

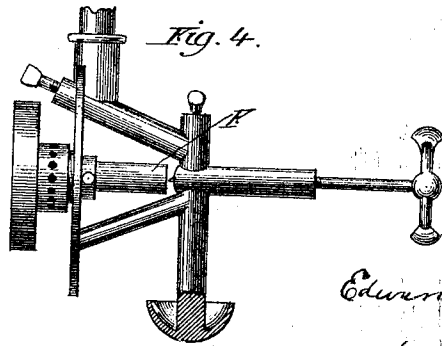
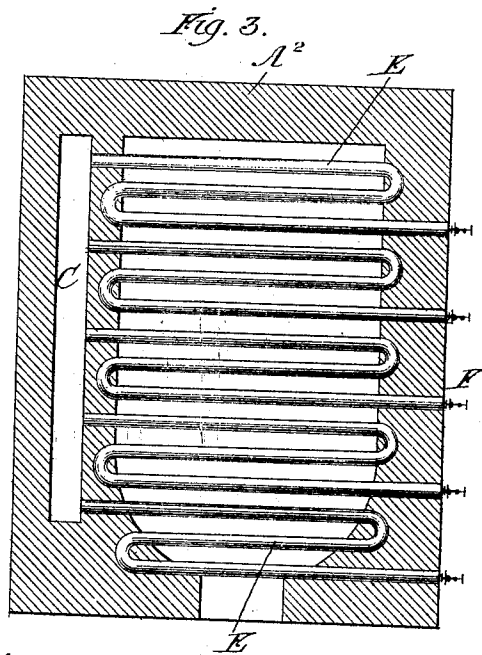
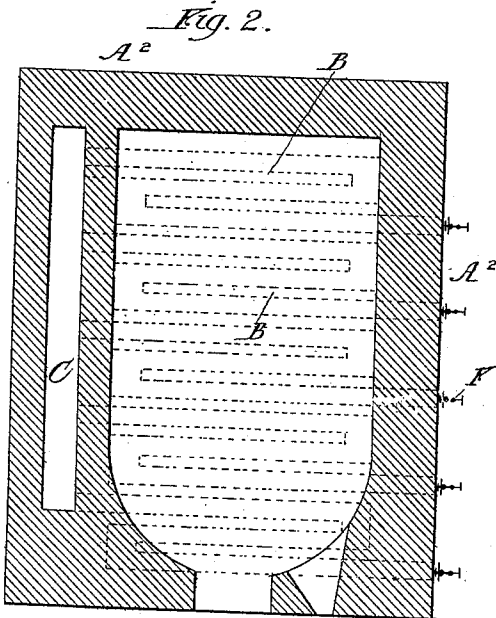
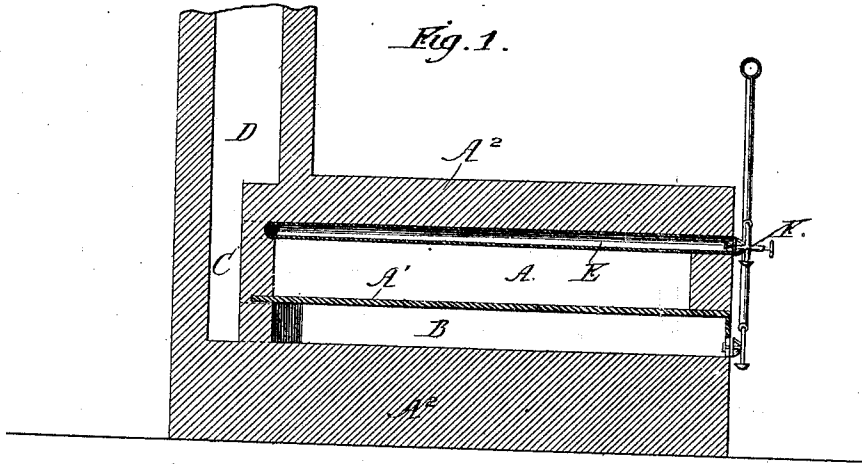
(No Model.)

E. A. C. PETERSEN.

BAKER'S OVEN.

No. 336,741.

Patented Feb. 23, 1886.



Witnesses:  
 Frank J. Blanchard  
 Frank W. Severin

Inventor:  
 Edward A. C. Petersen  
 By West & Loeb,  
 Attorneys.

# UNITED STATES PATENT OFFICE.

EDUARD A. C. PETERSEN, OF CHICAGO, ILLINOIS.

## BAKER'S OVEN.

SPECIFICATION forming part of Letters Patent No. 336,741, dated February 23, 1886.

Application filed July 21, 1885. Serial No. 172,181. (No model.)

*To all whom it may concern:*

Be it known that I, EDUARD A. C. PETERSEN, a citizen of the United States of America, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Bakers' Ovens, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to improvements in baking-ovens.

The object it has in view is to so construct such ovens that the full benefit of the heat may be obtained and the work be satisfactorily done.

To the accomplishment of these ends the invention consists of certain novel devices and combination of devices, as will be described.

In the accompanying drawings, Figure 1 is a transverse sectional view of the oven; Figs. 2 and 3, horizontal sections thereof, and Fig. 4 a detail of a burner used.

Like letters refer to like parts in each view.

A represents the baking compartment, formed by iron plate A' and the brick-work A<sup>2</sup>. Directly beneath plate A', I provide a series of tortuous flues or passages, B, which communicate at one end with the outer air and at the opposite end with a vertical flue, C, formed in the brick-work and communicating with the chimney D. There may be any number of these flues C B, and they may be formed with any suitable number of turns, it being only necessary to retain the heat a suitable time; and for this purpose it will be found that if each flue is formed with two turns, as shown, the object will be gained.

E represents a series of pipes situated within the baking compartment and arranged to act as a support for the ceiling thereof. Each pipe E is formed into a coil, and communicates at one end with the outer air and at the opposite end with the vertical flue C, before referred to.

As with the flues B, the number and exact form of pipes E need not be limited, but the best arrangement under different circumstances used.

The heating agent to be used in the oven may consist of any suitable volatile or gaseous hydrocarbon.

In Fig. 4 I have shown a burner, which I will refer to by the letter F, without giving any detailed description thereof, as it is of well-known construction and in common use. I place one burner at the mouth of each flue B and each pipe E, as clearly shown in the drawings, and the agent being ignited the hot gases are drawn through such flues and pipes. By the arrangement of these parts these gases are retarded in their flow, thereby thoroughly heating the baking compartment, and are finally discharged into flue C, whence they escape through the chimney.

I am aware of the existence of English Letters Patent No. 536 of 1882, issued to Messrs. Thompson and Boocor, and hereby disclaim the constructions shown therein.

What I claim is—

1. In a baking oven, the combination, with a series of tortuous flues situated beneath the baking compartment, of a series of burners, one for each flue, as set forth.

2. In a baking-oven, the combination, with a series of coiled pipes situated within the baking compartment, of a series of burners, one for each pipe, as set forth.

3. In a baking-oven, the combination, with the baking compartment, of flues B, pipes E, and burners F, as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

EDUARD A. C. PETERSEN.

Witnesses:

M. J. CLAGETT,  
FRANK S. BLANCHARD.