

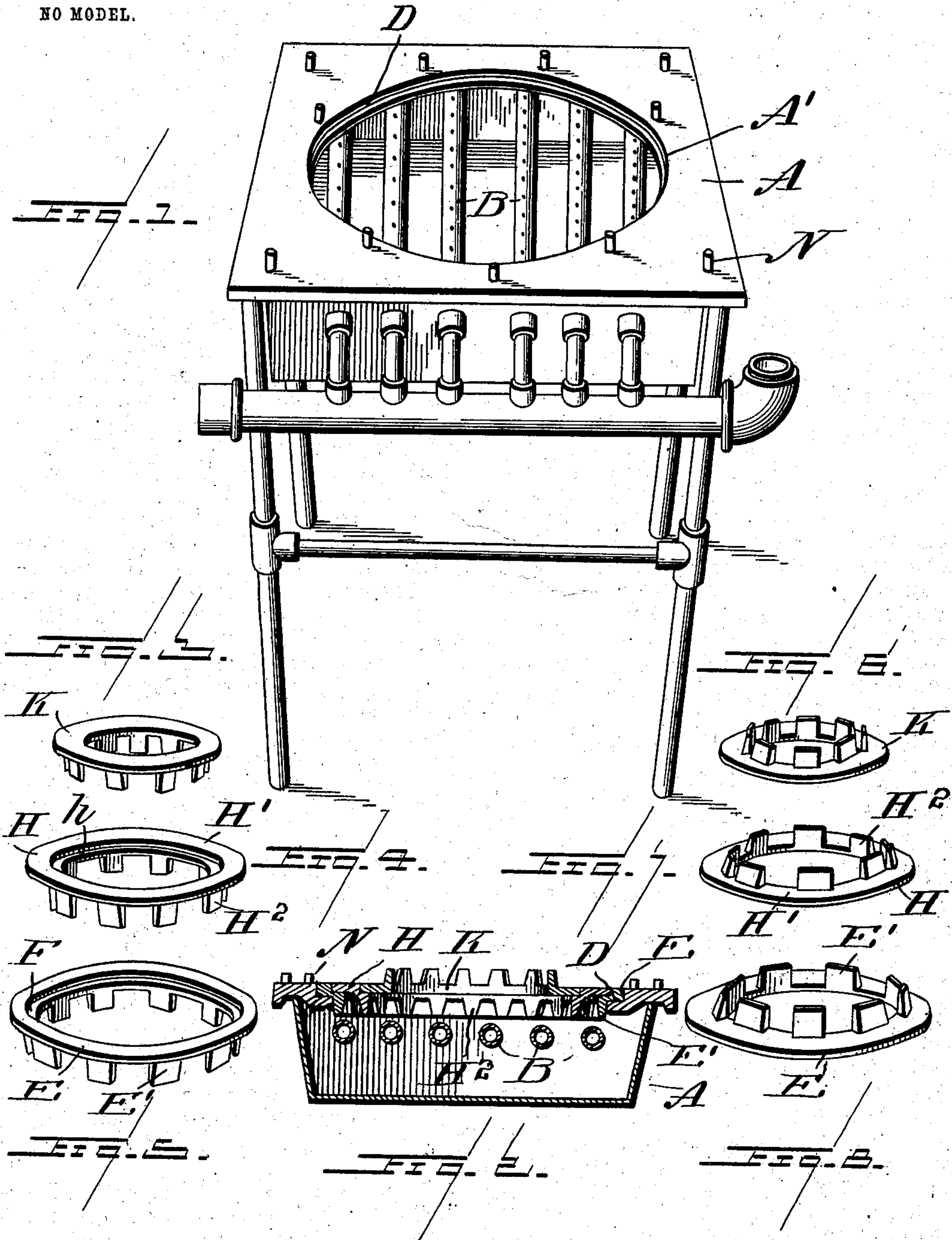
No. 730,268.

PATENTED JUNE 9, 1903.

J. W. KELLER.
GAS FURNACE.

APPLICATION FILED MAR. 17, 1903.

NO MODEL.



WITNESSES
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UNITED STATES PATENT OFFICE.

JOHN W. KELLER, OF CHICAGO, ILLINOIS.

GAS-FURNACE.

SPECIFICATION forming part of Letters Patent No. 730,268, dated June 9, 1903.

Application filed March 17, 1903. Serial No. 148,246. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. KELLER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Gas-Furnaces; 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 new and useful improvements in gas-furnaces especially adapted for use by bakers for heating to a high degree of temperature for various purposes; and it consists in the provision of a sheet-iron box with an iron top in which are positioned the gas-burners and in the provision of lugs projecting from the top of the box, whereby articles may be supported a suitable distance above the same, and in the provision of a series of nesting receptacle-supporting rings, whereby heat is distributed without loss to different sides of receptacles held over the burner and preventing a constant flow of cold air mixing with the heat from the burners and affording a closed top outside various-sized receptacles which are held over the burners.

The invention consists, further, in various details of construction and combinations of parts, which will be hereinafter more fully described and then specifically defined in the appended claims.

My invention is illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this application, and in which drawings—

Figure 1 is a perspective view of my improved burner and series of nesting rings carried therein and adapted to support pans, kettles, or other receptacles of different sizes and at the same time produce a means whereby a kettle of any size will cover the entire area of the opening, leaving a closed space about the kettle. Fig. 2 is a sectional view through the upper portion or box of the heater. Figs. 3, 4, and 5 show the nesting rings disassembled, and Figs. 6, 7, and 8 show reverse sides of the nesting rings.

Reference now being had to the details of the drawings by letter, A designates a boxing which may be supported upon suitable lugs and having gas-burners B arranged parallel to one another within said boxing and adjacent to the opening A' in said boxing. The marginal edge of said opening is provided with an annular shoulder D, and E designates a ring, which is provided with lugs E', spaced apart and projecting from one face of said ring. Said ring is so constructed that it will rest upon said annular shoulder when the ring is placed upon the boxing with the lugs projecting downward or in the reverse direction extending upward from the ring accordingly as the ring is used to receive smaller concentric rings for reducing the size of the aperture or used singly for supporting a large receptacle to be heated. One face of said ring has an annular shoulder F, adapted to receive the flange H of a concentric ring H' of a smaller diameter than the ring E. Said ring H' is provided with a series of lugs H² upon one face thereof which are spaced apart and are similar to the lugs upon the ring E and which lugs are provided for the purpose of supporting a receptacle to be heated by the stove. The ring H' has an annular groove h upon one face thereof adapted to receive a ring K of similar construction to the ring H', but of smaller diameter. In the drawings I have shown three of these rings; but obviously any number may be employed in order to adjust the top of the heater to various sizes of kettles or other receptacles to be heated and at the same time to produce a closed top to the stove outside and about the receptacle being heated.

When a plurality of the rings is used, as shown in Fig. 1 of the drawings, the inner ring is reversed, having the lugs projecting upward from the face thereof and adapted to form supports for a kettle or pan, and by means of the spaces intermediate the lugs the heat is allowed to make exit from under the kettle or pan being heated and rises up about the sides thereof.

When it is desired to increase the size of the aperture in the top, one or more of the rings may be taken out and one of the rings reversed to produce the supports for the kettle or other receptacle to be heated. When

it is desired to dispense entirely with the rings and utilize the full size of the aperture in the top, I have provided lugs N, which rise from the upper face of the heater and which provide suitable means for supporting the pan or kettle a sufficient distance above the top of the heater to allow for a satisfactory combustion of the gas.

From the foregoing it will be observed that by the provision of a gas-heater embodying the features described means is provided for adapting the heater for satisfactory work with kettles or pans of various sizes and at the same time utilizing all the heat and directing the flames against the bottom of the pan or kettle being heated and preventing cold air coming in contact with the same and utilizing the heat from the flames to the best advantage.

While I have shown a particular construction of apparatus embodying my invention, it will be understood that I may make alterations in the detailed construction of the apparatus without departing from the spirit of the invention.

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

1. A gas-heater comprising a boxing having

an aperture therein, burners in said boxing, the wall of said aperture having an annular shoulder, a series of nesting rings each having an annular shoulder on one face thereof, and lugs, spaced apart, projecting from their opposite faces, the inner of the series of rings adapted to be reversed and to rest upon the annular flange of the adjacent ring, the lugs of said inner ring forming a means of support for a kettle or other receptacle adapted to be heated, as set forth.

2. A gas-heater comprising a boxing, a support therefor, burners positioned within said boxing, the top of the boxing having an aperture with an annular flange about the margin thereof, a series of nesting rings, each provided with an annular shoulder about the margin of its central aperture, and lugs, spaced apart, and projecting from one face of the ring, the inner marginal flange of said rings being flush with the marginal outline of the aperture in the ring, as set forth.

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

JOHN W. KELLER.

Witnesses:

ROBERT W. STEWART,
W. F. PROPPER.