

A. T. SIMPKINS.
BAKER'S OVEN.

No. 419,369.

Patented Jan. 14, 1890.

Fig. 1.

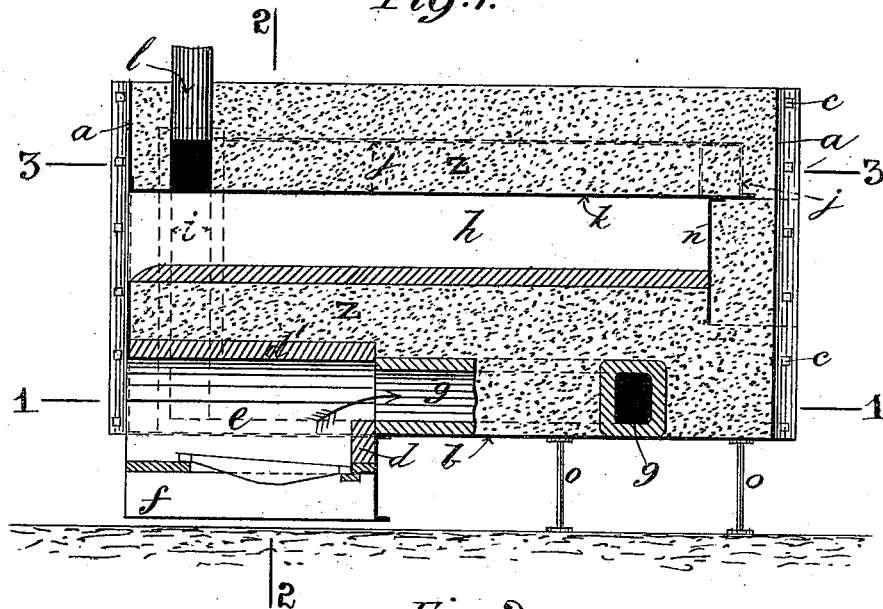
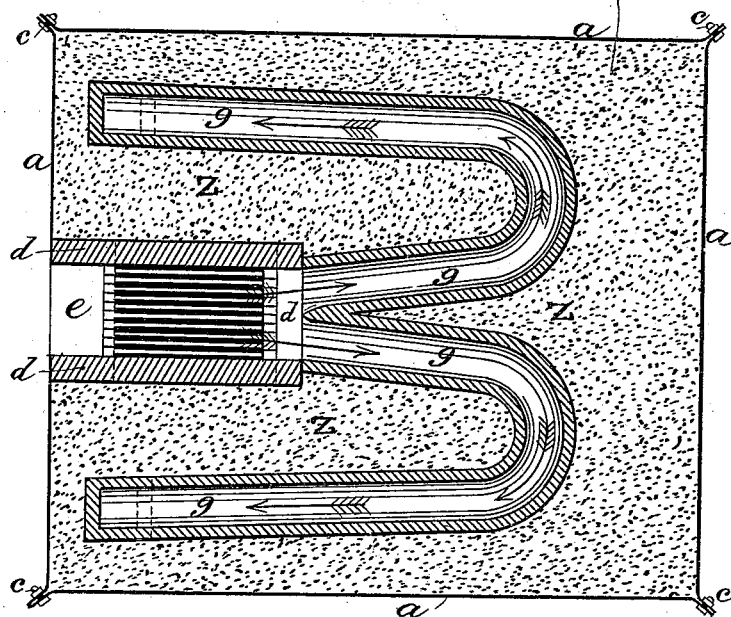


Fig. 2.



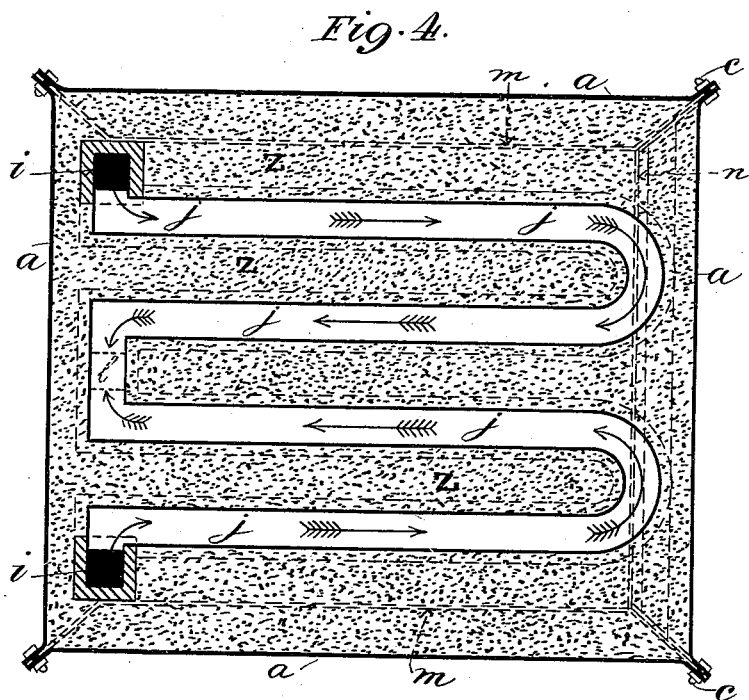
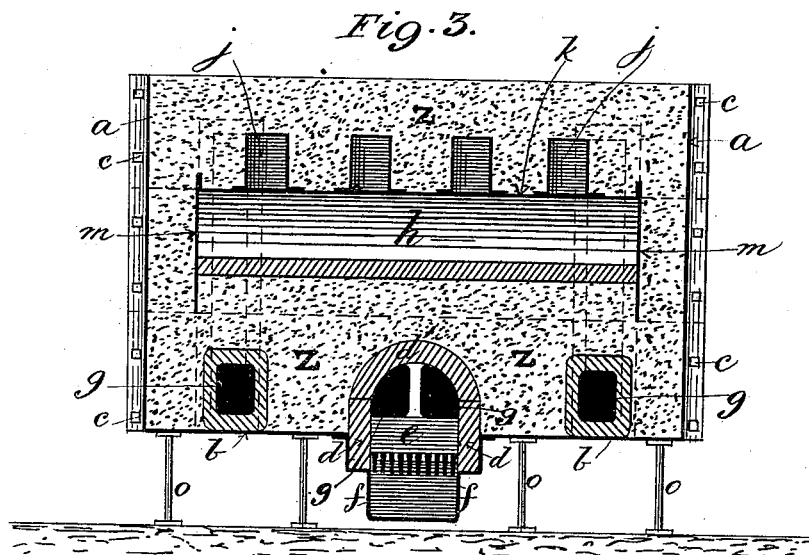
WITNESSES
J. L. Schradt.
W. M. Byrne.

INVENTOR
Alvin T. Simpkins
Paul Bakewell,
his attorney.

A. T. SIMPKINS.
BAKER'S OVEN.

No. 419,369.

Patented Jan. 14, 1890.



WITNESSES
S. L. Schrader.
W. M. Byrne.

INVENTOR
Allen T. Simpkins
Paul Bakewell,
his attorney

UNITED STATES PATENT OFFICE.

ALVIN T. SIMPKINS, OF ST. LOUIS, MISSOURI.

BAKER'S OVEN.

SPECIFICATION forming part of Letters Patent No. 419,369, dated January 14, 1890.

Application filed January 18, 1889. Serial No. 296,738. (No model.)

To all whom it may concern

Be it known that I, ALVIN T. SIMPKINS, a citizen of the United States, residing at the city of St. Louis, State of Missouri, have invented a certain new and useful Improvement in Bakers' Ovens, of which the following is a full, clear, and exact description.

My invention relates to improvements in knockdown or portable bakers' ovens, and has for its object to reduce the cost of their construction and obtain a portable structure that can be easily taken apart.

It consists in a detachable sectional casing or frame-work of iron surrounding the oven-chamber, furnace, and flues, the intermediate spaces being filled with sand, brick, rubbish, or other suitable material.

On the accompanying drawings, Figure 1 represents a side sectional elevation of my improved baker's oven, partly broken; Fig. 2, a sectional plan thereof on line 1 1 in Fig. 1; Fig. 3, a transverse section on line 2 2 in Fig. 1, and Fig. 4 a sectional plan on line 3 3 in Fig. 1.

Like letters of reference denote like parts in all the figures.

In carrying out my invention I construct the outer walls *a* and floor *b* of the oven structure with sheet-iron flanged (or angled) externally at the corners and secured together thereat by bolts *c*, (screws or otherwise.)

The walls *d* and crown *d'* of the furnace-chamber *e* may be built of fire-brick or tile, the walls *d* being located within an opening therefor through the bottom *b*, beneath which they are supported by and between the sides of a sheet-iron pocket *f*, projecting downward from the floor *b*.

From the rear end of the furnace-chamber *e* detachable flues *g* of fire-brick or tile extend beneath the oven-chamber *h* toward the rear wall *a* and return in opposite directions toward the side and front walls *a* to within a suitable distance of the latter, where each flue *g* opens into detachable upright flue *i*, communicating above with a sheet-iron flue *j*, which is located immediately over and extends along the roof *k* of the oven-chamber *h*

toward the rear wall *a*, whence it returns toward the front wall *a*, the two flues *j* communicating thereat with a detachable common uptake and chimney *l*. The roof *k* of the oven-chamber *h* is of sheet-iron stiffened by the flues *j*, which are secured thereto by flanges or angles. The sides *m* and rear end *n* of the oven-chamber *h* are of sheet-iron secured together and to the roof *k* and outer walls *a* by flanging or angles bolted together or otherwise, as found most practical and economical. The spaces thus formed between the furnace *e*, flues *g i j*, and oven-chamber *h* are filled with sand, brick, rubbish, or other suitable material *z*, which at the floor-level of the oven-chamber *h* are paved with bricks or cement, the whole being supported on standards *o* and forming a cheap and substantial structure, which can be readily taken apart and re-erected without the expense and labor required where brick-work is used, as in the present system of bakers' ovens.

By this invention the heat absorbed by the filling *z* between the furnace, flues, and oven-chamber will be gradually and uniformly imparted to the latter, so that the loaves will be properly and evenly baked without the necessity of shifting them, as in the present ovens.

I claim as my invention—

1. In a knockdown portable oven, the combination, with a casing composed of sheet-metal sections detachably connected together, of a furnace having detachable reflex flues leading therefrom in the plane of the furnace, a detachable superposed oven having reflex flues arranged on its crown, and vertical flues which connect the two sets of reflex flues, substantially as and for the purposes described.

2. In a knockdown portable oven, the combination of an outer shell or casing composed of sections of sheet metal connected together at the corners, a detachable fire-chamber arranged therein and provided with detachable horizontal reflex flues arranged in substantially the plane of the fire-chamber, said flues terminating at their ends in vertical

flues, a detachable oven-chamber having upon
its crown a series of reflex flues adapted at
one end to connect with the vertical end of
the flues leading from the fire-chamber and
5 at the other end with an uptake or chimney,
substantially as and for the purposes de-
scribed.

In testimony whereof I affix my signature,
in presence of two witnesses, this 9th day of
January, 1889.

ALVIN T. SIMPKINS.

Witnesses:

S. L. SCHRADER,
PAUL BAKEWELL.