(No Model.)

R. GUASTAVINO.

CONSTRUCTION OF FIRE PROOF BUILDINGS.

No. 323,930. Patented Aug. 11, 1885.

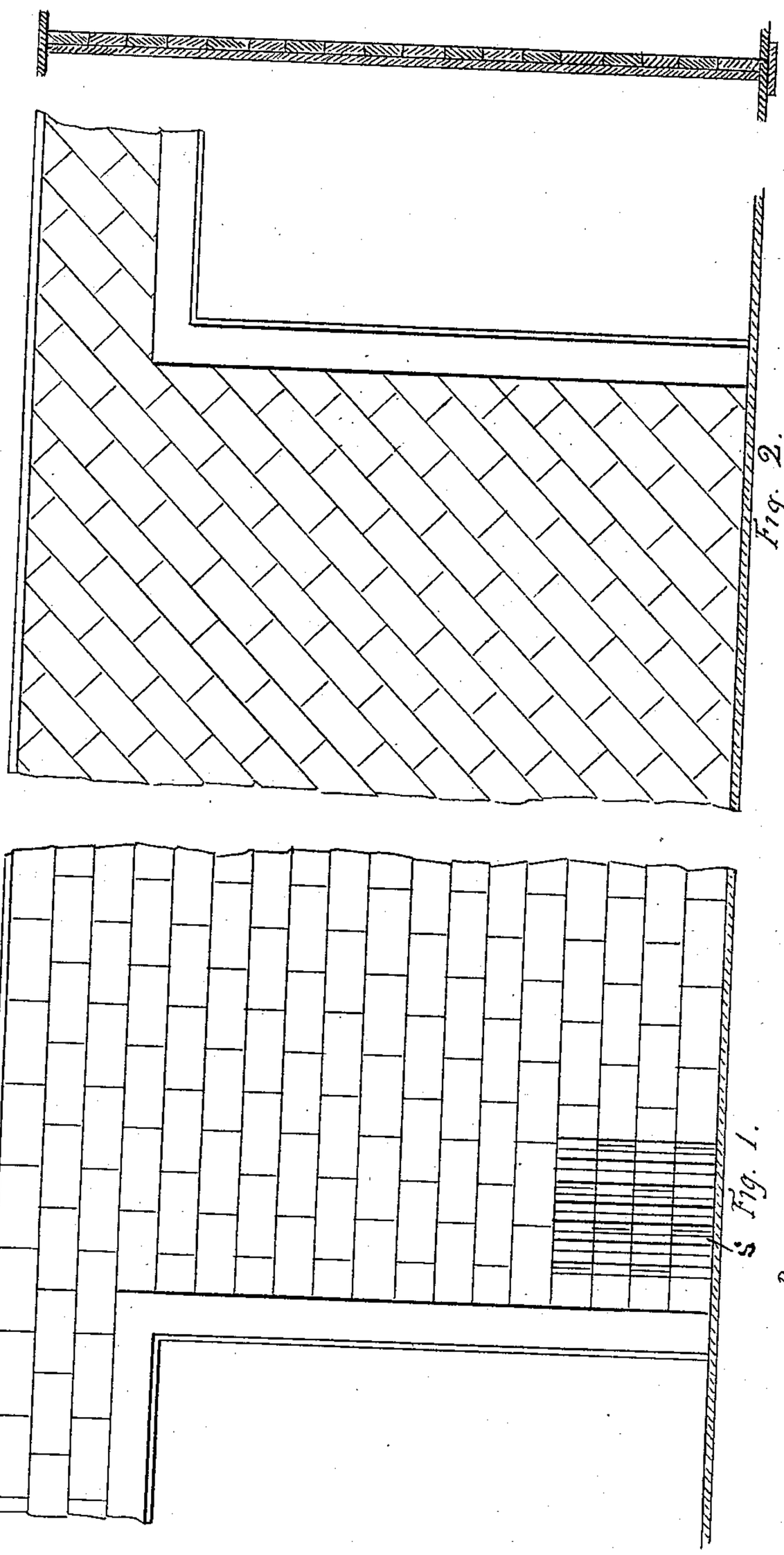

Fig. 1.

Fig. 2.

Fig. 3.

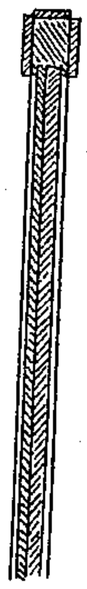

Fig. 4.

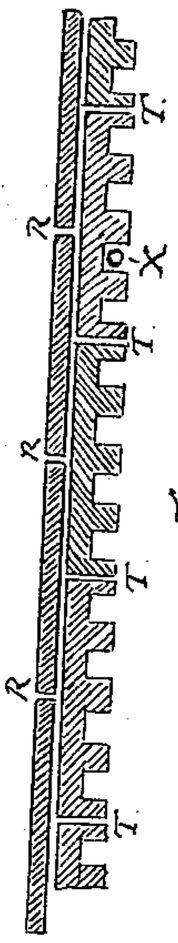

Fig. 5.

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RAFAEL GUASTAVINO, OF NEW YORK, N. Y.

CONSTRUCTION OF FIRE-PROOF BUILDINGS.

SPECIFICATION forming part of Letters Patent No. 323,930, dated August 11, 1885.

Application filed April 21, 1885. (No model.)

To all whom it may concern:

Be it known that I, RAFAEL GUASTAVINO, a citizen of the United States, and a resident of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Fire-Proof Buildings, of which the following is a specification.

My present invention relates to the construction of fire-proof buildings, and has particular reference to the partitions of such buildings. It is applicable to buildings of all descriptions—such as private dwellings, factories, theaters, school-houses, &c.

The object of the invention is to produce a more substantial and more economical system for constructing the partitions than any now in use. By my construction of partitions I attain economy, solidity, and incombustibility. In addition to the qualities mentioned, partitions constructed according to my invention are light in weight, clean, and entirely free from the usual cavities incident to the common form of partitions, thus insuring the buildings against the lodgment of pests—such as rats, roaches, and the like—besides, they are entirely free from joints, one integral structure without solution of continuity resembling a large stone.

In the accompanying drawings, which form part of this description, and in which like letters indicate like features, Figure 1 represents the partition in elevation; Fig. 2, a similar view of the opposite side of the same partition; Fig. 3, a vertical section of the partition; Fig. 4, a horizontal section of the same, and Fig. 5 a detail in horizontal section, showing the actual form of the bricks used in the partitions.

As shown in the drawings, my partitions are built of two or more thicknesses of brick tiles united one with the other by cement or plaster-of-paris.

In building the partitions according to my plan ordinary bricks are not well adapted. I by preference use brick tile of three-quarters of an inch thick to four to six inches wide, and from eight to twelve inches long. These tiles are built up into two or more layers with their broad faces vertical, and are set in the cement or plaster-of-paris. When two or more layers of brick tiles of this description are united together face to face in such manner as to break joints, a structure is formed having a surface without solution of continuity and resembling a large stone of three or more inches thick.

In some instances the brick tiles are so laid in two layers of cement as to break joints.

To add to the solidity of the structure, the tiles of one layer may be arranged in perpendicular lines, while those of the other are arranged in diagonal lines. In some forms of the structure the tiles of one layer may be smooth on the exposed surface, while those of the other layer have alternate elevations and depressions on the exposed surface.

To set properly the gas-pipes in this kind of tile-brick partitions, I may employ two kinds of tiles—one three-fourths of an inch thick, as shown in horizontal at R R R, Fig. 5, and the other of two inches thick, as at T T T T, Fig. 5—having the specific form of those shown in said figure. The letter X (shown in Fig. 5) indicates the position of the gas-pipes, and S indicates a partial view of the side of the partition before the first coat of plastering is applied.

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

1. A partition for buildings composed of two or more layers of brick tiles laid up with their broad faces vertical, united to each other by cement or plaster-of-paris, substantially as set forth.

2. A partition for buildings composed of two or more layers of brick tiles laid up with their broad faces vertical, united together, so as to break joints, by cement or plaster-of-paris, substantially as set forth.

3. A partition for buildings composed of two or more layers of brick tiles, the tiles of one layer arranged in horizontal lines, while those of the other or others are arranged in diagonal lines, substantially as set forth.

4. A partition for buildings composed of two or more layers of brick tiles, the tiles of one or more layers being smooth on the exposed surface, while those of the other layer have alternate elevations and depressions on the exposed surface, substantially as and for the purpose set forth.

Signed at New York, in the county of New York and State of New York, this 18th day of April, A. D. 1885.

RAFAEL GUASTAVINO.

Witnesses:

J. E. M. BOWEN,

J. BOYD.