

Cooking Stove.

No. 103,449.

Patented May 24, 1870.

FIG. 1.

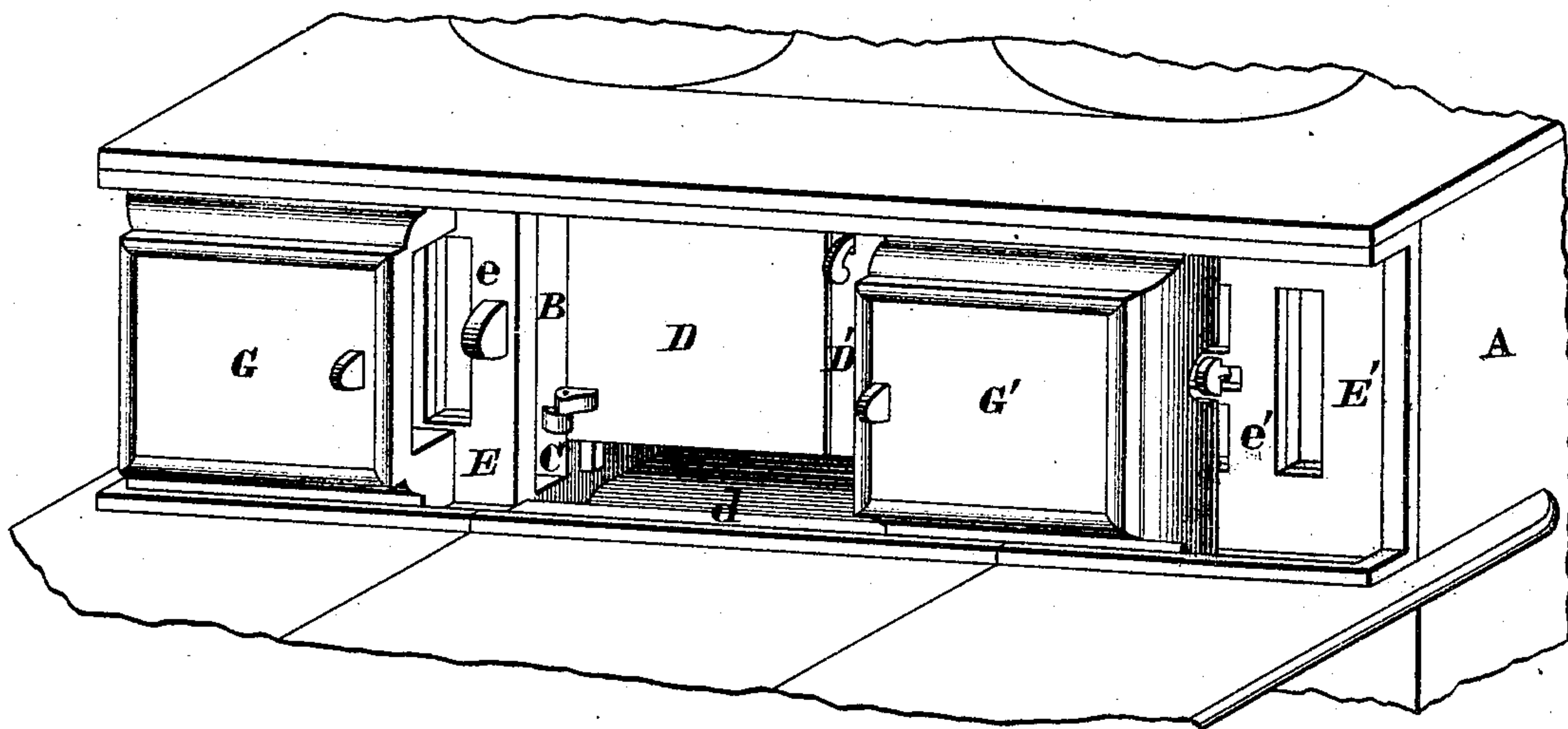


FIG. 2.

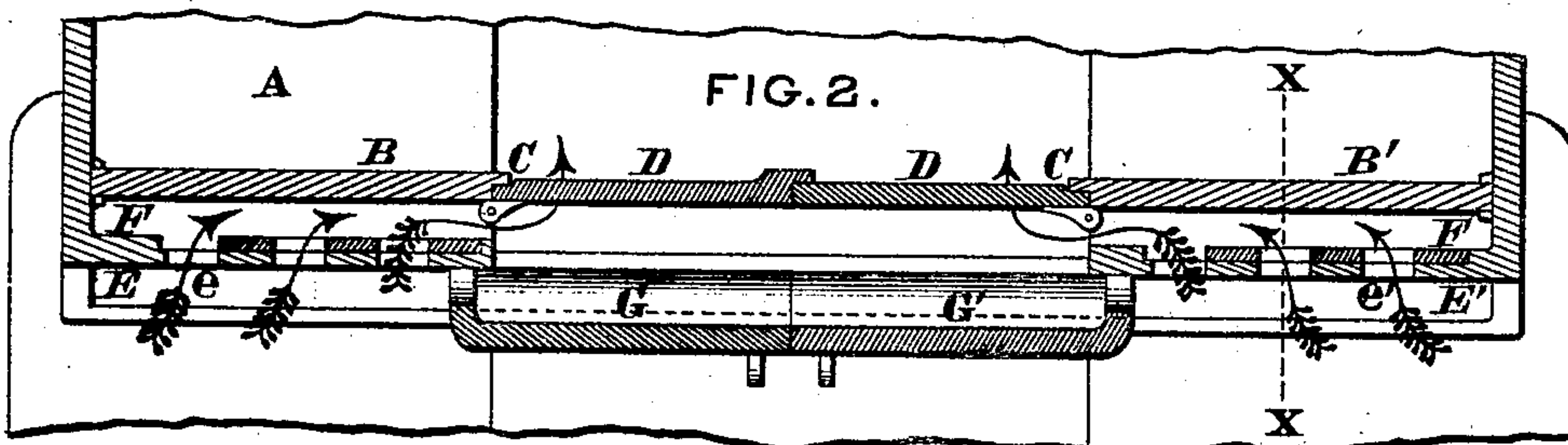


FIG.3.

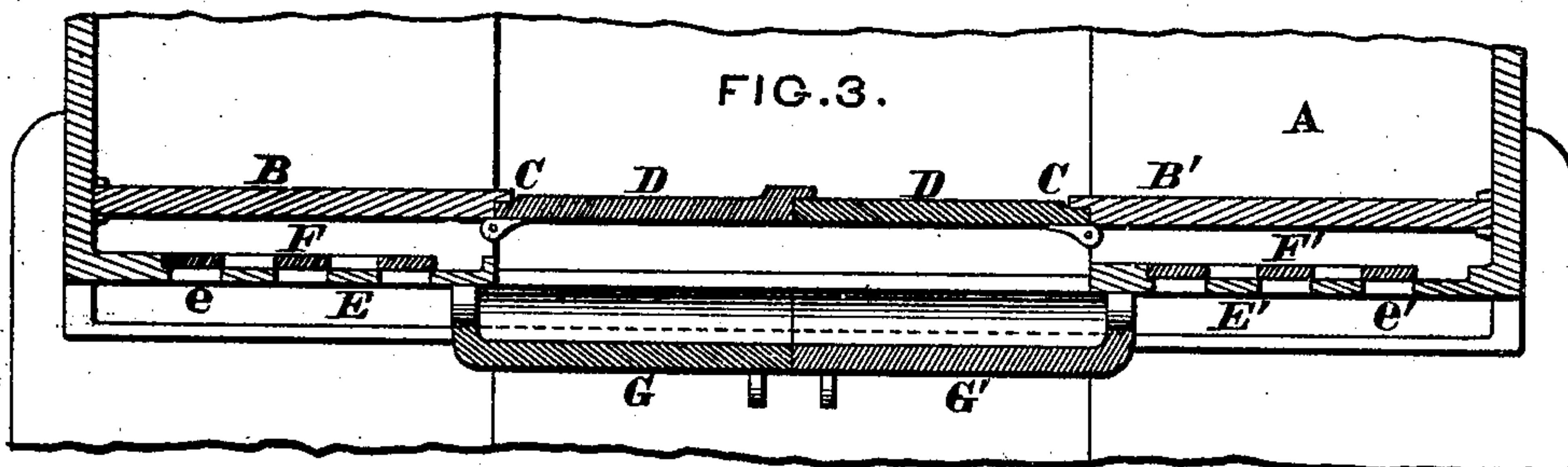
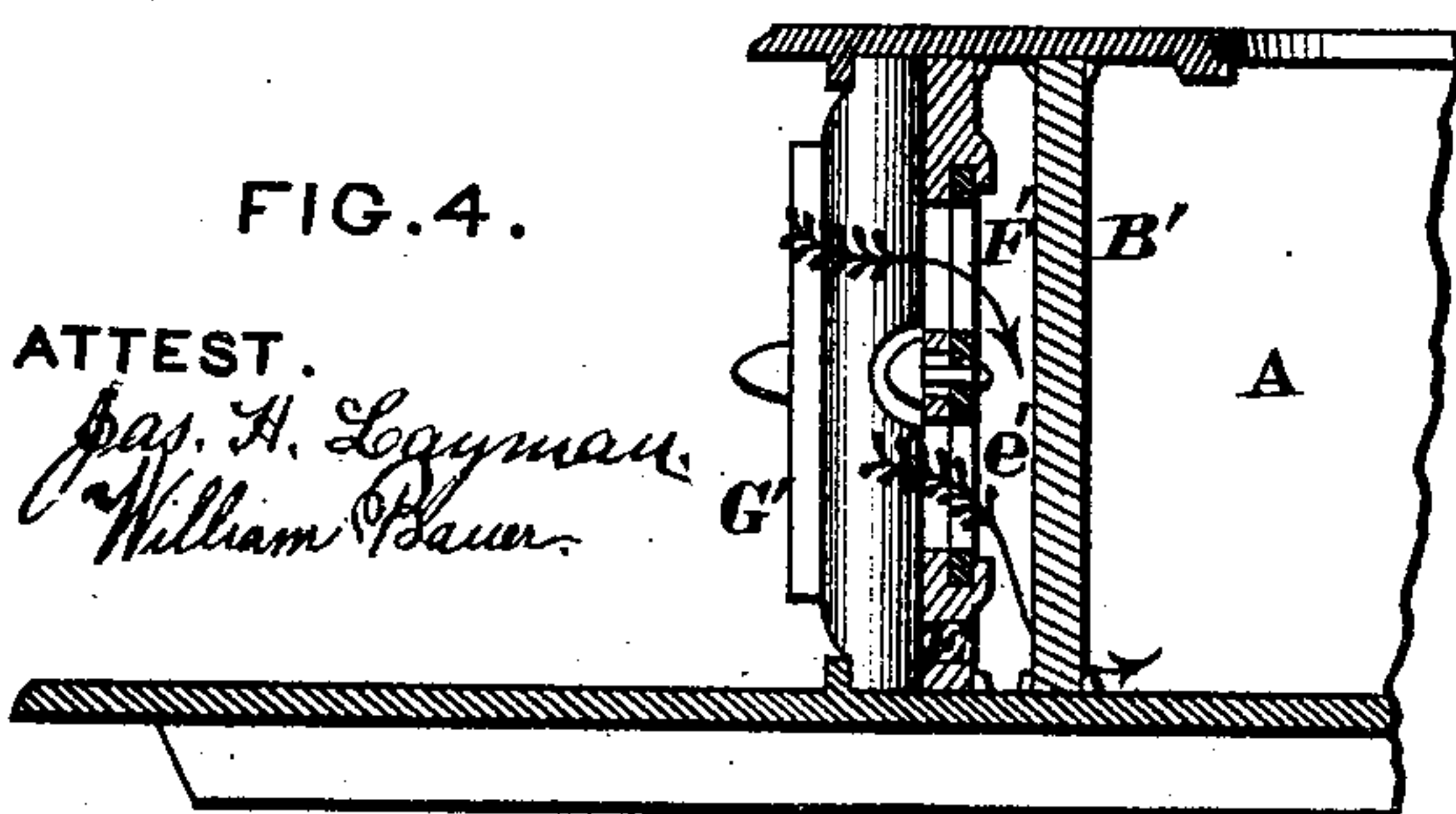


FIG.4.

ATTEST.

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JAMES GREER AND RUFUS J. KING, OF DAYTON, OHIO.

Letters Patent No. 103,449, dated May 24, 1870.

COOKING-STOVE.

The Schedule referred to in these Letters Patent and making part of the same.

We, JAMES GREER and RUFUS J. KING, both of Dayton, Montgomery county, Ohio, have invented a new and useful Improvement in Cook-Stoves, of which the following is a specification.

Nature and Objects of the Invention.

Our invention is designed to enable the heating of the draught-air to a cook-stove, so as to economize heat and increase combustion; and consists essentially of the following devices, to wit: an outer registered plate or shell in front of the fire-front, inclosing a passage or jacket through which, when desired, the draught-air passes to a space between the inner and outer fire-doors, and becomes highly heated before entering the fire-chamber, which it does underneath the inner fire-doors.

General Description with Reference to the Drawings.

Figure 1 is a perspective view of the front part of a cook-stove, embodying our invention.

Figure 2 is a horizontal section of the fire-front, with the registers open.

Figure 3 is a similar section, with the registers closed.

Figure 4 is a vertical section at the line *x x*.

A represents the fire-chamber of a cook-stove.

B B' its front walls.

C, its front opening, closed by a pair of imperforate doors D D', between whose lower edges and the hearth-bottom a space, *d*, is left for the entrance of the draught-air.

Placed a short distance in front of the walls B B' are plates E E', constituting a false front, and forming, with said walls B B' and with the inner and outer fire-doors, an inclosure or jacket, F F', which, besides preventing the escape of heat from the fire-chamber into the room, serves as a passage in which the draught-air becomes preheated on its way to the fire, so as to stimulate combustion and to avoid cooling the oven by the contact of cold air.

The plates E E' have registered openings *e e'*, which, when open, permit the entrance of draught-air, and,

when closed, stop the passage of air, and, when the outside doors are also closed, convert the jacket F F' into a warm-air chamber, which conserves the heat of the fire-chamber, and at the same time prevents a too rapid consumption of fuel therein.

Outside, and some distance in front of the doors D D', are outer doors G G', which, when closed in front of the doors D D', as in figs. 2 and 3, convert the entire front into a draught-passage or warm-air jacket, according to whether the registers are opened or closed.

When it is not desired to use the passages F, the outer doors G G' may be thrown open, so as to permit the draught-air to pass directly into the stove. All of our fire-doors are plain or imperforate.

Although preferring two inner and two outer doors, the former hinged and the latter sliding, as shown, yet it is evident a single inner door or fender and a single outer door or fender might be employed, and said doors might be either slidable or be hung on hinges, as preferred.

The draught-passages F F' might, if desired, receive air wholly or partly through apertures in the jambs.

Claims.

We claim as new and of our invention—

1. The draught-passage flue or jacket F F', formed by the perforate and registered plates E E', arranged on the outside of the fire-front of a cook-stove, substantially as and for the purpose set forth.

2. The imperforate inner fire-front B B' and outer perforate and registered plates E E', in the described combination, with the inner and outer sets of imperforate fire-doors D D' and G G', for the purposes set forth.

In testimony of which invention we hereunto set our hands.

JAMES GREER.
RUFUS J. KING.

Witnesses:

GEO. H. KNIGHT,
FRANK L. ALLEN.