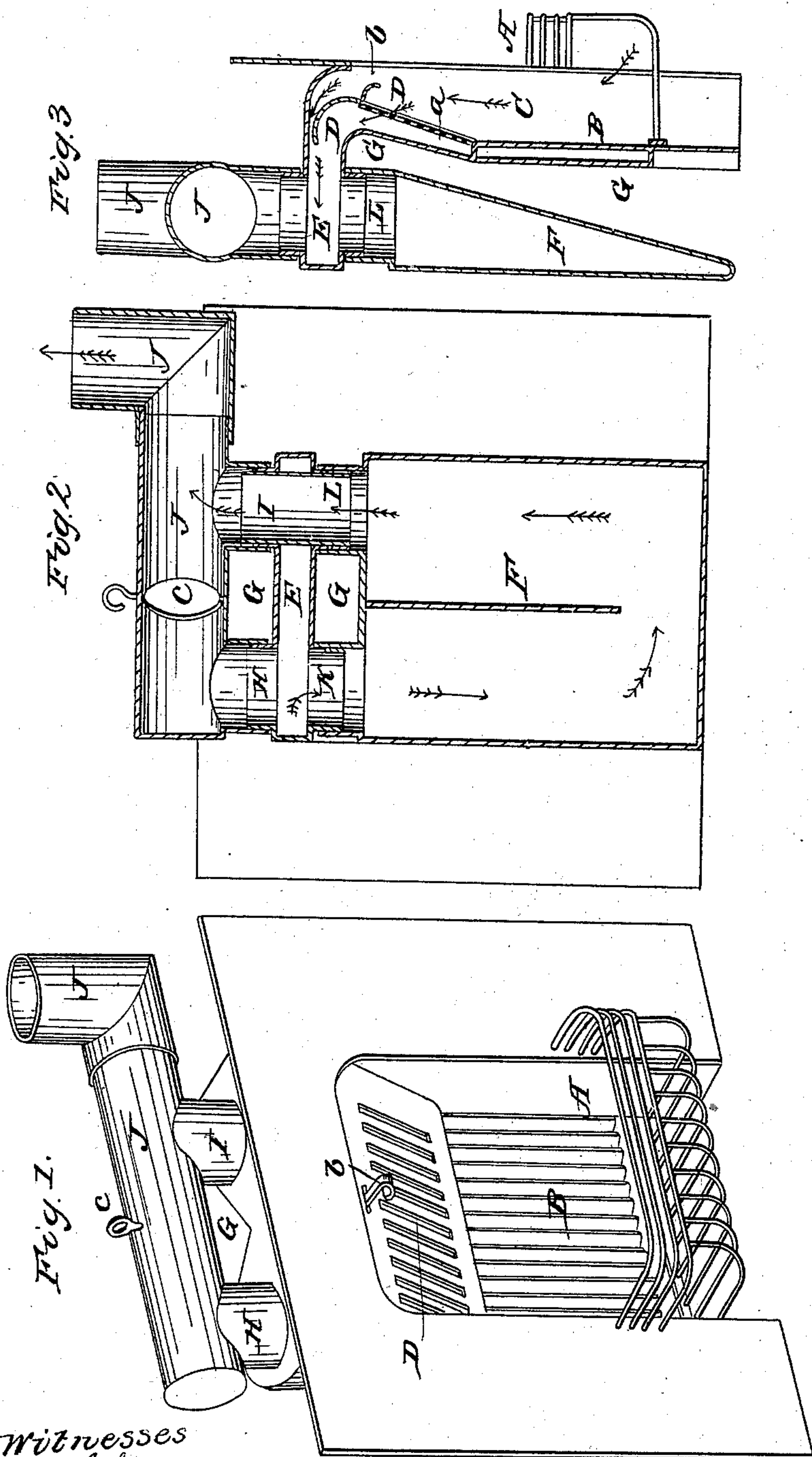


F. L. HEDENBERG.

Fireplace Heater.

No. 32,364.

Patented May 21, 1861.



Witnesses
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UNITED STATES PATENT OFFICE.

F. L. HEDENBERG, OF NEW YORK, N. Y.

FIREPLACE-HEATER.

Specification of Letters Patent No. 32,364, dated May 21, 1861.

To all whom it may concern:

Be it known that I, F. L. HEDENBERG, of the city, county, and State of New York, have invented certain new and useful Improvements in Fireplace-Heaters, to be used in connection with the ordinary parlor or basement grate, for warming the apartment or apartments above, while retaining the open grate below; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1, represents a perspective view of the grate and a portion of the heating apparatus. Fig. 2, represents a vertical section taken longitudinally through the heating apparatus behind the grate. Fig. 3, represents a vertical transverse section through the grate and heater behind it.

Similar letters of reference where they occur refer to like parts of the apparatus in all the figures.

The object of my invention is to preserve the usual agreeable open grate, and to connect with it, or so construct it, as make a heating apparatus behind it, for heating air and transmitting it to a room or rooms above for warming them.

To enable others skilled in the art to make and use my invention, I will proceed to describe the same with reference to the drawings.

A, represents the usual open grate.

The back plate B, may be corrugated or plain, and the jambs C, united thereto by screws or otherwise, so as to adapt the contrivance to grate fronts of various sizes, as the jambs may be put on at any point to the back plate. And the back plate may have a fire proof lining if preferred, the contrivance being applicable to, or used in connection with any of the ordinary well known grates in common use.

D, is the draft plate, which projects forward over the grate, and then curves backward into the extension flue E, as shown in Fig. 3. This draft plate is made with openings through it, and behind it is another sliding plate *a* with openings also through it, and which may be slid by means of a

handle *b*, to cause it to act as a regulator, and allow the gases &c., to pass directly through said draft plate, to the flue E, or compel them to pass up and over the top of said flue or draft plate as shown in Fig. 3. Underneath the extension flue E, and behind the grate, there is a wedge-shaped drum F, and between said drum, and the back plate of the grate, there is an air chamber G, the air being admitted thereto, at the bottom, and rising it is heated by the drum and plates and flues with which it comes in contact, and may thence be conveyed to an upper room or rooms, in any of the usual well known ways.

From the rear end of the extension flue E, rise two flue pipes H, I, which communicate with a flue, and exit pipe J, furnished with a damper *c*, by which the escaping heat and gases may be forced to pass down into and through the drum F, instead of immediately to the exit flue. And from the rear end of this extension flue E, two pipes K, L, connect it with the drum F, so as to turn the gases &c. down into the drum before they pass off finally at the exit flue or pipe.

It will be perceived that, though the grate takes up much of the room ordinarily found in a modern fire place, I still by my construction find sufficient room to place my drum, and leave considerable air space between it, and the back plate of the grate, and also have considerable heating surface at the top and bottom of the extension flue, and around the flue pipes and passages, and thus by what would be otherwise lost heat, I am able to warm one or two rooms overhead.

Having thus fully described my invention what I claim is—

The open grate, the draft plate, the extension flue, the drum, and air space between it, and the back plate, and the connecting passages, when arranged and operating together, substantially as herein described, and for the purpose set forth.

F. L. HEDENBERG.

Witnesses:

GEO. A. DUNBAR,
GEO. KELLOCK.