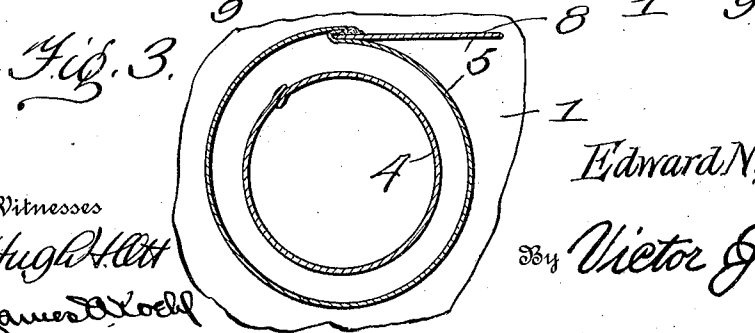
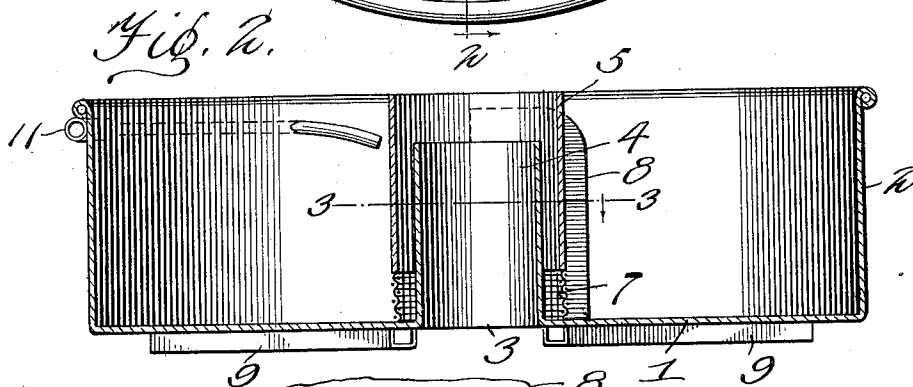
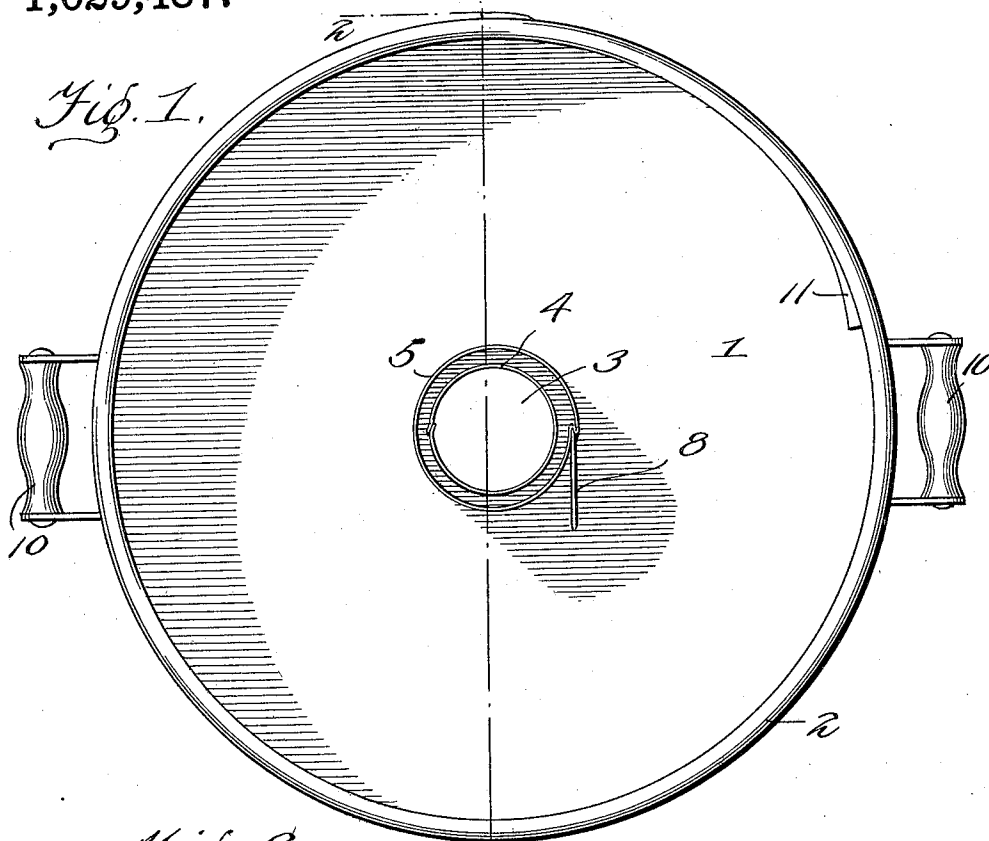


E. N. BURDICK.
 PHOTOGRAPHIC PRINT WASHER.
 APPLICATION FILED MAR. 21, 1910.

1,029,487.

Patented June 11, 1912.



Witnesses
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EDWARD N. BURDICK, OF WESTERLY, RHODE ISLAND.

PHOTOGRAPHIC-PRINT WASHER.

1,029,487.

Specification of Letters Patent.

Patented June 11, 1912.

Application filed March 21, 1910. Serial No. 550,596.

To all whom it may concern:

Be it known that I, EDWARD N. BURDICK, a citizen of the United States of America, residing at Westerly, in the county of Washington and State of Rhode Island, have invented new and useful Improvements in Photographic-Print Washers, of which the following is a specification.

This invention relates to photographic print washers, and has for an object to provide a washing receptacle constructed to cause the water to move in a circular path about a center column or outlet, the said column being disposed outwardly of an overflow whose wall is spaced from the column to permit the water at the bottom of the receptacle to rise between the wall of the column and that of the overflow, the overflow being of less length than the said column so that the water after rising to a given height, will be effectively discharged, the said construction of the said column and overflow respectively also obviating flooding or overflowing of the receptacle.

A further object of the invention is to provide a print washer which will be automatic in action, and constructed so that all chemicals that are heavier than the water will be drawn off from the bottom.

Another object of the invention is to provide a washer wherein means are employed whereby the prints will be held positively against congestion at the discharge of the washer, the said means also serving as a deflector to cause the prints contacting therewith to move away from the discharge end of the washer and to be maintained in the circulating water.

In the drawing, forming a portion of this application and in which like numerals of reference indicate similar parts in the several views:—Figure 1 is a top plan view of my improved photographic print washer. Fig. 2 is a vertical section therethrough on line 2—2 of Fig. 1. Fig. 3 is a horizontal section taken on the line 3—3 of Fig. 2.

My improved photographic print washer comprises a receptacle in the form, preferably, of a circular pan having a bottom 1 and an annular outer wall 2. At its center the bottom of the receptacle is formed to provide a discharge opening 3 from which rises a column 4 forming an overflow to be hereinafter described. Outwardly of the said overflow-forming column is a column 5 whose wall is spaced from the wall of the

overflow column for a purpose to be hereinafter described. At the bottom the column 5 is formed to provide a vertically extending foraminous discharge portion 7. The column 4 is disposed below the plane of the top of the pan so as to limit the rise of the water in the pan as is understood. A separating vane 8 extends vertically from the bottom of the receptacle and is tangential to the outer discharge column 5, the inner end of the said vane being secured in the outermost column in any approved well known manner. The separating vane is of a height approximately equal to that of the outer column. A small water inlet pipe 11 extends partly around the annular wall of the receptacle, one end of the said pipe being extended into the receptacle and arranged downwardly at an angle to the top of the receptacle, so that the water will be directed toward the bottom 1.

The bottom of the herein described receptacle is formed to provide depending feet or ribs 9 which are adapted to rest upon a suitable drain board, sink or the like during operation of the device. Suitable handles 10 extend from the wall of the receptacle in positions to be conveniently grasped by the operator to enable him to conveniently carry the device from place to place.

In the operation of my improved print washer, I first introduce water thereto by way of the inlet pipe described and I then place the print to be operated upon in the body of water. Incident to the fact that the water is delivered into the receptacle at the top, and in the manner described it will be seen that the full force of the flow upon introduction of the water will be deflected by the annular wall 2 to impart to the water the desired circular motion. The motion of the water will be spiral-like and the currents nearer the column 5 will travel with less speed than the currents nearer the annular wall 2. The vane 8 acts as a deflector and it is disposed with relation to the column 5 so as to interrupt or change the speed of the water currents and the direction of travel of the water currents so that when the prints come in contact with the vane they will be directed to the outer circulating currents of water. The prints are, therefore, substantially maintained at all times in a fresh supply of water.

The position of the vane is such that it obviates the accumulation of pictures at the

discharge end of the column 5 thus providing for an effective discharge of the water at all times and will keep the prints separated.

5 The construction of the print washer is extremely simple and is such that a complete change of water is going on at all times.

10 It will of course be understood that such chemicals as hypo in solution which is heavier than the water will fall to the bottom of the receptacle and will be carried off by the water currents at the lowest point of the column 5.

I claim:

15 A print washer comprising a receptacle having a centrally located discharge opening, a column extending upwardly from the opening, a second column embracing the

first column and spaced therefrom and extended above the said first column and provided with a lower feraminous portion, a water inlet member extending partly around the receptacle and opening thereinto and adapted to cause the water as it is introduced to the receptacle to circulate in a substantially spiral-like manner in the receptacle, and a vertically disposed vane secured to the second column and extending tangentially thereto. 20 25

In testimony whereof I affix my signature 30 in presence of two witnesses.

EDWARD N. BURDICK.

Witnesses:

EUGENE B. PENDLETON,
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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."