

G. H. PADGETT.  
 ROAD CONSTRUCTION.  
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1,406,068.

Patented Feb. 7, 1922.

Fig. 1.

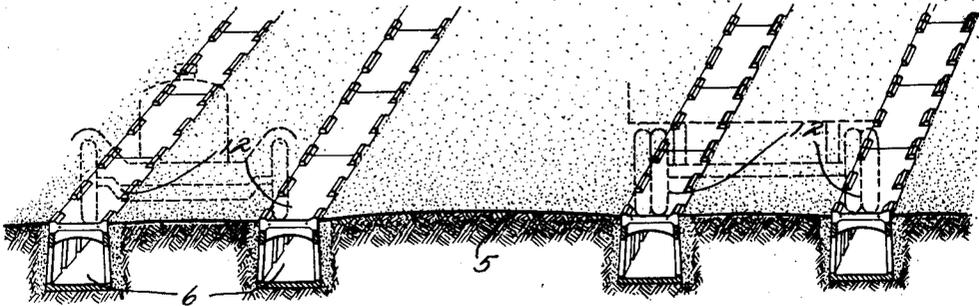
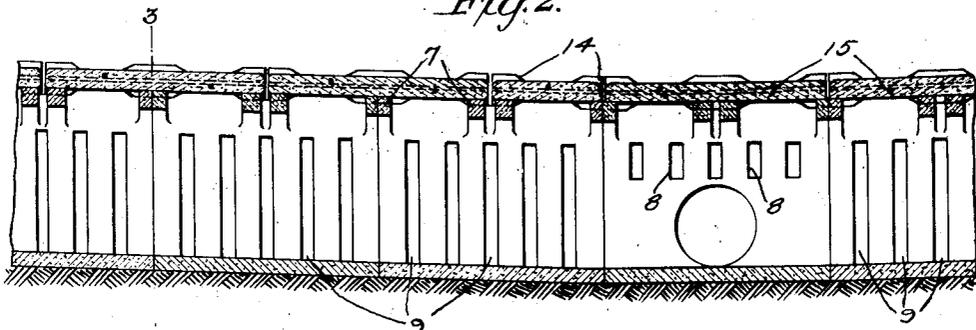


Fig. 2.



3

Fig. 3.

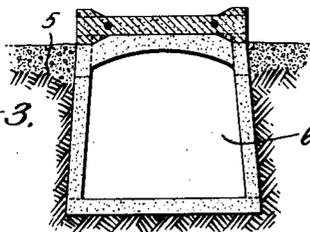


Fig. 6.

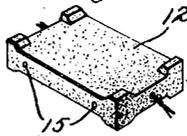


Fig. 7.

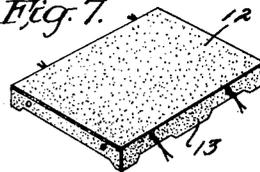


Fig. 4.

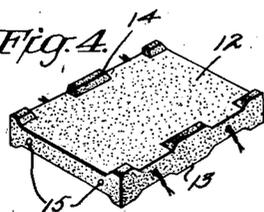
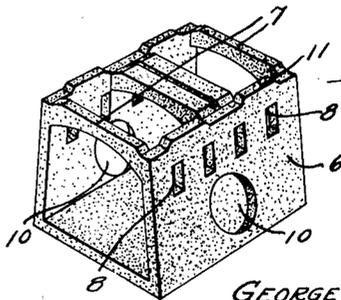


Fig. 5.



WITNESSES.

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# UNITED STATES PATENT OFFICE.

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## ROAD CONSTRUCTION.

1,406,068.

Specification of Letters Patent.

Patented Feb. 7, 1922.

Application filed November 20, 1919. Serial No. 339,288.

*To all whom it may concern:*

Be it known that I, GEORGE H. PADGETT, a citizen of the United States, and a resident of Edwards, county of St. Lawrence, State of New York, have invented a new and useful Improvement in Road Construction, of which the following is a full, clear, and exact description.

This invention relates to road construction and has particular reference to the construction of a track or wearing rail on which vehicles may traverse the road.

The primary object of the invention is to provide a track or wearing rail in road ways on which vehicles may be driven and to so construct the track or wearing rail that it may serve as a means for draining the road thus helping to maintain the road in good repair.

Heretofore roads are usually constructed without regard to establishing a track or wearing rail on which the vehicles may be run. Then again the draining system of the roads has been inadequate to meet the demands occasioned by heavy rains. According to my invention I propose to provide a combined track or wearing rail and drainage system whereby the vehicles that traverse the road may be run on the track or wearing rail thus reducing the chance of accident as well as overcoming the effects of customary wear on the road surface, and other conditions which make it highly desirable to drive the vehicles on a track which has an unusual amount of wear resisting qualities and is replaceable.

The preferred construction of the invention is illustrated in the accompanying drawing in which,

Figure 1 is a perspective view of a road constructed in accordance with my invention.

Figure 2 is a longitudinal sectional view showing the relative position of the parts on a grade.

Figure 3 is a sectional view on the line 3-3 of Figure 2.

Figure 4 is a perspective view of one of the track sections.

Figure 5 is a perspective view of one of the conduit sections which is made to support the cap section referred to in Figure 4.

Figure 6 is a perspective view of a modified form of cap.

Figure 7 is a perspective view of still another modified form of cap.

According to the invention, it is proposed to produce a road bed such as 5, the same being produced of any desirable material. Arranged longitudinally in the road are trenches or gutters which are made to receive the conduit sections 6, which are placed in the trenches end to end to provide a relatively long conduit. Each of these conduits is preferably constructed with battered side walls with bridge pieces 7 spanning the spaces between the side walls at the top of each section. These sections are also provided with openings as at 8 and 9 which are arranged in the vertical side walls establishing a drainage of the road bed through the conduit. Some of these openings extend almost the entire height of the side walls, others of which, such as 8 being relatively short. As shown in Figures 2 and 5, the side walls in this section are provided with relatively large openings 10 which may communicate with a conduit running transversely of the road or drainage pipe as the case may be. Each of the conduit sections is recessed at the top of the side walls, the recesses being so arranged as to present raised portion or lugs 11. Inasmuch as it will be desirable to replace the track or wearing rail sections, the same are made detachable from the conduit sections to which end they preferably comprise a cap 12, which is recessed along the edge of the bottom side, the recesses corresponding to the top of the conduit sections, and also adapted to provide lugs or raised portions 13. The bridge pieces 7 of the conduit section are also bevelled to accommodate the raised portions or lugs 13 of the caps in the recesses of the conduit sections. When in place, the lugs or raised portion on the cap sections will engage the recesses in the conduit sections and interlock these two parts together. To maintain the tread of the vehicles on the track or wearing rails the caps or track sections are provided with raised portions or lugs 14 along their sides. These lugs 14 are not so high as to prevent the vehicle being steered off the track or wearing rail if occasion demands, and at the same time they present an interrupted flange which under normal conditions will keep the vehicle on the track. According to the track or wearing rail section or cap shown in Figure 7 these lugs or raised portions are dispensed with as it is desirable to use this kind of cap or track section at the intersec-

tion of two or more tracks. The road will be built up substantially flush with the top of the track or wearing rail the lugs or raised portions 14 protruding slightly above the road surface. Reinforcing means such as rods or other flexible means 15, may be arranged in the track caps to strengthen the structure.

Of course it is to be understood that any number of these tracks or wearing rails may be arranged in parallel relation on the road according to the width of the road and the number of vehicles that are to be accommodated to pass each other side by side. On a very narrow road it may be only possible to use one track or wearing rail, that is to say a pair of tracks or wearing rails in which case, vehicles will pass each other by steering off the track as provided for in the interrupted flanged rail. Where the road is open to general traffic in both directions not less than two pairs of tracks or wearing rails will be sufficient. When the water is drained from the road through the conduits it may be discharged into culverts or piped into gutters by means of pipes arranged transversely of the road and communicating with the opening 10 in the side of some of the sections.

As shown in Figure 2 the sections are built to conform to a gradient and set thereon as in a trench cut to the engineered gradient desired. It is to be understood that the arrangement may be used on curves with the same advantages as on a straight away, by merely molding the sections to meet this requirement.

The essence of the invention resides in providing parallel trenches with bottoms corresponding to the desired gradients and curves of the finished roadway and in which trenches are set for the track or wearing rail sections of course including the conduit sections, of uniform height and built of such form as to conform to the said associated gradients and curves. As shown in Figures 4 and 6, the cap sections may be provided with galvanized wire cable reinforcing means with the ends of the cables projecting beyond the sides of the caps, for securing the sections in place. The track or wearing rail sections are reversible by reason of the proper spacing of the recesses and lugs and are capable of being laid to break joints with the conduit sections which support them. The confronting ends of these caps are slightly bevelled to make a generally open joint for the admission of water to the conduit and also in order that the caps may be laid with a sufficiently close joint wherever a change of gradient occurs. As shown in Figure 6 the cap sections may be made in half sections, the use of these half sections is shown in Figure 2.

Having thus described my invention what I claim as new and desire to secure by Letters Patent is as follows;—

1. In a road construction, a track comprising a plurality of conduit sections placed end to end longitudinally of the road, each section consisting of a bottom, side walls, and spaced bridge pieces connecting the side walls at the top, and a removable cap for each section provided with spaced lugs at each longitudinal edge.

2. In a road construction, a plurality of conduit sections placed end to end longitudinally of the road, each section consisting of a bottom, side walls having openings therein, and bridge pieces connecting the side walls at the top, and a removable cap for each section.

3. In a road construction, a pair of parallel conduits, each conduit being made in sections, and a replaceable track cap on each conduit and made in sections, the conduit sections and cap sections having interlocking engagement

4. In a road construction as set forth in claim 3 and in which the interlocking engagement of the track cap and each conduit comprises recesses in the top of the walls and bridge pieces of the conduit sections and lugs on the bottom side of the track caps received in said recesses.

5. In a road construction as set forth in claim 4 and in which the track cap for each conduit is constructed with raised longitudinal lugs arranged in spaced relation along its side edges.

6. In a road construction conduit sections end to end and longitudinally of the road, said sections being of such tile construction as to form a drainage conduit with vertical openings piercing the sides of the conduit establishing a drainage system through the conduit, and patterned to engage and lock and support wearing rails as described.

7. In a road construction, in combination with parallel trenches and drainage conduit supporting conduits, a wearing rail made in convenient sections with interrupted tram-mel upon either edge thereof so spaced as to form lugs to engage the corresponding conformation of the supporting conduits capable of re-enforcement and with protruding tie ends of suitable wire or cable with which to secure the sections in place, all as described.

8. As a new commercial product, wearing caps for conduit sections, said caps made in convenient sections with interrupted tram-mel edges, and with tie ends protruding for the purpose specified, said caps adapted when abutted end to end, to constitute a wearing rail for vehicular traffic.

GEORGE HENRY PADGETT.