

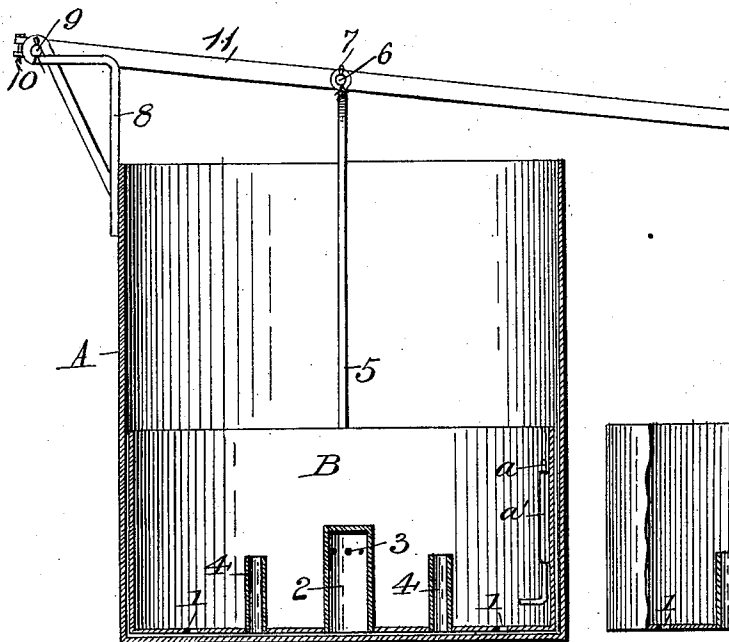
(No Model.)

C. E. RUHL.  
DISH CLEANER.

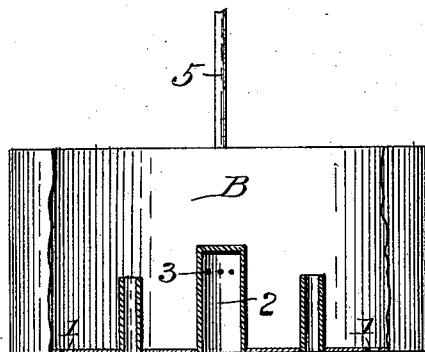
No. 560,371.

Patented May 19, 1896.

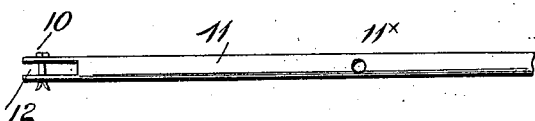
*Fig. 1.*



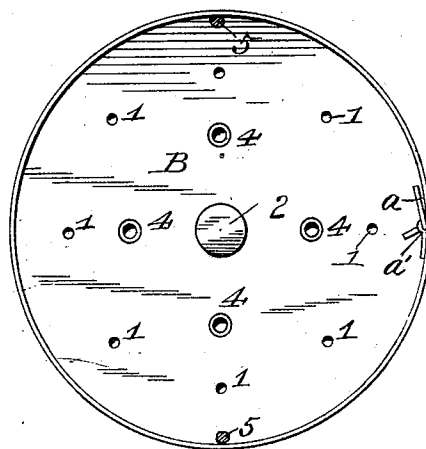
*Fig. 2.*



*Fig. 4.*



*Fig. 3.*



Witnesses.  
F. L. Osgood.  
A. J. Smith

Inventor  
Christine E. Ruhl  
By A. B. Williams  
attorney.

# UNITED STATES PATENT OFFICE.

CHRISTINE E. RUHL, OF FINDLAY, OHIO.

## DISH-CLEANER.

SPECIFICATION forming part of Letters Patent No. 560,371, dated May 19, 1896:

Application filed February 13, 1896. Serial No. 579,134. (No model.)

*To all whom it may concern:*

Be it known that I, CHRISTINE E. RUHL, a citizen of the United States, residing at Findlay, in the county of Hancock and State of Ohio, have invented certain new and useful Improvements in Dish-Washing Machines; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to dish-washing machines; and the object is to provide a machine or apparatus for washing dishes which is simple in construction, cheap in production, and effective in operation.

I have fully and clearly illustrated my invention in the accompanying drawings, wherein—

Figure 1 is a vertical central section of the complete apparatus. Fig. 2 is a detail of the dish-holder, a portion of the side of the holder being broken away to show the internal arrangement of the tubes. Fig. 3 is a plan of the perforated bottom. Fig. 4 is a detail of the operating-lever.

A designates a suitable sheet-metal vessel made cylindrical in cross-section and of such size and capacity as may suit it to the uses intended.

B designates the dish-holding vessel, fitting loosely in the outer vessel A, and of such height as may be adapted to receive and hold the dishes to be washed. The bottom of the dish-holder B is perforated by a series or number of holes 1, distributed throughout the area, to permit the passage of the water when the holder is reciprocated in the outer vessel, to throw or impinge the water against the dishes laid or arranged in the dish-holder. In the center of the bottom 1 of the dish-holder is secured a tube 2, having its lower end opening through the bottom and its upper end closed and having water ports or apertures 3 formed in it adjacent to the closed upper end, the purpose being that when the dish-holder is raised or lifted up and again depressed or moved down the water will be forced up into the tube and out through the ports against and over the upper surfaces of the dishes and cleanse them on the upper sides, and so that the water will course down through the dishes and clean them by the drainage of the water

over them and through the spaces between them.

In the bottom of the dish-holder are fixed a plurality of tubes 4, open at both ends, on which the dishes rest or against which they stand, and through which the water courses when the dish-holder is reciprocated. To the dish-holder is fixed a bail 5, extending above the water vessel A, substantially as shown, and at the middle of the bail is secured a bearing-pin 6, provided with a detachable pin or key 7, projected through its end, so that the operating-lever may be detachably mounted on the bearing-pin.

In the dish-holder is pivotally secured a suspension piece or rod *a*, journaled in keepers *a'* on the inner side of the dish-holder, and having its upper end formed to be turned over and engage on the rim of the water vessel to hold the dish-holder up and free from the water in the water vessel while the dishes are being drained off.

On the water vessel A is secured a bracket or support 8, carrying on its outer end a bearing-pin 9, which is engaged by the end of the operating-lever, the end of the lever being held in engagement to the pin and against lateral displacement by means of a collar or pin 10, substantially as shown. The operating-lever 11 is formed with a bearing 11<sup>x</sup>, which fits over the bearing-pin 6 and fulcrums thereon, and the outer end of the lever is provided with an open-end slot 12, which takes in the bearing-pin 9, substantially as indicated in the drawings. The lever 11 is thus made detachable, so that it may be removed from the apparatus and laid away when the machine is not in use or when being packed for transportation.

The use of my invention is as follows: The apparatus with the dish-holder in place and the lever applied is supplied with the requisite quantity of water, in which a detergent may be mixed, and then the dishes placed in the dish-holder. Then by reciprocating the lever the water is forced through the perforations of the bottom and the open-end tubes and also out of the perforations in the central tube until the washing process is completed, when the dish-holder is raised up with the bottom free from the surface of the water and the water allowed to drain from the dishes,

the holder being secured in the lifted or raised position by means of the sustaining-hook engaged over the rim of the outer vessel.

Having thus described my invention, what  
5 I claim, and desire to secure by Letters Patent, is—

A dish-washer, comprising an outer cylindrical vessel A, a dish-holder B within the  
10 outer vessel, having a perforated bottom, open-end tubes in the bottom of the dish-holder, and a central tube therein having a closed upper end and provided with perforations adjacent to the top thereof, a bail on the

dish-holder provided with a bearing-pin, a bracket on the outer vessel A, provided with  
15 a bearing-pin, and an operating-lever detachably fulcrumed on the bearing-pin of the bail and formed to detachably engage the bearing-pin of the bracket on the outer vessel.

In testimony whereof I hereunto affix my  
signature in presence of two witnesses.

CHRISTINE E. RUHL.

Witnesses:

ALFRED GRABER,

C. E. RUHL.