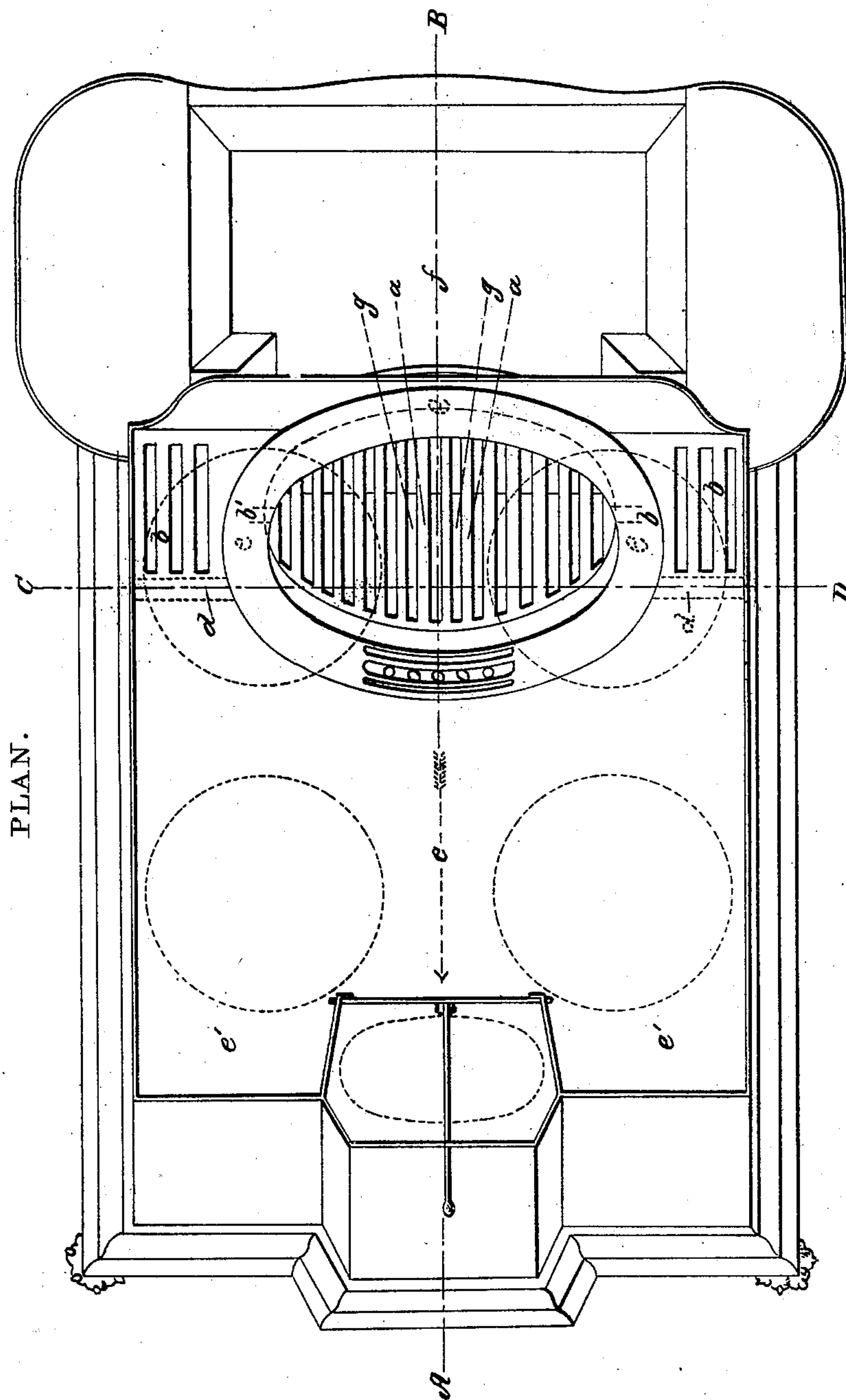


H. J. RUGGLES.
Cooking Stove.

3 Sheets—Sheet 1.

No. 9,436.

Patented Nov. 30, 1852.



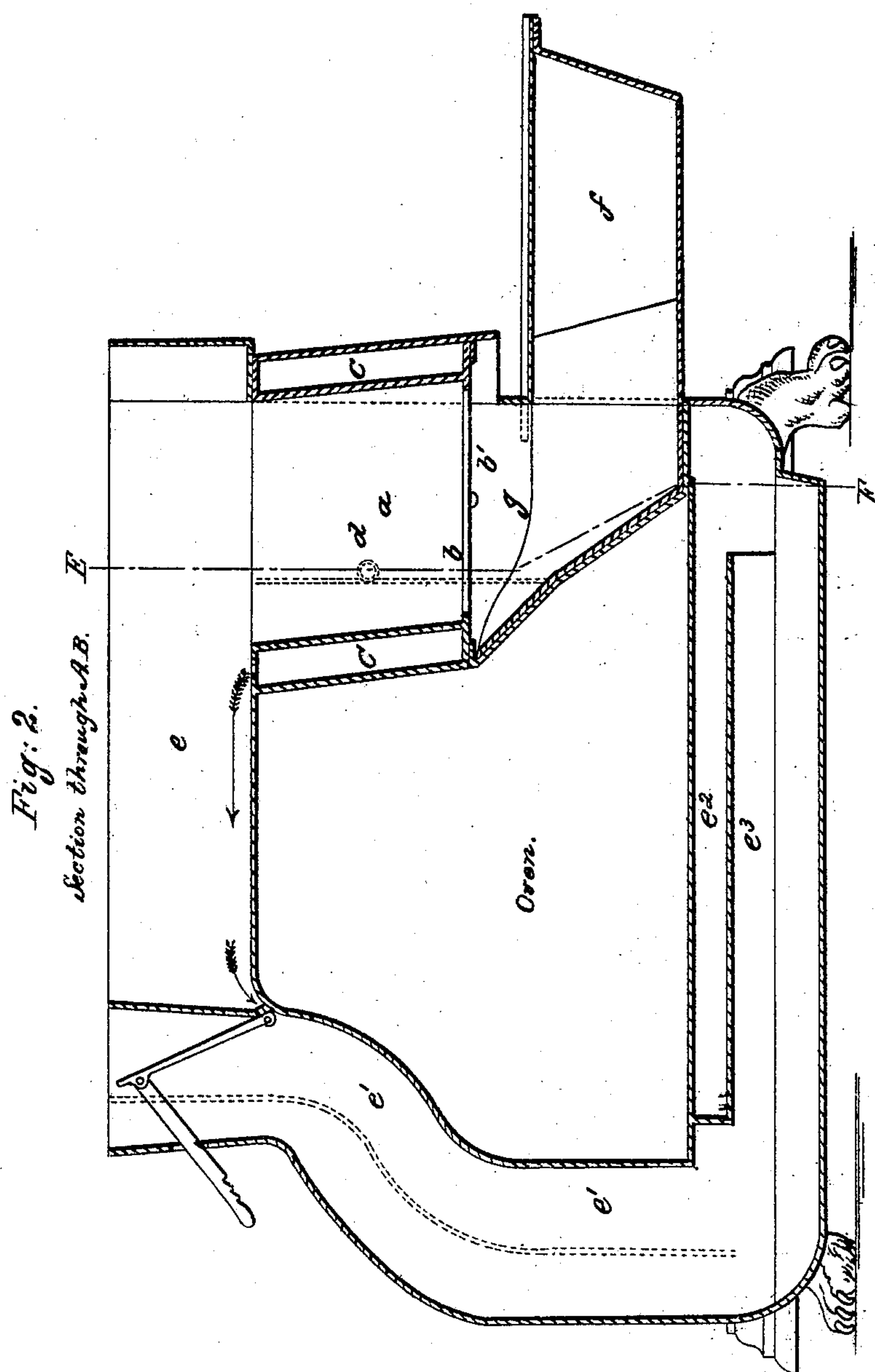
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Cooking Stove.

3 Sheets—Sheet 3.

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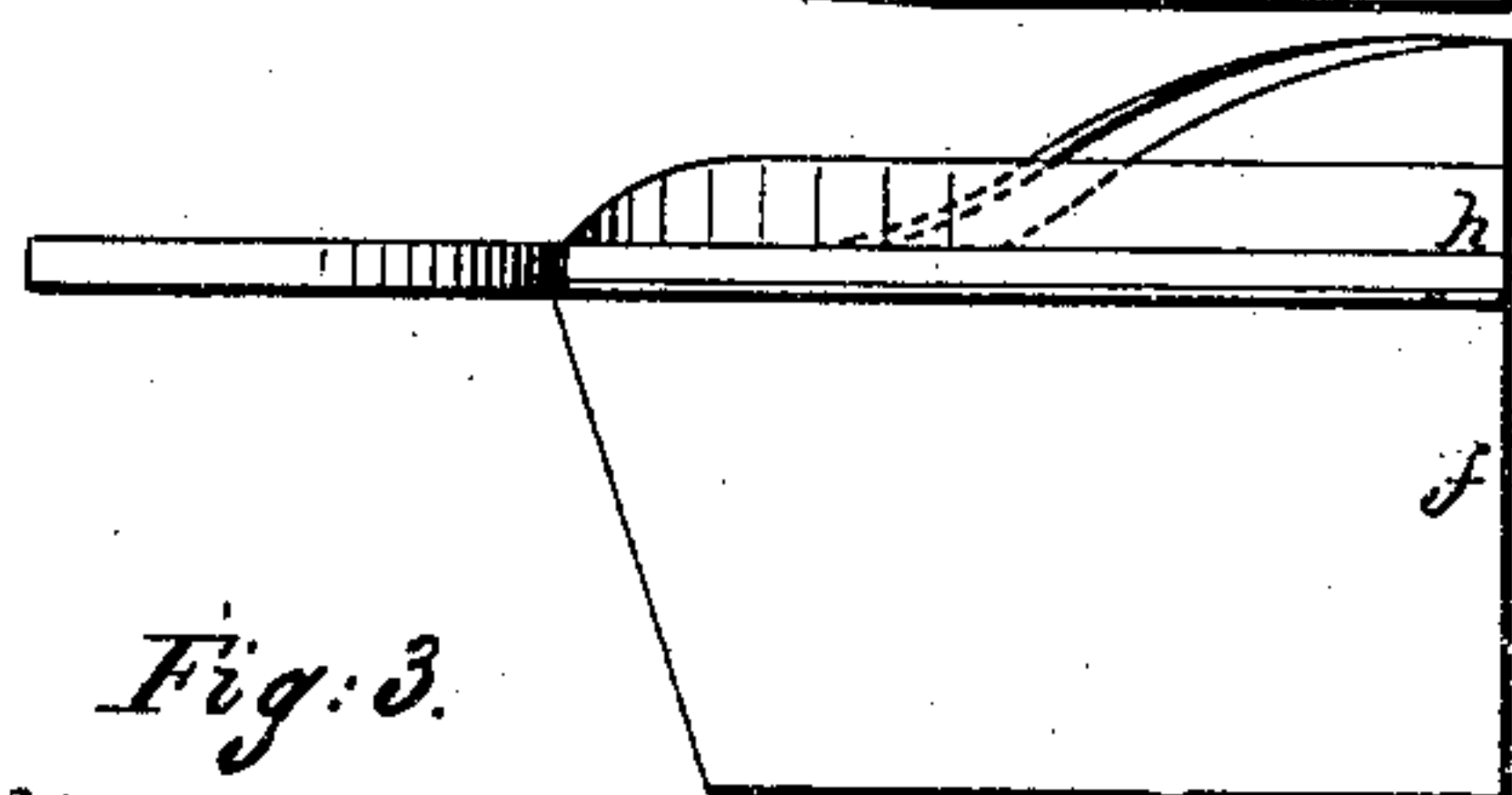
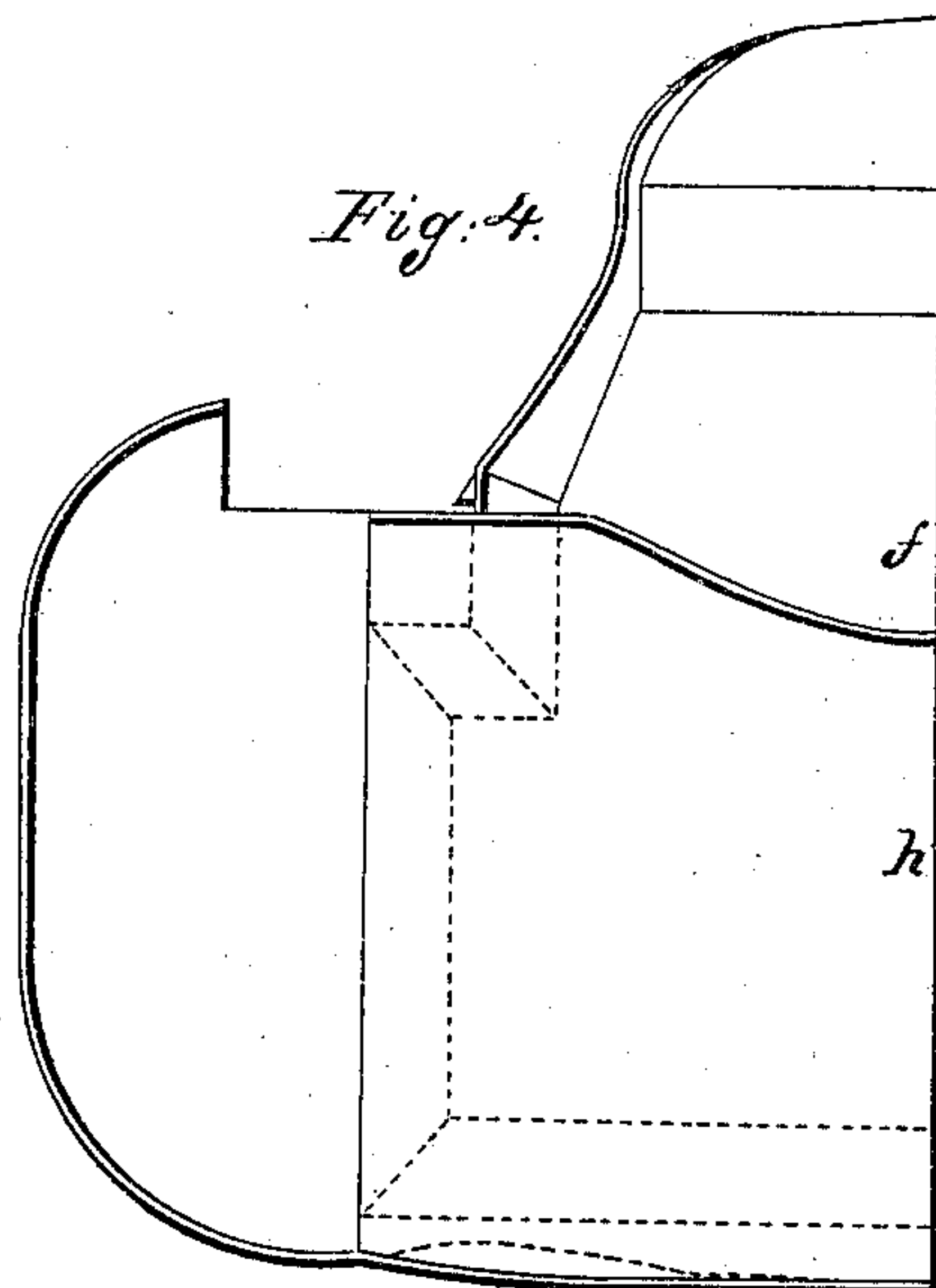
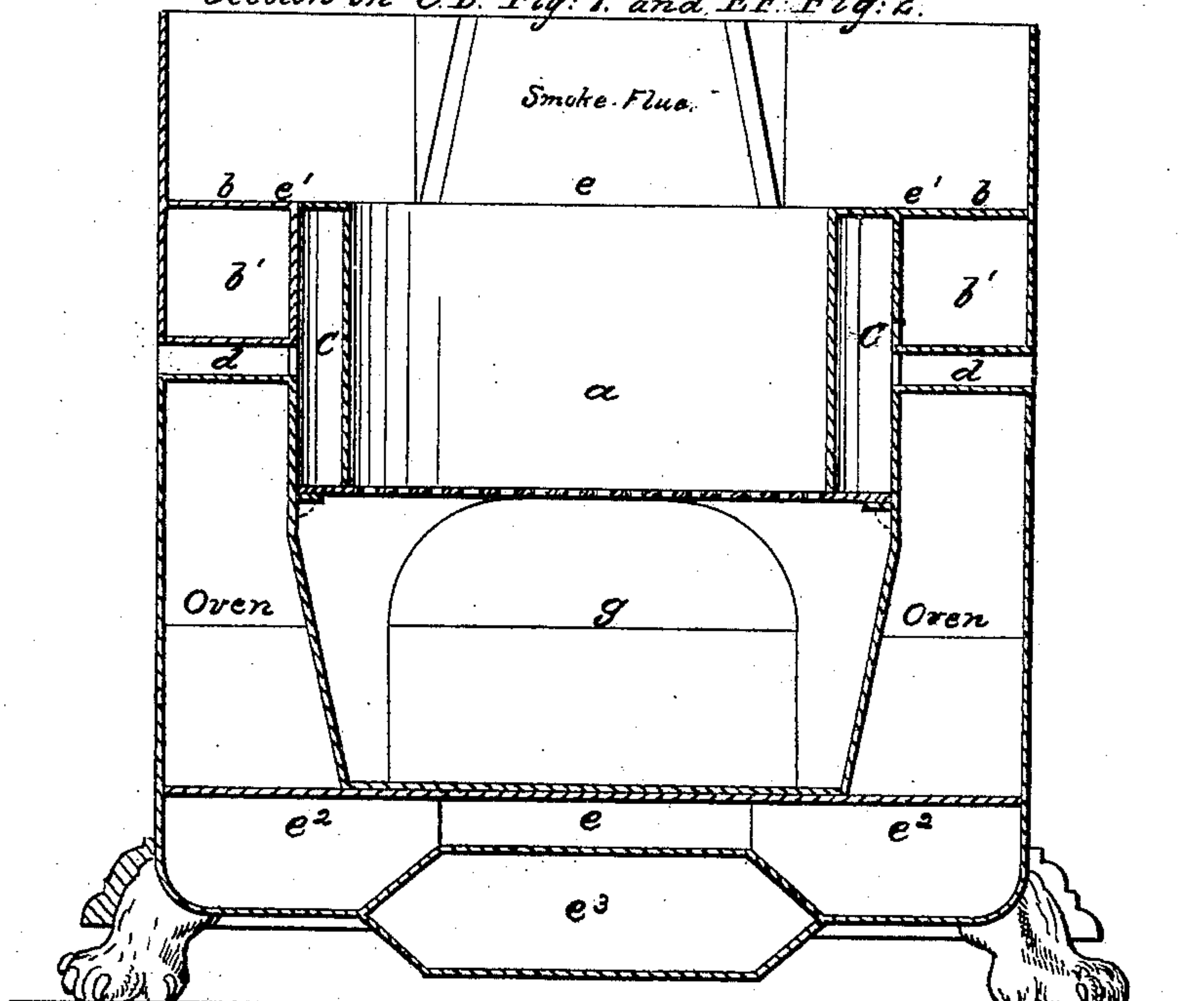


Fig. 3.

Section on C.D. Fig. 1. and E.F. Fig. 2.



UNITED STATES PATENT OFFICE.

H. J. RUGGLES, OF WEST POULTNEY, VERMONT.

COOKING-STOVE.

Specification of Letters Patent No. 9,436, dated November 30, 1852.

To all whom it may concern:

Be it known that I, HENRY J. RUGGLES, of West Poultney, in the county of Rutland and State of Vermont, have invented certain
5 new and useful Improvements in Cooking-Stoves, and that the following is a full, clear, and exact description of the principle or character which distinguishes them from
10 all other things before known and of the usual manner of making, modifying, and using the same.

My improvement consists in enlarging the oven by carrying it out in a curved form under the smoke pipe, and in an air chamber
15 surrounding the fire pot, which air chamber communicates with the external air by pipes, at the sides and at the bottom, with the flue, as about to be described, the flue communicating above and below with said air cham-
20 ber.

In the drawing (a) is the fire chamber, of any form, but I prefer an oval one, as shown in the figure, on either side of this chamber are grated openings (b) at the
25 sides of the fire chamber outside the air chamber above named; that cover descending flues (b') which descend outside the air chamber when they join a lower flue hereafter described and at the back of the fire
30 chamber, between it and the oven, are similar openings into the air chamber; the whole of the fire chamber is surrounded by an air chamber (c), with short pipes (d) leading into it from the outside of the stove; another
35 smoke flue (e) extends back over the oven and under the boiler holes, in the usual way, from the fire chamber to the back of the oven, and thence down the back on either

side of a center flue, in two divisions (e') to the bottom, whence it runs forward in a
40 flue (e²) the whole breadth of the bottom, but with the center much more shallow than the sides, owing to a projection of the bottom upward along the center from back to
45 front, to form a flue (e³), as clearly shown in the cross section Fig. 3. When flue (e²) reaches the forward end of the oven, it opens into the perpendicular descending flues
(b'), that open downward at the front corners of the stove, and there the products
50 of combustion enter the forward end of the center horizontal bottom flue (e³) and pass back and up the back center flue to the smoke pipe.

The ash pan (f) is made to put into a
55 recess (g) under the fire chamber, which is formed for the purpose; this is also connected with the hearth, and draft plate (h). It will be seen from the above that the front and bottom flues uniting under the fire
60 chamber, pass off in common through the center flue; and the air entering passes through the air chamber, after being heated, is caused to enter the direct draft flue above.

Having thus fully described my improved
65 cooking stove, what I claim therein as new, and for which I desire to secure Letters Patent, is—

The combination and arrangement of the front and rear flues e and b' and air cham-
70 ber (c), substantially as herein set forth.

H. J. RUGGLES.

Witnesses:

J. JOSLIN,
H. SHEPARD.