## F. W. GREBE. STREET PAVING BRICK.

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## STATES PATENT OFFICE.

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## STREET-PAVING BRICK.

No. 929,210

Specification of Letters Patent.

Patented July 27, 1909.

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To all whom it may concern:

Be it known that I, FRANK W. GREBE, a citizen of the United States, residing at Philipsburg, in the county of Center and State of Pennsylvania, have invented a new and useful Street-Paving Brick, of which the following is a specification.

This invention relates to road-bed construction and more particularly to a brick or

10 block used in preparing the same.

The object of the invention is to provide an artificial stone brick or block capable of being readily laid to form the surface of a pavement or road-bed, and which may be 15 supported against accidental sinking or displacement without the employment of the usual curbing.

A further object is to provide a reversible brick or block having a vertical seating 20 groove formed in one side thereof and a tongue on the other arranged to enter the seating groove of an adjacent block when several of said blocks are laid into a pavement or road-bed, thereby to securely lock 25 the several bricks or blocks against accidental separation.

A further object is to form the bricks or blocks with mortar-receiving grooves and to provide one side of each block with spacing 30 members arranged to bear against the mating block so as to form an intermediate chamber for the reception of cement or other binding material.

A still further object of the invention is 35 generally to improve this class of devices so as to increase their utility, durability and

efficiency.

Further objects and advantages will appear in the following description, it being understood that various changes in form, proportions and minor details of construction may be resorted to within the scope of the appended claims.

In the accompanying drawings forming a <sup>45</sup> part of this specification:—Figure 1 is a perspective view of a paving brick or block constructed in accordance with my invention. Fig. 2 is a plan view of several of the bricks or blocks assembled to form the surface of a road-bed or pavement. Fig. 3 is a transverse sectional view.

Similar numerals of reference indicate corresponding parts in all of the figures of the drawings.

The improved bricks or blocks 5 forming the pavement or road-bed are preferably

substantially rectangular in shape, as shown, and formed of cement, concrete, terra-cotta, or other suitable material, said blocks being reversible and having their upper and lower 60 faces provided with a marginal bevel, indicated at 6.

One longitudinal edge of each brick or block is formed with a plurality of spaced vertically disposed seating grooves 7 adapted 65 to receive correspondingly shaped tongues 8 extending laterally from the longitudinal edge of a mating brick or block when several blocks are laid to form a road-bed or pavement, thereby to firmly lock the blocks to- 70 gether and effectually prevent sinking of the pavement or accidental separation of said blocks.

Extending laterally from each brick or block between the seating grooves 7 and also 75 between said grooves and the adjacent ends of the block are vertically disposed ribs 9 preferably segmental in cross section and which bear against the smooth unobstructed. surface 10 of a mating block and serve to 80 space said blocks, thereby to form an intermediate channel 11 for the reception of mortar, cement or other binding material. Each brick or block is also provided with a circumferential groove 12 which registers with 85 the corresponding groove of a mating brick or block to form a substantially cylindrical mortar joint or lock 13, as best shown in Fig. 3 of the drawings.

The mortar-receiving groove 12 intersects 90 the vertical grooves 7 and spacing ribs 9 so that when the blocks are assembled to form a pavement the cement introduced within the channels 11 will be guided downwardly between the ribs 9 and thus fill the pockets 13 95 formed by the grooves 12 of the adjacent

bricks or blocks.

It will here be noted that the beveled portions 6 of the bricks or blocks serve to direct the mortar or cement into the channels 11 100 when filling the same, while the tongues 8 being disposed in the same horizontal plane with the upper surface of the blocks span said channels and thus serve to securely tie the blocks together.

The outer or free end of the tongues 8 are preferably curved or rounded, as indicated at 14, and are held in spaced relation to the curved walls 15 of the seating grooves 7, by the ribs 9 so as to form an intermediate 110 channel or recess for the reception of cement. If desired, however, the tongues 8 may be

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rectangular in shape or of any other cross sectional formation without departing from

the spirit of the invention.

Thus it will be seen that the bricks or blocks are locked against both longitudinal and lateral movement and being thus securely tied together, the employment of the usual curbing for the pavement or road-bed may be dispensed with.

While it is preferred to use the blocks in the construction of pavements, road-beds and the like it is obvious that the same may be used with equally good results in the construction of buildings, dams or other masonry.

It will also be understood that the bricks or blocks may be made in different sizes and shapes and provided with any number of locking tongues and spacing ribs.

Having thus described the invention what

20 is claimed is:—

1. In road-bed construction, a plurality of bricks or blocks laid to break joint and each provided with a vertically disposed tongue adapted to enter a corresponding seating groove formed in an adjacent block, said blocks being formed with circumferential mortar-receiving grooves, and a spacing member secured to each block and arranged to bear against an adjacent block to produce an intermediate channel for the reception of

a binding medium.

2. In road-bed construction, a plurality of bricks or blocks laid to break joint and each having one side thereof formed with spaced vertically disposed seating grooves and its opposite side provided with corresponding laterally extending locking tongues arranged to enter the grooves of an adjacent block, and ribs extending laterally from the grooved face of each block and adapted to bear against the tongue-carrying face of a mating block to form an intermediate channel for the reception of a binding medium.

3. In road-bed construction, a plurality of 45 reversible bricks or blocks each having one side thereof provided with spaced vertically disposed seating grooves and its opposite side formed with vertical locking tongues, ribs formed on the grooved side of each 50 block, there being a circumferential mortarreceiving groove formed in each block and intersecting the vertical seating grooves and spacing ribs, respectively, said bricks or blocks being laid to form a road-bed with the 55 tongues of one block entering the grooves of an adjacent block and with the ribs bearing against said mating blocks to produce an intermediate channel for the reception of a binding medium.

4. In road-bed construction, a plurality of 60 reversible bricks or blocks having their upper and lower faces provided with a marginal bevel, one side of each block being provided with spaced seating grooves and the other side thereof formed with locking tongues, the 65 opposite ends of the locking tongues being disposed in the same horizontal plane with the upper and lower faces of the blocks, the several blocks being laid to break joint with the tongues of one block entering the seating 70 grooves of an adjacent block, there being a circumferential mortar-receiving groove formed in each block and spaced ribs extending laterally from one side of each block between the seating grooves thereof.

5. A paving brick or block comprising a substantially rectangular body portion having one longitudinal edge thereof formed with spaced vertically disposed seating grooves and its opposite longitudinal edge 80 provided with vertical locking tongues extended the entire height of the block, there being a marginal mortar-receiving groove formed in the block and intersecting the seating grooves and locking tongues.

6. A paving block including a reversible substantially rectangular body portion having its upper and lower faces provided with a marginal bevel, one longitudinal edge of the block being formed with spaced vertically 90 disposed seating grooves and the opposite edge thereof provided with vertical locking tongues extending the entire height of said block, there being a circumferential mortar-receiving groove formed in the block and 95 intersecting the seating grooves.

7. A paving block including a reversible substantially rectangular body portion having its upper and lower faces provided with a marginal bevel, there being spaced vertically 100 disposed seating grooves formed in one longitudinal edge of the block and having vertical tongues on either side thereof, the space between the tongues being smooth and unobstructed, spacing ribs projecting laterally 105 from the grooved edge of the block, there being a marginal mortar-receiving groove formed in the body of the block and intersecting the seating grooves, ribs and locking tongues.

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

FRANK W. GREBE.

Witnesses:

J. K. HORTON, W. D. CROSBY.