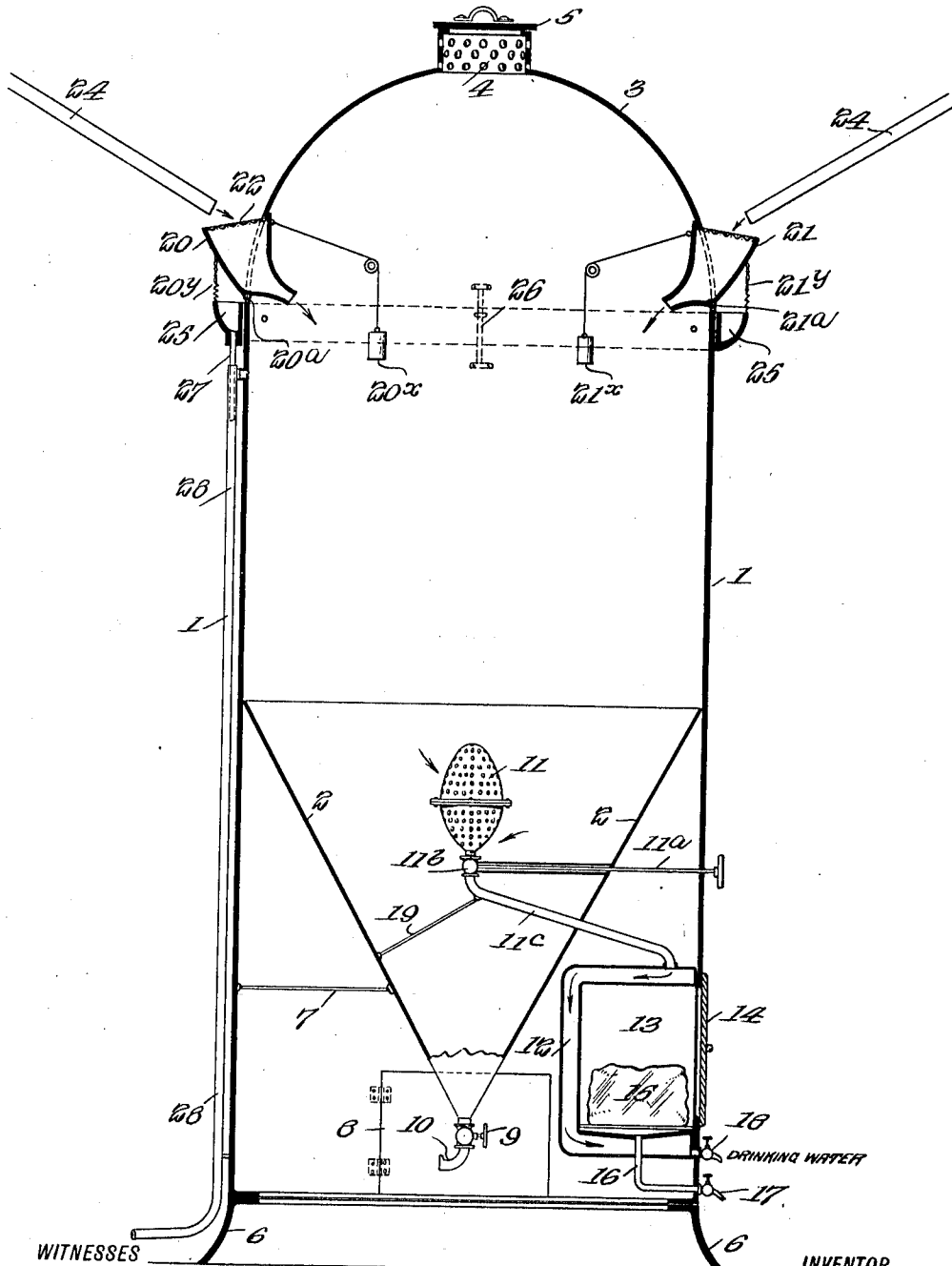


J. A. LEIGHTON.
 SANITARY CISTERN.
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SANITARY CISTERN.

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To all whom it may concern:

Be it known that I, JAMES A. LEIGHTON, a citizen of the United States, and a resident of Estherwood, in the parish of Acadia and State of Louisiana, have made certain new and useful Improvements in Sanitary Cisterns, of which the following is a specification.

My invention relates to improvements in cisterns, and it consists in the combinations, constructions, and arrangements herein described and claimed.

An object of my invention is to provide a cistern which is continually covered when it is not raining, but which may be open to admit water automatically by the rainfall.

A further object of my invention is to provide a covered cistern with means for carrying off any particles of dirt or foreign matter which may have found their way into the cistern with the water and for drawing off from the cistern pure filtered water.

A further object of my invention is to provide novel means for causing the automatic opening and closing of the cistern to receive or to shut off the water.

Other objects and advantages will appear in the following specification, and the novel features of the device will be particularly pointed out in the appended claims.

My invention is illustrated in the accompanying drawing which represents a central vertical section through the device.

In carrying out my invention I provide a receptacle consisting of the side walls 1, the cistern being built preferably in a cylindrical shape, a conical shaped bottom 2, and a hemispherical shaped top 3 provided with a man-hole 4 having a cover 5. The receptacle thus formed is mounted upon a suitable base 6 and the bottom 2 may be braced by means of rods such as that shown at 7. A door 8 is provided in the bottom portion of the structure so as to give access to a cock or valve 9 which controls a drain pipe 10 at the lower end of the conical bottom.

Within the conical shaped bottom is an elliptical shaped filter 11 which communicates by a pipe 11^c with a water space 12 about a cooler 13 which is provided with a door 14 for permitting the insertion of a cake of ice 15. The cooler 13 may be drained of the water from the melting ice by means of the pipe 16 and faucet 17. A faucet 18 controls the outlet of water from the water space 12. As shown in the draw-

ing, the pipe 11^c passes through one side of the bottom and communicates with the water space 12. The pipe is braced by means of the rod 19. A hand rod 11^a is provided for operating the valve 11^b which controls the pipe 11^c.

At the upper part of the cistern on opposite sides thereof are disposed the receptacles 20 and 21. These receptacles are pivoted at 20^a and 21^a respectively in the side walls of the cistern, each receptacle is covered by a screen or sieve 22 and has an outlet which discharges into the cistern. The outer wall of each receptacle forms a continuation of the wall of the cistern when the receptacles are in the positions shown in dotted lines, but when swung outwardly into their full line position each receptacle is in a position to receive the water from the spouts 24. The receptacle 20 is provided with a weight 20^x tending to keep the receptacle in its closed position, *i. e.*; with its outer wall in alinement with the wall of the cistern, thereby shutting off the flow of the water from the cistern.

Disposed about the cistern underneath the receptacles 20 and 21 is a trough 25 which is arranged to have a vertical sliding movement being guided in this movement by means of the guides such as that shown at 26. One side of the trough is provided with a small drain pipe 27 which telescopes into a larger pipe 28. A chain 20^y connects the outer edge of the trough 25 on one side to the outer wall of the receptacle 20. A similar chain connects the opposite side of the trough 25 to the outer wall of the receptacle 21.

From the foregoing description of the various parts of the device, the operation thereof may be readily understood.

The weights 20^x and 21^x, as stated above, tend to swing the receptacles 20 and 21 about their pivots so that their outer walls form closures to prevent the entrance of dust, dirt or water into the cistern. Now during a rain the water from the spouts 24 pours directly into the trough 25. The latter is held normally in an upper position when the receptacles are pulled inwardly by the weights. The drain pipe 27 is a very small one and the trough soon fills with water, thereby overbalancing the weights and causing an outward movement of the receptacles so as to receive the discharge from the spouts 24 and thereby filling the cistern. As soon

as the water runs out of the trough 25 the weights will again close the cistern thus rendering the opening and closing of the cistern automatic. An important advantage is secured by this arrangement. When it first begins to rain the roof has generally upon it an accumulation of dust, dirt, leaves, etc., which it is not desirable to have washed into the cistern. This first water is collected by the trough and the later, purer water is passed into the receptacles, the water in the trough draining slowly out as described. The filter 11, it will be noticed, is considerably above the lower end of the cistern. The sediment collects in the lower end and may be drained out through the drain pipe 10. The purer water passes through the filter into the water space 12 where it is cooled without coming into contact with the ice itself, and may be drawn off when wanted at the faucet 18.

I claim:—

1. The combination with a water spout, of a sanitary cistern for receiving the water from said spout, comprising a receptacle pivoted in the wall of the cistern, and adapted to receive water from the spout when in one position, and to close the cistern when in another position, and automatic means for shifting the position of the receptacle.

2. The combination with a water spout, of

a sanitary cistern for receiving the water from said spout, comprising a receptacle pivoted in the wall of the cistern, and adapted to receive water from the spout when in one position, and to close the cistern when in another position, automatic means for shifting the position of the receptacle, said automatic means comprising a trough disposed below the receptacle and connected therewith, and a counterbalancing weight disposed within the cistern and connected with the receptacle.

3. The combination with a water spout, of a sanitary cistern for receiving the water from said spout, comprising a receptacle pivoted in the wall of the cistern and adapted when in one position to receive water from the spout and when in another position to form a closure for the cistern, a circular trough disposed about said cistern and slidable relative thereto, said trough being adapted to receive water from the spout, a chain connecting said trough with said receptacle for operating the latter through a movement of the former, and a counter weight secured to said receptacle for restoring the latter to its normal position.

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Witnesses:

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