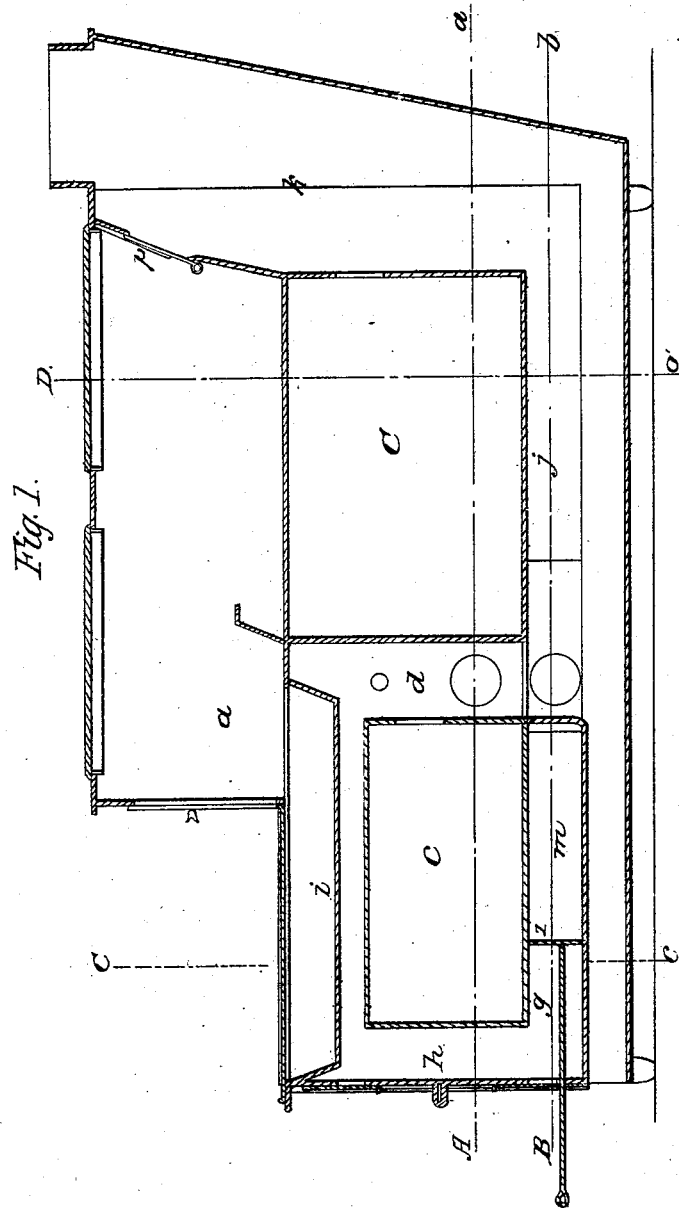


D. BUCK.
Cooking Stove.

4 Sheets—Sheet 1.

No. 5,967.

Patented Dec. 12, 1848.



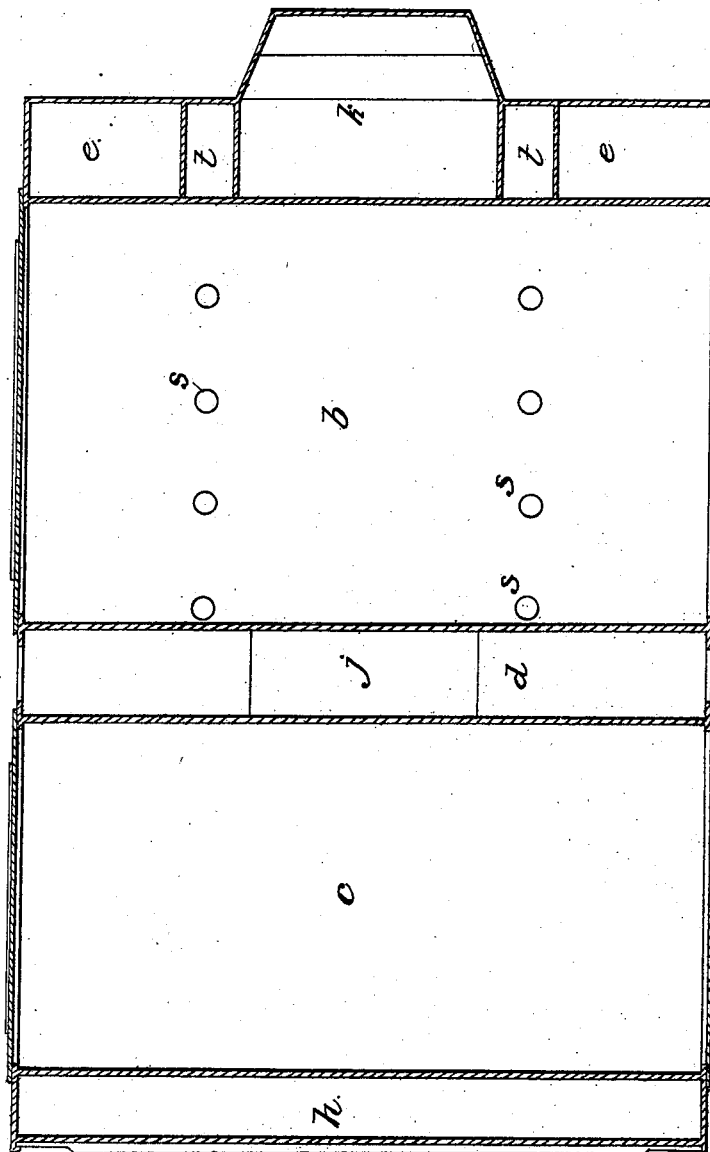
D. BUCK.
Cooking Stove.

4 Sheets—Sheet 2.

No. 5,967.

Patented Dec. 12, 1848.

Fig. 2. A.a.



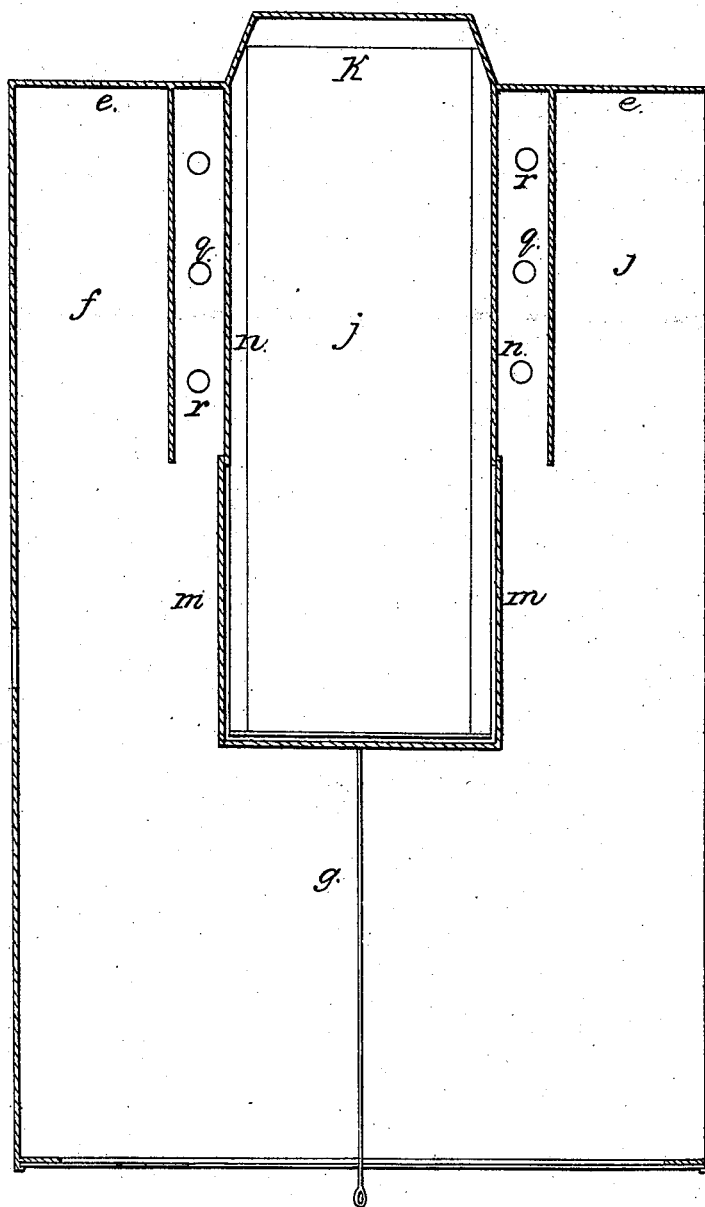
D. BUCK.
Cooking Stove.

4 Sheets—Sheet 3.

No. 5,967.

Patented Dec. 12, 1848.

Fig. 3.



D. BUCK.
Cooking Stove.

No. 5,967.

Patented Dec. 12, 1848.

Fig. 4. C. c.

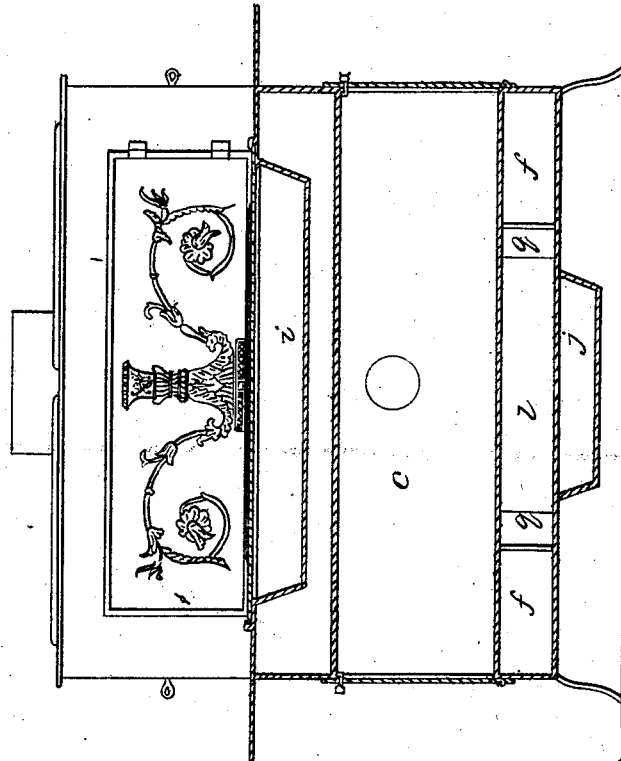
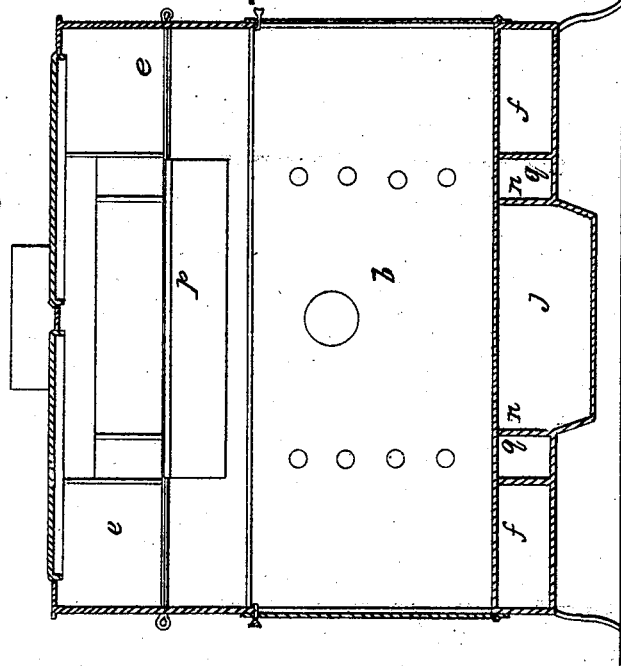


Fig. 3. D. d.



UNITED STATES PATENT OFFICE.

DARIUS BUCK, OF ALBANY, NEW YORK.

COOKING-STOVE.

Specification of Letters Patent No. 5,967, dated December 12, 1848.

To all whom it may concern:

Be it known that I, DARIUS BUCK, of Albany, in the county of Albany, in the State of New York, have invented new and useful
5 Improvements in Cooking-Stoves, and that the following is a full, clear, and exact description of the principle or character which distinguishes them from all other things before known and of the manner of making,
10 constructing, and using the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a longitudinal vertical section of my improved stove; Figs. 2 and 3, horizontal sections taken at the lines (A, *a*) and (B *b*) of Fig. 1; and Figs. 4 and 5 cross vertical sections taken at the lines (C, *c*) and (D *d*) of Fig. 1.

The same letters indicate like parts in all
20 the figures..

The nature of my improvements consist, first, in the arrangement of the two ovens, one (that is, the main one) at the back of the fire place, and extending, if desired,
25 partly under it, and the other in front of the main one extending under the open hearth, when this is combined with an arrangement of flues by which the draft is caused to pass over the main oven, down two side flues at the back, along two side flues at the bottom, then uniting in a single flue under the front oven, up in front thereof over the top and between it and the open hearth, then down a diving flue between
35 the two ovens to a return flue under the main oven and between the two side flues, and thence up through a middle flue at the back to the chimney—the said central return flue at the bottom of the main oven being
40 provided with a sliding damper which when open permits the draft after passing through the two main flues at the bottom to enter and pass through the said return flue to the chimney without passing around
45 the front oven, so that by means of the sliding damper both ovens or only the main one may be heated. And the second part of my invention consists in making hot air chambers between the central and the two
50 side flues at the back, and the two main and the return flues at the bottom by making the partitions double, that is, of two plates, when this is combined with apertures through the bottom and back plates of the
55 stove for the free admission of air to be heated in these chambers to aid in baking.

In the accompanying drawings (*a*) represents the fire place, (*b*) the main oven and (*c*) the oven in front of it, and separated by a vertical space (*d*). When it is desired
60 to heat the two ovens the products of combustion pass from the fire place directly over the main oven and down two diving flues (*e, e*) back of the oven, and placed so far apart as to leave a flue space between them, thence the draft passes along two main
65 flues (*f, f*) under the main oven, and also separated by a flue space in the middle; but as this center flue only extends to the front end of the main oven, the draft then
70 passes in a single sheet through a flue (*g*) under the front oven, up the front flue (*h*) over the top of this oven, and between it and the open hearth (*i*) which is thus heated for cooking purposes, and then the draft
75 passes down between the two ovens in the vertical flue space (*d*) to the return central flue (*j*), between the two flues (*f, f*), the said flue (*j*) conducting the draft to a flue (*k*) at the back and between the two
80 diving flues (*e, e*). The central return flue (*j*) is provided with a sliding damper (*l*) having two wings (*m, m*), one on each side, that embrace the partitions (*n, n*) that divide the central from the two main flues, and as this damper is provided with a handle (*o*) extending out to the front when it
85 is desired to heat the main oven alone this damper is drawn out (which opens the forward end of the return flue (*j*)) and then the draft instead of passing around the front oven passes from the main flues (*f, f*) into this return flue (*j*) and thence through the central vertical flue (*k*) to the chimney, so that by simply moving this damper both
90 ovens or only the main one can be heated. The central flue (*k*) has an opening near the top which opens into the flue space above the main oven governed by a damper (*p*) so that when desired, for kindling or other
95 purposes, the draft can be carried directly out into the chimney without passing around the oven by simply opening the damper (*p*), but when this damper is closed then the draft must pass around one or both ovens.

The partitions (*n, n*) that divide the main flues (*f, f*) from the central return flue (*j*) are made double leaving spaces (*q, q*) into which air is admitted through holes (*r*) in the bottom plate, to be heated by the passage
100 of the draft through the flues, and the air when thus heated passes through holes (*s*)

in the oven bottom to aid in heating the oven; and in like manner the hot air chambers (*t, t*) are formed in the same way and for the same purpose between the flues (*e, e,*)
5 and (*h*); holes being made in the back plate of the stove and main oven for the admission of cold air to these chambers, and for the introduction of it when heated to the oven. If desired however these chambers
10 in the bottom and back can be made continuous, and instead of discharging the air heated in them through holes into the main oven, it may be discharged into the flues that pass around the front oven to aid in
15 heating it. The oven top should be as usual provided with holes for the escape of the heated air from the oven after circulating through it; but as this is well known there is no necessity for describing and representing where and how made.
20

By my improvements the heat that passes through the flues will heat the air in the chambers formed between them and in that way aid in heating the oven or ovens; and
25 by the arrangement of the flues in combination with the arrangement of the two ovens and the dampers the two ovens can be heated regularly, and the heat carried around one or both ovens at pleasure, and when carried around both it will present the additional advantage of heating the open hearth

plate sufficiently to admit of broiling and carrying on other culinary operations, which has not heretofore been done without a separate fire in the hearth.

What I claim as my invention and desire to secure by Letters Patent in the before described stove, is—

1. The arrangement of the two ovens, one in front of the other, substantially as described, in combination with the arrangement of flues by which the draft can be made to pass over the main oven, down the back in the two diving flues, along the bottom, up the front of the front oven, over the top of it, down the diving flue between the front and main flue to the return flue, along the bottom and up the back of the main oven to the chimney, substantially as herein described.

2. And I also claim in combination with the arrangement of ovens and flues, the employment of the damper in the central return flue at the bottom for the purpose of causing the draft to pass around one or both of the ovens at pleasure, substantially as described.

DARIUS BUCK.

Witnesses:

CHS. M. KELLER,
G. MEYNIG.