No. 686,634. Patented Nov. 12, 1901.

A. OHNEMUS.

COOKING STOVE.

(Application filed July 5, 1901.)

(No Model.)

Fig. I.

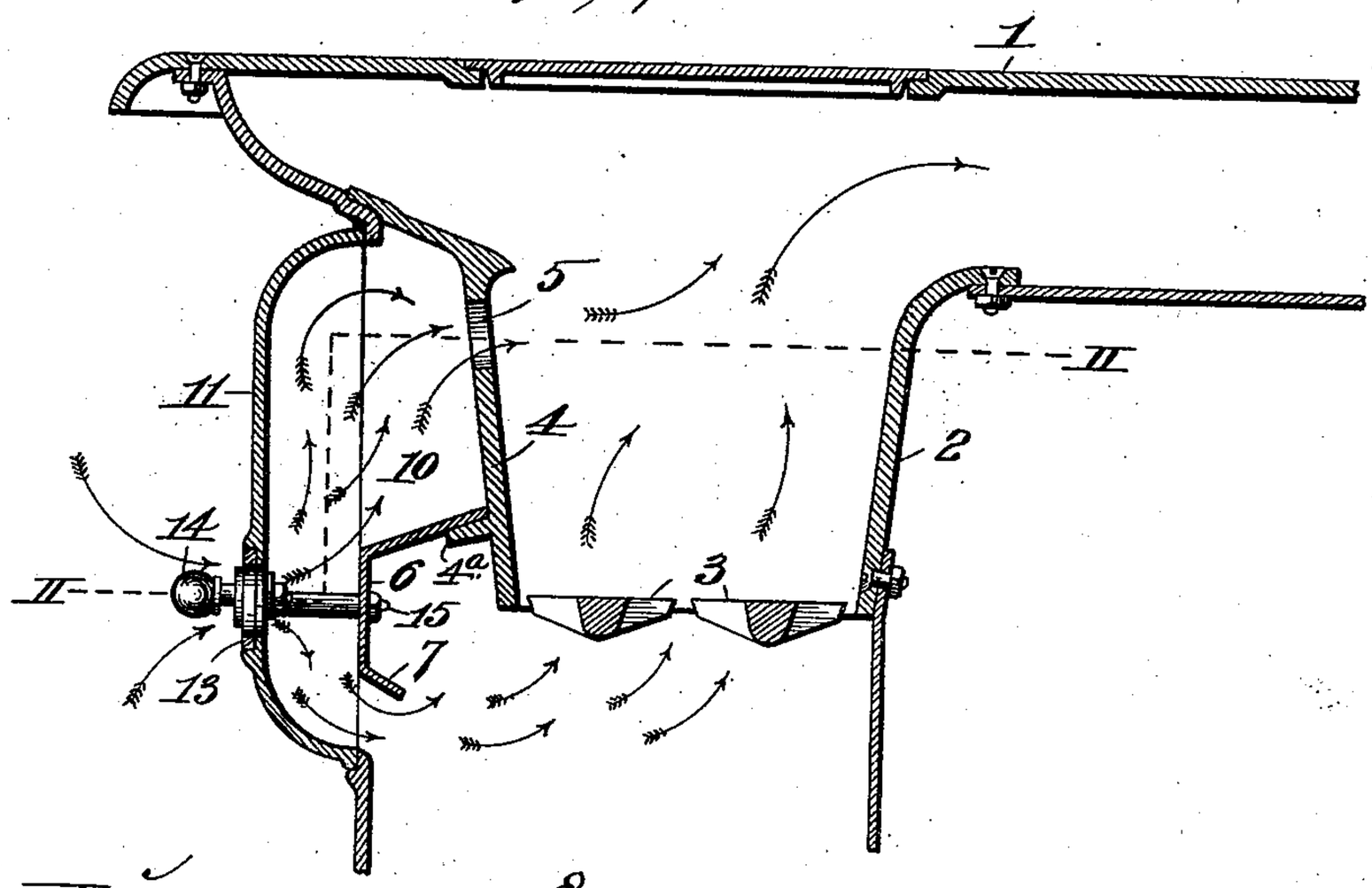
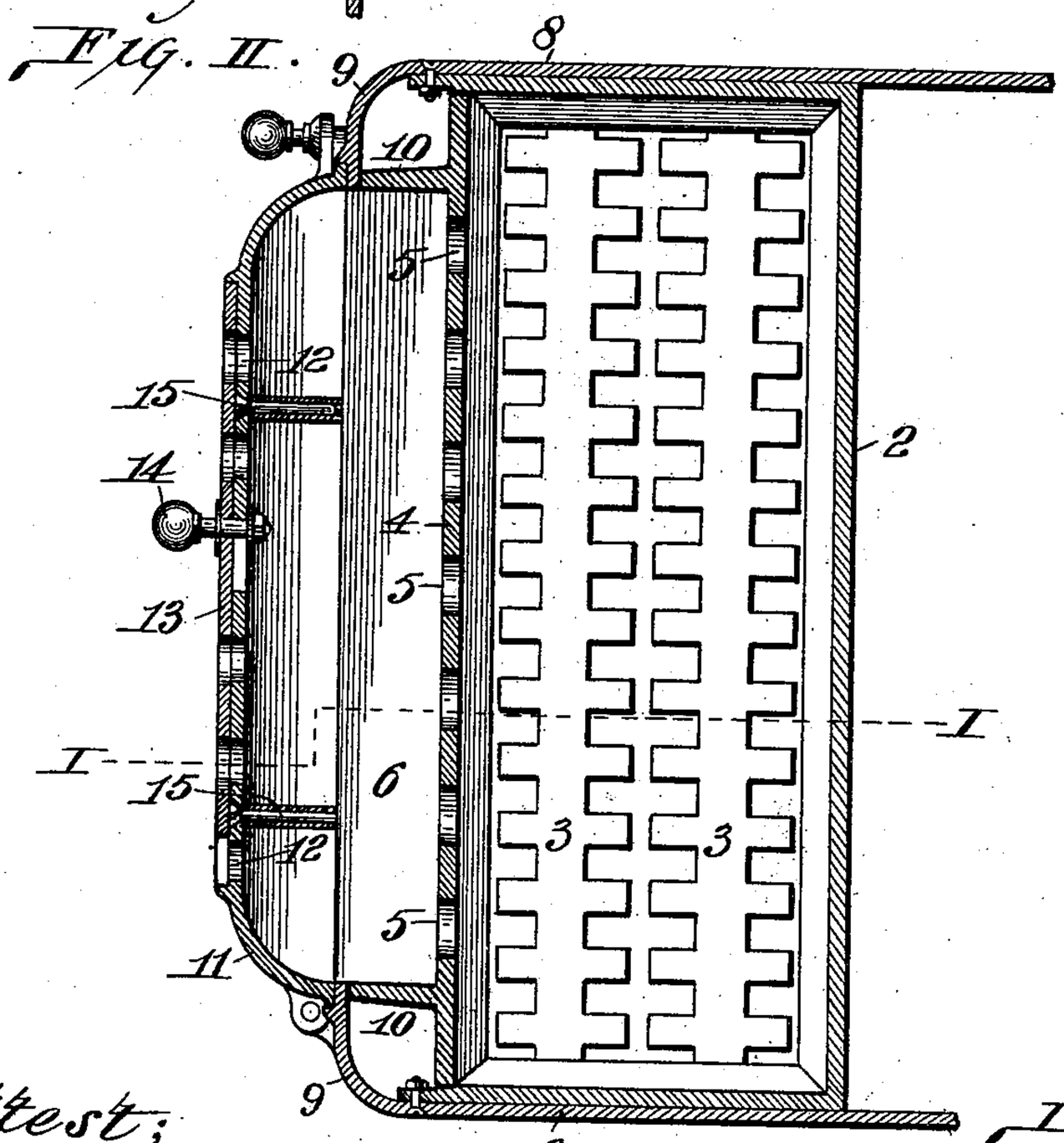


Fig. II.



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ANTON OHNEMUS, OF QUINCY, ILLINOIS, ASSIGNOR TO EXCELSIOR STOVE & MANUFACTURING COMPANY, OF QUINCY, ILLINOIS, A CORPORATION.

COOKING-STOVE.

SPECIFICATION forming part of Letters Patent No. 686,634, dated November 12, 1901.

Application filed July 5, 1901. Serial No. 67,116. (No model.)

To all whom it may concern:

Be it known that I, ANTON OHNEMUS, a citizen of the United States, residing in Quincy, in the county of Adams and State of Illinois, have invented certain new and useful Improvements in Cooking-Stoves, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to a cooking-stove construction wherein the air is partially admitted to the fire-pot at the upper part thereof and a portion beneath the grate, whereby the combination of the fuel is more effectually accomplished.

The invention consists in features of novelty hereinafter fully described, and pointed out in the claim.

Figure I is a vertical cross-sectional view taken through the stove at the location of the fire-pot on the line I I, Fig. II. Fig. II is a horizontal sectional view taken on line II II, Fig. I.

1 designates the top of the stove, beneath which is the fire-pot located in the usual position.

2 designates the fire-pot back, and 3 the fuel-supporting grate.

4 designates the front wall of the fire-pot, which is provided in its upper part with a series of orifices 5, arranged in a horizontal line and has a ledge 4^a extending forwardly therefrom. A shield 6 extends rearwardly over said ledge 4^a and is preferably provided at its lower edge with a rearwardly-extending lip 7. The shield is attached to the front door of the stove, as will hereinafter appear.

8 designates the side walls of the stove, that extend to corner-walls 9, that project inwardly toward each other at the front of the stove and receive the abutment of vertical flanges 10, that extend forwardly from the front wall 4 of the fire-pot to complete an inclosure between said flanges, the front wall 4, and the shield 6.

11 is the front door, hinged to one of the corner-walls 9 and adapted for engagement with the other corner-wall. The door 11 is preferably of bulging form and is provided with a series of apertures 12, that are controlled by a damper 13, provided with a handle 14. The shield 6 is attached to the front door 11 by bolts 15, so as to move with the door to or from the ledge 4^a on the front wall 4 of the fire-pot, over which ledge the shield projects when the door is closed.

In the practical use of the stove the air to supply the necessary oxygen and draft for combustion of the fuel in the fire-pot is admitted through the apertures 12 on the shifting of the damper 13 to permit of the ingress of the air through said apertures. The main portion of the air passes upwardly in the box-like space between the door 11 and the front wall 4 of the fire-pot and enters the fire-pot through the orifices 5 in said wall, being prevented from passing downwardly by the shield 6, which occupies a position immediately at the rear of the inlet-apertures in the door 11. The main portion of the air entering the stove is therefore supplied to the fire-pot above the fuel therein and the combustion of the fuel is rendered much more perfect by reason of the presence of a sufficient amount of oxygen to mix with the carbonaceous products of combustion. A small quantity of the air passes downwardly through the duct beneath the shield 6 and the rearwardly-extending lip 7 to the space beneath the grate 3 and ascends through the grate to provide the necessary ascending air-current in the fire-pot to occasion proper draft through the fuel and carry the products of combustion upwardly to be met by the air that enters the fire-pot through the orifices 5.

By the construction herein set forth I produce a stove of simple nature wherein the products of combustion are subjected to an adequate draft and air is supplied for mixing with the products of combustion in such manner as to effect a maximum degree of combustion, and consequently obtain a greater percentage of heat from the combustion of the fuel by reason of complete consumption thereof.

I claim as my invention—

In a stove, the combination of a fire-pot having a front wall provided with orifices, vertical flanges carried by said fire-pot wall and extending forwardly to the stove-wall, a bulging door mounted on the stove-walls and provided with damper-controlled apertures, and a shield carried by said door and having a rearwardly-extending lip, substantially as described.

ANTON OHNEMUS.

In presence of—
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