

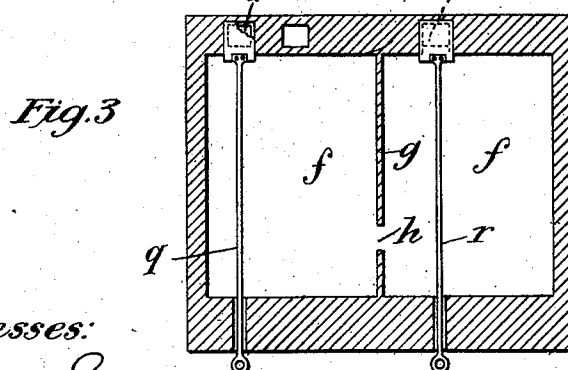
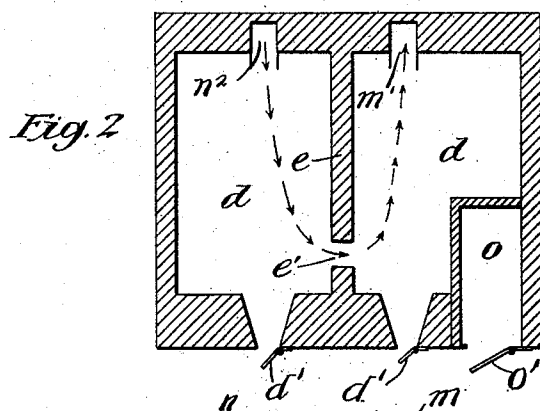
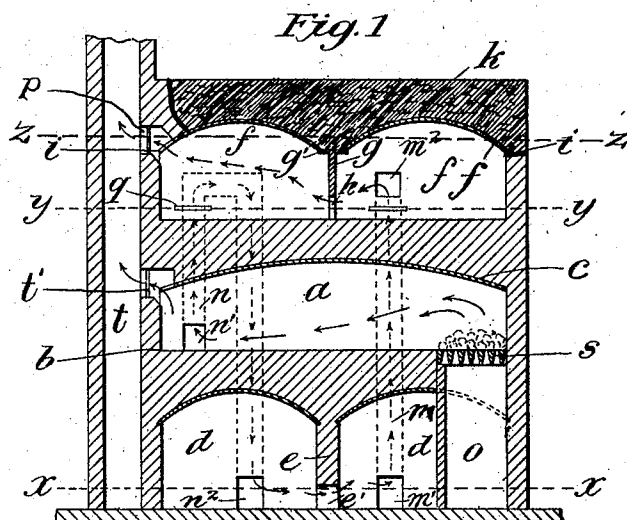
No. 823,695.

PATENTED JUNE 19, 1906.

W. H. PERRY.
BAKER'S OVEN.

APPLICATION FILED NOV. 18, 1904.

2 SHEETS—SHEET 1.



Witnesses:

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Sadie Bennett

Inventor:

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2 SHEETS—SHEET 2.

FIG. 5

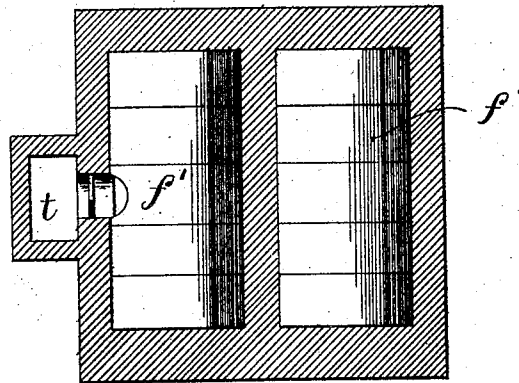
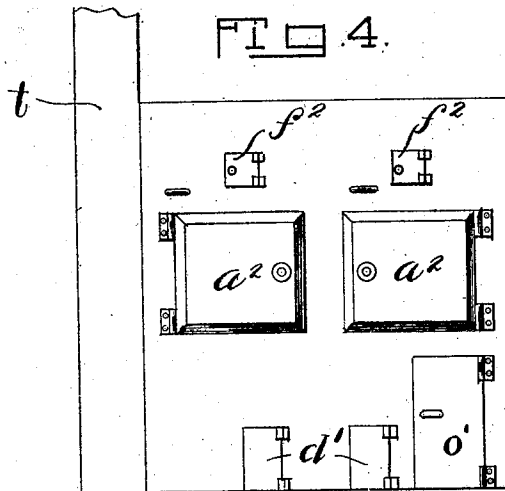


FIG. 4.



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UNITED STATES PATENT OFFICE.

WILTON H. PERRY, OF NEW YORK, N. Y.

BAKER'S OVEN.

No. 823,695.

Specification of Letters Patent.

Patented June 19, 1906.

Application filed November 18, 1904. Serial No. 233,251.

To all whom it may concern:

Be it known that I, WILTON H. PERRY, a citizen of the United States, residing at Brooklyn, city of New York, in the county of Kings and State of New York, have invented certain new and useful Improvements in Bakers' Ovens, of which the following is a specification.

My invention relates to improvements in bakers' ovens; and the object of my invention is to distribute the heat evenly through the baking-chamber to give the goods a uniform and continual bake.

In the ovens in use at the present time the upper part of the baking-chamber reaches a very high temperature, while the temperature of the lower part is much lower, and it requires a great amount of time to obtain an even temperature throughout the oven. By my arrangement of flues, however, the heat is brought under the bottom of the baking-chamber as well as in and above it, and an even, continual, and high temperature is readily obtained and retained.

I attain this object by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a vertical section of the device. Fig. 2 is a horizontal sectional view of the chamber below the baking-chamber on the line *x x*. Fig. 3 is a horizontal sectional view of the chamber above the baking-chamber on the line *y y*. Fig. 4 is a front elevation of the complete oven, and Fig. 5 is a view taken on line *Z Z* of Fig. 1.

Similar letters refer to similar parts throughout the several views.

My device consists of a baking-chamber *a*, preferably formed with a flat floor *b* and an arched roof *c*. A heating-chamber *d* is formed below the baking-chamber *a* and is provided with a dividing-partition *e*, extending from the front of the chamber to the rear and provided with an aperture *e'* near the front wall. A heating-chamber *f* is also provided above the baking-chamber *a* and is provided with a dividing-wall *g*, extending from the front to the back. This dividing-wall I prefer to make of iron, having a cross-piece *g'* at the top and provided with an aperture *h* at the floor near the front wall. The top of the chamber *f* is formed of a plurality of arched sheet-metal sections, each resting upon the cross-piece *g* on the dividing-wall at one edge and upon the projections *i i* in the side wall at the other edge. Earth or

other non-conducting material *k* is placed on top of these covers *f'*. The advantage of this arrangement is that the earth or other non-conducting material *k* may be removed from the covers and the covers lifted for the purpose of cleaning or repairing the chamber *f*. A vertical flue *m* is placed in the walls of the baking-chamber *a* and chambers *d* and *f*, preferably at the rear, having an opening *m'* into the chamber *d* below the baking-chamber *a* and also having an opening *m''* into the chamber *f* above the baking-chamber *a*. A flue *n* is also placed in the walls of the baking-chamber *a* and chambers *d* and *f*, preferably at the rear, having an opening *n'* directly into the baking-chamber *a* and extending upward to a point in the wall of the chamber *f* above the baking-chamber *a* and then downwardly beside the baking-chamber *a* to an opening *n''* at or near the floor of the chamber *d* below the baking-chamber *a*. An ash-pit *o* is placed within and at one side of the chamber *d* below the baking-chamber *a*. Flues are also provided from the baking-chamber *a* to the chimney and from the upper chamber *f* to the chimney. Dampers *q* *r* are also provided in the several flues in the usual form. A fire-grate *s* is placed in the floor of the baking-chamber *a* above the ash-pit *o*.

The operation of my device is as follows: The fire is started on the floor of the baking-chamber *a* upon the grate *s*, and the gases will pass off through the flue *t*. After the gases have passed off, the flue *t* is closed by the damper *t'*, and the heated air after filling the baking-chamber *a* will pass through the opening *n'* at the floor of the baking-chamber *a* into the flue *n*, upwardly beside the baking-chamber *a* and the upper chamber *f* and downwardly through the continuation of the flue *n*, again beside the baking-chamber *a*, and out through the opening *n''* on the floor of the lower chamber *d*. When the side of the chamber *d* in which the opening *n''* is situated becomes heated, the heated air will pass through the aperture *e'* in the dividing-wall *e* and cause the air in the other side of the chamber *d* to become heated. The heated air from the chamber *d* will pass upwardly through the opening *m'* in the flue *m* beside the baking-chamber *a* and out through the opening *m''* in the chamber *f* above the baking-chamber. The air in the side of this chamber *f* in which the opening *n* is situated will thus become heated, and

the heated air will pass through the aperture *h* in the divided wall *g* and out through the flue *p* to the chimney. The proper circulation of the heated air will be accomplished by the use of the several dampers in the usual form. The circulation of the heated air is shown by arrows.

I also provide doors *d'* *d'* and *f*² *f*² in the front wall of the chambers *d* and *f*, respectively, so that these chambers may be cleaned out when desired, the baking-chamber *a* being provided with the large doors *a*², while a door *o'* is provided for the ash-pit *o*.

Having thus described my invention, what I claim is—

1. In a baker's oven, the combination of a baking-chamber, a fire-grate in communication therewith, a chamber below and a chamber above said baking-chamber, the walls of said chambers formed with a plurality of flues, one of such flues communicating with the baking-chamber and passing upwardly and then downwardly to an opening near the floor of the lower chamber, and another of said flues communicating with the lower chamber and passing upwardly into the

chamber above the baking-chamber, and an exit-flue communicating with said upper chamber, substantially as described.

2. In a baker's oven the combination of a baking-chamber, a fire-grate in communication therewith, a chamber below and a chamber above said baking-chamber, a longitudinal dividing-wall in said lower chamber having an aperture therein, a longitudinal dividing-wall in said upper chamber having an aperture therein, the walls of said chambers formed with a plurality of flues, one of such flues communicating with the baking-chamber and passing upwardly and then downwardly to an opening near the floor of the lower chamber, and another of said flues communicating with the lower chamber and passing upwardly into the upper chamber, and an exit-flue communicating with said upper chamber.

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

WILTON H. PERRY.

Witnesses:

SADIE BENNETT,
JUSTIN S. POLLAND.