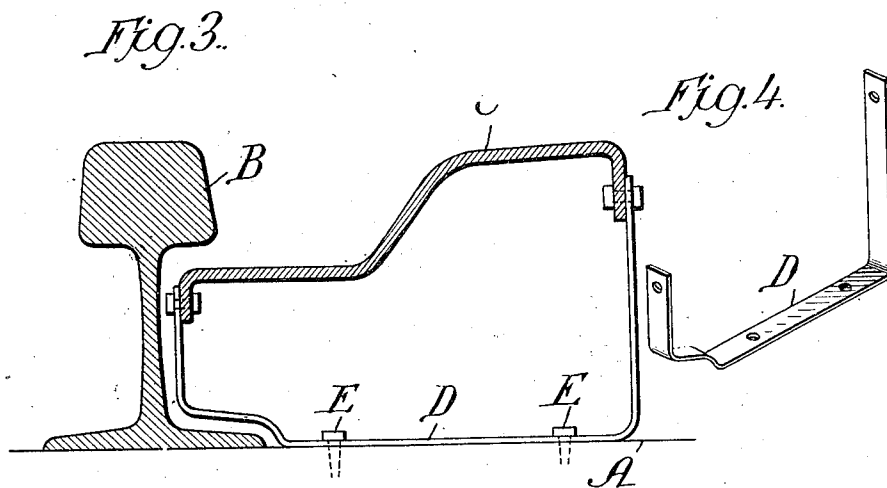
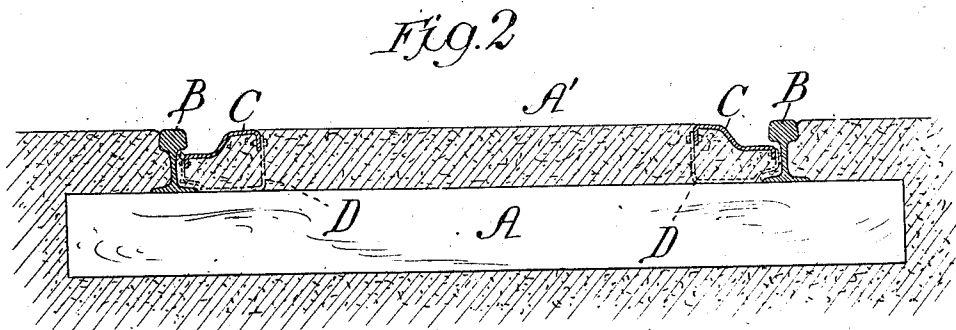
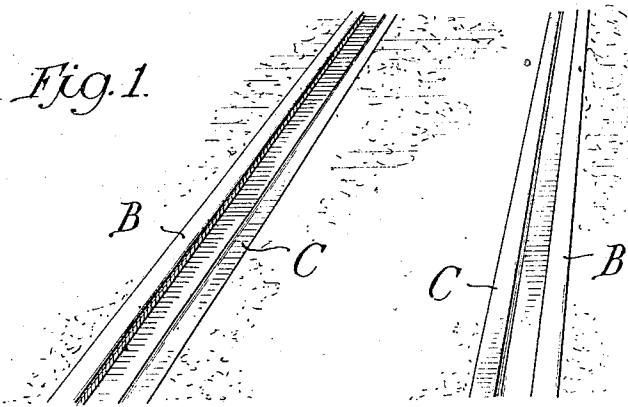


W. M. PINDELL.
 REINFORCING AND PROTECTING DEVICE FOR STREET PAVEMENTS.
 APPLICATION FILED JAN. 3, 1911.

1,034,504.

Patented Aug. 6, 1912.



Witnesses;
 E. R. Barnett
 Robert Dobberman

Inventor
 William Monroe Pindell.
 By Reesor, Hibben, Davis & Macaulay
 His Attys.

UNITED STATES PATENT OFFICE.

WILLIAM MONROE PINDELL, OF CHICAGO, ILLINOIS.

REINFORCING AND PROTECTING DEVICE FOR STREET-PAVEMENTS.

1,034,504.

Specification of Letters Patent.

Patented Aug. 6, 1912.

Application filed January 3, 1911. Serial No. 600,497.

To all whom it may concern:

Be it known that I, WILLIAM MONROE PINDELL, a citizen of the United States, residing at Chicago, county of Cook, and State of Illinois, have invented a certain new and useful Reinforcing and Protecting Device for Street-Pavements, of which the following is a description, reference being had to the accompanying drawings, forming part of this specification.

My invention has for its object the provision of simple and efficient means for reinforcing and protecting street paving between car tracks, and particularly the sides or edges thereof immediately adjacent the rails, where the pavement is subject to the heaviest wear of street traffic and consequently suffers the earliest and greatest damage.

One of the greatest problems affecting the construction of street pavements between and around street car tracks has been due to the fact that it has been found difficult to provide a pavement that will prove durable and remain at grade immediately next to the rails and on the inner side thereof. Where any monolithic pavement is used for such purpose, such as asphalt, bitulithic, etc., the vibration of the rail and the wear and tear of the vehicular traffic tends to cause the edges of the pavement adjacent the inner sides of the rails to disintegrate in a short time. Where any form of block paving is used, such as granite block, sand stone block, brick or wood block, the paving wears out very quickly adjacent the rails and becomes uneven in a short time. I propose to overcome these objections and difficulties by reinforcing and protecting the sides or edges of the pavement, along the inner sides of the rails, by means of a suitably shaped and formed steel plate extending longitudinally of the rails and suitably anchored in or otherwise secured to the pavement.

Figure 1 is a perspective view of a railway embodying my improvement. Fig. 2 a cross section thereof, Fig. 3 an enlarged sectional detail of one of the T-rails and the adjacent reinforcing and protecting plate, and Fig. 4 a perspective view of one of the metal strips or brackets by which such plate is secured to the ties of the track.

The pavement shown in the accompanying drawing is a monolithic one, that being the form of pavement to which my inven-

tion is particularly applicable and in connection with which it may be used to the greatest advantage. The portion of the pavement outside the car tracks, with the wooden cross ties A embedded in it, may be laid in the usual or any suitable manner, and in advance of the portion of the pavement between the rails B B of the track. Preparatory to laying the pavement between the rails my novel reinforcing and protecting plates C are secured in position along the inner sides of the rails. These plates extend longitudinally of the rails and are preferably bent along longitudinal lines to form an upper and a lower plane portion connected by an inclined portion, the plate being stepped in cross-section as shown especially in Fig. 3. In the present instance I have shown the plates provided with vertically depending flanges along their inner and outer sides, to which are secured, as by bolts, the upturned ends of supporting brackets D whose lower horizontal portions are secured to the cross-ties A, as by nails or screws E. This particular method of preliminarily supporting the plates C and securing them to the cross ties A is not an essential part of my invention, however, nor is it essential that the plate C shall have the depending flanges at their inner and outer edges, since with other suitable means for securing the plates to the cross-ties or to the pavement such flanges may be omitted.

When the plates C have been secured in position along the inner sides of the rails B the pavement between the rails may be laid in the usual manner, the space between the opposite plates C being filled with the paving material flush with the highest parts of the plates, and the space beneath the plates and around the supporting brackets D, and preferably also between the outer sides of the plates and the vertical webs of the rails, being likewise completely filled with the concrete, so as to form a solid and efficient support and anchor for said plates. In this manner and by these means the portions of the pavement between the rails and adjacent the latter are efficiently reinforced and protected by the plates C C and the wear and damage to which they have been heretofore subjected is prevented.

A further advantage of my invention consists in the fact that the T-rails, in combination with the reinforcing and protecting

plates C of the shape shown, constitute in effect grooved rails for the car tracks, which are required by laws or ordinances in many cities because of the smoother surface they present to the street traffic and the better track for ordinary vehicles, the use of T-rails in such instances being forbidden. It is well known that T-rails form the most efficient and durable rails for car tracks, and that it is highly economical and advantageous to employ them where permissible; and by the provision of my invention it is expected that their employment will be permitted in many places where the less durable and more expensive grooved rails are now required, since the T-rails in combination with my novel reinforcing and protecting plates present to the traffic upon the streets approximately the same surface and track-ways as that of the familiar grooved rails, the principal difference being that my novel protecting plates afford somewhat wider and better track-ways for street vehicles, along the inner sides of the treads of the rails, than do the usual grooved rails.

Having thus fully described my invention, I claim:

1. The combination with the T-rails of a street railway car-track, of an interposed

pavement, and metal reinforcing and protecting plates extending longitudinally of said rails along the inner sides thereof, and having depending flanges at longitudinal edges and brackets attached to the edges of the plates and to the ties for securing the plates in place.

2. The combination with the T-rails of a street railway car track, of an interposed pavement, and metal reinforcing and protecting plates extending longitudinally of said rails on the inner sides thereof, and strips secured to the edges of the reinforcing plates and anchored within the pavement.

3. The combination with the T-rails of a street railway car track, of an interposed pavement, and metal reinforcing and protecting plates extending longitudinally of said rails along the inner sides thereof but out of contact therewith, and brackets attached to the edges of the plates and to the ties of the track and embedded within the pavement.

WILLIAM MONROE PINDELL.

Witnesses:

EDWARD RECTOR,
S. E. HIBBEN.