

(No Model.)

T. J. FORD.
OVEN FOR VAPOR STOVES.

No. 337,757.

Patented Mar. 9, 1886.

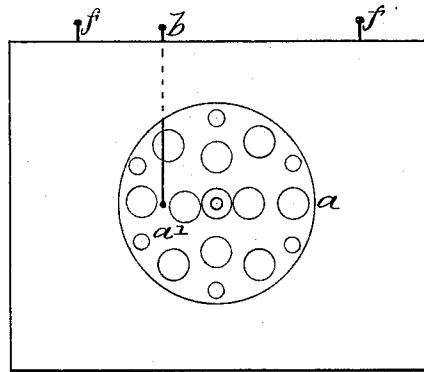


Fig. 3.

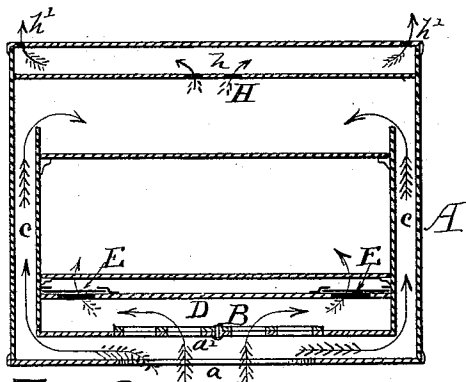


Fig. 2.

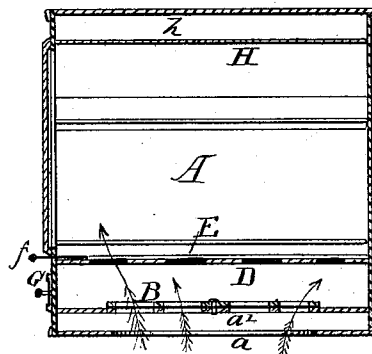


Fig. 4.

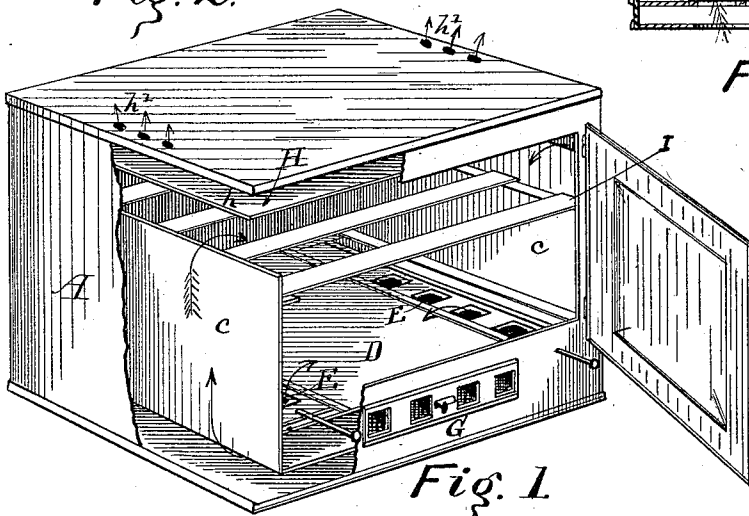


Fig. 1.

WITNESS,

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att'y

UNITED STATES PATENT OFFICE.

THOMAS J. FORD, OF GENEVA, OHIO, ASSIGNOR OF ONE-HALF TO FRANK S. TURNER, OF SAME PLACE.

OVEN FOR VAPOR-STOVES.

SPECIFICATION forming part of Letters Patent No. 337,757, dated March 9, 1886.

Application filed May 7, 1885. Serial No. 164,633. (No model.)

To all whom it may concern:

Be it known that I, THOMAS J. FORD, of Geneva, in the county of Ashtabula and State of Ohio, have invented certain new and useful Improvements in Ovens for Vapor-Stoves, of which the following is a specification.

This invention relates to improvements in ovens for vapor-stoves, and has for its object to provide a means for changing and controlling the heat, so that it may be shut off from the bottom, and conducting it over and into the top of the oven, thus providing for baking the top as well as the bottom of bread, &c.

These improvements consist of ducts or flues and dampers in combination with the oven, as hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a perspective view of an oven having my improvements attached, and having one corner broken away to show interior construction. Fig. 2 is a vertical section. Fig. 3 is a view of the bottom of the oven. Fig. 4 is a cross-section.

A is the outside casing of the oven, in the bottom of which there is an opening, *a*, which sets over the burner. A short distance above this is placed a second bottom, *a'*, in which is made a grating, provided with a slide, B, for the grating, when desired. In the drawings the grating shown consists of round holes or openings covered with a circular plate, B, also having holes to correspond with those in the bottom plate, *a'*, said plate B being pivoted at the center, and made to turn, for closing the openings, by means of a rod, *b*, passing out through the front wall of the casing. Instead of a circular plate and round openings, a straight or square plate with slotted openings may be used for the same purpose. The space between these two bottoms is connected at the ends to end flues, *c c*, formed by end plates arising from said second bottom, *a'*, to within about one inch of the top of the oven, the purpose of which will be herein- after shown.

D is a third bottom placed a short distance above the second bottom, *a'*, and the full space within the baking-chamber of the oven. This bottom is re-enforced with a plate, *d*, secured to the under side, for the purpose of protecting the said bottom from being burned by the intense heat from the burner. At each end of said bottom D are made a row of openings,

e e, over which are placed sliding plates E, provided with corresponding openings, for covering and uncovering the aforesaid openings *e e*, said plates having rods *f f*, for operating them.

In the back and top of the oven is made a lining, H, forming a back, and an upper flue, designed for creating a draft downward from the end flues, as hereinafter shown. Openings *h* are made through said lining at the bottom of said flue, and openings *h'* are made in the top of the oven near the front corner.

In the front side of the casing A is provided a damper, G, communicating with the space between the second and third bottoms, the use of which will be shown in the description of the operation.

I are movable shelves commonly used in ovens.

The operation of this oven is as follows: In the first place the grating B is thrown open, while the slides E and dampers G are closed. This allows the heat to pass directly through the grating to the bottom D. This will do the baking on the bottom. Then when this is sufficiently done the grating is closed and the slides E and dampers G are opened. This causes the heat to be deflected and carried to the end flues, as shown, in the direction of the arrows; thence over into the top of the oven, and downward over the top of the bread or other articles in the oven; thence through openings *h* at the lower rear side of the oven, and upward through back flue, and out at openings *h'* in top of oven. Air is also admitted at the same time through the dampers G, which tends to cool the bottom while the top baking is going on.

Having described my invention, I claim—

The combination, with the oven A, provided with open bottom *a*, of the second bottom, *a'*, end plates, *c c*, attached thereto, having the grating and grating-cover B, and connected with the end flues, *c c*, the bottom D, provided with the openings *e e* and slide-covers E, and the back and top lining, H, having openings *h* and *h'*, all constructed and operating substantially as and for the purpose specified.

THOMAS J. FORD.

Witnesses:

E. W. LAIRD,

GEO. W. TIBBITTS.