

Brick Kiln.

Patented July 9, 1867.



Witnesses:
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Letters Patent No. 66,604, dated July 9, 1867.

IMPROVED BRICK-KILN.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, ANDREW S. McBRIDE, of St. Louis, in the county of St. Louis, and State of Missouri, have invented a new and improved Brick-Kiln, and that the following description, taken in connection with the accompanying drawings, hereinafter referred to, forms a full and exact specification of the same, wherein I have set forth the nature and principles of my said improvements, by which my invention may be distinguished from all others of a similar class, together with such parts as I claim, and desire to have secured to me by Letters Patent.

This invention relates to a new and improved brick-kiln, constructed in such a manner that either coal or wood may be used as a fuel, and by which a great saving in fuel is effected and the bricks burned in much less time than hitherto. The invention consists in having the kiln constructed with a series of fire-chambers at each side, extending its whole length, with the smoke-stacks at each end, and having the top of the kiln constructed of a series of dampers or adjustable slats, as hereinafter fully shown and described. In the accompanying sheet of drawings—

Figure 1 is a transverse vertical section of my invention taken in the line *x x*, fig. 2.

Figure 2, a side view of the same.

Figure 3, a plan or top view of the same.

Similar letters of reference indicate like parts.

The body *A* of the kiln may be constructed of masonry in the usual way and provided with a smoke-stack, *B*, at each angle or corner, the kiln being of quadrilateral form and of any suitable dimensions. At each side of the kiln there is a series of fire-chambers, *C*, arranged side by side, and each provided with a door or opening, *a*, through which the several fire-chambers are supplied with fuel. The bricks to be burned are stacked up on a flooring, *b*, between the two series of fire-chambers, as shown in red in fig. 1, a series of fires being at each side of the stack. The top of the kiln is composed of a series of plates, *D*, which may be of heavy sheet iron, attached to rods, *e*, which are allowed to turn freely in their bearings, the inner bearings being in a longitudinal iron girder, *a'* on the top of the kiln and the outer bearings in longitudinal iron angle-plates *b'* on the top of the sides thereof. By turning these rods *e* the plates may be adjusted in a horizontal position, so as to form a perfectly tight cover or top to the kiln, or they may be adjusted in a more or less inclined position, so as to admit of a greater or less degree of ventilation, as may be required. The smoke-stacks *B* are each provided with a damper, *f*, for the purpose of regulating the draught. The plates *D* overlap each other, so that when they are closed or adjusted in a horizontal position a perfectly tight roof will be obtained.

By this arrangement it will be seen that the temperature of the kiln is under the complete control of the operator, and the bricks may be burned in a perfect manner with a very moderate consumption of fuel and in a comparatively short period of time.

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

1. The arrangement of the series of fire-chambers *C* upon each side of the kiln, flooring *b*, upon which the bricks are stacked between said series of fire-chambers, and the chimneys *B* at each angle or corner of the kiln, as herein shown and described.

2. The arrangement of the double series of metallic plates *D* upon the pivoted rods *e*, the plates of each series overlapping each other, as herein set forth, for the purpose specified.

ANDREW S. McBRIDE.

Witnesses:

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