

(Model.)

E. D. WESTON.

STOVE.

No. 247,138.

Patented Sept. 13, 1881.

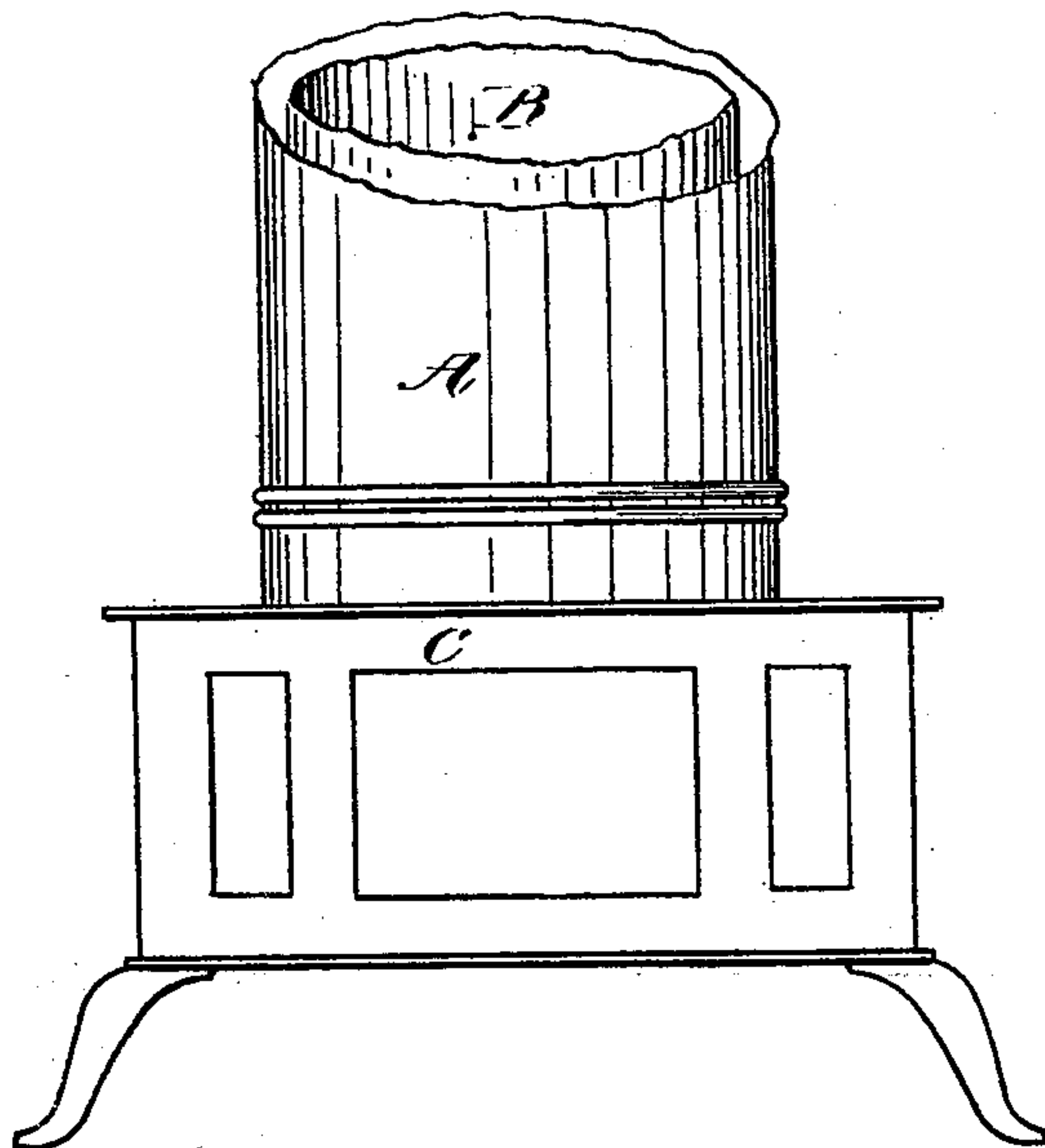


Fig. 1.

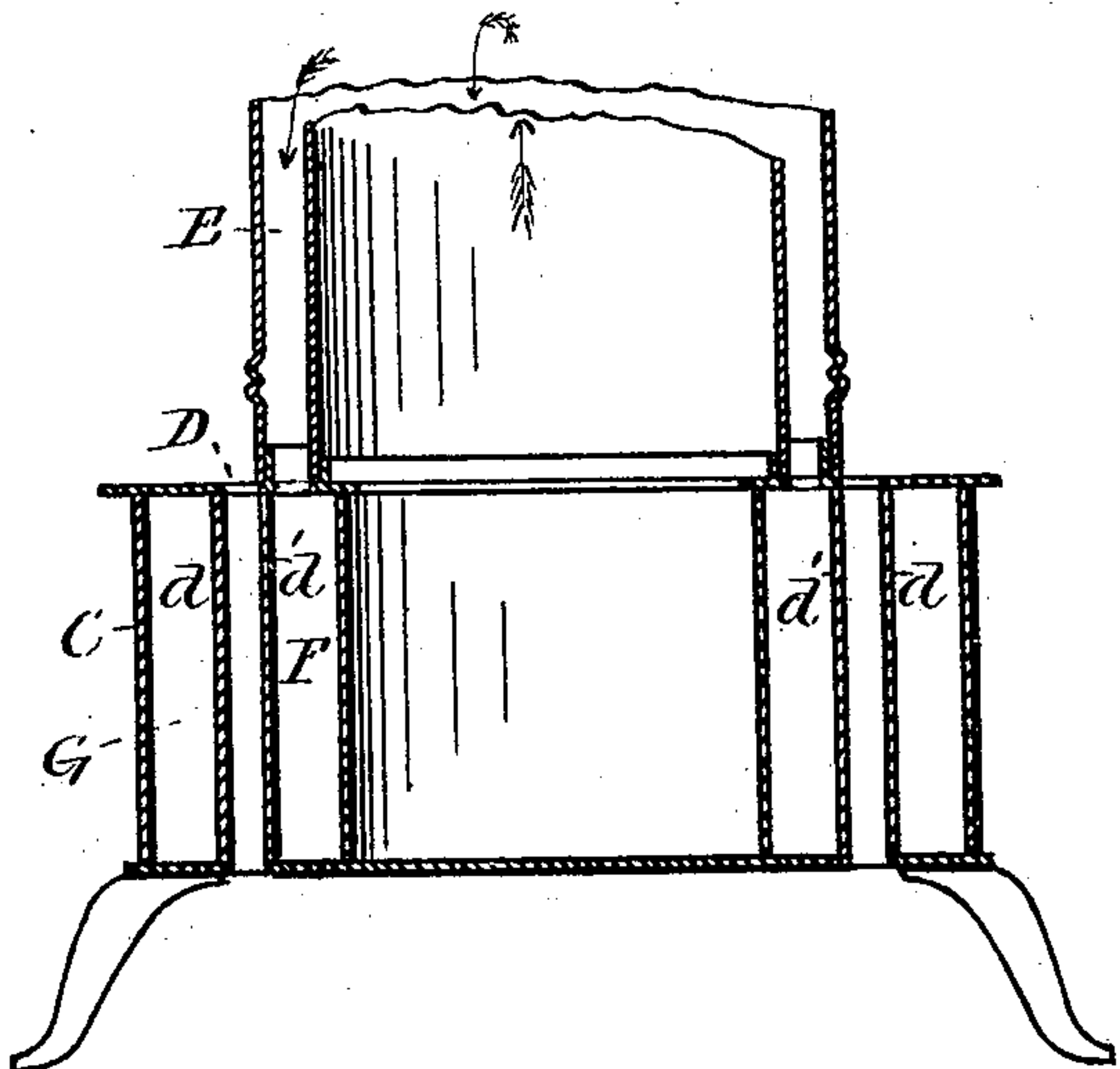


Fig. 2.

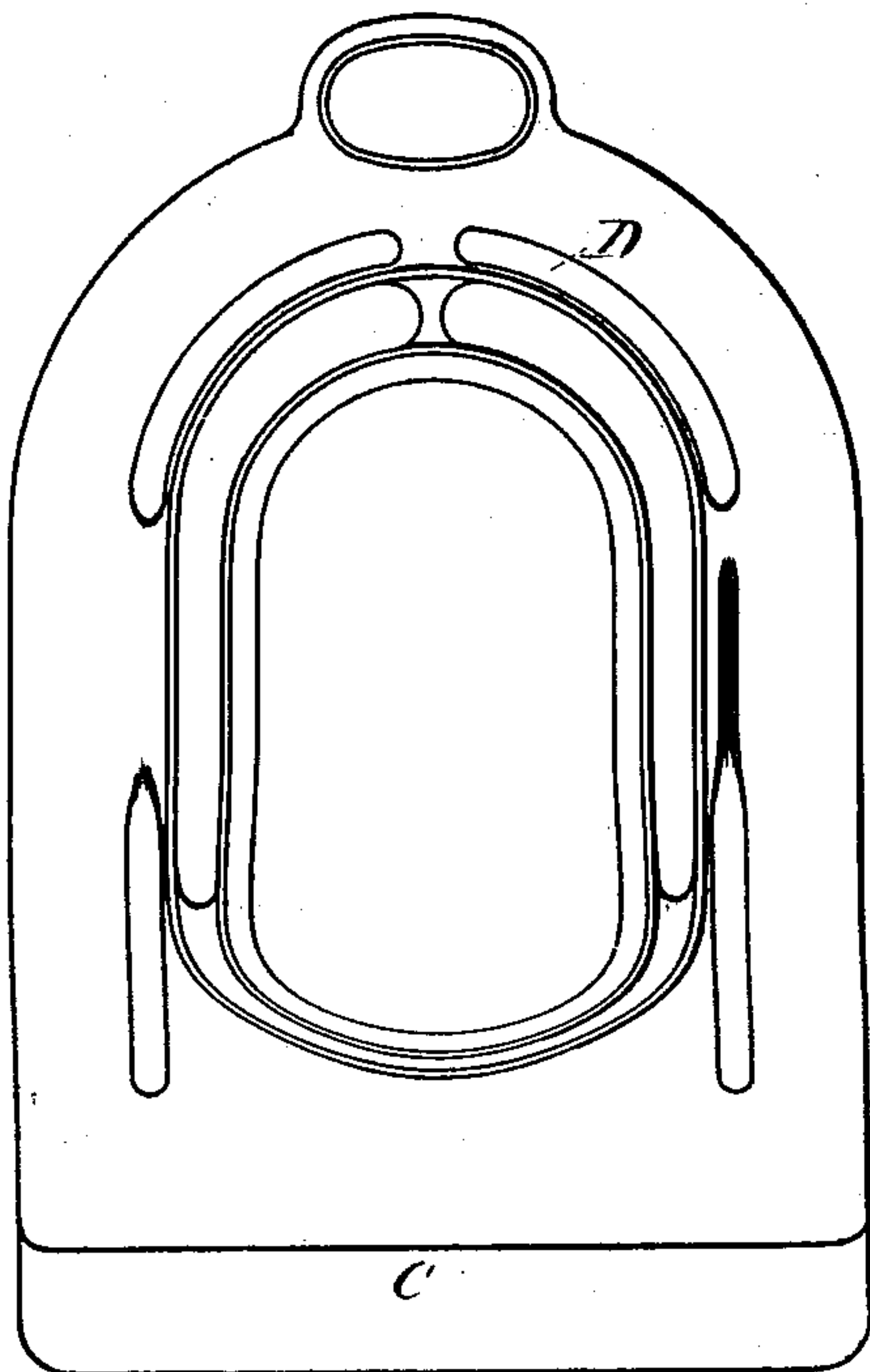


Fig. 3.

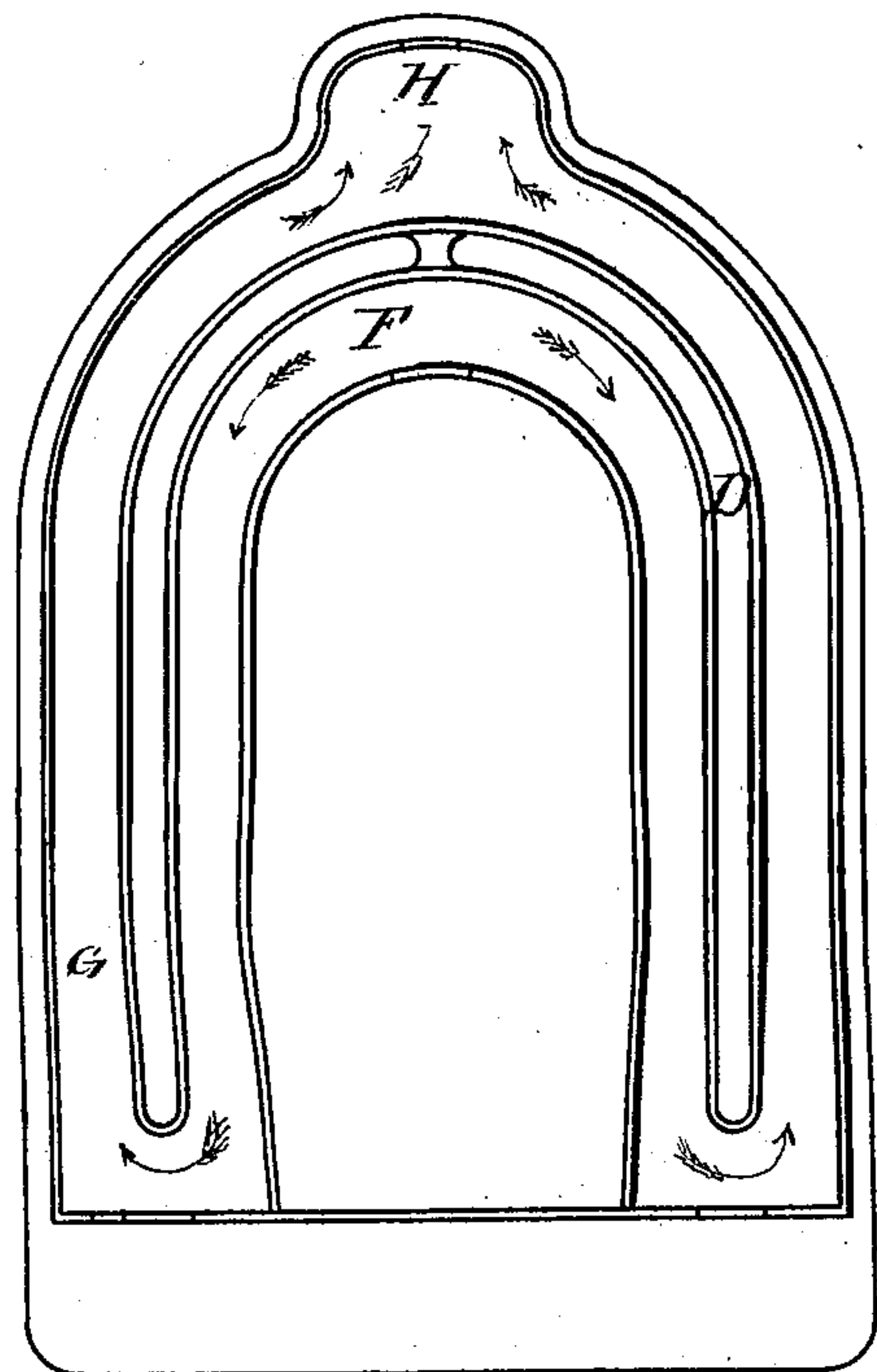


Fig. 4.

WITNESSES
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ERASTUS D. WESTON, OF WAKEFIELD, MASSACHUSETTS.

STOVE.

SPECIFICATION forming part of Letters Patent No. 247,138, dated September 13, 1881.

Application filed February 8, 1881. (Model.)

To all whom it may concern:

Be it known that I, ERASTUS D. WESTON, of Wakefield, in the county of Middlesex and State of Massachusetts, a citizen of said State, have invented a certain new and useful Improvement in Stoves and Furnaces, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification in explaining its nature, in which—

Figure 1 is a front elevation of a portion of a stove containing my invention. Fig. 2 is a vertical section of a stove further illustrating my invention. Fig. 3 is a plan of the base portion thereof, and Fig. 4 is a plan of the base part with the upper base-plate removed.

This invention has for its object the providing of a stove or furnace with increased radiating-surface by forming in the base a narrow vertical passage extending around its side and back and opening to the outer air at the top and bottom, and also providing the base of the stove with two parallel horizontal flues extending around the ash-pit, between which the said passage may be arranged, if desired, but which may be used for the purpose of increasing the radiating-surface of the stove or furnace without the passage by increasing the size of the base about the ash-pit, as hereinafter described.

In the drawings, A is the casing or outer shell of a stove or furnace. B is the fire-pot. C is the base, in which is formed the narrow vertical passage D, extending entirely through the base and around the sides and back, or either, and which opens to the outer air at the top and bottom. E is the diving-flue of one class of stoves and furnaces, and it connects the combustion-chamber with the horizontal base-flue F, extending around the inner side of the passage D, between it and the ash-pit. This flue surrounds the ends of the said passage, and connects with or enters the outside horizontal base-flue, G, extending around the outer side of the passage D from either end, and uniting beneath the uptake H, which opens therefrom.

By this construction the vertical walls *d d'* of the passage D form the partitions that separate the passage from the flues F and G, and they are both heated by the passage of the products of combustion through the base-flues, thereby radiating the heat into the passage from both sides.

It will be noticed that this construction, in

effect, adds another flue to the base of the ordinary furnace or stove parallel with the ordinary base-flue, and that it so disposes of the heat in its passage through the flue that not only is the large radiating-surface caused by the passage D obtained, but the base is increased in width, thereby increasing its radiating-surface, and portions of the stove not well heated by the base-flue of ordinary construction—namely, the front corners and portions of the hearth—are now heated equally with the remaining parts of the base.

The arrangement of the double flues F and G may be used without the interposed passage D, if desired, in which case there would be but one partition between the two flues.

I am aware that the patent to Treadwell, No. 48,115, describes a stove having a cold-air passage communicating with the combustion-chamber, and that the patent to Vose, No. 150,638, describes a stove having a triangular-shaped chamber above the base, open at the top, into which air is admitted through a horizontal passage; also, that the patent to Noble, No. 225,484, describes a stove having a chamber below the ash-pit, opening at its sides into a vertical passage; but I consider that these patents do not embrace the spirit of my invention.

Having thus fully described my invention, I claim and desire to secure by Letters Patent of the United States—

1. In a stove or furnace, the combination of the parallel base-flues F and G, connected at their front ends and surrounding the ash-pit, as specified, with the diving-flue connecting the combustion-chamber with the base-flue F, and the uptake H, connecting the flue G with the direct flue to the chimney, all substantially as and for the purposes described.

2. In a stove or furnace, the combination of the parallel base-flues F and G, connected at their front ends and surrounding the ash-pit, as specified, the diving-flue connecting the combustion-chamber with the base-flue F, the uptake H, connecting the flue G with the direct flue to the chimney, and the air-passage D between the flues F and G, all substantially as and for the purposes described.

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Witnesses:

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