

(No Model.)

J. H. McNUTT.

WATER HEATING ATTACHMENT FOR GAS STOVES.

No. 417,197.

Patented Dec. 10, 1889.

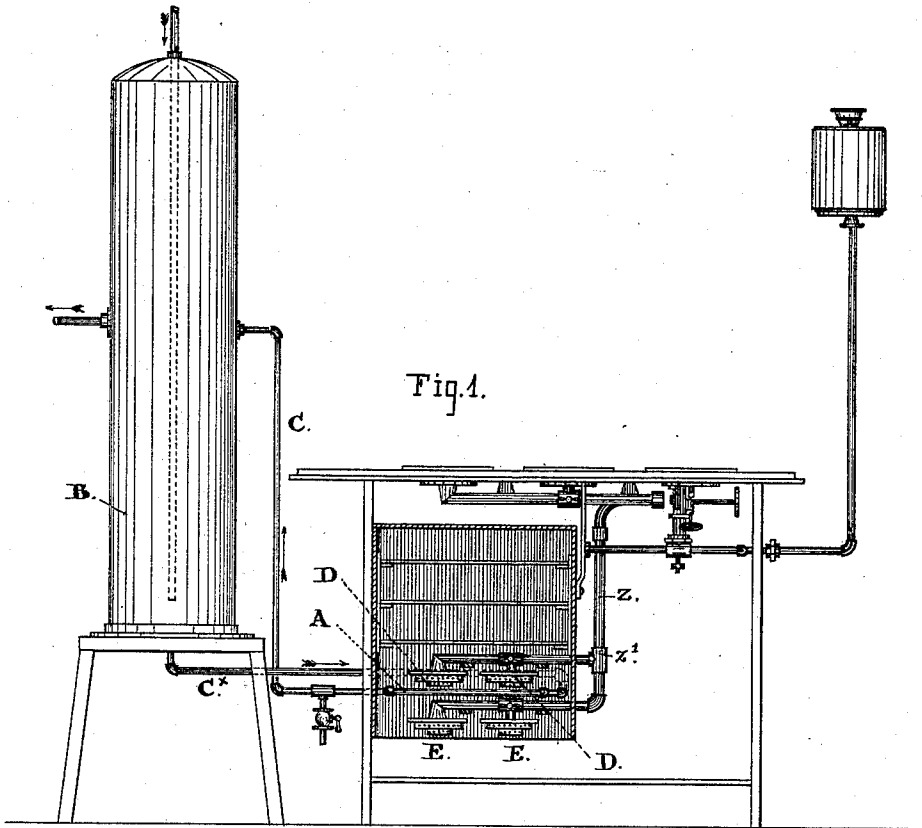


Fig. 1.

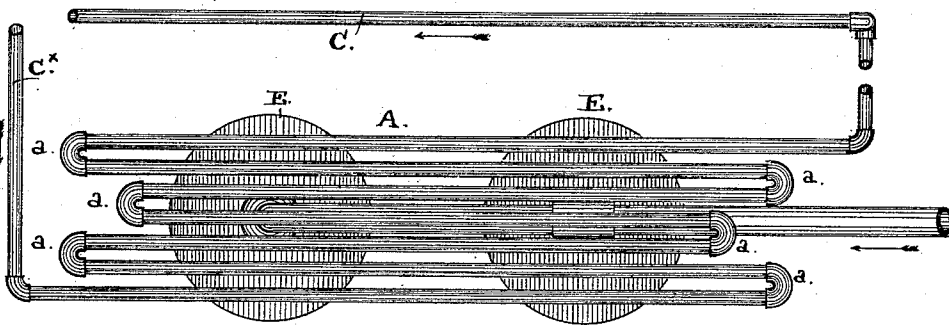


Fig. 2.

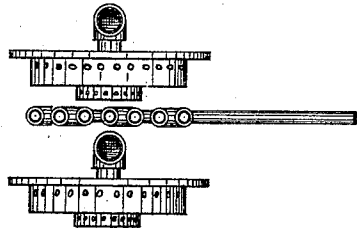


Fig. 3.

Witnesses:

W. M. May
J. E. Ford

Inventor:

James H. McNutt
By Smith & Wilson
his Atty's.

UNITED STATES PATENT OFFICE.

JAMES HENRY McNUTT, OF ALAMEDA, CALIFORNIA.

WATER-HEATING ATTACHMENT FOR GAS-STOVES.

SPECIFICATION forming part of Letters Patent No. 417,197, dated December 10, 1889.

Application filed February 11, 1889. Serial No. 299,501. (No model.)

To all whom it may concern:

Be it known that I, JAMES HENRY McNUTT, a citizen of the United States, residing at Alameda, in the county of Alameda and State of California, have invented certain new and useful Improvements in Water-Heating Attachments for Gasoline-Stoves, of which the following is a specification.

My invention relates to improvements in water-heating attachments for gasoline-stoves; and it consists in certain novel construction and combination of a permanent water-heating coil and burners, as hereinafter fully described, to afford a constant supply of hot water without retarding or otherwise affecting the regular cooking operation in any part of the stove.

The following description explains the nature of my said invention and the manner in which I have applied the same for use, the drawings that accompany and form a part of this specification being referred to by letters.

Figure 1 represents a gasoline-stove of the kind having a bake-oven and a broiling-space below it, with my invention arranged and combined therein ready for use. Fig. 2 is a plan, on a larger scale, of the heater-coil, but with the water-heating burners removed from above it. Fig. 3 is a vertical cross-section at about the line *x x*, Fig. 2, with the top burner in position.

My improvement is adapted more particularly for gasoline-stoves in which there is an oven or baking and roasting compartment, and I have therefore illustrated in the drawings an application of my complete device to one of the best-known styles of stoves of this character. The parts of the stove—such as the gas-generating apparatus, burners, and regulating-valves, the supply-tank and connections—I shall not describe, however, as the special style or construction thereof forms no part of the present invention, and the same may be of any suitable construction for producing the desired object.

In carrying out my invention I arrange inside of the oven of these stoves a heater-coil A, composed of pipes laid closely together in parallel manner, connected at the ends by U joints or couplings *a a*, and having the terminals connected with the hot-water reser-

voir or boiler B in the usual manner by pipes C C', for proper circulation of the water from the boiler through the coil. Directly over the coil and between it and the bottom or lowermost shelf or rack in the oven I place burners D D, facing the pipes, and with their burner-orifices as close as practicable to the top surfaces of the coil, the burners being connected by means of a pipe Z with the gas-generating apparatus of the stove. In this position the coil is directly over the burners E E, that supply heat to the oven, and are also used for broiling purposes. These last-mentioned burners, however, as now placed, have their backs turned toward the oven, and their faces or burner-orifices setting downward to furnish top heat and flame for broiling, so that alone they are not only insufficient to heat the coil properly, but the pipes of the coil, by virtue of their position and close relation to the burner and to one another, act to shut off and deflect the heat away from the oven-space above. The top burners D are applied, therefore, for the double purpose of securing effective heating action on the coil, for the replacing whatever proportion of heat is taken away from the oven-space by the coil that is thus placed over the oven-burners, as well as for contributing generally to the proper operation of the oven.

In practice the additional set of burners D can be connected to the pipe Z, that supplies the main or lowermost set of burners by a suitable T-coupling Z'.

The hot-water boiler and all the connections are of the usual character, and no special description of the same is necessary, as any person familiar with setting water-heating boilers for domestic purposes will readily understand from the foregoing description how to apply and arrange for practical operation my said apparatus.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The herein-described water-heating device or attachment for gasoline-stoves, consisting of a water-heating coil arranged inside the oven, the oven-heating and broiling burners, above which the coil is located, and the burners placed for operation over the said

coil and connected with the gas-generating apparatus of the stove, substantially as set forth.

2. In combination with the gasoline-stove
5 having the broiling and oven-heating burners
in the bottom thereof, a water-heating boiler,
a heating-coil connected with it and placed
for operation directly above said burners, and
a set of burners (one or more) placed directly
10 over the said coil, having connection with the

gas-generating apparatus of the stove, substantially as described, for operation as set forth.

In testimony that I claim the foregoing I have hereunto set my hand and seal.

JAMES HENRY McNUTT. [L. S.]

Witnesses:

CHAS. E. KELLEY,
E. DANGLADE.