(No Model.)

W. G. BEYERLY.

FIRE BRICK.

No. 260,155. Patented June 27, 1882.

Fig. 1.

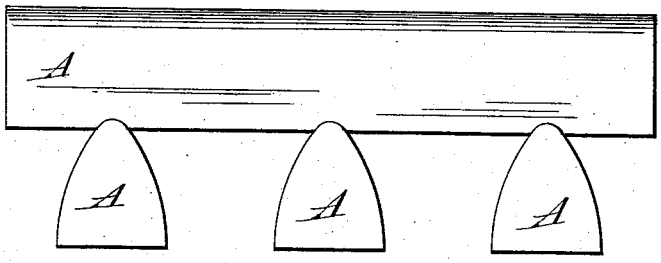
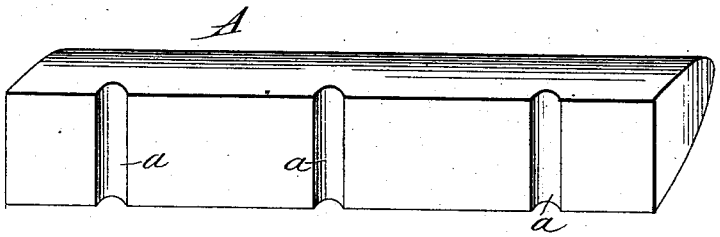


Fig. 2.



Witnesses:
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UNITED STATES PATENT OFFICE.

WILLIAM G. BEYERLY, OF PORTSMOUTH, OHIO.

FIRE-BRICK.

SPECIFICATION forming part of Letters Patent No. 260,155, dated June 27, 1882.

Application filed May 2, 1882. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM G. BEYERLY, a citizen of the United States, residing at Portsmouth, in the county of Scioto and State of Ohio, have invented certain new and useful Improvements in Fire-Bricks; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention consists of a fire-brick having its sides curved convexly to its upper edge, and provided on its flat under surface with transverse grooves, as hereinafter more fully set forth.

In the annexed drawings, illustrating the invention, Figure 1 represents a side and end elevation, showing the manner of arranging and connecting the bricks; and Fig. 2 is a perspective view of one of my improved fire-bricks laid upon its side, and showing the transverse grooves formed in its under surface.

The fire-brick A is made of any desired length and breadth, and is of a conoidal form in cross-section, its sides being curved convexly from its flat under surface to its rounded upper edge.

On the under surface of the brick are formed transverse grooves *a*, having rounded sides adapted to fit the rounded upper edges of the adjacent bricks when the same are arranged as shown in Fig. 1. These grooves are arranged at equal intervals throughout the length of the brick, as shown in Fig. 2, and may be of any desired number.

By this construction the bricks, when arranged in a furnace, are readily held in the desired position without liability of becoming displaced. The grooves also serve as guides, by means of which the workman is enabled to set the brick properly. It will be seen that the brick may thus be accurately set at equal distances, so that the air contained in the furnace will be heated uniformly. In case one of the bricks should become overheated, so as to cause it to melt or break, the grooves will still hold the remaining bricks in their places and preserve equal distances between them.

It will also be observed that the curved sides of the brick present a larger heating-surface than a flat or an angular brick, and also enable the soot and ashes to fall off as well as if the sides of the brick were formed with straight inclines.

I am aware of the patent to Wm. Swindell, No. 252,909, dated January 31, 1882, which shows a regenerative furnace provided with a checker-work composed of bricks having sharp wedge-shaped upper surfaces or ridges, with notches at the ends upon said upper surfaces for the purpose of receiving the transverse courses. This, however, I do not claim. In my bricks the notches or transverse grooves are made in the lower face of the brick away from the ends, the various sections of checker-work being thus independent. Consequently, if some of the bricks should become broken or melted, those in the other sections will not be disarranged, and the parts may be readily repaired. Therefore

What I claim as my invention is—

A fire-brick having curved sides terminating in a rounded upper edge, and provided on its flat under surface with transverse notches or grooves, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM G. BEYERLY.

Witnesses:

C. MCFARLAND,

R. C. SAUNDERS.