July 6, 1926. 1,591,167

L. B. LEWIS

PHOTOGRAPHIC PRINT WASHER

Filed Oct. 17, 1925

Fig. 1.

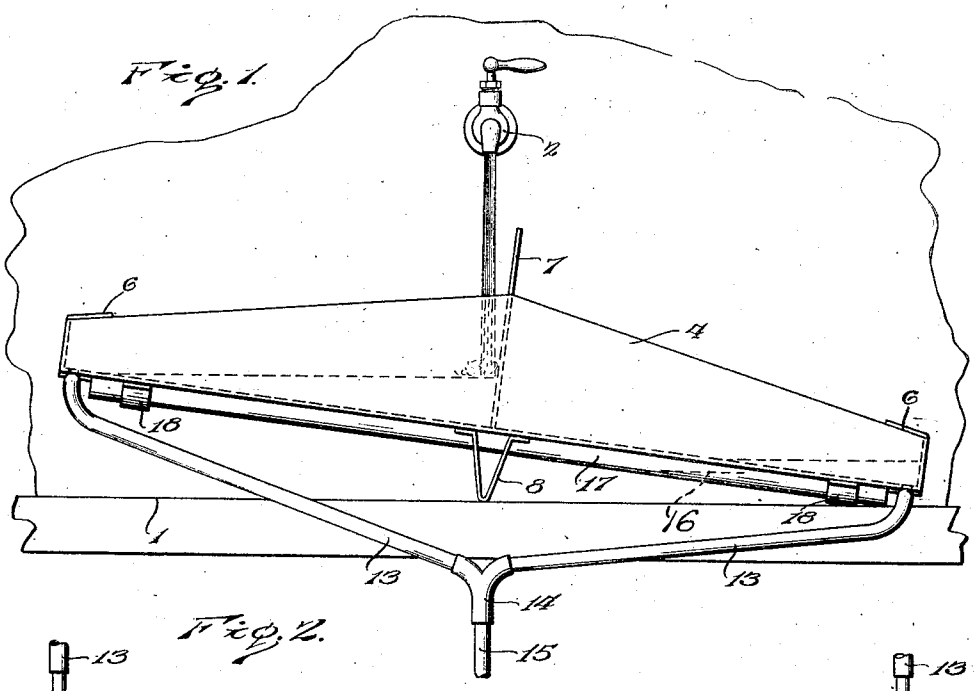


Fig. 2.

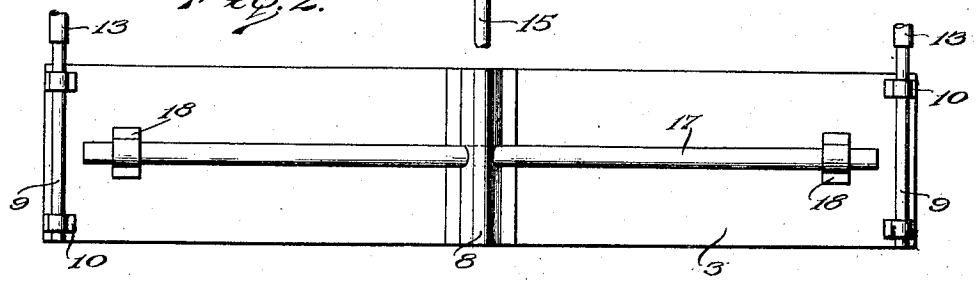
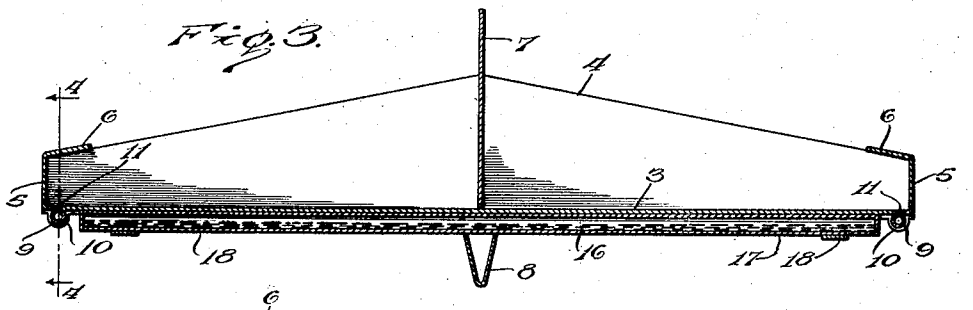


Fig. 3.



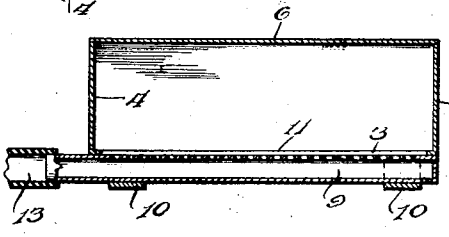


Fig. 4.

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UNITED STATES PATENT OFFICE.

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PHOTOGRAPHIC PRINT WASHER.

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In the photographic art it is essential that the prints be thoroughly washed to remove every trace of chemicals in order to obtain the best results. This is usually effected by water in motion, the common practice being to subject the print to a stream of water issuing from an outlet, such as a faucet.

It has been discovered that the chemicals will more readily dissolve in water not in motion and in accordance with the present invention, a tray is provided and mounted to automatically tilt, a mobile counterbalance being utilized to control the tilting movements of the tray jointly with the water supplied thereto and drawn off therefrom.

The invention therefore has as its primary object the provision of a tray pivotally mounted intermediate its ends and adapted to receive water from a source of supply, a mobile counterbalance freely movable from one side to the other of the pivot of the tray and adapted to hold one end of the tray lowered while the opposite end of the tray is receiving a supply of water to the predetermined level, and means for drawing off the spent water from the tray.

While the drawings illustrate a preferred embodiment of the invention, it is to be understood that in adapting the means to meet specific needs and requirements the design may be varied, and such other changes in the minor details of construction may be resorted to within the scope of the invention as claimed, without departing from the spirit thereof.

For a full understanding of the invention and the merits thereof, reference is to be had to the following description and the drawings hereto attached in which,—

Figure 1 is a front view of a photographic print washer embodying the invention,

Figure 2 is an inverted or bottom view of the washer,

Figure 3 is a vertical, central, longitudinal sectional view of the device, and

Figure 4 is an enlarged detail sectional view on the line 4—4 of Figure 3 looking to the left as designated by the arrows.

Corresponding and like parts are referred to in the following description and designated in the several views of the drawings by like reference characters.

The numeral 1 designates a table, shelf or the like for receiving the device when in action. The numeral 2 designates a faucet or other valve controlled outlet of a service pipe.

The washer comprises a tray which may be of any dimensions or construction and this tray comprises a bottom 3, sides 4, ends 5 and overhanging terminal coverings 6 forming, with the ends 5, terminal coverings 6 and sides 4, compartment for retaining and holding the water when the tray is tilted. A vertical partition 7 is centrally disposed and divides the tray into chambers whereby to retain the water in the elevated end portion until it has reached the predetermined level. A fulcrum 8 depends from the bottom of the tray and the latter is tiltably mounted thereon. The fulcrum 8, like the partition 7, is centrally disposed. The sides 4 are of maximum depth at a central point and decrease in depth towards the ends 5, and this is necessary to confine the water laterally when the tray is tilted as indicated in Figure 1.

A waste 9 is provided at each end of the tray to draw off the spent water and as shown this consists of a tube disposed beneath the bottom 3 and retained in place by suitable means such as clips 10 and this tube is perforated along its top side in line with a slot or opening 11 formed in the bottom 3. A flexible tube 13 connects with an end of each of the tubes 9 and leads to a coupling 13 to which a hose pipe 15 connects for conveying the spent water to a convenient point of discharge.

A mobile counterbalance is associated with the tray, so as to move freely from one end to the other end thereof, and this counterbalance may be provided in any manner, so long as it functions to hold one end of the tray in lowered position while the opposite end of the tray is filling with water to a predetermined level. In the preferable construction the mobile counterbalance consists of liquid, such as mercury which is preferred because of its high specific gravity, the mercury designated by the numeral 16, being confined in a chamber or conduit 17 disposed beneath the bottom of the tray and fastened thereto by means of clips 18 or in any preferred way. The chamber or conduit 17 extends substantially the entire length of the tray and the mercury 16 is supplied thereto in sufficient quantity to occupy an end portion of the chamber, or conduit, when the tray is tilted, whereby to hold the depressed

end in lowered position during the interval of supplying water to the elevated end to the predetermined level.

In the operation of the device the tray is placed upon the table, shelf or other support 1 with the vertical partition 7 in line with the nozzle or outlet of the faucet 2 when the tray is in horizontal position, so that upon tilting the tray, as indicated in Figure 1, the stream of water from the faucet 2 will flow into the elevated end portion of the tray upon one side of the partition 7, the opposite end portion of the tray being held in lowered position by the mercury or other counterbalance in the chamber or conduit 17. When the water reaches the predetermined level in the elevated end portion of the tray, it counteracts the force exerted by the counterbalance and the elevated end of the tray descends, thereby changing the inclination of the chamber or conduit 17 with the result that the mercury or other mobile counterbalance therein moves to the opposite end of the chamber or conduit and holds the tray in the changed position during the discharge of the water from one end of the tray and the supply of water to the opposite end of the tray. When the tray receives a supply of water to the predetermined level the operation thus described is repeated and continues so long as the water is permitted to flow from the faucet into the tray. The print to be washed is placed in an end portion of the tray and the chemicals are dissolved while the tray is at rest in either position as will be readily understood.

Having thus described the invention, I claim:

1. A photographic print washer comprising a tray pivotally mounted intermediate its ends and a mobile counterbalance associated with the tray to hold one end in lowered position while the opposite end portion is receiving a supply of water to the predetermined level.

2. A photographic print washer comprising a tray pivotally mounted intermediate its ends, a mobile counterbalance associated with the tray to hold one end in lowered position while the opposite end portion is receiving a supply of water to the predetermined level, and a discharge outlet at each end of the tray for drawing off the spent water.

3. A photographic print washer comprising a tray pivotally mounted intermediate its ends and having the terminal portions enclosed to prevent overflow of the water at the lowered end, the tray being provided at each end with an outlet for drawing off the spent water, and a mobile counterbalance associated with the tray for holding an end portion thereof lowered during the supply of water to the opposite end portion to the predetermined level.

4. A photographic print washer comprising a tray pivotally mounted intermediate its ends and sub-divided centrally by a partition, the tray having an outlet at each end so as to discharge the spent water, a mobile counterbalance adapted to move freely from one end to the other end of the tray, and means associated with the tray for supporting the mobile counterbalance.

5. A photographic print washer comprising a tray pivotally mounted intermediate its ends and having end compartments and a middle partition and furthermore provided with end outlets for drawing off the spent water, a conduit extending substantially the length of the bottom of the tray, and a mobile counterbalance within said conduit.

6. A photographic print washer comprising a tray including a bottom, sides, ends and overhanging terminal coverings forming compartments, the sides of the tray being of maximum depth at a middle point and gradually decreasing in depth toward the ends of the tray, a centrally disposed partition, a fulcrum depending from the bottom at a medial point, outlets at opposite ends of the tray, a tube having connection with the outlets for carrying off the spent water, a conduit extending substantially the length of the tray and disposed beneath the bottom thereof and a mobile counterbalance within said conduit.

In testimony whereof I affix my signature.

LESTER B. LEWIS. [L. S.]