

J. A. OMBERG, JR.
PAVEMENT AND METHOD OF CONSTRUCTING THE SAME.
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910,568.

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Fig. 1.

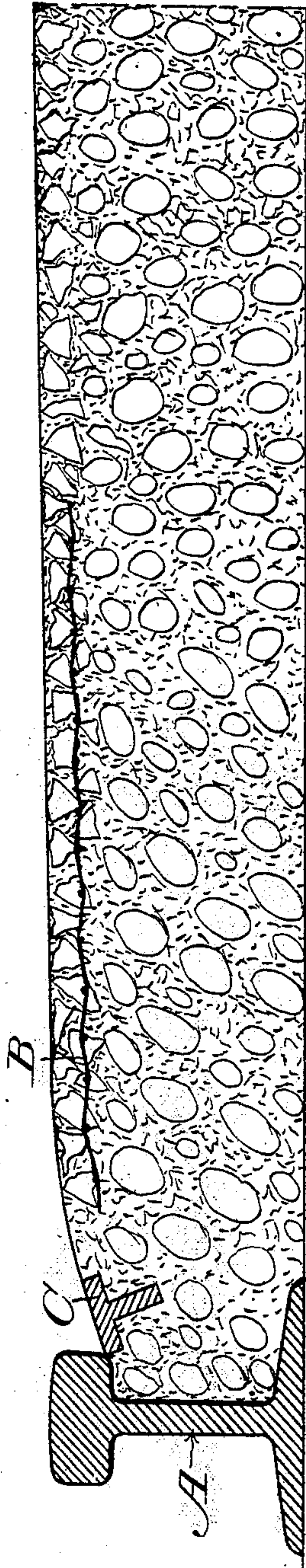
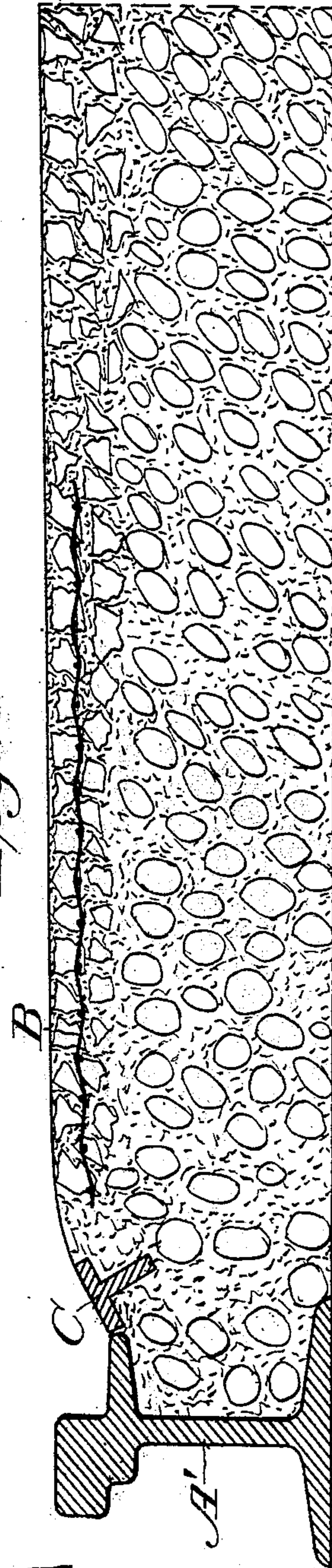


Fig. 2.



Witnesses

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PAVEMENT AND METHOD OF CONSTRUCTING THE SAME.

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To all whom it may concern:

Be it known that I, JAMES ADOLPHUS OMBERG, Jr., a citizen of the United States, residing at Memphis, in the county of Shelby and State of Tennessee, have invented certain new and useful Improvements in Pavements and Methods of Constructing the Same, of which the following is a specification.

My invention relates to a new and useful improvement in pavements and method of constructing the same, and particularly to that portion of a pavement adjacent to and between street car tracks.

The essential objects of the invention are; (1) to construct a cheap and durable pavement between the rails of a street car or tramway system; (2) to employ metal reinforcements adjacent to the track rails so as to secure exactly the same effect as is obtained from the grooved rail and, (3) to bind together solidly the two rails of a single track, or the four rails of a double track in such manner that an unequal settlement of the rails is made practically impossible.

With the above and other objects in view, my invention consists of the improved pavement and the improved method of constructing the same, which I will hereinafter describe and claim.

In the accompanying drawings forming part of this specification and in which similar letters of reference indicate like parts:— Figure 1, is a cross-sectional view of a T-rail and a portion of the pavement between the same and an adjacent rail. Fig. 2, is a similar view showing a rail of modified form.

In carrying out my invention I may use either the well known form of T-rail A of Fig. 1, or the equally well-known flanged rail A' of Fig. 2, these rails representing a portion of the track of a street-car or tramway system. These rails are secured to the top of the cross-tie in the usual manner and the space between adjacent parallel track rails and overlying the tie, is filled with gravel concrete of any well known character. The upper portion of this filling consists, preferably, of hard sharp stones and concrete of a depth of one inch, more or less, and in this surface is suitably placed a steel netting or other foraminous sheet, B, adapted to form a light steel reinforcement immediately under the top surface of the concrete and designed to impart more or less elasticity to said surface. This reinforcement has also the function of largely preventing the concrete wearing into

holes; it also permits the concrete surface to be more effectively repaired, when necessary, with grout or other appropriate material. Because of the use of the metal reinforcement just below the top surface of the pavement, when the pavement wears, the steel reinforcement will be exposed through the worn parts and the meshes of the steel will receive the new concrete and thus enable it to form a perfect bond between itself and the old concrete.

The top of the pavement is preferably slightly crowning, and adjacent to each rail and embedded in the concrete filling between the rails so that its upper surface will form a continuation of the top of the pavement, is a structural-iron, C, of T-shape or other appropriate form one edge of which is adjacent and inclined relative to the head or flange of the rail whereby this embedded rail forms a metal reinforcement adjacent to the head of the rail and serves, also, to form a groove or channel alongside the rail and thereby produce the same effect as the ordinary grooved rail commonly employed in street car or tramway construction. The cross-sectional form of this embedded reinforcement or structural-shape is immaterial. In the drawing I have shown this rail as having a T-form in cross-section and when embedded, as shown, its flange C, is arranged at an angle to the perpendicular. The rail C is of a well recognized form of structural iron and one which is readily purchasable in the markets, but I wish it understood that my invention is not limited to this particular form of rail but includes any form of metal reinforcement disposed adjacent to this main rail and with its surface substantially flush with the top surface of the pavement.

By reason of the construction herein shown and described I am enabled to construct a cheap and durable pavement between the rails of a street car or tramway system, and to employ a metal reinforcement adjacent to each main rail so as to secure exactly the same effect as will be obtained by the use of the more expensive grooved rail. I am further enabled by the construction shown and described to bind together solidly two rails of a single track or the four rails to a double track in such manner that the possibility of unequal settlement of rails is reduced to a minimum; in fact such settlement is made practically impossible.

By reason of the reinforcement, B, or steel

netting embedded just below the top surface of the pavement, more or less elasticity is provided for the pavement, which eliminates largely the wear of the pavements into holes, 5 but if holes should wear, the steel netting would be exposed and provision would thus be made for receiving new grout which would be enabled to join with and form a perfect bond with the old grout or filling underlying the 10 netting or other reinforcement.

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

1. A street car or other track comprising 15 track rails, a filling of concrete between said rails, and a reinforcement of structural metal having a part embedded in the concrete and having an upper surface exposed adjacent to each track rail and lying parallel with said 20 rail to form a groove or channel along the inside of the head of the rail.

2. A street-car or other track comprising track rails, a filling of concrete between said rails, a reinforcement of metal fabric em- 25 bedded in the concrete slightly below the top

surface thereof, and a reinforcement of structural metal embedded in the concrete adjacent to each track rail and lying parallel with said rail and having its upper surface exposed and forming a groove or channel along the 30 inside of the head of the rail.

3. The combination with a track rail and a concrete filling at the inner side thereof said filling having a slightly crowned form and having a reinforcing fabric, as steel netting, 35 embedded therein slightly below the top surface, and a T-iron having one flange embedded in the concrete at an angle to the perpendicular, and having other flanges substantially flush with the crowned top surface 40 of said filling, said T-iron being arranged parallel with and proximate to the track-rail and adapted to form a groove or channel alongside the rail.

In testimony whereof I affix my signature 45 in presence of two witnesses.

JAMES ADOLPHUS OMBERG, JR.

Witnesses:

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