Feb. 28, 1928. 1,660,459

J. G. THOMSON

INTERFITTING BLOCKS FOR ROAD PAVING

Filed Feb. 12, 1926

FIG. 1.

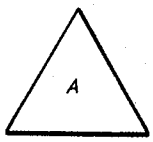


FIG. 3.

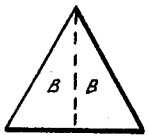


FIG. 5.

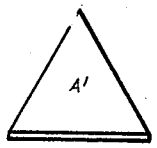


FIG. 2.

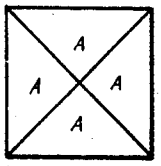


FIG. 4.

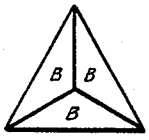


FIG. 6.

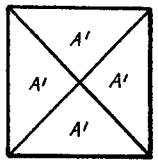


FIG. 8.

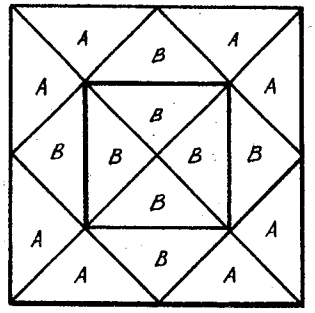


FIG. 9.

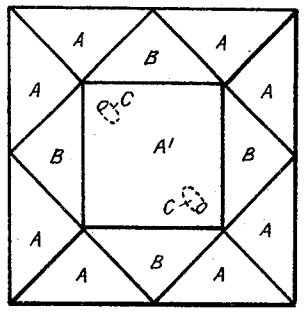


FIG. 7.

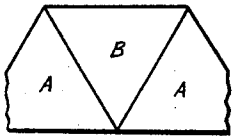


FIG. 10.

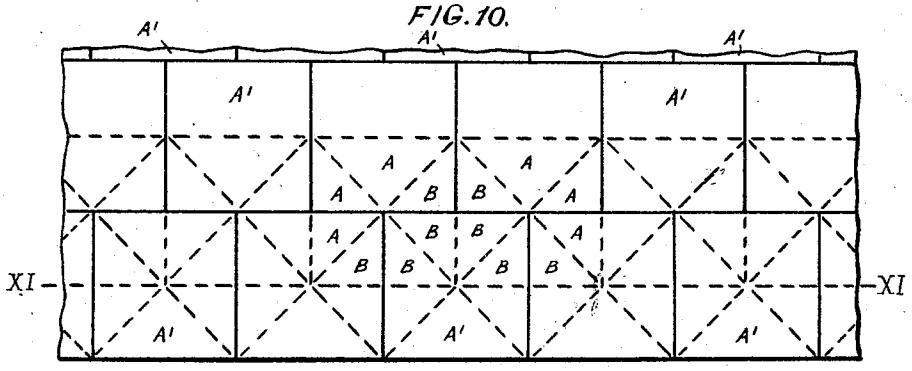
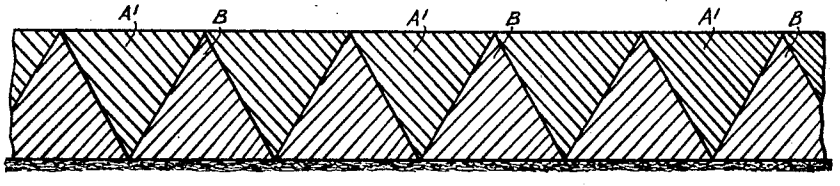


FIG. 11.



INVENTOR;
John Graham Thomson
BY: Riegel, Boyce & Bakelar
ATTORNEYS

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UNITED STATES PATENT OFFICE.

JOHN GRAHAM THOMSON, OF EDINBURGH, SCOTLAND.

INTERFITTING BLOCKS FOR ROAD PAVING.

Application filed February 12, 1926, Serial No. 87,772, and in Great Britain April 8, 1925.

My invention consists in the making of an improved form of interfitting concrete blocks for road paving, differing in form from the usual form of paving sets.

According to my invention the blocks are of two distinct forms, one of them is made in the form of a four-sided or square-based pyramid, whose four sides are equilateral triangles, whilst the other block is made in the form of a tetrahedral, or triangular-based pyramid, whose sides and base are equilateral triangles of equal dimensions, and correspond to the sides of the first mentioned block, and the base of the pyramidal block may be squared and thickened so that its opposing sides are, for a predetermined depth, parallel to each other, and a recess, or recesses, may be formed in the base to receive a tool, or tools, whereby the lifting and withdrawal of the block, when required, is facilitated. The pyramidal block, with its thickened base, is hereinafter termed a "pyramid", and the tetrahedral block a "tetrad". The blocks are preferably made of concrete and may be reinforced.

In order that my said invention and the manner of performing the same may be properly understood I hereunto append a sheet of explanatory drawings to be hereinafter referred to in describing my invention.

Figures 1, and 2, are respectively a side elevation, and a plan of a pyramid. Figures 3, and 4, are similar views of a tetrad, and Figures 5, and 6, are similar views of a pyramid with a squared and thickened base. Figure 7, is a side elevation of a tetrad and two adjoining pyramids. Figure 8, is a plan of adjoining tetrads and pyramids, but without the central inverted pyramid, and Figure 9, is a similar view but with the inverted pyramid in position. Figure 10, is a plan of a part of a road laid with the improved blocks, and Figure 11, is a sectional elevation on the dotted line XI—XI, Figure 10. In these drawings the same reference letters are used to mark the same or like parts wherever they are repeated.

As shown in the drawings the blocks, which are preferably made of concrete and may, if desired be reinforced, are of two distinct forms, one of them is made in the form of a four-sided or square-based pyramid A, whose sides are equilateral triangles, whilst the other block is made in the form of a tetrahedral, or triangular-based pyramid B, whose sides and base are equilateral triangles of equal dimensions, and correspond to the sides of the first mentioned block, and the base of the pyramidal block may be squared and thickened so that its opposing sides are, for a predetermined depth, parallel to each other as shown in Figure 5. Recesses C, are formed in the surface of the blocks to receive a tool (not shown) whereby the lifting and withdrawal of the blocks, when desired, is facilitated. The pyramidal block A, is hereinafter termed a "pyramid", and the tetrahedral block B, a "tetrad".

With the object of avoiding confusion the pyramid "A", when inverted is distinguished by the reference letter "A^1".

The method of laying a road, street and the like with the improved blocks is, for example, as follows:—Place four pyramids A, close together, as shown in Figures 7, 8, and 9, thus covering a comparatively large square area, lay four tetrads B, in the spaces between the pyramids A, which gives the formation shown in Figure 8, and into the space or pit thus formed insert an inverted pyramid A^1, as shown in Figure 9. These five pyramids and four tetrads, thus positioned, form one complete unit of the paving. The finished surface will show a number of squares, being the bases of the inverted pyramids A^1, which may in turn be divided into smaller squares to give foothold for horses.

While the blocks may be laid in the manner just described, other methods of doing so may be adopted, and the angles on one or more sides of the pyramid may be modified so as to give instead of the angle shown, any angle which may be found most suitable in practice, and thereby suit the angle or curve of any turn in the road, or street. To minimize shock the tetrads may be made of wood or like material well waterproofed.

When vertical pressure is applied to the base of an inverted pyramid, that pressure will be transmitted by the inclined faces of the adjacent tetrads to the corresponding faces of the next adjoining under-pyramids. The vertical pressure will thereby be spread over an area about four times greater than usual.

What I claim is:—

1. A pavement comprising blocks in the form of pyramids and tetrahedrons, the arrangement of said blocks being such that the

pavement surface consists of the bases of inverted pyramids, with pyramids and tetrahedrons adjoining and supporting the undersides of said inverted pyramids.

2. A paving structure comprising a plurality of blocks of pyramidal form disposed with their bases in abutting relation, blocks of tetrahedral form disposed between the sides of adjacent pyramids thereby to form openings of inverted pyramidal form between said blocks, and blocks of pyramidal form disposed in inverted position in said openings.

In testimony whereof I have signed my name to this specification.

JOHN GRAHAM THOMSON.