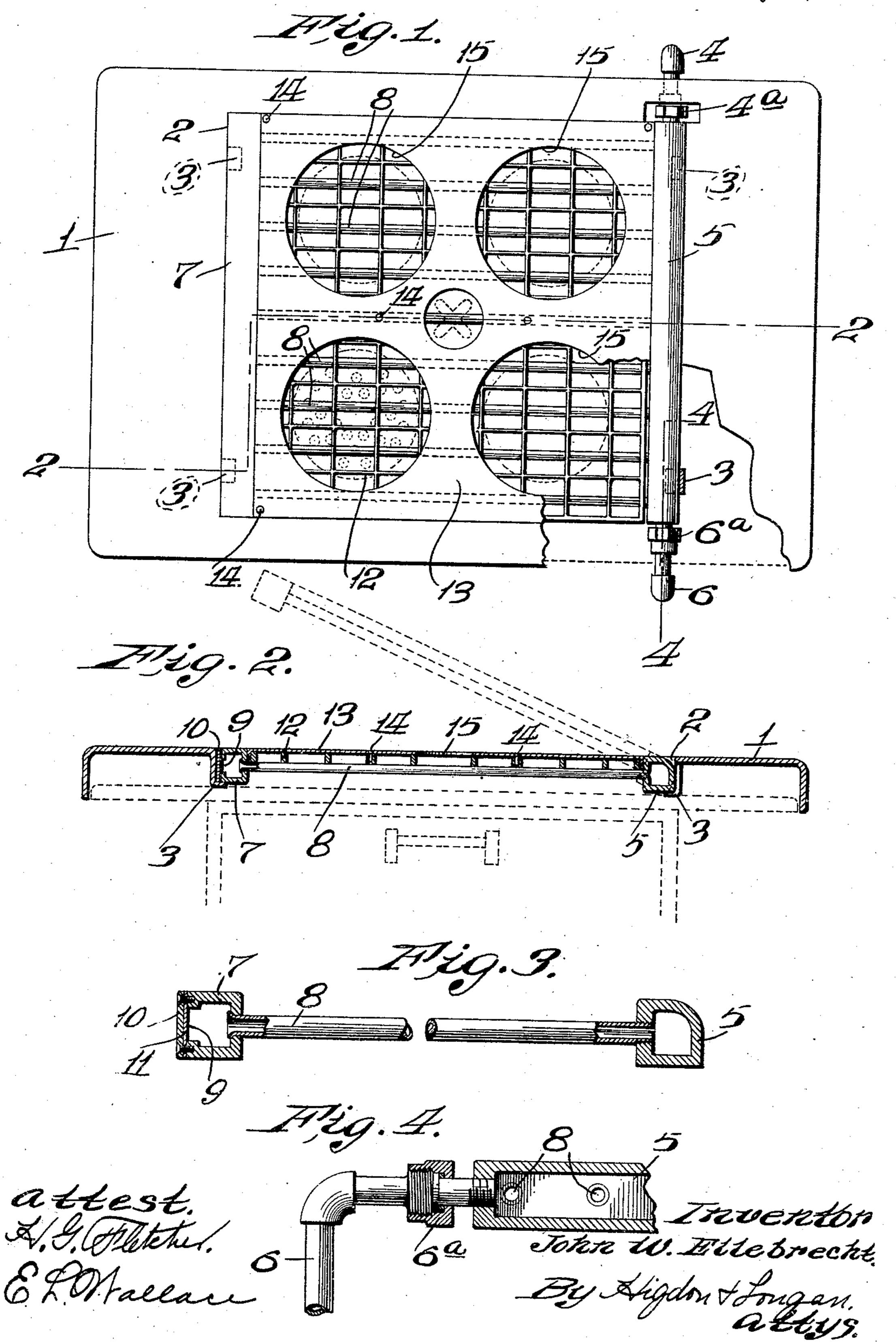
## J. W. ELLEBRECHT. WATER HEATER.

APPLICATION FILED MAR. 20, 1909.

928,859.

Patented July 20, 1909.



## UNITED STATES PATENT OFFICE.

JOHN W. ELLEBRECHT, OF ST. LOUIS, MISSOURI.

## WATER-HEATER.

No. 928,859.

Specification of Letters Patent.

Patented July 20, 1909.

Application filed March 20, 1909. Serial No. 484,642.

To all whom it may concern:

Be it known that I, John W. Ellebrecht, a citizen of the United States, and resident of St. Louis, Missouri, have invented certain 5 new and useful Improvements in Water-Heaters, of which the following is a specification containing a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to a water heater, and the object of my invention is to construct a simple and inexpensive device which may be readily applied to and removed from a gas range.

A further object of my invention is in having my device so applied that the gas being used for cooking can also be utilized for the heating purposes of my water heater.

My invention consists in certain novel 20 features of construction and arrangement of parts which will be hereinafter more fully described, pointed out in the claims and illustrated in the accompanying drawings, in which:

Figure 1 is a plan view of my device with a portion broken away; Fig. 2 is a vertical section taken on the line 2—2 of Fig. 1; Fig. 3 is an enlarged cross section of the water-heads, showing one tube partly in section; and Fig. 4 is an enlarged vertical section taken on the line 4—4 of Fig. 1.

Referring by numerals to the accompanying drawings: 1 designates the frame of my improved device, which rests over, or on top of a gas range, and 2 the rectangular opening in said frame in which my heating apparatus is located.

Depending from the frame 1, at the ends of this opening 2 are brackets 3, on which rests 40 the water-heads, which will be hereinafter more fully described. An inlet pipe connection 4, is connected to the water head 5, and at the opposite end thereof is an outlet pipe connection 6. This water-head 5 rests on a 45 set of brackets 3, and oppositely arranged and lying parallel with this water-head 5 is another water-head 7, which rests on another set of brackets 3. Connecting these waterheads 5 and 7 are longitudinally disposed 50 water tubes 8, one end of said water tubes 8 being threaded and screwed into the waterhead 5, while the opposite ends of said water tubes are expanded in the water-head 7. To provide for the expanding of said water tubes 55 in this water-head 7, I have left an opening 9

whereby suitable expanding tools can be used, and to close up this opening after the work of expanding has been done a plate 10 and a gasket 11 may be screwed to the waterhead 7 and be made water-tight. Loosely 60 mounted on these water tubes 8 is a grating 12, which may be made of cast iron or any other suitable material, and fastened to this grating 12 by screws 14 is a sheet iron cover 13. I ormed in this cover 13 are openings 15, which are for the purpose of allowing the flame to contact with the cooking utensils when they are placed over these openings.

In order to have ready access to the top of the gas range for the purpose of cleaning out 70 or arranging parts of the burners, I have made my water heater in such a manner that it can be readily lifted up, and to do so I have placed flexible joints or connections, such as 4<sup>a</sup> and 6<sup>a</sup> in the water pipe connections 4 and 6. By these means one end of the water heater can be readily lifted, as shown by dotted lines in Fig. 2.

A device of my improved construction does away with the necessity of having an so independent water heater and this device can be readily attached or detached to and from

It will be noted that the grating 12, which rests on the water tubes, serves for the purpose of keeping said tubes from being bent or worn when the cooking utensils rest or rub on them, and furthermore, this grating in keeping the cooking utensils from coming in contact with the water tubes also acts more or less as a nonconductor in the case of cold water being in one or another of the utensils, and by this arrangement the water in the water tubes is not so liable to become chilled, that is to a certain degree.

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The sheet iron cover 13 serves not only as a rest or top for the cooking utensils, but will also serve to retain the heat from the flames around the water tubes, and by this means practically all the heat will be utilized.

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1. A water heater comprising a frame adapted to be positioned on a gas range, said frame being provided with an opening in its top, a water-head pivoted in said opening 105 adapted to be connected with a water supply connection, a series of water tubes connected to said head, a similar water head connected to the opposite ends of said water tubes and being provided with a water outlet, a grating 110

located on said water tubes and a shield provided with openings located on said grating.

2. A water heater comprising a frame adapted to be positioned on a gas range, said 5 frame being provided with an opening in its top, a water-head pivoted in said opening adapted to be connected with a water supply connection, a series of water tubes connected to said head, a similar water head connected 10 to the opposite ends of said water tubes and being provided with a water outlet, and a shield provided with an opening located on said water tubes.

3. A water heater, comprising a frame 15 adapted to be positioned on a gas range, said frame being provided with an opening in its top, a water head provided with inlet and outlet connections pivoted in said opening, a series of parallel water tubes connected to 20 said head, a water head connected to the opposite ends of said water tubes and communicating with the said first mentioned head,

and a sheet metal shield provided with openings detachably located on said water tubes.

4. A water heater, comprising a frame 25 adapted to be positioned on a gas range, said frame being provided with an opening in its top, a water head provided with inlet and outlet connections pivoted in said opening, a series of parallel water tubes connected to 30 said head, a water head provided with an opening connected to the opposite ends of said water tubes and communicating with the said first mentioned head, a removable plate closing said opening in said water head, 35 and a sheet metal shield provided with openings detachably located on said water tubes.

In testimony whereof, I have signed my name to this specification, in presence of two subscribing witnesses.

JOHN W. ELLEBRECHT.

Witnesses:

E. E. Longan, E. L. WALLACE.