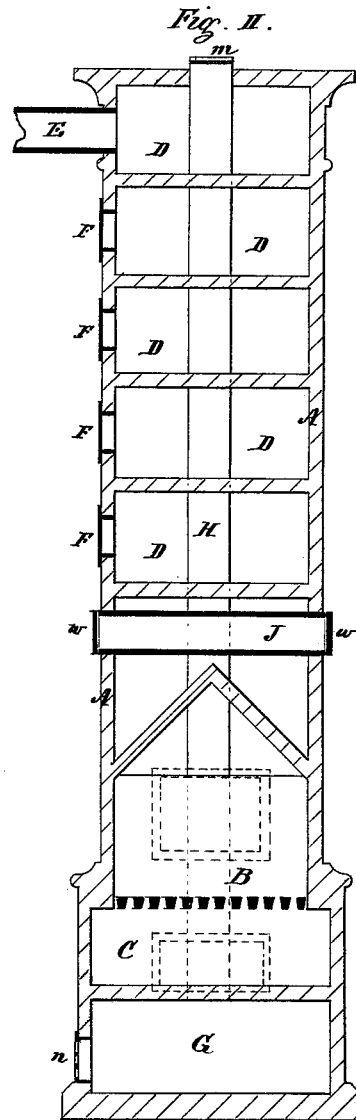
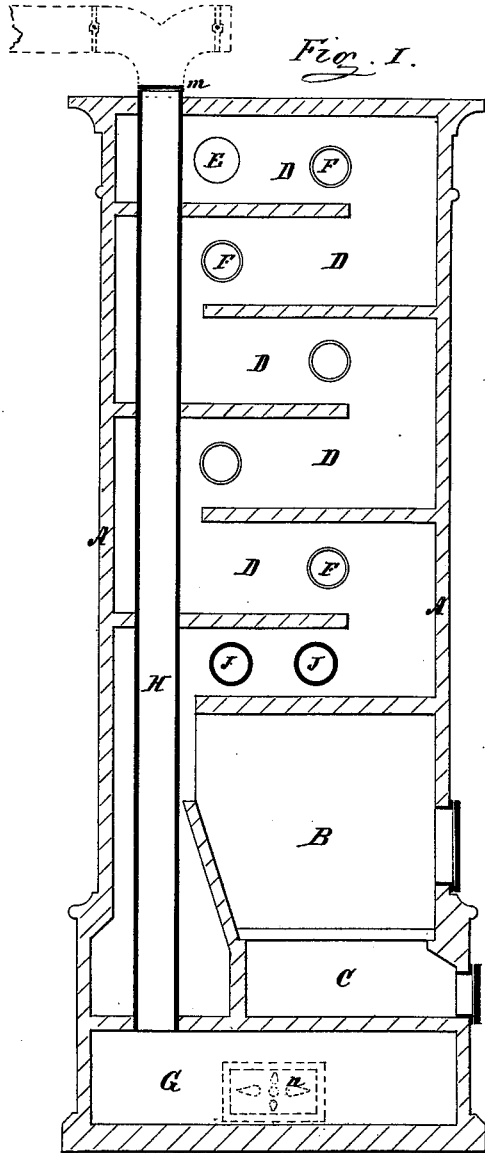


F. W. BRUNNERT.

TILE-OVEN.

No. 187,999.

Patented March 6, 1877.



Witnesses

Earle H. Smith
Wm. Chert.

Inventor.

Friedrich W. Brunnert
per Henry C. Roden
Attorney.

UNITED STATES PATENT OFFICE.

FRIEDRICH W. BRUNNERT, OF NEW YORK, N. Y.

IMPROVEMENT IN TILE OVENS.

Specification forming part of Letters Patent No. 187,999, dated March 6, 1877; application filed February 17, 1877.

To all whom it may concern :

Be it known that I, FRIEDRICH W. BRUNNERT, of New York, in the State of New York, have invented a new and useful Improvement in Tile Ovens, which improvement is fully set forth in the following specification and accompanying drawing, in which—

Figure I is a vertical section of an oven, with my improvements attached, and Fig. II is a vertical cross-section of the same.

The nature of my invention consists in the arrangement of vertical and horizontal flues passing through the oven, so that currents of air can pass through the same, to be heated in their passage, and thus increase the efficiency of the oven, and likewise, by means of the vertical flue, a proper ventilation of the room can be obtained when desired.

In the drawing, A represents the walls of the oven, built up from tiles in the usual manner, and in any desired shape. B is the fire-place, and C the ash-pit, closed by suitable doors. D D are the flues to conduct the flame and smoke in the interior of the oven, which may be arranged in any desired manner. To the upper flue a pipe, E, is connected, leading the smoke into the chimney. F are suitable cap-plates to close openings, by which the flues can be cleaned of soot collecting on the division-plates. G is an air-chamber in the lower part of the oven, below the ash-pit C, communicating, through perforated plates *n* inserted in the wall of the oven,

with the air in the room. On the top of this air-chamber G a pipe, H, is arranged, passing upward through the oven, and provided with a suitable cap or cover, *m*, to open or shut the same, as may be desired. J J are horizontal pipes passing through the oven, provided with suitable caps or valves *w* on both ends, to open or shut the same.

When the valves *w* are opened the current of air passing through these horizontal flues will be heated, and assist the heating of the room. The same result will be obtained whenever the valve *m* at the upper end of the vertical pipe H is opened. The upper end of this pipe H may be arranged with a branch pipe connected with the chimney, having a suitable valve, arranged as shown in dotted lines in the drawing, whereby, when the valve placed in the branch terminating in room is closed, a perfect ventilation of the room will be obtained.

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

In combination with a tile oven, the horizontal flues J J, the air-chamber G, and the vertical flue H, arranged in the manner and for the purpose described.

FRIEDRICH W. BRUNNERT

Witnesses:

HENRY E. ROEDER,
J. B. NONES.