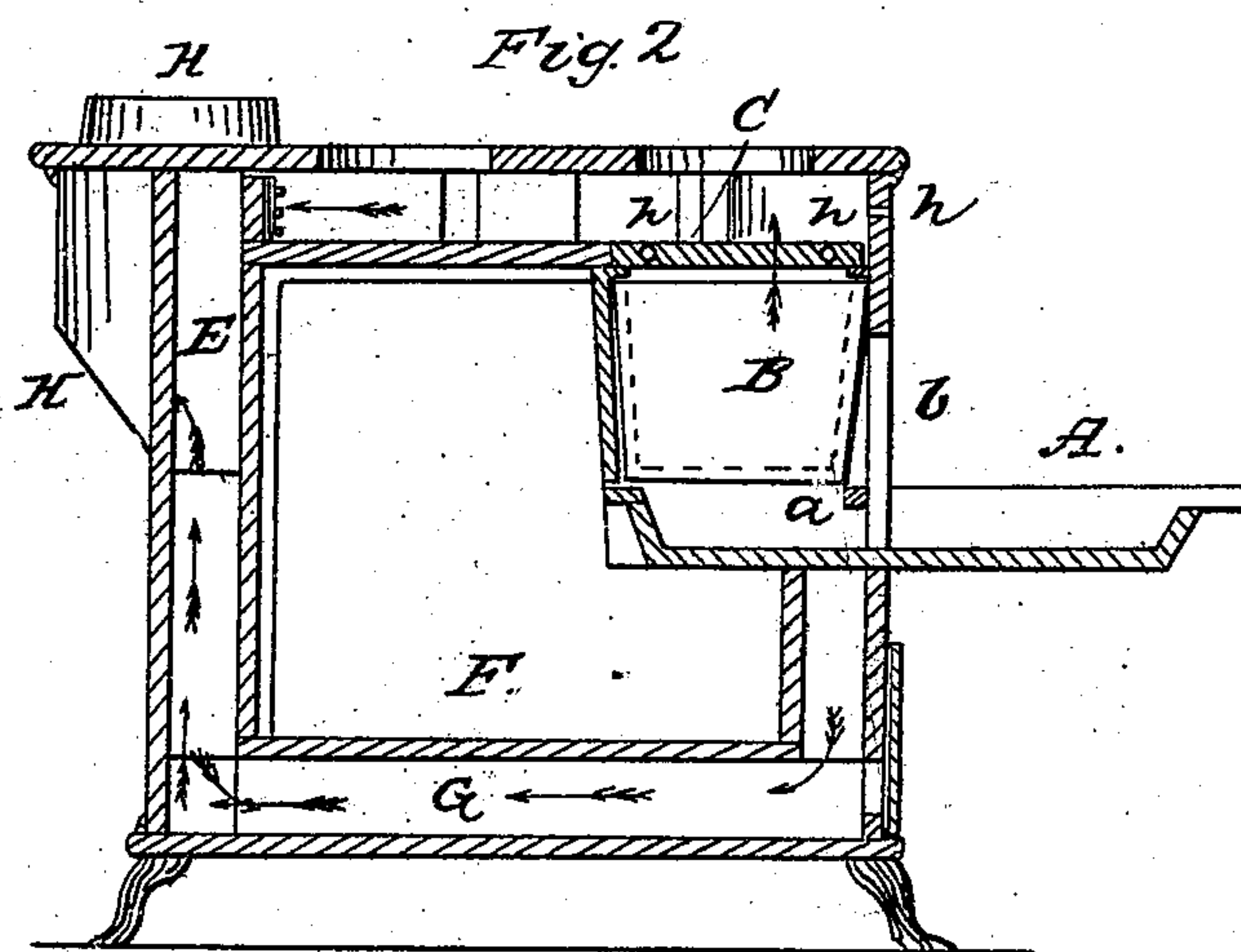
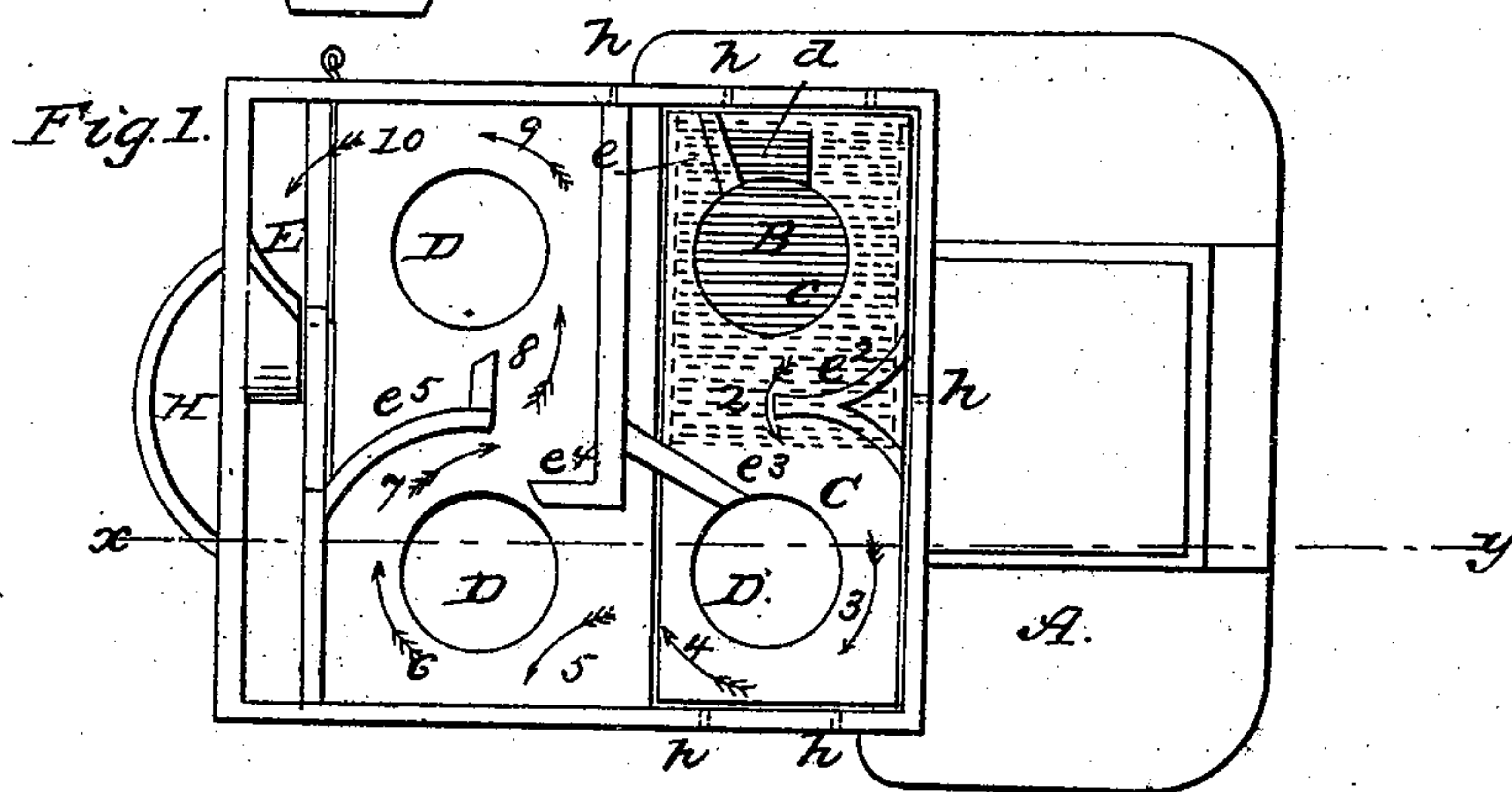
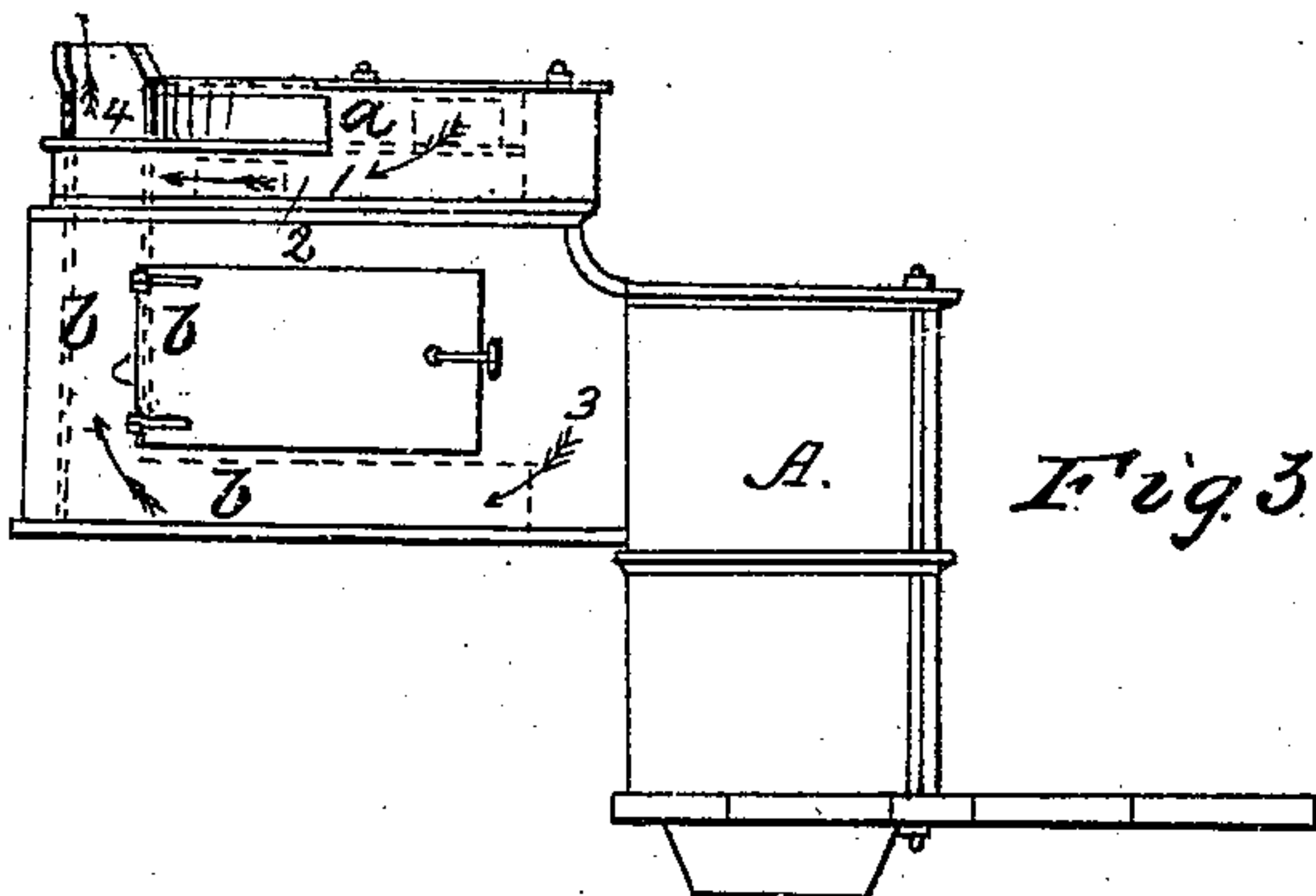


N. S. BROWN.

Cooking Stove.

No. 42,070.

Patented March 29, 1864.



Witnesses
J. L. & B. Smith
H. King.

Inventor
N. S. Brown

UNITED STATES PATENT OFFICE.

NICHOLAS S. BROWN, OF LITCHFIELD, NEW YORK.

IMPROVEMENT IN COOKING-STOVES.

Specification forming part of Letters Patent No. 42,070, dated March 29, 1864.

To all whom it may concern:

Be it known that I, NICHOLAS S. BROWN, of Litchfield, in the county of Herkimer, in the State of New York, have invented a new and useful Improvement in Stoves; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, of which—

Figure 1 is a plan view of my improved stove; Fig. 2, a vertical section through one side of the same, as indicated by the line *x y*; Fig. 3, a side elevation of my original plan, filed in the office in the year of 1839. In this the channels or apartments (through which the heat is conveyed and distributed to the best advantage for securing the greatest amount of heat to the oven and other vessels that may be used) are shown in red lines, as also the arrows, the latter indicating the way the heat is conveyed in this figure.

A is the stove; *a*, the cylindrical receptacle for the boiler. The heat rising upward on one side comes through the opening, as shown by arrow 1, passes around, and then descends to the lower apartment and out at the opening, as shown by arrow 2, descending downward on both sides of the pipe *b* and then underneath the oven *c*, until it reaches the end of the pipe, which is carried underneath and into the pipe, as shown by arrow 3, and out, as seen by arrow 4.

Like letters indicate like parts in both figures of the drawings.

The nature of my improvement consists in the distribution of the heat from the fire and in the retention of it in the stove by means of hollow partition check-plates, being so arranged that when the heat passes from the fire it is conducted around, through, and against these plates, thereby concentrating it upon one or more vessels in use and applying it to the best advantage.

To enable others skilled in the art to make and use my invention, I will now proceed to describe its construction and operation.

My stove A is of the ordinary form, having a square fire-place of the usual size, containing a movable furnace, B, for burning coal, and when desirable it may be removed and the fire-place used for wood or chips. This fur-

nace occupies about one-half of the fire-place, and rests on a bar, *a*. An opening, *b*, is made in front of the stove to enable the furnace to be slipped out or removed, the bar being taken out. Immediately over the furnace is a hollow plate, C. In this plate, on one side, is a cylindrical opening, *c*, for the reception of a kettle or other vessel, which kettle projects down through the top of the stove.

D D D are places where the boiler or other vessel will rest when placed on the stove alongside of the kettle, and communicating with the cylindrical opening is an opening or hole, *d*, for the passage of the heat, which, after being generated from the fire, passes up, and, encountering the check *e'*, passes around the kettle, as shown by arrow 1, reaching the curved check *e''*, and, encountering the straight check *e'''*, passes around the opposite kettle and rear ones, as indicated by the arrows 2 3 4 5 6 7 8 9 10, the hollow partition checks or plates arresting the progress of the heat in such a manner so that it may be concentrated upon any one or more of the vessels. The heat when it reaches the back part of the stove descends downward on one side of the partition E, passing underneath the oven F on one side of the partition G until it reaches the front part of the stove, and then over the top of the partition into and on the other side and out at the top of the pipe H, as shown by arrows. On both sides, and on the front of the stove are perforated holes *h h h h h h*, for the purpose of admitting a draft of air into the hollow plate C, hollow partition checks or plates *e''* and *e'''*, to prevent their burning out and at the same time assist in heating the room.

Having described my invention, what I claim therein as new, and desire to secure by Letters Patent, is—

The arrangement of the hollow partition check-plates *e'* *e''* *e'''* *e''''* *e'''''*, perforated holes *h h h h h h*, hollow plate C, with opening *d*, in combination with the partitions E and G and movable furnace B, when constructed substantially in the manner as herein described and set forth.

N. S. BROWN.

Witnesses:

GILBERT B. TOWLES,
H. KING.