June 30, 1942. M. TIBERGHIEN 2,287,844

RUBBER COVERED PAVING BLOCK

Filed Dec. 30, 1938

Fig. 1

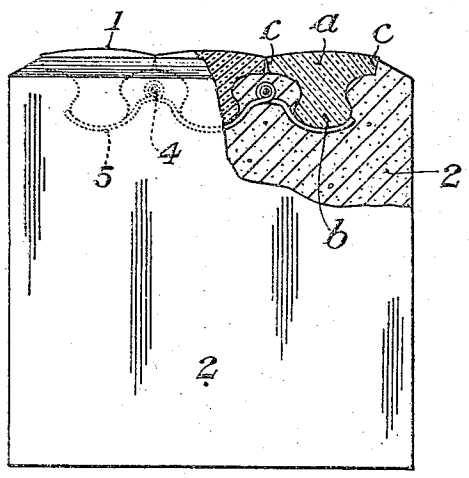


Fig. 2

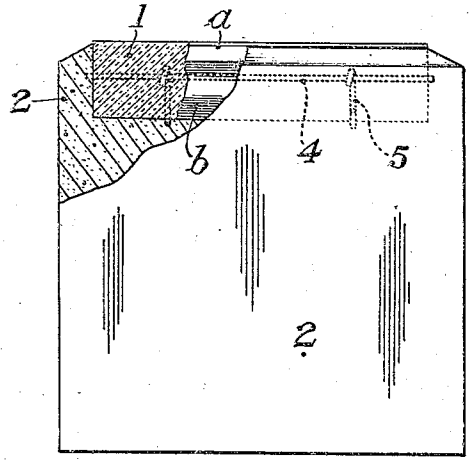
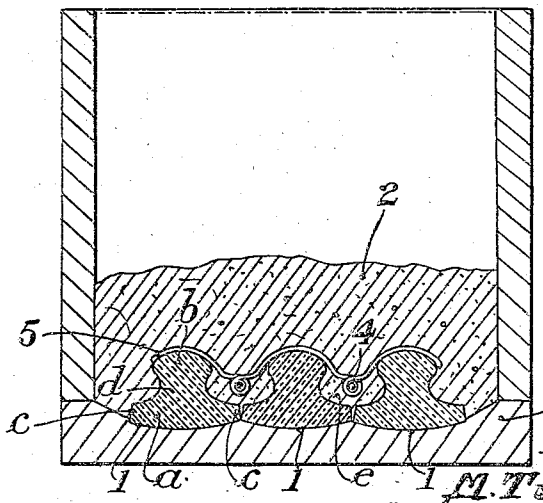


Fig. 3



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RUBBER COVERED PAVING BLOCK

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2 Claims. (Cl. 94—15)

The present invention has for object improvements in paving-blocks the rolling surface of which is provided with a rubber covering.

According to this invention, the rubber covering essentially comprises on its lower face a series of projections or ribs the cross section of which is of downwardly enlarged shape, similar to that of the head of railway rails, these ribs being adapted to ensure the securing in position of the covering by being simply embedded into corresponding recesses provided in the rigid body of the paving-block.

The latter is preferably constituted by a block made of concrete and the embedding of the ribs of the covering is preferably effected when moulding said block.

The accompanying drawing illustrates, by way of example, a form of construction of a paving-block according to the invention.

Figs. 1 and 2 are elevations of the finished paving-block, with parts broken away.

Fig. 3 is a vertical section showing the method for manufacturing said paving-block.

In this example, the covering is constituted by three rubber strips 1 having a profile similar to that of a double-headed rail, the outer head *a* being wider than the head or heel *b* and having sharp edges *c* which are juxtaposed when the paving-block is terminated.

When the body 2 of the paving-block is made of concrete it can be made as follows (Fig. 3):

On the bottom of a suitable mould 3 are arranged, side by side, strips of rubber 1 which are adapted to constitute the covering, their heads *a* turned under and juxtaposed, so that, between the heads *b* and the webs *d* of the adjacent strips, intermediate spaces *e* are left which are filled up with the concrete.

In order to reinforce the paving-block, in these spaces *e* are arranged iron rods 4 supported by transverse supports 5 which take a bearing on the top of the strips.

The concrete is then introduced in the mould and it is immediately vibrated so as to ensure the perfect filling up of the spaces *e* and to render the mass of concrete very compact.

This mass can be constituted for instance by cement concrete of high resistance, with a gauging of 400 to 600 kgs. per mo. As regards the rubber, it will preferably be rather flexible.

The covering thus constituted and embedded in the paving-block, is firmly held in position without sticking and without the intervention of any securing means other than embedding. The rubber will therefore freely work in the recesses of the rigid block when it is subjected to the stresses produced by the wheels of vehicles, the pressures and shocks of articles, animals, etc. coming in contact with the paving-blocks.

The placing in position of the strips 1 and the reinforcements 4, 5 in the moulds as well as the introduction and the vibration of the concrete can be effected mechanically.

The invention is moreover, not limited to the embodiment illustrated nor to the manufacture of paving-blocks proper; it includes under the name of "paving-blocks," strong blocks of all shapes and dimensions, for instance, more or less long slabs, used for paving or covering roads, steps of stair-cases, kerbs of pavements, etc.

Instead of being distinct from each other, the rubber strips can be joined to each other by their edges *c*. Their surfaces can be plain, or striated, or otherwise rendered anti-skidding.

On the other hand, the reinforcement 4, instead of being constituted by simple steel wires, can have any profile and cross section. The recesses or grooves of the block can be reinforced or protected by metal blades conforming to their profile.

Moreover, it is to be understood that the profile of the strips 1 can vary provided it can be firmly embedded in the grooves of corresponding shape provided in the rigid block.

I claim:

1. A paving-block comprising a block of rigid material in one face of which are provided grooves having a bulged profile, the cross section of which first narrows towards said face and then joins with said face by a flared portion having rounded edges with smooth walls, and a rubber covering, the cross section of which shows two bulged parts joined by a narrow median part, one of said bulged parts forming a rib adapted to exactly fit in said groove and against its rounded and smooth edges, the other bulged part of said covering forming a head of flat cross section, wider than said groove and intended to rest on the edges of said groove and on the face of the block whereby relative movement between the rubber and rigid material is rendered possible.

2. A paving-block comprising a block of rigid material in one face of which are provided a plurality of parallel grooves having a bulged profile, the cross section of which narrows towards said face and is united to said face by rounded edges having smooth walls, said grooves forming between them parallel, rounded and smooth ribs of rigid material, rubber elements in said grooves

the cross section of which shows an upper bulged portion and a lower bulged portion united by a narrowed median portion having rounded and smooth contours, longitudinal reinforcing metallic rods embedded in said ribs of rigid material, undulated transverse metallic rods, substantially at right angles to said longitudinal metallic rods, the upper bends of said transverse rods forming loops for surrounding and spacing the longitudinal rods embedded in the ribs of rigid material, from each other, the lower bends of said undulated rods being arranged in contact with the lower bulged portion of said elements.

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