

G. W. SMITH.
Fire-Brick.

No. 211,800.

Patented Jan. 28, 1879.

Fig. 1.

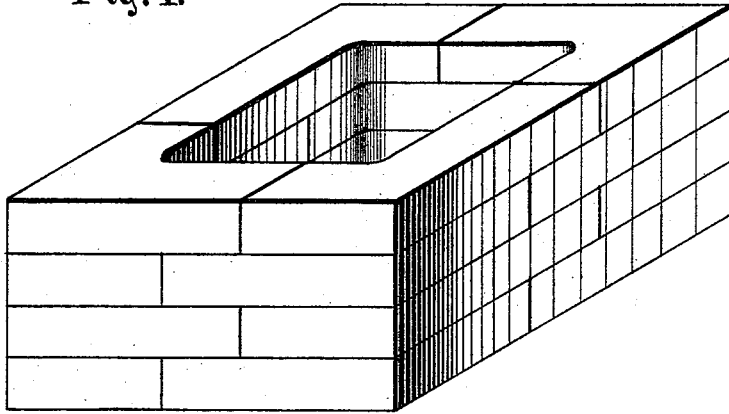


Fig. 2.

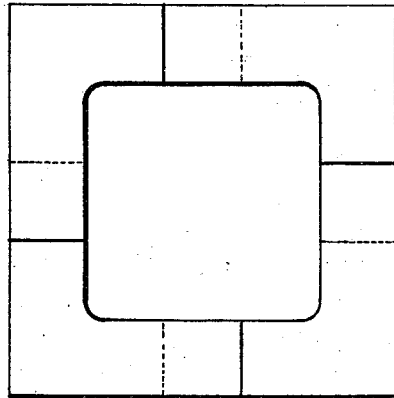
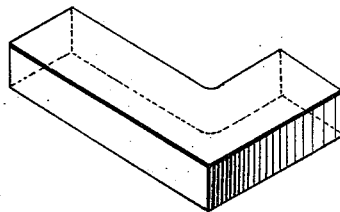


Fig. 3.



Witnesses:

P. C. Dietrich
Wm. S. Apperman

Inventor:

George W. Smith

Per *C. H. Watson & Co* Attorneys.

UNITED STATES PATENT OFFICE.

GEORGE W. SMITH, OF ANSONIA, CONNECTICUT.

IMPROVEMENT IN FIRE-BRICK.

Specification forming part of Letters Patent No. 211,800, dated January 28, 1879; application filed January 2, 1879.

To all whom it may concern:

Be it known that I, GEORGE W. SMITH, of Ansonia, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Fire-Brick; and I 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 it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to the construction of furnaces and flues, which will be hereinafter more fully set forth.

In the annexed drawings, Figure 1 is a perspective view as applied to a furnace. Fig. 2 is a plan view of the same, and Fig. 3 is a perspective view of the brick proper.

The brick, as shown at Fig. 3, instead of being made like the ordinary forms for fire-bricks, forms a square corner, with one long arm and one short arm. The inside angle is rounded out a little to give strength to the corner. The arms, however, may be made of suitable lengths, so that four bricks will make one course around the furnace, and can be laid so as to break joints.

The bricks can be made of the ordinary material for making fire-bricks, and of any desirable size or thickness.

The use for which this brick is designed is

to build those furnaces where metals are melted in crucibles, and in such cases the square furnaces are found preferable to the round ones, because more coal can be placed around the crucible.

If any part of the furnace becomes worn or damaged before the rest, as is frequently the case, the worn or damaged brick can be removed and another inserted without seriously disturbing the rest.

It is obvious that this form of brick can be applied to many other uses.

I do not claim the angular brick as herein described, as I know such to be old.

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

1. A furnace formed of brick of the form herein described, whereby there are no joints at the corners, and the joints on the sides broken, as herein shown and set forth.

2. A brick of angular or L-shaped form, having one short and one long arm, for the purpose of reversing their positions when laid so as to break joints, as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

GEORGE W. SMITH.

Witnesses:

DAVID TORRANCE,
FREDERIC DURAND.