Dec. 28, 1926. 1,612,274

A. C. FISCHER

RAIL FILLER

Filed August 30, 1926

Fig. 1.

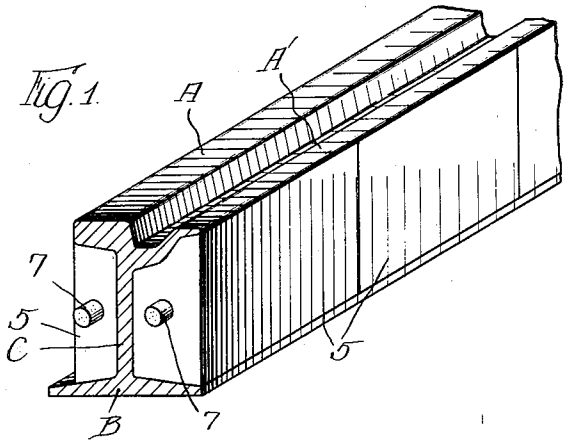


Fig. 2.

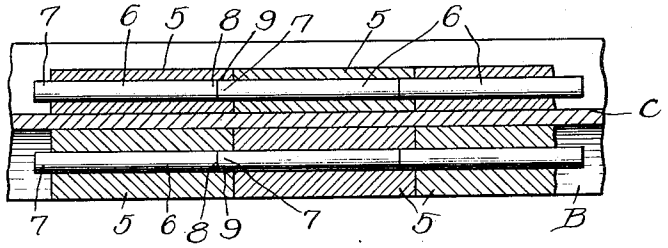
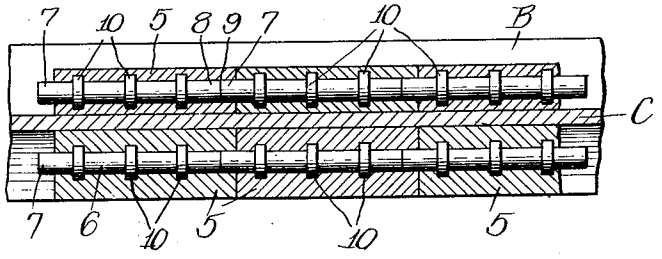


Fig. 3.



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UNITED STATES PATENT OFFICE.

ALBERT C. FISCHER, OF CHICAGO, ILLINOIS.

RAIL FILLER.

Application filed August 30, 1926. Serial No. 132,544.

My invention relates in general to paving and other construction projects in which tracks or rails for street railways are imbedded in paving and other places, and has particular reference to means to be used in combination with the rails for sound deadening purposes, for absorbing vibrations of shock, for compensating for expansion and contraction of the structure in which the rails are imbedded, and for otherwise improving the installation and maintenance of tracks and adjoining paving structures.

Briefly, my invention has to do with a so-called preformed rail filler, comprising block-like compressible members constructed substantially as illustrated in the accompanying drawing, in which Figure 1 is a perspective view of a section of a rail illustrating the application of the invention;

Figure 2 is a horizontal section of the assembly shown in Figure 1.

Figure 3 is a similar section but showing a modified form of the rod-like reinforcing members.

Referring now to the drawing in detail. The rail shown is a conventional type as used for street car tracks, having a head A, a base B and connecting flange C, the head being formed with the customary flange A^1. The idea is that when the rail is imbedded in street paving, or for that matter in any other imbedding material, there is nothing to compensate for expansion and contraction of the paving to prevent cracks and fissures. Then again there is nothing to deaden the sound of traffic over the rails, nor to make a watertight joint at the juncture of the paving and the rail.

My invention has for its object to overcome these disadvantages, and so far as concerns the present case the salient features of the invention reside in the construction and assembly of the rail filler.

I propose to make the rail filler out of some material suitable for the purpose, such as, a composition of asphalt and fibrous material, or any other material which will serve to deaden the sound of traffic, compensate for expansion and contraction and waterproof the joint formed by the filler. Fibrous material may be roofing scrap, sawdust, corn cob fibre, or any subdivided material that will make up a compressible member of the desired qualities. I say finely divided material because it will no doubt be more convenient to use an extruding machine in forming the members to the desired shape, and, of course, it is realized that a long fibrous material composition cannot be conveniently extruded. The material of the filling members is of no special importance so far as concerns the present invention, and I will not go further into details concerning the same.

The material will be made up as preformed block-like members, adapted to be assembled within the space defined by the head, base and connecting web of the rail, so as to completely fill the same and insulate the rail from the adjoining paving. These compressible block-like members, now referred to by the reference numeral 5, will be applied to the space referred to with their ends in abutting, confronting relation, so as to make a continuous filler along the rail. The space on one or both sides of the connecting web C may be filled according to requirements. In order to add rigidity and reinforcement to the members without destroying any of their inherent compressibility, I propose to internally reinforce each member with a rod-like member 6, one end, viz 7, of the rod-like member projecting beyond the end of the block-like compressible member, the opposite end, viz 8, of the rod terminating short of the opposite end of the block-like member, but co-axially with with an opening 9 in the end of the block-like compressible member, so that when assembled the members 5 may be interlocked, so to speak, by the end of the reinforcement in one member entering the opening 9 in the end of an adjacent or abutting block-like member, and in this way interlock the members together to form for all practical purposes a continuous filler. The members 6 reinforcing the assembled members prevent warping and displacement, and at the same time leave each and all of the members 5 undisturbed so far as concerns their functioning in response to the application of pressure from the expansion of the adjoining pavement. The expansible qualities of the filler will compensate for contraction of the pavement, so that the joint between the rail and pavement will be filled at all times and thus block the ingress of moisture and water from the street.

In the event that response to pressure on the sides of the filler should tend to slide the rod-like reinforcing members 6, the rods

may be made with enlargements 10 at intervals in their length, as best shown in Figure 3.

The rod-like members 6 may be internally applied to the block-like compressible members 5 at the time the filler is extruded or otherwise formed.

I claim:

1. A rail filler of the class described, comprising a preformed block-like compressible member, means extending internally and longitudinally of the member and substantially the length thereof for reinforcing the same, one end of said reinforcing means projecting from one end of the block-like compressible member, and the other end having an opening co-axial with the said reinforcing means.

2. A rail filler of the class described, comprising a preformed block-like compressible member internally reinforced with a rod-like member, and means on the rod-like member holding the same against longitudinal movement in the block-like compressible member.

3. A rail filler of the class described, comprising a preformed block-like compressible member internally reinforced with a rod-like member, and means on the rod-like member holding the same against longitudinal movement in the block-like compressible member comprising enlargements at intervals of the length of the rod-like member.

4. A rail filler of the class described, comprising a preformed block-like compressible member internally reinforced with a rod-like member, means on the rod-like member preventing longitudinal movement of the same in the block-like compressible member, said rod-like member projecting from one end of the block-like compressible member and the opposite end of the block-like compressible member having an opening co-axial with the rod-like member.

5. A rail filler of the class described, comprising a preformed block-like compressible member internally reinforced with a rod-like member, enlargements at intervals in the length of the rod-like member, said rod-like member projecting from one end of the block-like compressible member and the opposite end of the block-like compressible member having an opening co-axial with the rod-like member.

Signed at Chicago, Illinois, this 28th day of August 1926.

ALBERT C. FISCHER.