

Cooking-Stove.

No. 126,763.

Patented May 14, 1872.

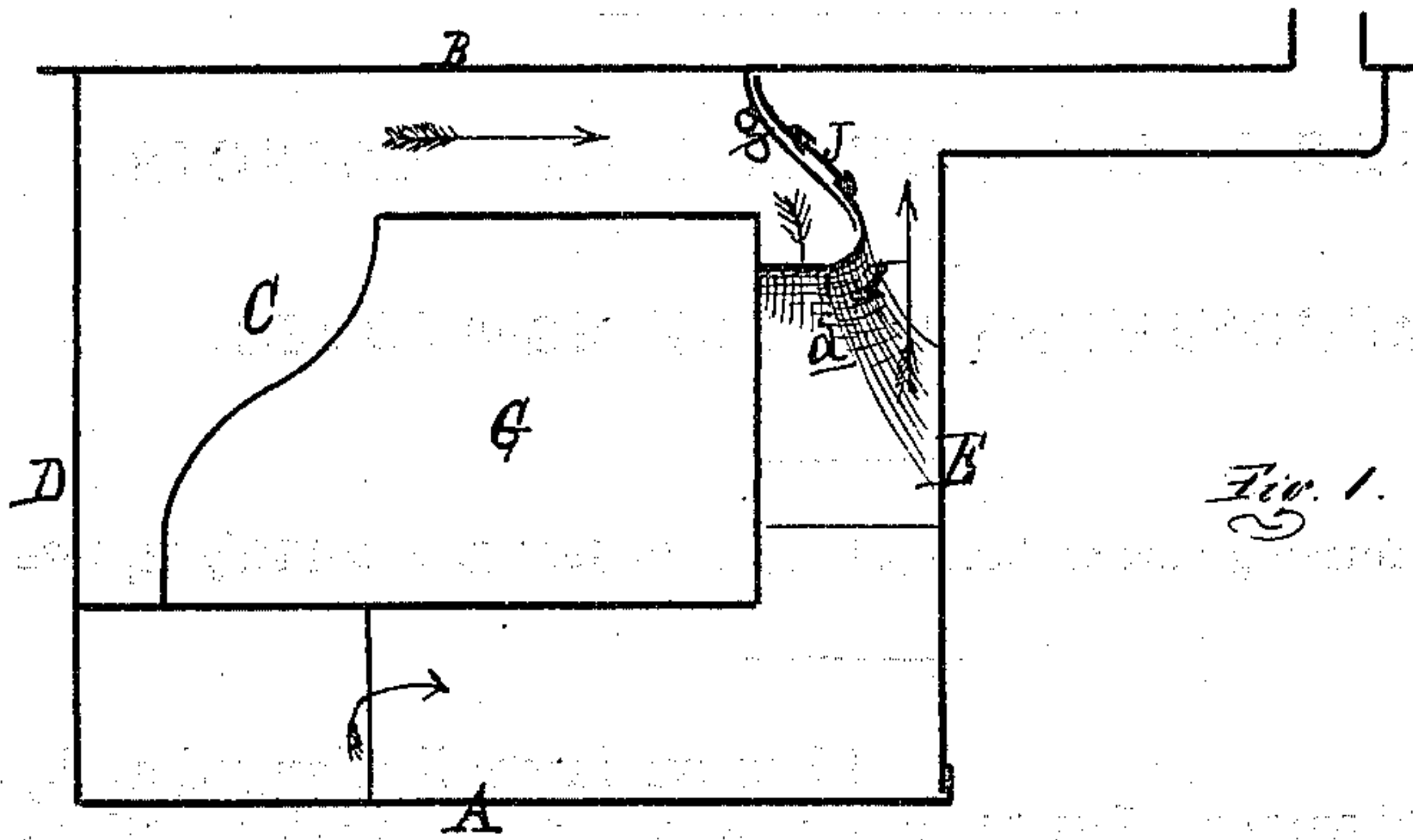


Fig. 1.

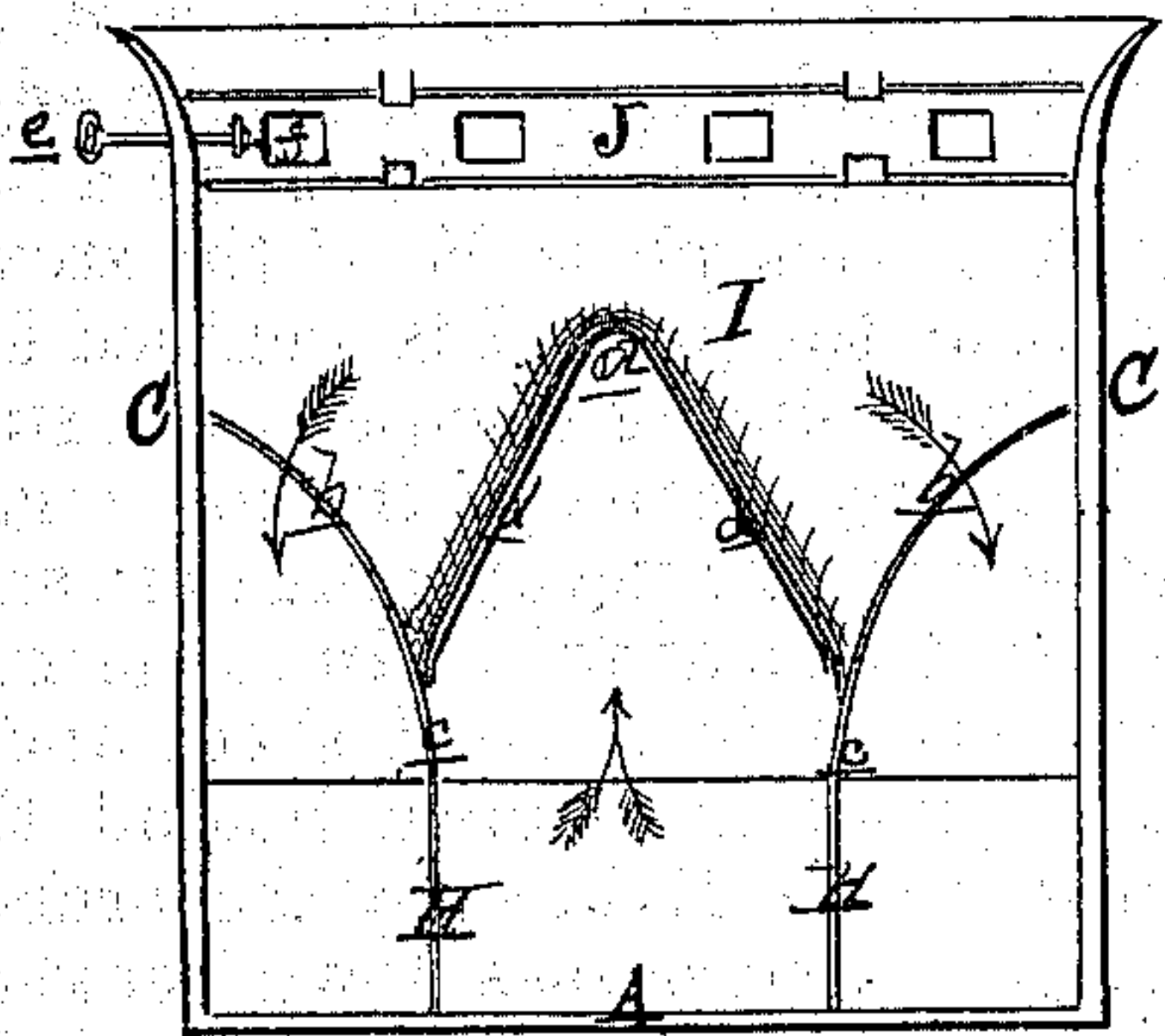


Fig. 2.

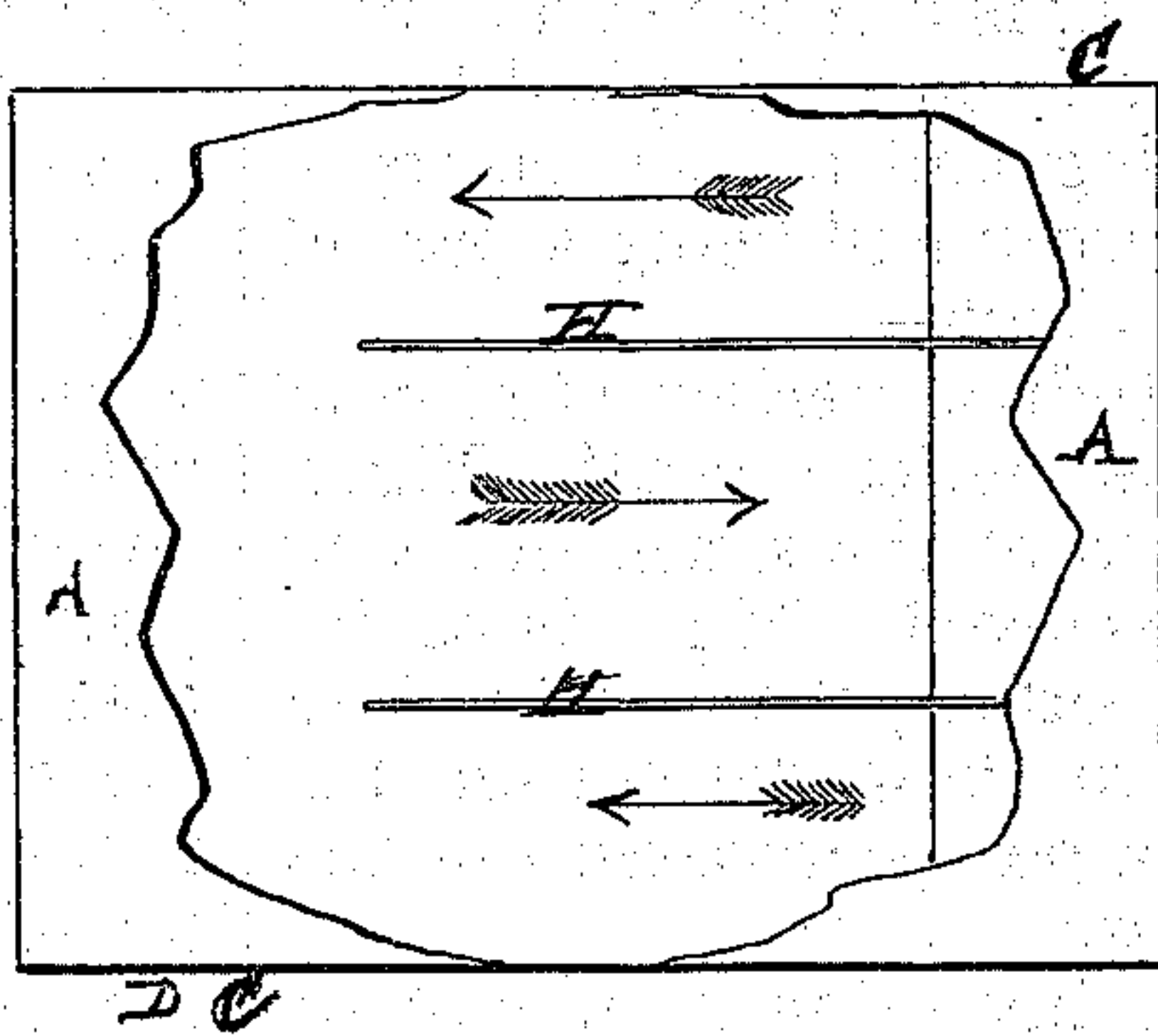


Fig. 3.

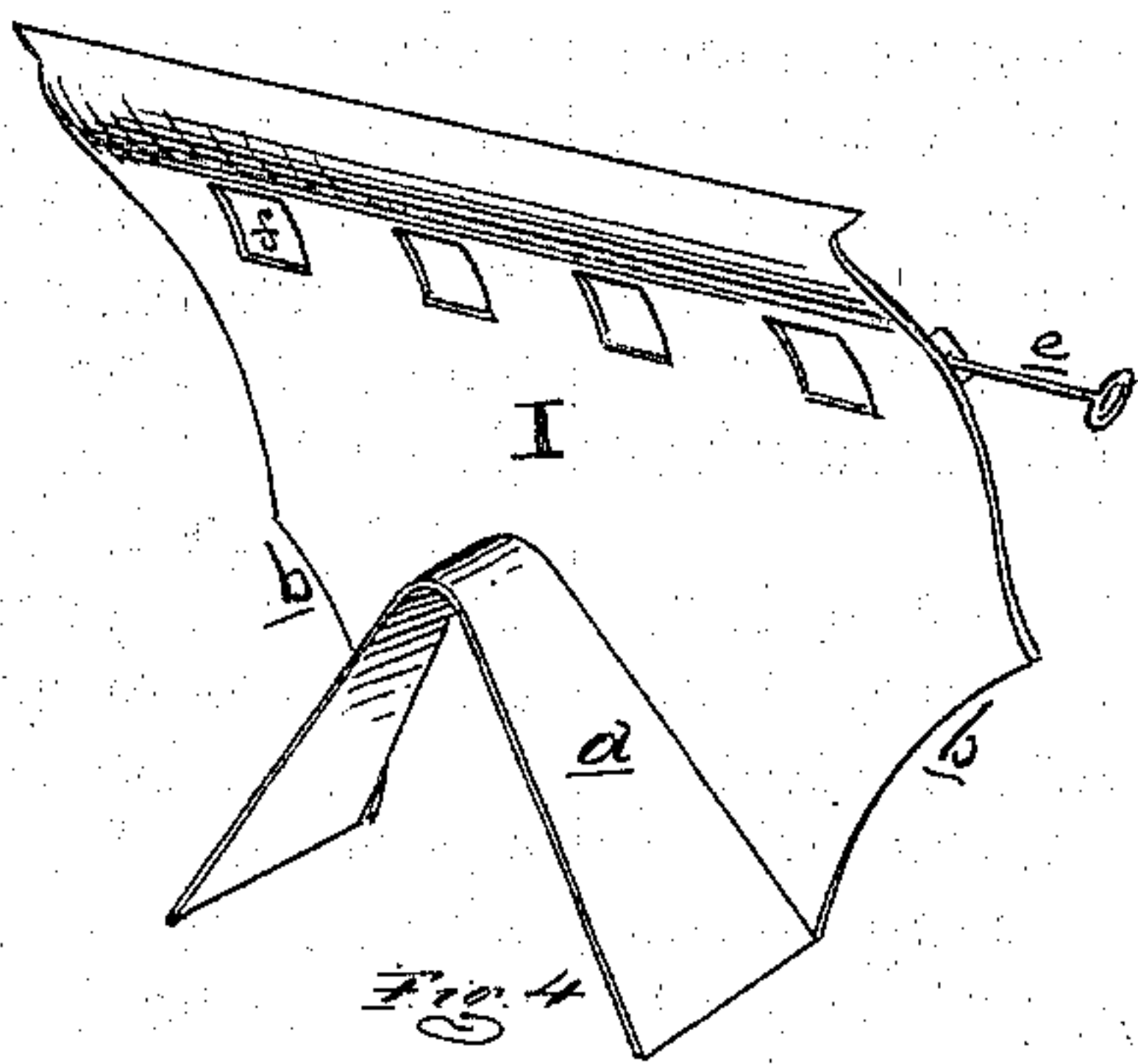


Fig. 4

ATT ESE

H. H. Everts.
J. S. Sprague

INVENTOR:

Thomas White
per attorney
Jno S. Sprague

UNITED STATES PATENT OFFICE.

THOMAS WHITE, OF QUINCY, ILLINOIS.

IMPROVEMENT IN COOKING-STOVES.

Specification forming part of Letters Patent No. 126,763, dated May 14, 1872.

To whom it may concern:

Be it known that I, THOMAS WHITE, of Quincy, in the county of Adams and State of Illinois, have invented a new and useful Improvement in Cooking-Stoves; and I do declare that the following is a true and accurate description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon and being a part of this specification, in which—

Figure 1 is a longitudinal vertical section of my stove through the center thereof. Fig. 2 is a rear end elevation of the same, the back plate having been removed. Fig. 3 is an inverted plan of the bottom, the bottom plate being broken away to show the bottom-flue strips; and Fig. 4 is a perspective view of the back division-flue plate.

The nature of this invention relates to an improvement in the construction of the back flues of a cooking-stove, whereby, from their peculiar construction and conformation, the stove will have a better draught when the latter is reverted, and the flame will have a better chance to spread under the vessels placed in the holes in the top plate; and it consists in the peculiar conformation of the back division-flue plate, and its arrangement with relation to the oven and back plates of the stove, and with the flue-strips in the bottom chamber thereof.

In the drawing, A represents the bottom plate, B the top plate, C the side plates, D the front plate, and E the back plate, inclosing the fire-place and an oven, G, under which there is a base-chamber. The drawing shows a stove having an extension top, but the latter is not necessary, and my improvement applies to the short or square-top as well. The base-chamber is divided into a middle and two side flues by two vertical-flue strips, H H, which extend from the back plate to a point under the front part of the oven. I is my improved back division-flue plate, cast in the peculiar form shown in Fig. 4, the lower part of which

has an inwardly-flanged arch, *a*, and at each side thereof an outwardly-flanged half-arch, *b*, sprung from the lower ends of the former, which rest upon and interlock with upward extensions *c* of the flue-strips H back of the rear oven-plate, on which there is cast an arched rib, *d*, to receive and support the edge of the arch *a*, the edges of the flanges *b* abutting against the back plate E of the stove. The upper part of the plate I is inclined forward, and carries a sliding damper, J, in suitable guides, and, by means of the rod *e* may be made to close or cover the openings *f* in said plate, or disclose them, at will. In the former case the flame passes in a broad sheet under the entire top plate, and down behind the oven-plate, where it is divided by the arched top of the flange *d*, and passes down between the outer sides of the flue-strips H and the side plates C to the front ends of said strips, returning between them into the arch *a*; thence through the pipe-hole in the top-plate pass to the chimney. By disclosing the holes or openings *f* a direct draught is obtained. To support the ends of the plate I, the side plates are cast with ribs *g*, corresponding in outline thereto, which support the edges of said plate. The extensions *c* of the flue-strips may be cast therewith, or to the plate I, as prolongations thereof. The curves of the arches, where they are flanged, should be easy, so as to retard as little as possible the passage of the smoke and gases of combustion.

It will be seen that by the peculiar construction of the plate I the heated currents, when reverted, in their upward return, must heat the back plate of the oven at the central portion thereof, as well as at the ends, before escaping up the chimney, insuring uniformity in the baking process, as well as equal expansion of the back plate of the oven, overcoming the tendency of unequally-heated stove-plates to warp and crack.

The back drop-flues are easily cleaned by introducing a scraper through the apertures

in the plate I, which is inclined at the plane of the damper, loosening the soot adhering to the walls of the flues, and then removing it through an opening in the bottom chamber of the stove.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The back division-flue plate I, constructed as described, and provided with the damper J, in combination with the division-flue

plates H, and arranged between the back of the oven and the back plate E, substantially as and for the purpose set forth.

2. The ribs *d g*, for supporting the plate I, as shown and set forth.

THOMAS WHITE.

Witnesses:

H. NEWLEY,
DICKERSON MCAFEE.