

F. HAINSWORTH.
Hollow Brick-Wall.

No. 159,320.

Patented Feb. 2, 1875.

FIG. 1.

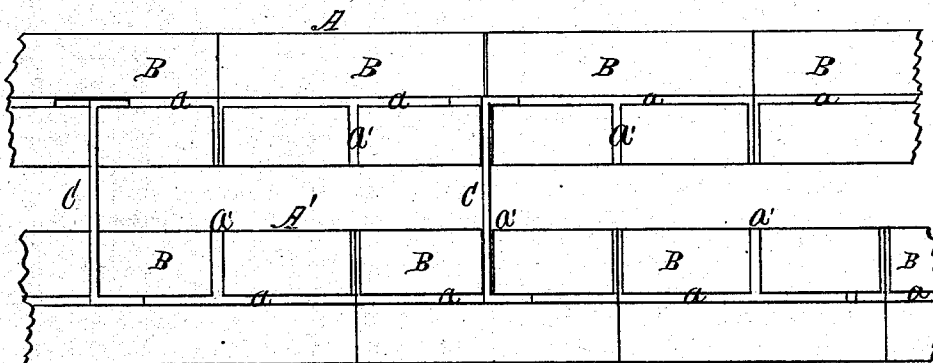


FIG. 2.

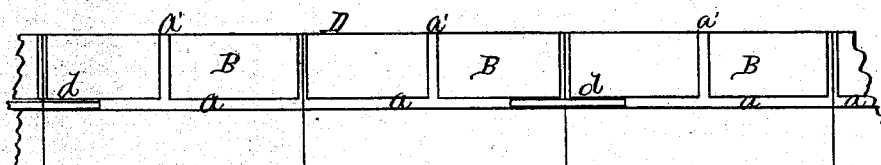
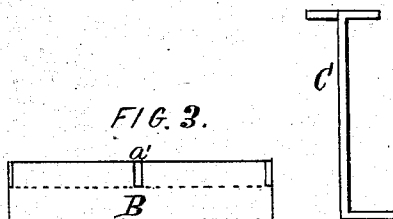


FIG. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

FREDERICK HAINSWORTH, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF
HIS RIGHT TO JONATHAN HAINSWORTH, OF SAME PLACE.

IMPROVEMENT IN HOLLOW BRICK WALLS.

Specification forming part of Letters Patent No. **159,320**, dated February 2, 1875; application filed
August 12, 1874.

To all whom it may concern:

Be it known that I, FREDERICK HAINSWORTH, of Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Brick Walls for Buildings; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable others skilled in the art to which my invention appertains to make and use the same, reference being had to the accompanying drawings forming a part of this specification, in which—

Figure 1 is a sectional plan of a portion of a hollow wall embodying my said improvement. Fig. 2 is a sectional plan of a portion of a single or partition wall; and Fig. 3 is an edge view of one brick, detached.

Similar letters of reference indicate like parts in the several figures of the drawing.

My invention relates more especially to hollow walls; and its object is to provide a means of connecting the separate walls without the headers commonly used; and to that end it consists in providing the upper surface of the brick with a transverse groove communicating at a right angle with a like longitudinal groove adapted to receive an angle-iron extending across the hollow, all of which will be more fully understood by the following description and claims.

In the drawings, A represents the inner wall, and A' the outer wall, both of which are constructed of brick. B represents the bricks, which are of the usual size and external shape. These bricks are each provided on the upper surface, at the center, with a longitudinal groove or channel, *a*, which extends the entire length of the same. *a'* is a transverse groove or channel, which is also formed in the upper surface, at the center, and communicates with the groove *a*, as shown in Figs. 1 and 2. The depth of these grooves is equal to near one-half the gross thickness of the

brick, as shown in Fig. 3. C is a wrought-metal angle-iron, which is usually made in the form shown. The size of this angle-iron is such as to fit into the grooves *a a'*, and its requisite length is such as to extend across the hollow to the center of the brick in each wall, thus determining the width of the space or hollow. D represents a single or partition wall made from one tier of bricks, the ends of which are connected laterally by means of a key, *d*, fitting into the groove or channel *a*. It is seen that with this arrangement of securing the ends of the bricks, one to the other, that a much stronger wall can be built than when the bricks are secured by the mortar only; consequently, a partition-wall may be built of but one tier of bricks, which will be sufficiently rigid to sustain the strain to which they are subjected, thus making the wall much cheaper than the ordinary wall, besides rendering the same fire-proof.

Further advantages are derived from the use of my invention: First, in laying a hollow wall less material is necessary to secure the requisite strength than when the separate walls are connected with headers in the usual manner; second, the space or hollow is less obstructed, consequently there is less material to conduct the frost from the outer to the inner wall, besides a more perfect ventilation can be obtained.

Having thus described my invention, I claim—

In combination with the angle-iron C, the grooved brick B, adapted to receive the angle-iron, as specified.

The foregoing specification of my invention signed by me this 6th day of August, A. D. 1874.

FREDERICK HAINSWORTH.

Witnesses:

THOMAS J. BURKE,
N. H. SHERBURNE.