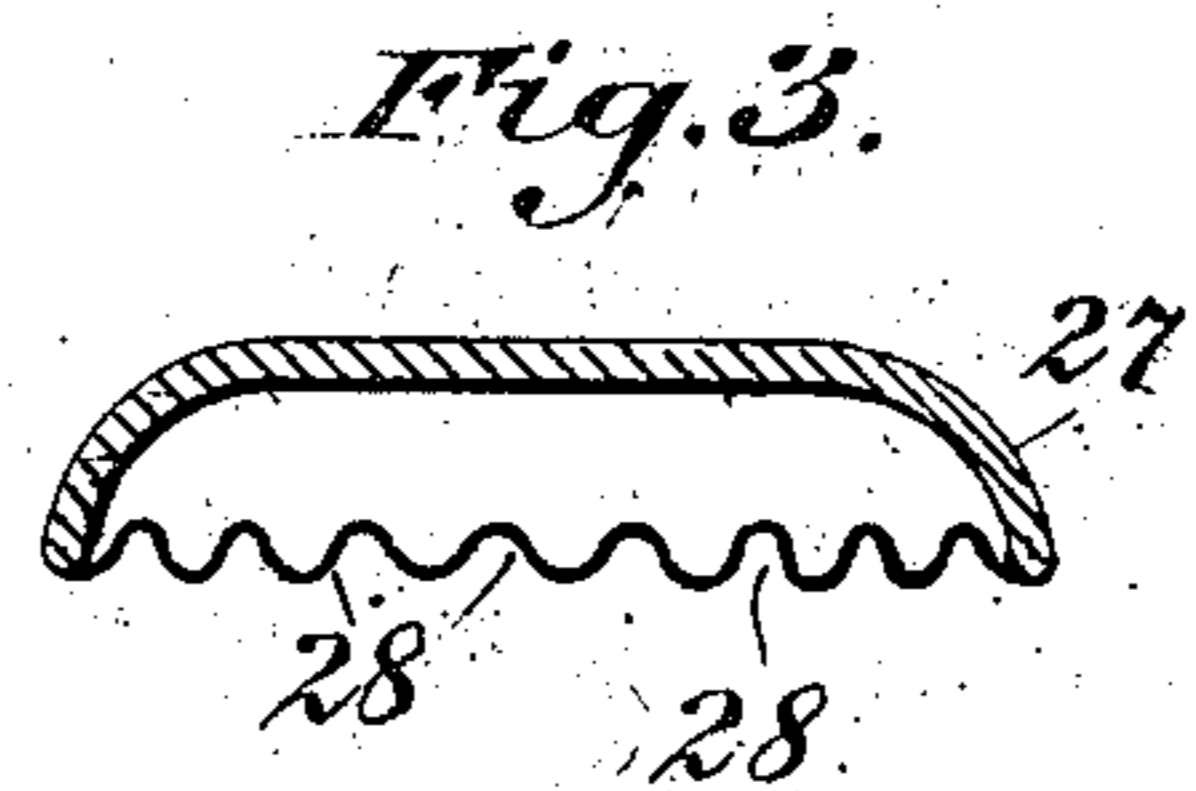
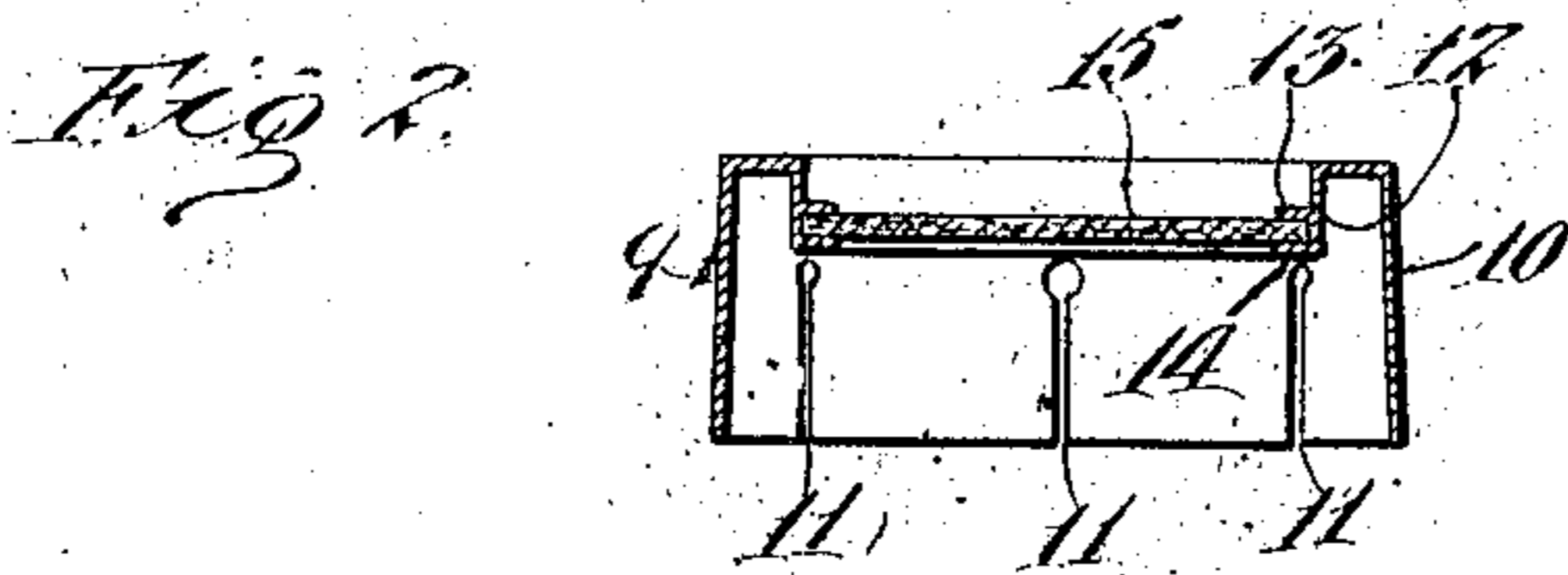
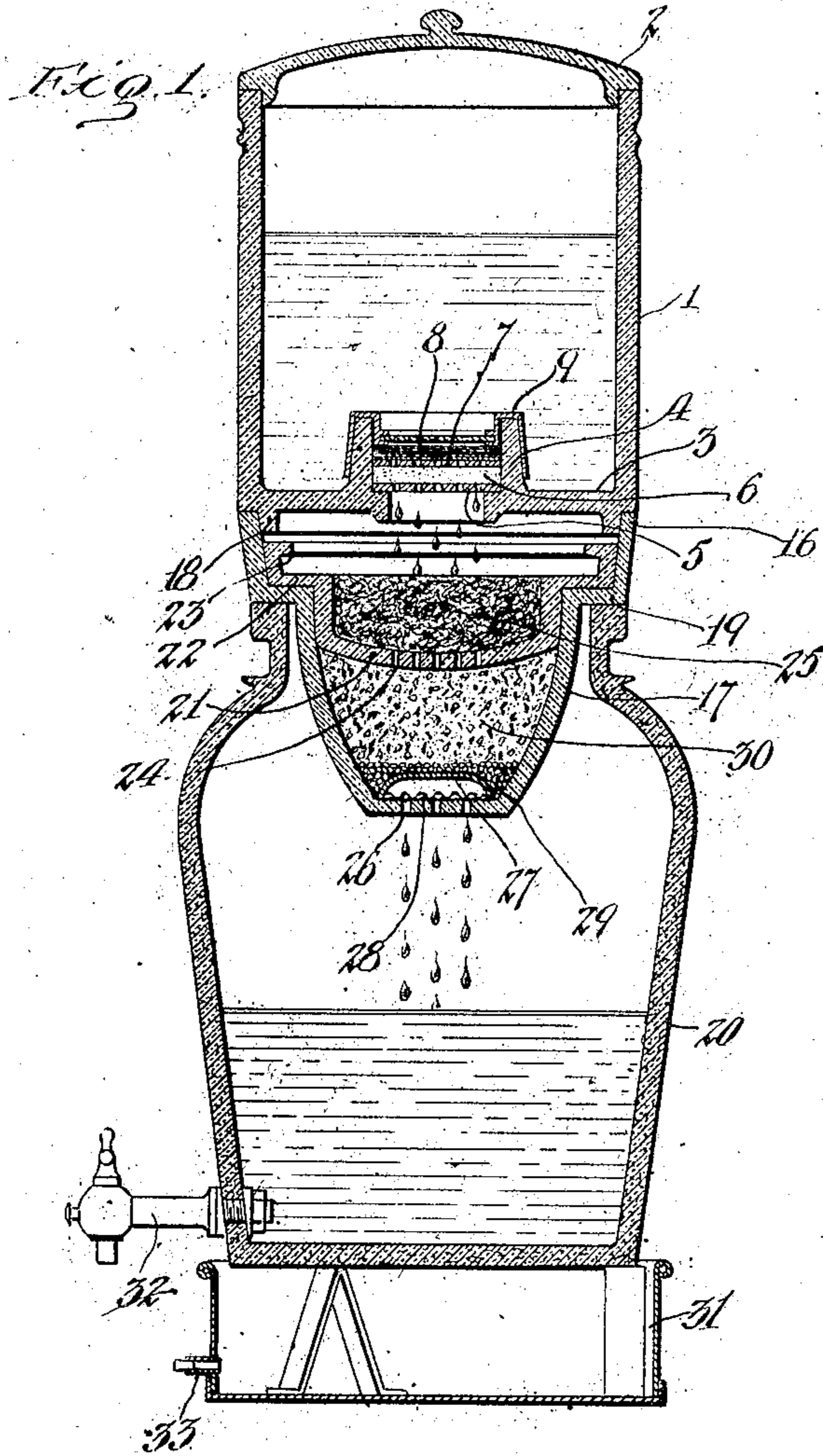


G. J. WIGGENHORN.
WATER PERCOLATOR.
APPLICATION FILED MAY 8, 1909.

944,395

Patented Dec. 28, 1909



Witnesses:
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UNITED STATES PATENT OFFICE.

GUIDO J. WIGGENHORN, OF LOS ANGELES, CALIFORNIA.

WATER-PERCOLATOR.

944,395.

Specification of Letters Patent.

Patented Dec. 28, 1909.

Application filed May 8, 1909. Serial No. 494,930.

To all whom it may concern:

Be it known that I, GUIDO J. WIGGENHORN, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented a new and useful Water-Percolator, of which the following is a specification.

This invention relates to a water percolator, and has for its object to provide a simple construction which is durable in use, efficient in operation, which may be easily cleaned, and which will keep the filtered water in a cool condition.

Referring to the drawings:—Figure 1 is a vertical longitudinal section through the complete device. Fig. 2 is a vertical cross section taken diametrically through the removable cap. Fig. 3 is a vertical cross section taken diametrically through the inverted shield.

1 designates the reception reservoir which is preferably of china, or like material, with a removable cover 2. The bottom 3 of the reception reservoir has an annular flange 4 directed upwardly, and within the flange 4 and resting on the bottom 3 is a perforated disk or screen 5. Above the disk 5 is a thick asbestos disk 6. Above the asbestos disk 6 is a perforated disk or screen 7. Above the screen 7 is a series of asbestos sheets 8. The foregoing elements which are contained within the flange 4 are secured therein and held under some compression by means of a removable cap 9.

As clearly shown in Fig. 2, the cap 9 comprises a ring 10 having slits 11. The ring 10 is formed preferably of metal and the slits 11 permit the ring to spring and flare at the bottom so as to fit and closely hug the beveled walls of the flange 4. The ring 10 has a downturned flange 12, the latter having two inwardly directed flanges 13 and 14, and secured between the flanges 13 and 14 is a disk 15 preferably of porous-stone. The cap 9 is forced down on the flange 4 so as to tightly grip the same, and the porous-stone disk 15 confines the elements within the flange 4 under pressure so that the disks 8 are prevented from curling or warping and are held perfectly flat. The cap 9 is readily removable from the flange 4 to give access to the interior thereof, it having frictional engagement with the flange 4. The cap 9 confines the elements within the flange 4 so that when the reception reservoir 1 is removed from the filter it may be tipped up-

side down, if desired, to empty out the water therein without displacing the elements within the flange 4. The object of this is to initially prepare the water for the subsequent purification by removing the coarsest elements in suspension.

The reception reservoir 1 rests upon a flange 16 formed at the upper end of a filtering bowl 17, and the reception reservoir 1 has a flange 18 which holds it in position on the flange 16. The filtering bowl 17 is formed with a shoulder 19 which rests upon the upper rim of a cooler 20. Within the filtering bowl 17 is an intermediate receptacle 21 which has a shoulder 22 resting upon the shoulder 19 of the filtering bowl 17, while the upper rim of the receptacle 21 has an inwardly directed flange 23 which forms a grip whereby the receptacle may be grasped to lift the same out of its seat in the filtering bowl 17. The bottom of the receptacle 21 is concave, as shown, and provided with perforations 24. Within the receptacle 21 is mineral fiber wool 25. The bottom of the filtering bowl 17 is provided with orifices 26 and above the orifices 26 is an inverted disk shield 27, the lower edge of which is corrugated as at 28. Above the shield 27 is coarse gravel 29, and above the gravel 29 is a filtering material 30 which may preferably consist of charcoal, bone carbon and granite. The inverted shield 27 prevents the gravel and filtering material within the bowl 17 from clogging the orifices 26, and the corrugated edge of the shield 27 permits the water which has seeped through the gravel to pass through the bottom of the bowl 17 into the cooler 20. The orifices 26 are respectively few in number and together with the shield 27 restrict the flow of water in such a way that the water necessarily passes very slowly through the filtering material within the bowl 17, as it has been found in practice that the beneficial effects of the material on the water are not as great when the water passes quickly through it as when the water is kept in contact with the mixture for some time. The cooler 20 rests upon a drip pan 31 and the lower part of the cooler is provided with a faucet 32.

Water within the cooler is cooled by evaporation of water which has percolated through the porous walls of the cooler, and the seepage from the cooler flows down the sides thereof and is caught within the drip

pan 31, the latter being furnished with an outlet 33 for drawing off the water which accumulates therein.

What I claim is:—

5 1. A filter comprising a cooler, a bowl resting on the cooler, filtering material in said bowl, an intermediate receptacle within said bowl, a reception reservoir resting on the upper rim of said bowl, filtering ma-
10 terial within the intermediate receptacle, filtering material in the bottom of the reception reservoir, the bottom of the reception reservoir having an upwardly directed flange which confines the filtering material
15 in the reception reservoir, a removable cap on said flange comprising a metallic ring, the walls of which are slitted longitudinally and adapted to be wedged onto the flange of the reception reservoir, said ring having two
20 inwardly directed flanges, and a disk of porous material engaged by said flanges and confining the filtering material.

2. In a filter, a reception reservoir, the bottom of which has an opening and is

formed with an upwardly directed flange 25 around said opening, a perforated disk over said opening at the bottom of said flange, a thick asbestos disk above said perforated disk, a screen above said asbestos disk, a series of thin sheets of asbestos above said 30 screen, a removable cap frictionally engaging said flange, and a porous stone disk secured to said cap and confining the foregoing elements within said flange, a filtering bowl supporting said reception reservoir, an 35 intermediate receptacle within the filtering bowl, the upper rim of said intermediate receptacle having an inwardly directed flange, filtering material in the intermediate receptacle, filtering material in the bowl, and a 40 cooler supporting the bowl.

In testimony whereof, I have hereunto set my hand at Los Angeles, California, this 1st day of May 1909.

GUIDO J. WIGGENHORN.

Witnesses:

G. T. HACKLEY,

FRANK L. A. GRAHAM.