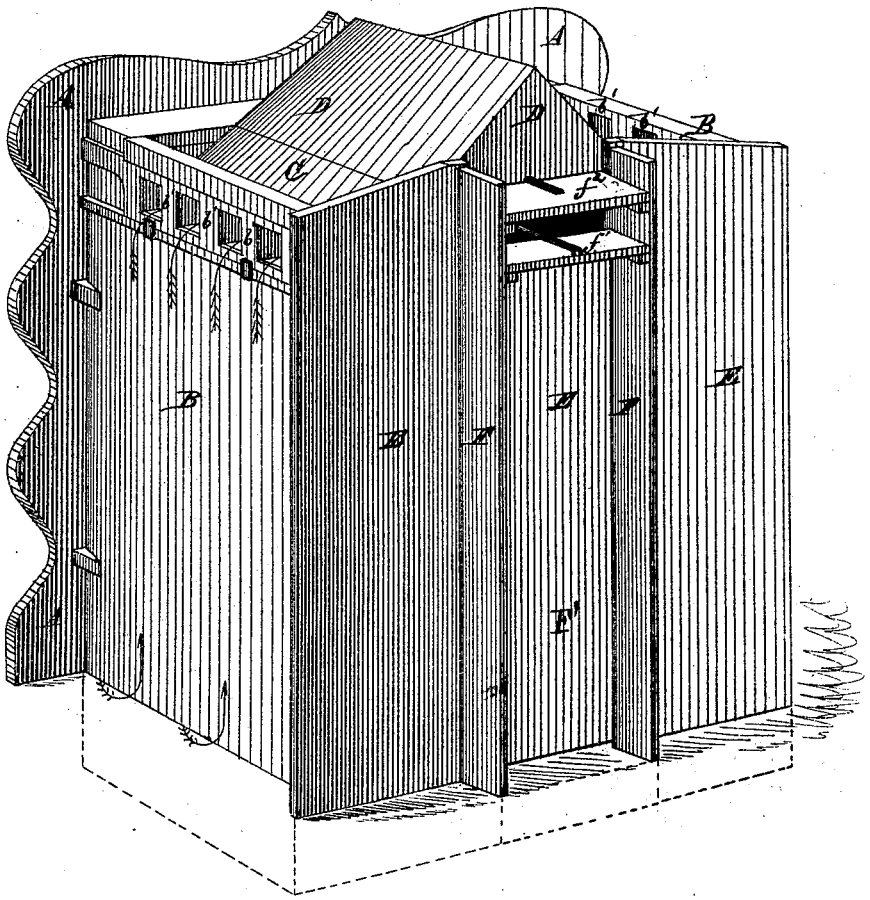
2 Sheets—Sheet 1.

B. SHOURDS.

GAS-OVENS OR SUMMER RANGES.

No. 184,551. Patented Nov. 21, 1876.

Fig. 1.



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2 Sheets—Sheet 2.

B. SHOURDS.

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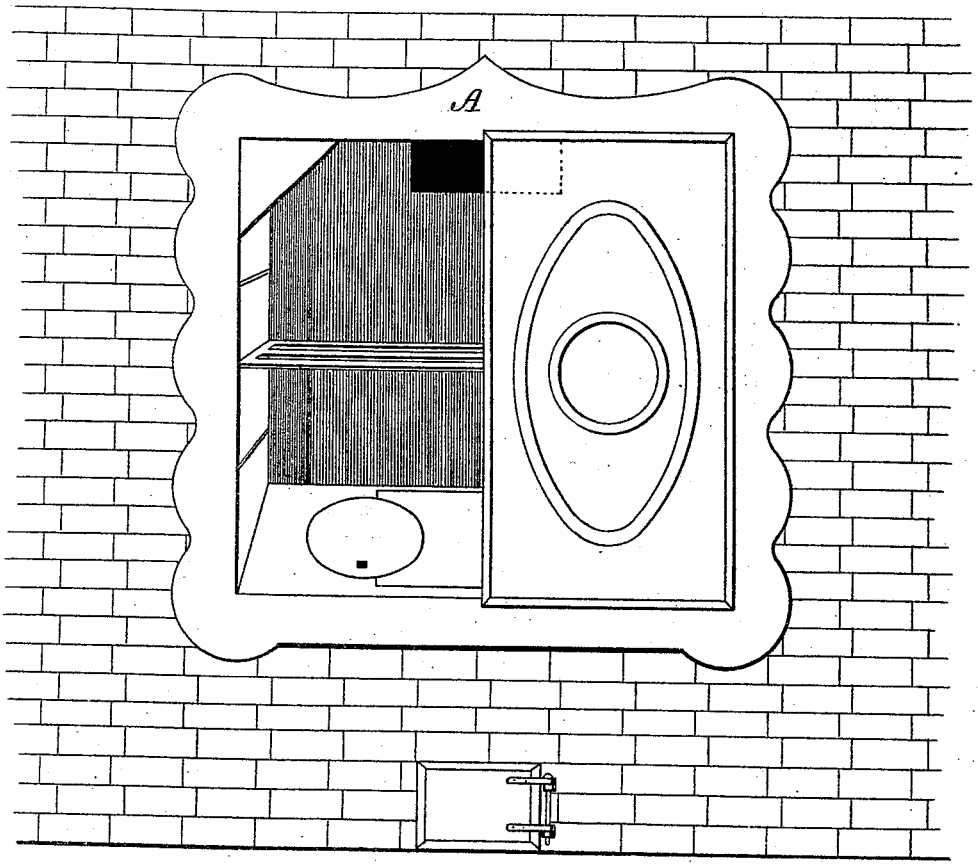
Fig. 2.



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UNITED STATES PATENT OFFICE.

BENJAMIN SHOURDS, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN GAS-OVENS OR SUMMER-RANGES.

Specification forming part of Letters Patent No. **184,551**, dated November 21, 1876; application filed July 11, 1876.

To all whom it may concern:

Be it known that I, BENJAMIN SHOURDS, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and useful Improvement in Gas-Oven or Summer-Range, of which the following is a specification:

Figure 1 is a rear perspective view of my improved gas-oven. Fig. 2 is a front view of the same, showing the interior thereof, and the surrounding brick-work or wall.

The present invention relates to certain improvements in that class of ovens or summer-ranges commonly known as "gas-ovens," because the draft, coal-gas, &c., from the fire can be caused to pass through the oven when the lids in the bottom plate thereof are removed.

The invention consists in a summer-range in which the side thirds of its top plate are inclined at an angle of about forty-five degrees, and its central third is flat, and is provided with an angular brick-work; in the upright openings and dampers formed in the upper parts of the side plates of a summer-range, above the lower edges of the inclined side parts of the top plate; and in the flue formed upon the rear plate of a summer-range, the hinged damper, and the sliding damper, in connection with an opening formed in the upper part of the back plate, as hereinafter fully described.

A is the front plate, which projects at the sides and top to rest against the brick walls that inclose the oven. B are the side plates, in the upper parts of which are formed openings, closed by vertical dampers b'. C is the top plate. The end parts of each, for one-third the width of the oven, are inclined at an angle of forty-five degrees, and their side edges are united with the side plates B, just below the dampers b'. The central third of the top plate C is flat, and upon it is built a brick-work, D, running to an angle, so that any dirt that may fall upon the top of the oven may slide down through the side dampers b', and fall through the side flues into the space below the bottom plate, and can be raked into the fire. E is the back plate, to the middle part of which are attached two upright parallel plates, F, projecting at right angles with said flue, and at a suitable distance apart to form a flue, F′. In the back plate E, just below the flat horizontal part of the top plate C, is formed an opening leading into the flue F′. At the lower edge of the opening through the back plate E is hinged a damper f^1, which may be turned up to close the said opening, or turned down to close the flue F′. In the flue F′, just above the opening into the oven, is placed a damper, f^2, which may be drawn into a recess left to receive it between the flat part of the top plate C and the brick-work D. The dampers f^1 f^2 are operated by rods extending out to the front of the oven. When the fire is being raked the damper f^2 is drawn forward and the damper f^1 is raised, to allow the fine dust to pass up through the flue F′ to the chimney. When the oven is to be used, the damper f^1 is lowered to close the flue F′, the damper f^2 is adjusted as required, and the side dampers b' are opened.

The dust-flue begins at an opening in the rear side of ash-pit, and continues through the brick-work, behind the rear of fire-chamber, and connects with the flue under bottom plate. It also has an opening from the space between the top of fire-chamber and bottom plate, in order to take from fire-chamber and ash-pit the dust that arises when the fire is raked. The damper of this dust-flue is opened, and the opening in the flue from oven at the same time closed, so as to afford a clear passage from ash-pit over the top of oven to the chimney-flue. The front doors are also closed while raking the fire, as well as the dust-flue damper, while the flue over dust-damper is opened. When baking, the damper is pushed over top plate, so as to confine all the heat to the oven.

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

1. A summer-range in which the side thirds of its top plate C are inclined at an angle of about forty-five degrees, and its central third is flat and horizontal, and is provided with an angular brick-work, D, substantially as herein shown and described.

2. The upright openings and dampers b',

formed in the upper parts of the side plates B of a summer-range, above the lower edges of the inclined side parts of the top plate C, substantially as herein shown and described.

3. The flue F′, formed upon the rear plate of a summer-range, the hinged damper f^1, and the sliding damper f^2, in connection with an opening formed in the upper part of the back plate E, substantially as herein shown and described.

BENJAMIN SHOURDS.

Witnesses:
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