

(No Model.)

R. A. & J. F. BROWN.

BRICK AND TILE KILN.

No. 263,473.

Patented Aug. 29, 1882.

Fig. 1.

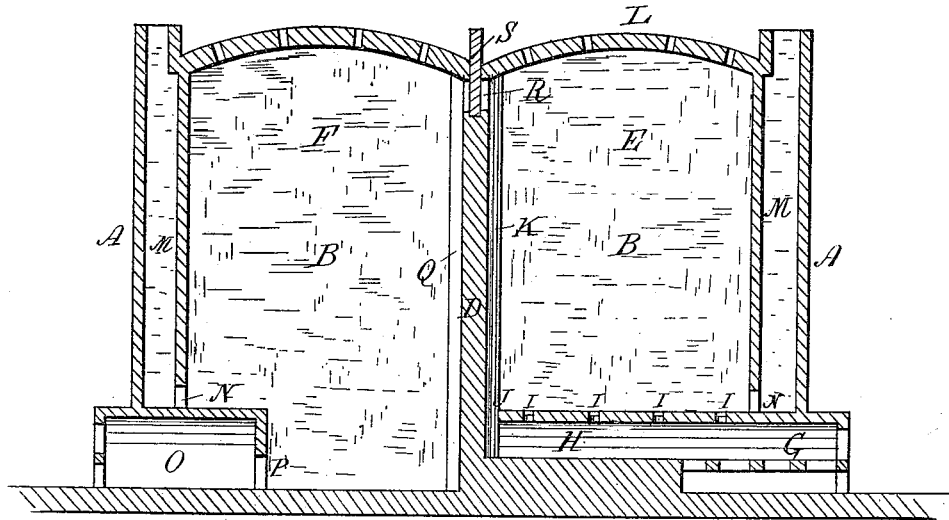
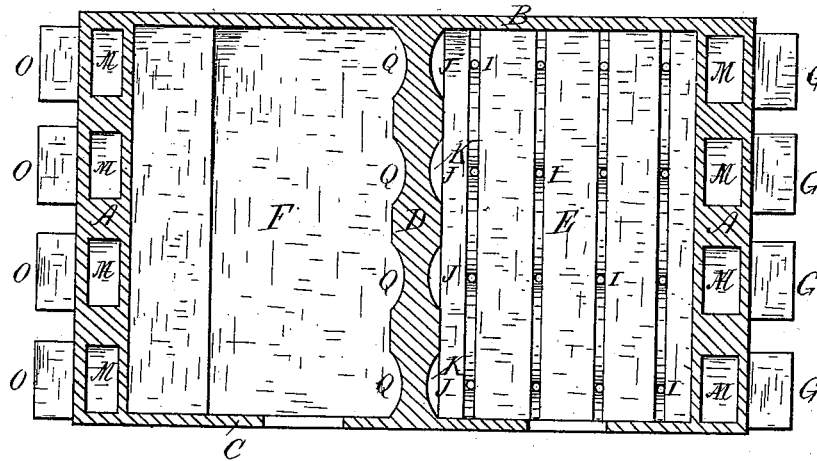


Fig. 2.



Witnesses:  
Frank L. Ouraud  
W. L. Collamer.

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# UNITED STATES PATENT OFFICE.

ROBERT A. BROWN AND JOHN F. BROWN, OF WASHINGTON, INDIANA.

## BRICK AND TILE KILN.

SPECIFICATION forming part of Letters Patent No. 263,473, dated August 29, 1882.

Application filed June 30, 1882. (No model.)

*To all whom it may concern:*

Be it known that we, ROBERT A. BROWN AND JOHN F. BROWN, of Washington, in the county of Daviess and State of Indiana, have  
5 invented certain new and useful Improvements in Brick and Tile Kilns; and we do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which  
10 it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

Figure 1 is a vertical sectional view of our improved brick and tile kiln, and Fig. 2 is a  
15 horizontal sectional view.

Like letters refer to like parts in both figures.

This invention relates to brick and tile kilns; and it consists in certain improvements in the  
20 construction of the same, which will be hereinafter fully described, and particularly pointed out in the claims.

In the drawings hereto annexed, A A represent the end walls, B the back wall, and C  
25 the front wall, of our improved kiln, and D is a partition-wall arranged centrally between and parallel to the end walls, thus dividing the kiln into two compartments, E F, or forming it into a double kiln.

30 The compartment E, which in the drawings represents a tile-kiln, is heated by furnaces G, located at the end wall, A, and having flues H extending longitudinally under the floor of said compartment, said floor having openings I for the passage of heat. The ends of  
35 the flues communicate through openings J with vertical concave recesses K in the partition-wall, D, forming continuations of the flues, and terminating under the arched roof L. The wall A is provided with vertical flues M,  
40 which are not connected with the furnaces, but which have openings N at their lower ends opening into the compartment E, just above the floor of the latter.

45 The compartment F is heated by furnaces O, located at the end wall, A, of said compartment, and having flues P, extending a short distance and opening directly into said com-

partment. The partition wall, D, is also on this side provided with vertical concave recesses Q, forming flues extending from the floor  
50 to the arched roof of the kiln. The wall C, like the wall of compartment E, has flues M, with openings N, opening into the kiln. This compartment F is used as a brick-kiln.

55 The partition-wall D is provided at its upper end, just below the roof, with openings R, connecting the flues or recesses K Q in the sides of said wall. Said openings have sliding doors or dampers S.  
60

When in operation one side or compartment of our improved double kiln has been burned, the dampers S may be opened, thus admitting the heat from said compartment  
65 into the other one, which has meanwhile been prepared for burning, and the contents of which are thus water-smoked. In our improved double kiln burning may always be kept up in one compartment. It is simple, easily managed, and very economical in regard to fuel.  
70

The compartments E F may, when desired, be constructed alike for either tile or brick.

We claim and desire to secure by Letters Patent of the United States—

1. A kiln provided with a central partition-wall having vertical concave recesses or flues  
75 on both sides, and dampers connecting the same at its upper end, as set forth.

2. As an improvement in brick and tile kilns, the herein-described structure, consisting of two separate compartments having furnaces located at the end walls, said end walls  
80 having vertical flues opening at their lower ends into the interior of the kiln, and the partition-wall being provided on both sides with vertical concave recesses or flues, and at its  
85 upper end with dampers connecting the same, as set forth.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures  
90 in presence of two witnesses.

ROBERT A. BROWN.  
JOHN F. BROWN.

Witnesses:

JOHN C. BILLHEIMER,  
SANDERS JOHNSON.