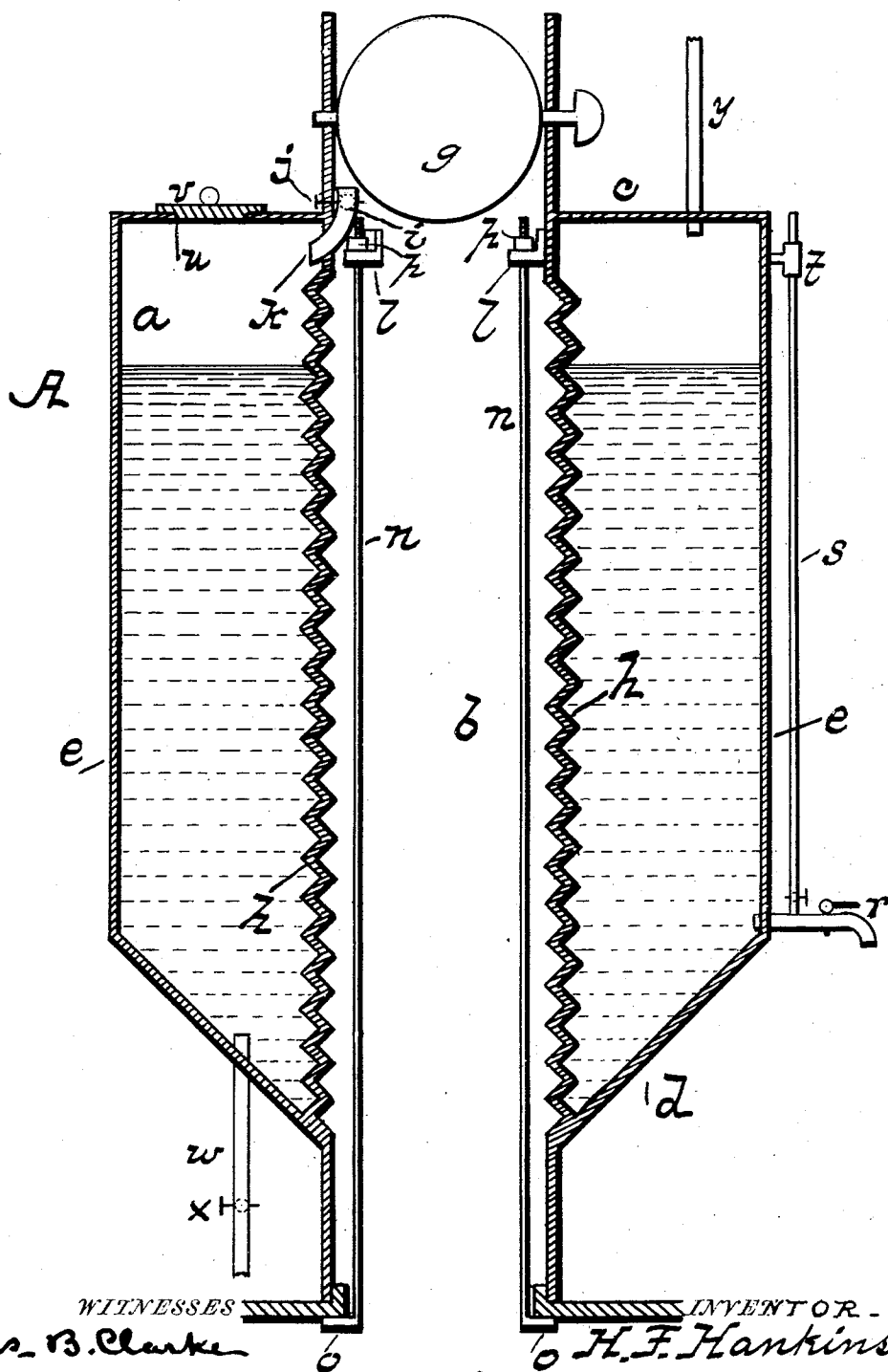


No. 738,187.

PATENTED SEPT. 8, 1903.

H. F. HANKINS.
WATER HEATER AND COFFEE URN.
APPLICATION FILED MAY 7, 1903.

NO MODEL.



WITNESSES

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UNITED STATES PATENT OFFICE.

HOWARD F. HANKINS, OF PINE, COLORADO.

WATER-HEATER OR COFFEE-URN.

SPECIFICATION forming part of Letters Patent No. 738,187, dated September 8, 1903.

Application filed May 7, 1903. Serial No. 155,982. (No model.)

To all whom it may concern:

Be it known that I, HOWARD F. HANKINS, a citizen of the United States, residing at Pine, in the county of Jefferson and State of Colorado, have invented certain new and useful Improvements in Water-Heaters or Coffee-Urns; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention has relation to improvements in that class of devices known as "water-heaters and coffee-urns;" and it consists in the novel construction, combination, and arrangement of parts of which it is composed, all as will be hereinafter fully explained, and particularly pointed out in the appended claim.

The annexed drawing, to which reference is made, fully illustrates my invention, in which the figure represents a central vertical sectional view of my invention.

Referring by letter to the accompanying drawing, A designates the water-heater or coffee-urn, which consists of a vessel *a* of cylindrical form and an inner central vertical pipe *b*, which is formed integral with said vessel. This vessel is closed at the top *c* and at its inverted frusto-conical bottom *d*, and in connection with the cylindrical wall *e* a closed interior is provided. Through the central portion of this vessel is arranged a vertical pipe *b*, that projects above the top of the vessel and is provided with a valve or damper *g*, and said pipe also projects downward, forming an extension to the inverted frusto-conical bottom, the lower end of which is fitted to the pipe-collar of the stove. This central vertical pipe is formed with transverse corrugations *h*, which extend its entire length of that portion within the vessel, and the same is provided with a short pipe *i*, having a shut-off cock *j*, which short pipe communicates at its lower end *k* with the interior of the vessel, near the top thereof, while the opposite end has its outlet in the central pipe. Said pipe is further provided with L-shaped lugs *l*, which have an eye through which passes a long rod *n*, having an L-shaped end *o* at its lower end and screw-threaded at its upper end to receive a nut *p*, whereby the vessel is

secured firmly in position upon an ordinary cooking stove or range, which will be further hereinafter explained.

Attached to the outside of the vessel is a faucet *r*, which communicates with the interior of the vessel at a point where the vertical wall thereof joins the inverted frusto-conical bottom aforesaid, and a water-gage *s* communicates at lower end with said faucet and held in place by a bracket *t*.

The top of the vessel is provided with a small opening *u*, having a cover *v*, and at the bottom of the vessel a water-pipe *w* is connected, having a shut-off cock *x*, and at the top an outlet or distributing pipe is arranged, as shown at *y*.

It will be readily observed from the above description, when taken in connection with the accompanying drawing, that my device is designed to be used in dwellings having a forced water-supply and also those not provided with such a service—for instance, in country districts. When forced water is used, the same enters the vessel through the pipe *w* and is heated and is distributed to the various rooms from the outlet-pipe at the top of the vessel. Otherwise the water is poured by hand into the vessel through the opening in the top, the valve *x* being closed, and of course there is no distribution, and in using the vessel for a forced supply of water the opening in the top would have to be closed tight. The vessel when attached to a stove is held firmly in position by means of the long rods, the lower end engaging the under side of the top of the stove and held firmly by the nut at the opposite end thereof.

The short pipe *i* provides an exhaust for the steam which enters the central or smoke pipe carrying out the soot, keeping the central vertical pipe clean and at the same time furnishing a better draft for the fire.

The corrugated central pipe provides not only a smoke-flue, but an excellent heating-surface when the heat is passing up through it, thus heating the water or coffee in the vessel, and the bottom of said tank or vessel being tapering or inverted frusto-conical bottom serves a twofold purpose—*i. e.*, that when the tank or vessel is low with water there will always remain in this portion of the vessel sufficient water, as the water-line of this por-

tion would be below the faucet and could not be drawn off, and by the same or bottom tapering outward and upward more space is given to the top of a stove about the vessel.

5 At the same time the top thereof can be used for keeping dishes warm, thus serving as a shelf.

It will be noticed that my inner central vertical pipe and tank are made in one piece and
10 that the pipe being in the center the heat is nicely radiated and the water becomes hot in a very short time, and where large quantities of coffee are made the same will serve as an excellent urn therefor, and a device as herein
15 described is simple in construction and inexpensive to manufacture.

Having thus described my invention, what

I claim, and desire to secure by Letters Patent, is—

In a water-heater or coffee-urn, the vessel 20 having a flat top and an inverted-frusto-conical bottom, said vessel being formed with a central flue transversely corrugated from top to bottom, and provided with lugs, in combination with rods provided with L-shaped ends 25 adapted to grasp the top plate of a stove, and nuts for securing the upper ends of said rods to said lugs.

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

HOWARD F. HANKINS.

Witnesses:

J. L. SPENCER,

A. H. DAKE.