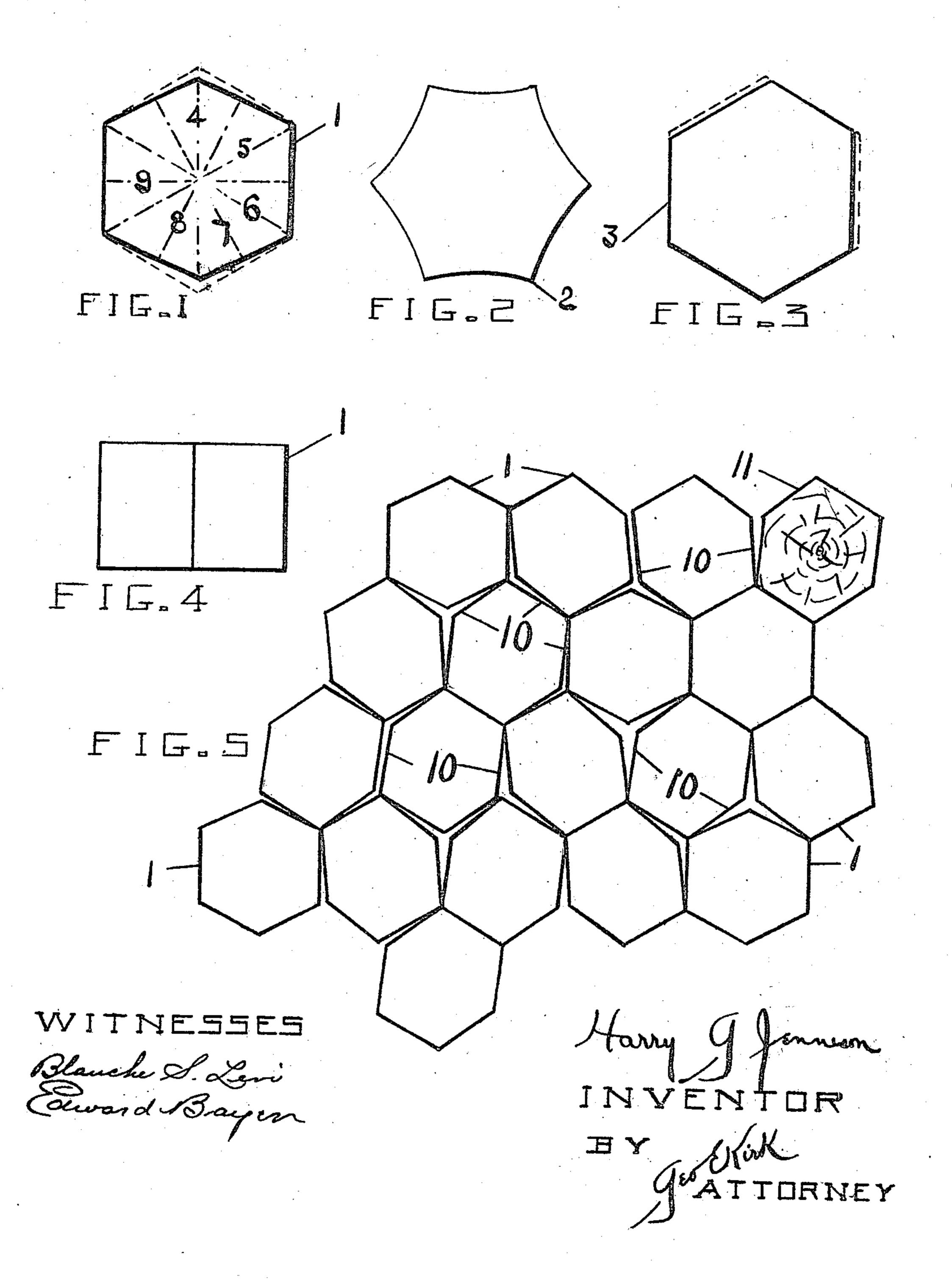
## H. G. JENNISON. PAVEMENT. APPLICATION FILED JUNE 29, 1909.

962,150.

Patented June 21, 1910.



## STATES PATENT OFFICE.

HARRY G. JENNISON, OF TOLEDO, OHIO.

## PAVEMENT.

962,150.

Patented June 21, 1910. Specification of Letters Patent.

Application filed June 29, 1909. Serial No. 505,012.

To all whom it may concern:

Be it known that I, HARRY G. JENNISON, a citizen of the United States, residing at Toledo, Lucas county, Ohio, have invented 5 a new and useful Pavement, of which the following is a specification.

This invention relates to paving, especially of the character comprising a plu-

rality of symmetrical blocks.

10 This invention has utility when embodied in pavements exposed to heavy traffic, as for streets and bridge floors, being adapted to take care of conditions of expansion and contraction due to moisture and temperature 15 variations. Further it is especially adapted for use on grades, in that convenient provision can be made for foothold for teams. The particular form of the block not only affords the many diverse directions for 20 joints to insure against block breakage and extended seams, but in being so free of general line of direction for laying there is possible a much greater speed in putting down this pavement and no necessity for 25 specially skilled labor in the work.

Referring to the drawings: Figure 1 is a plan view of a block embodying features of the invention herein; Fig. 2 is a plan view of a different form of block, also of a form 30 to produce the automatic spacing; Fig. 3 is a similar view of a still different type of the block embodying the same spacing feature; Fig. 4 is a side elevation of the block shown in Fig. 1; and Fig. 5 is a plan view 35 of a portion of a pavement comprising blocks, as shown in Figs. 1 and 4, illustrating how the spacing scheme works out in

the grouping of the blocks.

The polyhedral block 1 is shown as of six-40 sided form, the sides of which are straight, while the polyhedral block 2 has six sides slightly concave. The polyhedral block 3 is of six-sided form, but departs from a hexagon, as shown by the dotted lines, thus mak-45 ing the block irregular in shape. As shown by the dotted lines in Fig. 1, the block 1 departs from a true hexagon in having its diagonal 4, less than its two equal major diagonals 5, 6. Or in other words, its 50 diameters 7, 8, are equal and less than diameter 9. The corners of these blocks automatically and continuously so space the blocks that sides of the blocks in a general grouping are free, leaving spaces. These 55 spaces, as shown in Fig. 5, are of varying form 10, when resulting from blocks 1. As

the departure from regular hexagon is less, the automatic spacing of the blocks has smaller intervening areas. Temperaturé changes, as on extremely warm days, cause 60 paving blocks to expand, and when the blocks are of the form as herein disclosed. the intervening areas or closed spaces, by allowing slight movement or rotation of the blocks about the abutting corners as axes, 65 permit of this change in size being taken up among the blocks and within the width of the pavement without disastrous results of

bulging or block destruction.

A great problem is the proper handling 70 of wooden blocks, and for paving, notwithstanding antiseptio treatment and impregnation to saturation with waterproofing agents, the action of weathering causes the tar or asphalt to seep out of the blocks and 75 moisture gets in. This moisture produces a change in the size of the blocks, which applicant has discovered can be taken care of within the pavement itself without bulging, buckling, shattering of blocks or displacing 80 of curbing. As the tar or asphalt will not remain in the blocks, this problem of laying a wooden pavement so it will stay laid is of great importance. To avoid chipping and accordingly give greater wear, the blocks are 85 placed with the grain of the wood vertical, and as expansion of wood due to moisture is greatest laterally or radially there is a maximum of change to be taken care of in the body of the pavement itself. These ir- 90 regular polygonal blocks may be grouped regardless of any special arrangement, and throughout the entire pavement openings along full sides of blocks will occur. These openings may be filled with tar or other 95 filler as desired. On expansion of the blocks, there is a tendency to reduce the sizes of these openings. According to the temperature and weather conditions to which the pavement is to be subjected, and the co- 100 efficient of expansion of the particular wood used, the departure from true polygonal form for the blocks may be determined to insure ample spacing among the blocks within the normal width of the pavement to 105 automatically take care of expansion at all times.

The block 11, Fig. 5 is shown with the grain extending upward, as is desirable for maximum wear. Due to this irregular 110 form of polygonal block, while there are a plurality of seam or joints, there is nothing

approximating a general line of direction in the seams, thus providing not only good foothold for horses due to these varied joints, but there is the further foothold pro-5 vision due to the cracks or automatic spacing, making practicable the adoption of wood block paving for streets of consider-

able grade.

While the approximation of a hexagon 10 for block form, permits of most economic cutting from small timber, there is additional utility from a manufacturing standpoint in the fact that treatment of the blocks need only be with antiseptic, thus 15 doing away with the saturation so objectionable in seeping out over the blocks after being laid. This means not only a more desirable pavement in every sense, but there is the saving in cost by not saturating with 20 the tar or asphalt treatment to render waterproof. The waterproofing, at best, is only temporary, and as this property leaves, the expansion causes continued block movement. Herein there is provided the anti-25 septic block, with automatic expansion provision, permitting the placing of a pavement which will stay laid, and the laying of which may be conducted most cheaply in the avoidance of any system of placing the 30 blocks, but laying promiscuously. The blocks cannot be placed wrongly, that is with the grain in the direction of the pavement surface, for the six-sided form insures laying the block with flat side up. 35 There are no joint lines or seams to follow, which permits of faster work in laying. It is to be noted the openings or interstices are such as the block will move to close on expanding, for the interstices are of full side 40 lengths.

Besides the irregular directions assumed by the joints, the slight variation from uniformity in the dimensions across the wear face of the block, is an added feature of 45 strength and life, for heavy loads have no more tendency to split the block in one direction of travel over another. Consequently at street crossings and bends in the road, there is no necessity for altering the 50 scheme for laying the blocks to conform to

lines of travel.

What is claimed and it is desired to se-

cure by Letters Patent is:

1. The combination in a pavement com-55 prising similar polyhedral blocks providing corners, each block having a minimum diameter, of a first block thereof having a cor-

ner spaced from the additional blocks on such diameter and on each side of said corner an abutting corner, two additional 60 blocks having corners to abut one of said abutting corners, and a third additional block to abut the other of said abutting corners.

2. The combination in a pavement com- 65 prising similar polyhedral blocks providing corners, each block having a pair of maximum diameters of a first block thereof having a corner spaced from the other blocks and on each side of said corner an abutting 70 corner from which extend said maximum diameters, and a pair of blocks at each of said abutting corners, each block having a corner to abut the abutting corners of the first block.

3. The combination in a pavement comprising similar polyhedral blocks providing corners, each block of uniform cross section throughout its height, of three similar polyhedral blocks in abutting relation at some 80 of the corners, intermediate corners on the blocks between the abutting corners thereof, such corners being adjacent to each other and spaced apart whereby expansion can be taken up between the blocks.

4. The combination in a pavement comprising similar polyhedral blocks having a pavement face provided with corners, of three similar polyhedral blocks in abutting relation at some of the corners, intermediate 90 corners of the blocks being adjacent to each other, one corner of a block being spaced from the other two which are in abutting relation.

5. The combination in a pavement of 95 three similar blocks having corners, a corner of one block abutting with a corner of an adjacent block, and adjacent intermediate corners of the blocks spaced from each other.

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6. In a pavement the combination of three or more similar irregular polyhedral blocks having some of the corners thereof in abutting relation with intermediate closed spaces between said corners whereby ex-105 pansion is permitted between the blocks allowing the latter to rotate slightly from the abutting corners as axes.

In testimony whereof I affix my signature in the presence of two witnesses. HARRY G. JENNISON.

Witnesses: J. H. Bellows, Geo. E. Kirk.