Dec. 12, 1933. W. E. SWANSON 1,938,644

PAVEMENT AND METHOD OF MAKING THE SAME

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Fig. 1

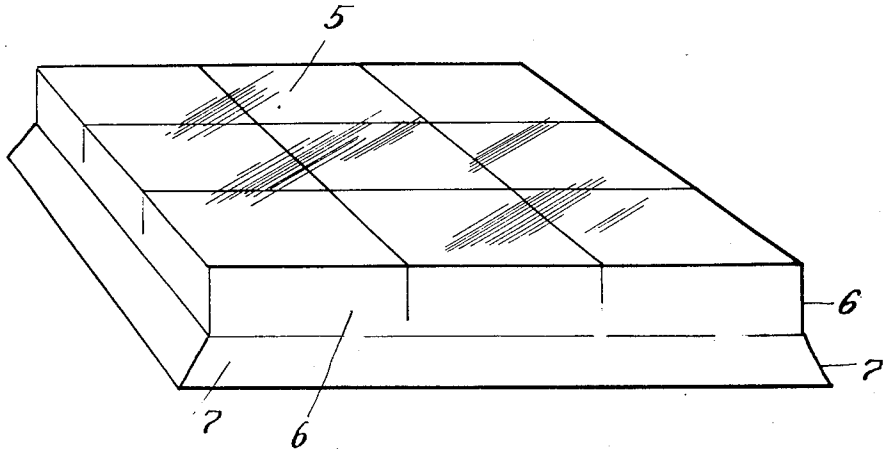
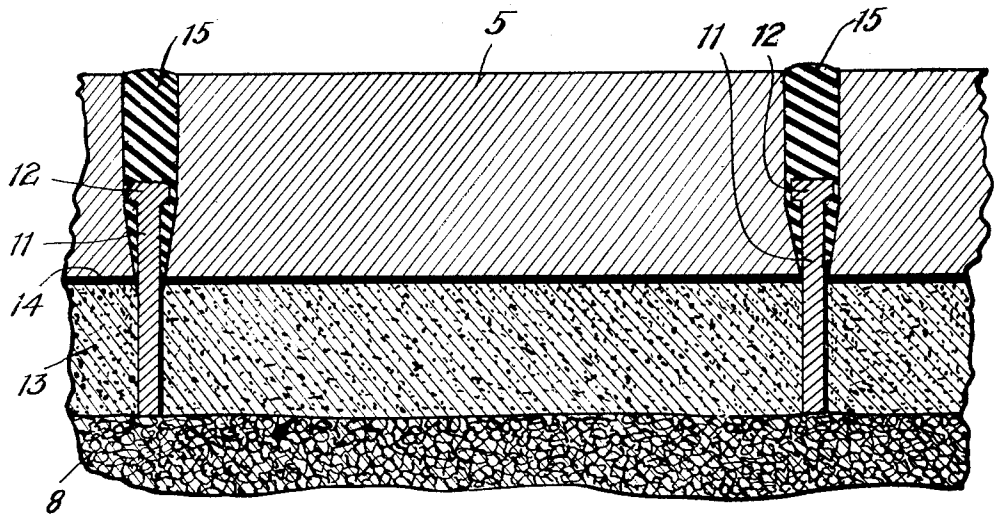


Fig. 2



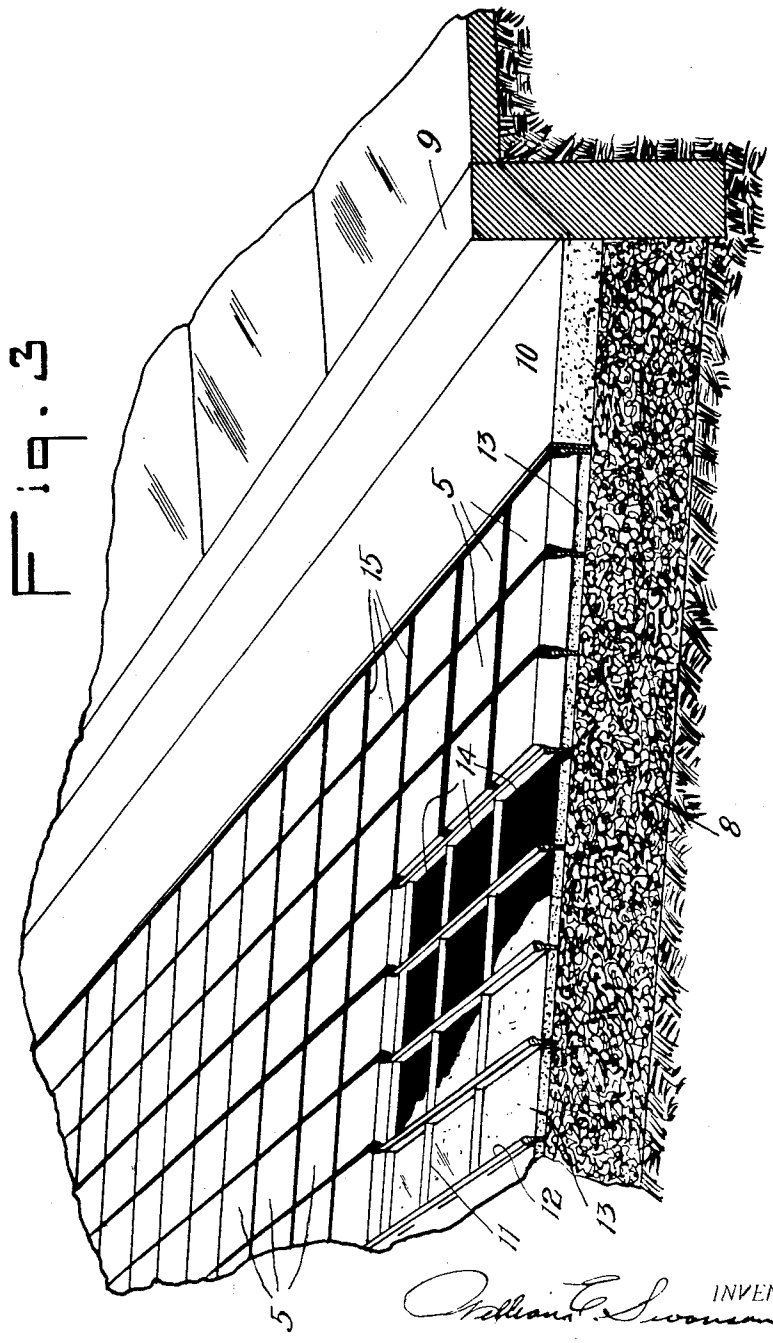
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Fig. 2



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UNITED STATES PATENT OFFICE

1,938,644

PAVEMENT AND METHOD OF MAKING THE SAME

William E. Swanson, Weehawken, N. J.

Application March 14, 1930. Serial No. 435,688

1 Claim. (Cl. 94—6)

This invention relates to pavements and a method of making the same, and is an improvement upon the structure and method disclosed in my prior Patent No. 1,746,169.

Among the principal objects of the invention are: To provide an improved pavement wherein resilient blocks may be utilized, conveniently and satisfactorily laid and retained in place; to provide a resilient pavement which can be laid with as great a speed as ordinary pavements are now constructed and in which the blocks will be prevented from creeping, bulging or getting out of place; to secure simplicity of construction, and to obtain other advantages and results as may be brought out in the following description.

In the drawings:

Figure 1 is a perspective view of one of the paving blocks;

Figure 2 is a sectional view of one of the blocks and adjacent portion of other blocks assembled in a pavement; and

Figure 3 is a perspective view of a portion of a pavement showing the construction of the same and method of laying the pavement.

In the specification:

In the specific embodiment of the invention illustrated in said drawings, the reference numeral 5 indicates the several blocks of which the surface of the pavement is made. These blocks are all preferably of the same dimensions, and are made out of resilient material such as waste rubber from worn out tires and the like. The blocks in this instance are shown as having a square upper surface and a square lower surface parallel to the upper surface of a greater area resulting in the side walls of the block tapering outwardly toward the bottom. In the present disclosure the said side walls are shown as depending for a part of their depth substantially perpendicular as at 6 to the upper surface and flare or taper outwardly as at 7 only for a portion of the side wall, but obviously this may be varied as found most expedient and desirable or necessary in manufacture or use.

In preparing the road body for reception of these blocks, the same is preferably prepared to present a firm surface upon which is applied a substantial foundation 8 of a grit or other desirable construction. By reference to Figure 3 it will be observed that the roadway is limited at one side by curbing 9 and a cement gutter 10, but the invention is not restricted to the particular edge finish to the roadway as shown since this may be altered to suit the needs or wishes of the one laying the road, or to meet formal specifications as to this feature.

For that part of the roadway which is to have the resilient blocks 5 applied thereto, I next lay a grid 11 upon the foundation 8, the grid consisting of a plurality of upstanding metallic members part of which are arranged lengthwise of the road or pavement and the others of which are transverse to the road or pavement. These grid members are positioned with respect to each other such as to provide a plurality of openings of substantially the same shape and area as the shape and base area of the blocks. Consequently, one of the blocks will fit into each of the spaces formed in the grid, as clearly shown in Figures 2 and 3. Furthermore, the grid members 11 preferably have enlarged upper edges or beads 12 thereat so as to provide a downwardly facing shoulder which will cooperate with the flared lower portion of the blocks to hold the blocks down.

After the grid is spaced, a cement body 13 is applied within the grid upon the foundation 8 for a portion of the height of the grid members. This body 13, serves to hold the grid in place both horizontally and vertically and attains a strong union between the grid and the foundation. The body 13 is preferably of cement which provides desirable strength and support for the blocks 5.

After the cement is dry and hard, the surface thereof is coated with a suitable binder 14, such as tar, asphalt, and the like. This binder may be as thick as found desirable or necessary to provide an extensive surface contact and adhesive for the underface of the blocks 5. While this binder is still soft, the blocks are applied between the grid members 11 directly on the said binder, and are preferably pressed firmly against the binder so as to permanently adhere to the body 13. After the blocks are thus placed, the cracks or crevices therebetween are filled with a suitable filler 15 which may be more of the same material used as the binder or any other suitable material. This filter will not only fill the crevices, but enters between the grid members and the adjacent blocks so as to underlie the beading 12 on the grid members 11 and overlie the tapered portions 7 of the blocks 5. Consequently, the blocks are prevented from lifting and the surface of the roadway is maintained smooth at all times. It is to be understood that the grids project from the body a less height than the depth of the blocks so that the upper edges of the grid members are

not exposed but instead are entirely covered over by the filler 15.

As various changes may be made in the above embodiment without departing from the spirit of the invention, all matter herein set forth is to be interpreted as illustrative and not in a limiting sense.

I claim:

A pavement as characterized comprising in combination with a foundation, a grid upon said foundation, a cement body within the grid for a portion of the height thereof, said foundation and body having a strong union therebetween rendering the same substantially integral and thereby securing the grid in place immovably, said grid having its several members provided with T-heads thereon, blocks having flared lower peripheries substantially of dimensions equal to the distance between the T-heads of the grid so as to pass therebetween, the upper parts of said blocks having dimensions less than the distance between the T-heads of the grid for leaving space therebetween for sealing purposes, and a filler applied in said spaces between the block overlying the flared portion of the block and underlying the projecting portion of the T-head for securing the block immovably in place.

WILLIAM E. SWANSON.