

E. D. NELSON.
RAILROAD TRACK TANK.
APPLICATION FILED MAR. 17, 1911.

1,000,749.

Patented Aug. 15, 1911.

FIG. 1.

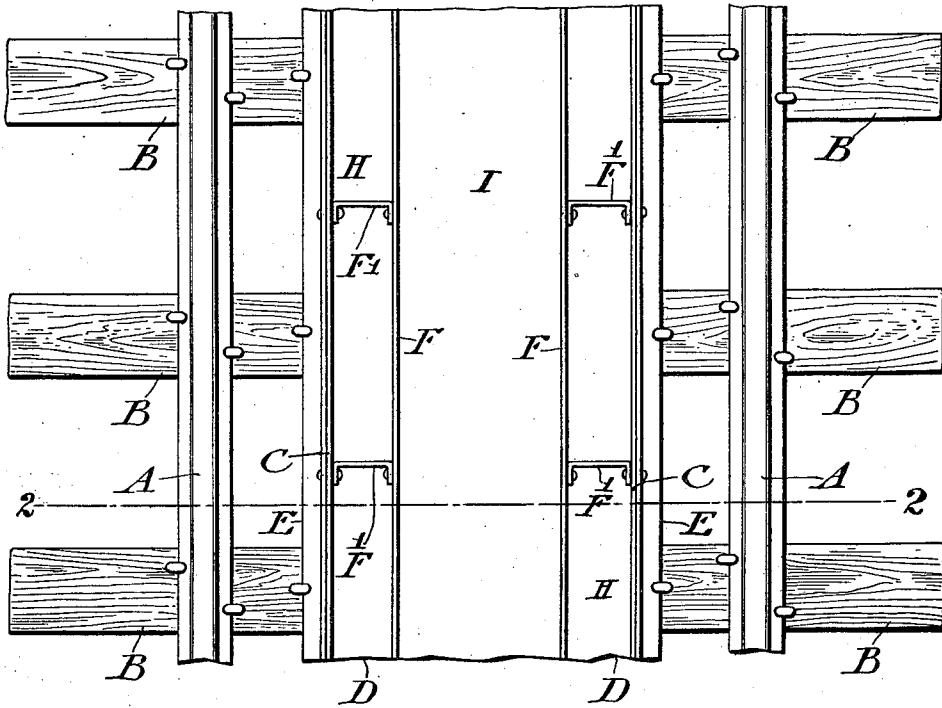
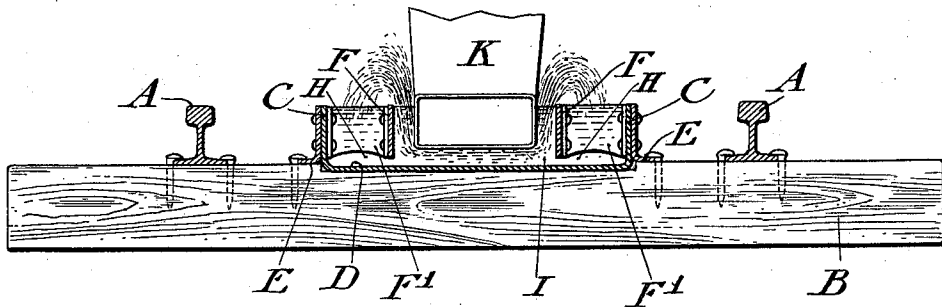


FIG. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

EDWARD D. NELSON, OF ALTOONA, PENNSYLVANIA.

RAILROAD TRACK-TANK.

1,000,749.

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Application filed March 17, 1911. Serial No. 615,006.

To all whom it may concern:

Be it known that I, EDWARD D. NELSON, a citizen of the United States of America, residing in the city of Altoona, county of Blair, State of Pennsylvania, have invented a certain new and useful Improvement in Railroad Track-Tanks, of which the following is a true and exact description, reference being had to the accompanying drawings, which form a part thereof.

My present invention relates to railway track tanks, *i. e.* the shallow water troughs placed between the track rails of a railway and from which water is taken by moving locomotives through suitable scoops carried by the tenders of the locomotives.

The object of my invention is to provide a tank of the kind specified, characterized by an increase in capacity for a given length and a decrease in water splashed out and wasted in operation as compared with the tanks of this general kind heretofore known.

In carrying out my invention I make the tank wider than has heretofore been the practice and place in it one or more longitudinal division walls so disposed as to provide a longitudinal scoop receiving space having substantially the same clear width for the passage of the scoop as the complete track tanks heretofore used, and provide in addition a supplemental water space at one or both sides of the scoop receiving space, and I so form the tank that these spaces are in communication.

The various features of novelty characterizing my invention are pointed out with particularity in the claims annexed to and forming a part of this specification. For a better understanding of the invention however and of the advantages possessed by it, reference should be had to the accompanying drawings and descriptive matter in which I have illustrated and described one of the forms in which my invention may be embodied.

Of the drawings, Figure 1 is a plan view of a portion of a railway road bed provided with my improved track tank, and Fig. 2 is a transverse section on the line 2—2 of Fig. 1.

In the drawings, A represents the track rails and B the cross ties of a railway road bed of standard type. Between the rails A and resting on the ties B is the track tank which comprises a trough shaped body having side walls C and a bottom D. The side walls are

advantageously stiffened by angle bars, the outturned bottom flanges of which are secured to the cross ties as by spikes. Within the tank are located a pair of longitudinal division walls F secured to and carried by pocket like members F' extending between and secured at their ends to each division wall F and the corresponding side wall C. The tank body and division walls provide three longitudinal water spaces H, I, H. The central space I should be in communication adjacent its bottom with the side spaces H, H. In the construction illustrated this is obtained by supporting the bottom edges of the division walls F above the bottom wall D of the tank body.

In the construction shown the division walls F F are spaced apart a sufficient distance to properly accommodate the scoop K which enters between these walls. The space I should be of the least width possible so as to properly accommodate the scoop and insure against undesired contact between the scoop K and the side walls of the water space into which it enters, and at the same time minimize the splashing out and wasting of the water. In practice the width of track tank heretofore employed has been somewhat greater than necessary, for it will be apparent without explanation that the amount of water splashed out of the tank space entered by the scoop on the passage of the latter will increase with an increase in the width of the spaces between the sides of the scoop and the side walls of said tank space, and practice has proved this. With the division walls F F at the minimum practical distance apart, however, the water splashed out is to a large extent decreased and that thrown out is to a large extent caught in the spaces H H and of course the water level in the three spaces H, I, H, equalized immediately after the passage of the scoop in each water withdrawing operation. The increase in tank capacity had with the new construction for a given length of tank is desirable for various reasons. The tanks must be located along level stretches of track, and long level portions are not always available at convenient watering stations. Moreover, even where a level track portion of greater length is available, it is desirable to make the tank only as long as is required to provide sufficient capacity for two or more locomotives on the same train and requiring

water at the same track tank. This is desirable at times as with a train, having one or more locomotives at its head or having one or more pushers at the rear of the train and requiring water to be conveyed to the tenders of some or all of these locomotives.

In the new construction the width of the tank body proper does not necessarily bear any relation to the size of the water lifting scoops and may be made nearly as wide as the distance between the track rails. With my invention I provide a larger cross section for the main tank body and thereby secure greater capacity than is had with the usual width of track tank heretofore employed. Any increase in width of the usual tank increases the quantity of water spilled while the scoop is passing through the tank space filled with water. In consequence, when the capacity of a tank of the usual construction heretofore employed is increased by increasing the width of the tank, the advantage due to the larger storage of water is partly lost through the consequent spilling of more water. This difficulty is not experienced with my invention.

While I prefer the form of tank illustrated in which there is a supplemental space H at each side of the scoop receiving space I, it will be apparent that some of the advantages of the invention may be obtained where only one division wall F is employed and in consequence a supplemental space is provided at one side only of the scoop receiving spaces.

While in accordance with the provisions of the statute, I have illustrated and described the best form of my invention now

known to me, it will be apparent to those skilled in the art that changes may be made in the form of the apparatus disclosed without departing from the spirit of my invention.

Having now described my invention what I claim as new and desire to secure by Letters Patent is:

1. A railroad track tank comprising bottom and sides, a longitudinal wall parallel to said sides and cooperating therewith to provide communicating water spaces, one of which is adapted to supply water to the scoop of a moving locomotive tender.

2. A railroad track tank comprising bottom side and division walls cooperating to provide three parallel communicating water spaces, the central one of which is adapted to supply water to the scoop of a moving locomotive tender.

3. A railroad track tank comprising a tank body having bottom and side walls and longitudinal division walls located between the side walls of the tank body and separated therefrom by water receiving spaces and spaced apart from each other the proper distance to accommodate the scoop of a locomotive tender taking water from said tank, said division walls being spaced away from the bottom wall of the tank body to permit water to flow into the space between said division walls from the spaces between the division walls and the side walls of the tank proper.

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Witnesses:

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