No. 726,828. PATENTED APR. 28, 1903.

G. J. SCHMID.

OVEN.

APPLICATION FILED JAN. 31, 1903.

NO MODEL.

Fig. 1.

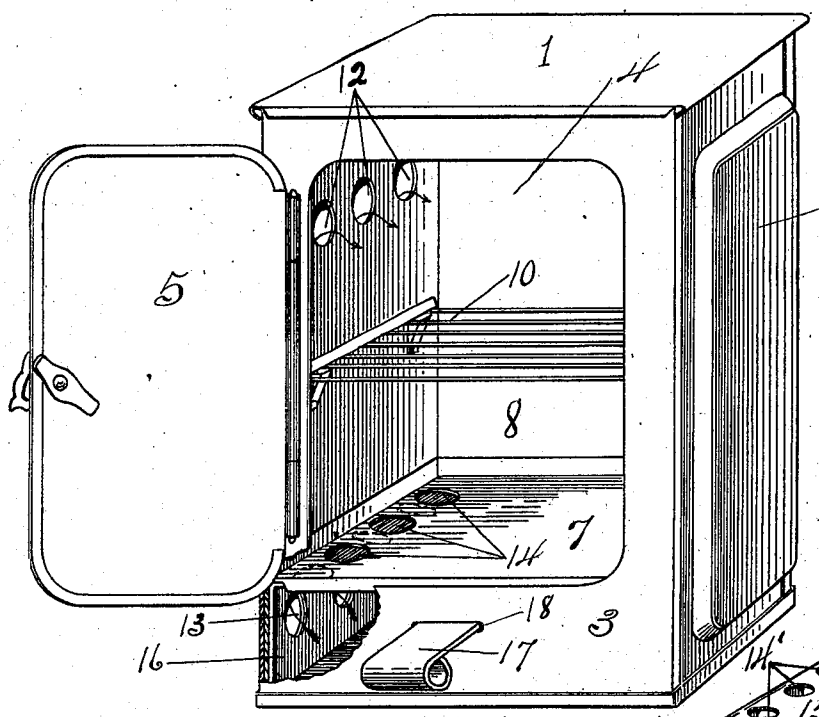


Fig. 3.

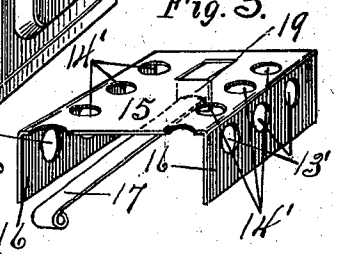
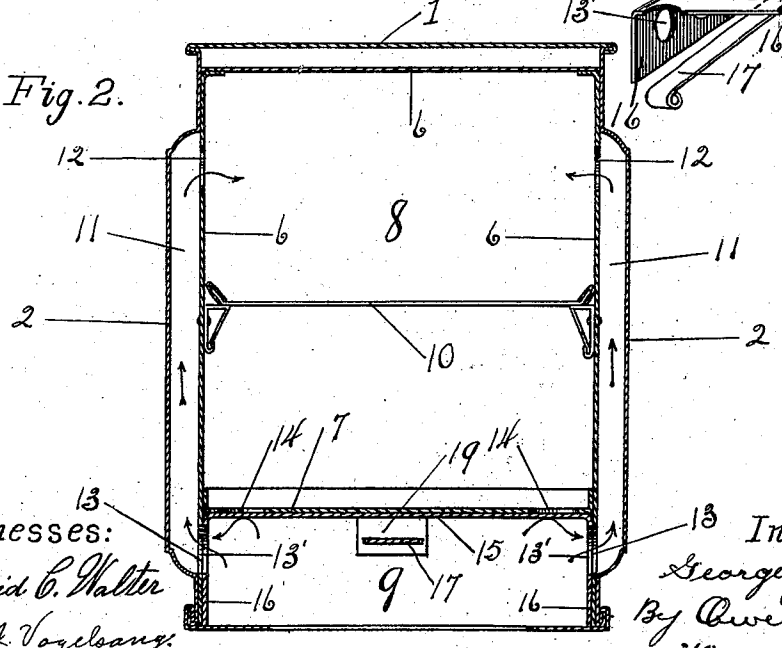


Fig. 2.



Witnesses:
David C. Walter
Emil J. Vogelsang.

Inventor.
George J. Schmid
By Church & Church
His attorneys.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

GEORGE J. SCHMID, OF TOLEDO, OHIO, ASSIGNOR OF ONE-HALF TO JACOB SCHMID, OF TOLEDO, OHIO.

OVEN.

SPECIFICATION forming part of Letters Patent No. 726,828, dated April 28, 1903.

Application filed January 31, 1903. Serial No. 141,259. (No model.)

To all whom it may concern:

Be it known that I, GEORGE J. SCHMID, a citizen of the United States, residing at Toledo, in the county of Lucas and State of Ohio, have invented certain new and useful Improvements in 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 the figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in ovens of the class more particularly adapted for use in connection with gas or gasolene ranges; and it has for its object to provide simple and efficient means for regulating the heat within the oven, whereby the said heat may be caused to enter either the upper or the lower portions of the same, as it is desired to throw the heat on the top or bottom of the article being baked, or it may be so regulated as to equalize and make the heat uniform in all parts of the oven.

While the essential features of my invention are necessarily susceptible of modification, still the preferred embodiment thereof is illustrated in the accompanying drawings, in which—

Figure 1 is a front perspective view of my improved oven, the door thereof being open and a portion of the front broken away to show the manner in which the heat is regulated therein. Fig. 2 is a vertical section of the same, and Fig. 3 is a perspective view of the heat-regulating slide.

Like figures of reference mark the same parts in all the figures of the drawings.

Referring to the drawings, 1 represents the top, 2 the sides, 3 the front, 4 the back, and 5 the door, usual to ovens of this class. An inner casing 6 is secured within the outer casing of the oven and is divided, by means of the partition 7, into the compartment 8, which is the oven proper, and the compartment 9, which forms what I would term the "fire-box" of the oven, the bottom thereof being provided with an opening (not shown in the drawings) to adapt it to set over the burner of the range to admit the blaze therein. In the compartment 8 of the oven any desired number of the shelves 10 may be provided to suit the convenience or size of the oven.

It will be noticed that the sides 2 of the oven are so formed and shaped as to form the chambers 11 between them and the sides of the inner casing 6, the said chambers extending nearly to the top and bottom of the oven. A series of ports or openings 12 and 13 are provided in the upper and lower portions of the sides of the inner casing 6 and establish communication between the chambers 11 and the interior of the compartments 8 and 9 of the oven, respectively. The partition 7 is also provided with a series of ports or openings 14 on either side thereof, which establish communication between the compartments 8 and 9 of the oven.

In order to control the ports 13 of the casing 6 and the ports 14 of the partition 7, I secure within the compartment 9 the heat-regulating slide 15, (shown in Fig. 3,) which is made shorter than the width of the oven to enable it to have a limited forward and rearward movement therein. The slide 15 is formed with the supporting-flanges 16 and is adapted to fit snugly against the under surface of the partition 7 and the sides of the casing 6. A series of ports 14′, corresponding to the ports 14 in the partition 7, and a series of ports 13′, corresponding to the ports 13 of the casing 6, are provided in the horizontal and flanged portions of the slide 15, respectively. The ports 13′ and 14′ are so arranged in the slide 15 with relation to the ports 13 and 14 that when the ports 13′ communicate with the ports 13 of the casing 6 the ports 14 in the partition 7 are closed, the ports 14′ of the slide 15 being then in the position shown by dotted lines in Fig. 1, and vice versa.

The movement of the slide 15 is regulated by the handle 17, which extends through a slot 18, provided in the front of the oven, and has its inner end connected in any suitable manner to the lip 19, formed on the slide 15. It will thus be apparent that when the slide 15 is drawn flush with the front of the oven the ports 14 will be closed and the heat from the burner over which the oven is placed will

be forced to find an exit from the compartment 9 through the ports 13, which are open, as shown in the drawings, into the chambers 11 and from thence, through the ports 12, into the upper portion of the compartment 8. If it is desired to have the heat enter from the bottom of the oven instead of from the top, the slide 15 is pushed to the rear, thus closing the ports 13 and opening the ports 14, or the ports 13 and 14 may each be left half-open, so that the heat will be equalized in all parts of the oven.

While I have described the oven as having an inner casing 6, it is not necessary that this should extend entirely around the inner portion of the oven, as the main object of this casing is to form the inner sides of the chambers 11. I prefer this construction, however, as a double casing is thereby provided and the heat more efficiently retained within the oven.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In an oven, a series of chambers formed on the sides thereof, a partition dividing said oven into an upper and a lower compartment, communication provided between said chambers and said compartments, communication between said compartments through said partition, and means for alternately opening and closing the communication between said compartments by way of said chambers and said partition.

2. In an oven, a partition, a series of ports provided in said partition, chambers on the sides of said oven, a series of inlet-ports provided to said chambers on one side and a series of outlet-ports on the other side of said partition, a movable element adjacent to one side of said partition adapted when moved to alternately open and close the inlet-ports in said chambers and the ports in said partition, and means provided for moving said element.

3. In an oven of the class described, a partition dividing said oven into the compartments 8 and 9, communication provided between the compartment 9 and the lower portion of the compartment 8, communication provided between the compartment 9 and the upper portion of the compartment 8, and means provided for alternately opening and closing said communications for the purposes described.

4. In an oven, a partition, the compartments 8 and 9 formed by said partition, a series of ports in said partition, a series of outlet-ports in said compartment 9 communicating with the upper portion of said compartment 8, and a movable element provided with openings to control the passage-ways through said series of ports and alternately close the same.

5. In an oven, a partition 7, compartments 8 and 9 formed by said partition, a series of ports 14 provided in said partition, chambers 11, a series of ports opening from said compartment 9 into said chambers and a series of ports opening from said chambers into said compartment 8, a flanged slide 15 in said compartment 9, openings provided in said slide to alternately register with the ports opening into said chambers and the ports in said partition, and means for moving said slide for the purpose described.

In testimony whereof I have hereunto signed my name to this specification in the presence of two subscribing witnesses.

GEORGE J. SCHMID.

Witnesses:
CORNELL SCHREIBER,
C. W. OWEN.