

A. SILVERGLADE.
 UTENSIL CLEANER.
 APPLICATION FILED SEPT. 2, 1908.

908,509.

Patented Jan. 5, 1909.

Fig. 1.

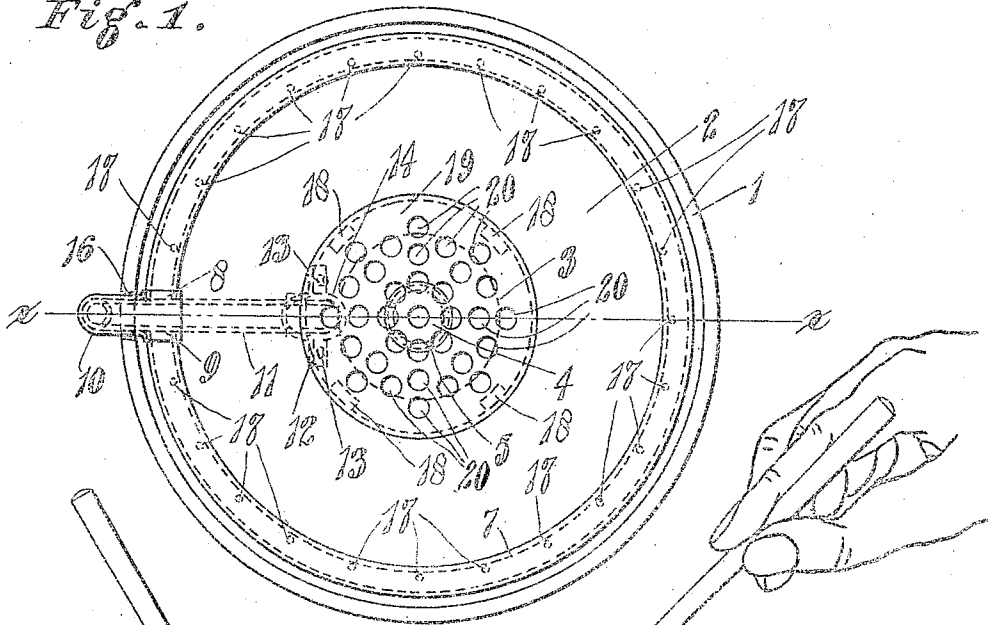
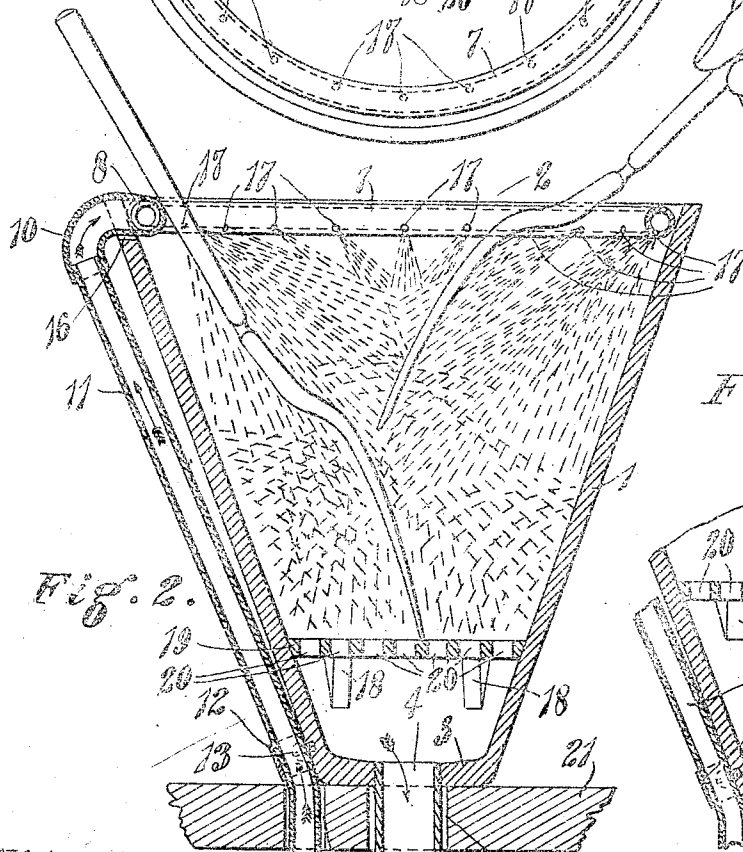
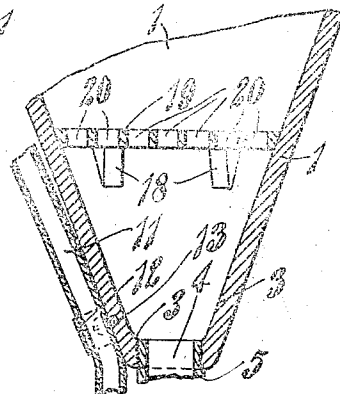


Fig. 2.

Fig. 3.



Witnesses:

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UNITED STATES PATENT OFFICE.

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UTENSIL-CLEANER.

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To all whom it may concern:

Be it known that I, ABE SILVERGLADE, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Utensil-Cleaners, of which the following is a specification.

My invention relates to washing apparatus and has for its object the provision of a continuously operating device for cleaning forks or similar utensils that must be used without removal from the serving table in public eating places, and where it is customary for the patrons to serve themselves with the use of such utensils.

My invention consists in a vessel provided at its bottom with an outlet and at its top with an opening for the insertion of utensils, and an inlet pipe encompassing the opening whereby water may be forcibly applied to the utensils during their insertion into the vessel.

My invention also consists in the parts and in the details of construction and arrangement of parts as will hereinafter be more fully described and claimed.

In the drawing: Figure 1 is a plan view of a device embodying my invention. Fig. 2 is a vertical section on a line corresponding to the line $x-x$ of Fig. 1, illustrating the manner of use of my invention. Fig. 3 is a partial vertical section illustrating a modification.

Constructed as illustrated, my invention comprises a vessel 1 of inverted frusto-conical formation, open at its top 2 and closed at its bottom 3 excepting for an outlet 4 which comprises a waste pipe 5 screwed into an opening in the bottom 3 provided at its free end with threads 6 to which may be attached any suitable well known waste pipe construction. Interiorly of the vessel, immediately below the edge of the top 2 and following it closely, is the inlet pipe 7, which, consequently to its conforming to the upper part of the vessel 1, is of annular formation with its ends 8 and 9 approaching each other. These ends 8 and 9 of the inlet pipe 7 are secured into the two oppositely extending branches of a tee shaped connection 10 which has its third branch bent downwardly, in a direction approaching that of the adjacent side of the vessel 1, to receive the upper end of a supply pipe 11, which extends down along the side of the vessel 1 and, closely approaching the direc-

tion thereof, is secured thereto by means of a clip 12 taking over the supply pipe 11 and attached to the vessel 1 at one side of the pipe 11 by means of short screws 13. Immediately below the clip 12, the pipe 11 is bent so that it extends substantially vertically, and at its end it may be provided with a suitable regulating cock 14, past which it is connected to a pipe 15 which may lead from a suitable source supplying water under pressure. The side of the vessel 1 is provided with a recess 16, in its top edge, to allow the tee shaped connection 10 to lie entirely below the upper edge of the vessel and form a support for the inlet pipe 7 in such position.

It is at the open top of the vessel that the forks or other utensils are inserted. This inlet pipe 7, encompassing the opening for the insertion of the utensils, is provided with a series of perforations 17 so positioned in the pipe that they open in a direction somewhat inclined below the horizontal. Then, when water under pressure is introduced into the inlet pipe 7 through the supply pipe 11 and tee shaped connection 10, a jet of water will be projected from each of the perforations 17 in the inlet pipe 7 radially inward and in a downwardly inclined direction, affording a continuous supply of moving water in the central region of the interior of the vessel 1 through which the utensil must pass when it is being inserted into the vessel. The consequence is that the water, in rapid motion, striking the utensil, will efficiently wash therefrom any particles which adhere thereto as a result of the use of the utensil, this operation being provided without especial attention from the person inserting the utensil into the vessel.

At some distance above the bottom 3 of the vessel 1, lugs 18 are provided on the interior wall of the vessel, preferably formed integral therewith and having their upper surfaces substantially horizontal and in the same plane, these lugs forming supports for a diaphragm 19 which, preferably, is of considerable thickness and affords a rest for the lower ends of the forks or other utensils when they are placed in the vessel. This diaphragm 19 is provided with a number of perforations 20 and is of such shape as to conform closely to the interior of the wall of the vessel 1 in the vicinity of the lugs 18. The diaphragm thus forms a support for the utensil placed in the vessel, and at the same time

constitutes a strainer to prevent any particles from passing into the outlet 4, which might be of such size as to clog the outlet.

It is now the practice to use, for the purpose of receiving forks on lunch counters and the like where it is intended that my invention shall be used, glass tumblers or similar simple vessels containing an amount of water sufficient to immerse the part of the utensil to which particles adhere in the use of the utensil, this water only serving to prevent the hardening of the substance on the utensils and not serving to efficiently remove the substance, owing to the fact that the water is stationary. Furthermore, such of the substance as is removed from the utensils is not carried away from the vessel but remains therein to sour, resulting in a more undesirable condition than if the vessel were not used, this condition prevailing until the utensils are cleaned by a specific operation, and requiring, in addition, the cleaning of the glass tumbler or other vessel which has been used to contain the utensils.

In the use of my improved cleaning device, a constantly moving volume of water is supplied and the particles removed from the utensil are as constantly removed from the vessel, maintaining both the utensils and the vessel in a sanitary condition.

For allowing the ready passage of the water carrying away the particles from the vessel, I prefer to have the upper surface of the bottom 3 of the vessel 1 sloping toward the outlet 4. As illustrated in the drawing, the slope of the upper surface of the bottom 3 is not continuous with the slope of the interior of the wall of the vessel 1, it being desirable to have the bottom 3 of sufficient diameter exteriorly to afford a substantial base for the vessel where it rests on the upper surface of the table or counter 21, which is provided with openings 22 and 23 for the passage of the waste pipe 5 and supply pipe 11, respectively, which are made to extend parallel to each other below the vessel for this purpose. However, it will be understood that the specific design of the vessel 1 may be varied so that the slope of the bottom 3 might closely approach the inclination of the sides of the vessel, or might be continuous therewith. Such a modified construction is illustrated in Fig. 3 of the drawing.

As will be noted from the above description, in connection with the manner of mounting the supply pipe 11 by means of the clip 12 and the manner of mounting the diaphragm 19 on the lugs 18, such parts are readily removable for cleaning and polishing the vessel. In order to avoid corrosion due to the acids present in the substances cleaned from the utensils, I prefer to construct the entire device of solid aluminum. The device may be constructed of any suitable metal and

plated, although it may be stated that the interior surface of the vessel, which is struck repeatedly by the utensils when placed in the vessel, is liable to have the plating removed in places allowing the corrosion to begin in such places. The vessel may be more cheaply constructed of earthenware or other glazed material.

The supply pipe 11 may be connected with a suitable cock for supplying either hot or cold water to the vessel, while the waste pipe 5 may either be connected permanently to a closed waste connection or it may simply lead into a sink such as is usually provided in such places as it will be desired to use my invention. In any case, it will be understood that the installation of the device will usually be found convenient owing to the fact that some kind of water supply connection and waste connection is usually present in such places.

It will be noted that my improved utensil cleaner, adapted as it is for the cleaning of all kinds of utensils used in serving food and drink, without especial attention on the part of the patrons or servants, will be found particularly convenient for use, not only on lunch counters, but at bars and soda fountains, for cleaning the utensils used in serving drinks at such places, thus constituting a more sanitary device than has heretofore been used for such purposes.

Having fully described my invention, what I claim as new and desire to secure by Letters Patent is:

In a utensil cleaner, a vessel of inverted frusto-conical formation open at its top and provided with an outlet at its bottom comprising a vertically extending waste pipe, an inlet pipe immediately below the edge of the top of the vessel, of annular formation with its ends approaching each other, whereby it follows the edge of the top of the vessel closely, said inlet pipe being provided with a series of perforations so positioned therein that when water flows therethrough from the inlet pipe it may be forcibly applied to utensils inserted into the vessel through the open top thereof, a tee shaped connection into two branches of which the ends of the inlet pipe are secured, the edge of the top of the vessel being provided with a recess to receive the tee shaped connection, a supply pipe having one end secured into the other branch of the tee shaped connection, extending down along the side of the vessel and closely approaching the direction thereof, and a clip securing the supply pipe to the vessel near the bottom thereof, the supply pipe extending in a vertical direction immediately below the clip, substantially as set forth.

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Witnesses:

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