

J. W. BROWN.

BRICK-KILN

No. 176,421.

Patented April 25, 1876.

Fig. 1

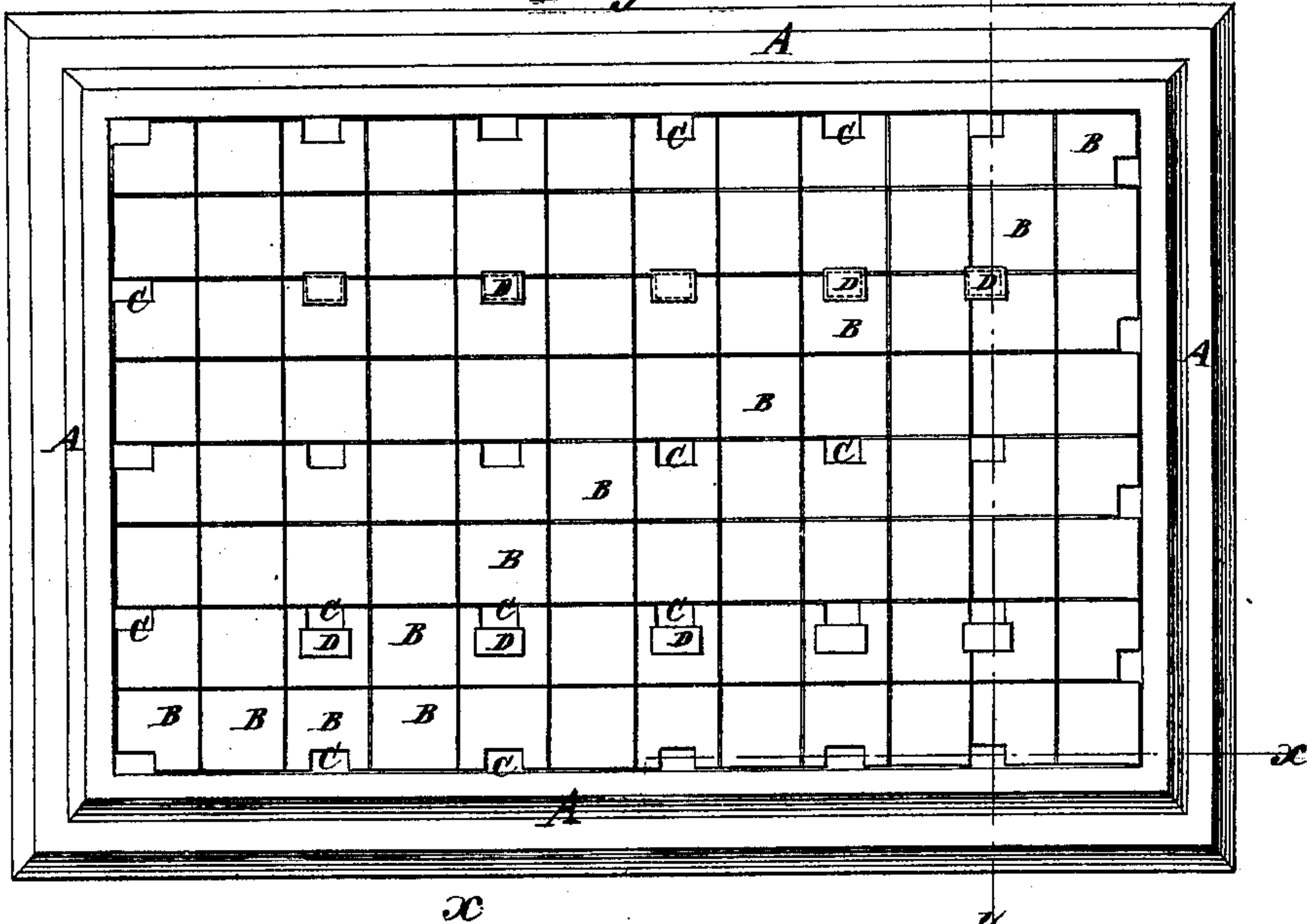


Fig. 2

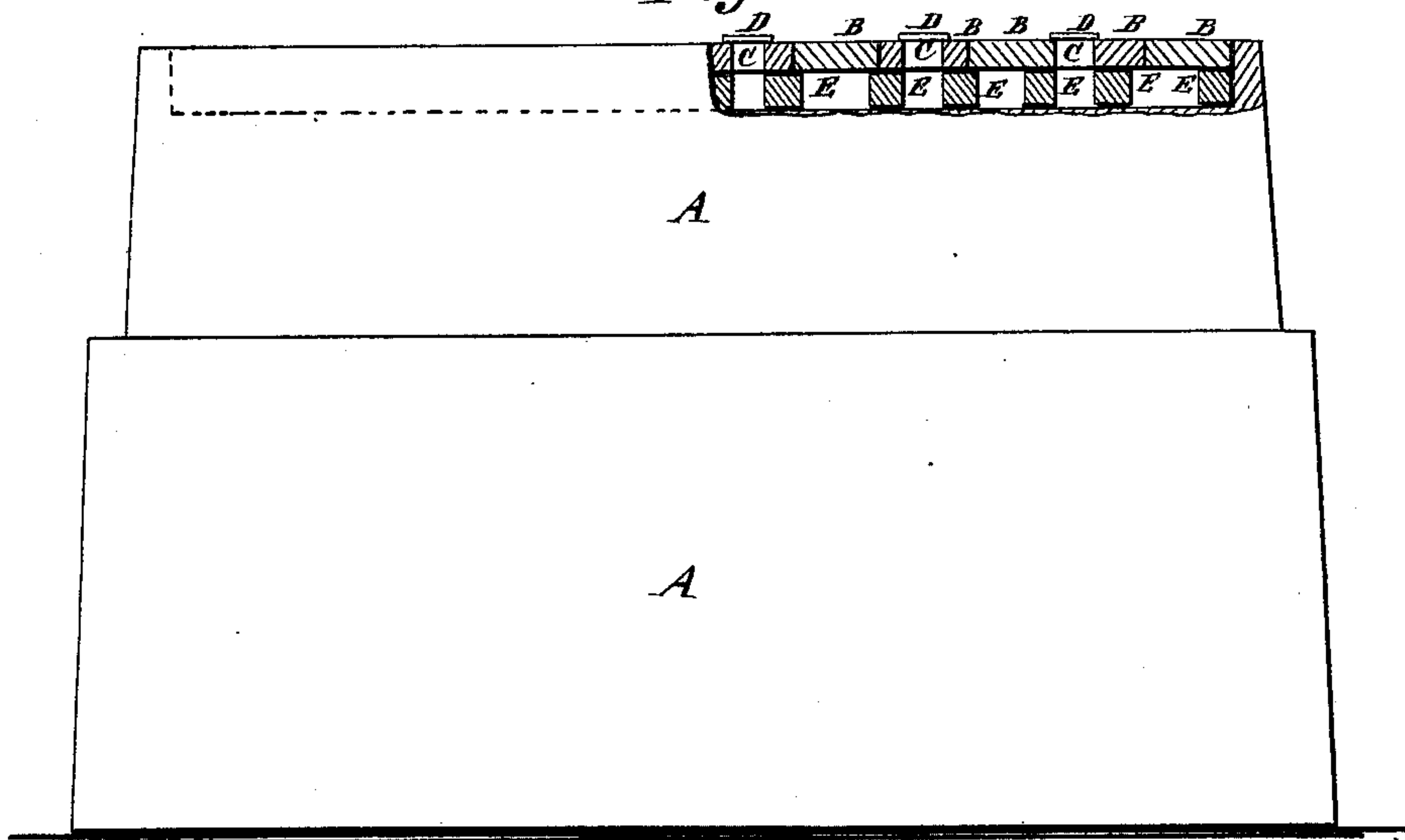
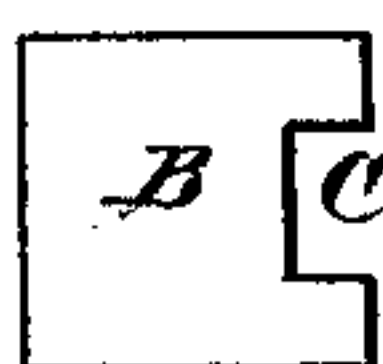
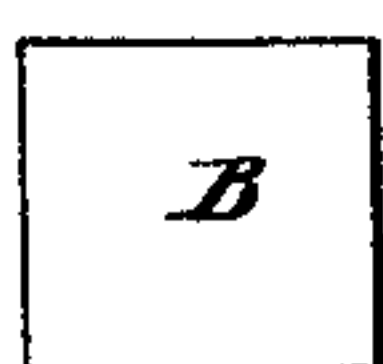


Fig. 3



Fig. 4



WITNESSES:

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# UNITED STATES PATENT OFFICE.

JOHN W. BROWN, OF MILTON, VERMONT.

## IMPROVEMENT IN BRICK-KILNS.

Specification forming part of Letters Patent No. **176,421**, dated April 25, 1876; application filed October 2, 1875.

*To all whom it may concern:*

Be it known that I, JOHN WILLIAM BROWN, of Milton, in the county of Chittenden and State of Vermont, have invented a new and useful Improvement in Brick-Kilns, of which the following is a specification:

Figure 1 is a top view of my improved brick-kiln. Fig. 2 is a side view of the same, part being broken away through the line *x x*, Fig. 1. Fig. 3 is a cross-section of the upper part of the same, taken through the line *y y*, Fig. 1. Fig. 4 is a detail top view of two of the covering bricks or tiles.

Similar letters of reference indicate corresponding parts.

The object of this invention is to economize fuel and time in "clearing" the kiln or expelling the water, steam, &c., and in burning the bricks, by covering the kiln in such a way as to bring the heat under more perfect control.

The invention will first be described in connection with drawing, and then pointed out in the claim.

A represents the body of the kiln, which is built in the usual way. The kiln is covered with large tiles or bricks B, a convenient size for which is a foot square, but they may be made of any desired size. In some or all the bricks or tiles B are formed holes C, to serve as flues, which holes may be at any desired distance apart. I prefer to so arrange the bricks B that the flues C may be about

two feet apart. The bricks B are provided with dampers D, to enable the flues C to be partially or wholly closed, so that the heat may be readily controlled. The covering bricks or tiles B are supported at their corners or edges by small props E, so as to leave a space between the tops of the unburned bricks and the covering B or flatting, as it is called by brick-makers, to allow the heat to circulate freely over the top of the unburned bricks.

By this construction by fully opening the flues C the moisture and steam can be quickly expelled, and then by closing the said flues less or more the heat, during the process of burning, may be controlled as may be desired.

The bricks B are covered with sand, mud, or clay, or their seams are plastered with mud or clay to prevent the heat from escaping at any place other than the flues C.

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

The combination, with a brick-kiln body, A, of covering-tiles B, having holes C, dampers D, and edge-supports E, as and for the purpose specified.

JOHN WM. BROWN.

Witnesses:

O. W. BROWN,  
CHAS. I. LADD.