

W. G. ROUNDS.

DEVICE FOR WASHING PRINTS AND THE LIKE.

APPLICATION FILED SEPT. 20, 1909. RENEWED FEB. 26, 1912.

1,025,206.

Patented May 7, 1912.

2 SHEETS—SHEET 1.

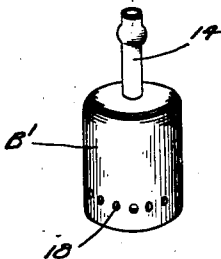


Fig. 5.

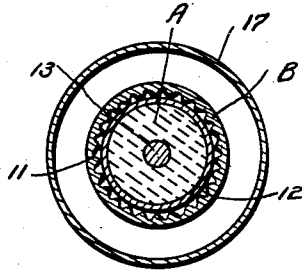


Fig. 3.



Fig. 4.

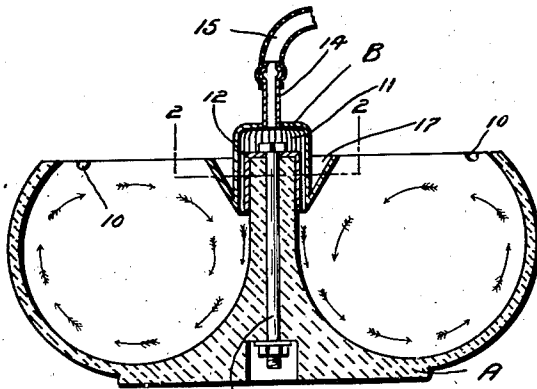


Fig. 2.

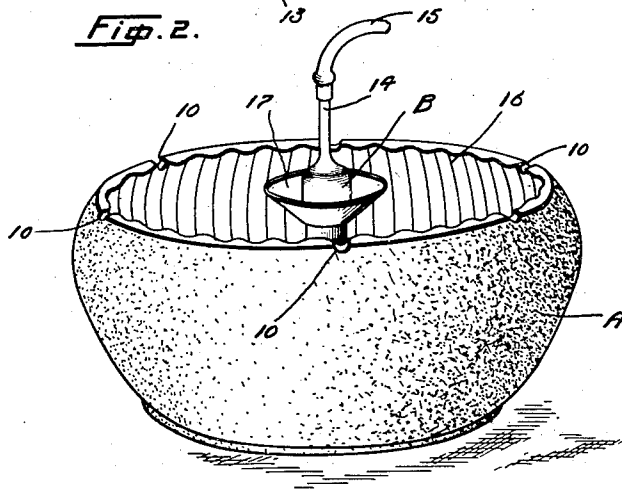


Fig. 1.

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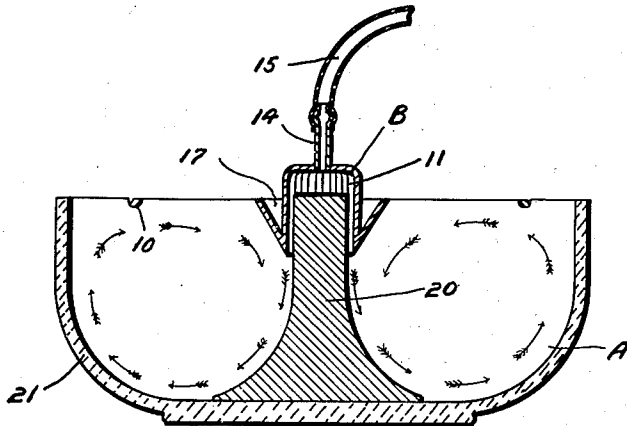


Fig. 6.

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# UNITED STATES PATENT OFFICE.

WASHINGTON GEORGE ROUNDS, OF WOODSTOCK, ONTARIO, CANADA.

DEVICE FOR WASHING PRINTS AND THE LIKE.

1,025,206.

Specification of Letters Patent.

Patented May 7, 1912.

Application filed September 20, 1909, Serial No. 518,704. Renewed February 26, 1912. Serial No. 680,092.

*To all whom it may concern:*

Be it known that I, WASHINGTON GEORGE ROUNDS, of Woodstock, in the Province of Ontario, Canada, have invented certain new and useful Improvements in Devices for Washing Prints and the Like, of which the following is a specification.

My invention relates to a device for washing prints and the like, and the objects of my invention are to enable photographic prints and the like to be thoroughly washed in a current of running water in such a way that the prints will never be allowed to mat together or lodge in any part of the washing apparatus, further objects being to give a uniform direction to the moving current of water of such a character that the prints will not be bent unduly during their movement.

To these and other ends the invention consists in certain improvements and combinations of parts all as will be hereinafter more fully described, the novel features being pointed out in the claims at the end of the specification.

In the drawings, Figure 1 is a perspective view of the device. Fig. 2 is a transverse sectional view through the same, the corrugations on the containing vessel being omitted for the sake of clearness. Fig. 3 is an enlarged sectional detail on the line 2—2, Fig. 2. Fig. 4 is an enlarged sectional detail taken horizontally through the containing vessel. Fig. 5 is a perspective view of an alternative form of discharge member. Fig. 6 is a section through an alternative form of the invention.

In the drawings, like letters of reference indicate corresponding parts in each figure. Referring to the drawings, A represents the liquid containing vessel preferably in the form of a bowl, which may be provided with notches 10 around the upper edge to permit the uniform overflow of liquid therefrom.

In accordance with the present invention, the containing vessel is formed at the center with a conoidal member 20, over which the incoming jets of liquid are discharged. This member, in the embodiment illustrated, in Figs. 1 to 5, is formed integral with the bowl, and it will be seen that in combination with the bowl, it forms an annular water circulating chamber, substantially circular in cross-section. It is within this chamber that the prints are washed, and to maintain a

constant and uniform circulation through every part of the chamber, a plurality of jets of liquid are discharged downwardly over the conoidal member. To do this, in the embodiment illustrated, I provide a discharging member B in the form of a cap, fitting over the top of the conoidal member, and provided on the interior with a series of corrugations 11 adapted to divide the discharging liquid into a plurality of fine jets. To give uniformity to the discharge by presenting a smoother surface than that of the vessel A, which will often be formed of stoneware, I prefer to provide a cap 12 on the top of the conoidal member retained in position by a suitable bolt 13 extending through the conoidal member. The diameter of this cap 12 is such as to make it fit closely within the discharge member B, touching the corrugations thereon.

The washing liquid is supplied to the discharge member through a suitable inlet pipe 14 placed in communication with a supply of liquid through a suitable conduit 15. In the ordinary washing of prints, the liquid employed will be water in which case, the conduit 14 will be connected directly to a water tank. It will be seen that the streams of water discharged downwardly over the conoidal member, will form a circular current in a radial direction, and to assist the formation of this current, and to prevent the prints adhering to the sides of the vessel, it is desirable to provide the interior of the vessel with a series of corrugations 16 in the same direction as that in which the currents are to be formed. These corrugations thus perform two functions namely, that of forming a rough surface to which the prints will not adhere and that of guiding the moving currents of liquid. The corrugations permit the water to pass behind the prints when they are against the side and thus prevent them sticking to the side.

It is desirable to provide means to prevent the prints adhering to the sides of the central discharge members, and in the embodiment shown in Figs. 1 to 4, I employ a conical flange 17 to accomplish this, while in the form shown in Fig. 5, the discharge member B' has a series of perforations 18 extending around the same near the bottom, through which small jets of water will pass, effectually clearing the surface of the member from any prints which would tend to adhere thereto.

In the form shown in Fig. 1, the conoidal member 20 is formed separately from the containing vessel 21, and this has the advantage that the conoidal member may be used with different forms of vessels, which the user of the device will have on hand; and it will then only be necessary to purchase the conoidal member and the distributing member. In this form of the invention, the cap on the conoidal member is omitted, the member being made sufficiently smooth itself. It will be noted that the top of the conoidal member in reality, forms a baffle plate within the discharge member, which forces the liquid to pass to the outer side of the same.

As many changes could be made in the above construction, and many apparently widely different embodiments of the invention, within the scope of the claims, could be made, without departing from the spirit or scope thereof, it is intended that all matter contained in the accompanying specifications and drawings shall be interpreted as illustrative and not in a limiting sense.

What I claim as my invention is:—

1. In a print washer, the combination with a conoidal baffle member adapted to be submerged in a fluid-containing vessel with its larger end lowermost to prevent upwardly and inwardly curved walls, of a liquid discharge member connected at the smaller end of the baffle member to direct a stream downwardly along the diverging walls of the latter.

2. In a print washer, the combination with a conoidal baffle member adapted to be submerged in a liquid-containing vessel with its larger end lowermost to present upwardly and inwardly curved walls, of a liquid discharge member embodying an interiorly corrugated cap fitting over the smaller end of the baffle member to direct a stream downwardly along the walls of the latter.

3. A device for washing prints and the like, including a vessel having a central baffle member, and an interiorly corrugated discharge member fitting over said baffle member.

4. A device for washing prints and the like, including a vessel, a central baffle member, a discharge member fitting over the same having a conical flange on the edge adapted to prevent prints adhering to the outer surface thereof, the said discharge members being adapted to discharge liquid around the baffle member.

5. A device for washing prints and the like, including a bowl, having a central conoidal member and an interiorly corrugated discharge member fitting over the conoidal member adapted to discharge a plurality of jets of liquid over the same.

6. In a print washer, the combination with a liquid containing chamber, a liquid supply device arranged to direct a stream down-

wardly along one wall of the chamber, the point of discharge being below the overflow level of the chamber and an inclined guard flange on one of said parts extending from the point of discharge outwardly and upwardly to the overflow level of the chamber for the purposes described.

7. In a print washer, the combination with a liquid container, of an upwardly projecting member centrally arranged therein forming an annular chamber within the receptacle, and means for producing circular currents in the chamber traveling vertically and radially of the central member embodying a liquid discharge device arranged to discharge in a vertical direction along one wall of the chamber.

8. In a print washer, the combination with a liquid container having upwardly curved outer walls, of an upwardly projecting member centrally arranged therein forming an annular chamber within the receptacle having a substantially circular vertical cross section and means for producing circular currents in the chamber traveling vertically and radially of the central member comprising a liquid supply device arranged to discharge in a downward direction along one wall of the chamber.

9. In a print washer, the combination with a liquid container, of an upwardly projecting member centrally arranged therein forming an annular chamber within the receptacle and means for producing circular currents in the chamber traveling vertically and radially of the central member embodying a liquid supply member fitting over the said central member and adapted to discharge in a vertical direction along the outer surface thereof, which surface also forms a wall of the chamber.

10. In a print washer, the combination with a liquid container, of an upwardly projecting member centrally arranged therein forming an annular chamber within the receptacle, and means for producing circular currents in the chamber embodying a fluid supply cap fitting over the end of the central member and arranged to discharge along the surface of the same.

11. In a print washer, the combination with a liquid container having walls provided interiorly with a plurality of vertically disposed channels or corrugations, of an upwardly projecting member centrally arranged therein forming an annular chamber within the receptacle and means for producing circular currents in the chamber traveling vertically and radially of the central member comprising a liquid supply device surrounding the central member and arranged to discharge a plurality of streams downwardly along the surface thereof to flow longitudinally of the channels on the wall of the receptacle.

12. In a print washer, the combination with a fluid holding chamber having substantially vertically extending corrugations or channels on one wall thereof, of a fluid supply device arranged to discharge a stream in a downward direction along the opposite wall.

In witness whereof I have hereunto set my hand in the presence of two witnesses.

WASHINGTON GEORGE ROUNDS.

Witnesses:

F. M. TOBIN,  
MAY E. FIELD.