

(No Model.)

2 Sheets—Sheet 1.

E. W. ANTHONY.

HEATING STOVE.

No. 354,297.

Patented Dec. 14, 1886.

Fig. 1.

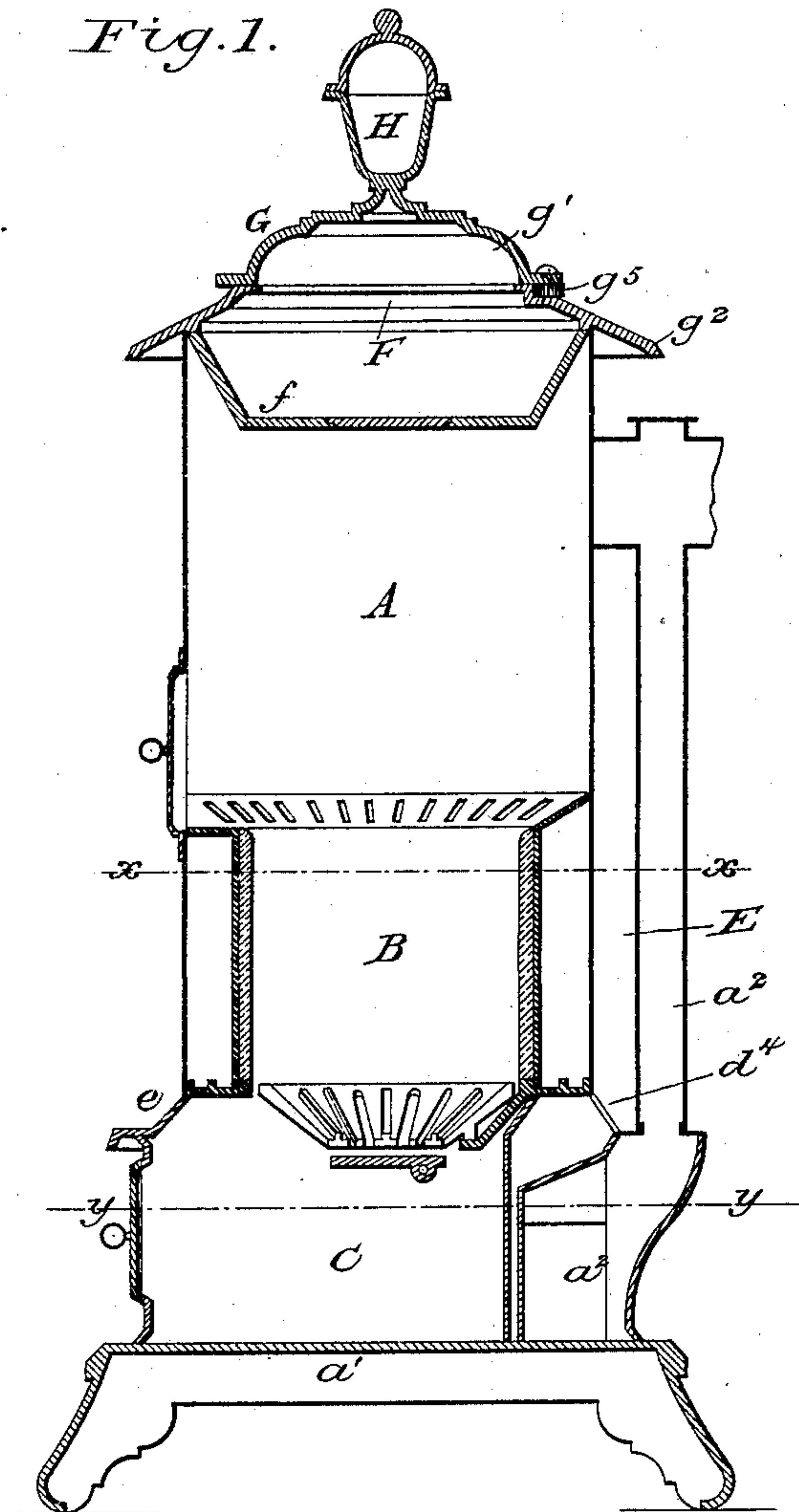


Fig. 2.

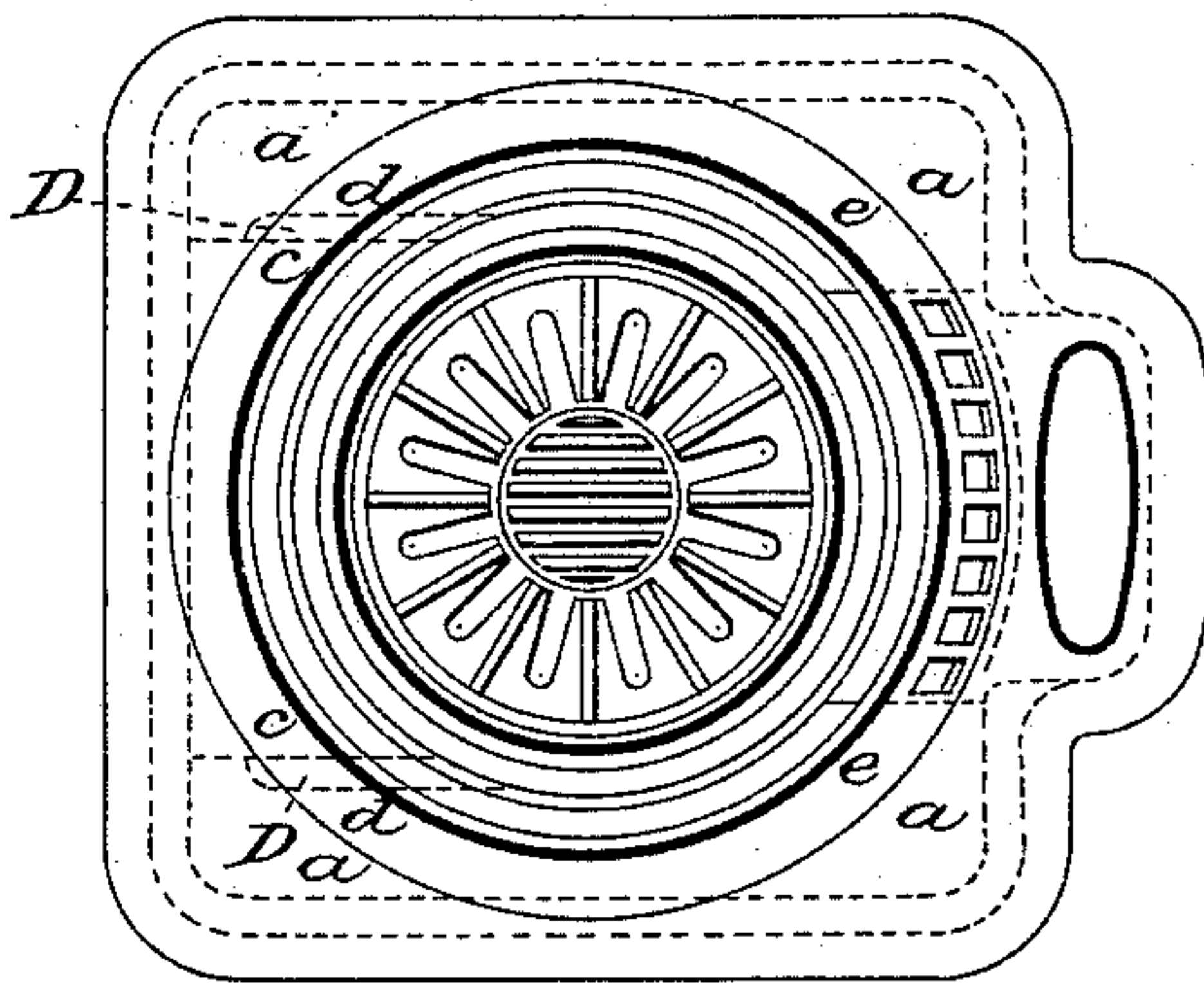
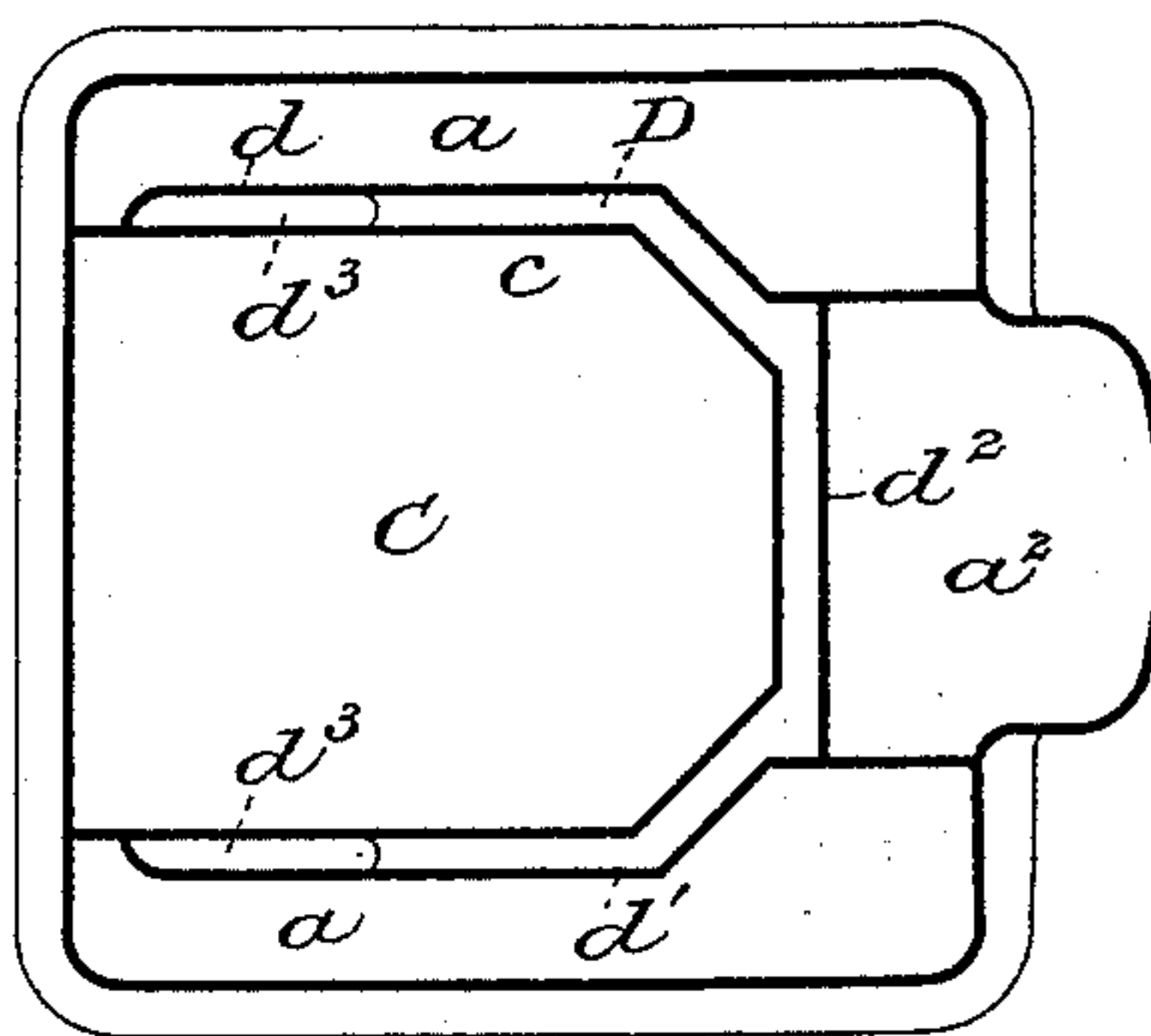


Fig. 3.



Witnesses:

Fred. Harris

Fred. C. Dolan.

Inventor

Edgar W. Anthony

by his attys

Clark & Raymond.

(No Model.)

2 Sheets—Sheet 2.

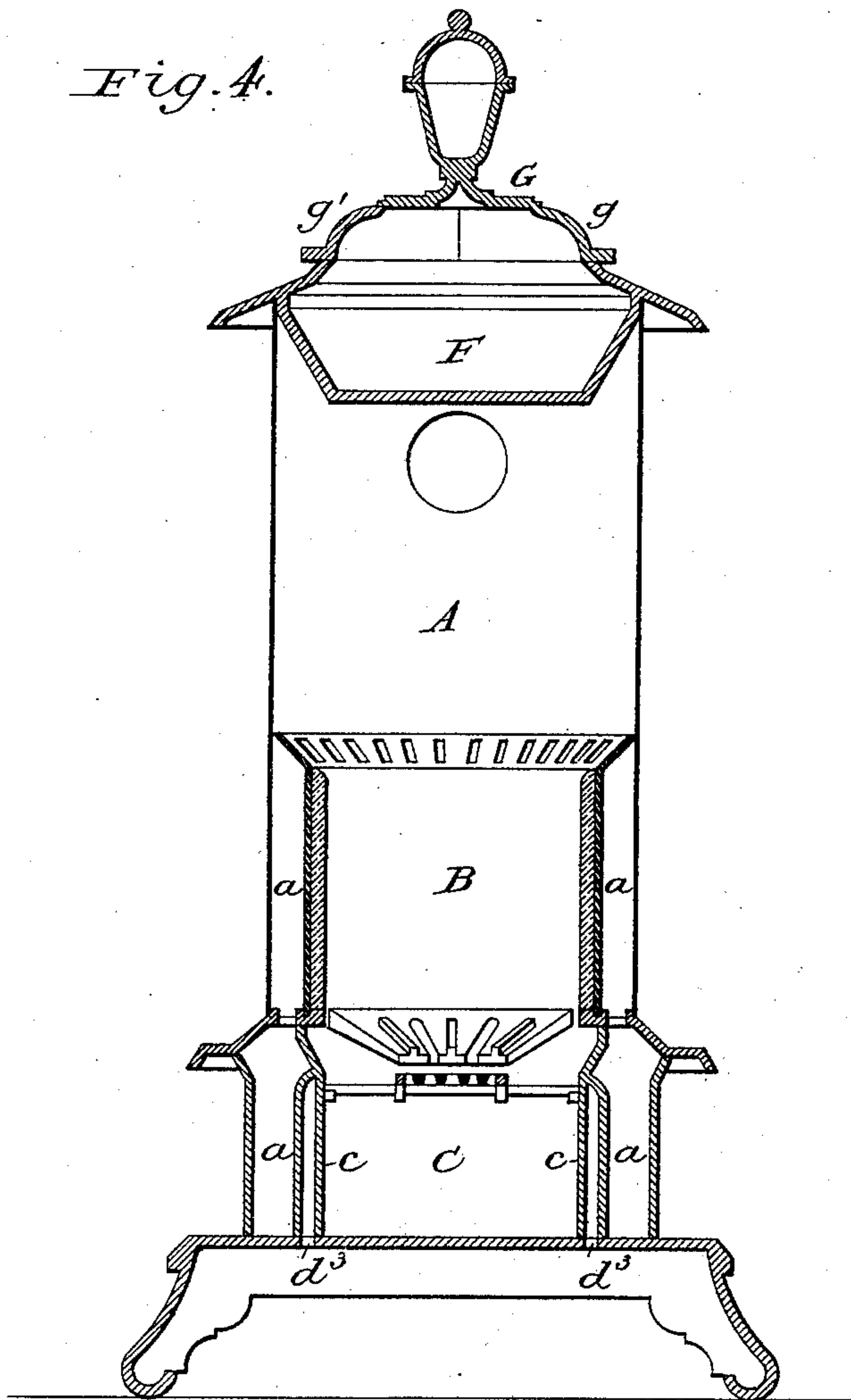
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*Fig. 4.*



Witnesses:

*Fred. Harris*

*Fred. B. Dolan*

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*Charles T. Raymond*



# UNITED STATES PATENT OFFICE.

EDGAR W. ANTHONY, OF BOSTON, MASSACHUSETTS.

## HEATING-STOVE.

SPECIFICATION forming part of Letters Patent No. 354,297; dated December 14, 1886.

Application filed November 30, 1883. Serial No. 113,253. (No model.)

*To all whom it may concern:*

Be it known that I, EDGAR W. ANTHONY, of Boston, in the county of Suffolk and State of Massachusetts, a citizen of the United States, have invented a certain new and useful Improvement in Heating-Stoves, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification, in explaining its nature, in which—

Figure 1 is a vertical central section of a stove having my improvements. Fig. 2 is a horizontal section upon the line  $x x$  of Fig. 1. Fig. 3 is a horizontal section upon the line  $y y$  of Fig. 1. Fig. 4 is a vertical central section of the stove on a line at right angles to that shown in Fig. 1.

The invention relates to the specific arrangement of passages and flues in the base of the stove, whereby a circulation of air about the stove is effected.

Referring to the drawings, A represents the combustion-chamber; B, the fire-pot, and C the ash-pit. Extending downwardly from the combustion-chamber A, upon each side of the fire-pot, are the diving-flues  $a$ , which extend downwardly to the base-plate  $a'$  of the stove, and backwardly in the base to the uptake  $a^2$ . Between the base-sections of the diving-flues  $a$  and the ash-pit  $c'$  is the narrow passage or chamber D, which is formed by means of the flue-plates  $d d' d^2$  and the ash-pit wall  $c$ . This narrow chamber or passage D has an opening,  $d^3$ , toward the front of the stove, upon either side of the ash-pit, through the base-plate, (see Fig. 3,) and also the opening or openings  $d^4$  between the uptake-pipe  $a^2$  and the lower portion of the casing E of the stove, and in the upper plate,  $e$ , of the base-section of the stove.

It will be observed that the cooled air enters through the openings  $d^3$ , and is heated between the flue-plates  $d d' d^2$  and the ash-pit walls  $c^2$ , and that the air thus heated passes out through the opening or openings  $d^2$  at the rear of the stove, and that thereby a continuous circulation about the stove is provided. It will also be observed that by this construction the heat passing through the diving-flues  $a$

is utilized for heating the air passing through this chamber D.

I am aware that Patents No. 4,032, to Hedenberg, and No. 48,145, to Treadwell, show and describe heating-stoves having an air-heating passage extending through the base of the stove to the top, which require a somewhat complex arrangement of flues, and I consider that the said stoves do not contain the feature of my invention, which is an improvement upon that described in my Patent No. 246,995, in that I dispense with the passage or chamber and flues below the ash-pit, and thereby cheapen the construction and reduce the weight of the stove without impairing the efficiency of the invention.

The subject-matter of this application was originally shown and described in my application filed May 7, 1883, Serial No. 94,233; but it was removed subsequently by amendment, and I do not now claim herein the present subject-matter of said application.

I am aware, also, of the Patent No. 42,831, granted N. C. Bond, dated May 24, 1864, for a fire-pot, which shows a chamber surrounding a fire-pot, to which entrances are provided from below, and which has an outlet at its upper end. I am also aware of the patent to Noble, No. 225,484, dated March 16, 1880, which shows a chamber or passage in the base-section of a stove about the ash-pit, into which cold air is introduced through the lower base-plate of the stove, and from which it escapes through openings in the upper plate of the base-section; but as these patents do not show or describe the flue-plates  $d d' d^2$ , arranged in relation to the ash-pit wall  $c$ , as shown, to provide a narrow passage or chamber, D, between the ash-pit wall and the base-flue, and entirely surrounded by the base-flue, which passage or chamber has the inlet-openings and the escape-openings  $d^4$ , I consider that they do not embrace the essential features of my invention.

Having thus fully described my invention, I claim and desire to secure by Letters Patent of the United States—

In a heating-stove, the combination and arrangement, in the base-section of the stove, of

the base-plate  $a'$ , the ash-pit wall  $c$ , the flue-plates  $d$   $d'$   $d''$ , arranged in relation to each other and to the outer shell of the stove and to the ash-pit wall to form the base-flues  $a$  5 and the air-heating chamber D, the upper base-plate,  $e$ , the said lower base-plate,  $a'$ , having inlets or openings  $d^3$ , and the said upper

base-plate,  $e$ , having the outlets or apertures  $d^4$ , arranged in relation to the passage or chamber D as specified, substantially as described. 10

EDGAR W. ANTHONY.

Witnesses:

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FRED. HARRIS.