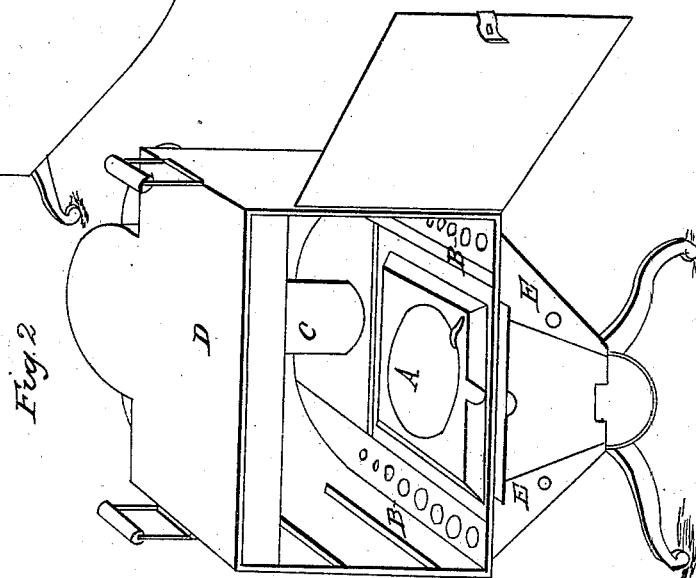
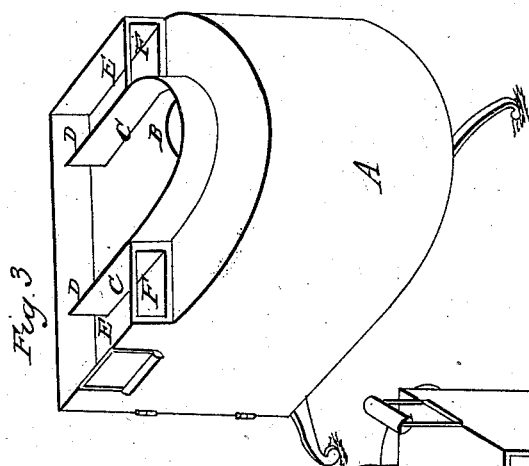
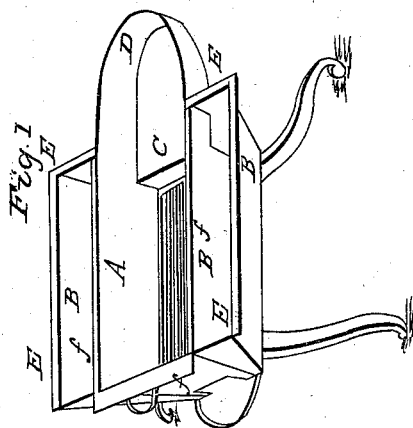
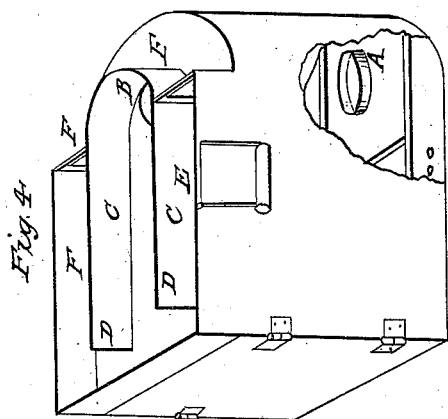


J. T. DAVY.
Domestic Oven.

No. 3,910.

Patented Feb. 12, 1845.



UNITED STATES PATENT OFFICE.

JOHN T. DAVY, OF TROY, NEW YORK.

BAKER.

Specification of Letters Patent No. 3,910, dated February 12, 1845; Antedated August 12, 1844.

To all whom it may concern:

Be it known that I, JOHN T. DAVY, of the city of Troy, county of Rensselaer, and State of New York, have invented a new and useful Improvement in Summer-Bakers; and I do hereby declare that the following is a full and exact description, reference being had to the accompanying drawings, which constitute a part of this specification.

The baker consists of a fire box or chamber as represented at A (Figure 1) with vacant air chambers each side B, B, (Fig. 1) surmounted by an oven as seen in perspective with the door open at Fig. 2 which figure represents the entire apparatus as set up for use.

To enable others skilled in the art to make and use my invention I will proceed to describe its construction and operation.

I construct my fire box in an oblong form of any suitable dimensions of sheet iron or other suitable materials and not differing from those heretofore in use for a similar purpose except in the mode of conveying the flame and smoke from the fire to the pipe or conductor above. At the back end of the grate on which the fuel is laid, C, (Fig. 1), is the back end plate to the fire box proper rising from the bottom of the fire box to within two or three inches of the top of the box and from that point backward a shallow box or passage way of equal width with the top part of the fire box and two or three inches deep extends back to the extreme back edge of the oven and terminates in a semi-circle (D, Fig. 1), thus forming a suitable flue for the flame and smoke to pass to the bottom of the aforesaid pipe or conductor. This fire chamber and flue is then placed in a kind of square box or air chamber of tin or iron of equal length and breadth with the top plate of the oven and of sufficient depth to contain the fire box wholly within it (E, E, E, E, Fig. 1.) The side plates of this exterior box or air chamber are usually set leaning outward at an angle of about forty-five degrees so as to be at the bottom very little wider than the bottom of the fire box. The ends of the air chamber are closed by entire plates having openings only sufficient for the fire box to slide in and out front and rear as a common drawer which is done by means of flanges attached to the upper edges of the side plates of the fire box (f, f, Fig. 1) resting on lips or other suitable supports un-

derneath attached in any of the ordinary modes of hanging a common sliding drawer so as to move easily back and forth. The top of the aforesaid air chamber is covered by plates or sheet of iron or tin which also forms the bottom plate to the oven (A, Fig. 2) and may be composed of one entire plate or a separate plate may be fitted in over the fire box so as to be easily replaced when burnt out and may or not have boiler holes in it. Along each side of the bottom plate to the oven from front to rear over the vacant air chambers are rows of holes (B, B, Fig. 2) more or less in number and of any suitable size to let the air as it becomes heated by contact with the fire chamber underneath to pass up into the oven and thus facilitate the culinary operations there, and at the same time improve the flavor of meats or other food roasted or baked therein.

The oven is in the ordinary form of a tin oven being of a square form from the front, back to the back end of the fire box proper and from that point the side plates extending around and meeting so that the back side of the oven is of a semi-circular form as seen at (A, Fig. 3). In the center of the oven near the back side and over the flue leading back from the fire box is a pipe or funnel (C, Fig. 2) of the size of ordinary stove pipe extending perpendicular from the bottom of the oven and conveying the flame and smoke from the fire chamber up through the oven into the flue seen at (B, Figs. 3 and 4) and is attached at each end by means of collars adapted for the purpose to the pipe holes through the top plate of the oven at (B, Figs. 3 and 4) and the bottom plate at (A, Fig. 4). The flame and smoke are conducted through the flues or chambers over the entire top of the body of the oven by means of flues formed by a partition in form of the letter U (C, C, Figs. 3 and 4) which partition commences at a point in the chamber over the oven at the distance of two or more inches back from the front plate of the oven and at about one-third the distance from the left to the right hand side of the oven and extends back in a line parallel to the side plates of the oven to the extreme back part of the square part or body of the oven then back around the aforesaid pipe hole (through the top plate of the oven) forming a semi-circle around the back side of said pipe hole then extends across toward the front plate of the oven

in a like parallel line to the side plates at about one-third the distance from the right to the left hand side plate of the oven to a point two or more inches from said front
5 plates so that the flame and smoke passing up through the aforesaid pipe or funnel passes into the center flue at (B, Figs. 3 and 4) and passes forward through said flue to the front extremities of said partition
10 (D, D, Figs. 3 and 4) where it separates and passes back through the side flues (E, E, Figs. 3 and 4) and out at (F, F, Figs. 3 and 4) into the open air the outer sides of these side flues are formed by extending the
15 front and side plates of the oven two or three inches (a distance equal to the height of the aforesaid partition) above the top plate of the oven. The whole of said flues are then inclosed on the top by means of one
20 entire plate of tin or iron as seen at (D, Fig. 2). The fire box is mounted on legs of any suitable form and height and the oven placed on over the fire box as seen at Fig. 2.
25 For the purpose of giving action to the heated air in the air chambers each side of

the fire box through the oven and for the better regulating the heat of the oven a small aperture is made through the plate into the air chamber each side of the fire
30 place and provided with a damper (E, E, Fig. 2).

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

The manner in which I have combined the
35 oven and fire box that is the fire box being surrounded with an air chamber perforated through the top plate with holes communicating with the oven, the oven being directly
40 over the fire box and the smoke pipe ascending through the oven, and the flame and smoke being distributed over the top of the oven in the manner described these features in combination constituting the economy of
45 my summer baker the whole arrangement and combination being substantially as herein set forth.

JOHN T. DAVY.

Witnesses:

A. A. THOMPSON,
I. F. WELLS.