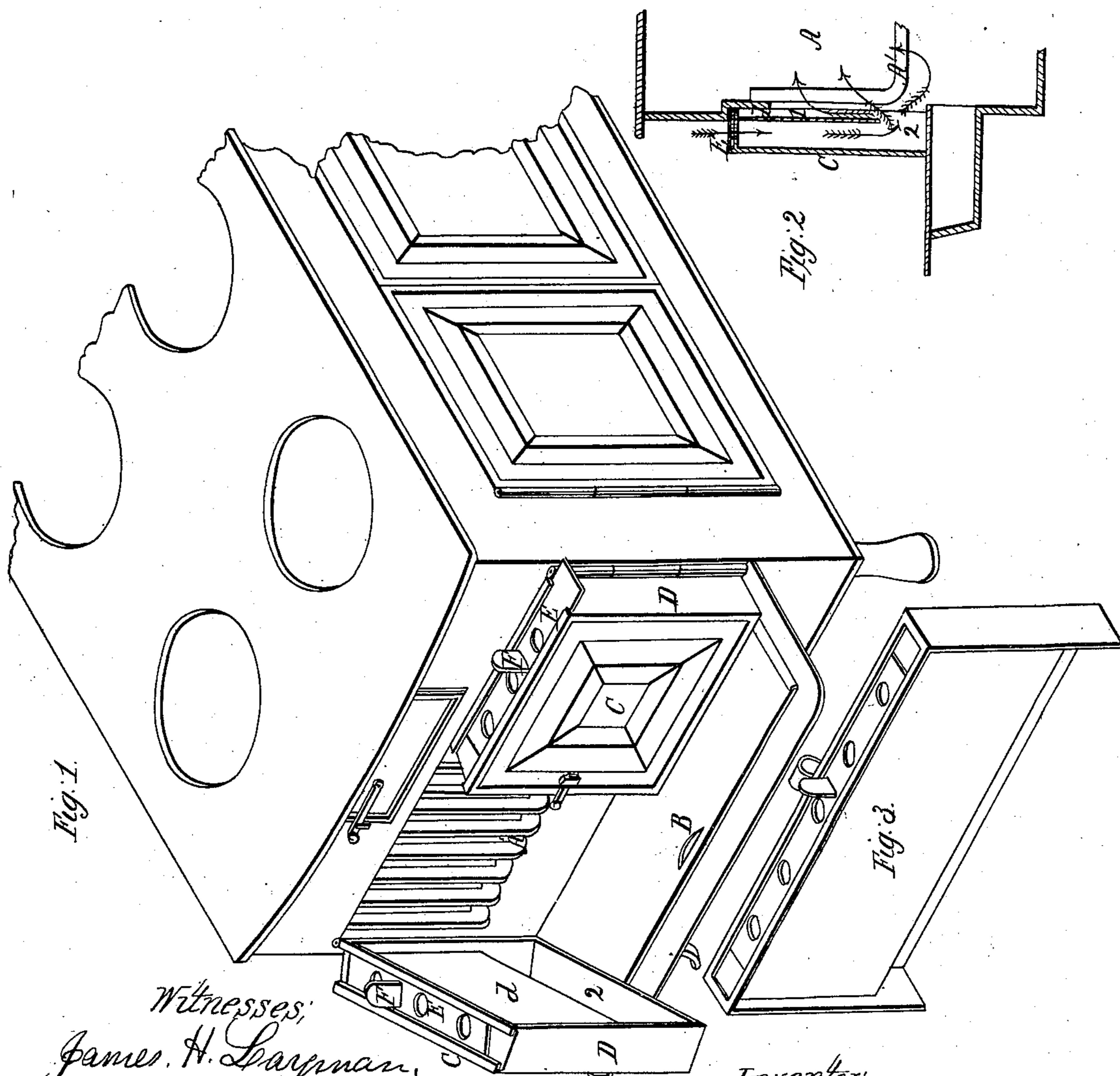


Fares & Miller,

Stove Door.

No. 42,935.

Patented May 31, 1864.



Witnesses;
James H. Layman,
Charles L. Fisher.

Inventor;
S. Fares
W. Miller
for Knight Bros
attys

UNITED STATES PATENT OFFICE.

SEBASTIAN FARES AND WILLIAM MILLER, OF CINCINNATI, OHIO.

IMPROVEMENT IN COOKING-STOVES.

Specification forming part of Letters Patent No. 42,935, dated May 31, 1864.

To all whom it may concern:

Be it known that we, SEBASTIAN FARES and WILLIAM MILLER, both of Cincinnati, Hamilton county, Ohio, have invented a new and useful Improvement in Fire-Doors of Cooking-Stoves; and we do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification.

Our invention relates to a form of door or blower for the fire-front of a cooking-stove, which combines the several advantages of economizing the heat and fuel in the stove, increasing the draft, assisting combustion, avoiding the undue heating of the apartment, and preserving the said doors or blowers from burning out.

Figure 1 represents the front part of a stove embodying our improvement. Fig. 2 is a longitudinal section of the same. Fig. 3 shows a modification of our invention.

A represents the fire-place of a cooking-stove, A' being the grate. B is a sliding hearth-plate.

The fire-doors C D have each one an inner plate or box, D, whose side *d* next to the grate is so disposed as to leave a passage, 1, between the box D and the front bars of the grate A', for the ascent and entrance at all parts of the grate-front, of the draft which has passed down through the box D. The box D receives fresh air at top through apertures E, regulated by means of a register, F. The side *d* of the box D terminates somewhat short of the level of the door-bottom, so as to permit the now heated draft-air to flow into a space, 2, whence it may enter the fire-chamber A at all parts of the front and bottom of the grate.

We have described our improvement in connection with a grated cooking-stove adapted for burning stone-coal, that being the class of stoves for which it is particularly designed; but our improvement is not necessarily re-

stricted to coal cooking-stoves alone, the invention being manifestly applicable to every form of cooking-stove.

A modification of our invention may consist of a single detachable door or blower, Fig. 3 having the precise construction of the fire-door C D, except in not being suspended by hinges to the stove front.

Operation: The fire being kindled, the hearth B being drawn back and the fire-doors C D C D being closed, and the register F being opened, the cool exterior air will pass down the boxed interiors D D of the fire-doors, so as to keep said doors cool, which on their part so heat the said air as to assist combustion and prevent the entrance of cool air into the flues. The space 1 between the boxes D D and the grate-front permits a current of the entering air to pass up between said boxes and the fire, so as to afford a sufficient ingress for the draft at various parts of the grate, even although a portion thereof may become choked with ashes, and so as to preserve the said boxes from becoming burned out.

We are aware that fire-doors of cooking-stoves have before been so constructed that the air to support combustion will pass through them. This, therefore, we do not broadly claim; but,

Having thus described our invention, what we claim as new therein, and desire to secure by Letters Patent, is—

The combination of the box-door C D with a register, E F, at top thereof, and partition *d*, the latter being set at some distance from the back of the door or front of the grate, and all being constructed and arranged as described.

In testimony of which invention we hereunto set our hands.

S. FARES.
WM. MILLER.

Witnesses:
GEO. H. KNIGHT,
JAMES H. LAYMAN.