

[54] **TESSELATION OR PAVING ELEMENT**
 [76] Inventor: **Hans Thorkil Ludvigsen**, Fjellebro, Rudme, Denmark
 [22] Filed: **Oct. 12, 1970**
 [21] Appl. No.: **79,887**

[30] **Foreign Application Priority Data**
 Oct. 13, 1969 Germany.....G 69 39 758.6
 [52] **U.S. Cl.**.....**52/608**, 94/13
 [51] **Int. Cl.**.....**E04b 2/00**, E04b 1/24, E01c 5/00
 [58] **Field of Search**.....52/608-611, 575, 52/590, 572, 573, 415; 94/13

[56] **References Cited**
UNITED STATES PATENTS
 1,417,010 5/1922 Wright et al.....94/13
 194,250 8/1877 Krackowizer et al.....52/575
 621,100 3/1899 Knowles.....52/611
FOREIGN PATENTS OR APPLICATIONS
 76,252 12/1947 Czechoslovakia.....52/415
 29,994 12/1912 Great Britain.....52/608
 1,178,186 12/1958 France.....52/590
 145,073 2/1931 Switzerland.....52/575

Primary Examiner—Frank L. Abbott
Assistant Examiner—James L. Ridgill, Jr.
Attorney—Stowell & Stowell

[57] **ABSTRACT**
 Tessellation or paving element or tile comprising an underpart having two by two symmetrical side surfaces, of which one pair is converging and the other diverging in the direction of the upper surface, said part carrying at its upper surface a prism, the base of which is congruent with the upper surface, wherein said prismatic part makes up at least one-third, preferably more than half of the height of the element in order to improve the mutual interlocking in directions perpendicular to the surface of the paving as well as making the joints impenetrable for loose underlayer.

Tessellation of paving element or tile having parallel upper surfaces and bottom faces and oblique, two by two symmetrical side surfaces, of which at least one pair is converging in the upper surface and at least another pair in the bottom face, are known. Thus, these bodies make up shortened cross prisms, the axis of which is parallel with the upper surface and the bottom face.

By joining these bodies together the elements are fixed in upwards as well as in downwards direction, when the tessellated or tiled pattern has been arranged. Each element may on its upper surface as well as on its bottom face carry a prism, the base of which is corresponding to or smaller than the surface in question, said base having such a form that the elements when joined may form a continuous surface. By these known elements the height of the prism in question is small in comparison with that of the cross prism.

3 Claims, 4 Drawing Figures

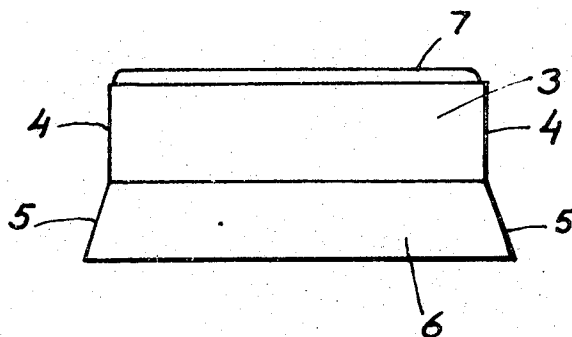


Fig. 1.

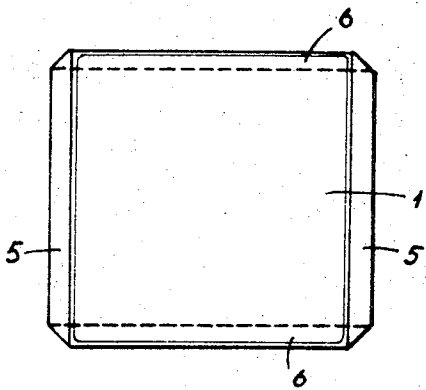


Fig. 2.

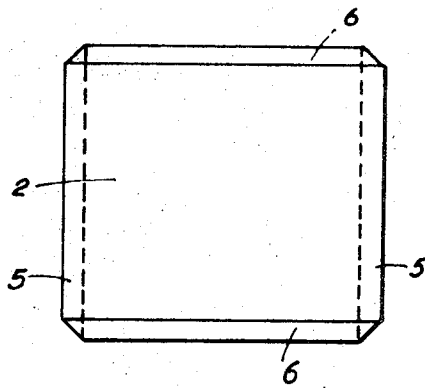


Fig. 3.

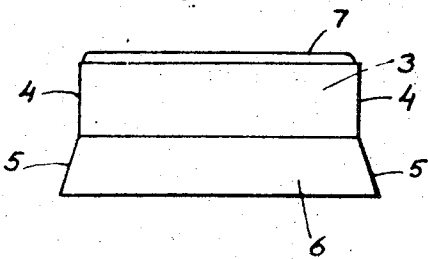
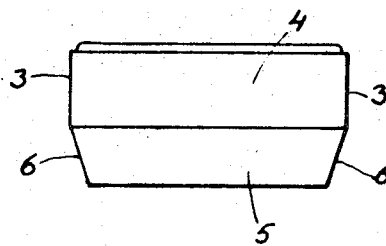


Fig. 4.



INVENTOR
HANS THORKIL LUDVIGSEN

BY *Stowell + Stowell*

ATTORNEYS

TESSELATION OR PAVING ELEMENT

The purpose of the present invention is to improve the tightness of the joints between the elements of the paving or tessellation. According to the invention this has been achieved by forming elements of the kind mentioned above in such a way, that the prismatic part makes up at least one-third, preferably more than half of the height of the element. In addition to the purpose aimed at an improved mutual fixing perpendicular to the paved surface is surprisingly obtained when compared with that of the known elements. Furthermore, more even surfaces are obtained with the elements according to the present invention as the elements tend to level during use.

The elements according to the invention may be used advantageously in the covering of a loose underlayer, f.ex. sand, and may for instance be used for the securing of shores or of river-banks or as revetments on dikes. Due to the improved mutual interlocking effect the pavement can be used on softly curved surfaces, and the pavement is able to take up local settings in the underlayer.

For these purposes the base of the prismatic part of the element may be square, and the length of the side lines in the upper surfaces and the bottom face may be considerable when compared with the height, f.ex. by square elements two or more times the depth, thus making the element tile-shaped.

In the drawing an embodiment of the element according to the invention is shown,

FIG. 1 and 2 showing the element seen from the upper surface and the bottom face, respectively, and

FIG. 3 and 4 the element seen from two sides at right

angles to each other.

In the drawing 1 is the upper surface, 2 the bottom face, 3 and 4 the side surfaces of the prismatic part, 5 and 6 the oblique surfaces, of which the surfaces 5 are converging in the upper surface, the surface 6 in the bottom. The upper surface has for ornamental purposes a rounded-off elevation 7. When joined together the tiles are turned 90° around a vertical axis in comparison with the neighboring tiles, in such a way that the oblique surface 5 is always brought into contact with the oblique surface 6 of the neighboring tile.

I claim:

1. Units for use in tessellation, as paving elements, as tiles and the like covering, each of the units consisting of a prism having parallel top and bottom surfaces, the upper at least one-third portion of each of said units having pairs of symmetrical, parallel side walls the outer surfaces of which are normal to the top and bottom surfaces, and the lower remaining portion of said unit consisting of oblique in pairs of symmetrical planar side walls of which at least one pair of the oblique planar side walls is converging from the bottom surface and at least the other pair of the oblique planar side walls is diverging from the bottom surface, said units being assembled with the upper at least one-third portion of the side walls of adjacent said units in closely spaced parallel relationship.

2. The invention defined in claim 1 wherein the upper portion of each unit exceeds half of the total height of the unit.

3. The invention defined in claim 1 wherein the top and bottom surfaces of each unit are square.

* * * * *

35

40

45

50

55

60

65