

(No Model.)

J. RINGEN.
PORTABLE OVEN.

No. 316,914.

Patented Apr. 28, 1885.

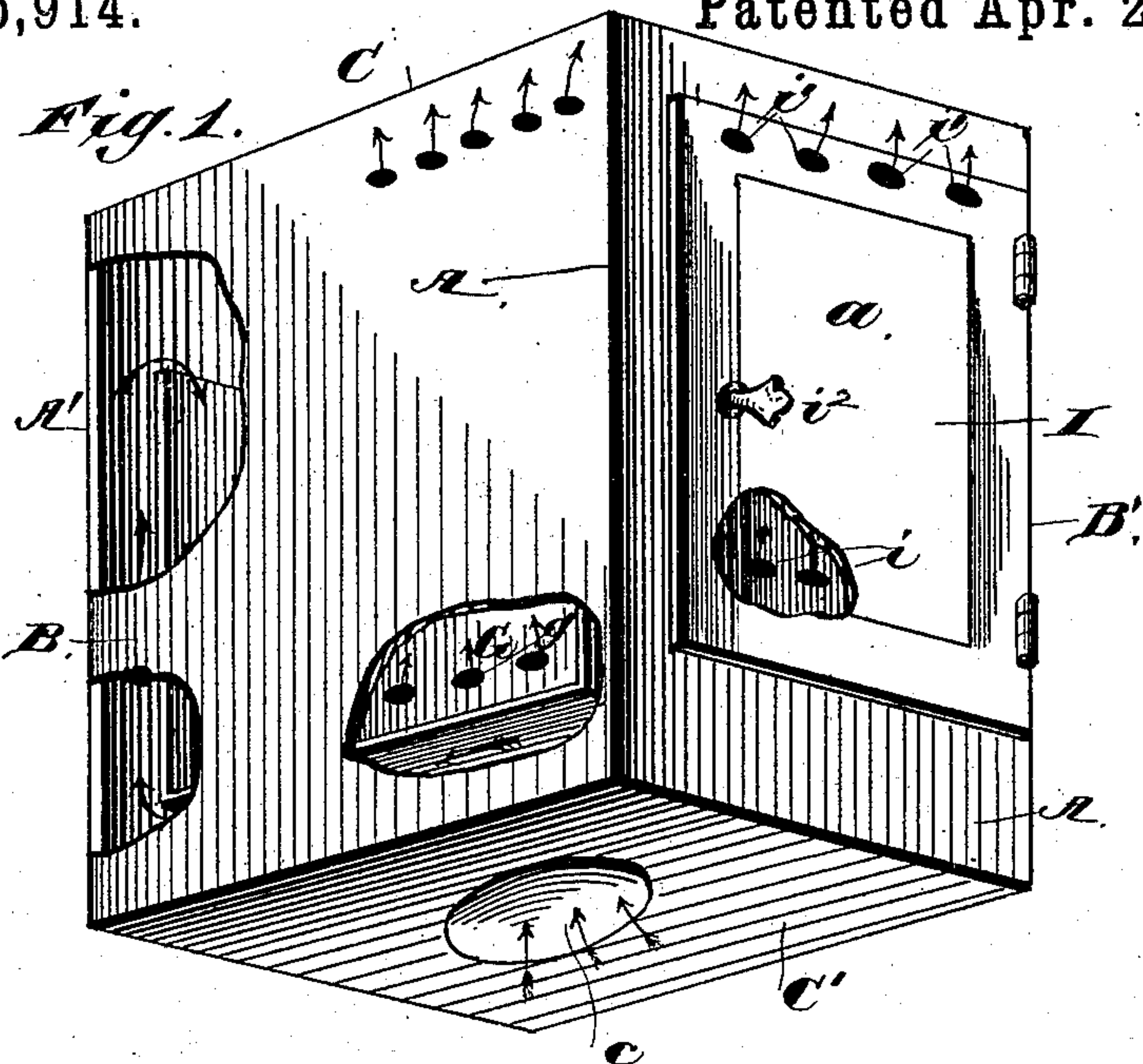


Fig. 2.

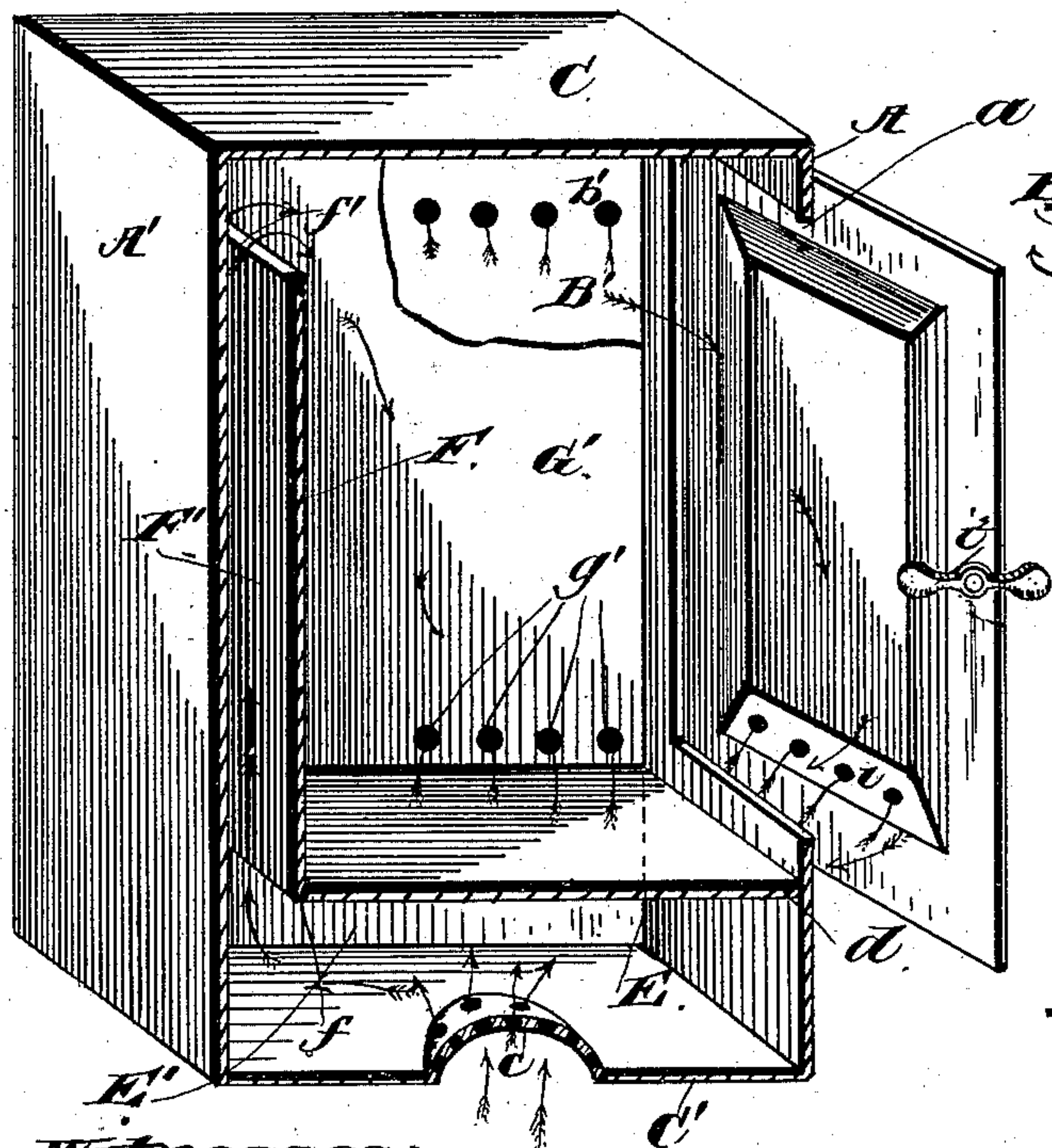
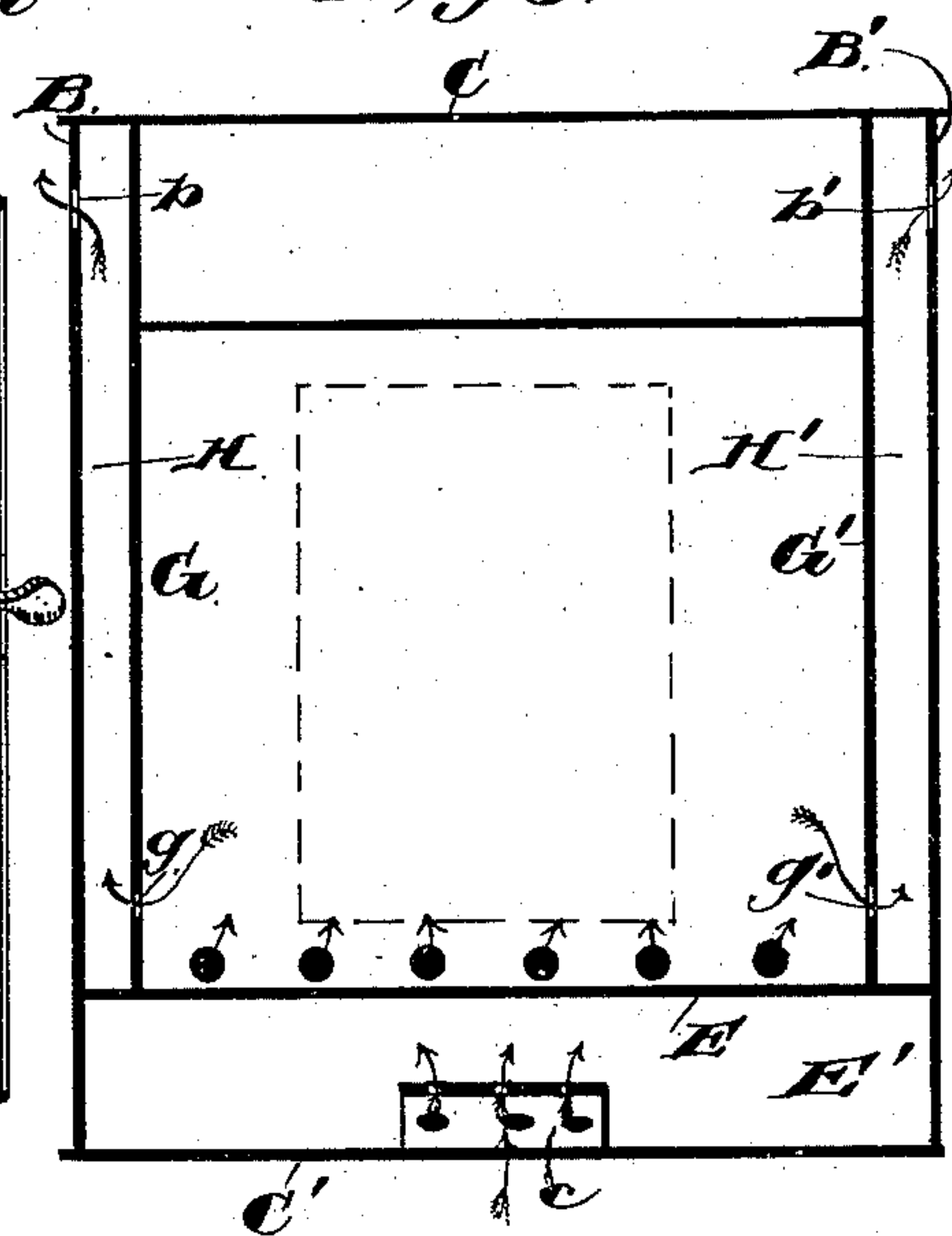


Fig. 3.



Witnesses:
Charles S. Meyer.
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UNITED STATES PATENT OFFICE.

JOHN RINGEN, OF ST. LOUIS, MISSOURI.

PORTABLE OVEN.

SPECIFICATION forming part of Letters Patent No. 316,914, dated April 28, 1885.

Application filed December 26, 1884. (No model.)

To all whom it may concern:

Be it known that I, JOHN RINGEN, a citizen of the United States, residing at St. Louis, in the county of St. Louis and State of Missouri, have invented certain new and useful Improvements in Portable Ovens, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to portable ovens adapted for service over ranges, oil-stoves, or other sources of heat; and the novelty consists in the construction, arrangement, and adaptation of the parts, as will be more fully hereinafter set forth, and specifically pointed out in the claims.

The object of the invention is to produce an oven for baking purposes adapted to be placed over a stove or to receive heat from another source, one which shall be simple in construction, efficient in service, and inexpensive of manufacture. I provide that the heat shall pass under the interior bottom of the oven and circulate through its sides. I further provide that the current of heat as it enters the oven proper shall be in the direction of the sides at their lower ends.

The invention is illustrated in the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view, broken away at points to show the internal construction. Fig. 2 is a vertical longitudinal section in perspective with the door in elevation, and Fig. 3 is a transverse section looking in the direction of the door.

For convenience of description I have illustrated a rectangular form, A being the front, having doorway *a*; A', the back, and B B' the respective sides. C designates the top, and C' the bottom. These portions comprise the exterior shell. The bottom C' has a large heat-receiving aperture, *c*; or it may be largely cut away to receive the volumes of heat from a range or other source. (Not shown.)

From a point, *d*, on the front A, beneath the sill of the doorway *a*, a horizontal plate, E, extends toward the back, being secured to both the sides B and B' at a height sufficient to form heat-flue E'. This part E forms the bottom of the oven-chamber, and it is bent at *f* and extends vertically to form a flue, F',

between the vertical plate F and the back A'. A space, *f'*, is left between the upper edge of the plate F and the top C to form a throat, and the plate F is secured to the sides B B' in any suitable manner.

At a suitable distance from the sides B—say two inches, more or less—and secured to the plates E and F and to the front A and top C, is a plate or partition, G, having near its bottom a series of apertures, *g*, while upon the opposite side, and bearing the same relation to the side B', is a similar partition, G', having similar apertures, *g'*. These partitions G and G' form the side flues, H and H', respectively, and for an outlet to the flues the side B has perforations *b* near the top, and the side B' similar perforations, *b'*.

I designate the door. The door is hinged, and has a proper latch or catch, *i*.

The flues H and H' have no connection with the flues E' and F', but form passages from the lower interior of the oven to the outer atmosphere, conducting the heat upward on both sides, while the flues E' F' conduct the heat directly into the oven.

By my construction I provide heat-flues on both sides, bottom, and back of the oven. The entire device is made preferably of sheet metal.

It is important that the heat in its greatest intensity is projected directly into the interior of the oven, and in passing through the flues H H' is taken from near the bottom of said interior.

The various apertures, as *g g'*, &c., may be provided with registers and other modifications in details of construction may be made without departing from the principle or sacrificing the advantages of my invention, the essential features of which have been explained.

I disclaim an oven with a flue at its back in combination with a hollow door having apertures on the inside near the bottom and other apertures on the outside near the top, as such an oven is not new.

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

1. A portable oven having bottom flue, E, vertical back flue, F, by which the heat is conveyed and discharged into the oven, and side

flues, H H', connecting with the inner oven by apertures *g g'*, and with the outer air by apertures *b b'*, substantially as described.

2. The oven described, composed of the front
5 A, having doorway *a*, the back, and the sides
B B', perforated, as shown; the bottom E, and
vertical plate F, arranged to form flues E' and
F', the partitions G and G', perforated, as

shown, and forming with the sides flues H and
H', all combined, arranged, and serving as set 10
forth.

JOHN RINGEN.

Witnesses:

J. O. INGALS,
FRANCIS VALLE.