A. L. BAUGHMAN.

PAVING BLOCK.

APPLICATION FILED JUNE 26, 1919.

1,348,774. Patented Aug. 3, 1920.

Fig. 1.

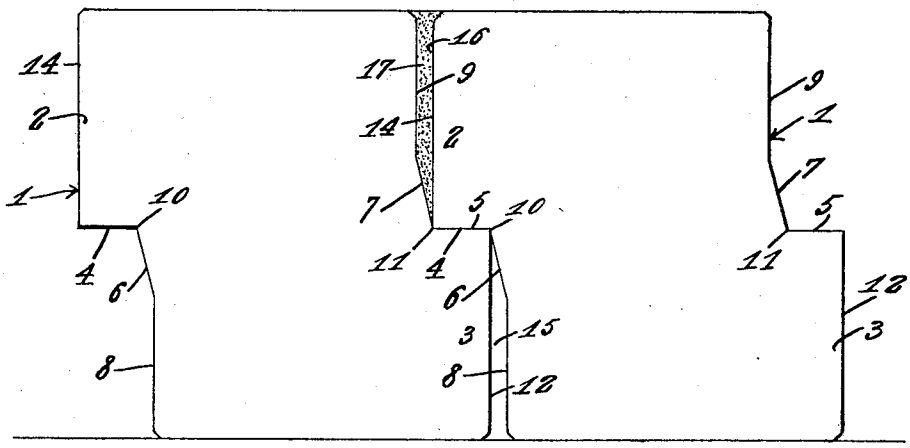


Fig. 2.

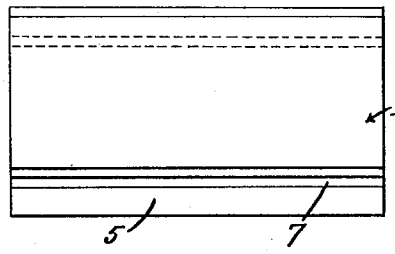


Fig. 3.

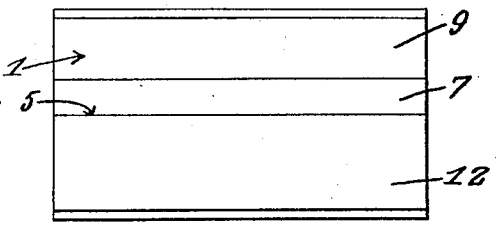
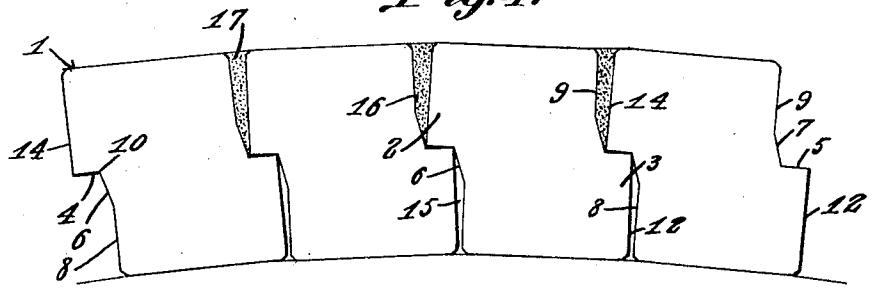


Fig. 4.



A. L. Baughman, Inventor

Witness

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UNITED STATES PATENT OFFICE.

ALTON L. BAUGHMAN, OF WOLF LAKE, INDIANA.

PAVING-BLOCK.

1,348,774. Specification of Letters Patent. Patented Aug. 3, 1920.

Application filed June 26, 1919. Serial No. 306,883.

To all whom it may concern:

Be it known that I, ALTON L. BAUGHMAN, a citizen of the United States, residing at Wolf Lake, in the county of Noble and State of Indiana, have invented a new and useful Paving-Block, of which the following is a specification.

The device forming the subject matter of this application is a block adapted to be used in the making of a pavement, and one object of the invention is so to construct the block that when one block is pushed downwardly at the side of another block, the blocks will be spaced apart laterally to form a cement-receiving recess between the blocks and above coöperating transverse shoulders on the blocks, the construction being such that a ventilating space will be formed between the blocks, below the said shoulders.

The invention aims to provide a block so constructed that it may tilt or fulcrum, during the expansion of the pavement, without producing an abrupt hump in any one part of the pavement, the upward curve, due to the expansion of the pavement, being distributed fairly and evenly throughout the entire pavement.

A further object of the invention is so to construct the block that, in a pavement comprising a plurality of blocks, air spaces will exist between the blocks, ventilation being afforded, and the expansion and consequent bulging of the pavement being reduced to a minimum.

Within the scope of what is claimed, a block-maker or road engineer may make changes, without departing from the spirit of the invention, or placing the utility of the invention in jeopardy.

In the drawings:—

Figure 1 shows, in end elevation, a plurality of blocks constructed in accordance with the invention and placed in operative relation to each other.

Fig. 2 is a top plan of the block.

Fig. 3 is a side elevation of the block.

Fig. 4 is an end elevation, showing a plurality of blocks forming part of a pavement, the view illustrating the manner in which the blocks operate and coöperate when the pavement expands.

The block forming the subject matter of this application may be made of concrete, fictile material or any of the substances commonly employed in the manufacture of paving blocks. The block, denoted generally by the numeral 1, has an upper offset 2 and a lower offset 3 on its respective sides, the upper offset defining a downwardly facing shoulder 4, and the lower offset defining an upwardly facing shoulder 5. The block 1 is provided with approximately parallel laterally slanting surfaces 6 and 7, the surface 7 leading from the downwardly facing shoulder 4 to the adjacent side surface 8 of the block, below the shoulder 4, the surface 6 leading from the upwardly facing shoulder 5 to the adjacent side surface 9 of the block, above the shoulder 5.

In constructing a pavement out of blocks of the sort described, one block is pushed downwardly at the side of another block. The right angle formed by the shoulder 4 and the adjacent side surface 14 of the offset 2 rides along the slanting surface 7. Similarly, the right angle formed by the shoulder 5 and the adjacent side surface 12 of the offset 3 rides along the slanting surface 6, the shoulders 4 and 5 ultimately coming into contact. The blocks thus are spaced, so that, above the shoulders 4 and 5, and to one side thereof, there is formed, between the surface 14 of one block, and the opposite surface 9 of an adjoining block, a recess 16 in which cement 17 of the usual sort is placed. Below the shoulders 4 and 5, and to one side thereof, there is formed an open space 15. This space has two functions. One function of the space 15 is to admit air between the blocks, and because air is admitted between the blocks, the expansion of the pavement, due to super-heating, will be reduced appreciably.

Passing to the second function which the space 15 exercises, it is to be observed that the slanting surface 7 and the shoulder 5 define an obtuse angle 11 the right angle formed by the shoulder 4 and the surface 14. Likewise, the shoulder 4 and the slanting surface 6 form an obtuse angle 10 receiving the right angle formed by the shoulder 5 and the surface 12. One block, therefore, is pivoted or fulcrumed on the other, so that when the pavement expands and curves upwardly, the curvature will be distributed evenly throughout the entire width of the pavement from curb to curb, there being no abrupt hump including a single block or, at most, two or three blocks which

are closely adjacent to each other. The space 15 gradually decreases in cross sectional area, during the expansion of the pavement, and permits a pivoting or fulcruming of one block upon another as above described.

The advantages of the block are that the blocks are spaced automatically, when one block is pushed downwardly at the side of another; that the blocks remain spaced at fixed distances; that the blocks can tilt or pivot on each other to accommodate expansion and contraction; that a cement-receiving groove exists between the blocks; that the blocks are spaced to afford ventilation and to admit of relative tilting movement between the blocks; and that the shoulders on the blocks cooperate to prevent the cement from running downwardly out of the cement-receiving recess into the ventilating space.

The block described is an efficient interlocking paving brick and is self-spacing to receive the filler. A hinge joint, caring for lateral expansion, is one of the features of the device. The strength to resist crushing or breaking strain is increased approximately one-third. A pavement fashioned from bricks of the kind alluded to will be devoid of small pockets on its surface. The air space reduces expansion approximately one-half. A saving of thirty per cent. in the amount of filler used is effected. The pavement may be laid ten per cent. faster than is possible with other bricks. The brick is so constructed that it will sustain a heavier load than any other brick. No single brick can settle without carrying with it, every adjoining brick. The surface of the pavement always remains smooth and even, and the durability of the pavement is promoted.

I claim:—

1. A paving block having upper and lower offsets on its respective sides, the upper offset defining a downwardly facing shoulder, and the lower offset defining an upwardly facing shoulder, the block being provided with approximately parallel laterally slanting surfaces leading respectively from the downwardly facing shoulder to the adjacent side surface of the block below the downwardly facing shoulder, and from the upwardly facing shoulder to the adjacent side surface of the block above the upwardly facing shoulder.

2. A pavement comprising blocks having upper and lower offsets, forming, respectively, a downwardly facing shoulder in one block and an upwardly facing shoulder in the other block, the shoulders coöperating with each other, the blocks having laterally slanting surfaces leading from the shoulders, and defining, with the shoulders, obtuse angles constituting fulcra for the blocks, said angles serving as stops separating the blocks to form a ventilating space between the blocks and below and at one side of the shoulders, and to form a filler-receiving recess between the blocks, above and at the other side of the shoulders; and a filler in the recess.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

ALTON L. BAUGHMAN.

Witnesses:
BENEDICT LAWTON,
IVY E. SIMPSON.