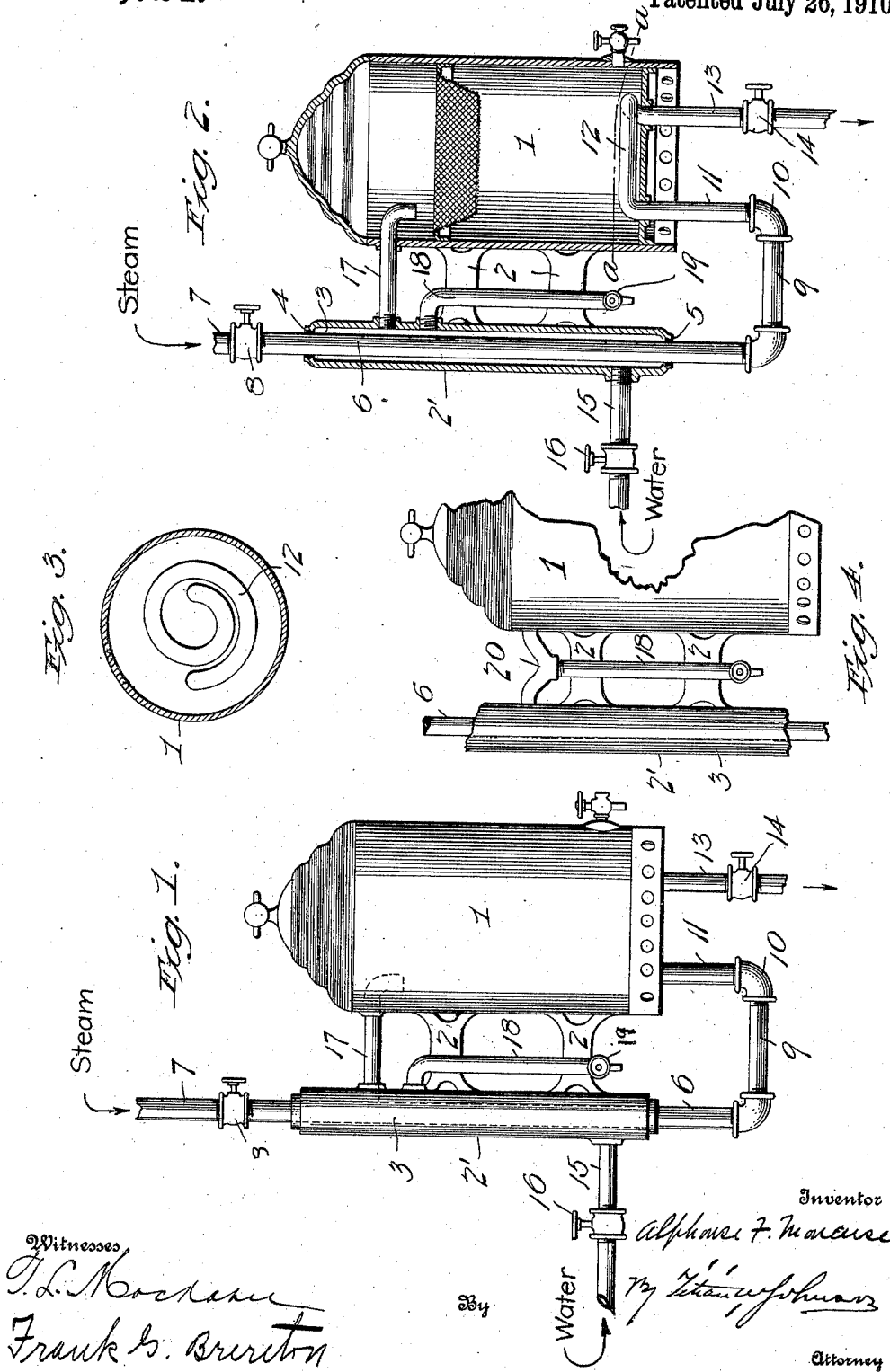


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 WATER HEATING APPARATUS FOR URNS.
 APPLICATION FILED MAR. 12, 1908.

965,724.

Patented July 26, 1910.



Witnesses
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ALPHONSE F. MONEUSE, OF NEW ROCHELLE, NEW YORK.

WATER-HEATING APPARATUS FOR URNS.

965,724.

Specification of Letters Patent. Patented July 26, 1910.

Application filed March 12, 1908. Serial No. 420,666.

To all whom it may concern:

Be it known that I, ALPHONSE F. MONEUSE, a citizen of the United States, residing at New Rochelle, in the county of Westchester and State of New York, have invented certain new and useful Improvements in Water-Heating Apparatus for Urns, of which the following is a specification.

This invention relates to improvements in urns, and more particularly to an apparatus especially adapted for filling coffee urns.

The invention contemplates the provision of an apparatus wherein the water which goes into the urn is given a preliminary heating, so that the coffee or other beverage may be immediately drawn from the urn in condition for use, without the necessity of waiting a considerable time for the contents of the urn to be heated.

The invention also contemplates the provision of a construction whereby should it be desired to draw off hot water before it enters the urn, this can be done at a point below the connection which establishes communication between the heating chamber and the urn.

The invention further contemplates a construction whereby the heat medium which heats the water before it passes into the urn, is also employed to keep the contents of the urn hot, thus dispensing with the usual jets or burners commonly employed for this purpose. However, it will be understood and it will appear from the construction, that additional heating means such as burners may be employed if desirable, the construction being such as to conveniently permit this without interference in any way with the apparatus.

An object of the invention is to provide a simple construction that will be entirely sanitary in use.

In the drawings illustrating the invention: Figure 1 is a side elevation of a coffee urn, showing so much of my invention as will appear in such a view; Fig. 2 is a central section of the urn and apparatus; Fig. 3 is a horizontal section taken about on line *a-a* of Fig. 2, intended to show more clearly a coil in the bottom of the urn which is connected with the steam pipe; and Fig. 4 is a broken elevation of a portion of the urn and connections, showing a modification of the means for drawing off hot water before it passes into the urn and after it has been heated in the heating chamber.

Referring to the drawings, the numeral 1 designates the urn which may be of any suitable construction, and provided with any suitable burner or burners such as are commonly used for heating water in urns of this character. Secured to the side of the urn by strong pieces 2 is an enlarged pipe 2' in which there is a heating chamber 3. This pipe preferably extends from the bottom of the urn to a point near the top, but it will be understood that the length of the pipe and the heating chamber therein and its size generally, is something that may be varied, as the exigencies of the case may require. Passing through packed openings 4 and 5 at the upper and lower ends respectively of the pipe, within the compartment or chamber is a steam pipe 6 whose upper end leads through a valve controlled connection 7 to any source of steam supply. The inlet of the steam is governed by the valve 8. The lower end of the steam pipe is connected with a branch 9 which, by a suitable union 10 is connected with the lower end of the pipe 11, which in turn is connected with a coil 12 positioned in the bottom of the urn. The opposite end of this coil connects with an exhaust pipe 13 which is controlled by a valve 14.

The numeral 15 designates a supply pipe controlled by a valve 16. This pipe is let into the lower portion of the pipe 3 and may lead to any suitable source of cold water supply. Communication between the upper part of the heating chamber or compartment within the pipe 3 and the urn is established by a horizontal pipe 17.

The numeral 18 designates a pipe for drawing off hot water should this be desired, from the heating compartment or chamber within the pipe 3. This pipe is provided at its lower end with a faucet 19 of ordinary construction. In the modification shown in Fig. 4, the pipe 18 is let directly into the pipe which establishes communication between the heating chamber and the urn and in this instance, this pipe is provided with a dip or central depression 20 as shown, so that the hot water will, when the faucet at the end of the pipe is open, pass out of the faucet instead of to the urn, or at any rate, such portion as may be desired will pass out of the pipe before reaching the urn.

In operation, the valve 16 is manipulated to permit cold water to run slowly or rapidly into the heating chamber 3, depend-

ing upon the degree of heat of the steam pipe and is quickly heated by contact with the surface of the steam pipe, so that when the water has reached the short horizontal pipe 17 by which communication between the urn and the heating chamber is established, the hot water which, by this time has reached boiling point, or such temperature as is desired, will pass into the urn where it passes over the coffee or other article from which the beverage is made. The steam which has served the purpose of heating the water preparatory to its introduction to the urn or tank, passes from the branch 9 and pipe 11 and thence through the coil 12 in the bottom of the urn and the contents of the urn being in contact with the coil, is kept heated.

The urn is provided with the usual faucet for drawing off its contents.

In the event it is desired to draw off hot water, the faucet at the end of pipe 18 may be manipulated for this purpose and in the form shown in Fig. 1, this pipe is let into the heating chamber below the pipe 17 and consequently the water is drawn off before it reaches the upper pipe, but in the modification shown in Fig. 4, a portion of the water passing through the pipe 20 will, when the faucet on the pipe 18 is opened, pass out at the lower end of the said pipe.

Claims.

1. In an apparatus of the character described, the combination with a receiving-vessel, of a water-chamber supported from

the receiving-vessel and in communication with the upper part thereof, means for supplying water to said chamber, a heater passing through the water-chamber, whereby the water in said chamber is heated, a heating-coil in the lower part of the receiving vessel and communicating with the lower end of the heater, whereby the water in said vessel is maintained in a heated condition, and means situated below the point of communication of the water-chamber with the receiving-vessel, for drawing off hot water.

2. In an apparatus of the character described, the combination with an urn, of a water-chamber supported by brackets secured to said urn, a valve-controlled inlet for supplying water to said chamber, a pipe connection between the upper parts of the water-chamber and the urn, a steam-pipe passing through the water-chamber and connected with a steam-coil at the bottom of the urn, whereby the water is heated before passing into the urn and maintained in a heated condition in said urn, a valve-controlled exhaust connected to said steam-coil, and a hot-water draw-off situated at a point below the point of communication between the water-chamber and the urn.

In testimony whereof I affix my signature in presence of two witnesses.

ALPHONSE F. MONEUSE.

Witnesses:

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