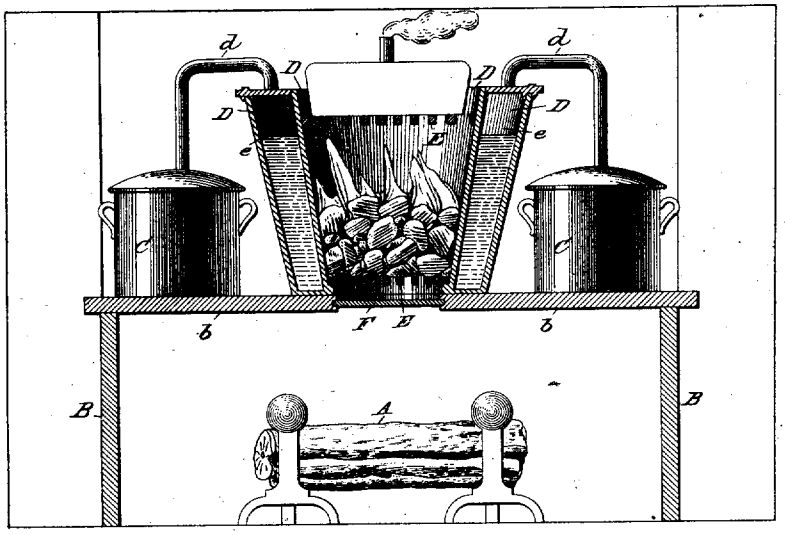
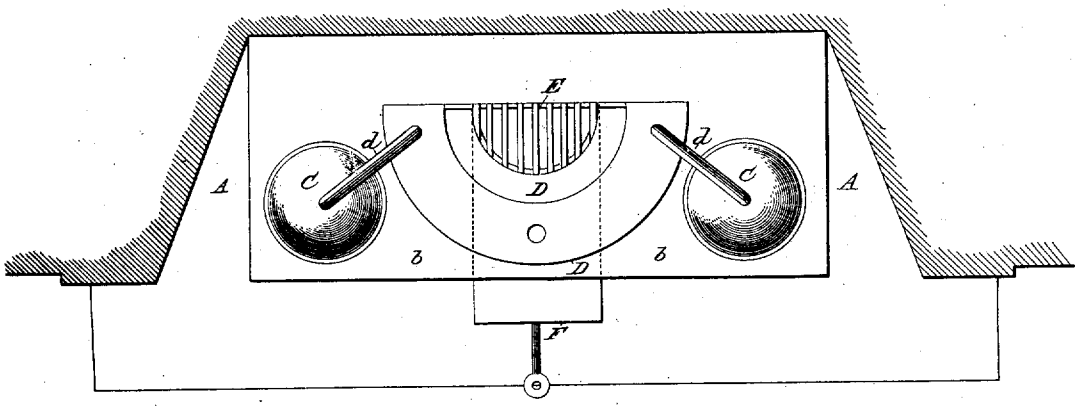
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J. REED.

Generating Steam for Culinary Purposes.

Patented Jan'y 5, 1831.





N. PETERS. Photo-Lithographer. Washington, D. C.

Jan. 5 1831

Vespe Reed
Letters Patent

X 6317
Jan. 5, 1831

The schedule referred to in these Letters Patent and making part of the same containing a description in the words of the said Vespe Reed himself of his improvement in the manner of constructing furnace for generating steam for culinary purposes

To all persons to whom these presents shall come.

Be Vespe Reed of Marshfield in the County of Plymouth and Commonwealth of Massachusetts Machinist sendgreeting. Be it known that I the said Vespe Reed have invented constructed made and applied to use a new and useful improvement in the manner of constructing a furnace for generating steam for culinary purposes and which for distinction sake, I call the Culinary Steamer. The simplest mode of fixing up my said steamer for use is as follows viz. When placed in a common fire place as in most cases it will be, it should stand so high from the hearth as to admit a sufficient current of air for the fire to pass freely up between the grates upon which the fuel lays, and also to afford room below it for a small fire up on the hearth, when wanted. This may be done with bricks or stone though plates of cast iron set into the fire place with the edges up is the mode I have adopted. that is to say: place three plates of cast iron of sufficient thickness in the chimney fire place, with their edges up fastened together at the two back corners, standing upon the hearth, and being ten or fifteen inches high upon these place another plate horizontally, for the steamer to stand upon. having an aperture about midway of it corresponding in size to the bottom of the steamer, which covers it through which the air is admitted to pass. The last mentioned plate may be long enough to furnish a place each side the steamer for cooking, but is a stand to stand upon. or three may stand upon the hearth. The manner of constructing my said steamer, which I propose,

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is by fastening together by means of screws and nuts two cylindrical flanges — cast on handles or jaws of equal height placed one within the other and a little flaring from the bottom upwards.

The diameter across the bottom of the outside kettle is about ten inches. The diameter across the top is about fifteen inches.

The height eleven inches or the dimensions may be varied, as also the form of the perforations. The diameter of the inside kettle is about one third less than the other whereby a circular space between them is afforded for the water. The outer kettle has a rim or flange around the bottom projecting inwardly, nearly at right angles with the sides and broad enough to extend to the inner surface of the inside kettle. with which its edge forms an angle and is made perfectly light and by means of which a bottom is formed to the space intended to contain the water. Upon the upper surface of this flange and within said space a cup is cast to support the lower end of the inner kettle against which it bears —

This kettle has also a rim or flange about three inches wide extending from the top edge outwardly, over the outside rim of the other kettle covering said circular space at the top and by means of eyelets or flanges both edges are firmly secured and screwed together. The kettle being thus fastened the central cavity within the inner one is intended for the fire. at the lower end of which is the grate to sustain the fuel and when the steamer is in its place over the aperture of the horizontal plate the air is freely admitted to pass up through the fire. To the under side of the last mentioned plate a sliding damper of cast iron is fitted to regulate the draft as occasion may require. Another grate is placed within said central cavity over the fire for the ordinary purposes of heating and cooking over the fire as in common clay furnaces. A hole of an inch in diameter is perforated through the upper flange through which the water is conveyed into the boiler. This hole answers also for the safety-valve. Make two smaller perforations through said flange

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flange into which I insert steam pipes to conduct the steam in to the other vessels for culinary or other purposes. The boiler may be of a semicircular form & the fire applied to the side or to a section of it. but in this case there would be a loss of heat. In fastening the main parts of the steamer together it will be necessary to put between the parts becoming in contact a sufficiency of suitable cement to make the seams steam tight thin putty, made of white lead and oil will answer. It will be apparent to every intelligent mind that the form and proportions of my said steamer as described above need not be rigidly adhered to but may be variously altered without changing the principle or purpose of said steamer. In many cases it may be best to supply the waste of water in the boiler with hot water in which cases it will be found convenient to heat the water with the steam by means of the steam or conducting pipes, before it is injected or poured into the boiler. And when a fire is wanted upon the hearth beneath the boiler it may be found necessary to have an opening at the back of the boiler that the upright plate for the smoke to pass off freely. Bread may be baked in a close pan within the working bottle by means of a tube in the top of it to conduct the steam from the bread. The improvement in my said steamer which I claim to be new consists of such addition of surrounding parts to the common clay or soap stone furnace now in use as will enable me to arrest that portion of heat which in ordinary use escapes through the sides of the furnace and with it to boil the water which generates the steam for the purposes before mentioned. In testimony that the above is a true specification of my said improvement as above described I do hereunto set my hand and seal the nineteenth day of August in the year of our Lord one thousand eight hundred and thirty.

Witnesses Geo. Odiorne
Thomas A Dexter

Silas Reed