

June 25, 1946.

C. B. WEBBER

2,402,859

SUPPORT FOR GLASS WASHING MACHINES

Filed Feb. 21, 1944

2 Sheets-Sheet 1

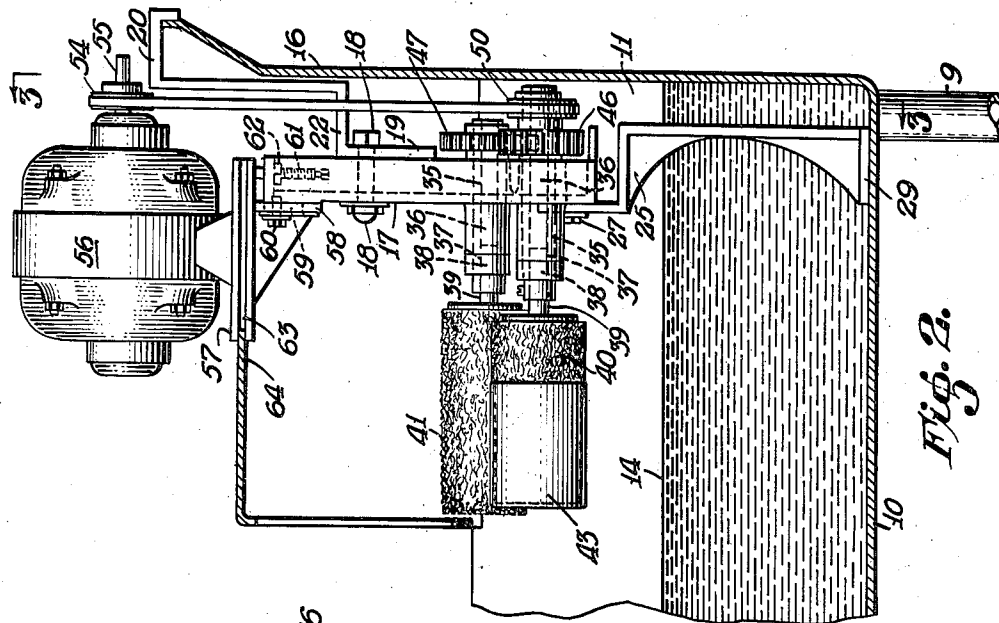


Fig. 2.

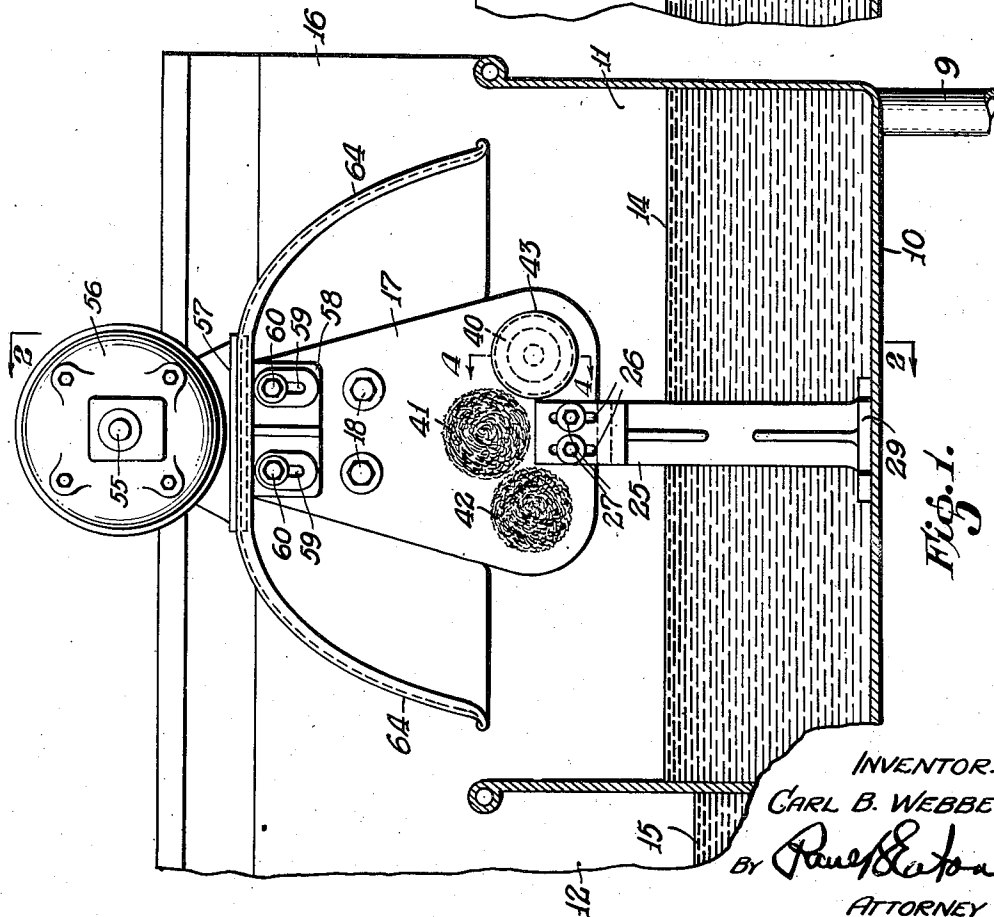


Fig. 1.

INVENTOR:
CARL B. WEBBER,
By *Paul E. Latta*
ATTORNEY

June 25, 1946.

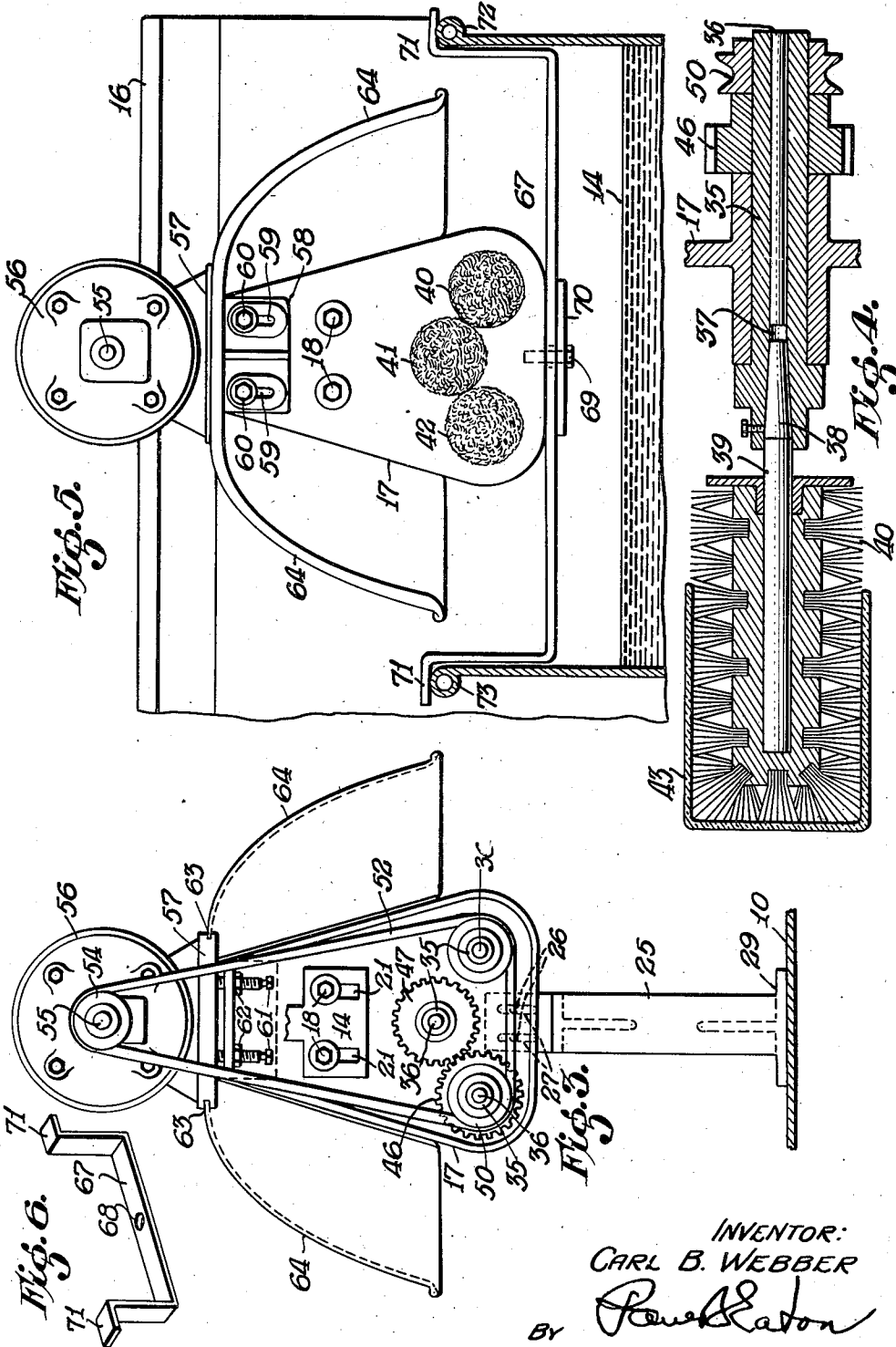
C. B. WEBBER

2,402,859

SUPPORT FOR GLASS WASHING MACHINES

Filed Feb. 21, 1944

2 Sheets-Sheet 2



INVENTOR:
CARL B. WEBBER

By *Paul Eaton*
ATTORNEY

UNITED STATES PATENT OFFICE

2,402,859

SUPPORT FOR GLASS WASHING MACHINES

Carl B. Webber, Winston-Salem, N. C.

Application February 21, 1944, Serial No. 523,176

1 Claim. (Cl. 248—16)

1

This invention relates to the combination of a sink and a container washing apparatus. Specifically, it relates to a support for an apparatus of this type employing three adjacent revolving brushes, the two outside brushes being used to cleanse the interior of the containers, such as drinking glasses, and the center brush is used to simultaneously cleanse the exterior of the glasses which are disposed around the outside brushes.

The present invention contemplates using three substantially horizontal brushes, a motor and a driving connection between the brushes and the motor. All of the parts are disposed in a compact unit which can be easily removed or installed along one sidewall of a sink. It is designed compactly enough to fit in and be attached to the ordinary sink and allow room for its use so as to make a practical glass washing machine out of the ordinary sink. It is not necessary to have any space behind the sink such as a table or support, in order to hold the apparatus in proper position. In other words, the present unit is so constructed that it can be used by many concerns that already have their sinks for dish-washing purposes without making any alterations in the existing equipment or layout.

It is therefore an object of this invention to provide a support for a glass washing apparatus, installed in a unit which can be easily and effectively used in combination with a sink for washing containers such as glasses, bottles, and the like. The simplicity of the present apparatus makes it possible for any small restaurant to obtain a glass washing machine at a very low price and install it with existing equipment. This type of machine will not only give a perfectly washed glass, but will save breakage over the common plan of piling glasses in a sink to soak.

Some of the objects of the invention having been stated, other objects will appear as the description proceeds, when taken in connection with the accompanying drawings, in which:

Figure 1 is a sectional view through a sink, showing my invention installed therein;

Figure 2 is a vertical sectional view taken along the line 2—2 in Figure 1;

Figure 3 is a vertical sectional view taken along the line 3—3 in Figure 2, and showing a portion of the support broken away;

Figure 4 is a sectional detail view through one of the brushes and through a glass which has been placed thereon, said view being taken along the line 4—4 in Figure 1;

Figure 5 is a view similar to Figure 1, but show-

2

ing a slightly modified form of support for the apparatus;

Figure 6 is an isometric view of the bracket which is used for supporting the lower portion of the glass washing machine in Figure 5.

Referring more specifically to the drawings, the numeral 9 denotes suitable legs or supports which have attached to the upper ends thereof, a container or sink 10. This sink has compartments 11 and 12 therein, the compartment 11 being adapted to contain soapy water 14 and the compartment 12 being adapted to contain clear cool water 15. One of the sidewalls of the container or sink 10 has an apron 16 integral therewith, and extending upwardly a substantial distance above the other walls. A frame 17 has bolts 18 penetrating the same which secure a bracket 19 to the frame 17. Bracket 19 has an upper hooked portion 20 which fits over the upper edge of back wall 16. Bracket 19 has slots 21 penetrated by bolts 18 for vertical adjustment of the bracket 19.

Usually the material from which the sink 10 is constructed is of very thin gauge and therefore, an additional supporting means is advisable. Therefore, an additional support is provided which extends from the bottom of the frame 17 to the bottom of the sink 10. This support is designated by the reference character 25, and has suitable slots 26 in the upper end thereof, said slots being penetrated by stud bolts 27 which are also threadably secured in the frame 17. The purpose of the slots 26 is to permit a substantial amount of vertical adjustment so that the bottom of the support will fit firmly against the bottom of the sink. It will be noted that the lower portion of the support 25 has a foot portion 29 integral therewith which forms a base for contact with the bottom of the sink 10.

The lower portion of the frame 17 has three hollow shafts 35 rotatably mounted therein, each of these shafts having a hollow bore 36 therein and each of said bores being tapered as at 37 so as to accommodate a tapered end 38 on a brush shaft 39 (Figures 2, 3, and 4). The three shafts 39 are identical and have brushes 40, 41, and 42 mounted thereon. When these brushes are installed in the manner shown in Figures 1 and 2, the peripheries thereof contact each other, so that when a glass 43 is placed on either of the brushes 40 and 42 in the manner shown in Figures 1 and 4, the interior as well as the exterior of the glass will be washed. The purpose of providing the hollow cavities or bores 36 is to permit easy removal of the brush shafts 39. When it is desired to remove the brushes, it is only necessary

3

to take a rod and insert it in the open end of the bores 36, and apply the necessary pressure to remove the tapered end 38 from tapered bore 37.

By referring to Figure 3, it will be seen that two of the hollow shafts 35 have gears 46 and 47 mounted on one end thereof. These gears 46 and 47 drive brushes 40 and 41, respectively, which are employed for washing the glasses 43. The third hollow shaft is associated with outside brush 42, but does not have a gear thereon.

The two outer shafts 35, upon which brushes 40 and 42 are mounted have pulleys 50 and 51 respectively, mounted thereon, said pulleys having a belt 52 engaging the peripheries thereof. This belt extends upwardly and is mounted upon a motor pulley 54, said pulley being fixedly secured on motor shaft 55 of motor 56. Motor 56 is mounted upon a base 57 which base has a downwardly extending flange 58 integral therewith which flange overlaps the upper portion of frame 17. This downstanding portion has slots 59 therein which are penetrated by stud bolts 60 and these stud bolts are threadably secured to the upper portion of the frame 17. By loosening these bolts and raising or lowering the motor base 57, the tension in the belt 52 can thereby be regulated. The bolts 60 are assisted by suitable set screws 61 which are threadably secured in the upper portion of the frame 17. The upper ends of screws 61 normally engage the base 57. When the stud bolts 60 are loosened, the set screws 61 are regulated to adjust the height of the motor 56. Suitable lock nuts 62 are employed upon the set screws 61 to lock them in adjusted position.

The base 57 also has a groove 63 therein which accommodates a suitable shield 64. This shield serves to catch spray and the like which is thrown from the brushes 40, 41, and 42 during a glass washing operation.

It is seen that by observing Figure 2, practically all of the moving parts, with the exception of the brushes, are disposed adjacent the apron 16 of the sink and therefore in a position where a person will be unlikely to contact the same or become injured. By providing this arrangement, the whole unit occupies a minimum amount of space in a sink, which of course, will leave more room for washables such as dishes or the like. It is, therefore, seen that I have provided a machine that has a flexibility of usage, as well as a very efficient, economical and simple apparatus.

Figures 5 and 6 show a slightly modified form

4

of mounting for the glass washing apparatus. The chief difference in the form shown in Figures 5 and 6 and that of the previous form is the elimination of the support 25 which extends to the bottom of the sink, and the substitution therefor of a U-shaped support 67. This U-shaped support 67 has a hole 68 in the central portion thereof which is penetrated by a bolt 69, said bolt also penetrating a washer 70 and being threadably secured in the lower portion of frame 17. The ends of the U-shaped brackets 67 have horizontally extending flanges 71 which rest upon the rims 72 and 73 of the sink. This form of support has the advantage of a quick installation on an existing sink although it does not permit vertical adjustment of the frame 17.

Process of washing

Take one glass in each hand and dip in soapy water. Then push glasses right over the two outside brushes, holding loosely, and glasses will revolve with brushes, which allow center brush to clean outside while brushes in glass clean inside. This is done very quickly allowing speed of operation. Glasses are then usually dipped in clear cool water in second compartment to flush off soapy water.

In the drawings and specification, there has been set forth a preferred embodiment of the invention and although specific terms are employed, they are used in a generic and descriptive sense only and not for purposes of limitation, the scope of the invention being defined in the claim.

I claim:

Means for supporting a glass washing machine in a sink, wherein the sink has a rear wall extending upwardly a substantial distance above the end and front walls, a bracket secured to the machine and projecting rearwardly against the rear wall of the sink and then projecting upwardly and then rearwardly over the top of the rear wall of the sink and having a downturned portion fitting against the rear surface of the rear wall of the sink for supporting the glass washing machine a substantial distance above the bottom of the sink, and means secured to the lower portion of the glass washing machine and resting by gravity on a portion of the sink for also supporting the machine with relation to the sink.

CARL B. WEBBER.