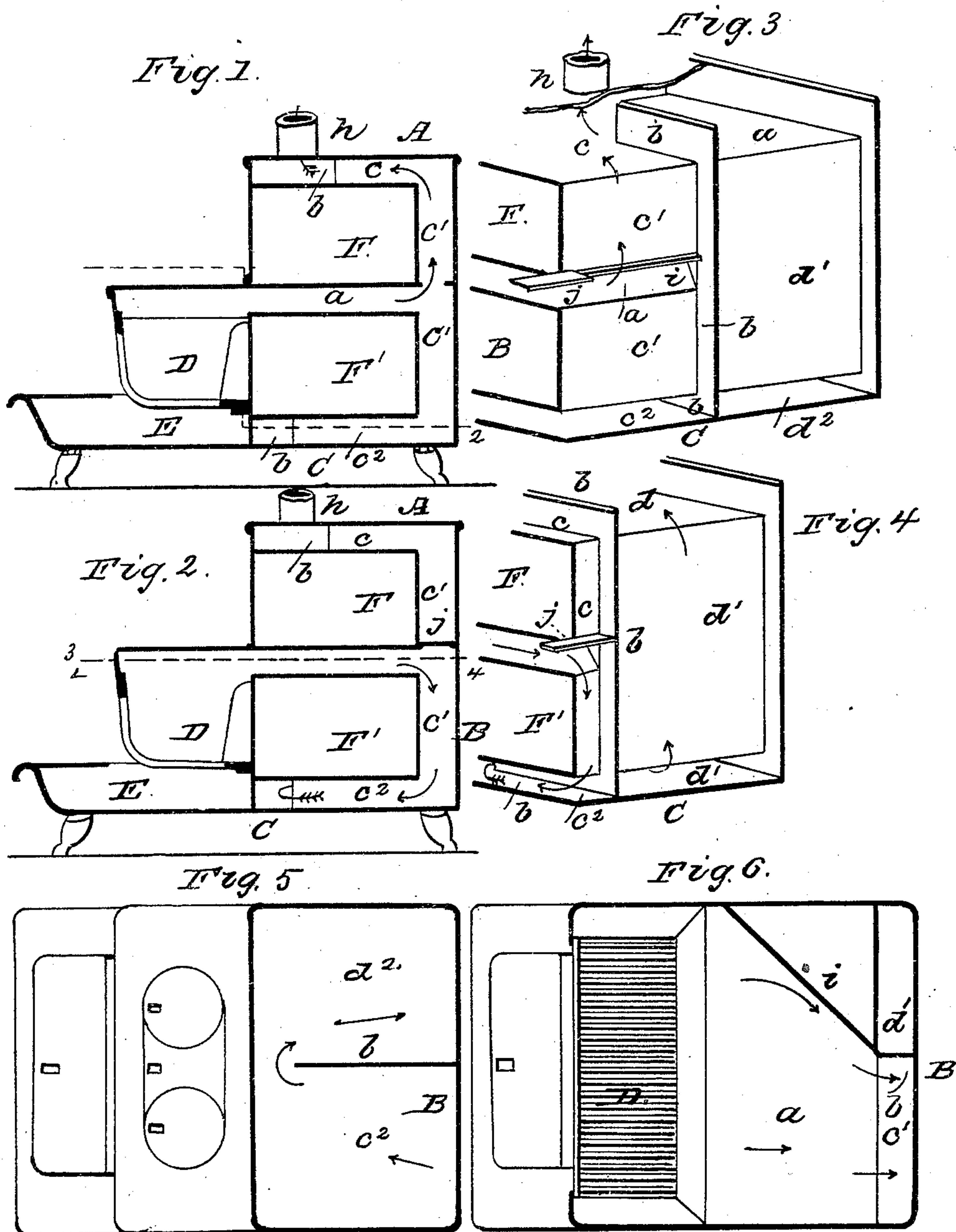


C. GREEN.
Cooking Stove.

No. 90,258.

Patented May 18, 1869.



Witnesses
Jas B Harding
John Parker

Inventor
Chas Green
By his Atty
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United States Patent Office.

CHARLES GREEN, OF VINCENTOWN, NEW JERSEY.

Letters Patent No. 90,258, dated May 18, 1869.

COOKING-STOVE.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, CHARLES GREEN, of Vincentown, county of Burlington, State of New Jersey, have invented an Improvement in Cooking-Stoves; and I do hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to an improvement in that class of cooking-stoves which are provided with two ovens, one directly above the other, and the improvement consists in a peculiar arrangement of flues or passages, by means of which the heated products of combustion are caused to circulate around and in contact with the ovens, all as fully described hereafter.

In order to enable others skilled in the art to make and apply my invention, I will now proceed to describe its construction and operation, reference being had to the accompanying drawing, which forms a part of this specification, and in which—

Figures 1 and 2 are vertical sectional views of my improved cooking-stove;

Figures 3 and 4, sectional perspective views of the same, with the back plate removed;

Figure 5, a sectional plan view on the line 1-2, fig. 1; and

Figure 6, a sectional plan view on the line 3-4, fig. 2.

Similar letters refer to similar parts throughout the several views.

A is the top plate; B, the back plate; and C, the bottom plate of a cooking-stove, in which are arranged the fire-place D, ash-pit E, and two ovens, F and F', the latter being placed one directly above the other, with an intervening flue, *a*, as best observed in figs. 1 and 2.

The space between the ovens and the top, back, and bottom plates of the stove is divided by a partition, *b*, figs. 3 and 4, into communicating chambers or flues *c*, *c'*, and *c''*, at one side of the stove, and into similar flues, *d*, *d'*, and *d''*, at the opposite side of the stove.

The upper end of the partition *b* does not extend entirely to the front of the stove, but terminates at a short distance to the rear of the outlet pipe *h*, by which the products of combustion are conveyed to the chimney, the flues *c* and *d*, consequently, communicating with each other beneath this pipe.

The flues *c''* and *d''*, in like manner, communicate with each other beneath the oven F', as shown in fig. 5, for a purpose described hereafter.

The flue *a*, between the ovens F and F', does not communicate with both of the passages at the rear of the stove, but with the flues *c'* only, a diagonal partition, *i*, directing the products of combustion towards this flue, as best observed in fig. 6.

A sliding damper, *j*, is arranged in the flue *c'* at a point immediately above the horizontal flue *a*. (See figs. 3 and 4.)

When it is desired to heat both ovens, the damper *j* is closed, as seen in figs. 2 and 4, the heated products of combustion then passing from the fire-place D, through the flue *a*, to the vertical flue *c'*, and descending through the latter to the flue *c''*, thence passing around the partition *b*, beneath the lower oven, as indicated by the arrow in fig. 5, and rising from the flue *d''* into the vertical flue *d'*, from which they are conducted, through the flue *d*, above the oven F, to the outlet-pipe *h*.

It will thus be seen that the products of combustion, in their course from the fire-place to the outlet-pipe, are caused to circulate around and in contact with the ovens, in such a manner that both of them shall be equally and effectually heated.

When it is required to heat the upper oven only, the damper *j* is opened; the products of combustion then, after passing between the ovens, rising through the flue *c'* and passing over the top of the oven F, through the flue *c*, directly to the chimney. (See arrows, figs. 1 and 3.)

It will be evident, without further description, that by the above peculiar arrangement of flues and partitions, the heated products of combustion can be so directed as to effectually heat one or both of the ovens of the stove.

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

1. The arrangement, with respect to the ovens F and F', of a cooking-stove, of the within-described passages or flues, for the purpose specified.

2. The diagonal partition *i*, arranged within the flue *a*, substantially as and for the purpose set forth.

In testimony whereof, I have signed my name, to this specification, in the presence of two subscribing witnesses.

CHARLES GREEN.

Witnesses:

JOHN WHITE,
LOUIS BOSWELL.