No. 747,495. PATENTED DEC. 22, 1903.

J. SOSS.

BUILDING BRICK OR TILE.

APPLICATION FILED FEB. 28, 1903.

NO MODEL.

Fig. 1

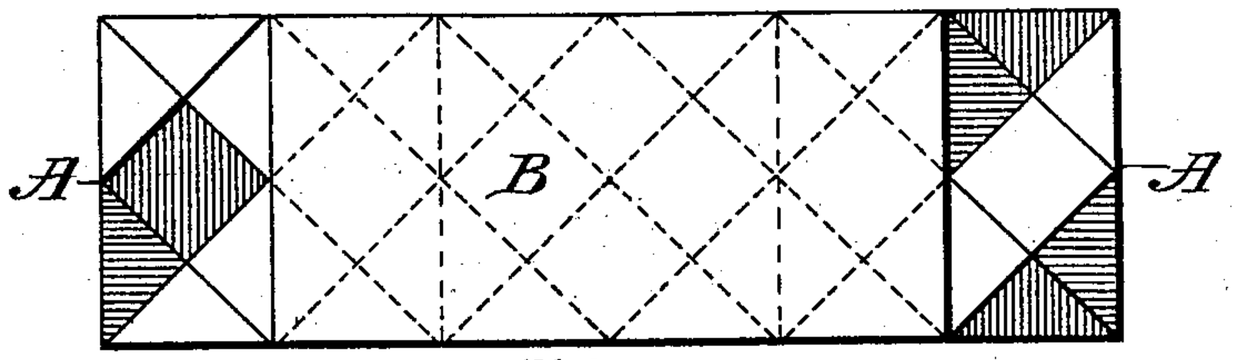


Fig. 2

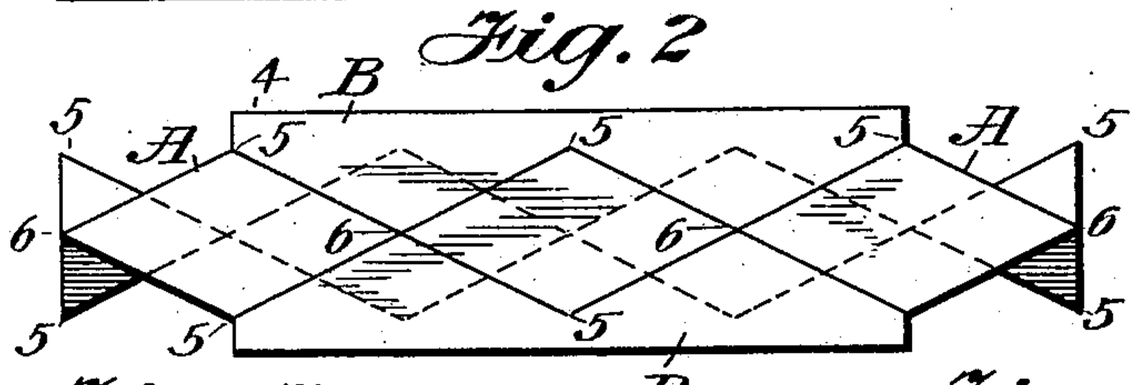


Fig. 3

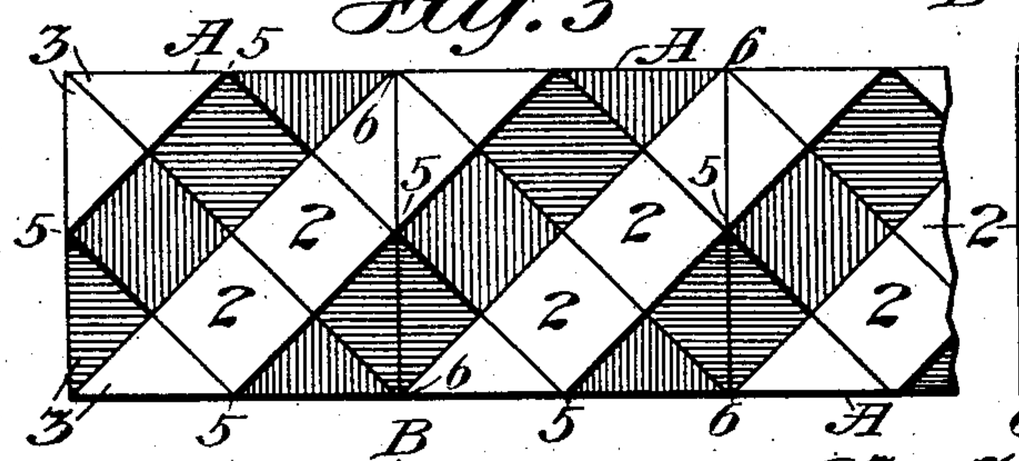


Fig. 4

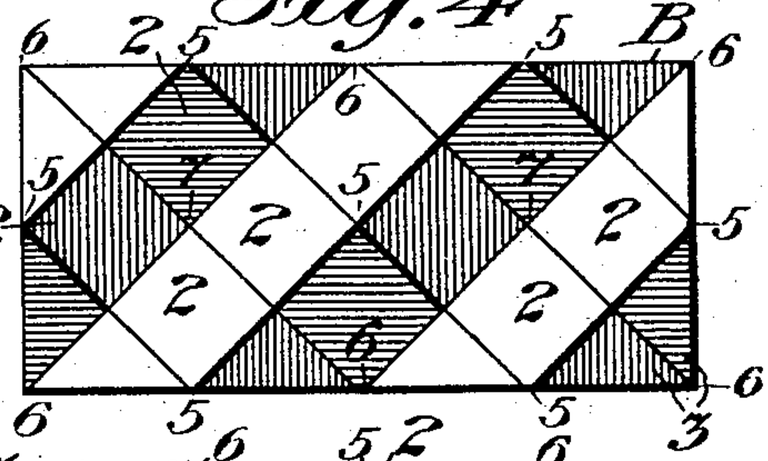


Fig. 5

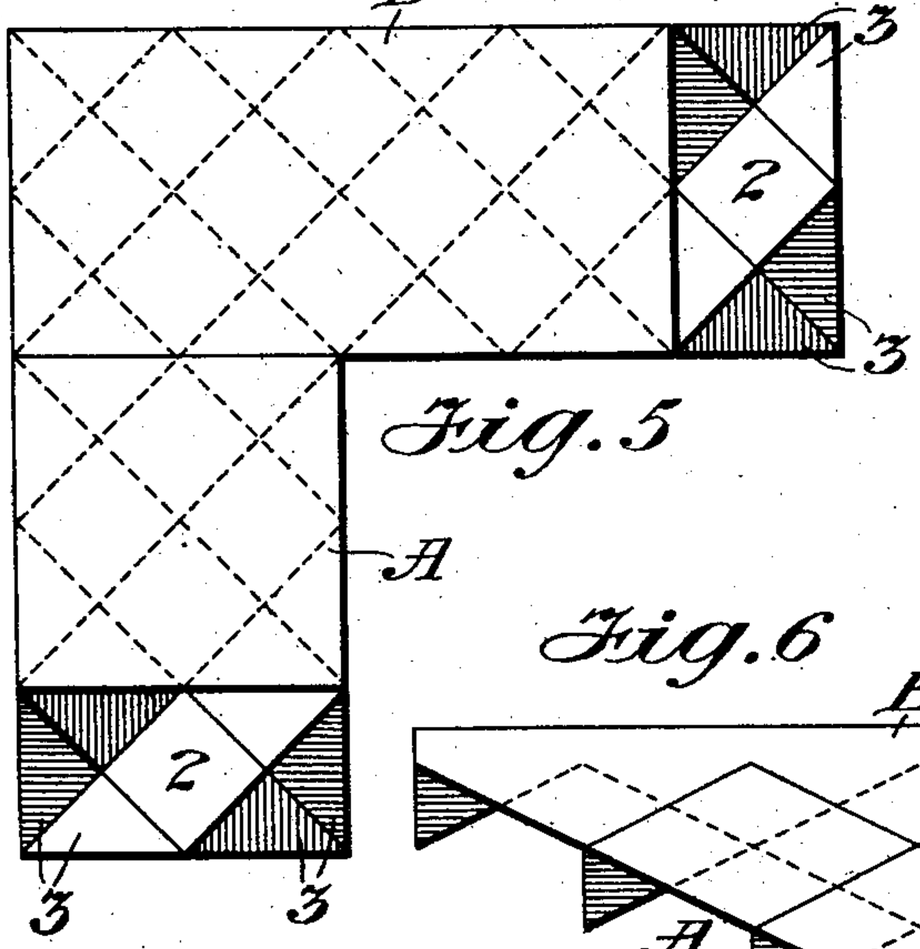


Fig. 7

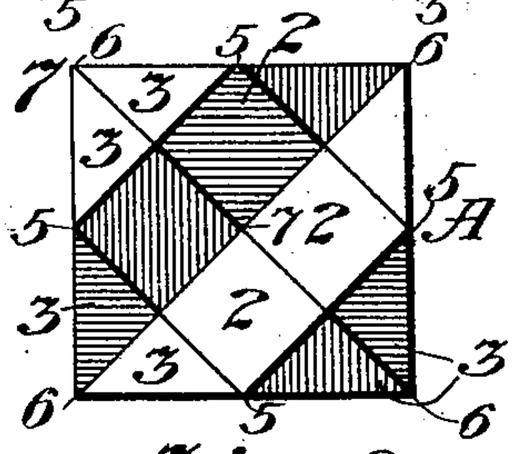


Fig. 8

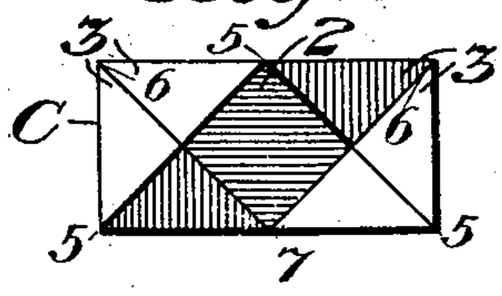
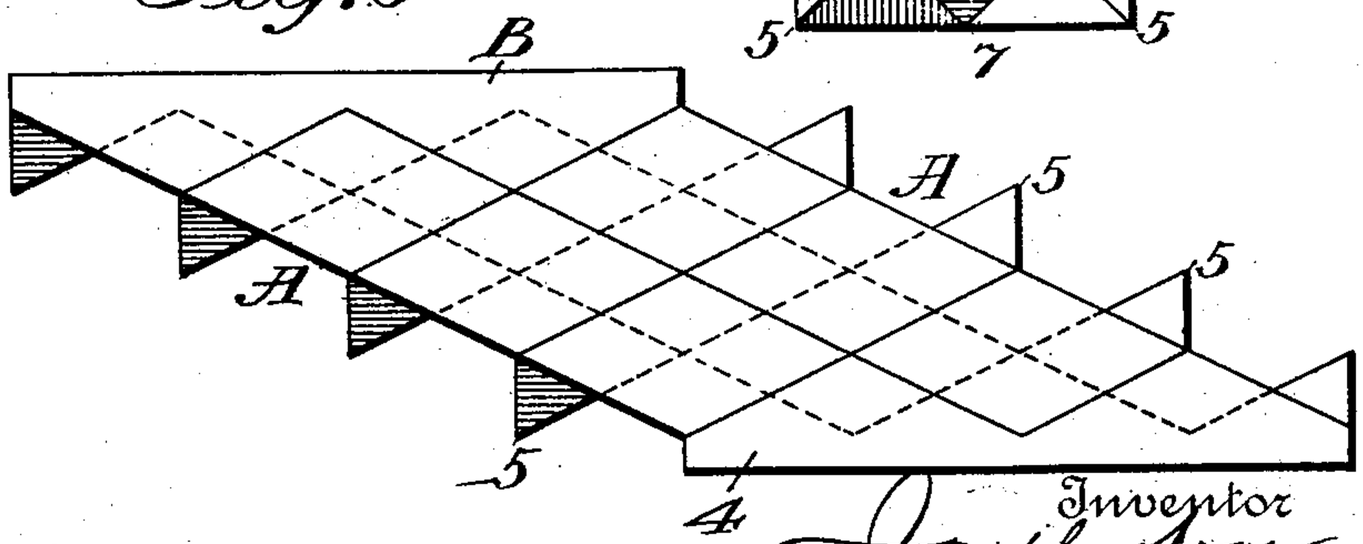


Fig. 6



Witnesses
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Inventor
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No. 747,495. Patented December 22, 1903.

UNITED STATES PATENT OFFICE.

JOSEPH SOSS, OF NEW YORK, N. Y., ASSIGNOR OF ONE-FOURTH TO CHARLES K. COLE, OF NEW YORK, N. Y.

BUILDING BRICK OR TILE.

SPECIFICATION forming part of Letters Patent No. 747,495, dated December 22, 1903.

Application filed February 28, 1903. Serial No. 145,560. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH SOSS, a citizen of the United States, and a resident of New York, in the county and State of New York, have invented certain new and useful Improvements in Building Bricks or Tiles, of which the following is a specification.

My invention relates to a new form of building element, which may be termed a "brick" or "tile;" and it consists of blocks of this character provided with peculiarly-related plane surfaces of such size and geometrical arrangement and all having a common angle with a central plane, whereby they may be fitted together in a great variety of positions and relationships, in all of which they interlock in such manner as to secure a material bonding action.

The object of my invention is to produce building-bricks which are so shaped as to interlock in a great variety of positions and may be easily and rapidly molded by means of simple and inexpensive apparatus. At the same time the bricks or tiles may be effectively used to produce surfaces having ornamental patterns and by reason of their difference in outline combine effectively with other brick to secure this result, even if there is no contrast in color. This effect may be further enhanced if different colors are used.

In the drawings, Figures 1 and 2, respectively, are a top plan view and a side elevation of members comprising my invention. Fig. 3 is a top plan view of the middle course of members shown in Fig. 2. Fig. 4 is a corresponding view of the lower course of members shown in Fig. 2. Fig. 5 is a plan of parts of two courses of members, said members being disposed at right angles, as for parts of a lintel and cope of a window. Fig. 6 is a plan view of a tiled surface formed with the members of my invention, and Figs. 7 and 8 are detail views.

Corresponding parts in all the figures are denoted by the same reference characters.

The term "brick" as I herein use it is employed in its broadest meaning and is intended to cover bricks as the term is understood in its narrower sense, tiles, terra-cotta, and building-blocks generally, whether formed of natural or artificial materials.

What may be termed my "standard" or "basic" brick is shown in plan in Fig. 7 and in elevation in Figs. 2 and 6. The complementary forms of my brick are made up of multiples or divisions of this form. This is rectangular in outline, as seen in plan. Central points upon all four sides are thick points measured vertically, and corners and center are thin points where in the form shown the thickness is reduced substantially to nothing, as is clearly shown in Fig. 1. As viewed in plan, there appears a central square, which is subdivided into four small squares 2 2, the large square being placed diagonally of the brick, with its corners 5 at the edge of the brick. Each of the small squares 2 is a plane which slopes from its outer corner 5 downward toward the center 7—that is, its outer corner is farther from the central plane of the brick than its inner corner. The four squares 2 together outline a pyramidal figure. The triangular sections 3 3 are planes which slope from their corners 5 downward toward the corners 6. The two at each corner outline one-quarter of a pyramidal figure like that at the center. The four squares 2 2 form a pyramidal concavity composed of four plane surfaces. If four such bricks be placed with a corner of each at a common point, the triangular surfaces 3 3 adjacent such corners will combined form another such pyramidal concavity as that formed by the four squares 2 2.

Opposite sides of the brick are alike, the thick and thin points coinciding in location. The four peripheral faces are parallelograms, the angles at the corners depending upon the angle made by the faces with the central plane. As herein shown, this parallelogram is a diamond, two angles being acute and two obtuse.

It is evident that, if so desired, the block may be thickened by separating the faces without changing the angle of the faces—that is, by simply inserting a body of the clay of suitable thickness, as has practically been done with the member B. This member is twice the length of the square brick before described, with one side a plane surface, and is used to make the finishing layer. The brick shown in Fig. 8 is like half of that shown in Fig. 7—that is, if the brick shown

in Fig. 7 be cut through a central line it would make two such as that shown in Fig. 8. This half-brick is used for finishing out the ends of courses.

Bricks of this kind may be superposed and fitted together, with two edges coinciding in plane and with the transverse center of one coinciding with the edge of the other or with the corner of one fitting over the center of another, and the double-length finishing-bricks, such as B, may further be placed in any of the four right-angled positions.

The facets of these bricks interlock in such a way as to securely bind them all together into a homogeneous and strong wall. Even if laid up without any cementing material the wall would be strong, while with a cementing material it is substantially equivalent to a monolithic structure.

It is evident that the appearance of this brick may be widely varied by changing the angle of the faces, by inserting a central web, by combining more than one square, and in various other ways without departing from the scope of my invention, which is intended to cover all such changes, the same being considered as within the scope of my invention, which lies in the peculiar construction of the surfaces whereby the interlocking and bonding effect is obtained.

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

1. A brick having upon its face a diagonally-placed square depression having four plane surfaces combining to outline a pyramidal figure, the corner triangles outside of said square being correspondingly beveled to form a quarter of a similar figure.

2. A brick having a bearing-surface composed of planes each of which is adapted to combine with others upon the same or other bricks to outline a pyramidal figure which is placed diagonally of the sides of the brick.

3. A brick having a rectangular perimeter and a bearing-surface composed of planes, a plurality thereof upon the same or adjacent bricks forming pyramidal depressions and elevations, the bases of which are placed diagonally of the sides of the brick with two opposite corners placed upon opposite sides of the brick.

In testimony whereof I have signed my name in the presence of the subscribing witnesses.

JOSEPH SOSS.

Witnesses:
CHAS. H. DAVIDS,
J. C. PYBAS.