Jan. 5, 1926. 1,568,677

W. F. McCANLESS

STREET RAILWAY CONSTRUCTION

Filed Oct. 9, 1923

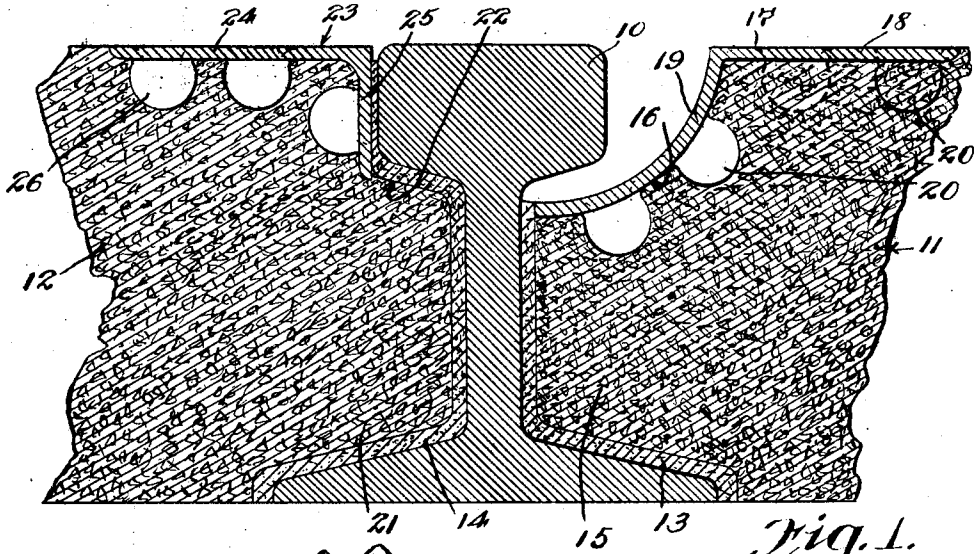

Fig. 1.

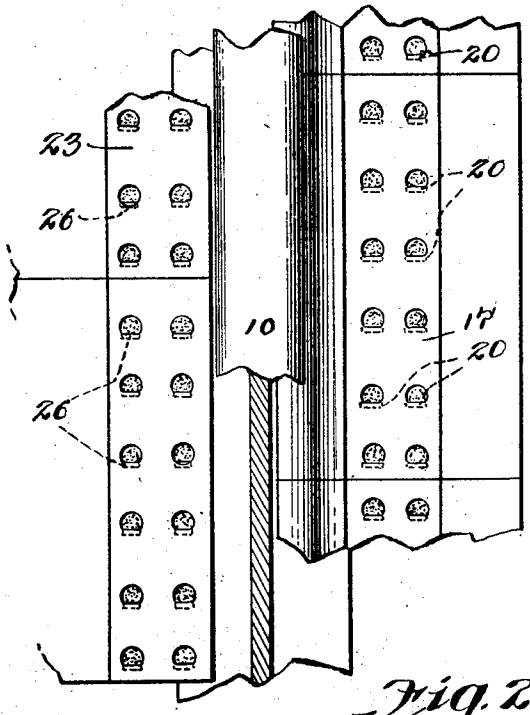

Fig. 2.

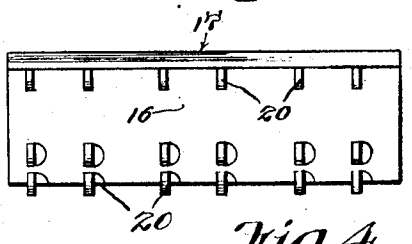

Fig. 4.

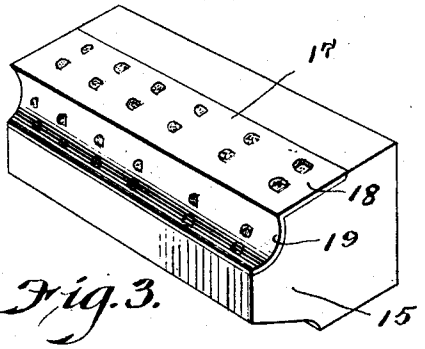

Fig. 3.

WITNESSES

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UNITED STATES PATENT OFFICE.

WILLIAM F. McCANLESS, OF CHARLOTTE, NORTH CAROLINA.

STREET-RAILWAY CONSTRUCTION.

Application filed October 9, 1923. Serial No. 667,573.

To all whom it may concern:

Be it known that I, WILLIAM F. McCANLESS, a citizen of the United States, and a resident of Charlotte, in the county of Mecklenburg and State of North Carolina, have invented certain new and useful Improvements in Street-Railway Constructions, of which the following is a specification.

This invention relates in general to street railway constructions, and more particularly to improved paving block structures for use in the construction of street railways.

The object of the invention is to provide paving blocks of this character which are susceptible of being manufactured at a central plant under proper conditions and in the desired quantities, and which may be readily and easily laid and assembled in a street railway track so as to greatly facilitate the production of the railway, and so as to minimize the interruption to traffic occasioned by the construction or repair of the railway.

A further object is to provide a paving block structure having the foregoing capacities and advantages, and which at the same time is so designed and organized as to be protected and reinforced at the points of greatest wear.

A still further object is to provide a paving block structure of this character which is at the same time of simple and durable construction, reliable and efficient in use, and easy and comparatively inexpensive to manufacture and lay.

Other objects and advantages reside in the certain novel features of the construction, arrangement and combination of parts which will be hereinafter more fully described and particularly pointed out in the accompanying drawings forming a part of this specification, and in which:

Figure 1 is a fragmentary view in transverse section showing a street railway made up of the paving blocks constituting the present invention,

Figure 2 is a fragmentary view in plan of the arrangement shown in Figure 1, with parts broken away and shown in section for the sake of illustration,

Figure 3 is a perspective view of one of the paving blocks, and

Figure 4 is a detail view in elevation of one of the protecting shoulders.

Referring to the drawings, wherein for the sake of illustration is shown the preferred embodiment of the invention, the numeral 10 designates one of the rails of the street railway track. Along the inside of each rail a row of blocks designated generally at 11, is provided. Along the outside of each rail a row of blocks designated generally at 12 is arranged. In between the blocks 11 and 12 of the rails fillings of asphalt designated at 13 and 14 are provided. The blocks 11 are of similar construction and are preferably made up of a body of concrete having a projection 15 overhanging the base of the rail 10 and fitting in close to the web thereof. The upper corner of the projection is recessed or cut away as at 16 to provide the proper clearance for the tread of the rail and for the flanges of the car wheels. A protecting shoulder designated generally at 17 is provided and is preferably constructed of steel, and includes a flat flange 18 fitting against the portion of the top of the block which lies along the recess 16, and a curved flange 19 integral with the flat flange and fitting snugly against and covering and protecting the wall of the recess 16. Gripping lugs designated at 20 are punched from the flanges 18—19 and are embedded in the concrete making up the body of the block and the projection, while the same is plastic.

The blocks 12 are also made up of a body of concrete having a projection 21 fitting over the base of the rail and up against the web thereof. This projection does not actually engage the base of the web since the filling 14 of asphalt is placed between the projection and base and web of the rail. One of the upper corners of the block is cut away as at 22 to provide a clearance necessary to accommodate the tread of the rail. The block 12 is not, however, cut away to the same degree as the block 16 since it is not necessary to provide any spaces for the flanges of the car wheels, as these flanges travel along the inside of the rail 10 and not along the outside thereof. Protecting shoulders designated generally at 23, are provided for the portions of the blocks 12 which lie adjacent the tread of the rail 10 and preferably, these protecting shoulders are constructed of steel and are made up of a pair of flat flanges designated at 24 and 25, and arranged at right angles to each other, the flange 24 covering and protecting the portion of the top of the block 12 which lies along and adjacent the top of the rail 10 and

flange 25 covering and protecting the portion of the block which lies adjacent the lateral face of the tread 10 of the rail. As shown in Figure 1, a part of the filling 14 of asphalt occurs between this flange 25 and the adjacent lateral face of the tread of the rail 10. Gripping shoulder lugs 26 are punched from the flanges 24 and 25 and are embedded in the concrete making up the block 12.

The paving block may be cast in sections to suit the need of the particular railway, although the size of the standard block would probably be in width, about one-half the distance from center to center of the rails of the track, and between one to three feet in length. This of course applies to the blocks 11. The blocks 12 could be of any suitable length and width. The height of both the blocks 11 and 12 is preferably the same as the height of the rails of the track. These blocks would find their greatest utility in sections where paving bricks are not easily secured, as in such places it would greatly facilitate the laying of the track and would not necessitate the tying up of traffic for any considerable time.

I claim—

1. A paving block for use with street railway tracks having a protecting shoulder for the corner thereof disposed adjacent the rails of the track, said protective shoulder comprising a pair of angularly disposed flanges, each of said flanges being provided with a plurality of gripping lugs embedded in the body of the block.

2. A paving block for use with street railway tracks having a protecting shoulder for the corner thereof disposed adjacent the rails of the track, said protective shoulder consisting of a flat flange and a curved flange angularly disposed with respect to each other.

WILLIAM F. McCANLESS.