

J. BLUM.
BRICK-KILN.

No. 171,970.

Patented Jan. 11, 1876.

Fig. 1

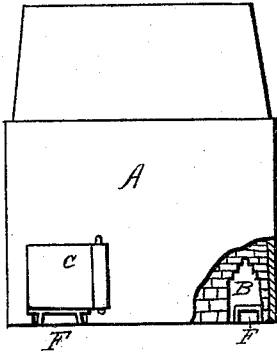


Fig. 2

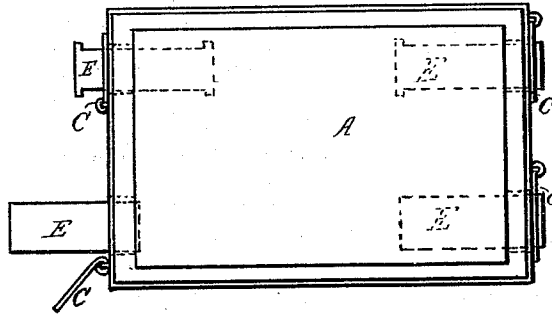
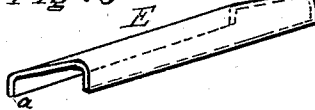


Fig. 3



WITNESSES

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INVENTOR

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UNITED STATES PATENT OFFICE.

JOSEPH BLUM, OF WILMETTE, ILLINOIS.

IMPROVEMENT IN BRICK-KILNS.

Specification forming part of Letters Patent No. **171,970**, dated January 11, 1876; application filed October 20, 1875.

To all whom it may concern:

Be it known that I, JOSEPH BLUM, of Wilmette, in the county of Cook and State of Illinois, have invented new and useful Improvements in Brick-Kilns; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable others skilled in the art to which my invention appertains, to make and use the same, reference being had to the accompanying drawing forming part hereof, in which—

Figure 1 is an end view of a brick-kiln, embodying my invention. Fig. 2 is a top view of the same; Fig. 3 is a perspective view of the draft-flue detached.

Like letters of reference indicate like parts.

My invention has for its object to provide a means of distributing the heat equally through all parts of the kiln; and to that end it consists in providing the fuel-supply flues at each end with a door, under which, and within the supply-flues, are arranged adjustable draft-flues, extending inward to a point near the center of the kiln, whereby a volume of air is admitted into the center of the kiln, forcing the heat to the outside of the kiln, and equally distributing the same.

In the drawing, A represents the kiln, which is constructed in the usual manner, and provided with fuel-supply flues B, extending through the same. CC are metal doors hinged to the end of the kiln, over the mouth of the flues B. The arrangement of these doors is such as to leave an opening in the mouth of the fuel-flue, between the lower edge of the door and base of said flue, as shown in Fig. 1. EE are metal plates, which are fitted within the fuel-supply flues under the doors, and extend inward to a point near the center of the kiln. The edges of these plates are bent downward, as shown at *a*, forming draft-flues F, extending inward under the fuel.

These plates are so arranged as to admit of being moved in the direction of their length, by which means the air, passing through the draft-flues F, is admitted into the kiln at any desired point within the fuel-supply flues.

In the ordinary brick-kilns, as now constructed, the action of the draft through the fuel-supply flues, consequently through the products of combustion, forces the heat to the center of the kiln, and frequently burning the brick in the locality of the center of the kiln too much, while the bricks at the outside, near the walls, are not sufficiently burned. This difficulty is entirely overcome with my invention, the air-flues being so arranged as to convey the current of air through them to the center of the kiln, without coming in contact with the products of combustion until it passes from the flues, thereby producing no action upon the heat until it is admitted into the center of the kiln, when its action is to force the heat from the center to the outside, thus equally distributing it through the kiln.

In using my invention if it is found, at any time, that too much heat is being forced to the outside of the kiln, and not sufficient at the center, the doors CC are opened, and the plates EE drawn outward to the proper point to discharge the current of air through flues F farther from the center, which will equally distribute the heat.

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

The adjustable plates EE, arranged to form the draft-flues within the fuel-supply flues B, in combination with doors CC, as and for the purposes specified.

JOSEPH BLUM.

Witnesses:

N. C. GRIDLEY,
J. H. LAWLOR.