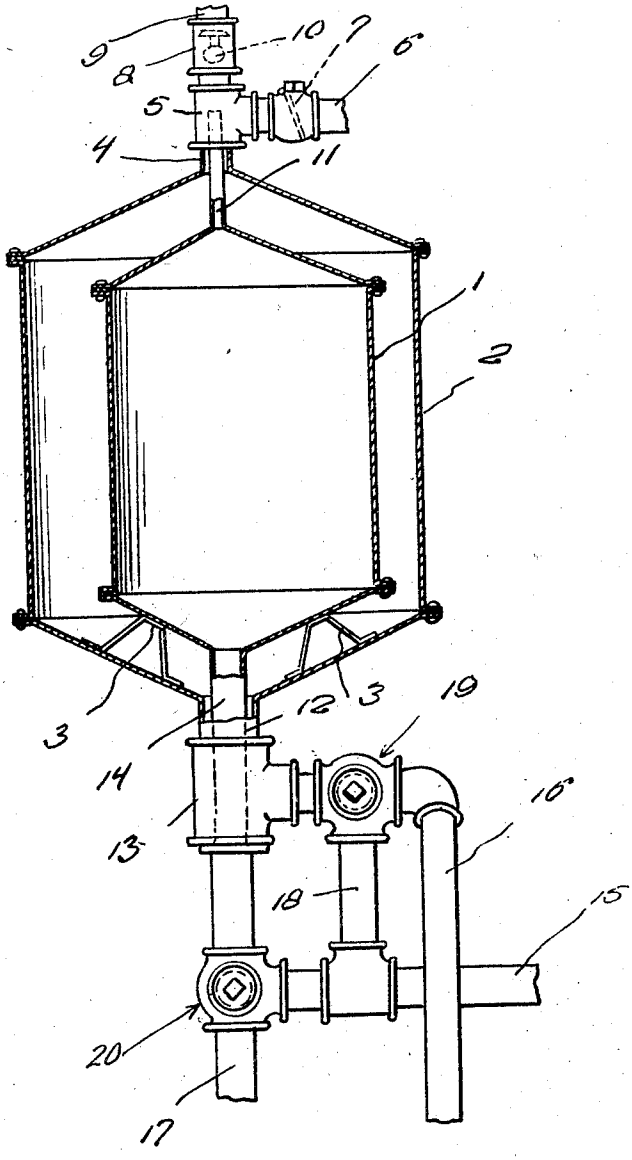
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T. J. BYRNE

MEASURING DEVICE FOR ICE MAKING CANS

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Inventor
T. J. Byrne,

By Clarence A. O'Brien
Attorney

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THOMAS J. BYRNE, OF TULSA, OKLAHOMA.

MEASURING DEVICE FOR ICE-MAKING CANS.

Application filed May 12, 1925. Serial No. 29,804.

This invention relates to a device which is adapted to measure the water which is later conducted to cans in which ice is frozen in the art of ice making machines.

The purpose of the invention is to provide a device in which the exact quantity of water for each can is measured initially and placed in readiness to be conducted into the cans, the quantity of water measured being such as to allow for expansion and contraction, to eliminate wastage of water, and permit the formation of standard ice blocks.

The present device is such as to permit it to be substituted for the open top supply receptacles ordinarily used, whereby to render the device an improvement from the standpoint of sanitation and economy by permitting the formation of standard blocks and cubes of ice, and preventing unnecessary wastage of water which is encountered with the commonly employed structure.

The invention possesses other features and advantages, and these may be more logically brought out after a description of the detailed construction is given.

In the accompanying drawing forming a part of this application, and in which like numerals are employed to designate like parts throughout the same:

The single figure represents a sectional and elevational view of a water measuring device constructed in accordance with the present invention.

Referring to the drawing in detail, the reference characer 1 designates an inner receptacle surrounded by a spaced outer receptacle 2. Both receptacles are somewhat the same in general configuration. In fact both receptacles are of a size to permit each to contain exactly the same amount of water. Spacing brackets 3 are interposed between the bottoms of the receptacles to secure rigidity of structure, and to aid in centering the inner receptacle. It will be noted that a neck 4 extends upwardly from the center of the top of the outer receptacle 2, this being connected with an appropriate coupling 5 with which an overflow pipe 6 is in turn connected. A suitable check valve 7 is disposed in the overflow pipe. Above the coupling 5 is another coupling 8 connected with an air vent pipe 9. Located in the coupling 8 is a check valve 10 to prevent passage of water into the vent. Connected to the top of the inner receptacle 1 is a relatively small pipe 11 extending up and into the coupling 5 for cooperation with the overflow pipe 6. The bottom of the outer receptacle 2 is provided with a nipple or its equivalent 12 connected to a coupling cup 13. A pipe 14 is connected with the bottom of the inner receptacle and extends downwardly through the nipple and cup.

The reference character 15 designates a water supply pipe leading from any appropriate source of supply. The reference character 16 designates a drain pipe for the outer receptacle 2, while the reference character 17 designates the drain pipe for the inner receptacle 1. A by-pass pipe 18 affords connection between the supply pipe 15 and the cup 13. Interposed in this passage however is a suitable two-way valve 19. Another two-way valve 20 is disposed in the passage made up of the pipes 14 and 17.

The operation of the device is as follows: The water is turned on, and passes through the pipe 15. At this time the valve 19 and 20 are open in a manner to permit the passage of the water therethrough, and through the parts 12 and 14 into the receptacles 1 and 2, thus substantially simultaneously filling both of these receptacles with water. They contain the same amount of water as before described. As the receptacles are filled, the water rises in the pipes 4 and 11, and overflows through the overflow pipe 6. The rising water also closes the check valve 10 to prevent entrance of the water into the vent pipe 9. Water passing through the overflow pipe gives a signal that both receptacles are filled. Now, the valves 19 and 20 are reversed, allowing the receptacles to empty or drain simultaneously through the same passages that were previously utilized for filling. Of course, at this time the water passes through the properly opened valves and into the drain pipes 16 and 17. These drain pipes, will in practice, be connected with their respective cans, so that the cans will be filled with just sufficient water necessary to make an ice block of a predetermined size.

From the foregoing description and drawing, it will be seen that I have evolved and produced a novel means whereby any desired number of cans may be simultaneously filled with the exact or desired amount of water previously measured and maintained in a sanitary dust and dirt proof condition. In the drawing I have simply illustrated a pair of receptacles. It is within the scope of

the invention however to employ a multiplicity of such receptacles. For instance a third receptacle may surround the receptacle 2 and the third receptacle will necessarily be of a size larger in external appearance, but of an area to contain the same amount of water as the enclosed receptacles. The water which is supplied to these receptacles is preferably contained in a large tank where it is brought to just above the freezing point. Hence, the feature just named with respect to maintaining substantially the same temperature will be appreciated.

A careful consideration of the description in connection with the drawings will undoubtedly suffice to enable those skilled in the art to which the invention relates to obtain a clear understanding of the same. Therefore, a more lengthy discription is deemed unnecessary.

While the preferred embodiment of the invention has been shown and described it is to be understood that minor changes may be resorted to without departing from the spirit of the invention and the scope of the appended claim.

Having thus described the invention, what I claim as new and desire to secure by Letters Patent is:—

A fluid measuring device of the class described, comprising inner and outer closed receptacles the interiors of which are isolated from each other and having their sides, tops and bottoms separated by intervening spaces, the inner receptacle having a discharge, a single and common overflow for and above said receptacles, venting means above said overflow, separate and independent conduits connected with the bottoms of the receptacles, and arranged one within the other, a water supply conduit, a valved connection between the water supply conduit and the conduit in connection with the bottom of the inner receptacle, and a valved conduit interposed between the water supply conduit and the conduit in connection with the bottom of the outer receptacle, and a drain for the outer receptacle in communication with said valved conduit.

In testimony whereof I affix my signature.

THOMAS J. BYRNE.