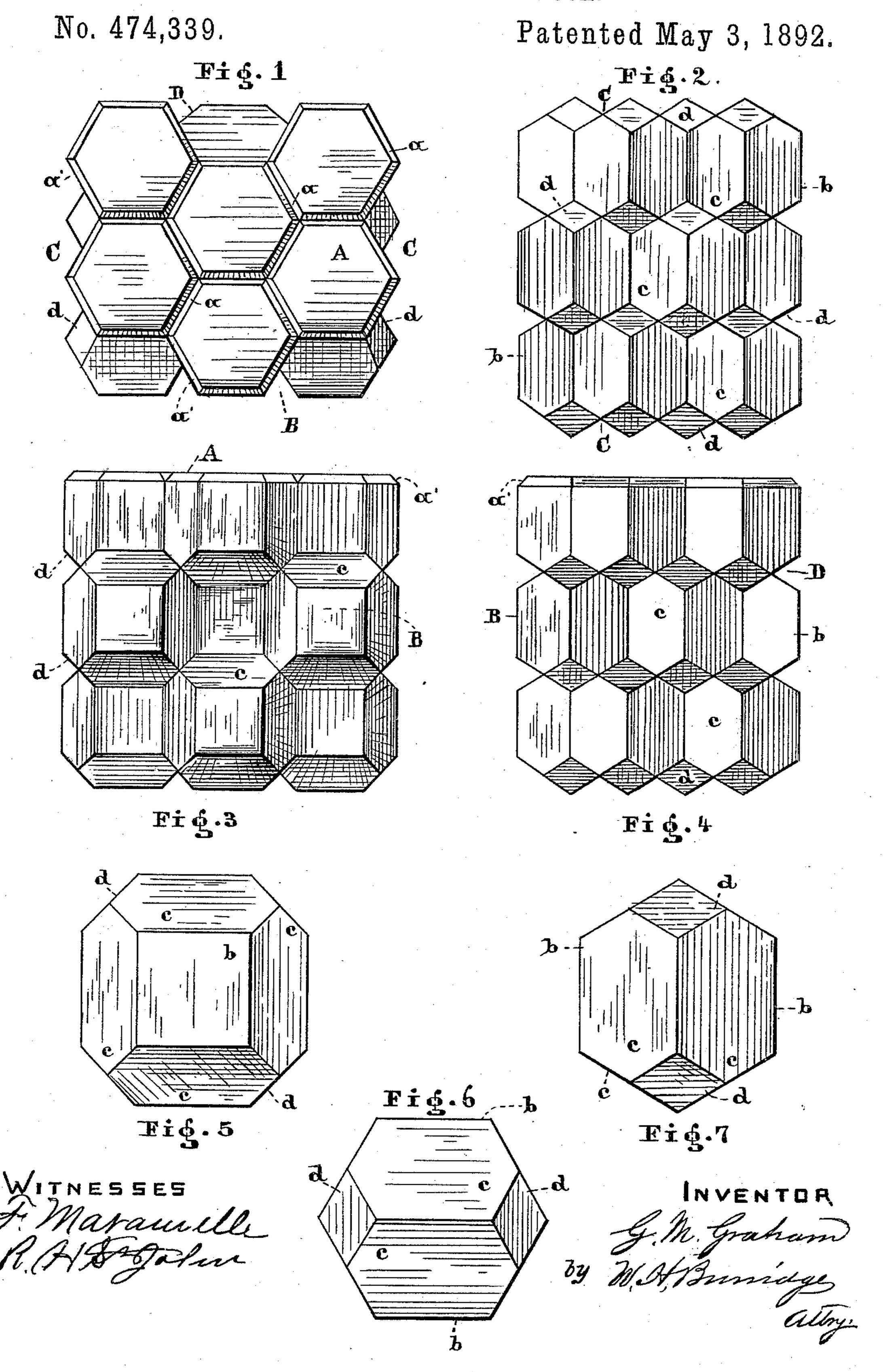
G. M. GRAHAM. ARTIFICIAL STONE BLOCK.



United States Patent Office.

GEORGE M. GRAHAM, OF HOUSTON, TEXAS.

ARTIFICIAL-STONE BLOCK.

SPECIFICATION forming part of Letters Patent No. 474,339, dated May 3, 1892.

Application filed December 9, 1889. Renewed November 30, 1891. Serial No. 413,504. (No model.)

To all whom it may concern:

Be it known that I, GEORGE M. GRAHAM, a citizen of the United States, residing at Houston, in the county of Harris and State of Texas, 5 have invented a certain Improved Artificial-Stone Block; and I hereby declare that the following is a full, true, and exact description thereof.

My invention relates to artificial - stone 10 blocks for architectural or building purposes, as well as for street and sidewalk pavements, being an improvement on a patent granted to

me April 16, 1889, No. 401,492.

The said improvement consists in the par-15 ticular formation of the protuberances by which interlocking joints or seams of the building-blocks are attained, the object of which is to so form the profilic protuberances of said blocks as to permit joining them in 20 close proximity on all the sides or faces of the seam, to reduce the binding material for the same and increase the strength of the same.

That the invention may be fully understood, reference will be had to the annexed specifi-25 cation and the accompanying drawings, in

which—

Figure 1 is a face view of a building or paving block, as above referred to. Fig. 2 is an under side view of the same. Figs. 3 and 4 30 are side views of said block, and Figs. 5, 6, and 7 are respectively side and plan views of a solitary building-block which forms the unit of the compound blocks.

Like letters of reference denote like parts

35 in the drawings and specification.

In Figs. 1 to 4, inclusive, a paving or building block of a polygonal profile is represented. The same has grooves a impressed in the face side A thereof. Said grooves imi-40 tate the beveled edges a' of the hexagonal prismoidal side profiles of said blocks—that is, they resemble a hexagonal configuration, which is the continuation of the hexagonallybeveled edges and sides.

Each block resembles six prisms in the face side thereof and is three layers thick or high. Thus in all it is the equivalent of eighteen solitary prismoids such as are shown in Figs. 5, 6, and 7, with the exception of the upper 50 layer, which is flattened and beveled in the combination-block. Substantially the said

opposite sides are alike and the other two are the reverse of each other. Fig. 3 represents a view of the side indicated at B, Fig. 1, 55 whereas Fig. 4 represents either one of the sides C C. (See Fig. 1.) The side D is the exact reverse or counterpart of B—that is, D has prismoidal depressions, where B has projections, which projections will fit into said 60 depressions when the side B of one block is joined onto the side D of another block. It is the particular prismoidal form which enables the engagement of said blocks, allows of a close contact of all the faces of the jointed 65 sides, and imparts greatest compactness and durability to the joints. These features are obtained by forming the sides of said blocks in the manner as shown in and by the solitary block, Figs. 5, 6, and 7. Said block con- 70 sists of a polygon having two square and parallel faces b, the sides of which are equal to the sides of hexagons, which determine the distance between said square sides. (See Fig. 7.) The faces c, lying to each side of the 75 faces b, are uniform and of oblong hexagonal shape and meet under an angle of 120°, and the termination of each of said faces at said angles forms a side of the parallelograms d. The solitary prismoid consists of two square 8c faces b, eight oblong hexagonal faces c, and four parallelogrammic faces d. The faces dadmit of joining the blocks in close proximity on all sides, so that the seam of mortar or cement which is to bind said blocks is of a uni- 85 form thickness all around.

The grouping of the blocks, as shown in Figs. 1, 2, 3, and 4, facilitates the setting of pavements or the erection of structures in so far as less seams are required in the construc- 90 tion thereof.

The compound blocks are pressed in molds and afterward dried. The face side, as above stated, is grooved to imitate the solitary hexagons; but the surrounding sides are virtually 95 the equivalent of so many solitary blocks, and the prismoidic projections thereof will fit into the analogous depressions in the same manner as solitary blocks would be joined. It will be noticed in the drawings and from the 100 preceding description that the joints are strongest at the base, or, in other words, the projections taper into the depressions, which blocks have a face, bottom, and sides. Two I condition makes the structure at the joints

almost equally as strong as the solid blocks, and by joining the blocks equally close on all sides comparatively small quantities of binding material are required with this improved article of building material.

What I claim, and desire to secure by Let-

ters Patent, is—

A building or paving block adapted to be used singly or in groups, having its opposite faces b b square, the faces c of oblong hexag-

onal form, extending between the two square faces, and the rectangular faces d intermediate of the hexagonal faces c, substantially as described.

In testimony whereof I affix my signature in 15 presence of two witnesses.

GEORGE M. GRAHAM.

Witnesses:

WILL W. THOMAS, I. S. ROBERTS.