

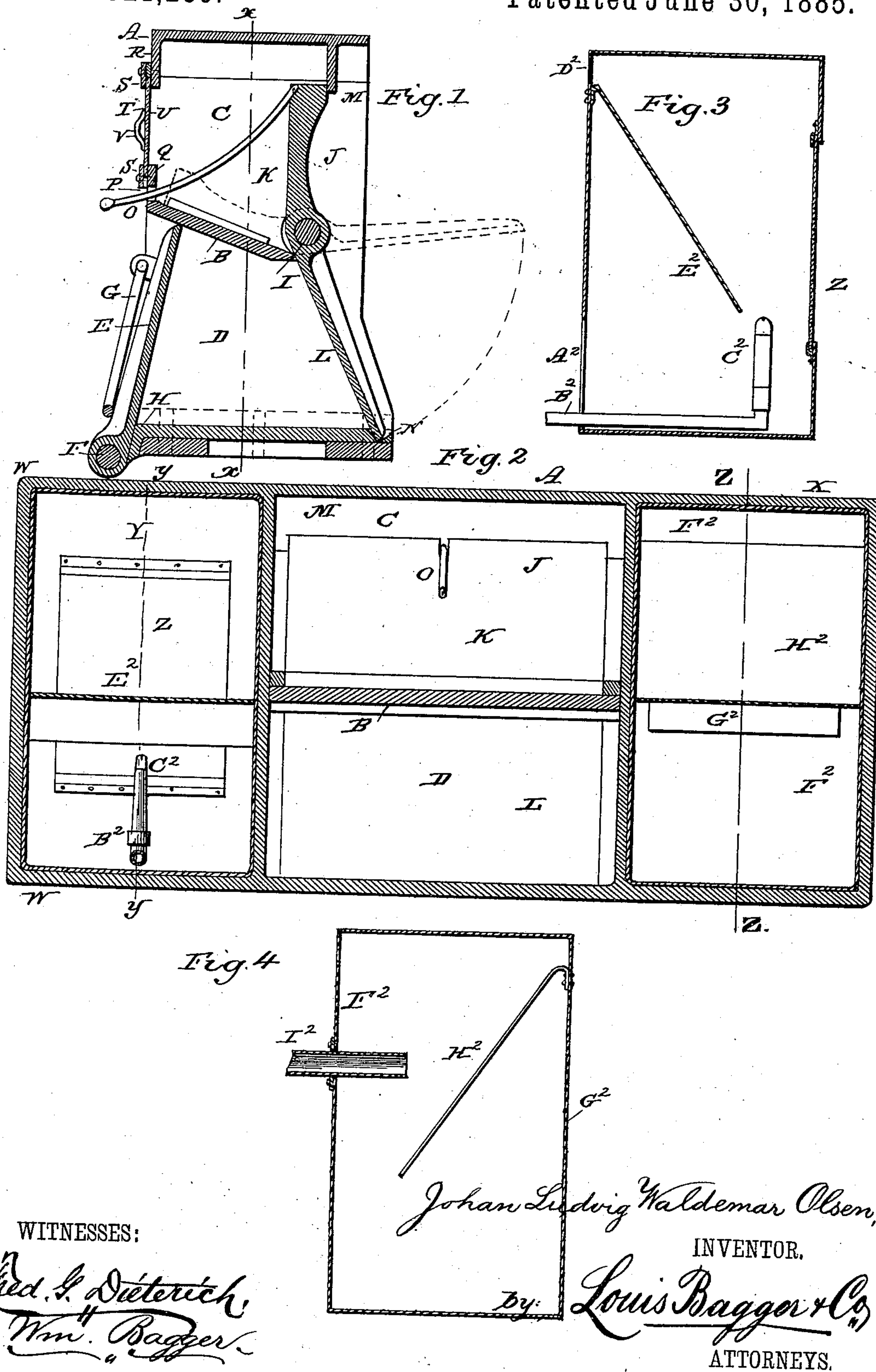
(No Model.)

J. L. W. OLSEN.

BAKE OVEN.

No. 321,239.

Patented June 30, 1885.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

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## BAKE-OVEN.

SPECIFICATION forming part of Letters Patent No. 321,239, dated June 30, 1885.

Application filed November 20, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, JOHAN LUDVIG WALDEMAR OLSEN, a subject of the King of Denmark, residing at Copenhagen, in the Kingdom of Denmark, have invented certain new and useful Improvements in Bake-Ovens; and I do 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 letters and figures of reference marked thereon, which form a part of this specification.

My invention has relation to bake-ovens; and it consists in the improved construction and combination of parts of an oven having means for illuminating its interior and for viewing the interior of the oven without opening the same, as hereinafter more fully described and claimed.

In the drawings hereto annexed, Figure 1 is a vertical sectional view taken centrally through the door-frame and door. Fig. 2 is a transverse vertical sectional view taken on the line *x x* in Fig. 1. Fig. 3 is a vertical sectional view, taken on the line *y y* in Fig. 2, through the lighting device; and Fig. 4 is a vertical sectional view, taken on the line *z z* in Fig. 2, through the steam-admission casing.

The same letters refer to the same parts in all the figures.

A in the drawings designates the door-frame, which consists of a suitable casing of cast-iron, which is divided by a transverse downwardly and inwardly inclined partition-plate, B, into an upper and a lower compartment, C and D. E is a door hinged upon a transverse bolt, F, at the front of the lower part of the casing, and serving to close the lower compartment thereof. The said door is provided with a pivoted handle, G, of such dimensions that when the door is open it will rest upon the floor and serve to support the door in a level position. The upper edge of the door, when the latter is closed, abuts against the under side of the partition-plate B, and the door is retained in its closed position by resting against a flange, H, upon the lower part of the casing. The inner end of the door-casing is provided with a transverse bolt, I, located slightly above the inner end of the

partition-plate B, and upon this bolt is pivoted a door, J, consisting of upwardly and downwardly extending wings K and L, serving to close, respectively, the upper and lower compartments of the frame at the inner ends of the said compartments. When the door is closed, the edge of its upper wing abuts against a flange, M, extending downwardly from the top of the casing, and the lower edge of the lower wing fits in a groove or recess, N, in the bottom of the casing, thus forming close joints. This door may be manipulated by means of a curved handle, O, pivoted to the upper wing, as shown, and extending through a slot, P, in a flange, Q, upon the front edge of the partition-plate B. The wings K and L of the door J are at an angle to each other, so that when the door is open—i. e., when the upper wing rests upon the partition-plate, as shown in dotted lines in Fig. 1—the lower wing shall be in an approximately-horizontal position, when it will act as a deflector and prevent, to the greatest possible extent, the escape of the steam and vapors from the interior of the oven. The upper part of the casing is provided at its front edge with a downwardly-extending flange, R, upon which and the flange Q of partition B are arranged a pair of parallel flanged beads, S S, between which may be slid a removable frame, T, having a glass, U, through which, when the door J is open, the contents of the oven may be observed. This frame may, for convenience in manipulating it, be provided with a handle, V. The door-frame A is provided with lateral extensions W and X, forming supplemental casings, in the former of which is placed a sheet-metal box, Y, the front side of which has a glass, Z, and the rear or outer side of which is provided with an opening, A<sup>2</sup>, at the bottom, through which extends a movable gas-bracket, B<sup>2</sup>, having a burner, C<sup>2</sup>. The opening A<sup>2</sup> also serves for the admission of air to feed the flame, and the products of combustion escape through an opening, D<sup>2</sup>, at the top of the back of the casing. From the lower edge of said opening D<sup>2</sup> a deflector or plate, E<sup>2</sup>, extends downwardly and forwardly, for the purpose of guiding the air as directly as possible to the ing flame, and thus preventing the blackening of the glass.

Arranged in the supplemental casing X is a



sheet-metal box, F<sup>2</sup>, the inner or front side of which has an opening, G<sup>2</sup>, over which is secured a downwardly and outwardly inclined deflector, H<sup>2</sup>, while the rear or outer side of the said box is provided with a steam-supply pipe, I<sup>2</sup>. The steam, on entering through this pipe, will strike the deflector, H<sup>2</sup>, which will cause such of the steam as condenses to trickle down into the box, instead of dropping upon the floor of the oven, which is very objectionable, while at the same time the steam will freely enter the oven through the opening G<sup>2</sup>. It will thus be seen that the oven may be illuminated by inserting the lighted gas-burner in the illuminating-casing, whereupon the contents of the oven may be viewed by sliding the glazed frame over the upper aperture and tilting the pivoted door, the glazed frame and the outer door for the lower compartment of the door-frame preventing any escape of heat, and the lower wing of the pivoted door deflecting the steam and vapors arising from the bread in the oven from striking the glazed frame and obscuring it, the said wing serving as a deflector for the said vapors; and it will also be seen that steam may be let into the oven without any inconvenience from the condensed steam gathering in the bottom of the oven, although I do not wish to claim this device in this application.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. A door-frame for bake-ovens having a transverse partition whereby it is divided into an upper and a lower compartment, in combination with a door pivoted near the inner end of the said partition, and having upwardly and downwardly extending wings that close, respectively, the upper and lower compart-

ments, substantially as and for the purpose set forth.

2. A door-frame for bake-ovens having an upper and a lower compartment, in combination with a pivoted door having upwardly and downwardly extending wings to close the inner ends of the said compartments, and a door hinged to the lower outer edge of the bottom compartment, and adapted to close the outer end of the said compartment, substantially as and for the purpose set forth.

3. The combination, with a door-frame having an upper and a lower compartment, and provided with an inner pivoted door having upwardly and downwardly extending wings to close both of said compartments, of a sliding frame adapted to be arranged in front of the upper compartment, and provided with a glass through which, when the inner door is open, the progress of the baking may be inspected, substantially as and for the purpose set forth.

4. A door-frame for bake-ovens provided with a transverse inclined partition, a door pivoted near the inner end of the same and having upwardly and downwardly extending wings, a detachable glazed slide at the outer edge of the upper compartment, and a door hinged at the outer bottom edge of the lower compartment, and provided with a hinged handle adapted to rest upon the floor and support the door when the latter is open, substantially as and for the purpose set forth.

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

JOHAN LUDVIG WALDEMAR OLSEN.

Witnesses:

VIGGO C. EBERTH,  
HANS JACOB LARSEN.