July 19, 1927. 1,636,114

H. D. STREATOR

PAVEMENT

Filed May 24, 1926

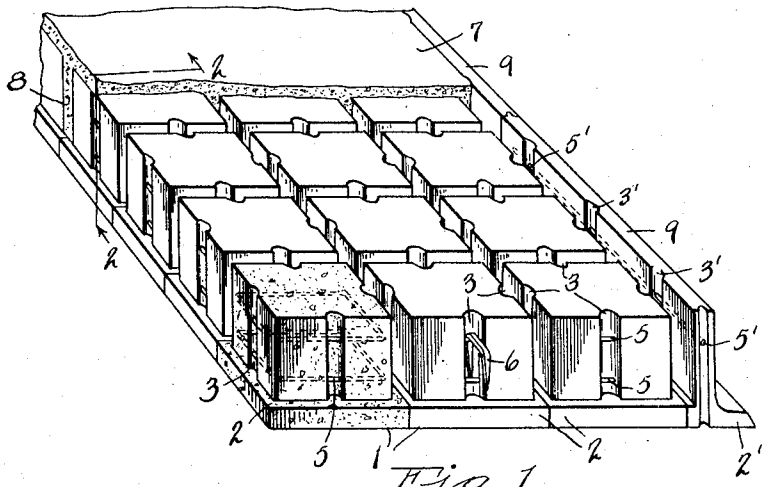


Fig. 1

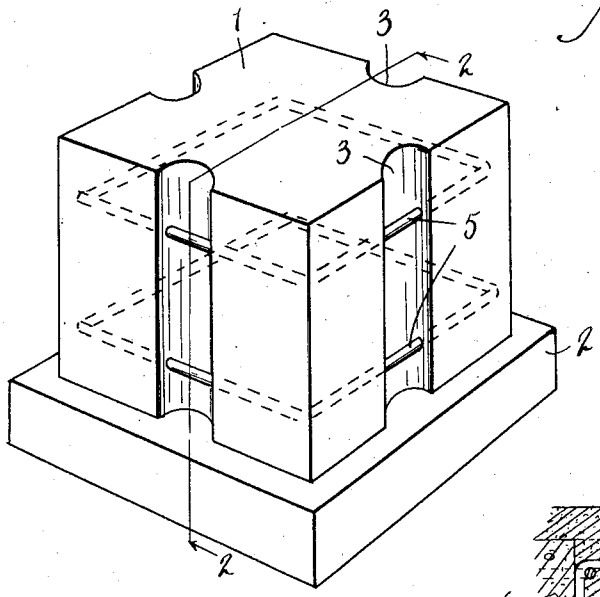


Fig. 3

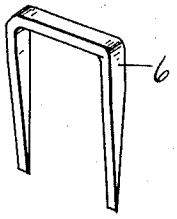


Fig. 4

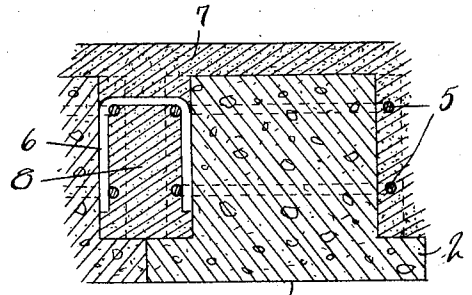


Fig. 2

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UNITED STATES PATENT OFFICE.

HENRY D. STREATOR, OF GALESBURG, MICHIGAN.

PAVEMENT.

Application filed May 24, 1926. Serial No. 111,288.

The objects of this invention are:

First, to provide a pavement containing in its composite structure all of the advantages of a concrete pavement and at the same time all the advantages of an asphalt pavement, and which may be readily opened and repaired or parts be replaced.

Second, to provide in such a structure a topping which can be readily renewed.

Third, to provide such a pavement in which ample provision is made for expansion.

Fourth, to provide such a pavement which is fully reinforced and at the same time can be readily repaired.

Objects pertaining to details will appear from the detailed description to follow. The invention is defined and pointed out in the claims.

A structure which is a preferred embodiment of my invention is illustrated in the accompanying drawing, forming a part of this application, in which:

Fig. 1 is a perspective view of a section of pavement, with parts broken away to show details of construction and arrangement.

Fig. 2 is an enlarged detail sectional view through a complete section of the pavement, taken on line 2—2 of Figs. 1 and 3, showing the block coupling means embedded in the asphalt.

Fig. 3 is a perspective view of one of my improved foundation blocks showing the reinforcing bars in dotted lines and the coupling portion exposed at the notches.

Fig. 4 is an enlarged detail perspective view of the reinforce hairpin connecting means between the blocks.

In the drawing like parts are identified by the same numerals of reference throughout views.

Considering the drawing, 1 is an individual foundation block substantially cubical in form with a bottom flange 2. For ordinary pavement work these blocks are about one foot square on the base, with the flange projecting substantially one inch and being substantially two inches thick. The upper face of these blocks is smooth. A vertical notch 3 extends midway of each side from the top to the flange 2.

Reinforce bars 5 are disposed rectangularly with the body of the block towards its top and bottom with straight parts exposed at each notch 3.

The blocks are laid in the pavement on any suitable foundation, which may be gravel, grout, or the compacted and level roadbed of any material. The blocks are slightly spaced, preferably by a piece of thin metal which is removed after the block is placed. This facilitates access of moisture to the concrete, which is very desirable.

The projecting parts of the reinforce 5 are side by side and the hairpin 6 is inserted around the same, as seen in Fig. 3.

When the foundation blocks have been thus laid, the asphaltic topping is poured onto the pavement, forming the top layer 7, and downwardly projecting engaging cross ribs 8 which embrace the hairpin 6. The result is that all the foundation blocks are effectively interlocked and retained so that it cannot be displaced and it can expand and contract without becoming detached from the concrete base. At the same time, when it is desired to open the pavement or to repair the same for any reason, by simply cutting away the asphalt top a section can be removed and, further, it can be readily and accurately replaced.

Also, when the top layer wears down, it is possible to scrape the same down to the foundation blocks and apply a new layer in an effective and satisfactory manner. A foundation block or a line of them can be readily removed by digging out below.

I have shown my improved foundation blocks cubical in form. They may be of various shapes. It is clear they will be effective in this relation if they are not provided with a reinforce, although the particular reinforce I provide locates the same effectively and serves as a binding means for the entire section, and at the same time is very accessible and readily repaired.

The projection 8 of asphalt between the blocks can be varied in thickness and serve its purpose. I show ample thickness for the severest of conditions.

I show a concrete shoulder made up of sections 9 three feet long or long enough to embrace a plurality of blocks. Each has a base 2′ and reinforce rods 5′ and is notched at 3′ for the hairpin couplings. The sections 9 are similarly notched at their ends for end coupling.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

1. In a pavement, the combination of a foundation made up of spaced cubical blocks

with flanged bases and vertically notched at the sides, rectangular bar reinforcements in said blocks exposed at and extended across the notches at the sides, a retaining hairpin tie between said blocks embracing the exposed part of the reinforcements in said notches on adjacent blocks, and an asphaltic topping with extensions into the spaces between said blocks embracing the said tie, coacting as specified.

2. In a pavement, the combination of a foundation made up of spaced cubical blocks with flanged bases and vertically notched at the sides, rectangular bar reinforcements in said blocks exposed at and extended across the notches at the sides, a tie between said blocks embracing the exposed part of the reinforcements in said notches on adjacent blocks, and an asphaltic topping with extensions into the spaces between said blocks embracing the said tie, coacting as specified.

3. In a pavement, the combination of a foundation made up of spaced cubical blocks with flanged bases and vertically notched at the sides, reinforcements in said blocks exposed at and extended across the notches at the sides, a tie between said blocks embracing the exposed part of the reinforcements in said notches on adjacent blocks, and an asphaltic topping with extensions into the spaces between said blocks embracing the said tie, coacting as specified.

4. In a pavement, the combination of a foundation made up of spaced cubical blocks with flanged bases, a tie between said blocks above said flanges, and an asphaltic topping with extensions into the spaces between said blocks above said flanges embracing the said tie, coacting as specified.

In witness whereof I have hereunto set my hand.

HENRY D. STREATOR.