired, in place of taking it from the water tank 21. The water now passes into the interior of the container 12 at a point 27 and is heated to a desirable temperature by means of the heating unit 16.

By referring to Figure 3 it will be seen that a suitable tray 28 is provided for holding dishes and the like. It will be seen that there is provided an upper securing means 29 which slides over the upper end 11 of the vertical shaft 10. When the motor 4 is started this shaft is caused to rotate, thereby rotating the tray 28. It will be seen that the interior of the container 12 is provided with a removable screen 30 which rests upon a support member 31. This removable screen 30 is for the purpose of preventing particles from falling into the lower part of the container.

At this time a clutch lever 32 is moved so as to contact a clutch member 33 which in turn manipulates a pump 34. Water is now pumped through tubing 35 into the pump 34, and then upwardly through a tube 36 leading to a vertical tube 37 having a plurality of jets 38, the inner ends of which extend into the side wall of the container. The dishes within the rotating tray 28 are now sprayed with hot water. When the washing period has ended the water may be withdrawn from the container 12 by the manipulating of a valve control 39 turning a waste valve 40 which allows the used water to pass out through an outlet tube 41. When the water has been completely pumped from the interior of the container 12, the waste valve 40 is closed and the clutch lever 32 is moved so as to contact a fan clutch 42, thereby setting in motion a fan 43, drawing heated air into the fan at a point 44 and forcing it upwardly through a tube terminating at an opening 45 in the container 12. The heated air is taken from the chamber 15, this chamber 15 being substantially closed but permitting the

access of air thereinto, where it is heated by means of the electrical heating unit 16. In order to avoid building up a pressure within the interior of the container 12, there is provided a central screen 46 in the lid 47 of the container 12.

5 It is obvious that various shapes and forms of trays may be used in order to conform with the need in washing dishes and the like, and, if desirable, a number of trays may be used at the same time.

10 What I claim is:—

1. In a device of the class described comprising a base, a container supported on said base, an air chamber formed by and between said base and the bottom of said container, said chamber being substantially closed but permitting the entrance of air thereto, a rotating central shaft within said container, means for rotating said central shaft, a tray supported and rotated by said shaft within said container, a heating unit below said container and in the upper portion of the said air chamber for the dual purpose of heating the water in the container and the air in the air chamber, a water inlet to said container, a plurality of jets positioned within said container together with pumping means for forcing hot water from the container to the jets for washing purposes, and a manually controlled fan

means for transferring heated air from the air chamber to the container for drying purposes.

2. In a dishwashing machine, the combination of a base, a container supported on said base, an air chamber formed by and between said base and the bottom of said container, said chamber being substantially closed but permitting the entrance of air thereto, a rotating central shaft within said container, means for rotating said central shaft, a tray supported and rotated by said shaft within said container, an electric thermostatically controlled heating unit below said container and in the upper portion of the said air chamber for the dual purpose of heating the water in the container and the air in the air chamber, a water tank connected to said container as a source of water supply, a plurality of jets positioned within said container together with pumping means for forcing hot water from the container to the jets for washing purposes, together with manually controlled fan means for transferring heated air from the air chamber to the container for drying purposes, a removable screen positioned near the bottom of said container and designed to prevent foreign objects from falling into the lower part of the container, and a screen air outlet on the top part of said container, substantially as described.

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