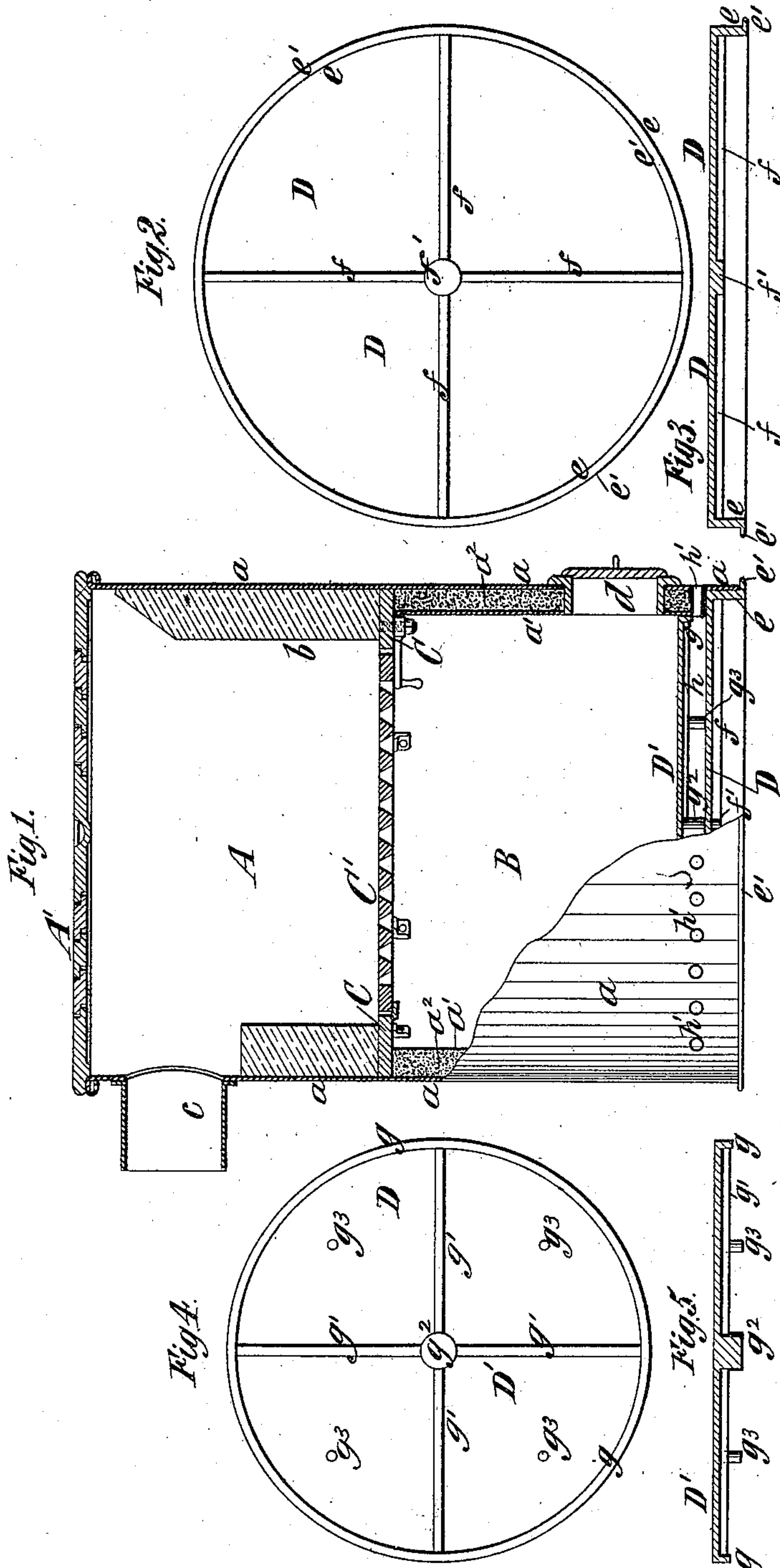


(No Model.)

T. BURKHARD.
STOVE.

No. 322,580.

Patented July 21, 1885.



Witnesses:
Henry P. Collock
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Brown & Hall

UNITED STATES PATENT OFFICE.

THOMAS BURKHARD, OF BROOKLYN, NEW YORK.

STOVE.

SPECIFICATION forming part of Letters Patent No. 322,580, dated July 21, 1885.

Application filed February 19, 1885. (No model.)

To all whom it may concern:

Be it known that I, THOMAS BURKHARD, of the city of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Stoves, of which the following is a specification.

This invention may be applied to stoves for various uses, but is more particularly intended for stoves for confectioners' use.

Confectioners' stoves are subjected to very rough usage, and the body of the stove is commonly made of sheet-iron lined with fire-brick above the grate and of single thickness below the grate. Frequently the men using them dump the fire, and then go away, and the sides of the ash-box below the grate become burned away by the hot coals dumped therein. The bottom of the stove is usually of sheet-iron, and this also is liable to be burned away by the hot coals.

The invention consists in novel features of construction and combinations of parts hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is an elevation, partly in section, of a stove embodying my invention. Figs. 2 and 3 are respectively an inverted plan and a section of the base plate or piece; and Figs. 4 and 5 are respectively an inverted plan and a section of the upper plate, which combines with the base-plate to form the hollow or double bottom of the stove.

Similar letters of reference designate corresponding parts in all the figures.

A designates the fire-pot, and B the ash-pit, of the stove. The outer shell or casing, *a*, of the stove may be of sheet metal, and the ash-pit B has an inner casing, *a'*, of sheet metal, the two forming a double wall, which is filled in with asbestos or other refractory material *a*². On this double wall the grate ring or frame C is supported, and within this frame is the grate C', which may be a plain tilting-grate of ordinary form. The fire-pot A is lined with fire-brick *b*, and from it extends the smoke-pipe *c*.

The top A' of the stove may consist of rings of different sizes, which provides for placing different-sized vessels thereon and for supplying fuel to the fire.

Access to the ash-pit B may be had through a door, *d*.

The bottom of the stove is double, and consists of a base plate or piece, D, and an upper plate, D'. The plate D has a downwardly-

projecting peripheral rim, *e*, and a slight flange, *e'*, at the bottom thereof. The outer shell or wall, *a*, of the stove slips snugly upon the rim and abuts against the flange *e'*. The base-plate D should be as light as possible, and it is formed with ribs *f*, which radiate from a central boss or hub, *f'*.

The upper plate, D', has a downwardly-projecting peripheral rim, *g*, and ribs *g'*, which radiate from a central hub or boss, *g*², as shown in Fig. 4. It has also feet or legs *g*³, which bear upon the base-plate D and hold the plate D' raised, so as to form and maintain between the two an air-space, *h*, open to the atmosphere by holes or passages *h'*, formed by thimbles inserted through the double wall *a a'* of the stove.

The plates D D' may be of malleable cast-iron of very light weight, and the ribs above described add greatly to their strength.

The bottom when made as described will not crack or break or bulge down by reason of the fire being dumped into the ash-pit, and then quenched by water.

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

1. The combination, with the walls and grate of a stove, of a bottom composed of a cast-metal base-plate, D, having a downwardly-projecting rim, *e*, whereby it is supported, and the cast-metal upper plate, D', supported upon the base-plate, and forming between them the air-space *h*, and passages *h'* leading through the walls of the stove into the air-space, substantially as herein described.

2. The combination of the outer shell or casing, *a*, and grate C C', the ribbed cast-metal base-plate D, having a downwardly-projecting rim, *e*, on which the shell or casing *a* is slipped and secured, the inner metal shell, *a'*, extending downward to the base-plate, and the filling *a*², between the shells *a a'*, the ribbed cast-metal upper plate, D', having a downwardly-projecting rim, *g*, fitting within the inner shell, *a'*, and resting upon the base-plate D, whereby an air-space, *h*, is formed between the plates D and D', and passages *h'*, leading through the shells *a a'* into said air-space, substantially as herein described.

THOMAS BURKHARD.

Witnesses:

FREDK. HAYNES,
MATTHEW POLLOCK.