(No Model.)

P. SIMONS.

TILE.

No. 320,822. Patented June 23, 1885.

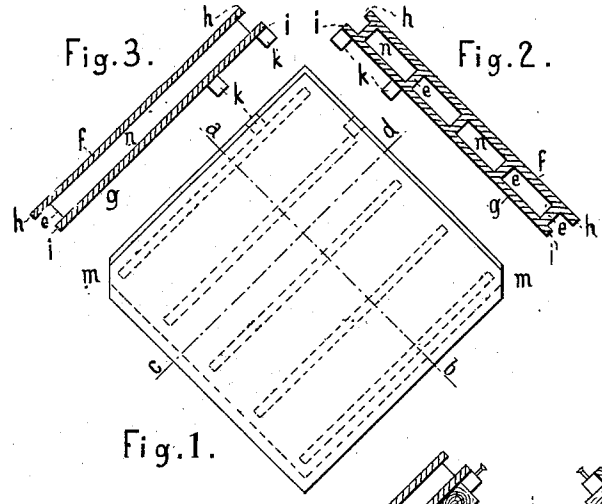
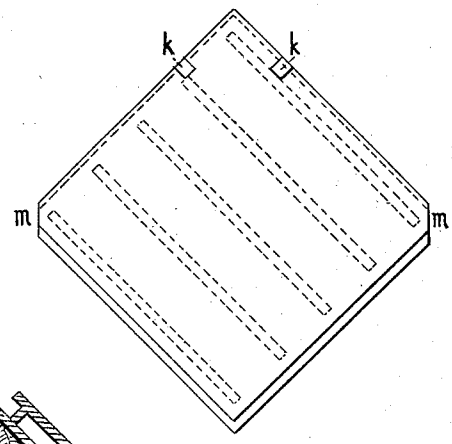


Fig. 3.

Fig. 2.

Fig. 1.

Fig. 4.



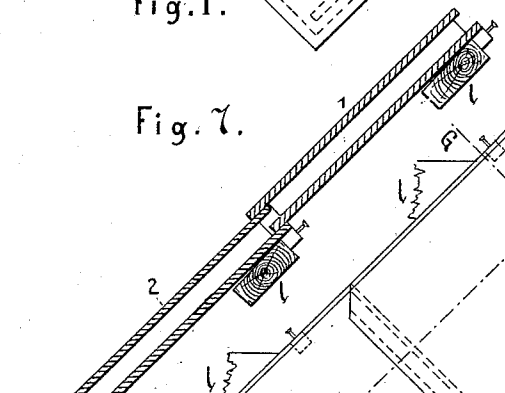


Fig. 7.

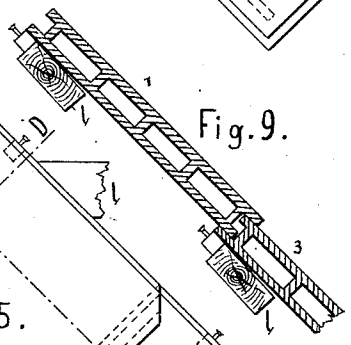


Fig. 9.

Fig. 5.

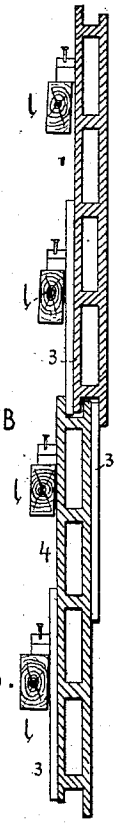


Fig. 8.

Fig. 6.

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UNITED STATES PATENT OFFICE.

PAUL SIMONS, OF DARMSTADT, HESSE, GERMANY.

TILE.

SPECIFICATION forming part of Letters Patent No. 320,822, dated June 23, 1885.

Application filed April 23, 1885. (No model.)

To all whom it may concern:

Be it known that I, PAUL SIMONS, a subject of the Grand Duke of Hesse, and residing at Darmstadt, in the Grand-Duchy of Hesse, German Empire, have invented an Improved Tile, whereof the following is a specification.

My invention relates to tiles for covering roofs, and more especially to tiles of square form designed to be placed diagonally on the roof; and the improvements consist, first, in providing such tiles on all sides with two projecting rims or flanges, one above the other, adapted to produce a double-lap joint between the tiles in juxtaposition with each other; and, secondly, in making the tiles of a top and a bottom wall connected together by vertical walls, which leave hollow spaces between them.

On the annexed sheet of drawings, Figure 1 shows an improved tile of my invention, seen from above. Figs. 2 and 3 are sections respectively on the lines *a b* and *c d* of Fig. 1. Fig. 4 is a view from below. Fig. 5 is a top view of four tiles placed together on a roof. Figs. 6, 7, 8, and 9 are sections on the lines A B, C D, E F, and G H, respectively.

As shown by Figs. 2 and 3, the tile consists of the top wall, *f*, the bottom wall, *g*, and the connecting-walls *e*, inclosing between them the spaces *n*. The walls *f* and *g* project on all sides over the walls *e*, so as to form the salient rims *h* and *i*, each of which is adapted to overlap the corresponding rim of another tile. The tiles are each provided with two knobs, *k*, by which they are hung on the roof-laths *l*. These knobs may have a hole for the purpose of allowing the tiles to be nailed to the roof-laths.

The described tiles may be made on any brick-making machine adapted to produce hollow bricks.

In order to allow the tiles to properly overlap each other while the tiles of any diagonal row are all with their lateral edges in a line, the corners of the same which are opposite to each other in a horizontal line have to be clipped by a certain amount, as shown at *m*, Figs. 1, 4, and 5, so that the tiles placed on the same laths, *l*, may be brought close enough together for the said purpose.

From Fig. 5, showing four tiles, 1, 2, 3, and 4, in their relative position on the roof, and from the different sections, Figs. 6 to 9, it will be seen that the neighboring tiles all overlap each other in two lines—*i. e.*, as well with their upper projecting rims as with the lower ones. They are therefore perfectly secure against being lifted and thrown off the roof by the wind.

I claim as my invention—

1. A square tile having on all sides two projecting rims, *h* and *i*, adapted to form with the like rims of another tile a double-lap joint, substantially as described.

2. A square tile having the projecting rims *h* and *i*, and which consists of the top wall, *f*, the bottom wall, *g*, and the connecting-walls *e*, leaving between them hollow spaces, substantially as specified.

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

PAUL SIMONS.

Witnesses:
HENRY SPRINGMANN,
B. ROI.