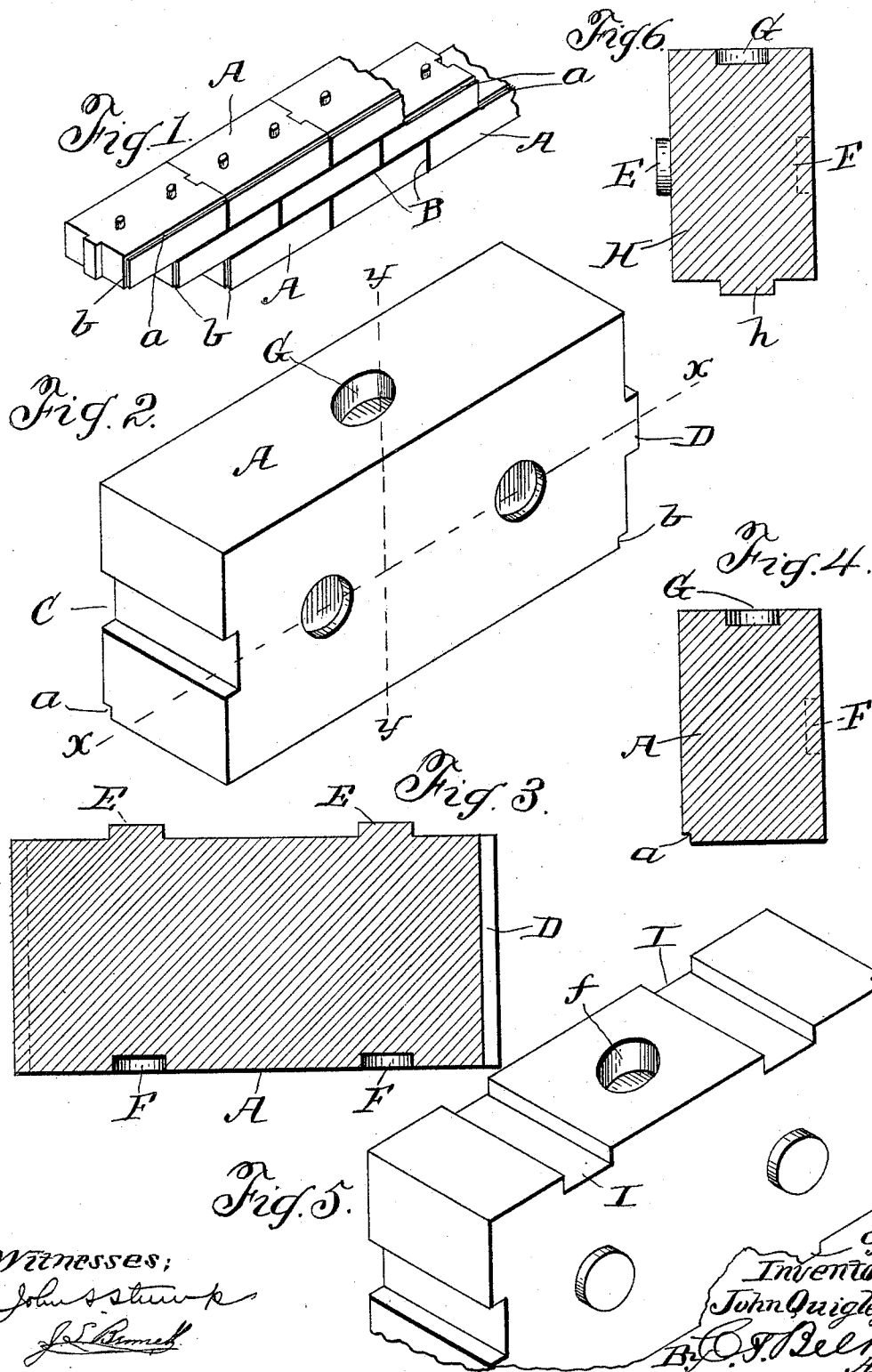


(No Model.)

J. QUIGLEY.
BRICK.

No. 584,293.

Patented June 8, 1897.



Witnesses;
John S. Stump
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UNITED STATES PATENT OFFICE.

JOHN QUIGLEY, OF BLOSSBURG, PENNSYLVANIA.

BRICK.

SPECIFICATION forming part of Letters Patent No. 584,293, dated June 8, 1897.

Application filed July 29, 1896. Serial No. 600,973. (No model.)

To all whom it may concern:

Be it known that I, JOHN QUIGLEY, a citizen of the United States, residing at Blossburg, in the county of Tioga and State of Pennsylvania, have invented certain new and useful Improvements in Bricks, of which the following is a specification.

This invention relates to brick-making, and particularly to a brick; and the object of the invention is to provide a brick of such peculiar and novel construction that no mortar is required in joining the same.

A further object of the invention is to provide a brick having upon all sides and ends means for joining it to other bricks without employing mortar, cement, or other adhesive material.

The invention consists in the peculiar and novel construction of the brick, and resides, essentially, in the special arrangement thereon of means for joining it to other bricks without mortar or other adhesive elements.

In the accompanying drawings, forming part of this application, Figure 1 is a perspective view of several of my bricks joined together forming part of a front wall. Fig. 2 is a perspective view of my brick upon a larger scale, looking at the bottom and rear side. Fig. 3 is a longitudinal central section on the line *x x*, Fig. 2. Fig. 4 is a cross-section on the line *y y*, Fig. 2. Fig. 5 is a perspective view of a modified form of brick. Fig. 6 is a cross-section of an inner brick.

The same letters of reference denote the same parts throughout the several figures of the drawings.

The brick hereinafter to be fully described is intended for walls in structures of various character, and while it has special reference to buildings it may be found not only desirable but exceedingly beneficial when used in furnace-linings and furnace-walls where the heat is so great as to cause expansion and contraction of the lining or wall.

The front bricks A—that is, the bricks employed to form the front of the wall—have a horizontal shoulder *a* and vertical shoulder *b* upon one edge and one end, which form grooves B by having the square edges of the adjoining brick placed hard against the shouldered portions of the brick. This groove may

be filled with material to form ornamental dividing-lines between the bricks.

One end of the brick has a vertical angular groove C and the other end has an angular tongue or projection D. The top of the brick has round projections E and directly opposite the same in the bottom of the brick are formed corresponding cavities F, and a like cavity G is formed in the center of the rear face of the brick to receive a plug to which lathing may be secured when only one course of bricks is employed in the wall.

The inner or rear bricks H have their top and bottom surfaces, ends, and one side constructed identical with that of the brick A, hereinbefore described, except the shoulders *a* and *b* are omitted and with the addition of a round projection *h* opposite the cavity G in the side of the brick.

It will be observed that in building a wall of my improved brick every brick in the wall except the front bricks are joined or bound together upon the top and bottom and upon each side by the projections and cavities, and the ends of each brick, including the front bricks, are joined or bound together by the tongue-and-groove connection hereinbefore described. Owing to this perfectly rigid connection between the bricks forming a wall, it is impossible for the bricks to be moved or become displaced by the settling of the wall or from the contraction or expansion of the same.

Referring now to the modification shown in Fig. 5 one side of the brick has a vertical groove I upon each side of the cavity *f*. Directly opposite on the other side of the brick are corresponding tongues *g*. This construction provides an additional tie between the sides of the bricks, and it is obvious that each course of bricks is not only tied with the course above and below, but is firmly and securely bound with the course upon each side.

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

1. As an improved article of manufacture a brick provided with projections upon its top and corresponding cavities upon its bottom, a cavity upon one side, and a corresponding projection upon the other side, a vertical

tongue upon one end, and a corresponding vertical groove upon the other end, substantially as set forth.

5 2. A brick having a vertical shoulder and a horizontal shoulder, projections upon its top, and corresponding cavities in its bottom, a vertical tongue upon one end, and a corresponding vertical groove upon the other end, substantially as set forth.

10 3. An outside brick having projections upon its top, corresponding cavities upon its bot-

tom, a cavity upon the inner side adapted to receive a corresponding projection of an inside brick, a vertical tongue upon one end, and a corresponding groove upon the other end. 15

In witness whereof I hereunto set my hand in the presence of two witnesses.

JOHN QUIGLEY.

Witnesses:

THOMAS J. EVANS,

WALTER T. MERRICK.