

Aug. 3, 1943.

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2,326,017

DEVICE FOR WASHING GLASSES AND THE LIKE

Filed July 7, 1941

2 Sheets-Sheet 1

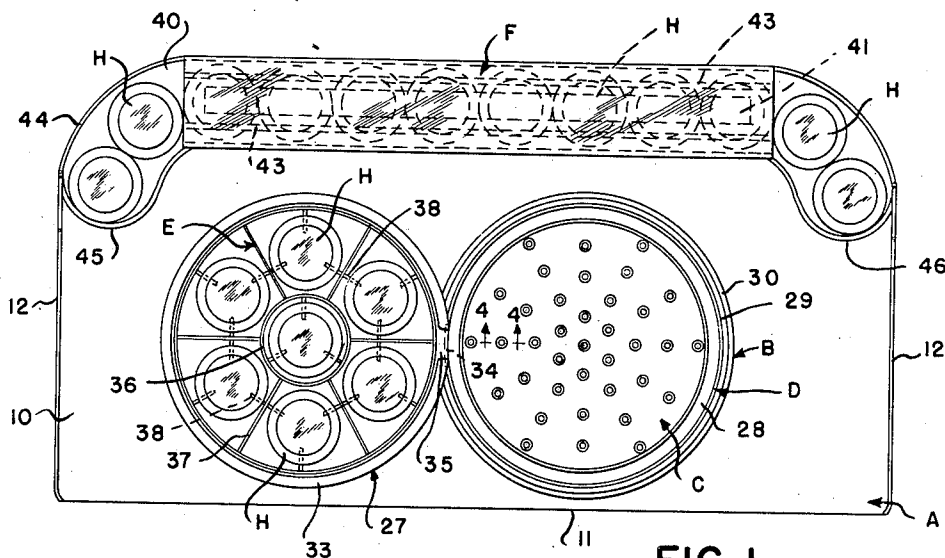


FIG. 1.

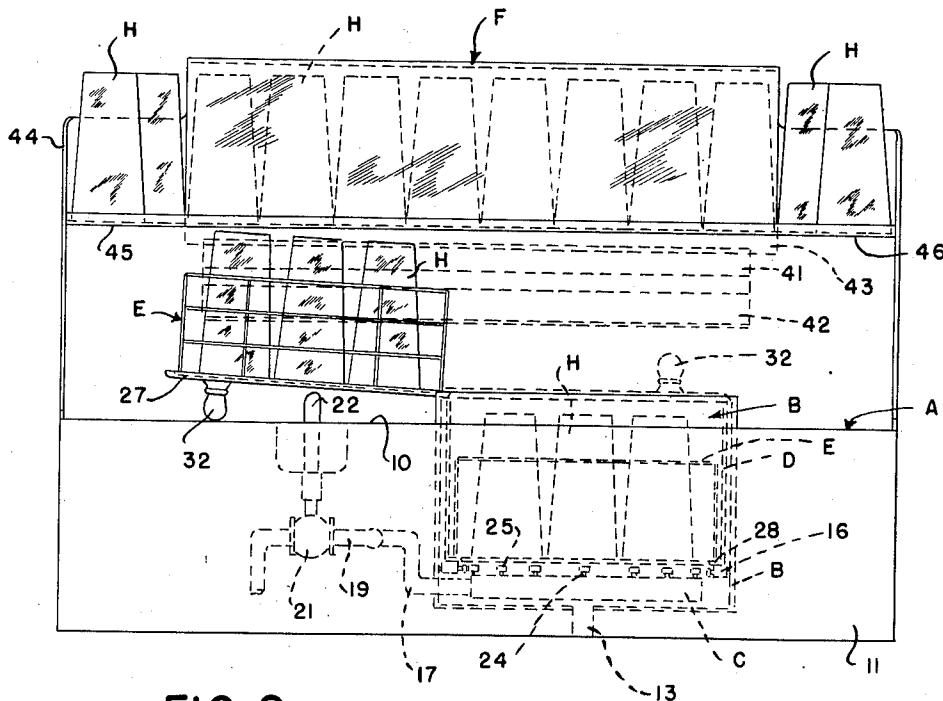


FIG. 2.

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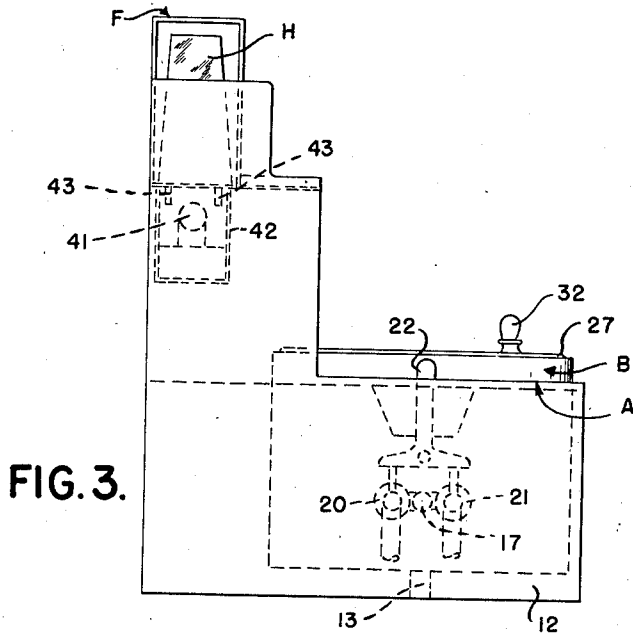


FIG. 3.

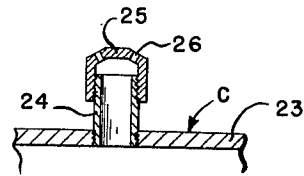


FIG. 4.

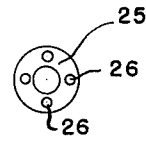


FIG. 5.

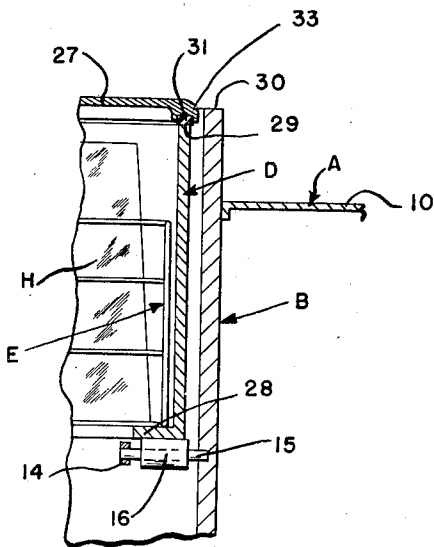


FIG. 6.

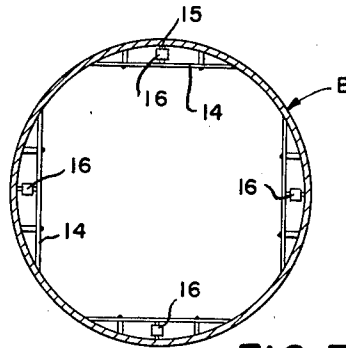


FIG. 7.

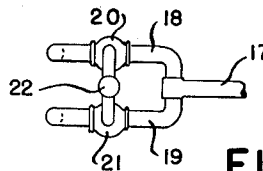


FIG. 8.

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2,326,017

DEVICE FOR WASHING GLASSES AND THE LIKE

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Application July 7, 1941, Serial No. 401,364

6 Claims. (Cl. 141-3)

This invention relates generally to apparatus for washing various types of ware and refers more particularly to apparatus for washing glassware such as drinking glasses and the like.

One of the essential objects of the invention is to provide an apparatus wherein cold and hot water may be used alternately as the washing fluid and is directed by suitable nozzles to both the inside and outside of the glasses.

Another object is to provide an apparatus wherein a header for receiving the hot and cold water from suitable valve controlled conduits therefor serves as a common fixed support for the nozzles and is mounted within a sink having a suitable drain.

Another object is to provide an apparatus wherein a revoluble open bottom carrier is within the sink above the header therein and has an interned flange that rides on suitable anti-friction elements within the sink and serves as a support or seat for a removable wire basket in which the glasses are placed while being washed.

Another object is to provide an apparatus wherein the revoluble carrier has a hinged cover for closing the carrier while the glasses are being washed and for supporting in drying position the wire basket containing the glasses after the latter have been washed.

Another object is to provide an apparatus wherein the upper edges of the carrier are spaced below the upper edges of the sink so that water overflowing the carrier will drain down within the sink, and are engaged by a suitable seal on the underside of the cover when the latter is in closed position during the washing operation.

Another object is to provide an apparatus wherein a knob or handle fixed to the cover is engageable with the top of a counter in which the sink is mounted to support the cover in an inclined position so that water draining onto the cover from the glasses and wire basket therefor when in drying position on said cover will flow from the cover into the carrier.

Another object is to locate the control lever for the water valves at such a point in the counter that it will be inaccessible and concealed by the cover when the latter is in open basket supporting position on the counter as a safety factor to prevent the water being turned on while the cover is in such open position.

Another object is to provide an apparatus that is a compact self-contained unit, neat in appearance, and efficient in operation.

Other objects, advantages and novel details of construction of this invention will be made more

apparent as this description proceeds, especially when considered in connection with the accompanying drawings, wherein:

Figure 1 is a top plan view of an apparatus embodying my invention;

Figure 2 is a front elevation thereof showing by full lines the cover for the revoluble carrier in open inclined position and supporting the wire basket containing cleaned glasses, and showing by dotted lines the position of the cover and glasses during the washing operation;

Figure 3 is an end elevation of the structure illustrated in Figure 2;

Figure 4 is a sectional view taken substantially on the line 4-4 of Figure 1;

Figure 5 is a plan view of one of the nozzles;

Figure 6 is a fragmentary vertical sectional view through the sink, carrier and wire basket;

Figure 7 is a horizontal sectional view through the sink showing the mounting for the rollers;

Figure 8 is a fragmentary plan view of the water conduits and valve control means therefor.

Referring now to the drawings, A is the counter, B is the sink, C is the header, D is the revoluble carrier, E is the wire basket, and F is the sterilization tunnel of an apparatus embodying my invention.

As shown, the counter A extends from one end to the other of the apparatus and has a substantially flat horizontal top wall 10 and depending front and end walls 11 and 12, respectively.

The sink B is mounted in the top wall 10 of the counter intermediate its ends and has a suitable drain 13. Preferably this sink is circular in cross section and of sufficient depth to receive the header C, carrier D, wire basket E, and glasses H. Fixed to the upright walls of the sink at substantially diametrically opposed points thereof are bars 14 that cooperate with said upright walls to support shafts 15 for rollers 16.

The header C is also circular and is centered within the sink B adjacent the bottom thereof. Extending through a wall of the sink to the header C is a conduit 17 that is adapted to receive hot and cold water respectively from branch conduits 18 and 19 provided with valves 20 and 21 under the control of a suitable hand lever 22. Projecting upwardly from the top wall 23 of the header at spaced points thereof are short tubes 24 upon which are mounted suitable nozzles 25 having inclined jets 26 for directing the water upwardly to both the inside and outside of the glasses H when disposed within the sink B.

The revoluble carrier D is preferably formed of sheet metal and is circular in configuration.

Such carrier is located within the sink B in concentric relation thereto and is provided with a hinged cover 27. The carrier is open at the bottom except for an intumed flange 28 that rides on the rollers 16 and forms a seat or support for the wire basket E. Preferably the upper edges 29 of the carrier are spaced below the upper edges 30 of the sink, and are engaged by a resilient sealing strip 31 on the underside of the cover when the latter is in closed position. The cover 27 has a knob or handle 32 that may be used when the cover is closed to revolve the carrier D on the rollers 16 and that is engageable with the top wall 10 of the counter when the cover is opened to support the cover in an inclined open position so that the glasses H and wire basket E therefor may be placed in a drying position on the cover 27. At the edges of the cover is a flange 33 that is continuous except at the hinge 34 where a space 35 is provided to permit water draining onto the cover from the glasses and wire basket to flow from the cover into the carrier. In this connection it will also be noted that the cover 27 extends over and conceals the control lever 22 for the valves 23 and 24 so that said lever is inaccessible when the cover is in open position. Hence this provides a safety factor to prevent the water from being turned on while the cover is in such open position.

The wire basket E is circular in form and is open at the top and bottom thereof. Preferably it has a circular center portion 36 and an encircling series of segmental portions 37 for the reception of the glasses H. Inwardly extended horizontal lengths 38 of wire carried by the center and segmental portions 36 and 37, respectively, are used to support the glasses in said portions and may, if desired, be covered with rubber or some other sound deadening material.

The sterilization tunnel F for the glasses is transparent and contains a slideway 40 for the glasses. Beneath the slideway is an electric germicidal lamp 41 supported by a U-shaped member 42 that constitutes a reflector for the light rays from said lamp. Preferably the tunnel F is made of glass and is located at a higher elevation in rear of but adjacent the sink B, and the slideway 40 has suitable slide bars 43 and guide rails 44 and is preferably provided at opposite ends of the tunnel F with forwardly curved end portions 45 and 46 which constitute respectively convenient loading and unloading stations for the glasses.

In use, the glasses to be washed and sterilized are first placed upside down in the wire basket E. Then the basket containing the glasses is placed within the revoluble carrier D. After the cover 27 of the carrier is closed, the lever 22 may be operated so that either hot or cold water may, as desired, be admitted to the header C and nozzles 25 so that it will be projected from the latter against the glasses H. While the water is turned on, the knob or handle 32 of the cover is then used to revolve the carrier D on the rollers 16 so that the glasses H will be moved accordingly over and relative to the nozzles 25. Thus, the water will be directed to both the inside and outside of the glasses to thoroughly wash the same. If desired, the lever 22 may be operated by the left hand while the knob 32 is operated by the right hand of the operator. After the washing operation is completed, the lever 22 is returned to normal inactive position and movement as aforesaid of the carrier is stopped. The cover 27 may then be swung open until the

knob 32 rests upon the top wall 10 of the counter. The basket E of washed glasses is then removed from the carrier D and placed in drying position on the cover 27. When it is desired to sterilize the glasses, they are moved from the wire basket E on the cover 27 to the loading station 45 at the left end of the slideway and are then pushed or shoved along the slideway through the tunnel F as other glasses are placed on the loading station. As the glasses H pass through the tunnel F they are subjected to the light rays from the germicidal lamp 41 so that they are sterilized when they arrive at the unloading station 46 at the right end of the slideway.

Thus, from the foregoing, it will be apparent that I have provided a very practical and efficient apparatus for the purposes set forth. Such apparatus is a compact self-contained unit that is comparatively inexpensive to manufacture and neat and attractive in appearance. In this connection it will be noted that the water conduits or piping 17, 18, 19, valves 20 and 21, header C and associated parts are all within and concealed by the counter A. The apparatus disclosed herein is also simple to operate and insures proper washing and sterilization of the glasses.

What I claim as my invention is:

1. In apparatus for washing various types of ware, a counter, a sink mounted in the counter and having a drain, stationary nozzles within the sink for directing a cleaning fluid upwardly, a carrier for ware mounted to turn within the sink in the path of the cleaning fluid from said nozzles and having a cover adapted to swing over the counter to an inclined position for supporting the cleaned ware, and a handle on the cover engageable with the counter for supporting the cover in said inclined position, said handle being also operable when the cover is closed to turn the carrier within the sink.

2. In apparatus for washing various types of ware, a counter, a sink mounted in the counter, a movable carrier for ware to be washed mounted within said sink, a hinged cover for closing the carrier while the ware is being washed adapted to swing over the counter for supporting in a drying position the ware after being washed, and a handle by which the carrier may be moved engageable with the counter for supporting the cover when over said counter.

3. In apparatus for washing various types of ware, a counter, a sink mounted in the counter, a carrier for ware mounted to turn within the sink and having a cover adapted to swing over the counter to an inclined position for supporting the cleaned ware, and a handle on the cover engageable with the counter for supporting the cover in said inclined position, said handle being also operable when the cover is closed to turn the carrier within the sink.

4. In apparatus for washing various types of ware, a counter, a sink mounted in the counter, a carrier for ware to be washed mounted within said sink and having a cover adapted to swing from closed position upon the carrier to an open position upon the counter for supporting in drying position the ware after being washed, means for supplying a washing fluid to the ware within the carrier, and means for controlling the fluid supply means including a manually operable member carried by the counter in the path of the swinging cover, whereby said cover will conceal said member when said cover is in open

ware supporting position to thereby preclude operation of said member.

5. In apparatus of the class described, a counter, a sink in the counter, a carrier for ware to be washed in said sink, means for supplying a washing fluid to ware in the carrier, a manually operable member in the counter for controlling said fluid supply means, and a cover for the carrier normally closing the same but movable from closed position to an open position over the manually operable member aforesaid to preclude its operation while the cover is in open position and to support in drying position the ware after being washed.

6. In apparatus for washing various types of ware, a counter, a sink in said counter, nozzles within said sink for directing a cleaning fluid upwardly, a rotatable carrier for ware in said sink in the path of the cleaning fluid from said nozzles, a cover for said carrier normally closing the same but adapted to swing over the counter to a position for supporting the cleaned ware, and a handle on the cover engageable with the counter for supporting the cover when disposed over said counter, said handle being also operable when the cover is closed to rotate the carrier within said sink.

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