No. 893,209. PATENTED JULY 14, 1908

A. A. WARNER.

ELECTRICAL HEATING VESSEL.

APPLICATION FILED DEC. 2, 1907.

2 SHEETS—SHEET 1.

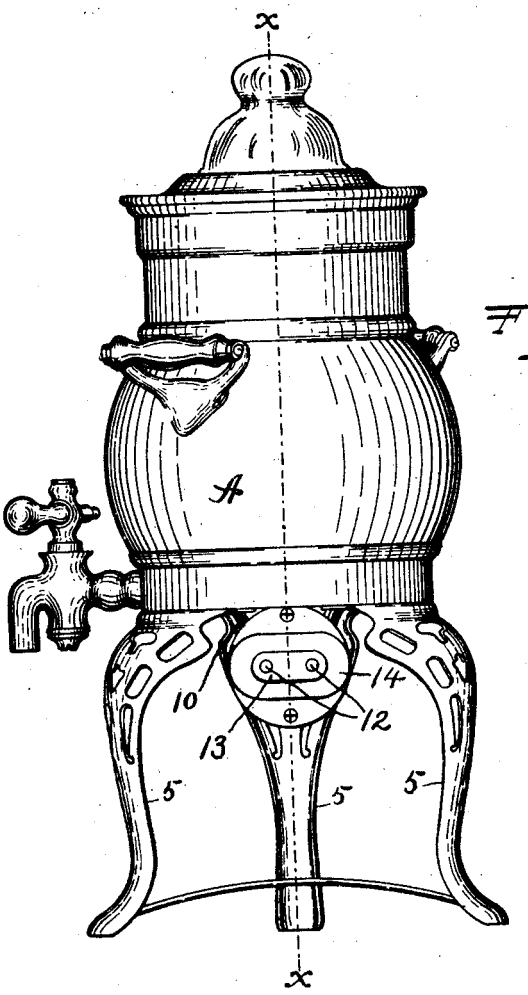


Fig. 1.

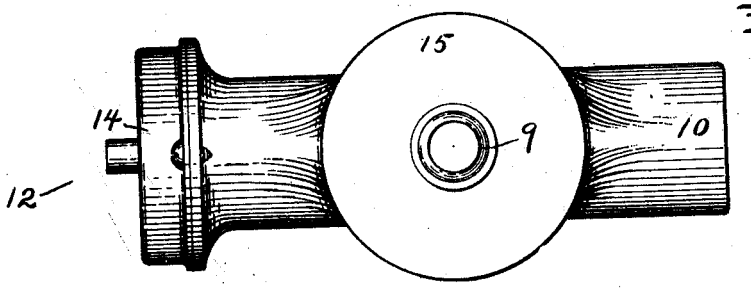


Fig. 2.

Witnesses.
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Fig. 3.

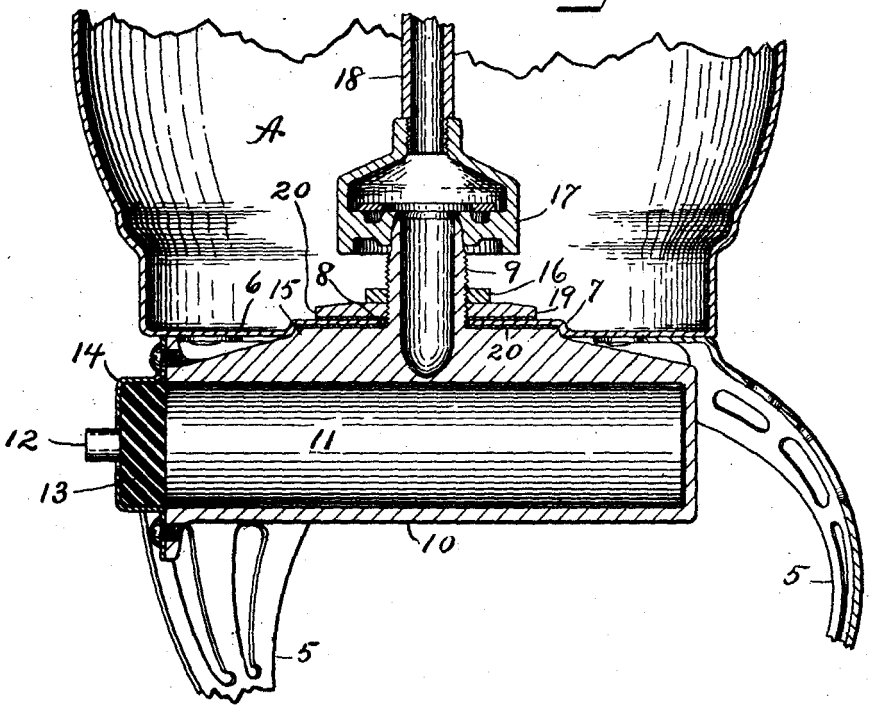
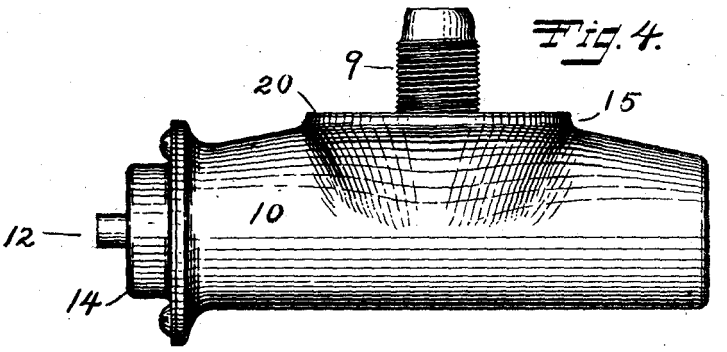



Fig. 4.




Witnesses

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# UNITED STATES PATENT OFFICE.

ALONZO A. WARNER, OF NEW BRITAIN, CONNECTICUT, ASSIGNOR TO LANDERS, FRARY AND CLARK, OF NEW BRITAIN, CONNECTICUT, A CORPORATION.

## ELECTRICAL HEATING VESSEL.

No. 893,209. Specification of Letters Patent. Patented July 14, 1908.

Application filed December 2, 1907. Serial No. 404,810.

*To all whom it may concern:*

Be it known that I, ALONZO A. WARNER, a citizen of the United States, residing at New Britain, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Electrical Heating Vessels, of which the following is a specification.

My invention relates to improvements in electrical heating vessels, and the objects of my improvement are simplicity and economy in construction with convenience and efficiency in use. In this simple construction, the socket for the electrical heater is suspended directly from the bottom of the vessel.

In the accompanying drawing: Figure 1 is a side elevation of my electrical heating vessel. Fig. 2 is a detached plan view, on a larger scale, of the socket for receiving the electrical heater. Fig. 3 is a sectional view on the line $x\,x$ of Fig. 1 of the main portions of my heating vessel, together with a side elevation of a cylindrical electrical heater and two screws. Fig. 4 is a detached side elevation of the socket shown in plan view in Fig. 2.

The vessel A, in which to heat any liquid, may be of any ordinary construction and provided with legs 5 for it to stand upon so as to leave a free space underneath the vessel within which space to suspend a socket for an electrical heater. As shown the said vessel A is an ordinary form of a percolator vessel.

The bottom 6 of the vessel A has its central portion 7 slightly elevated, in order to form a central circular recess in its under surface. In the center of this central portion, there is an opening or hole 8, to receive the stem 9 of the socket 10, which socket is provided with a chamber that is designed to receive and hold a cylindrical form of electrical heaters 11. This heater is provided at its outer end with two posts 12, by which to electrically connect it with a suitable electric current. These posts are guarded by a porcelain or other insulator 13, which insulator and end of the cylindrical heater are preferably covered with a cap 14 to give a neat finish. The cylindrical heater of itself is not of my invention, as it is of an ordinary form now on the market and any other known heater may be substituted therefor.

The socket 10 is provided with an upper flange or shoulder 15, that sets into the recess in the under side of the central portion 7 of the bottom 6 of the vessel A, and the stem 9 of the socket projects upwardly from the center of this flange 15, through the hole 8 in the bottom of the vessel. This stem 9 is made hollow but does not open into the chamber of the socket into which the cylindrical heater is placed. The said stem is also exteriorly threaded to receive a nut 16, and its upper end is shaped to receive and hold thereon an ordinary percolator pump or fountain base 17, from which base the fountain tube 18 projects upwardly after the ordinary manner of coffee percolators. A metal washer 19 is placed on the stem 9 above the bottom 6, and the nut 16 is screwed down thereon to firmly hold the stem in place with the socket 10 suspended from the bottom of the vessel as shown in Figs. 1 and 3. Suitable gaskets 20 of asbestos or other suitable material, may be placed around the stem above and below the bottom 6 of the vessel, as shown in Fig. 3.

With the socket and its electrical heater inclosed therein, thus in place and connected with an electrical circuit, the said socket will be heated and the heat conducted mainly through the hollow stem and the liquid therein to the liquid in the vessel for heating the same. The construction is very simple and is believed to be efficient in operation. The socket for the heater is suspended directly from the bottom of the vessel, whereby there are only few parts and these are permanently and rigidly connected with the vessel so as to require no further attention.

I claim as my invention:

A vessel for heating liquids, comprising a socket having a chamber for an electrical heater and a central hollow stem extending from said socket through the bottom of the vessel and secured thereto with the chamber of the socket underneath the bottom of the vessel.

ALONZO A. WARNER.

Witnesses:
H. A. TRAVER,
LEROY H. PAGE.