

J. KRENIG.  
Oven-Door.

No. 212,712.

Patented Feb. 25, 1879

Fig. II.

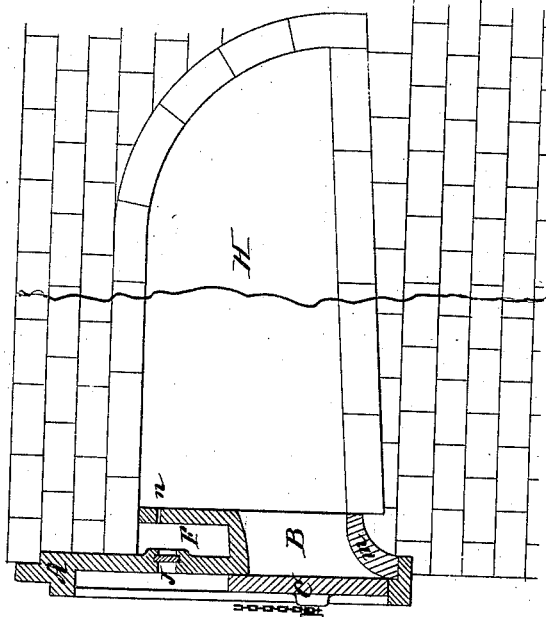
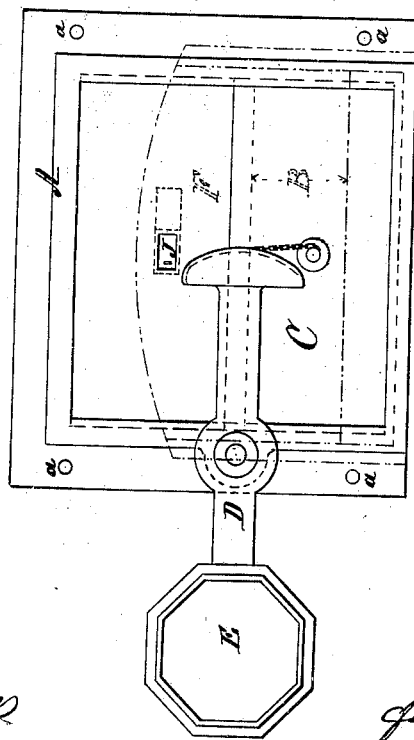


Fig. I.



Witnesses.  
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# UNITED STATES PATENT OFFICE.

JOSEPH KRENIG, OF NEWARK, NEW JERSEY.

## IMPROVEMENT IN OVEN-DOORS.

Specification forming part of Letters Patent No. 212,712, dated February 25, 1879; application filed January 23, 1879.

*To all whom it may concern:*

Be it known that I, JOSEPH KRENIG, of Newark, in the State of New Jersey, have invented a new and useful Improvement in Doors for Baking-Ovens, of which the following is a specification:

The nature of my invention consists in the arrangement in the frame to which the door of a baking-oven is fastened of a water chamber, to facilitate the introduction of vapors or steam into the baking-oven; and, further, by the arrangement of a balanced sliding door, to prevent as much as possible the escape of the vapors or steam from the oven when the door requires to be opened.

In baking-ovens for baking bread called "Vienna bread," steam or vapors must be introduced during the process of baking the bread; and as it is desirable to retain as much as possible these vapors in the oven, even when the door must be opened for the purpose of charging or emptying the oven, this sliding door is arranged in place of hinged or folding doors, as is usual at present. By this arrangement only the lower part, sufficient to introduce a new quantity or to withdraw some of the baked bread, can be opened, retaining thereby the vapors or steam in the upper part of the oven, while with the hinged or folding doors the whole mouth of the oven is opened each time.

In the accompanying drawings, Figure I represents a front view of the front and door for a baking-oven. Fig. II is a longitudinal section of an oven with my front and door attached.

A is the frame, forming the front of the oven, secured to the mason-work of the same by suitable anchor-bolts *a a*. B is the opening through this front into the oven, closed by a sliding door, C, attached to a lever, D, pro-

vided with a balance-weight, E, to balance the weight of the door C and facilitate the opening and closing of the same.

Above the mouth-piece B a water-chamber, F, is arranged in this front plate, A, closed at the top by the fire-bricks forming the roof of the baking-oven H. A small sliding door, J, is provided in this front, for the purpose of introducing the necessary water into the chamber F, and small openings *n* are made in the inner plate, to allow the vapors or steam to escape into the oven H.

The bottom plate, *m*, of the mouth or opening B is made loose, capable of being removed when it is necessary to enter the oven for repairing the same.

By this arrangement of a water-chamber in the front, the required vapors or steam can be easily supplied into the oven, and at the same time the operator is partly protected from the heat radiating from the front of the oven.

By the arrangement of the sliding door, the same can be opened more or less, as may be required, and the vapors or steam in the upper part of the oven will be prevented from escaping as freely as with the present arrangement of hinged or folding doors.

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

In combination with a front, A, of a baking-oven, the water-chamber F, removable bottom piece, *m*, of the mouth or opening B, and the balanced sliding door C, arranged in the manner and for the purpose substantially as described.

JOSEPH KRENIG.

Witnesses:

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