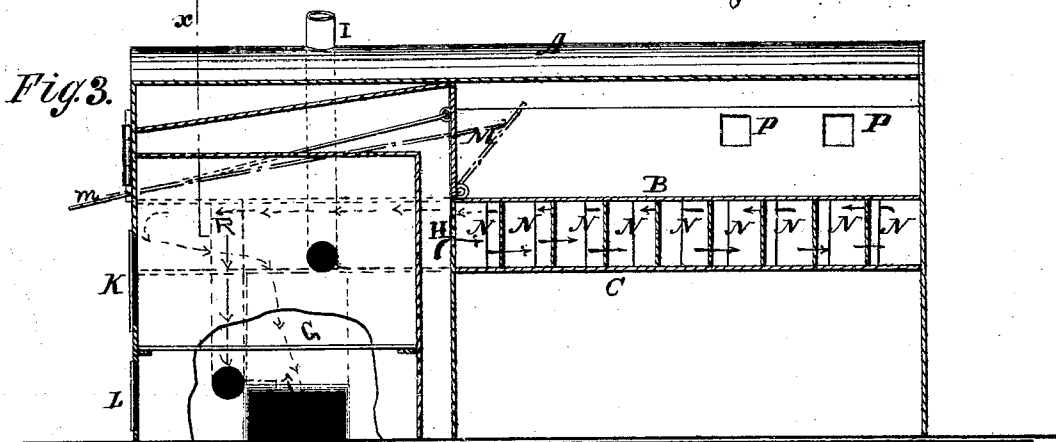
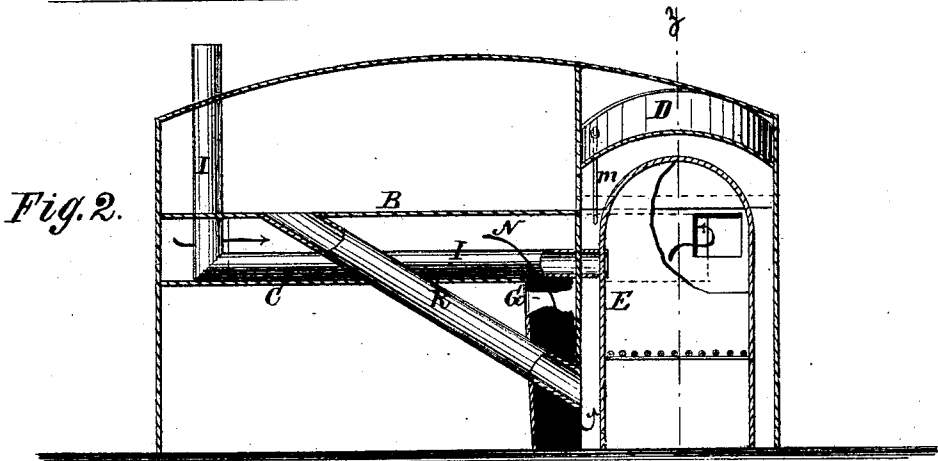
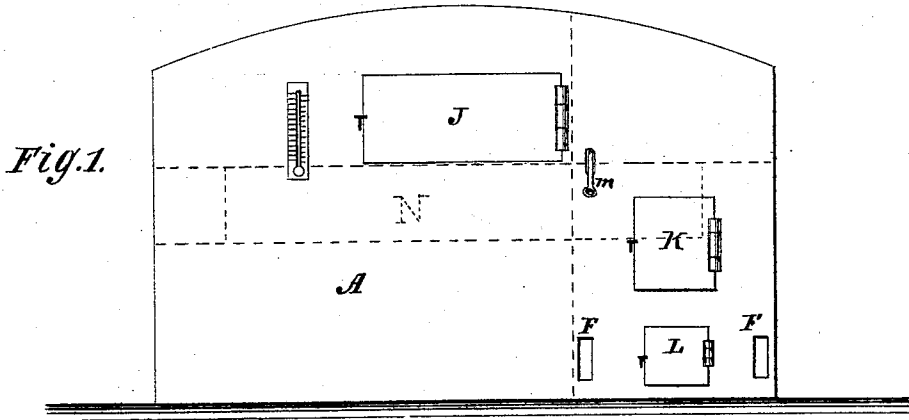


G. H. SMITH.
Baker's Oven.

No. 128,433.

Patented June 25, 1872.



Witnesses:

D. S. Stuart
J. Knight

Inventor:

George H. Smith
by A. McCallum
att'y.

UNITED STATES PATENT OFFICE.

GEORGE H. SMITH, OF GALESBURG, ILLINOIS.

IMPROVEMENT IN BAKERS' OVENS.

Specification forming part of Letters Patent No. 128,433, dated June 25, 1872.

SPECIFICATION.

I, GEORGE H. SMITH, of Galesburg, in the county of Knox and State of Illinois, have invented certain Improvements in Bakers' Ovens, of which the following is a specification:

Nature and Objects of the Invention.

The nature of my invention relates to improvements in ovens for bakers' use; and the invention consists in the arrangement and combination of a furnace with an oven, so constructed that any part of the oven may be heated at pleasure, the heat all utilized, and no flame or smoke pass through the oven, all as hereinafter fully described.

Figure 1 is a front elevation of my improved oven. Fig. 2 is a vertical sectional view on the line *x x*, Fig. 3. Fig. 3 is a vertical sectional view on the line *z z*, Fig. 2.

General Description.

A is the outside casing inclosing the entire apparatus. B is the baking-floor or bottom of the oven. (See Fig. 3.) C is a second floor, a little distance below the floor B. D is the outer shell, and E the inner shell, of the heating-furnace. F F are openings to admit the external air to the space between casings D and E. G is a pipe leading from the space between the doors B and C to and communicating with the lower part of the air-chamber of the furnace. H is an opening leading from the air-space between D and E to the space between the floors B and C. I is the chimney leading from the interior of the heating-furnace to the exterior of the casing A. J is the door to the oven. K is the door to the fire-box of the heating-furnace. L is the door to the ash-pit. M is a valve opening from the rear and top of the hot-air chamber of the heating-furnace into the oven, and is operated by a rod, *m*, which extends outward to the front side of the casing A. N N N N N are a series of walls or flue-plates dividing the space between the floors B and C transversely,

as shown, their outer ends not extending quite to the casing A.

The openings between the walls N may be partially closed at their ends, closing those most which are nearest the heating-furnace, and those least which are most distant.

The operation of my invention is as follows: Fire being made in the heating-furnace, the heated air will pass through the opening H, (see Fig. 3,) and in the direction shown by the arrows, through between the walls N, until it reaches the pipe G, where, having become a little colder, it will descend through said pipe G to the bottom of the space between the shells D and E of the furnace, where it will re-enter and take the same course, heating thoroughly the bottom B of the oven. By opening the valve M heated air may be admitted to the oven for the purpose of heating the top thereof at pleasure.

P P are isinglass windows in the sides of the casing A, through which light is admitted to the oven, obviating the necessity of passing in a lamp or light and holding the oven-door open for inspection of the interior. R is a pipe leading from the oven down through to the bottom of air-chamber between D and E, through which the cooler air returns for re-heating and distribution.

Claims.

What I claim as my invention is—

1. The heating-chamber between walls D E, double bottom B C, walls N N, and pipe G, when arranged to operate in combination for the purpose specified.
2. In combination with the heating-chamber and the oven, the valve M and rod *m* and pipe R, for the purpose specified.
3. The combination of the heating-chamber, valve M, pipe R, double bottom B C, walls N, and pipe G with the oven, substantially as and for the purpose specified.

Witnesses: GEO. H. SMITH.

F. G. GREELY,
JOHN C. STEWART.