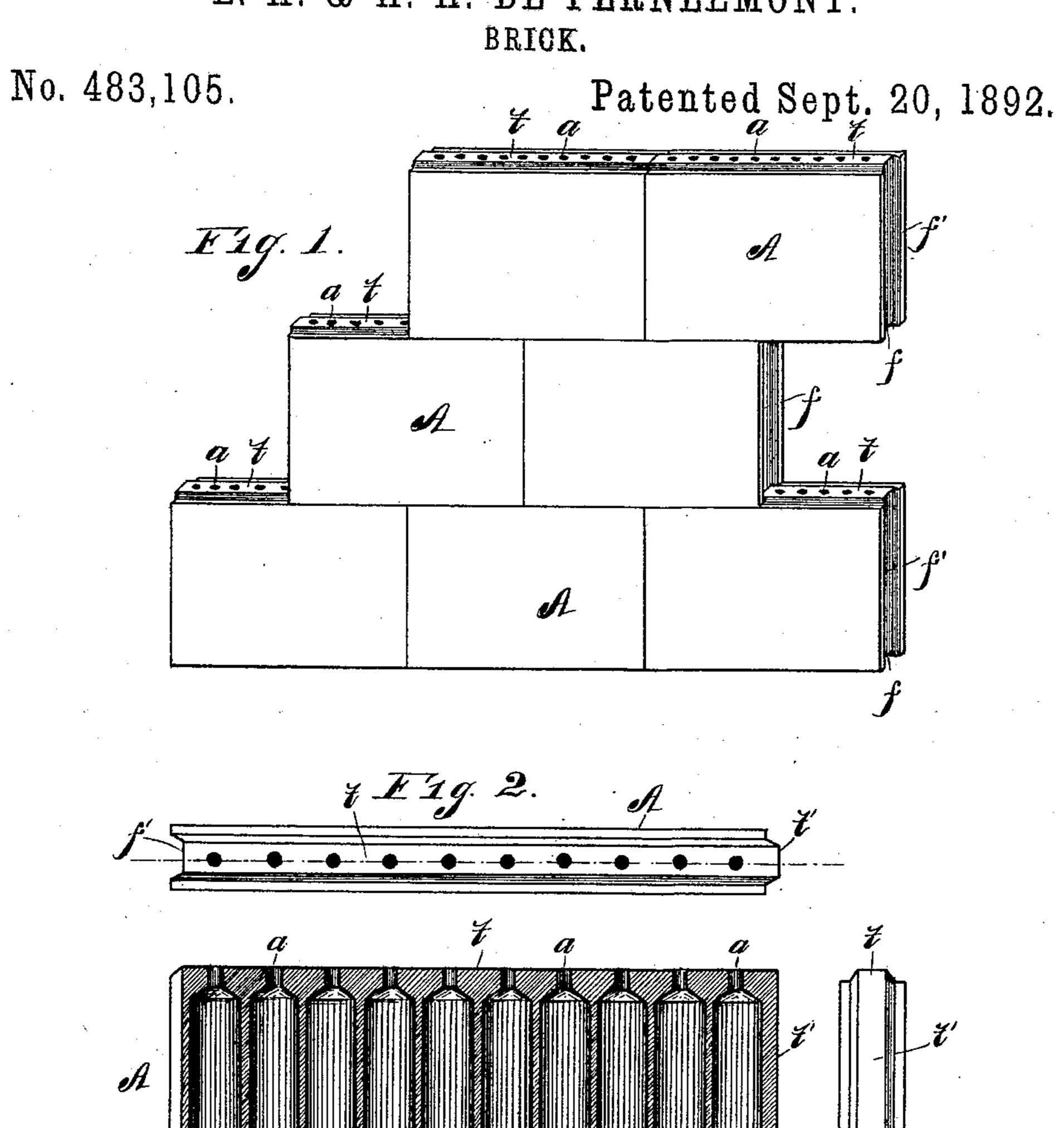
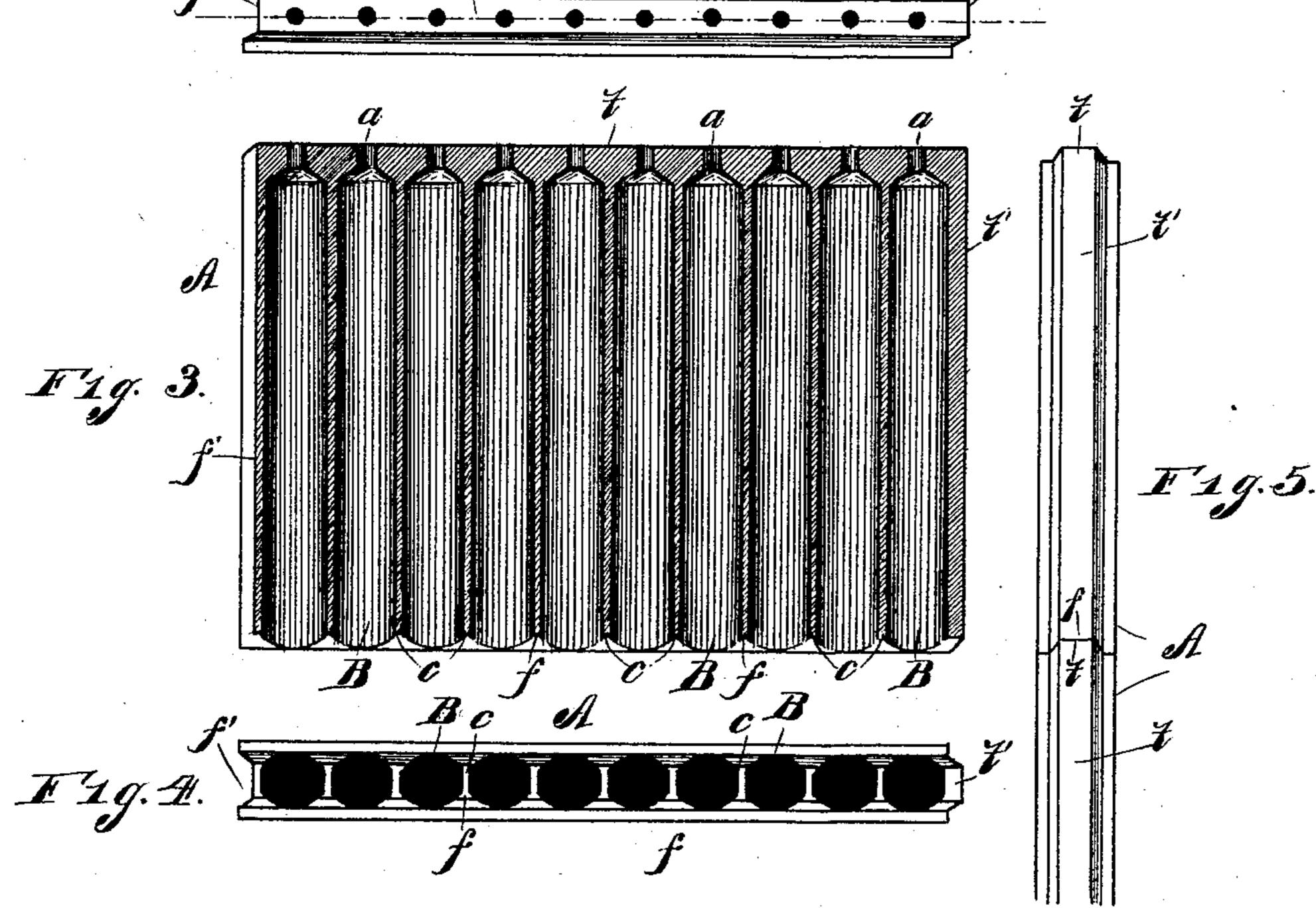
## L. H. & H. H. DE FERNELMONT.





WITNESSES

## United States Patent Office.

LEONARD H. DE FERNELMONT AND HENRY H. DE FERNELMONT, OF DETROIT, MICHIGAN, ASSIGNORS, BY MESNE ASSIGNMENTS, OF ONE-THIRD TO SAID LEONARD H. DE FERNELMONT.

## BRICK.

SPECIFICATION forming part of Letters Patent No. 483, 105, dated September 20, 1892.

Application filed November 24, 1890. Serial No. 372,401. (No model.)

To all whom it may concern:

Be it known that we, LEONARD H. DE FER-NELMONT and HENRY H. DE FERNELMONT, citizens of Holland, residing at Detroit, in the 5 county of Wayne and State of Michigan, have invented certain new and useful Improvements in Plastic Brick; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable 10 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 new and useful improvements in the construction of fireproof bricks to be used for inside wallwork instead of lath and plaster; and it consists in making such brick of plaster, staff, or cement in va-20 rious sizes and preferably rectangular in form and providing said brick with a series of cavities or openings passing vertically therethrough and having a reduced upper end, and also in providing two of the right-angle edges 25 of said brick with an extending beveled tongue and its reverse edges with corresponding depressions, producing a brick that is light and cheap, a number of which may be readily and securely cemented together, forming a fire-30 proof partition-wall of great strength and durability, all of which will be hereinafter more fully set forth, and the essential features pointed out particularly in the claim.

In the accompanying drawings, forming a 35 part of the specification, Figure 1 is an isometrical view of a portion of a wall constructed of our improved bricks. Fig. 2 is an elevation of the top or upper edge of the brick. Fig. 3 is a central horizontal section through 40 the brick, taken on dotted line of Fig. 2. Fig. 4 is an elevation of the bottom edge or base of the brick. Fig. 5 is an end elevation of

two of the bricks set together.

Referring to the letters of reference, A in-45 dicates the body of the brick, the sides of which are solid and are supported by a number of narrow partitions c c, which form a se-

ries of cavities or air-chambers B, passing vertically therethrough, the lower ends of said chambers opening through the bottom or base 50 of the brick, as shown in Fig. 4. Their upper ends terminate in the reduced openings a, that pass through the raised tongue t on the upper edge of the brick, as shown in Figs. 2 and 3, said brick having a like raised tongue 55 or tenon t' at one end (see Figs. 2 and 5) and corresponding grooves or depressions ff' in the opposite end and base, respectively, as shown in Figs. 1, 2, 3, and 4. This form of construction permits of the bricks being 60 matched or fitted one into the other when placed in a wall, the raised tongues of one brick entering the corresponding grooves of the other, the bricks being set so as to break joints, as shown in Fig. 1. The cement placed 65 between the joints of the bricks oozes into the reduced ends a of the chambers or cavities B as the bricks are forced together, making a tight and perfect joint between the bricks and forming a wall that is light, solid 70 and compact and absolutely fireproof.

Having thus fully set forth our invention, what we claim as new, and desire to secure by

Letters Patent, is—

A hollow rectangular brick having a raised 75 tongue on two adjacent right-angle edges and corresponding grooves in the two opposed edges, a series of transverse partitions joining the sides of said brick and forming a series of vertical chambers, said chambers open-80 ing into the groove in the edge of the brick at their base, the raised tongue on the opposite edge of the brick having a series of small apertures passing therethrough that communicate with a series of vertical chambers 85 within the brick.

In testimony whereof we affix our signatures in presence of two witnesses.

> LEONARD H. DE FERNELMONT. HENRY H. DE FERNELMONT.

Witnesses:

E. S. WHEELER, B. F. WHEELER.