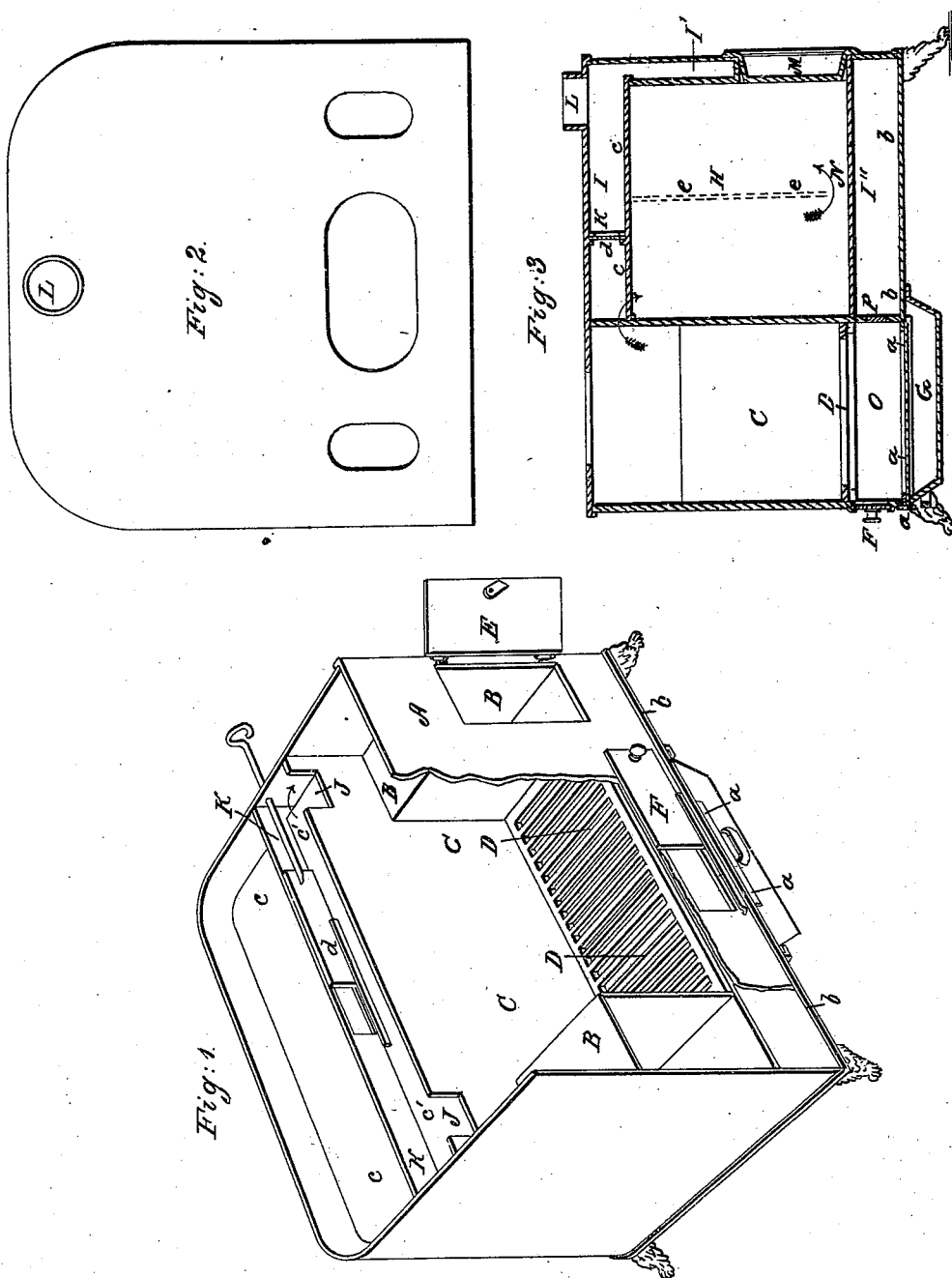


J. S. SILVER.
Cook Stove.

No. 4,899.

Patented Dec. 22, 1846.



UNITED STATES PATENT OFFICE.

J. S. SILVER, OF NEW YORK, N. Y.

COOKING-STOVE.

Specification of Letters Patent No. 4,899, dated December 22, 1846.

To all whom it may concern:

Be it known that I, J. S. SILVER, of the city of New York, in the State of New York, have invented a new and Improved Manner of Constructing Cooking-Stoves, which I denominate the "Anthrax Stove"; and I do hereby declare that the following is a full and exact description thereof.

My stove is provided with three ovens, two of them small, occupying each side of the fire chamber, the other large occupying the whole width of the stove and situated in the rear of the fire chamber. The fire chamber is furnished with a horizontal grate for the anthracite, or other fuel to rest upon, and is intended to be lined with fire brick, or other bad conductor of heat. I do not intend to have a feeding door for the supply of fuel but to admit this through a boiler hole immediately above the fire, there being a sliding, or other door for the admission of the draft of air below the grate bars, by which arrangement it becomes an air-tight stove. There is an ash drawer to receive the ashes when it becomes necessary to remove them, but the ashes are not allowed to fall through the grate bars into this drawer during the general use of the stove; the bottom plate of the stove has an opening through it immediately under the grate bars, but this is to be closed perfectly by a sliding dead plate which is to be withdrawn when the ashes are to be removed. Instead of the small ovens on each side of the fire chamber, one or both of these compartments may be occupied by a boiler.

In the accompanying drawing, Figure 1 is a perspective representation of the stove, the top plate Fig. 2 being removed and the front plate in part cut away to exhibit the interior of the fire chamber; Fig. 3 is a vertical section of the stove from front to back through its middle.

A A is a part of the front plate.

B, B, are the two ovens that are situated at the sides of the fire-chamber C C, which chamber as above remarked is intended to be lined with fire brick, but this lining is not represented in the drawing.

D D are the grate bars, and E is one of the small oven doors.

F is the sliding door or register for the admission of air to the fire. This may be constructed in any of the known modes, and is made to fit very closely.

G is the ash drawer; a a is the sliding dead plate which closes an opening made,

above the ash drawer, in the bottom plate b b of the stove.

H Fig. 3 is the large oven in the rear of the fire chamber; c c' being the top plate of said oven. This oven is surrounded at its top and sides by a flue space I, I'.

J, J, Fig. 1 are draft openings in the back plate of the fire chamber to admit the heated air from the fire chamber to pass into the flue space above the top plate c c' of the rear oven.

K K is a partition plate that divides this flue space into two compartments c c and c' c' this partition is furnished with a sliding door d d to allow of a direct passage when necessary to the exit pipe L. There is a partition e, e, Fig. 3, that extends down in the end flue spaces I, nearly to the bottom plate N, of the oven, said plates extending out so as to close the flue spaces I, and I'. The space I'' under the large oven is not a flue, but merely a heated air space; a longitudinal opening is made into it from the air space O, under the fire grate as shown at P, and this stove operating on the air tight principle the heated air that passes through the opening P, is found to heat, effectively, the lower plate N, of the oven.

M, is the door of the rear oven.

The side and bottom plates of my stove I usually form of sheet iron preferring this to cast iron, having found stoves so constructed to operate better than those with side plates of cast iron; the top plate I make of the latter material.

Having thus fully described the manner in which I construct my anthrax cooking stove, what I claim therein as new and desirable to secure by Letters Patent is—

The special arrangement and combination of the respective parts thereof, as herein set forth; that is to say, I claim the combining of the two ovens or boiler spaces B, B, situated on the sides of the fire chamber, with the rear oven H, the draft from the fire chamber descending and passing under the partition plates e, e, on its way to the exit pipe; and the space I'' under the rear oven being heated by means of the heated air from the air chamber O, under the fire grate, the whole being constructed substantially as herein set forth.

J. S. SILVER.

Witnesses:

T. BAILEY MYERS,
JOHN W. MITCHELL.