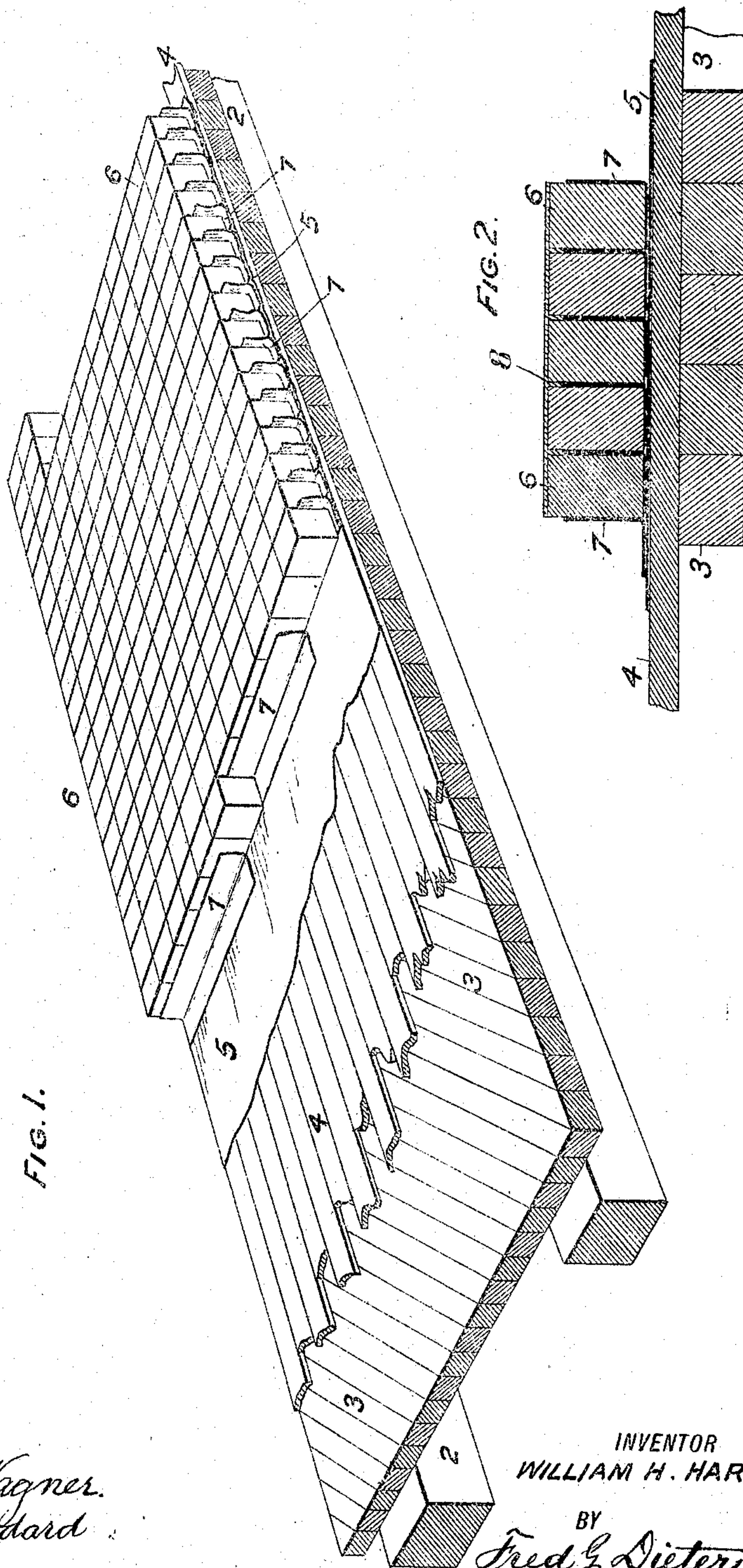


W. H. HARVEY.
WOOD BLOCK PAVING.
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900,729.

Patented Oct. 13, 1908.



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WOOD-BLOCK PAVING.

No. 900,729.

Specification of Letters Patent.

Patented Oct. 13, 1908.

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To all whom it may concern:

Be it known that I, WILLIAM H. HARVEY, citizen of the Dominion of Canada, residing at Vancouver, in the Province of British Columbia, Canada, have invented a new and useful Improvement in Wood-Block Paving, of which the following is a specification.

This invention relates to a system of laying a wood block paving which is particularly designed to anchor or tie the individual blocks to the foundation bed on which they are laid and to one another whereby the upward creeping or super elevation of the blocks above the general surface of the road is prevented.

The invention also comprises certain subsidiary features whereby the vibration of the road deck of a bridge or trestle structure is lessened and distributed in a manner to avoid disturbance of the blocks.

The invention is particularly described in the following specification, reference being made to the drawings by which it is accompanied, in which:

Figure 1, shows in perspective the successive structure of a bridge or trestle deck in preparation for block paving and the manner in which the blocks are tied or secured thereto, and Fig. 2, a section through the block paving across the lines in which they are laid.

On the bearers 2 which carry the road-bed is laid diagonally a foundation deck of timbers 3 having an equal dimension of breadth and depth, say 4" x 4", the grain of the wood being normal to the surface of the road-bed. These timbers 3 are spiked to the bearers 2 and to one another and are thereafter dressed to an approximately even upper surface. On this foundation, deck planking 4 is laid longitudinally, the planks being planed on one side to insure their being of uniform thickness and are nailed with the planed side down so that the rough upper surface will absorb and retain a coating of bituminous distillate which is then spread over the surface. On the surface so treated is evenly laid a layer of tarred felt 5 which adheres to the rough bituminous surface of the planking 4, and bituminous distillate is again spread on the upper surface of the layer of felt. This forms the foundation for the wood blocks 6 of the roadway which are then laid either across or diagonally with the edge grain square to the surface in the usual manner.

Each row of blocks is laid upon a strip 7 of tarred felt, wire cloth or other suitable material, which strip is carried up between the blocks to a height about equal to two-thirds of their depth. The material of this strip should be of such a character as will permit the mixture of bituminous asphalt and oil of tar 8 with which the blocks are "floated" to permeate the material and obtain an adherent hold of it to the blocks, or the material of the strip may be roughened to obtain a positive hold of the blocks in addition to the adherence of the asphalt grouting with which they are "floated." The blocks are thus secured together and to the road-bed and will resist any tendency to work up above the general surface of the road under the vibration of passing traffic.

The use of equal dimensioned timbers for the solid floor enables the timbers to be placed edge grain without special selection, in which position they have greater strength and rigidity, and being laid diagonally the undulatory vibrations due to the passage of traffic are distributed away from the line of movement, while the superposed boarding being laid longitudinally its vibration will not coincide with that of the foundation floor and will therefore be more readily neutralized.

The vibrations of the road-bed will thus have a less disturbing effect on the super-laid blocks, while the manner in which those blocks are laid with an underlying and intervening connected strip between each row bedded in a dressing of bituminous material such vibrations as there are will be unlikely to cause displacement of the blocks.

The vibration of traffic on a road structure not only tends to work the blocks up in places, and particularly so in the case of blocks adjacent to tramway rails, but the vibration disintegrates the bituminous dressing which is quickly reduced to powder, when its moisture excluding qualities are destroyed. Under the structural system of laying just described the vibration is rendered less intense and is further lessened by the layers of felt under and between the paving blocks. This lessening of the vibrations alone saves to a large extent the disintegration of the bituminous coating, but in addition the felt layers being saturated with the oil of tar from the compound with which the blocks are grouted maintains the

bituminous compound in the semi-plastic state which is most favorable to the exclusion of moisture.

5 Having now particularly described my invention and the advantages claimed for it, I hereby declare that what I claim as new and desire to be protected in by Letters Patent, is:

10 1. In a wood block paving, the combination with a roughened surface dressed with a layer of bituminous distillate, of a layer of felt evenly laid thereupon which layer is further dressed with bituminous distillate, strips of absorbent material such as
15 felt underlying each row of blocks and extending upward between each row, wood blocks arranged edge grain on said strips and a grouting of bituminous asphalt and oil of tar "floated" over the blocks to fill
20 the seams and interstices.

2. In a wood block paving, a foundation

of timber arranged diagonally side by side and spiked to one another and to the foundation frame, a layer of planks of gaged thickness and rough upper side nailed to the
25 underlying floor the joints at an angle of approximately 45° to those of the floor beneath, a dressing of bituminous distillate on the upper surface of these boards, a layer of
30 felt evenly spread thereon, a further dressing of bituminous distillate, and wood paving blocks laid on this felt in rows edge grain up with means for securing the blocks on their bed and to one another.

35 In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM H. HARVEY.

Witnesses:

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CLIVE S. CARMAN.