

(No Model.)

2 Sheets—Sheet 1.

C. A. SCHUBERT.  
BAKER'S OVEN.

No. 581,622.

Patented Apr. 27, 1897.

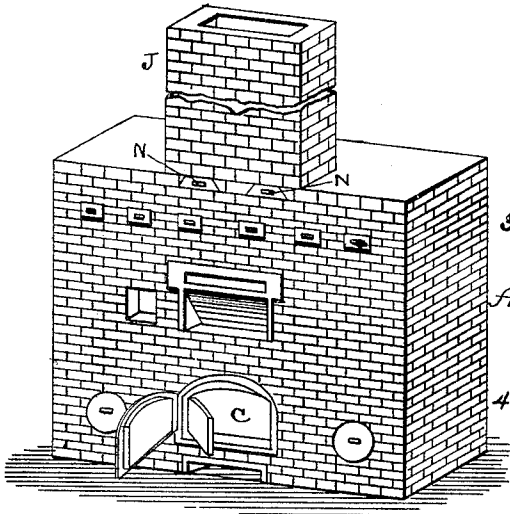


Fig 1

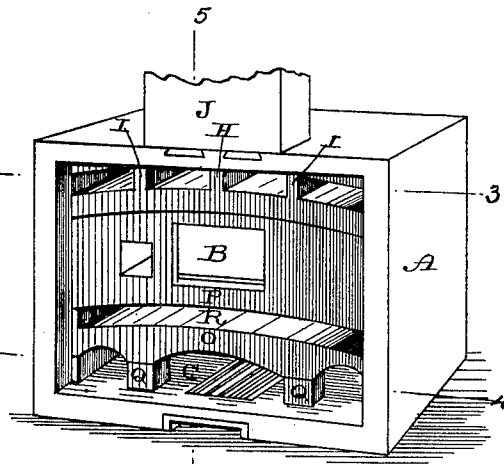


Fig 2

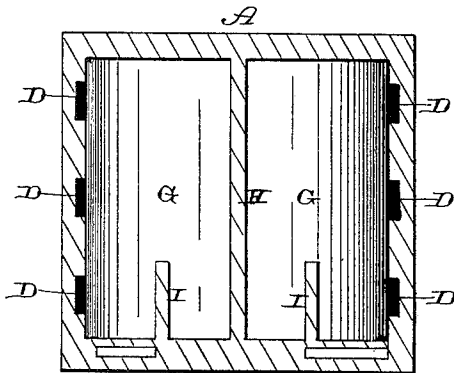


Fig 3

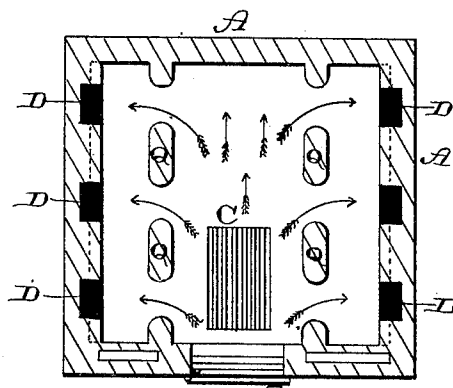


Fig 4

WITNESSES:

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*O. A. Michels & Co*  
ATTORNEYS.

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Fig. 5.

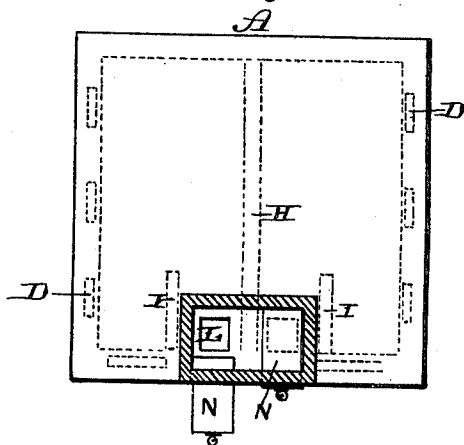
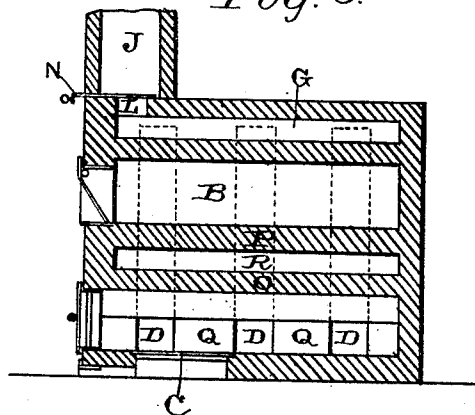


Fig. 6.



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# UNITED STATES PATENT OFFICE.

CHARLES AUGUST SCHUBERT, OF NEW YORK, N. Y.

## BAKER'S OVEN.

SPECIFICATION forming part of Letters Patent No. 581,622, dated April 27, 1897.

Application filed August 6, 1896. Serial No. 601,935. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES AUGUST SCHUBERT, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Bakers' Ovens; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This improvement relates to that class of bakers' ovens having a furnace beneath and side flues leading to a chamber above; and its object is to provide an oven of this class that will be very evenly heated and in which the drafts on the opposite sides can be regulated as desired.

To these ends the invention consists in the peculiar construction hereinafter more particularly described and then definitely claimed.

In the accompanying drawings, Figure 1 is a perspective of an oven which embodies my invention. Fig. 2 is a similar view with the front portion removed. Fig. 3 is a horizontal section taken on the line 3 3 of Fig. 2. Fig. 4 is a horizontal section taken on the line 4 4 of Fig. 2. Fig. 5 is a plan view of the oven, the upper portion of the chimney being cut away. Fig. 6 is a vertical longitudinal section.

A represents the inclosing brickwork or frame of the oven, and B the oven proper. The furnace C is formed in the bottom of the framework A, and the products of combustion move, as indicated by arrows in Fig. 4, toward the sides and rear of the furnace-chamber and pass up through the flues D, formed in the side walls, as shown. Of these flues there will be any desired number upon each side, in contradistinction to the rear side, which has been heretofore used for this purpose, and these flues discharge the products of combustion into the two chambers G, formed over the top of the oven, but which are separated from each other by the partition H. This partition is used to form the chambers so that the products of combustion may be

made to rise upon either side of the oven, as may be found necessary. In order to prevent the products of combustion from passing directly up the chimney from the front flues, short partitions I are made, and these partitions extend parallel with the central one II and any desired distance backward that may be found preferable. The heat rising from the front flues must pass backward around the partitions I and then move forward to the chimney J, which is provided at its bottom with the two flues L, that are controlled by the two dampers N. If either one of these dampers is closed, as shown in Fig. 5, the products of combustion pass up through the three flues upon the opposite side only, and hence the heat is applied to that side only of the oven. If one of the dampers is only partially closed, but a portion of the heat will be deflected from that side, and in this manner the heat in the oven B is regulated at will.

Heretofore it has been customary to form the flue or flues in the rear wall of the oven, and then, the entire products of combustion passing up this side only, the back of the oven becomes too hot, while the front is not hot enough to bake properly. By forming the flues in the two sides and providing dampers, so as to regulate the flow of the products of combustion, the heat in the oven can be regulated at will.

In order to prevent the bottom of the oven from becoming too hot, as it would do if the whole heat of the furnace was applied directly to it, a protecting-wall O is built at a suitable distance below the bottom P of the oven, and this wall is supported upon the pillars Q, which rise vertically through the furnace-chamber, as shown in Figs. 2, 4, and 6. Between this horizontal wall O and the bottom of the oven P is formed an air-chamber R, which serves as a protector to the bottom of the oven from the heat.

By the construction above described the heat is applied to the oven at those points where it is most needed. The flues, being arranged in the sides of the brickwork, enable a much larger number to be used and the heat to be applied to a larger number of places, and hence there is a corresponding saving in fuel.

The heat being more equally distributed, better work can be done and less time and care are required to operate the oven.

Having thus described my invention, I  
5 claim—

The combination with an oven, of an out-  
take, a combustion-chamber below the oven,  
a non-conducting air-space between the oven  
and the combustion-chamber, a series of ver-  
10 tical flues at each side of the oven leading  
from the combustion-chamber, two horizontal  
flues over the oven, each communicating with

one series of flues and with the outtake, and  
a deflector in each of said horizontal flues sit-  
uated between the outtake and a discharge 15  
end of the nearest of said vertical flues, sub-  
stantially as described.

In testimony that I claim the invention set  
forth above I have hereunto set my hand this  
13th day of June, 1896.

CHARLES AUGUST SCHUBERT.

Witnesses:

OSCAR A. MICHEL,  
GREGOR WALZEL.