

UNITED STATES PATENT OFFICE.

JOHN ARTMAN WAGLE, OF AVONMORE, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO ALBERT CLAWSON, OF SAME PLACE.

WATER-HEATING STOVE.

SPECIFICATION forming part of Letters Patent No. 546,367, dated September 17, 1895.

Application filed May 10, 1895. Serial No. 548,862. (No model.)

To all whom it may concern:

Be it known that I, JOHN ARTMAN WAGLE, a citizen of the United States, residing at Avonmore, in the county of Westmoreland and State of Pennsylvania, have invented certain new and useful Improvements in Water-Heating Stoves; and I do 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, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to certain new and useful improvements in stoves, and especially to a means of heating water by surrounding the fire-box and oven with a shell, within which water is allowed to flow and become heated; and it is my purpose to construct an ordinary range or cooking-stove with my invention, by the use of which an entire house may be warmed at a minimum expense by utilizing what would be otherwise lost heat.

A further object of the invention resides in the construction of a back to the fire-box, which is hollow, designed to hold water, suitable communication being had with the outer casing surrounding the stove, and the central portion of the said back being perforated to receive a fire-brick for heating the oven directly behind. By the provision of corrugated water-holding tanks beneath and behind the oven a greater amount of heating-surface is provided, and by suitable damper mechanism the current of heat may be caused to travel over a larger or a smaller surface, as may be desired.

To these ends and to such others as the invention may pertain the same consists, further, in the novel construction, combination, and adaptation of the parts, as will be hereinafter more fully described, and then specifically defined in the appended claims.

I clearly illustrate my invention in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which drawings similar letters of reference indicate like parts throughout the several views, in which—

Figure 1 is a perspective view of a stove equipped with my water-heating device. Fig. 2 is a central vertical section. Fig. 3 is a sectional view on the line 3 3 of Fig. 2, and Fig. 4 is a sectional view on the lines 4 4 of Fig. 3 and line 4 4 of Fig. 2.

Reference now being had to the details of the drawings by letter, A designates the outer casing of an ordinary cooking-stove, and B is an inner casing surrounding the sides and back of the stove.

C is a corrugated reservoir located beneath the oven D. The said reservoir C has communication with the water-holding casing or shell surrounding the stove, and G is a vertically-disposed tank having corrugated sides and having communication with the other water-holding receptacles.

H is a damper located between two upright partitions L, which damper, when closed, causes the heat to take the course indicated by the arrows in full lines in Fig. 2 and when open to take the course indicated by the arrows in dotted lines and to pass over a greater heating-surface than when the damper is closed.

The back side of the fire-box is made up of a rectangular hollow frame K, with a central aperture, in which a fire-brick M is held, for offering a greater amount of heat to the oven, the said rectangular hollow casing being connected with the outer water-carrying shell. P is an outlet-tube, from which connection may be made to the heating-radiators at various locations about a house, and Q is the inlet-tube leading into the interior communicating tanks.

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

1. In combination with a reservoir cooking stove having a double casing as described, a rectangular hollow frame K having a central recess and a fire brick M held in said recess, the rear and forward faces of said brick being flush with the sides of the said frame, and suitable communication between the frame K and the outer reservoir, substantially as shown and described.

2. In combination with a reservoir cooking

(No Model.)

W. A. WEBSTER.
ROTARY ENGINE.

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Fig. 1.

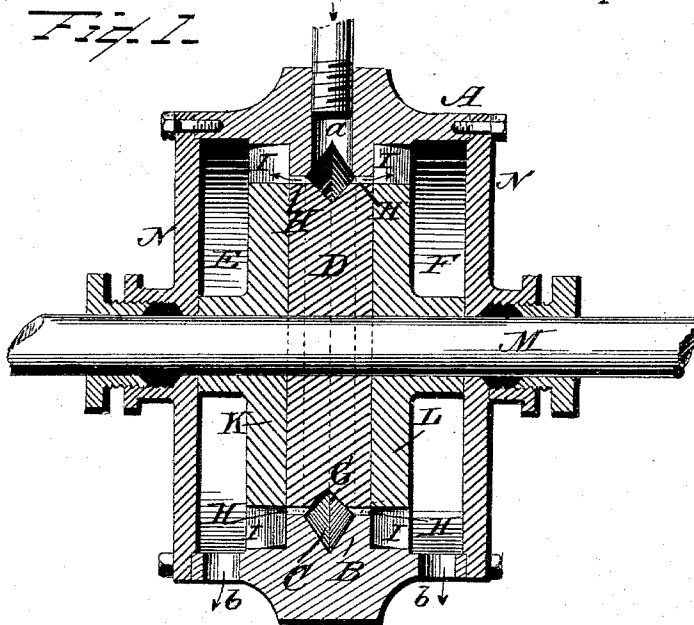


Fig. 2.

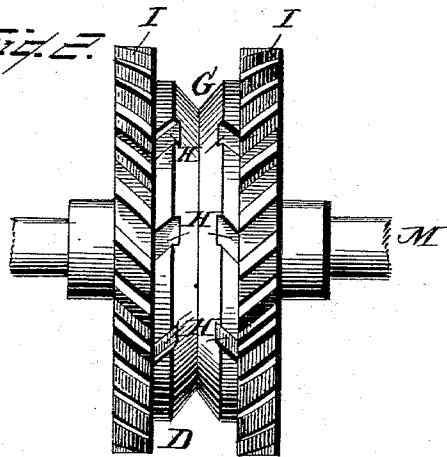
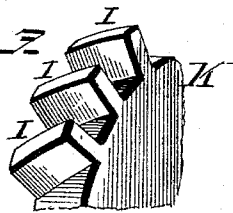


Fig. 3.



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