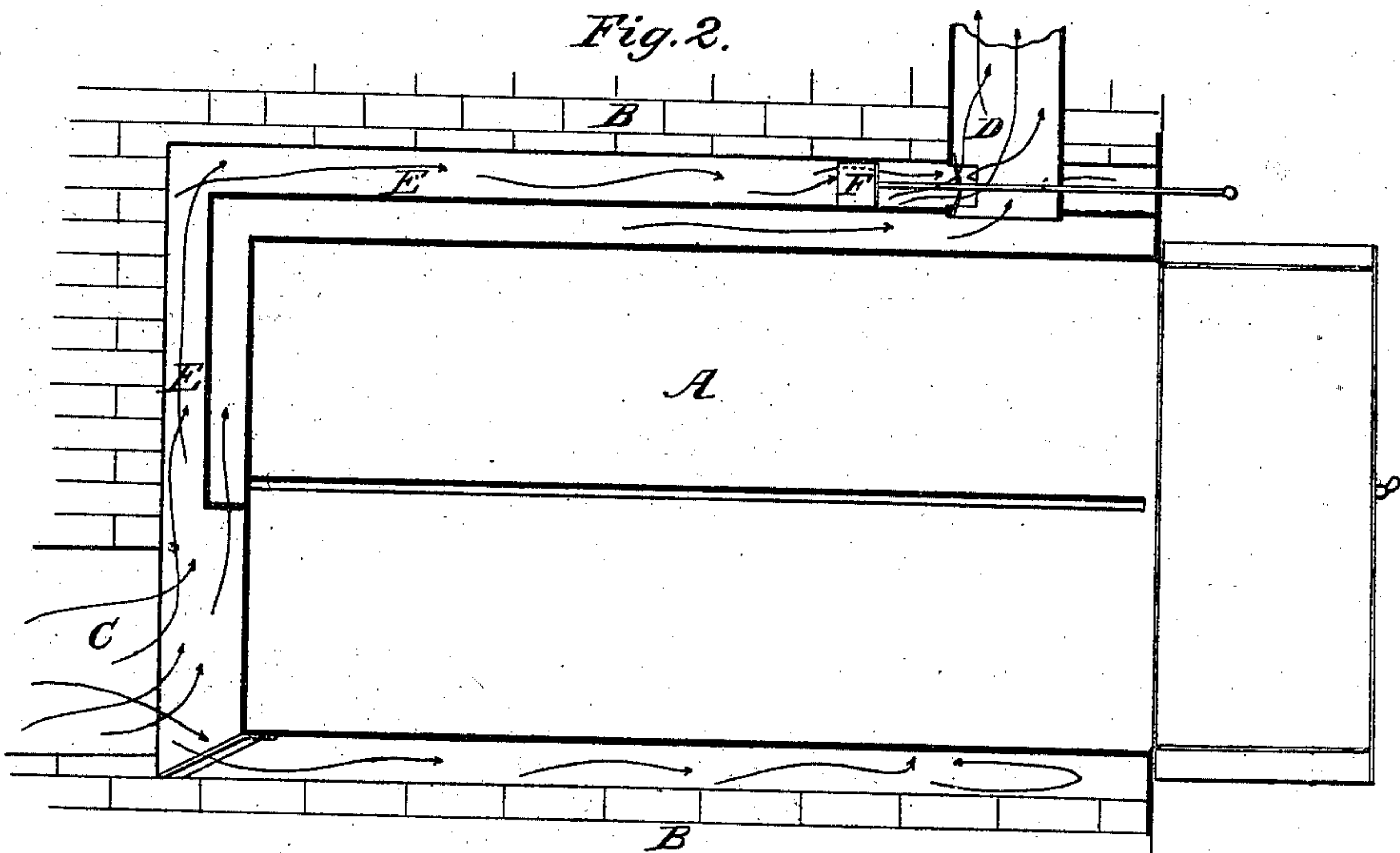
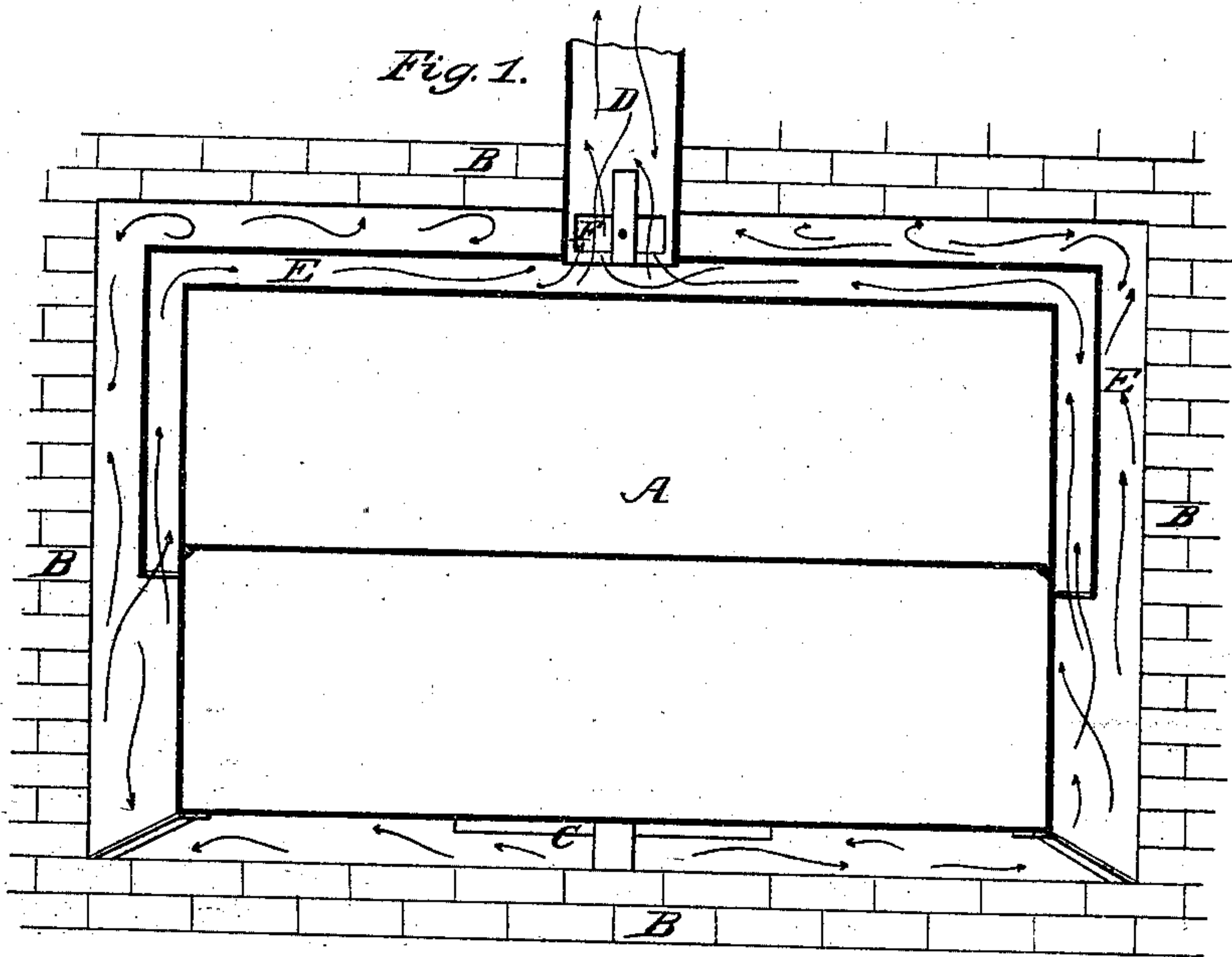


*A. Whittock.*  
*Domestic Oven.*

*N<sup>o</sup> 58,522.*

*Patented Oct. 2, 1866.*



*Witnesses.*  
*Andrew Whiteley.*  
*James McFowler.*

*Inventor.*  
*Abel Whittock*  
*By his atty*  
*R. D. O. Smith*

# UNITED STATES PATENT OFFICE.

ABEL WHITTOCK, OF DANBURY, CONNECTICUT.

## OVEN.

Specification forming part of Letters Patent No. 58,522, dated October 2, 1866.

*To all whom it may concern:*

Be it known that I, ABEL WHITTOCK, of Danbury, in the county of Fairfield, in the State of Connecticut, have invented a new and useful Improvement in Ovens; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, in which—

Figure 1 is a vertical cross-section of my oven, and Fig. 2 is a vertical longitudinal section of the same.

The nature of my invention consists in covering the baking-chamber of my oven with a jacket or reverberator, which prevents a too rapid flow of the heated air and products of combustion over the surface of the walls of the baking-chamber, and also prevents, in a great degree, the absorption of heat by the outer walls of the structure, and in a corresponding degree increases the amount of heat utilized in the baking-chamber.

That others skilled in the art may understand the nature and operation of my invention, I will particularly describe it.

A is the chamber, in which the baking process is performed. It may be composed of metallic plates, or made in any other suitable way. The chamber A is placed in the midst of a larger chamber, B, and surrounded on all sides except one by a space between the walls of A and B. Through this space the heated air and products of combustion pass from the fire-box at C to the flue at D, thereby surrounding and bathing the baking-chamber. But experience has proved that the upper part of a baking-chamber so constructed usually fails to become as hot as the lower part, which receives the draft of heated air sooner than the upper part, and therefore utilizes more of its caloric. The inclosing walls also absorb a

large portion of the heat, and more, probably, at the top than at the bottom in proportion to the amount passing over the surfaces.

By enveloping the upper portion of the baking-chamber in a jacket, E, as represented, I find the heat within the baking-chamber to be equalized—that is, it is as great at the upper part as at the lower. This phenomenon is in consequence of the isolation of the real inclosing wall surrounding the upper part of the baking-chamber, for when the oven is in use the draft of hot air ascends between the walls of A and the wall E, while behind E is a non-absorbent stratum of air, also hot, which is in effect motionless. Instead of heat then being absorbed and carried away by the wall E, it is reverberated upon the wall of the baking-chamber, which does absorb it and conveys it to the space within the oven where it is utilized.

The valve F affords a more ready draft into the flue, and is intended to be used only when the fire is being kindled. The front of the baking-chamber is closed by a door in the usual way.

The jacket E should be composed of thin metallic plates, and flue D penetrates through it, so that when the valve F is closed there can be no egress for the products of combustion except through the space between the walls A and E.

Having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The jacket or reverberator E, in combination with the baking-chamber of an oven, substantially in the manner and for the purpose set forth.

ABEL WHITTOCK.

Witnesses:

L. H. BOUGHTON,  
THEODORE McDONALD.