

(No Model.)

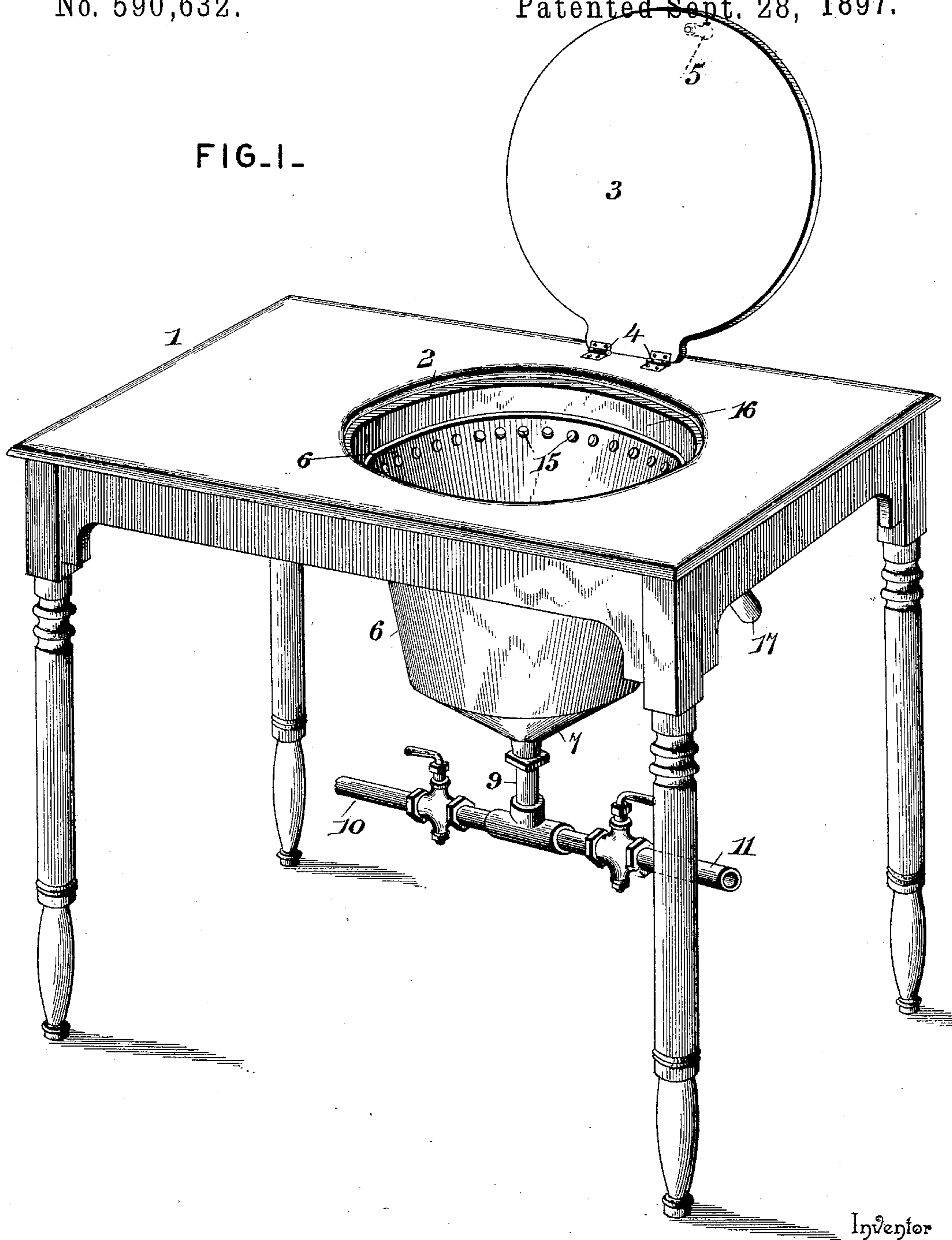
2 Sheets—Sheet 1.

F. SHURIG.
PHOTOGRAPHIC PRINT WASHER.

No. 590,632.

Patented Sept. 28, 1897.

FIG. 1.



Inventor

Witnesses

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FIG. 2.

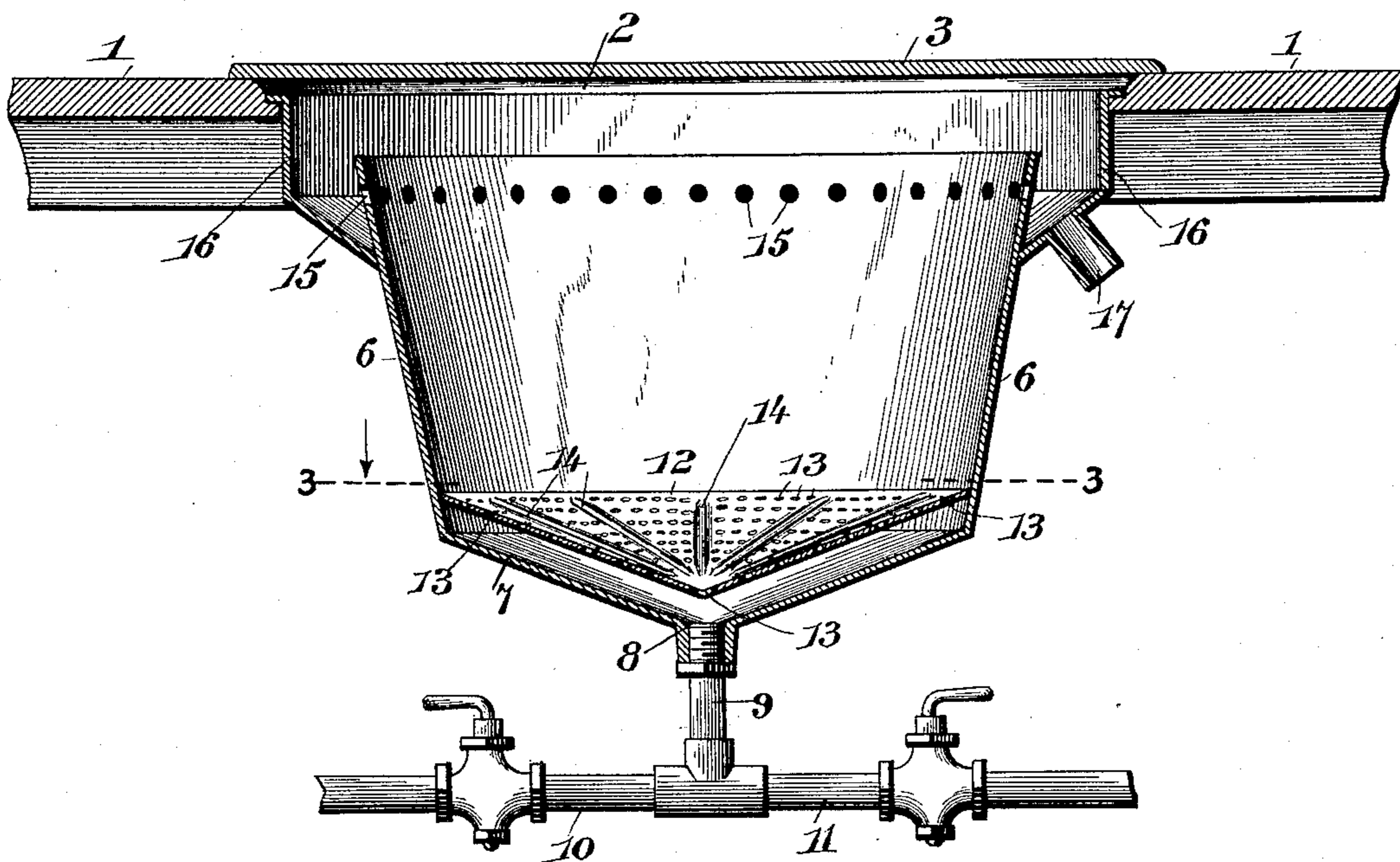


FIG. 3.

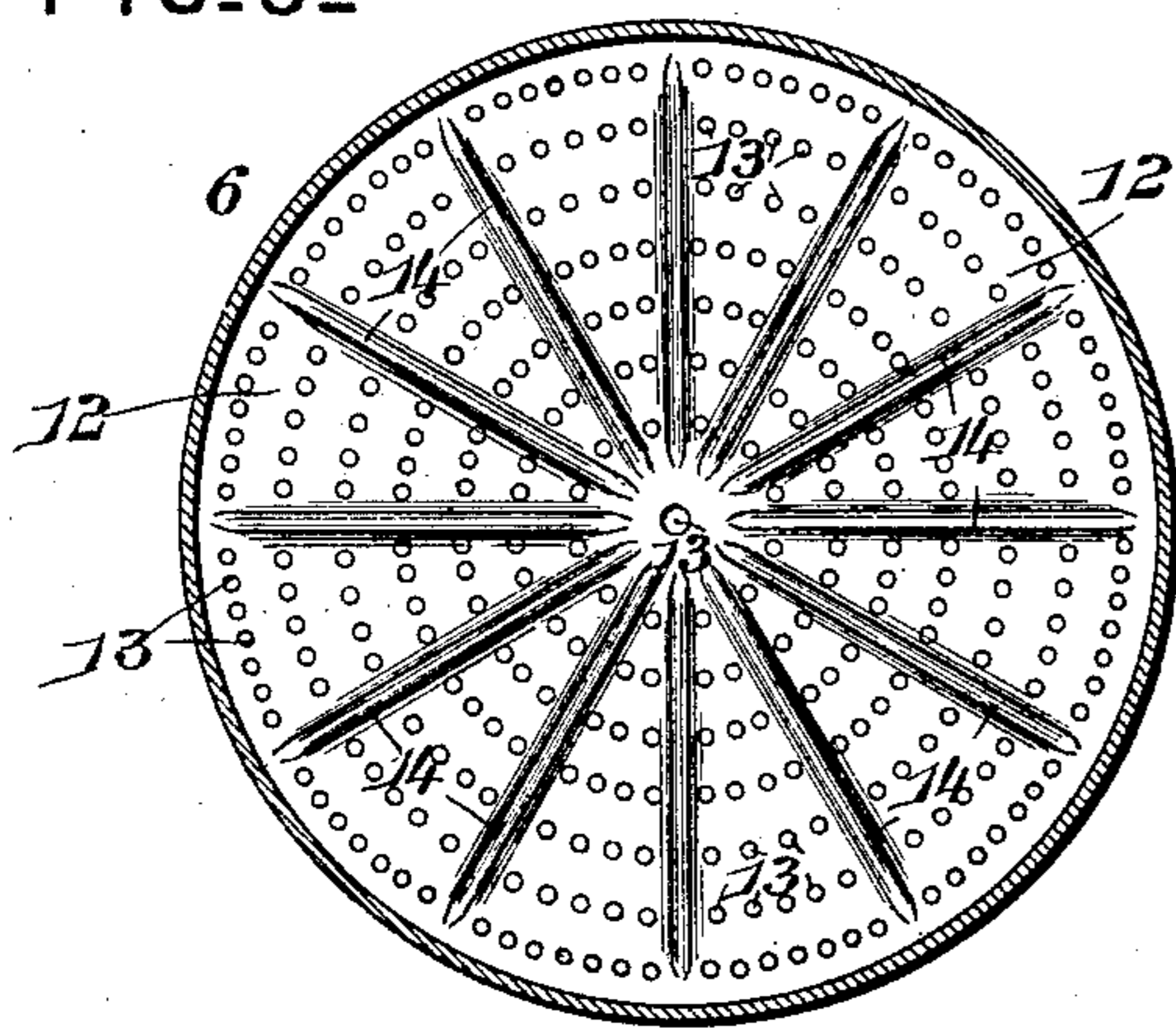
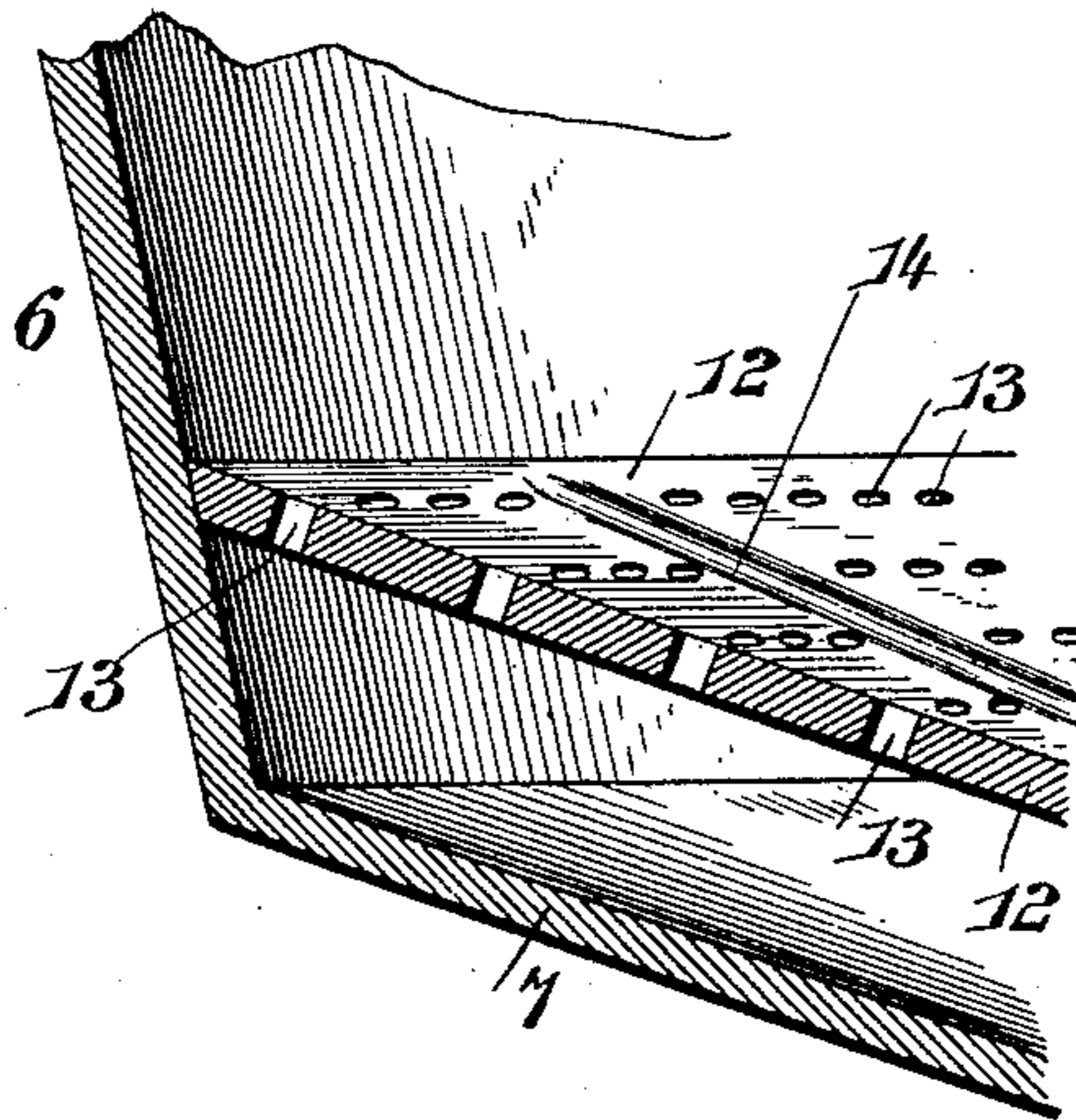


FIG. 4.



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UNITED STATES PATENT OFFICE.

FRANK SHURIG, OF HUNTINGBURG, INDIANA.

PHOTOGRAPHIC-PRINT WASHER.

SPECIFICATION forming part of Letters Patent No. 590,632, dated September 28, 1897.

Application filed February 19, 1896. Serial No. 579,909. (No model.)

To all whom it may concern:

Be it known that I, FRANK SHURIG, a citizen of the United States, residing at Huntingburg, in the county of Dubois and State of Indiana, have invented a new and useful Photographic Print and Negative Washer, of which the following is a specification.

This invention relates to photographic print and negative washers; and it has for its object to effect certain improvements in washing apparatus of this character whereby a continuous supply of clean water is circulated throughout a bunch of prints or a rack of negatives; and in the accomplishment of this object the invention provides means for positively insuring an equal and thorough washing of every print or negative placed in the washer and at the same time positively preventing prints from bunching or matting together.

With these and other objects in view, which will readily appear as the nature of the invention is better understood, the same consists in the novel construction, combination, and arrangement of parts hereinafter more fully described, illustrated, and claimed.

In the drawings, Figure 1 is a perspective view of a photographic print and negative washing apparatus constructed in accordance with this invention. Fig. 2 is a central vertical sectional view thereof. Fig. 3 is a horizontal sectional view on the line 3 3 of Fig. 2. Fig. 4 is an enlarged detail sectional view of the bottom portion of the wash vessel, illustrating the disposition of the jet-openings in the perforate false bottom.

Referring to the accompanying drawings, 1 designates a wash-table provided in the top thereof with an operating-opening 2, adapted to be covered by a circular cover or lid 3, hinged at one edge, as at 4, to the top of the table and provided at its free edge with a finger-knob 5, whereby the said lid or cover may be readily raised or lowered. Suitably supported from the under side of the table-top, below the opening 2 therein, is a metallic wash vessel 6, which is preferably circular in cross-section and flared upwardly toward the top of the table from which the said vessel is suspended.

The upwardly-flared wash vessel 6 may be square or of any other convenient or desir-

able shape and is provided with a dished conical bottom 7, having at its apex an opening 8, in which is fitted the upper end of a water-inlet pipe 9, to which inlet-pipe 9 are respectively connected the separate valved water-supply and drain pipes 10 and 11. The water-supply pipe 10 is designed to be connected with a hydrant or other source of water-supply, whereby water will be carried under pressure through the pipes 10 and 9 into the bottom of the wash vessel 6, and arranged within the bottom portion of said wash vessel 6 is a dished perforate false bottom 12, which is illustrated as being substantially parallel with the dished conical bottom 7 of the vessel. The downwardly-dished false bottom 12 of the wash vessel 6 is provided throughout its area with a multiplicity of jet-openings 13, which, by reason of the conical shape of the false bottom, have their sides disposed at an angle to the vertical center of the vessel, and at the apex of the false bottom 12 the central one of the jet-openings 13 is larger than the other openings to provide for directing a stronger jet of water upward through the vertical center of the wash vessel, for a purpose to be more fully explained.

The perforate bottom 12 of the wash vessel, in addition to the jet-openings 13 thereof, is provided with a downwardly-converging series of radially-disposed reinforce-ribs 14, which ribs not only serve to strengthen the bottom 12 to obviate bulging thereof under heavy hydrant-pressure, but also provide a ribbed or uneven surface on which prints being washed will rest when it is necessary to drain the surplus water from the prints. In explanation of this function of the ribs 14 it will be noted that said ribs prevent the prints, when surplus water is being drained from the vessel, from adhering to or resting flat on the upper surface of the bottom 12, over the openings 13, and thereby closing any of said openings and interfering with the free draining of the vessel.

The wash vessel 6 is provided near its upper edge with an annular series of overflow-openings 15, which communicate with an annular gutter-rim 16, exteriorly fitted to the wash vessel 6, near its upper edge. The said gutter-rim 16 has its outer wall extended above the plane of the upper edge of the ves-

sel 6, so that the said gutter-rim will positively receive the overflow from the vessel 6 irrespective of the height the water reaches in such vessel, and said gutter-rim 16 is provided in one lower side with an overflow-pipe connection 17, which provides for carrying off the overflow-water from the wash vessel 6; and thereby maintaining a constant circulation of clean water therein.

10 In operation the valve or cock in the drain-pipe 11 is closed and clean water under pressure passes through the pipes 10 and 9 into the bottom of the vessel 6 and distributes itself under the perforate false bottom 12. It

15 will of course be understood that if prints are to be washed a bunch thereof is placed directly in the vessel above the false bottom, and if negatives are to be washed a suitable rack filled with negatives is placed within

20 the vessel on the said false bottom. The water which enters the vessel under the false bottom is forced through the jet-openings 13 of said false bottom in a number of small jets, and since the said jet-openings are dis-

25 posed at an angle to the vertical center of the vessel 6 the water as it rises within the vessel and fills the same will be in a constant state of agitation and will circulate in every direction, so as to reach each and every one

30 of a batch of prints or a rack of negatives, and thereby cause every print or negative to be evenly and thoroughly washed. By reason of this particular circulation of the water throughout the wash vessel prints will be pre-

35 vented from bunching or matting together, and by reason of having a stronger jet of water rising centrally from the apex of the false bottom 12 prints will be prevented from settling down to the bottom of the vessel at this

40 point, and said central strong jet of water also assists materially in causing the water to freely circulate toward and through the overflow-openings 15 into the gutter-rim 16, thereby insuring a constant discharge of the

45 impure water and a constant circulation of clean water. When it is desired to wash out the wash vessel or drain the same, the valve in the water-supply pipe 10 is closed, while that in pipe 11 is opened, thereby allowing

50 the vessel to be readily and thoroughly washed out from the interior thereof.

Changes in the form, proportion, and the

minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention. 55

Having thus described the invention, what is claimed, and desired to be secured by Letters Patent, is—

1. In a photographic print and negative washer, a wash vessel having an overflow connection at the top and provided with a 60
dished conical bottom having a combined water-supply and drain pipe connection at its apex, and a downwardly-dished false bot- 65
tom fitted within the vessel above the main bottom thereof and provided with a multiplicity of jet-openings whose sides are disposed at an angle to the vertical center of the vessel, the central one of said openings being 70
larger than the other of said openings, substantially as set forth.

2. In a photographic print and negative washer, a wash vessel provided near its upper 75
edge with an annular series of overflow-openings and with a downwardly-dished conical bottom having a combined water-supply and drain pipe connection at its apex, a downwardly-dished false bottom fitted within the vessel above the main bottom thereof and 80
provided with a multiplicity of jet-openings and with a downwardly-convergent series of radially-disposed reinforce-ribs, and an annular gutter-rim fitted exteriorly on the wash vessel near its upper edge to receive the 85
overflow from said overflow-openings, substantially as set forth.

3. In a photographic print and negative washer, a wash vessel having a water-inlet opening at the bottom and an overflow con- 90
nection at the top, and a false bottom arranged within the vessel above the water-inlet opening and provided with a multiplicity of jet-openings and a converging series of radially-disposed reinforce-ribs, substan- 95
tially as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

FRANK SHURIG.

Witnesses:

EDMUND PICKHARDT,
AUGUST SALAT.