

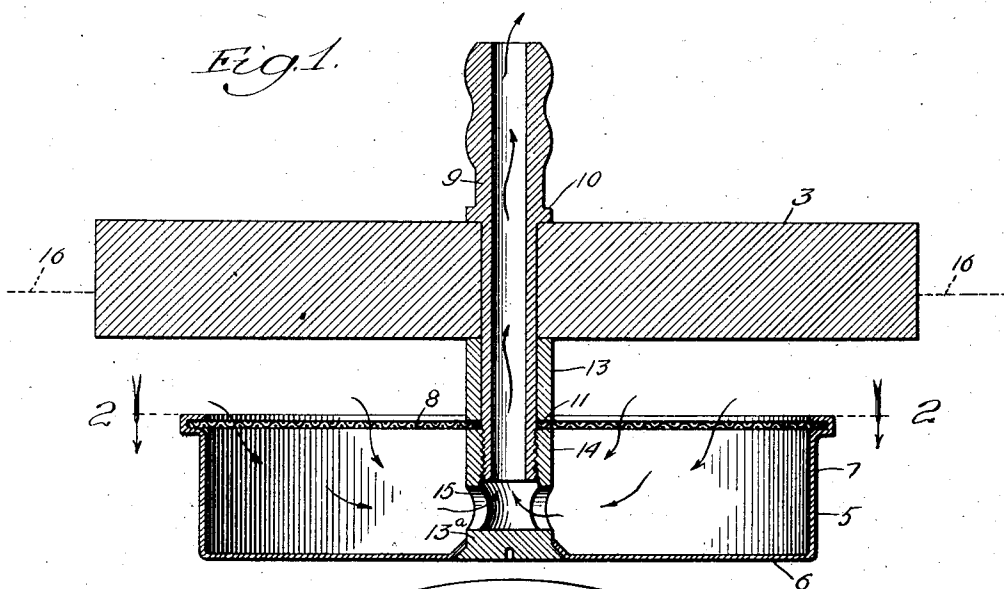
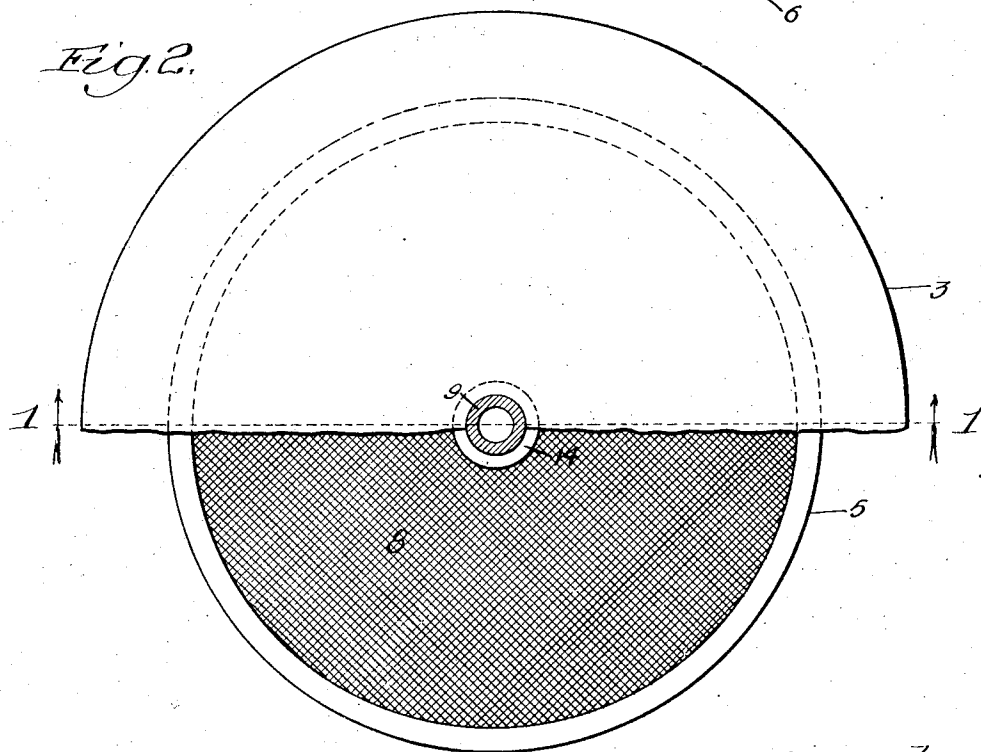
Oct. 4, 1927.

1,644,248

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DECANTING AND FILTERING FLOAT DEVICE

Filed April 16 1926



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DECANTING AND FILTERING FLOAT DEVICE.

Application filed April 16, 1926. Serial No. 102,553.

My primary objects are to provide a novel, simple, and economical construction of decanting and filtering float-device which may be readily cleansed to render it sanitary and which shall be so constructed that the tendency of the device to tilt when positioned in a receptacle and subjected to forces tending to tilt it, resulting as, for example from lateral pull exerted against it by its siphon, or suction, tube, shall be reduced to the minimum.

Referring to the accompanying drawing:—

Figure 1 is a view in vertical sectional elevation of a combined decanting and filtering float-device constructed in accordance with my invention, the dotted line therein shown representing the level of the liquid when the device is partly submerged therein, the section at which this view is taken corresponding with the line 1—1 on Fig. 2 and viewed in the direction of the arrow; and Figure 2 a plan view of the structure shown in Fig. 1 with a portion of the float broken away.

The device, according to the preferred illustrated embodiment of my invention, comprises a float represented at 3 and which may, by way of example, be a disk of wood, or other suitable material centrally apertured at 4. The device also comprises a receptacle 5 shown as of circular shape in cross section with its bottom and side walls 6 and 7, respectively, imperforate, the receptacle being provided with a top-forming portion 8 of interstitial form which serves as the means for filtering the liquid decanted through the device, this filtering portion being shown as formed of relatively fine wire mesh. The top portion 8 is represented as held in place on the body portion of the receptacle 5, by flanging the upper edge portion of the side wall 7 and spinning it over the member 8, to securely fasten the latter to the body portion of the receptacle.

The float 3 and receptacle 5 are connected together in vertically spaced relation, as shown, by means comprising a tubular member 9 which extends downwardly through the opening 4 in the float 3 and overlaps, at a shoulder 10 thereon, the upper side of the float, the upper end of the member 9 being adapted for connection with a hose through which the liquid, in being decanted, is drawn, as for example by a siphon, or other suction action. The top portion 8 of the

receptacle 5 is centrally apertured, as represented at 11, and through which the lower threaded end 12 of the tubular member 9 extends downward, the member 9 preferably reaching short of the bottom of the receptacle 5. A sleeve 13 surrounds the member 9 between the float 3 and the receptacle 5 and forms a means for vertically spacing these members apart the desired distance. The various parts described are held together by a clamping screw 13^a the shank portion 14 of which is in the form of a tube which screws upon the lower threaded end 12 of the member 9 and against the underside of the top portion 8, it being understood that when this screw is tightened the parts of the structure will be rigidly secured together to hold them in the desired relative position.

The side wall of the shank portion 14 of the screw 13 is apertured, as indicated at 15, to afford communication between the interior of the receptacle 5 and the tube member 9, these two parts forming a passage through the device through which the decanted liquid entering the receptacle 5 is drawn into and through the tube which in practice would be connected with the upper end of the member 9.

In the use of the device it is applied to the top of the body of liquid to be decanted and forced down into the liquid to cause the latter to flow into, and fill, the receptacle 5, whereupon the device floats, in partially submerged condition, as for example that illustrated in Fig. 1, relative to the level of the liquid represented at 16. Suction applied to the member 9, as above stated, causes the liquid to flow downwardly through the filter member 8 into the receptacle 5, thence through the openings 15 and outwardly and upwardly through the member 9, the member 8 serving to intercept solid particles in the liquid in the flow thereof into the receptacle 5.

The provision of the receptacle 5 of the construction shown and described operates to cause it to serve as a stabilizer to prevent the canting or tilting of the device when the positioning of the hose referred to tends to tip the device in the liquid, and thus the device is maintained at all times in the desired horizontal position, it being understood that the decanting action ceases upon the seating of the receptacle 5 upon the bot-

tom of the container for the liquid, so that danger of sediment from the layer thereof which commonly forms in the bottom of the container, is avoided.

By constructing the several parts of the device as shown and described, the device may be manufactured very economically and the parts thereof readily assembled and disassembled for cleaning which may be easily and sanitarily effected, my improved construction rendering the parts readily sterilizable without danger of impairing them.

While I have illustrated and described a particular construction embodying my invention, I do not wish to be understood as intending to limit it thereto, as the same may be variously modified and altered without departing from the spirit of my invention.

What I claim as new, and desire to secure by Letters Patent, is:

1. A combined decanting and filtering float device comprising a float, a filter-receptacle having an imperforate side wall and an interstitial top portion, said receptacle being located below said float and adapted to receive liquid from the body thereof in which it is submerged, and means securing together said float and receptacle, the device containing a passage opening into said receptacle and through which the filtered liquid is conducted away from the device.

2. A combined decanting and filtering float-device comprising a float, a filter-element located below said float and having a top portion, a tubular member extending through said float, a sleeve surrounding said member and interposed between said float and the top of said filter-element, and means engaging said float, filter-element and tubular member for clamping said float and filter-element against opposite ends of said sleeve.

3. A combined decanting and filtering float-device comprising a float, a filter-ele-

ment located below said float and having a top portion, a tubular member extending through said float and provided with a flange above said float, a sleeve surrounding said member and interposed between said float and the top of said filter-element, and means engaging said filter-element and tubular member and cooperating with said shoulder for clamping said float and filter-element against opposite ends of said sleeve.

4. A combined decanting and filtering float-device comprising a float, a filter-receptacle having an imperforate side wall and an interstitial top portion, said receptacle being located below said float, a tubular member extending through said float, a sleeve surrounding said member and interposed between said float and the top of said filter-receptacle, and means engaging said float, filter-receptacle and tubular member for clamping said float and filter-receptacle against opposite ends of said sleeve.

5. A combined decanting and filtering float-device, a filter-receptacle having an imperforate side wall and an interstitial top portion, said receptacle being located below said float and in vertical spaced relation thereto, a tubular member extending through said float and having a shoulder located above said float, a sleeve surrounding said member and interposed between said float and the top of said filter-receptacle, said receptacle containing an opening in its bottom, a hollow threaded member screwed upon the lower end of said tubular member and lapping the wall of the opening in said receptacle and operating, in connection with said shoulder, to clamp said float and filter-receptacle against the opposite ends of said sleeve, said hollow threaded member apertured to provide communication between said filter-receptacle and said tubular member.

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