

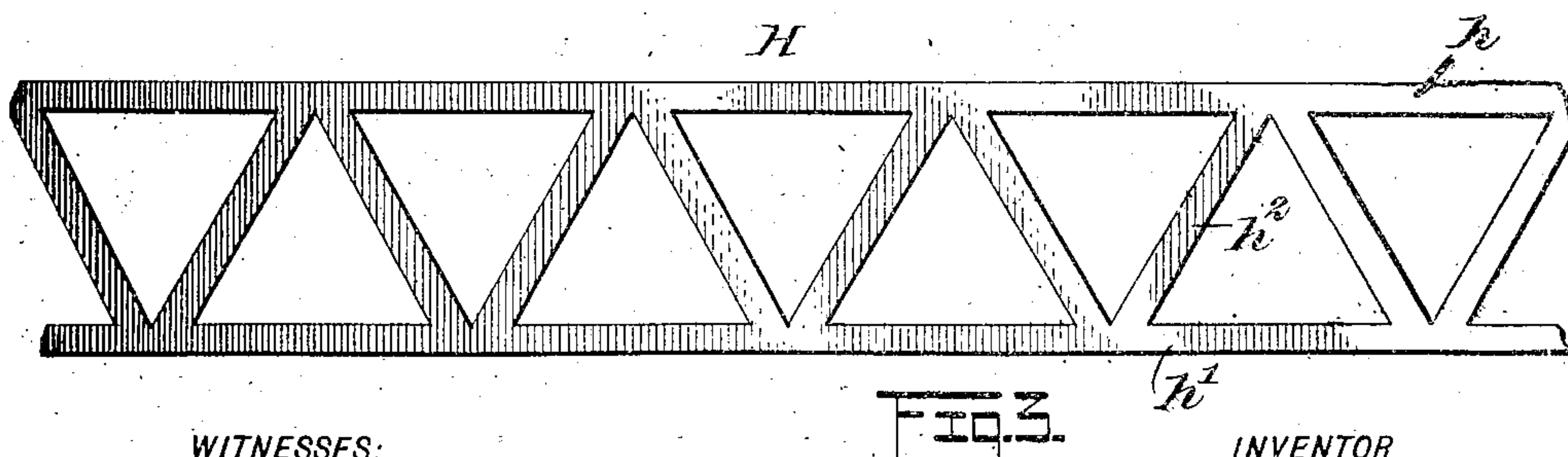
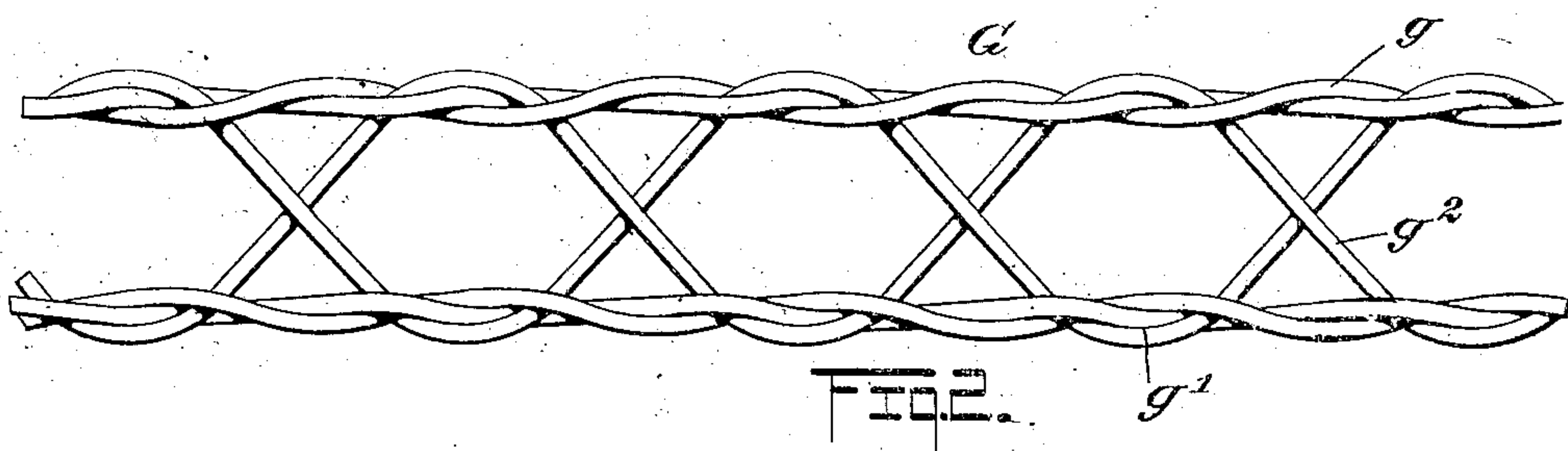
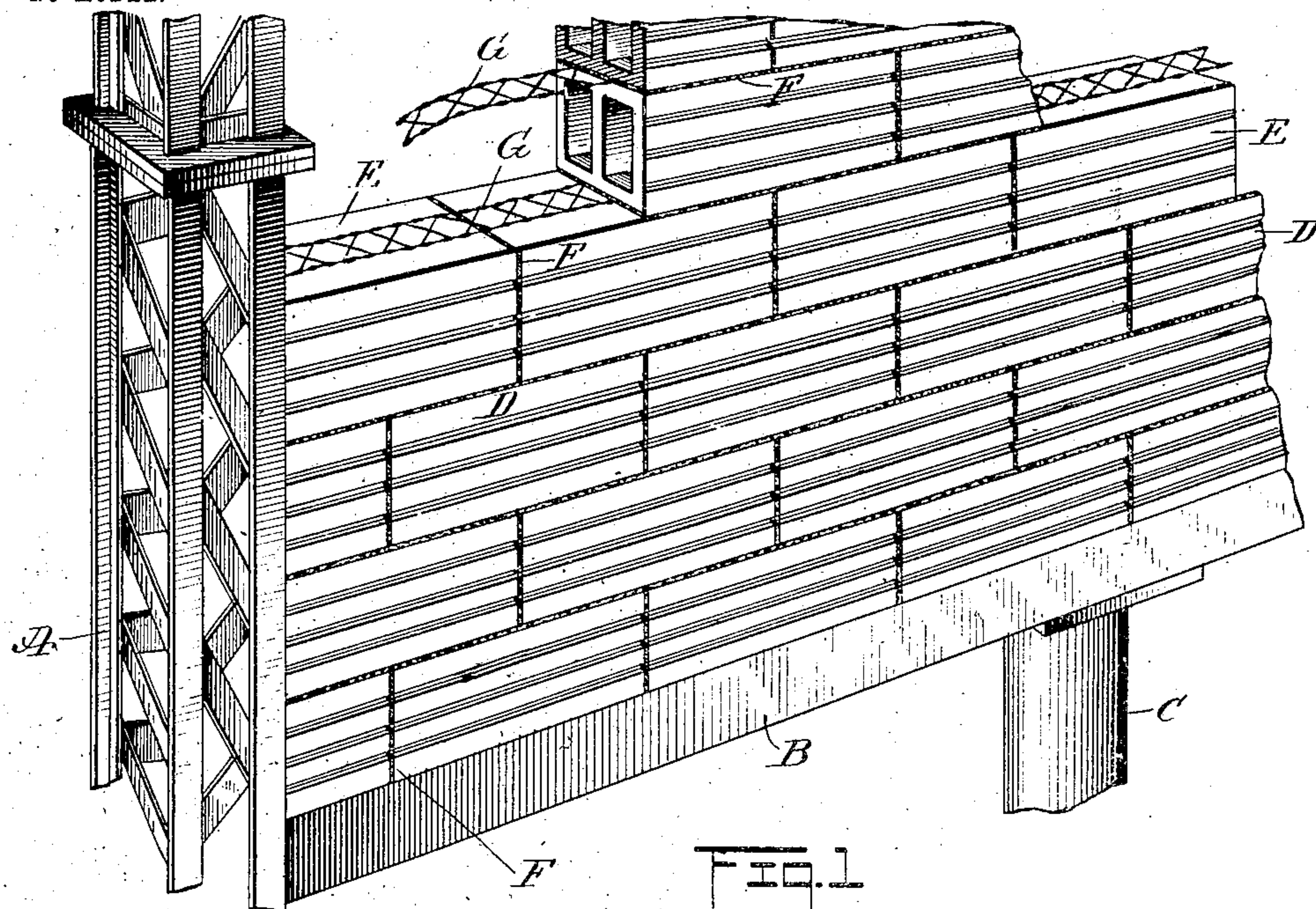
No. 762,678.

PATENTED JUNE 14, 1904.

P. H. BEVIER.
REINFORCED TERRA-COTTA PARTITION.

APPLICATION FILED JAN. 5, 1904.

NO MODEL.



WITNESSES:

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REINFORCED TERRA-COTTA PARTITION.

SPECIFICATION forming part of Letters Patent No. 762,678, dated June 14, 1904.

Application filed January 5, 1904. Serial No. 187,796. (No model.)

To all whom it may concern:

Be it known that I, PHILIP H. BEVIER, a citizen of the United States, and a resident of the city of New York, borough of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Reinforced Terra-Cotta Partition, of which the following is a full, clear, and exact description.

This invention is an improvement in partition-walls employed in the construction of buildings; and it relates more especially to means for bonding the joints between superposed terra-cotta tiles. In this invention I seek to provide means for increasing the strength and efficiency of the mortar or cement joint between the superposed tiles, and to the attainment of this end a metallic member of open-work or lattice-like construction is placed between the courses of tiles and embedded in the plastic bond in a way for the material while in a plastic state to pass through the metallic member and to adhere to the surfaces of adjacent tiles, the mortar and the open-work metallic member producing a thin, strong, and secure joint between the tiles.

Further objects and advantages of the invention will appear in the course of the subjoined description, and the actual scope thereof will be defined by the annexed claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of a portion of a partition having its tiles united by a plastic and metallic bond as contemplated by this invention. Figs. 2 and 3 are detail views of different embodiments of the metallic bond contemplated by this invention.

In Fig. 1 of the drawings the letter A indicates a portion of a metallic building structure, and B is a horizontal beam adapted to be upheld by a pillar or column C. On the beam and adjacent to the metallic construction A is a partition, which is built up of tiles laid in courses, as indicated at D E, said tiles of the partition being laid to break joints. Each tile is of the cellular construction well

known to those skilled in the art, and said tiles are provided in their opposing faces with longitudinal channels or grooves, which are adapted to receive plastic material, such as cement or mortar, to form the plastic bond or joint indicated at F by the drawings.

The important feature of my invention resides in the employment of a metallic bond which is of open-work or lattice-like construction, examples of which are shown more clearly by Figs. 2 and 3 of the drawings. In Fig. 2 the metallic bond G is shown as made of wire and consists of parallel cables g g' and transverse strands g'' . This metallic wire bond can be economically and rapidly manufactured by existing machinery, which is constructed and operated to make the transverse strands g'' cross one another between the side cables g g' , and thereby produce a plurality of openings or interstices of large area. I do not, however, desire to confine myself to the employment of a wire bond, because I am aware that I may use a bond similar to that shown at H in Fig. 3, wherein a length or strip of metal is cut or stamped to produce side portions h h' and connecting transverse members h'' , the whole arranged to provide openings of large area, as shown. I prefer, however, for certain reasons to employ the wire construction of Fig. 2, because the wire bond can be manufactured cheaply, conveniently reeled, and shipped in a reeled condition, and the bond can be cut into lengths by ordinary tools to meet the requirements of the particular work in hand.

After one course of tiles is laid the operator should proceed to apply the open-work or lattice-like bond upon the grooved top surfaces of the course of tiles, and the plastic material, such as mortar or cement, should now be applied in the ordinary way over the whole surface of the tile course. This plastic material flows through the openings or interstices of the lattice-like metallic bond and coats the upper surface of the tile course, after which the next course of tile should be imposed directly upon the bonding material, so as to be united by such material to the subjacent course of tiles. The plastic material fills the whole space between the two courses of tiles and the

grooves in the opposing surfaces of the tiles. The compact form of the metallic bond allows the use of narrow mortar joints, and this bond is thoroughly embedded in the plastic material, which extends from one course of tiles to the other through the openings in the metallic bond. This construction produces extremely durable and strong joints between the courses of tiles, and the metallic bond occupies very little space in the plastic joint.

The metallic lattice-like bond may extend continuously of the joints between the courses of tile, as shown by the drawings, or it may be arranged in interrupted layers with gaps or spaces between the ends of the bond in each joint, said spaces in the discontinuous metallic bond being spanned by other metallic bonds in the joint or joints of an adjacent course or courses of tiles. It is to be understood, therefore, that I reserve the right to employ my lattice-like metallic bond in a variety of ways between the courses of tile.

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

25 1. A partition-wall comprising courses of

tiles united by a plastic and metallic bond, the metallic element of the bond being of open-work or lattice-like construction, having side pieces joined by cross-pieces at angles to each other which is filled by the plastic element of the bond. 30

2. A vertical partition-wall having courses of superposed tiles, the latter being provided with grooves or channels in their opposing faces, a plastic filling between the courses, and 35 a horizontal metallic bond embedded in the filling and disposed opposite to the channels or grooves of the tiles, said metallic member of the bond being of open-work or lattice-like construction, having side members united by 40 diagonal cross members and having its openings occupied by the plastic filling.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

PHILIP H. BEVIER.

Witnesses:

HENRY STRUBE,

MORTIMER L. TILFORD.