

S. MUSSER.  
FIRE-PLACE HEATER.

No. 176,670.

Patented April 25, 1876.

Fig. 1.

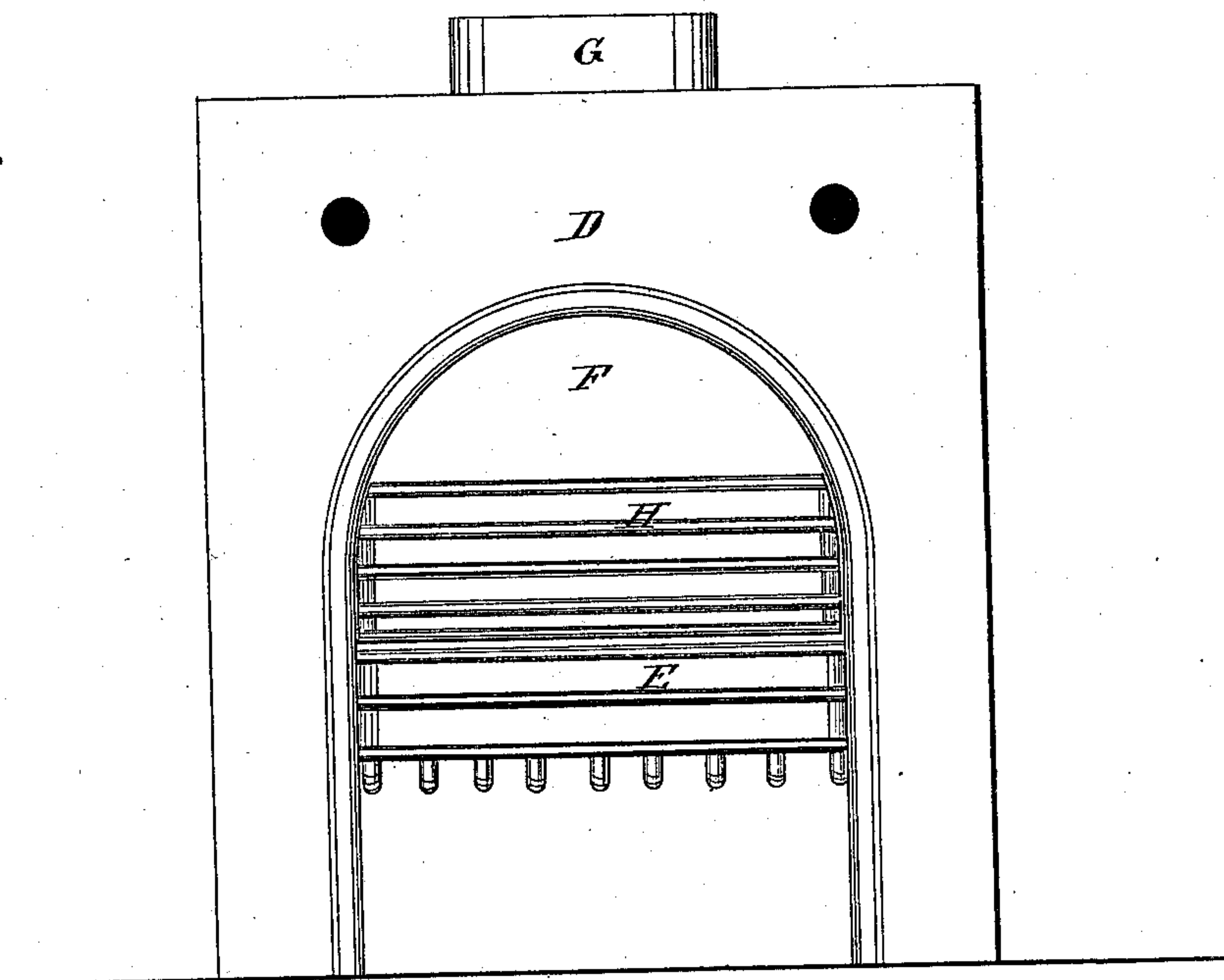


Fig. 2.

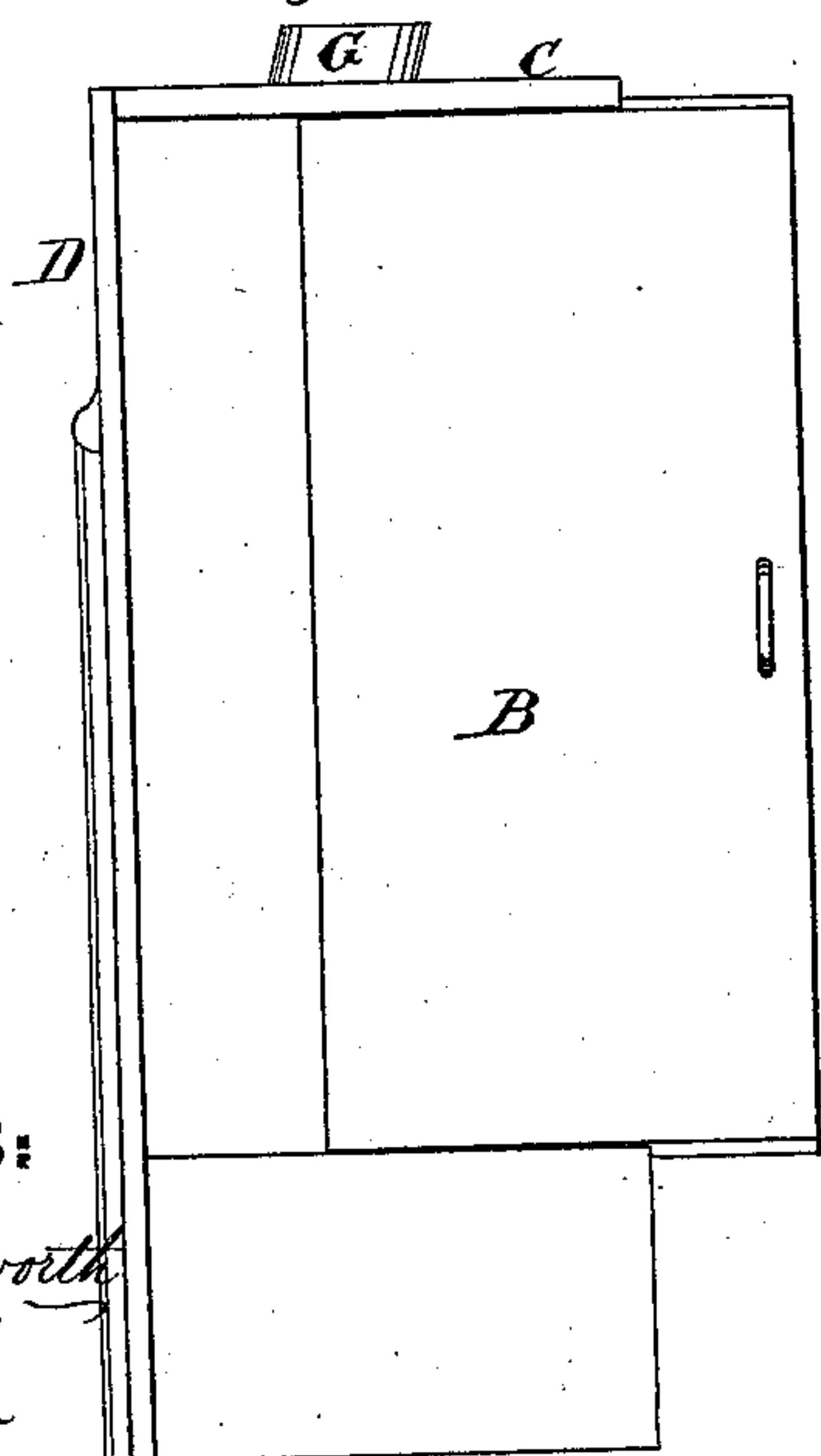
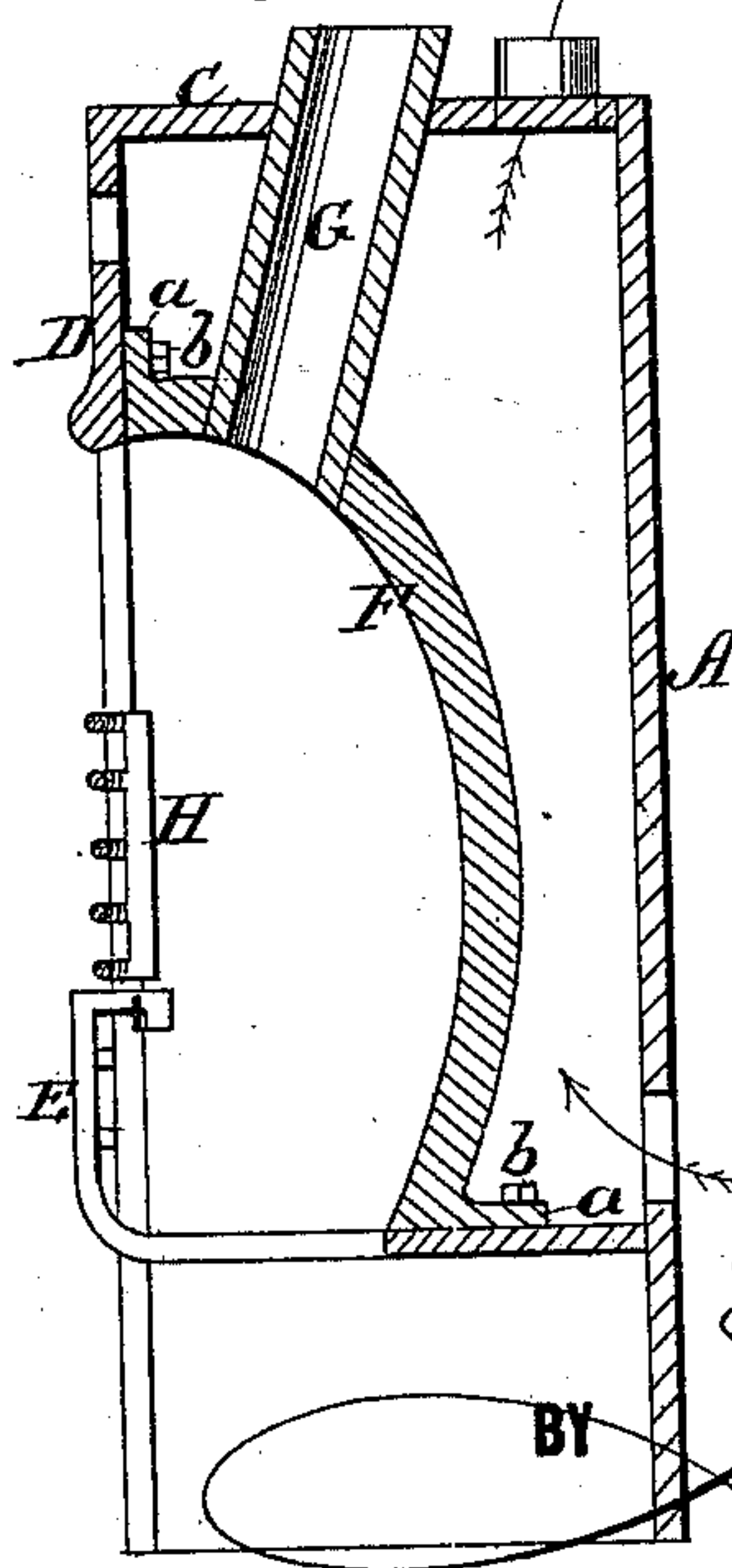


Fig. 3.



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# UNITED STATES PATENT OFFICE.

SAMUEL MUSSER, OF BEAVER FALLS, PENNSYLVANIA.

## IMPROVEMENT IN FIRE-PLACE HEATERS.

Specification forming part of Letters Patent No. **176,670**, dated April 25, 1876; application filed January 25, 1876.

*To all whom it may concern :*

Be it known that I, SAMUEL MUSSER, of Beaver Falls, in the county of Beaver and State of Pennsylvania, have invented a new and Improved Fire-Place Heater; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, forming a part of this specification, in which—

Figure 1 is a front elevation; Fig. 2, an end elevation; Fig. 3, a vertical section.

This invention relates to certain improvements in that class of fire-place heaters which have a hot-air chamber in the rear, which is employed in connection with a flue and registers for heating the upper rooms of a building. The invention consists in the particular construction and arrangement of parts, as hereinafter more fully described.

In the drawing, A represents the back, B the side, and C the top plate forming the air-chamber in the rear of the grate. D is the front plate, having an arched opening, E, the grate fastened therein by suitable means; and F, the fire-back or plate forming the rear of the fire-pot. Said fire-back is made of a half-oval shape, and is provided at the top and bottom with flanges *a*, through which pass screws *b*, that serve to attach the back F to the front and bottom of the outer containing-case. Connected with the fire-back F near the front is arranged a pipe, G, leading from the fire-chamber through the air-chamber to the chimney or pipe connection. The back plate A has, near its bottom, one or more holes, to admit of the access of fresh air to the heating-chamber, and the top plate C is provided with one or more similar holes for the escape of the heated air. These holes are designed to connect with hot-air flues, with registers leading to such of the upper rooms as require to be heated. This arrangement of the air-chamber in the rear of the grate, it will be seen, effects a great economy of fuel, for while all the benefits of the fire-place are available below for heating the room, the same fire is made to heat the upper stories.

In constructing the fire-place as thus described, I do not confine myself to any particular material, and may use either metallic plates, burnt clay, or a combination of metal with burnt clay or bricks, as may be desirable. When made of metal and finished upon all sides, I may employ the fire-place as a stove, and place it in the room away from the chimney.

One of the sides B is made to slide, so as to give access to the interior of the air-chamber, and when used as a stove, away from the chimney, the slide may be opened or closed as desired, and the air-chamber employed for holding dishes of food to keep the same warm, and still not be exposed to view.

H is a supplemental grate, which is adapted to and intended to be placed above the stationary grate whenever desired. It is held in this position by hooks, lugs, or any other suitable means, and serves the purpose of increasing the holding capacity of the grate for very cold weather, but more particularly for night service, the supplemental grate preventing the coals from rolling out upon the floor when a fresh supply is fed to the fire for the purpose of keeping up the same all night.

I am aware of the fact that it is not new to employ a hot-air chamber in the rear of the fire-pot, and therefore only claim the particular construction shown and described.

Having thus described my invention, what I claim as new is—

The rectangular outer case, consisting of plates A, C, and D, in combination with the oval fire-back plate F, having flanges *a* fastened to the front and bottom plate by screws *b*, and the smoke pipe G, passing through the heating-chamber, and connected with the top plate and the fire-back, the whole being so arranged as to be used either as a fire-place heater or a stove, as described.

SAMUEL MUSSER.

Witnesses:

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