

## Baker's Oven.

Patented Sept. 21, 1869.



Inventor  
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per  
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Attys.



# United States Patent Office.

I. A. HAMMER, OF NEWTON, IOWA.

Letters Patent No. 95,106, dated September 21, 1869.

## IMPROVEMENT IN BAKE-OVENS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, I. A. HAMMER, of Newton, in the county of Jasper, and in the State of Iowa, have invented an Improvement in Bake-Ovens; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in the construction of a bake-oven, divided into chambers, and provided with movable shelves, which can be lowered and raised at pleasure.

Figure 1 is a horizontal section view of my oven.

Figure 2 is an end view of the the same.

Letter A represents the walls of the oven, which are built of brick, or any other suitable material.

The oven is divided, by means of the partition B, into two separate chambers C, each of which has a furnace, D, constructed under it.

Inside of each chamber there is arranged a set of swinging shelves, G, which move up and down in grooves at each end of the oven, and are so arranged as to balance each other, by means of the chain H passing up through the top of each chamber over the pulley K.

These shelves may be either constructed of lattice-work, and have the spaces filled with earthen tiles, or be formed of any solid substance, and are so arranged that the heat from the furnace can be conducted around and between each shelf alternately until it reaches the top, when it passes up the flue, thereby causing a draught, and heating the chamber evenly from top to bottom.

To the bottom of each of the chambers, at the rear end, there is pivoted a damper, L, so that the amount of heat passing into the chambers from the furnaces can be readily controlled.

In the back part of the furnaces there is a hollow or recess, M, formed, extending across the width of the furnace, into which an ash-pan is placed, so as to receive the ashes, there being an opening in the back wall of the oven, so as to allow it to be removed at will.

Leading up from the furnaces are the flues N, which are intended to be placed in the wall.

In the bottom of the flue there is placed a damper, O, so as to regulate the current up the chimney. When the damper L is open, so as to heat the chambers, the damper O should be closed, and *vice versa*.

In the sides of the walls leading into each of the chambers, there is an opening made, so that the articles to be baked can be placed upon the shelves.

These opening are closed by the doors P, which have their ends so formed that when opened downward they form a shelf, as seen in fig. 2.

Upon the front end of the oven there are secured two guides R, between which there is an adjustable slide, S, dovetailed, which can be fastened at any desired point, by means of the pin *a*.

In the top of the slide there is secured the double hook T, to which is attached the grooved crank-pulley V.

Passing up from this pulley to the one, W, is the endless cord X, which communicates the rotary motion to the pulley K, through the shaft Z, for the purpose of raising the shelves in the ovens.

By means of the adjustable slide the crank can be raised or lowered to any desired point.

By means of the dampers in the bottoms of the ovens, the heat is readily and quickly controlled, and makes it unnecessary that the fire should ever be drawn off, so as to regulate the temperature in the chambers.

Having thus described my invention,

What I claim, and desire to secure by Letters Patent, is—

1. The dampers L, placed in the bottom of the ovens, so that the heat can always be readily controlled, and so as to cause a current of heated air upward, substantially as set forth.

2. The dampers L, in combination with the flue-dampers O, when so arranged that the heat from the oven can be turned up the flue, and *vice versa*, substantially as shown.

3. The pulleys K, V, and W, endless rope or chain X, shaft Z, and chain H, when used to lower and raise the shelves, substantially as specified.

4. The adjustable slide S, provided with a hook, T, or its equivalent, when used substantially as set forth.

5. The depression or recess M, formed in the back of the furnace, for the purpose of receiving an ash-pan, substantially as described.

6. The chambers C, shelves G, dampers L and O, furnace D, chains H and X, pulleys K, W, and V, slide S, hook T, and flue N, when all are combined to form an oven, substantially as specified.

In testimony that I claim the foregoing, I have hereunto set my hand, this 20th day of May, 1869.

I. A. HAMMER.

Witnesses:

T. CHADWICK,  
R. A. SANKEY.