(No Model.)

G. SCHREYER.

PAVING BLOCK.

No. 420,020. Patented Jan. 21, 1890.

FIG. 1

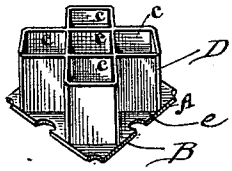


FIG. 2.

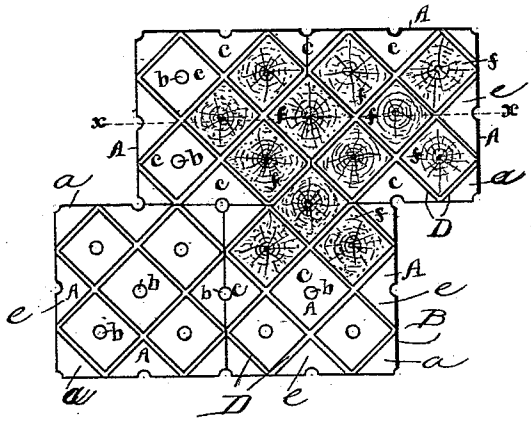
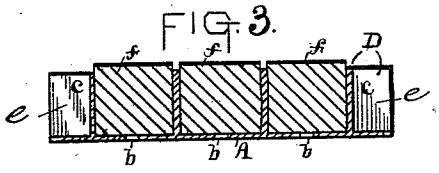


FIG. 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

GOTTLIEB SCHREYER, OF COLUMBUS, OHIO, ASSIGNOR OF ONE-THIRD TO BENJAMIN Z. SCHREYER, OF SAME PLACE.

PAVING-BLOCK.

SPECIFICATION forming part of Letters Patent No. 420,020, dated January 21, 1890.

Application filed May 6, 1889. Serial No. 309,828. (No model.)

To all whom it may concern:

Be it known that I, GOTTLIEB SCHREYER, a citizen of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented a certain new and useful Improvement in Paving-Blocks, of which the following is a specification.

My invention relates to the improvement of pavements, such as are adapted for use in the construction of streets, sidewalks, solid flooring, &c.; and the objects of my invention are to so construct and arrange the paving-blocks as to produce an exceedingly durable and inexpensive roadway upon which horses may travel with ease and safety, to so construct the same as to enable horses traveling thereon to gain a firm foothold without slipping, and to so construct the paving-blocks as to admit of their being readily and easily joined. As hereinafter described, these objects I attain by using a metal block in combination with suitable filling, which may be of wood or other suitable material.

The use of wood blocks for paving purposes is well known. Their superiority over other paving-blocks consists in the fact that they are comparatively noiseless, cause but little dust, and are easy on the feet of horses. The objection to these blocks, however, when laid in the usual manner—that is, so that one block supports another—is their inferior wearing quality. It has been found that blocks forming a pavement of this kind have a tendency to wear unequally or give out at different points, and thus loosen the surrounding blocks. This difficulty, however, is remedied by my invention in the manner hereinafter described and illustrated.

In the accompanying drawings, Figure 1 is a perspective view of one of said paving-blocks when unfilled. Fig. 2 is a plan view of four of said blocks when united and partially filled, and Fig. 3 is a transverse section taken on line *x x* of Fig. 2.

Similar letters refer to similar parts throughout the several views.

In practicing my invention I form the blocks A of suitable proportions and shape and as best adapts them for transportation and handling and prefer to form the same of cast-iron. The block comprises a base-plate B, preferably of a rectangular shape in plan, and upon the same is cast integral oppositely and diagonally disposed pairs of superficial ribs or flanges D, the ribs of one pair trisecting those of the others, thus forming a central pocket or recess, and four outer pockets or recesses of a depth equal to that of the ribs, said pockets or recesses being designated by the letter *c*. By reason of the angular disposition of the ribs and the pockets or recesses with relation to the plate it will be apparent that at each of the four sides of the plate there will occur a half-pocket *e* and at the four corners quarter-pockets *a*, so that when a series of blocks A are asssembled, as in the construction of a road, so that the edge of two plates abut and meet at the center of an adjacent plate, the half-pockets of one block will be completed by the two adjacent quarter-sized pockets of two adjacent blocks, and so on throughout the surface of the road or pavement.

The construction herein shown and specifically described as advantageous in that there is a certain dependence of support that one block gives an adjacent block, thus lessening the liability of the blocks settling individually and forming abrupt hollows.

In order to provide each of the pockets or recesses with a proper drainage for moisture, I provide the plate with a series of small openings *b*, one for each of the pockets of the plate, and each of the corners of the plate with quarter-pockets and at the sides with half-openings, so that the openings are completed by the assemblage of several plates and are the same form as the other pockets.

These blocks can be made as large and with as many sockets as desired, the openings in said sockets being small enough to allow but little, if any, wear between the metal walls of the sockets. As shown in the drawings, the bottom plate of the block presents a flat surface, which will prevent any tendency of the blocks to sink or settle in the street-foundation.

It is obvious that the block bottom plate may be cast at the center of the block in order that the latter may be removed and turned upside down in case its upper surface should become badly worn.

As shown in Fig. 2 of the drawings, the

above-described blocks may be so laid as to adjoin each other and form thereby continuations of the same-sized sockets without producing a double thickness of metal where said sockets are joined, except where half or quarter blocks are necessary to finish paving between car-tracks, adjoining the curb, &c.

The above-described sockets are filled with wood or other desired material *f*, which is preferably made to project slightly above the upper side of the block, as shown.

By the above-described construction it will be seen that in case the projecting surface of the filling should be worn off the metallic blocks or those portions thereof which form the upper ends of the sockets will, in combination with the filling of said sockets, present an extremely solid, durable, and comparatively smooth roadway.

In case the filling is of wood the blocks forming said filling will necessarily be small, and in case one or more of said filling-blocks should become worn they may be withdrawn and replaced by others without interfering with the remaining fillings.

Owing to the small size of the sockets, it will be seen that the filling material having been worn down to the metallic block the remainder of the filling will be preserved from the formation therein of ruts or other indentations.

It is obvious that in case asphaltum, concrete, or other composition is used as filling for the blocks, a coat of said filling material may be made to entirely cover the blocks, as desired.

Having now fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The herein-described block, consisting of a base-plate having two oppositely-disposed series of superficial parallel ribs, the ribs of each series being at an angle to those of the other series and diagonal to the plate and forming inner complete pockets, and at each of the corners of the plate quarter-pockets, and at the sides of the plate intermediate half-pockets, substantially as specified.

2. The herein-described block, consisting of a base-plate having two oppositely-disposed series of superficial parallel ribs, the ribs of each series being at an angle to those of the other series and diagonal to the plate and forming inner complete pockets, and at each of the corners of the plate quarter-pockets, and at each side of the plate intermediate half-pockets, said base-plate being perforated within the walls of each of the completed pockets, quarter-notched at its corners and half-notched at the center of each of the half-pockets, said pockets being provided with a filling, substantially as specified.

GOTTLIEB SCHREYER.

In presence of—
BARTON GRIFFITH,
C. C. SHEPHERD.