

B. M. ANTHONY.
Heating-Stoves.

No. 151,071.

Patented May 19, 1874.

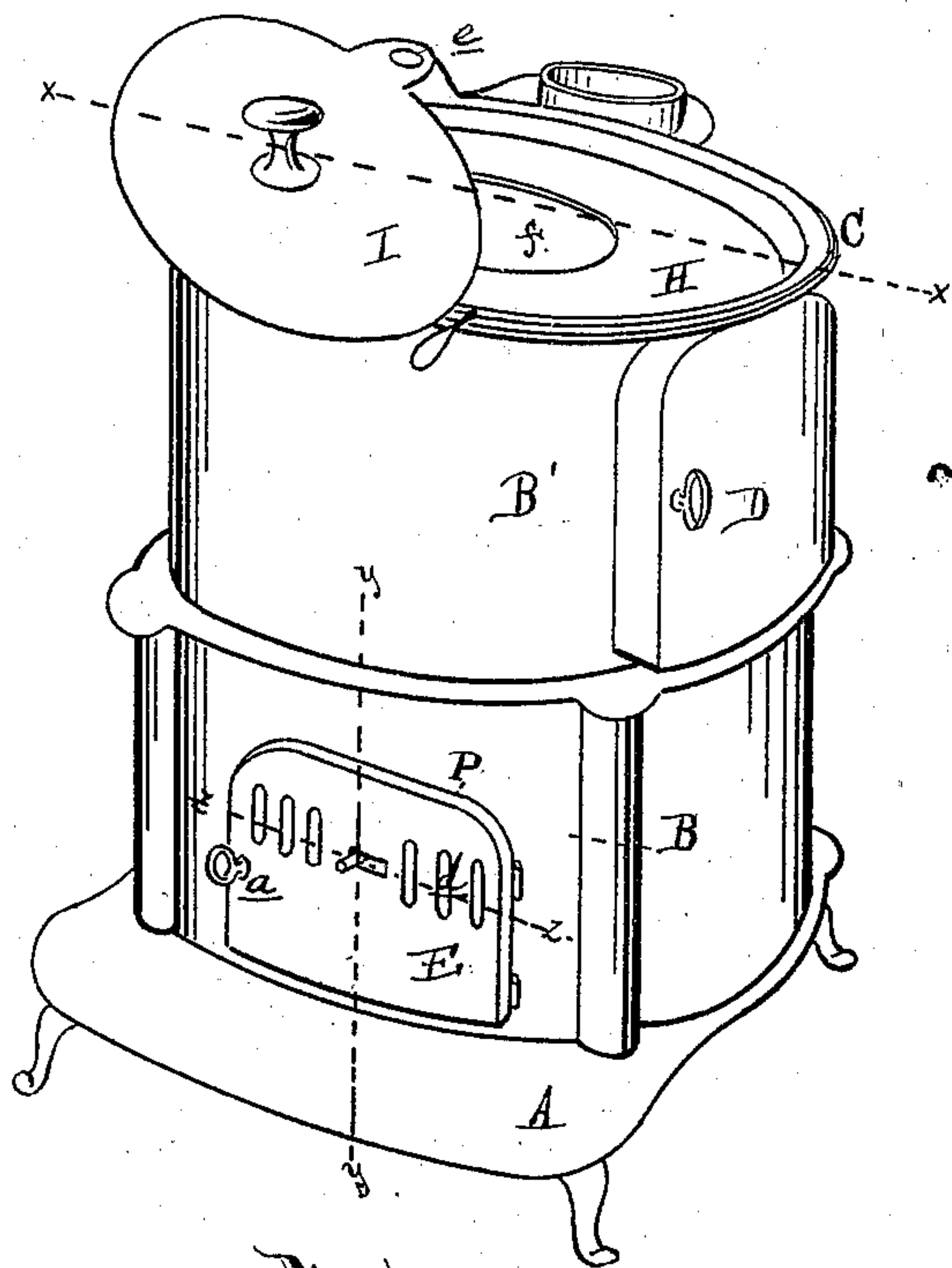


Fig. 1.

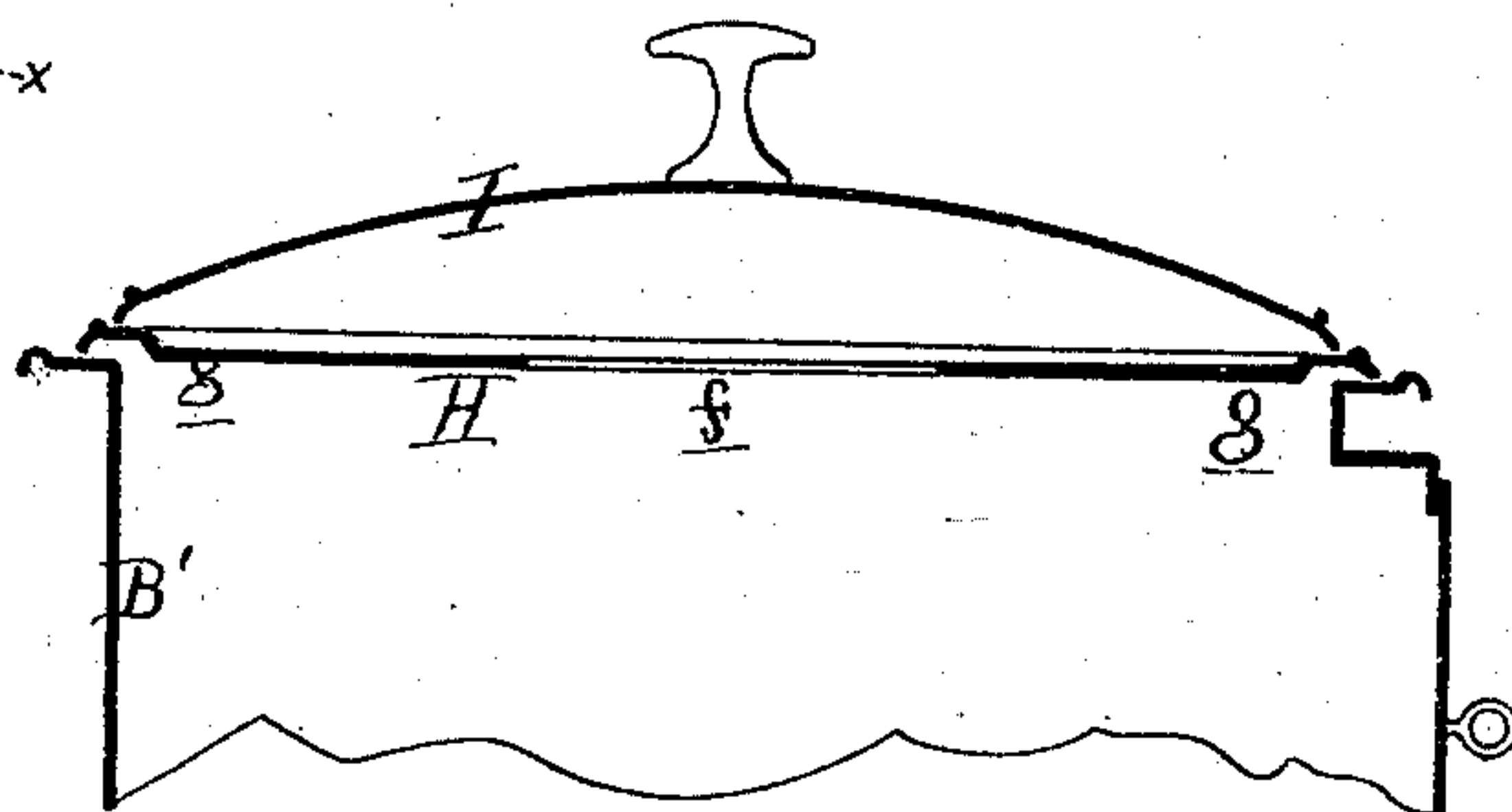


Fig. 2.

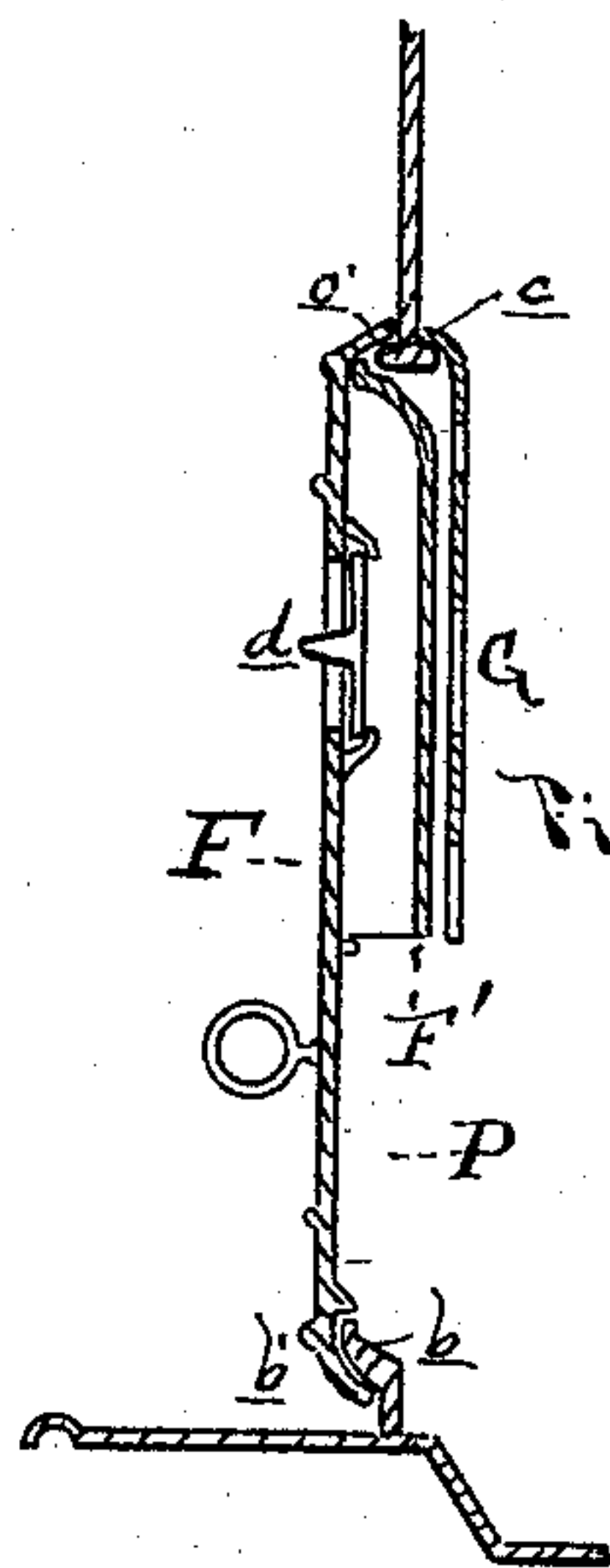


Fig. 3.

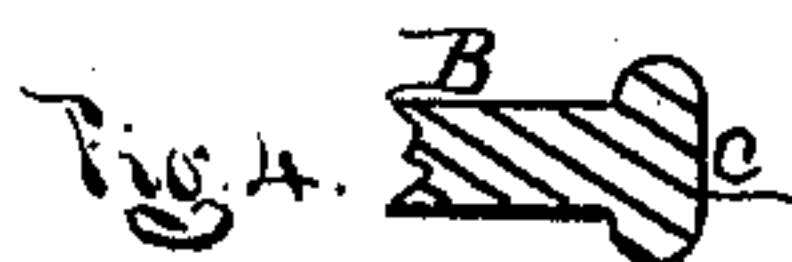


Fig. 4.

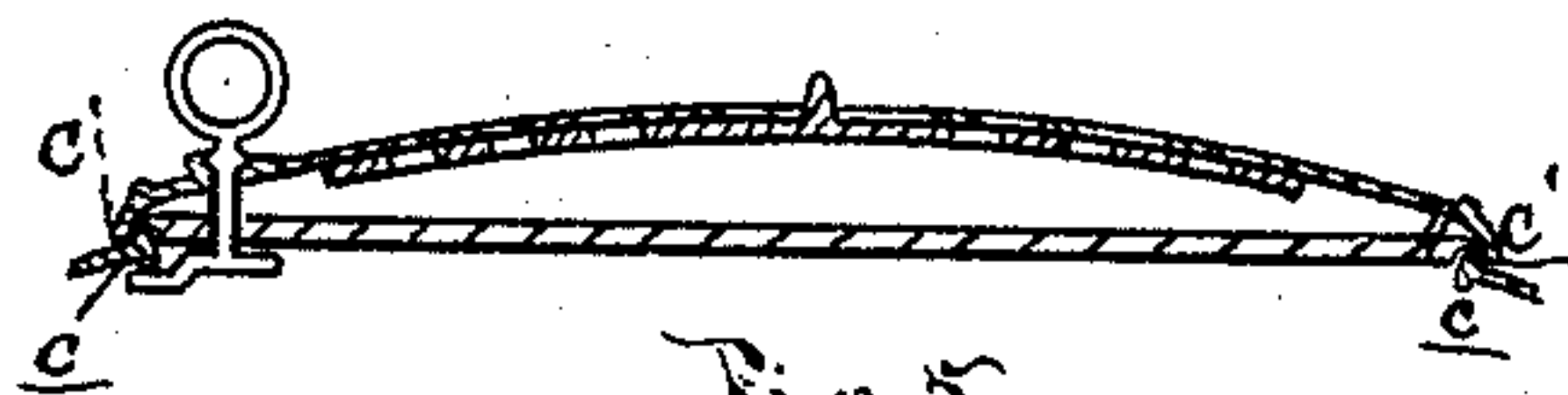
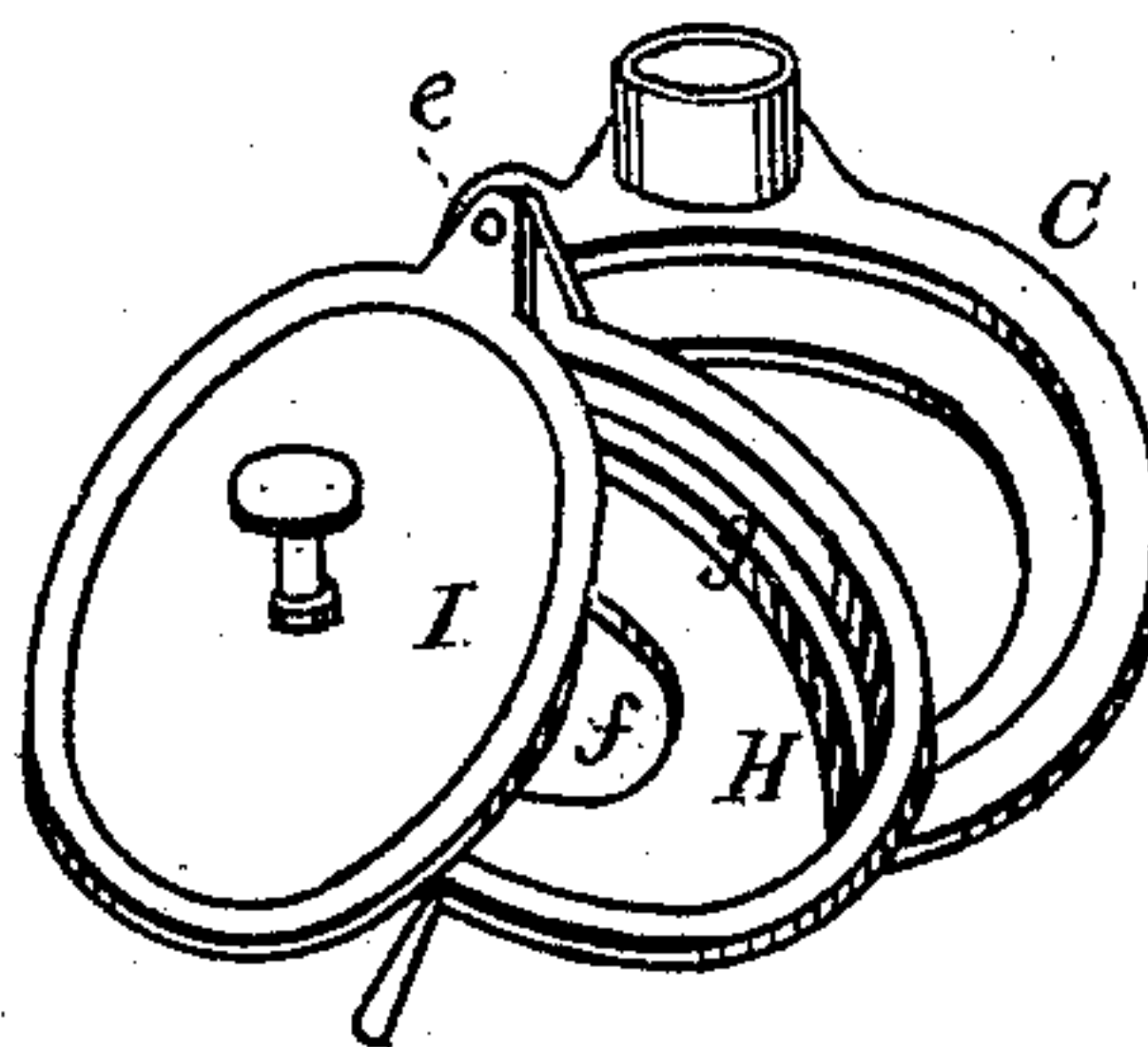


Fig. 5.

ATTEST:

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Fig. 6



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BENJAMIN M. ANTHONY, OF DETROIT, MICHIGAN, ASSIGNOR TO THE
MICHIGAN STOVE COMPANY, OF SAME PLACE.

IMPROVEMENT IN HEATING-STOVES.

Specification forming part of Letters Patent No. 151,071, dated May 19, 1874; application filed
February 24, 1874.

To all whom it may concern:

Be it known that I, BENJAMIN M. ANTHONY, of Detroit, in the county of Wayne and State of Michigan, have invented an Improvement in Heating-Stoves, (Wood,) of which the following is a specification:

The nature of this invention relates to an improvement in that class of heating-stoves known as "cottage-stoves," wherein the lower part of the shell is cast-iron, and the upper part is sheet metal; and has for its object to provide such a stove with a swinging pan-top and cover, and a tight-fitting front door provided with a hot-blast draft, the peculiar construction of the door and frame being such as to make the stove practically air-tight, whereby fire can be kept much longer than in the ordinary stoves of this class.

Figure 1 is a perspective view of the stove with the cover partially swung off. Fig. 2 is a transverse vertical section of the upper part at *x x* in Fig. 1. Fig. 3 is a vertical section of the front plate and door at *y y*. Fig. 5 is a horizontal section of the same at *z z*. Fig. 4 is an enlarged section of the door-frame shown in Fig. 5. Fig. 6 is a perspective view of the top of my stove with the cover and pan-top partially swung off.

In the drawing, A represents the base-plate, on which is mounted the cast-iron combustion-chamber B, surmounted by a Russia-iron shell, B', to which is secured a cast-iron top rim, C. In one end of the shell B' is a door, D, for the introduction of fuel. The front plate of the chamber B has an opening, D, over which is hung an ash-door, E, locked by a heavy and strong turn-buckle, *a*. The bottom edge of the door-opening has a projecting inclined flange, *b*, and a half-round projecting bend, *c*, at the sides and across the top, over which laps a curved flange, *c'*, around the top and side edges of the door. At the bottom of the door is an inclined flange, *b'*, which comes under the flange *b*. When the door is closed and locked by the turn-buckle its flanges *c'* overlap the beads *c*, and the action of the flange *b* is to draw the door down until its flanges are in close contact all around with the said flanges, thus making it practically air-tight. In the upper half of the door E is a well-fitted draft-slide or register, *d*, behind which a pendent plate, F, closed at the top and sides, is secured to the door. The draft entering at the register is thus compelled to

pass down in contact with the heated plate F before entering the combustion-chamber, thus insuring all the advantages claimed for the hot blast in coal cooking-stoves. A guard-plate, G, is secured to the front plate across the opening, to protect the door and keep the fuel in place when the door is opened. The guard-plate may be made in any ornamental pattern of open-work. H is a pan-top, and I a swinging cover, each having a lug in one corner or pivot, and both pivoted by a single bolt, *e*, to a lug on the top rim. The pan-top has a central hole, *f*, in which to place a tea-kettle or other culinary vessel, if desired. The top H, instead of being merely a flat plate, is made with a slight depression or pit, as at *g*, Fig. 2, to sit into the top rim, making a much better fitting joint than a flat plate, which is always liable to warp or buckle from heat, and consequently admit air to the interior of the stove, while in the pan-top expansion is provided for.

The drawing shows the depression standing away from the top rim, in order to distinctly show its construction without confusion or confounding the two; but in practice the sides of the depression fit the opening in said rim-top.

The pan-top opening should have a lid or cover, and, to open the top of the stove for the introduction of a large block of wood, the pan-top and cover C may be swung simultaneously by slightly raising the former so as to free its pit, the pan-top being provided with a handle for that purpose.

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

1. In combination, the front plate B, having the opening P, lined with the circular rod on its top and sides, making an outward and inward flange, the guard-plate G, the door F, resting on and against the flange *b*, the turn-buckle *a*, the damper *d*, and the pendent plate F', all constructed and arranged substantially as herein described and set forth.

2. In combination with the top rim C, the pan-top H and cover I, simultaneously or separately swinging laterally on the common pivot *e*, all constructed and arranged substantially as herein described and set forth.

BENJAMIN M. ANTHONY.

Witnesses:

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