Feb. 10, 1970 W. BAUMBERGER 3,494,266

PAVING STONE

Filed Dec. 27, 1967

Fig. 1.

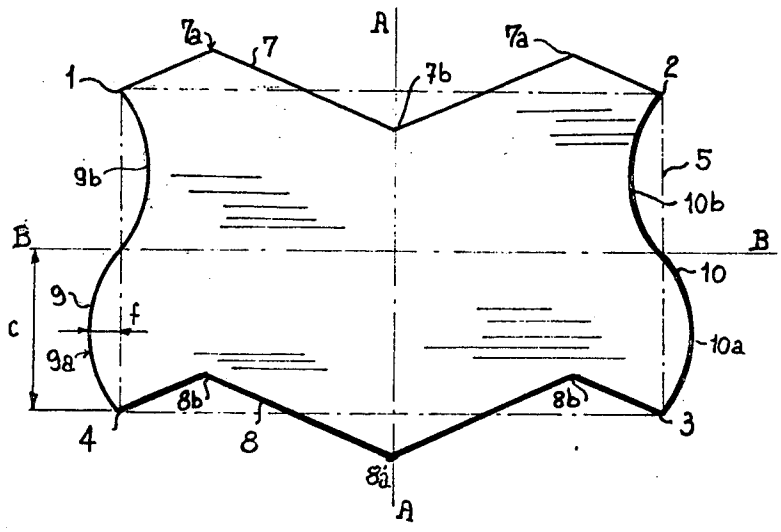


Fig. 2.

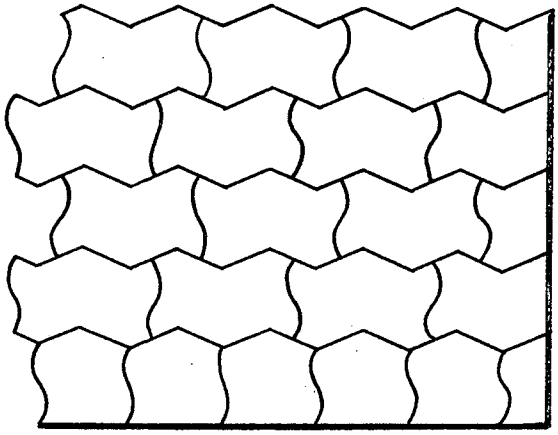
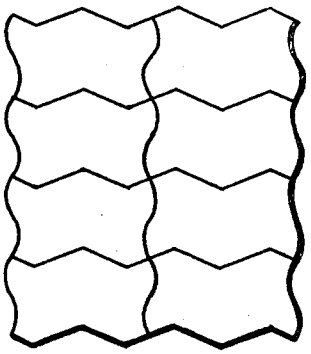


Fig. 3.



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PAVING STONE

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ABSTRACT OF THE DISCLOSURE

A paving-stone has four corners disposed at the corners of an imaginary rectangle and has a first pair of opposite sides each having an outline composed of rectilinear parts. One of the first pair of sides presents two apices and a central angular recess therebetween which are complementary to two angular recesses and a central apex presented by the other side. A second pair of opposite sides of the paving stone each has an outline composed of complementary convex and concave portions shaped as an arc of a circle, such portions being arranged so that each side is complementary to the other when inverted.

BACKGROUND OF THE INVENTION

The present invention relates to a paving-stone for use as a covering for ground and the like. The paving-stone of the present invention can be used with advantage for covering inter alia roads, paths in parks and gardens, canals, dykes and embankments.

SUMMARY

It is one object of the present invention to provide a novel paving-stone which is very stable under vertical load by virtue of its substantially rectangular-like shape and may be used to provide attractive interlocking pavements.

Accordingly the present invention provides a paving-stone for use as a covering for ground and the like and having a substantially rectangular-like shape, wherein the the improvement comprises a first pair of opposite sides which have an outline in the form of a regular broken line and which are complementary when disposed directly opposite one another, and a second pair of opposite sides which have an outline in the form of a rounded sinuous line and which are complementary when disposed in inverted realtionship to one another.

BRIEF DESCRIPTION OF THE DRAWING

Further objects and advantages of the invention will become apparent from the following description of an exemplary embodiment thereof, given with reference to the appended drawing, in which:

FIGURE 1 is a plan view of an exemplary paving-stone embodying the invention; and

FIGURES 2 and 3 show two pavements utilizing paving-stones of the kind shown in FIG. 1.

DESCRIPTION OF PREFERRED EMBODIMENT

Referring now to the drawing, the paving-stone shown in plan in FIG. 1 has four corners 1 to 4 disposed at the corners of an imaginary rectangle 5 shown in chain-dotted lines.

On two oppositely disposed sides of the rectangle 5, the paving stone has sides 7, 8, which are of complementary shape and which are shaped as regular interrupted lines having a number of rectilinear portions. The side 7 has two lateral apices 7*a* disposed one on each side of a central recess 7*b*, and the side 8 has two lateral

recesses 8*b* disposed on either side of a central apex 8*a*. The angles of the apices 7*a*, 8*a* are obtuse (approximately 135°), so that the protuberances formed by the apices 7*a*, 8*a* on the sides of the stone are of satisfactory mechanical strength. The sides 7 and 8 are made of straight lines and the lines of the side 7 are substantially of the same length as those of the side 8, so that the total formation on the left side of the paving stone in relation to a transverse axis A—A is substantially a mirror image of the right side of the paving stone.

On the other two sides of the imaginary rectangle 5, the paving-stone has sinuously shaped sides 9, 10 which are symmetrical in relation to a transverse axis A—A of the imaginary rectangle 5. The sides 9, 10 have on either side of the longitudinal axis B—B of the rectangle rounded protuberant or convex parts 9*a*, 10*a* and rounded recessed or concave parts 9*b*, 10*b*, the shapes of the protuberant parts matching and complementary to the shapes of the recessed parts.

The two convex parts 9*a*, 10*a* are both disposed on the same side of the axis B—B and the two concave parts 9*b*, 10*b* are both disposed on the other side of the axis B—B. These parts are in the form of an arc of a circle the versin *f* of which is approximately 20% of the length of the chord C (FIG. 1).

A paving stone embodying the invention has the following features and advantages:

(1) It is in shape substantially rectangular-like (in a variant it could be substantially square-like) and therefore remains very stable under vertical load, since the sand bed on which the stone is placed is more evenly compressed than by S-shaped or herringbone paving stones having thin or prow-like parts which tend to sink into the bed.

(2) Since the sides 7, 8 have a broken-line shape but the sides 9, 10 have sinuously extending shapes, the lines of the joints between paving-stones are, referring to the checkerwork paving shown in FIG. 3, of one kind in one direction and of another kind in the direction perpendicular to the first direction.

(3) The paving-stones shown can be assembled in staggered form, as shown in FIG. 2, or in the aligned position shown in FIG. 3. In the position shown in FIG. 3, if stones of different colors are used, it is readily possible to provide regular checkerwork effects or perpendicular lines serving to mark a road.

(4) The staggered pavement shown in FIG. 2 is devoid of any substantially inclined joint line. The pavement has a calmer appearance, and unlike what occurs in known pavements formed by paving-stones having convergent surfaces, there is no false axis inclined to the road axis.

The paving-stone can be fashioned in cement or any other form of artificial stone and can be fashioned or cut in other materials, such as plastics, timber, terra cotta.

While I have disclosed one embodiment of the present invention, it is to be understood that this embodiment is given by example only and not in a limiting sense.

I claim:

1. A paving-stone for use as a covering for ground and the like and having a substantially rectangular-like shape to define four corners, wherein the improvement comprises

a first pair of opposite sides having an outline in the form of a regular zigzag line formed of a plurality of straight lines and being complementary when disposed directly opposite one another,

a second pair of opposite sides having an outline in the form of a rounded sinuous line and being complementary relative to each other when disposed in inverted relationship to one another,

said stone defining an imaginary longitudinal axis across

said second pair of opposite sides and an imaginary cross axis across said first pair of opposite sides,

the portion of said stone on one side of said imaginary cross axis being a mirror image of the portion of said stone on the other side of said imaginary cross axis,

one of said first pair of sides being formed with two apices, and a recess between said two apices,

the opposite of said sides of said first pair of sides being formed with two recesses complementary to said apices, and one apex complementary to said recess,

said apices of said one side having an apex angle of approximately 135°,

each of said second pair of opposite sides has two rounded parts,

one of said rounded parts being convex,

the other of said rounded parts being concave,

said rounded parts of said second pair of opposite sides having an outline in the form of an arc of a circle,

the versin of said arc being substantially 20% of the length of the corresponding chord of said circle, and

the apices of said four corners defined at the junctions between said first and second pairs of opposite sides being disposed at the four corners of an imaginary rectangle.

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