

No. 834,282.

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F. FIEBEGER.
STOVE AND FURNACE.
APPLICATION FILED MAR. 26, 1906.

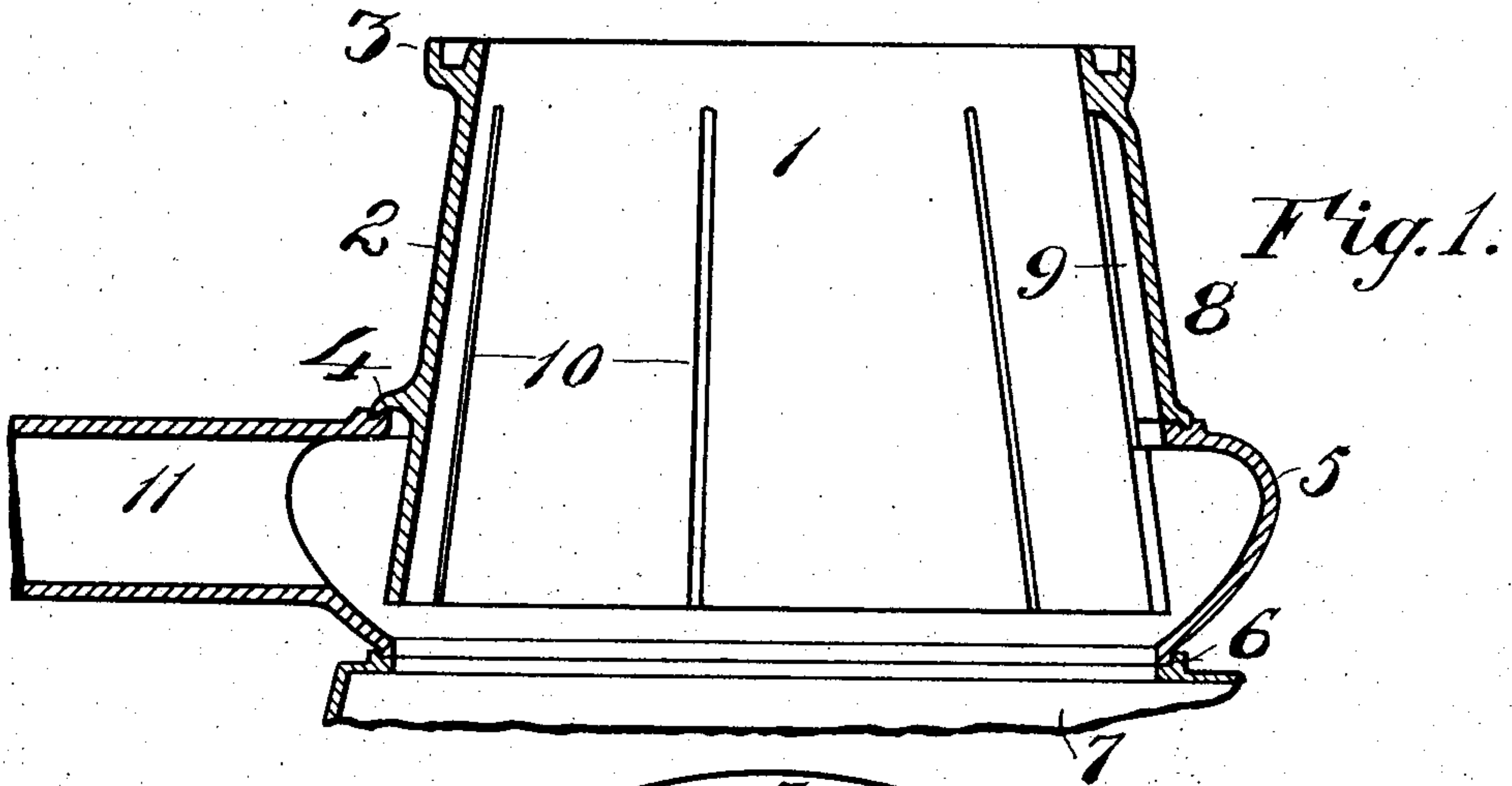


Fig. 1.

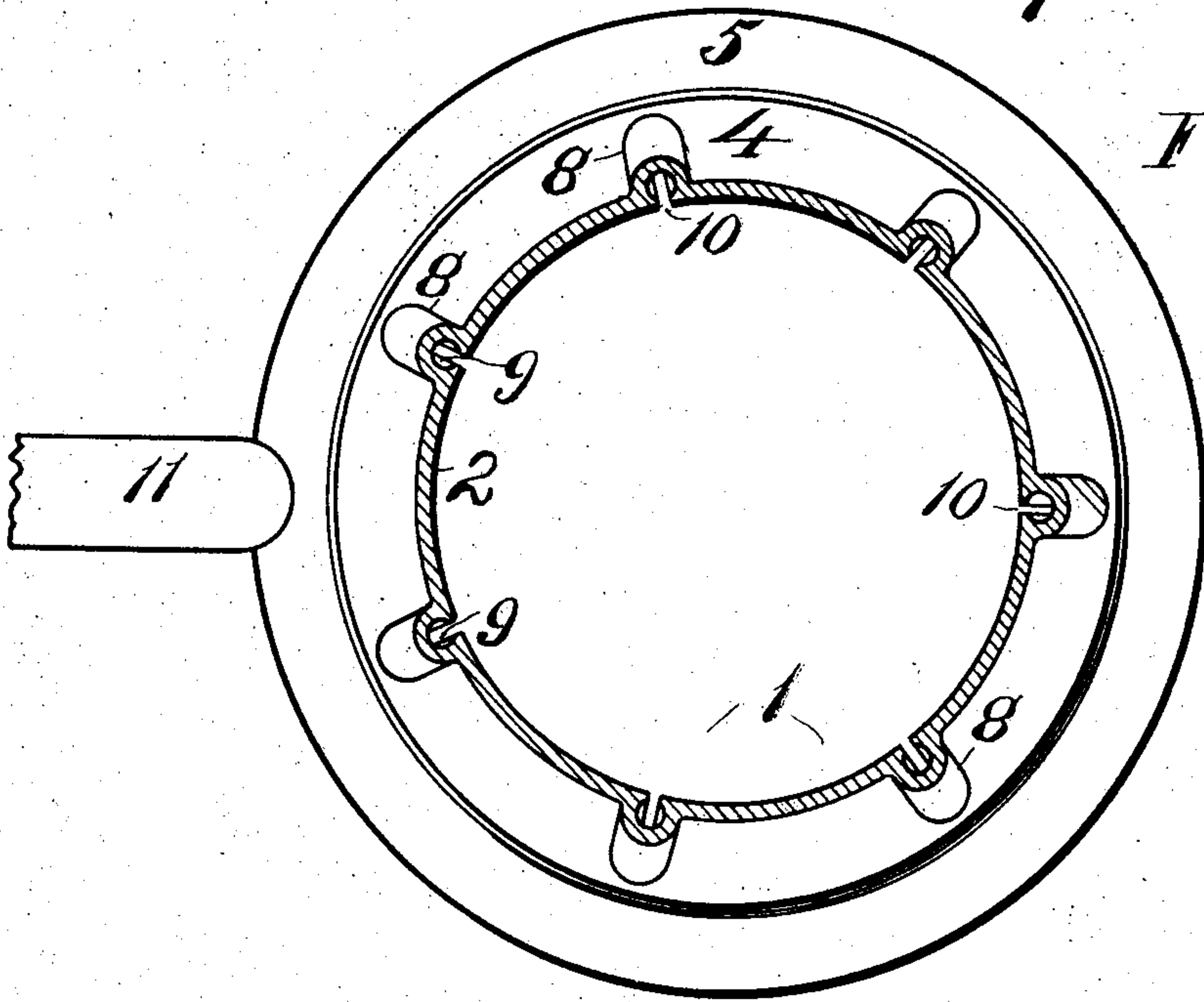


Fig. 2.

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UNITED STATES PATENT OFFICE.

FRANK FIEBEGGER, OF AKRON, OHIO.

STOVE AND FURNACE.

No. 834,282.

Specification of Letters Patent.

Patented Oct. 30, 1906.

Application filed March 26, 1906. Serial No. 308,036.

To all whom it may concern:

Be it known that I, FRANK FIEBEGGER, a citizen of the United States, residing at Akron, in the county of Summit and State of Ohio, have invented new and useful Improvements in Stoves and Furnaces, of which the following is a specification.

This invention relates to improvements in stoves and furnaces, and primarily relates to that type of heating devices described in United States Letters Patent granted to Hiram J. Hough, November 1, 1904, No. 773,744; and the object thereof is to evenly and perfectly distribute a supply of oxygen to the fuel sustained within the fire-pot of the device.

With the foregoing and other objects in view the invention consists of the novel construction, combination, and arrangement of parts constituting the invention to be hereinafter referred to, and illustrated in the accompanying drawings, which form a part of this specification, in which is shown the preferred embodiment of the invention; but it is to be understood that changes, variations, and modifications can be resorted to which come within the scope of the claim hereunto appended.

In the drawings, in which similar reference-numerals indicate like parts in the different figures, Figure 1 is a vertical central section of so much of the heater portion of a stove or furnace as will illustrate my invention, and Fig. 2 is a section of Fig. 1 on line *x*.

In the drawings the reference-numeral 1 designates the fire-pot of the device, which is of the general type described in Letters Patent No. 773,744, and consists of a main body portion 2, shaped in the form of an inverted frustum of a cone, provided with an upper annular seat 3, on which may be mounted the fuel-section of the combustion-chamber. The fire-pot 1 is further provided with an outwardly-extending annular beading or flange 4, which is adapted to rest on an annularly-formed outwardly-convexed member 5, which in turn rests on a seat 6, formed in the upper portion of the ash-pit 7 of the device.

In the drawings only the upper portion of the ash-pit is shown, as it may be of any ordinary type suitable for a device of this character. The shell or body portion 2 of the fire-pot 1 is provided with a plurality of integral ribs 8, which extend downwardly from a point adjacent the seat 3 to the annular flange 4. The ribs are made hollow by hav-

ing openings 9 therein, which preferably communicate throughout their entire length with the interior of the fire-pot by means of slots 10. The opening in the upper part of the member 5, through which the lower portion of the fire-pot depends, is of such a diameter that there exists space enough therein for the openings 9 to communicate with the interior of this member 5 outside of the main portion 2 of the fire-pot without having their lower portions closed by the inwardly-converging upper portion of the member 5. From this it will be seen that the openings 9 lead directly from the interior of the member 5, and thereby form continuous air-conduits therefrom upwardly to the interior of the fire-pot, thus allowing air to freely pass to the burning fuel. Air is admitted to the interior of the member 5 by means of an inlet-pipe 11, which may be provided with a controlling damper or grate. (Not shown in the drawings, as its operation is believed to be obvious from this description.)

In using this device air is admitted (when desired) through the inlet-pipe 11 and from thence passes around the space between the member 5 and the lower portions of the fire-pot 1 and enters the interior thereof through the openings 9 and slots 10.

It will be obvious that by providing the hollow ribs 8 with openings 9 the air within the member 5 is permitted to escape into the fire-pot and there mingle with the gases which constitute the products of combustion from the fuel at a greater number of points and be more evenly distributed than is possible where the slots 10 are wholly contained within the area inclosed by the member 5. It frequently happens that portions of the slots 10 will be substantially closed by fresh fuel to such an extent as to prevent free ingress of air to the fire-pot, and in a case like this the air can freely pass upward through the openings 9 and enter above the fuel and cause intense combustion without interference. No form of grate is shown in the drawings, for the reason that any type of grate may be used in conjunction with this fire-pot which will suitably sustain the supply of fuel for consumption in proper position with respect to the fire-pot herein shown and described.

What I claim, and desire to secure by Letters Patent, is—

The combination with the ash-pit of a stove or furnace provided with an opening

for establishing communication between the
ash-pit and a fire-pot, of a seat surrounding
said opening, an outwardly-extending annu-
lar air-ring arranged on said seat, a fire-pot
5 extending below the upper part of said air-
ring and having an outwardly-projecting an-
nular flange arranged to rest on the upper
part of said air-ring thereby supporting said
fire-pot in position, said fire-pot being fur-
10 ther provided with slots extending upwardly
from the bottom thereof, and a plurality of
hollow ribs formed integral with said fire-pot
extending upwardly from said flange, the

openings in said ribs being in open communi-
cation with the interior of said air-ring and 15
said slots and constituting air-passages from
the interior of said air-ring through said slots
to the interior of said fire-pot.

In testimony whereof I have hereunto set
my hand in presence of two subscribing wit- 20
nesses.

FRANK FIEBEGGER.

Witnesses:

C. E. HUMPHREY,
GLENARA FOX.