JOHN F. MERRILL.

Magazine Fire-Place Stove.

No. 127,500. Patented June 4, 1872.

Fig: 1.

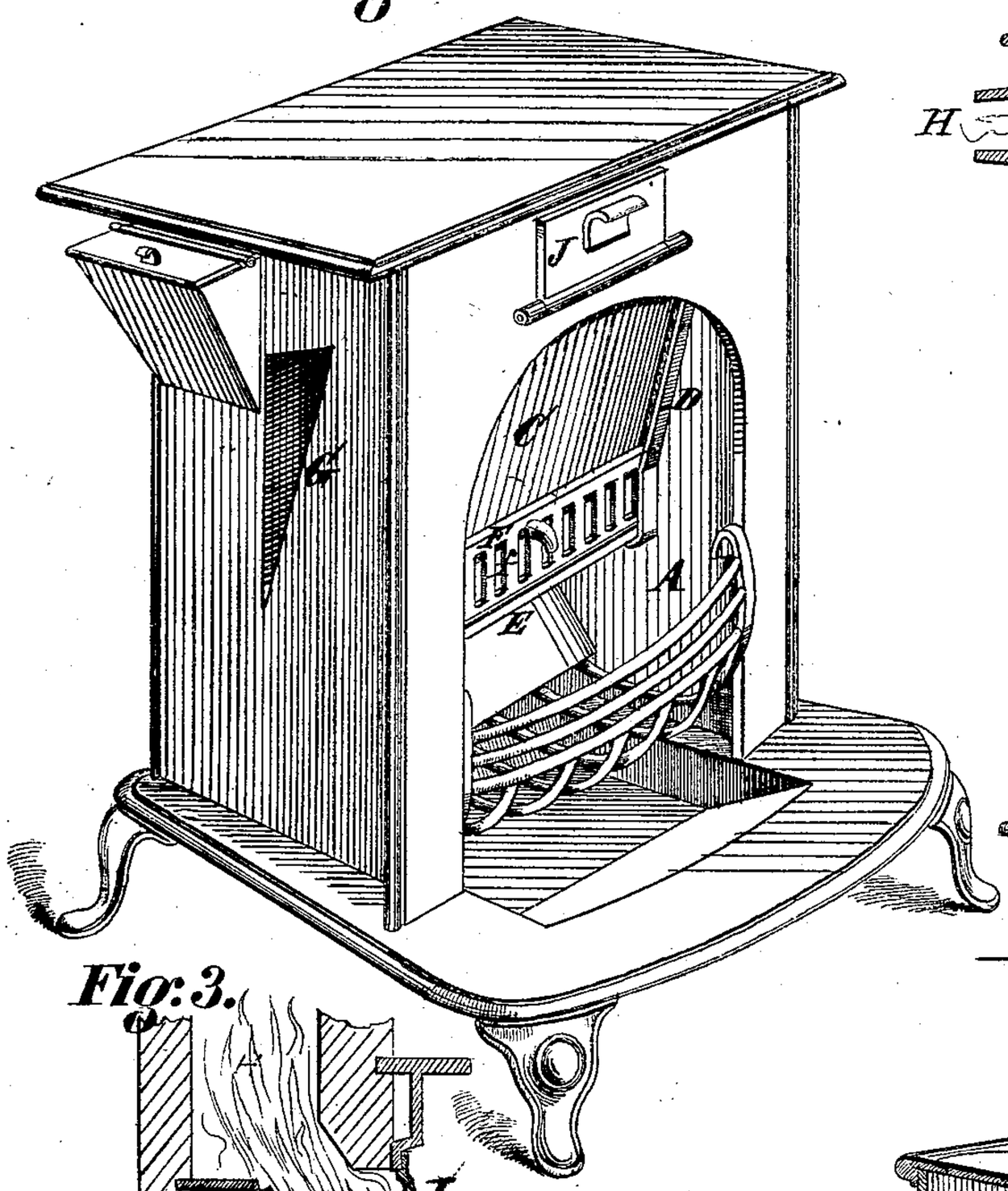

Fig: 2.

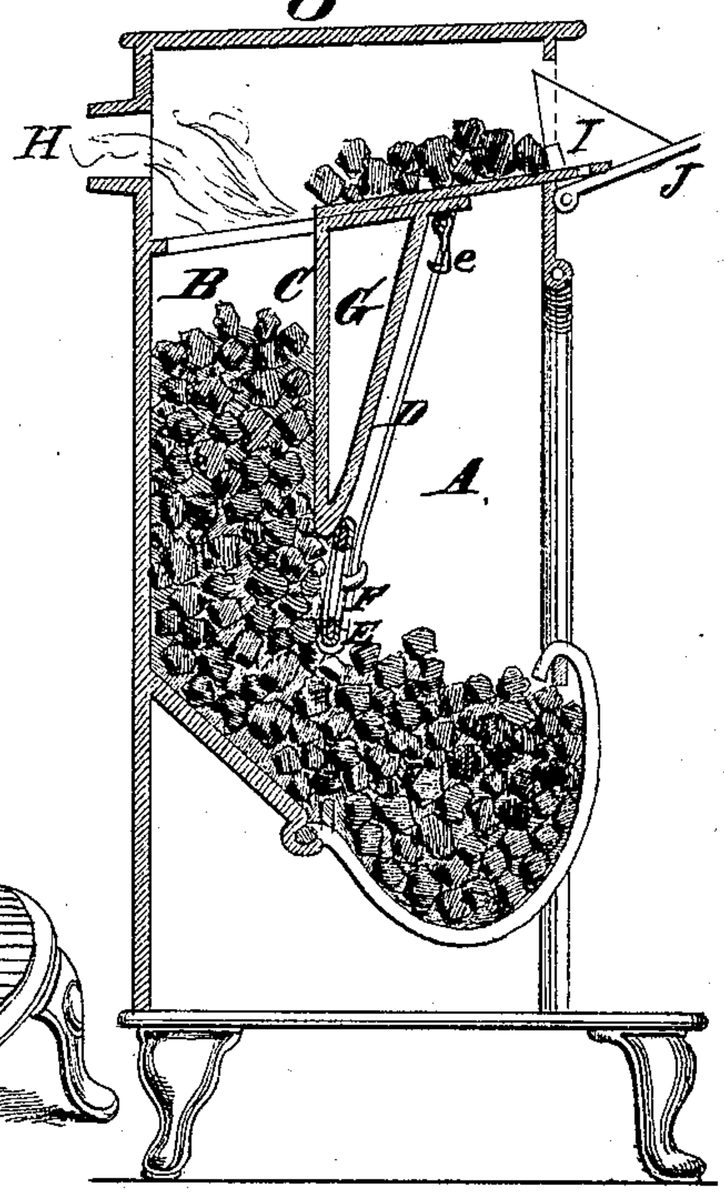

Fig: 3.

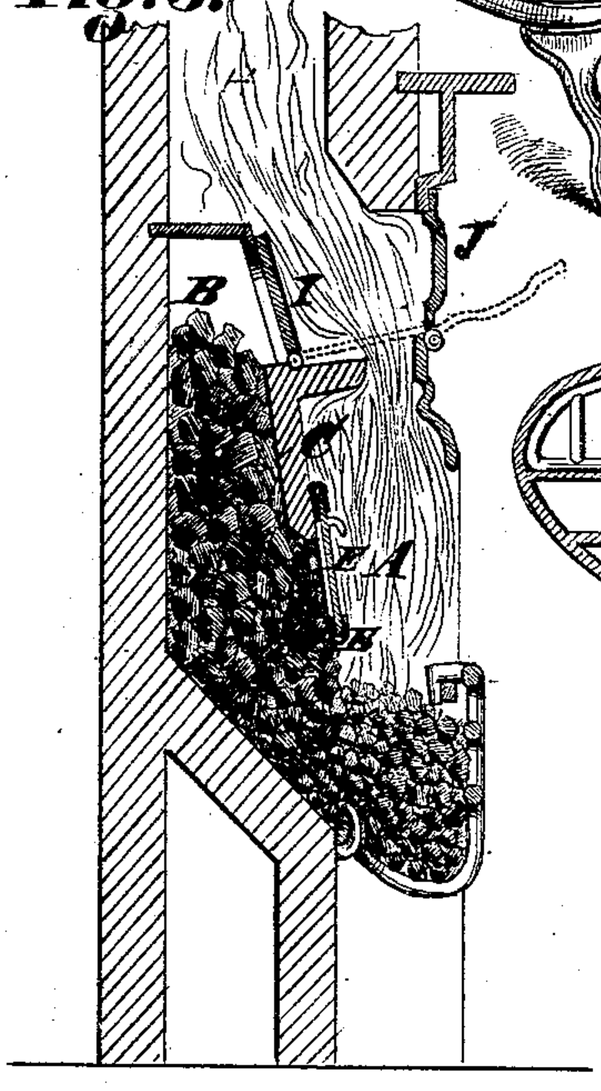

Fig: 5.

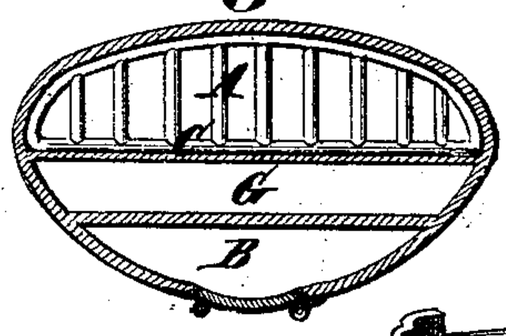

Fig: 4.

Attest;

Wm. R. McComas.

Henry C. Webber.

Inventor:

John F. Merrill

By F. Millward

Attorney

UNITED STATES PATENT OFFICE.

JOHN F. MERRILL, OF CINCINNATI, OHIO.

IMPROVEMENT IN MAGAZINE FIRE-PLACE STOVES.

Specification forming part of Letters Patent No. 127,500, dated June 4, 1872.

I, JOHN F. MERRILL, of Cincinnati, Hamilton county, State of Ohio, have invented certain new and useful Improvements in Fire-Places, of which the following is a specification:

Nature and Objects of Invention.

My invention relates to the class of inventions denominated as magazine-stoves or fire-places; and consists, first, in the provision, in connection with the magazine and fire-chamber, of a series of openings governed by an adjustable sliding door at the bottom of the plate or wall dividing the magazine from the fire-chamber, for the purpose of increasing or decreasing at will the amount of radiant burning-surface, and permitting the introduction of a poker to the neck of the magazine to draw down the coal or break up coked fuel; second, in the peculiar construction and arrangement of the doors governing the mouth of the magazine from the front of the fire-place as to form, when the feeding is being done, a chute from the front to direct the fuel into the magazine and divert the current of gases from the usual channel during the feeding of the magazine.

Description of the Accompanying Drawing.

Figure 1 is a perspective view of a stove embodying my invention. Fig. 2 is a vertical section of the same. Fig. 3 is a vertical section of a fire-place in which the air-chamber between the fire-chamber and magazine is omitted and the other features of my invention embodied. Fig. 4 is a perspective view from the rear of a stove in which the magazine is adapted to be fed from the rear. Fig. 5 is a cross-section of a heating-stove in which my provision of the air-chamber between the magazine and fire-chamber is shown.

General Description.

The same letters of reference refer to corresponding parts in all the figures—

A being the combustion or fire-chamber; B, the magazine; and C the dividing-wall between them. Two side-guides, D D′, support a plate, E, which has a series of long apertures through it, covered by a sliding adjustable door, F, with corresponding apertures *f*.

By sliding the door F over the apertures in plate E the openings may be closed entirely, opened partially, or to the full extent; and by this provision the amount of burning-surface exposed for radiation into the room may be increased or diminished at pleasure, and facility is afforded for the introduction of a poker to assist the descent of the fuel for replenishing the fire, or to break up the coals coked together at the neck of the magazine.

The side-guides D D′ are provided to permit of the plate E and its door being raised altogether and supported by hook *e*, when desirable to expose a great surface of burning fuel, the plate and door being then in front of wall C. The wall C may be made of solid tile or other material, as shown in Fig. 3, or may be so constructed that a chamber, G, is formed between the fire-chamber A and magazine, B, for the purpose of admitting a free access and circulation of air to insulate, as it were, the magazine from the effects of the high temperature of the fire-chamber. A portion, *c*, of the wall C projects slightly over the fire to reduce the area of the smoke-throat and cause a slight reverberation of the gases within the chamber to insure good combustion.

H is the smoke-flue, with which the combustion-chamber has communication (while the fire is in the customary condition) by a direct course, as in Fig. 3, or indirectly, as in Fig. 2.

When the magazine is being filled and its cover necessarily off, the course of part of the current of gases is diverted so as to pass through the magazine before its escape, as shown in Fig. 2, by the following device: A sliding plate, I, or hinged plate I, Fig. 3, is adapted by a single movement to close part of the smoke-throat, and at the same time to uncover the magazine, the movement of the plate serving to connect with the front plate of the stove or fire-place, so as to form a chute for the conduct of the fuel to the magazine, the plate J being swung down to admit the fuel. As shown in Figs. 1 and 4, the magazine may be fed or supplied from the side or rear.

Claims.

1. In a magazine-stove or fire-place having chamber A for fire and magazine B, divided by wall C, the adjustable plate F and plate E connected therewith, arranged and operating substantially as and for the purpose specified.

2. The combination of chambers A B and plates I J, connected and operating as and for the purpose specified.

In testimony of which invention I hereunto set my hand.

JOHN F. MERRILL.

Witnesses:

FRANK MILLWARD.

J. L. WARTMANN.