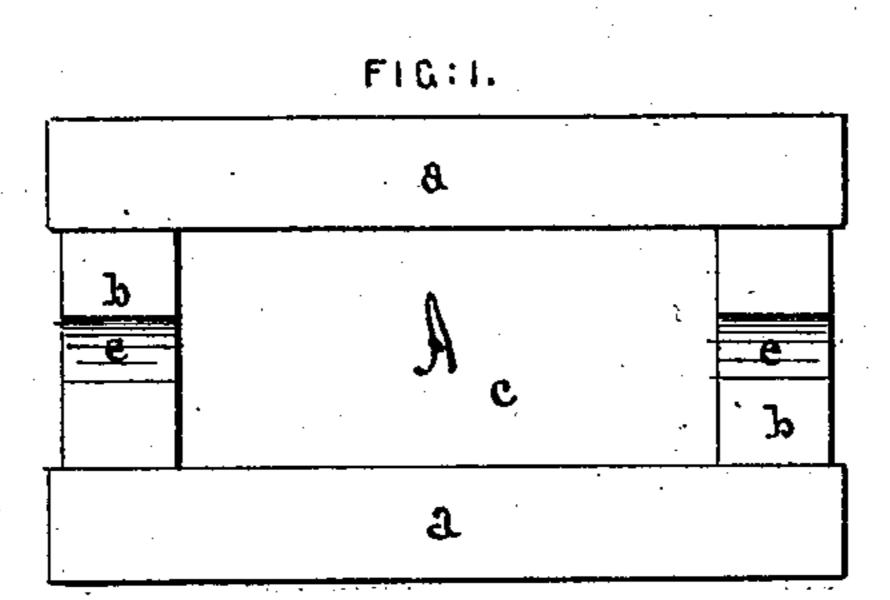
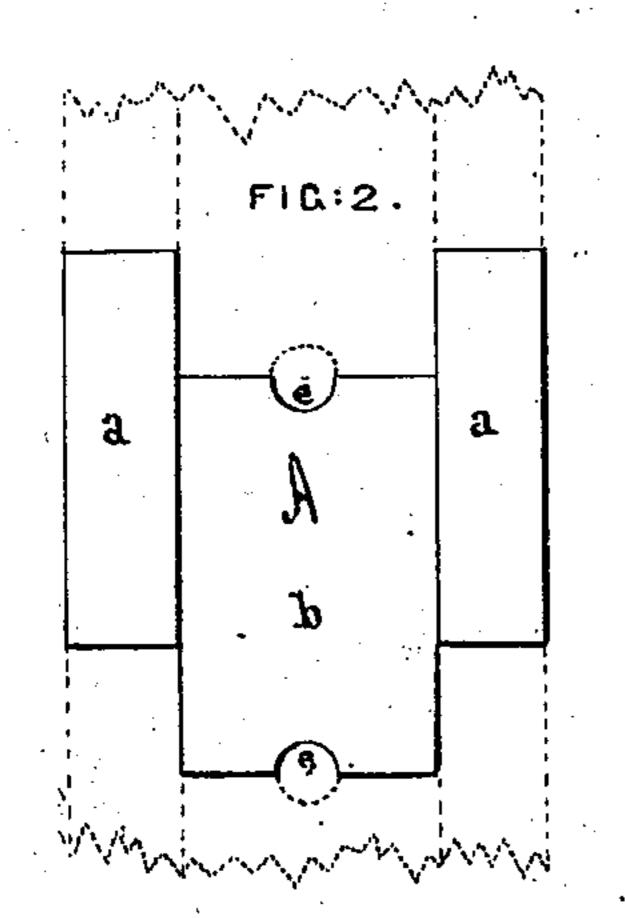
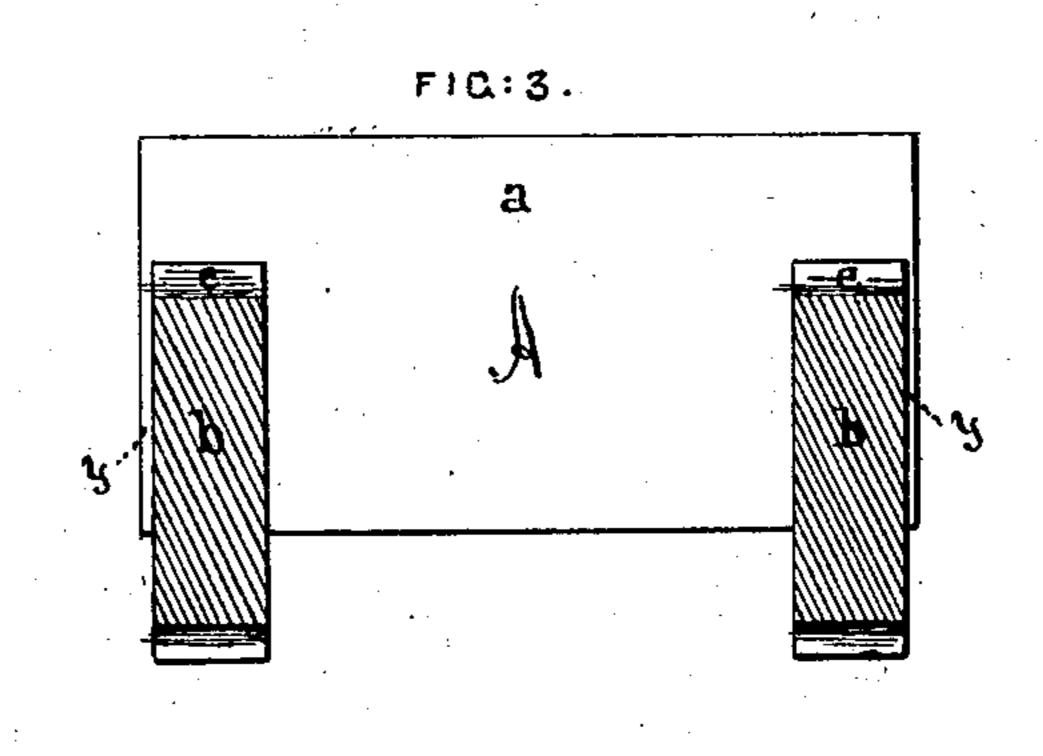
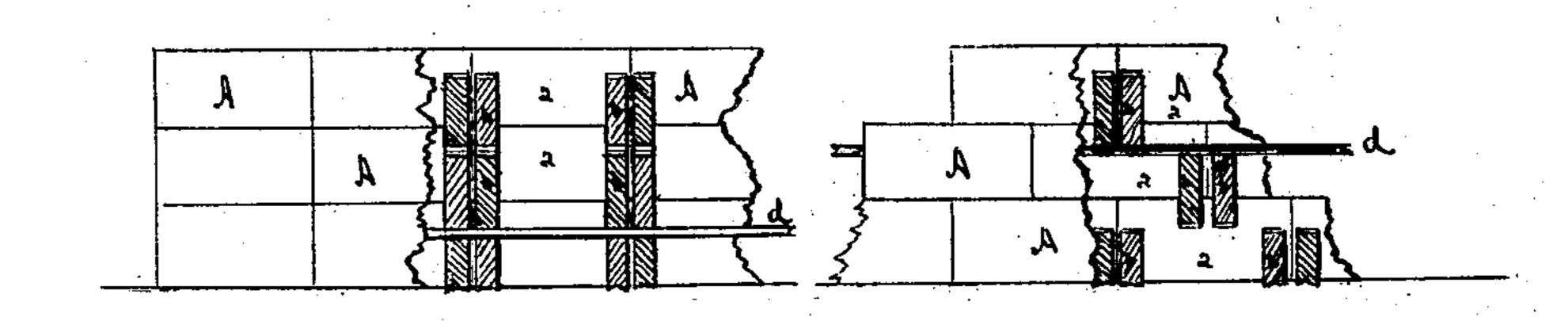
G. H. JOHNSON. HOLLOW BRICK.







F1 G: 4.



HITNESSES J. H. Joung J. M. Berr. George H. Arbuson By David arBurr atty

United States Patent Office.

GEORGE H. JOHNSON, OF NEW YORK, N. Y.

Letters Patent No. 110,764, dated January 3, 1871.

IMPROVEMENT IN HOLLOW BRICKS.

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

I, GEORGE H. JOHNSON, of the city, county, and State of New York, have invented an Improved Hollow Tile or Brick, of which the following is a specification.

My invention relates to an improvement in the form and construction of hollow quadrilateral tiles or bricks, produced by dropping down the ends of the hollow tile or brick between the sides thereof, until the upper edges of the ends shall be an inch or two below the upper edges of the sides, and lower edges of said ends shall project an equal distance below the lower edges of the sides, thus forming projecting tongues or tenons at each end of the tile on one side or face thereof, and counterpart recesses at each end on the opposite side or face, so that when any two of these tiles are laid directly one upon the other in a proper manner, the tongues of the one will closely fit into the counterpart recesses in the other, and thus form a lock-joint between them.

Semicircular recesses are formed in each end of the end-pieces, so that when the end-pieces are brought together in laying up the bricks, a cylindrical hole is left through them, forming air-passages communicating with the hollow spaces within the tiles.

The sides of the tile are made to project slightly beyond the ends thereof, leaving a margin to be chipped, off when desired, in fitting the tiles to form a circle or other irregular line.

In the accompanying drawing-

Figure 1 is a plan view of my improved hollow tile. Figure 2, an end view thereof, with dotted lines illustrating the manner in which two or more are fitted together.

Figure 3, a central vertical section in the line x x

of fig. 1.

Figure 4, a view, partly in section, illustrating the manner of laying up the tiles, either directly one upon the other in straight vertical joints or otherwise, so as to break joints in horizontal courses; and also the combination of a horizontal tie-rod therewith.

A is my improved hollow tile or brick, molded of clay or other suitable material, and consisting of the sides a a and ends b b, inclosing a central hollow space, c.

Instead of forming the ends b of the tile even and flush with the extremities of the sides as in ordinary hollow bricks, the sides a a are made to project slightly beyond the ends b b, as seen at y, fig. 3, and these ends are made to project about an inch and a half, more or less, beyond the sides transversely thereto one face of the tile, and are cut away to the same extent between the sides on the opposite face thereof, as

A central semicircular recess, e, is cut out or formed at each end of the ends b b, so that when two tiles are properly brought together, a cylindrical aperture is formed, (see fig. 2,) either for an air-passage or to receive an iron tie-rod, d, to strengthen the wall, as illustrated in fig. 4.

Where it is desired to break joints in laying a course of tiles, the projecting ends from one tile pass into the central hollow space of that below it, (see fig. 4;) otherwise each projection fits into the recess above the end of the tile below it, and rests therein, (see also fig. 4,) and in either case a close lock-joint is made between the tile above and below.

I claim as my invention-

fully illustrated in figs. 2 and 3.

The improved hollow brick or tile herein shown, composed of the equal rectangular sides a a and the ends b b, when said parts are disposed, with relation to each other, in the manner and for the purpose herein set forth.

Witness my hand to this specification this 17th day of May, 1870.

GEO. II. JOHNSON.

Witnesses:

DAVID A. BURR, EMILY JOHNSON.