

J. E. CONLEY.
RAILWAY FROG.
APPLICATION FILED JULY 1, 1909.

960,156.

Patented May 31, 1910.

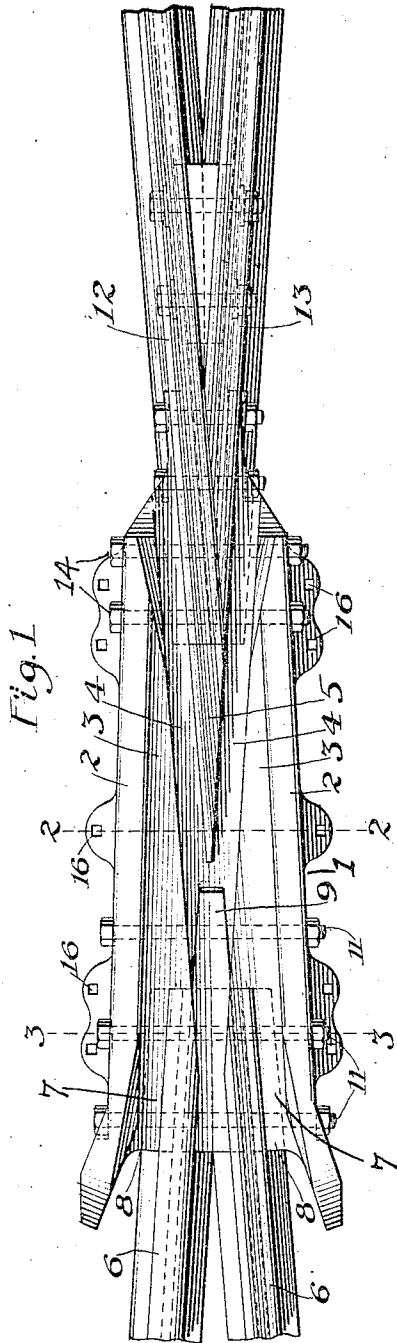


Fig. 3

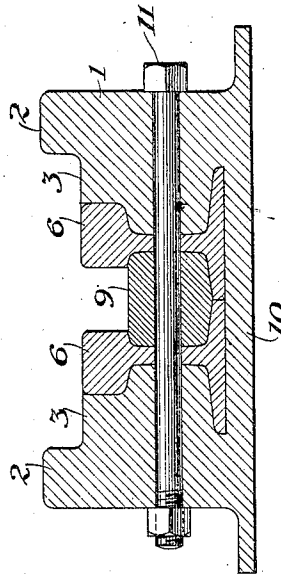
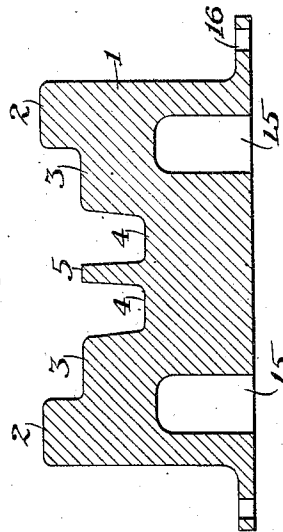


Fig. 2



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UNITED STATES PATENT OFFICE.

JOHN E. CONLEY, OF MEMPHIS, TENNESSEE.

RAILWAY-FROG.

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To all whom it may concern:

Be it known that I, JOHN E. CONLEY, a citizen of the United States, residing at Memphis, in the county of Shelby and State of Tennessee, have invented certain new and useful Improvements in Railway-Frogs, of which the following is a specification.

This invention relates to railway frogs, and has for its object to provide a new and improved device of this description.

Referring to the accompanying drawings, Figure 1 is a plan view of a frog embodying the invention; Fig. 2 is a sectional view taken on line 2—2 of Fig. 1. Fig. 3 is a sectional view taken on line 3—3 of Fig. 1.

Like numerals refer to like parts throughout the several figures.

As shown in the drawings, the central portion 1 of the frog consists of a single integral part, said part comprising the guide rails 2, portions 3 of the wing rails, the filler 4, and a portion 5 of the point. The central portion is provided at the toe end of the frog with a receiving space or recess in which is received the ends of the removable wing rail portions 6. Located between the ends of these removable wing rail portions and the guide rails 2 of the integral part are the portions 7 of the wing rail portions 3 which extend along the removable wing rail portions 6 for a part of their length. These portions 7 are beveled or curved at their ends 8 so as to be somewhat below the top of the rail portions 6, but are substantially flush with the tops of said wing rail portions 6 near their ends. Inserted between the wing rails 6 is a wedge 9 which is forced in between them and occupies the position shown in Fig. 3. This wedge holds said rails 6 apart and in proper alignment with the portions 3 of the wing rails of the integral central portion of the frog. The ends of the rails 6 rest upon a support 10 which extends across between the guide rails 2. This support may be integral with the central portion, or may be separate therefrom. The rails 6 and wedge 9 are held in place by fastening devices 11. These fastening devices may be bolts or any other suitable devices for this purpose. The parts 7 of the integral wing rail portions act to prevent the ends of the rails 6 from being battered, and they also receive and support any flange that may be on the outside of the car-wheel, caused by wear, and prevent it from injuring the frog. This construc-

tion in connection with the guide rails also prevents the wheel from passing onto the wrong rail as it passes from the frog. At the heel end of the frog are the two removable point rail portions 12 and 13. The rail portion 13 is wedge-shaped and acts as a wedge to cause the parts to be forced and held in proper alinement with the portion 5 of the point. The central portion 1 is recessed to receive these rail portions 12 and 13, and the ends of said rails rest upon a support which extends across between the guide rails. The rails 12 and 13 are held in place by the fastening devices 14.

The central portion 1 of the frog may be made of any desired material, such, for example, as manganese, and this central portion may be used with frogs of any desired length by simply fastening thereto wing rail portions 6—6, and point rail portions 12 and 13 of the desired length. The central portion of the frog ordinarily receives the greatest wear, but when constructed as herein shown it outlasts the removable rail portions, and when these rail portions are worn it will be seen that they can be readily removed and replaced by anyone, such as a section foreman, and the frog thus easily and cheaply renewed.

The wedge-shape of the rails 12 and 13 keeps the rails tight without the addition of a separate wedge for this purpose. The weight of the frog may be reduced, if desired, by removing or omitting portions of the metal, as shown at 15 in Fig. 2.

When the supports 10 are integral with the frog they may project therefrom and be provided with holes 16 through which holding devices may be inserted for holding the frog in place.

I claim:

1. A railway frog comprising an integral central portion forming the guide rails, a portion of the wing rails and a portion of the point, two point rail portions removably connected to the central portion, the guide rails and wing rail portions of the central portion extending beyond the inner ends of the two point rail portions.

2. A railway frog comprising a frog point, a filler, wing rails and guide rails formed from a single integral part, and removable rails detachably attached to each end of the frog so as to complete the same.

3. A railway frog comprising an integral central portion forming the guide rails, a

portion of the wing rails, the filler and a portion of the point, two wing rail portions removably connected to the central portion, and two point rail portions removably connected to the central portion.

4. A railway frog comprising an integral central portion forming the guide rails, a portion of the wing rails, the filler and a portion of the point, two wing rail portions removably connected to the central portion, and two point rail portions removably connected to the central portion, and a supporting part integral with said central portion, which passes under the ends of said removable rails so as to support the same.

5. A railway frog comprising an integral central portion forming the guide rails, a portion of the wing rails, the filler and a portion of the point, said central portion provided with a receiving space in proximity to said wing rail portions, two removable rails contained within said receiving space and forming continuations of said wing rail portions, a supporting part below said removable rails and extending from one of said guide rails to the other, and means for detachably connecting said removable rails in position.

6. A railway frog comprising an integral central portion forming the guide rails, a portion of the wing rails, the filler and a

portion of the point, said central portion provided with a receiving space in proximity to said wing rail portions, two removable rails contained within said receiving space and forming continuations of said wing rail portions, a supporting part below said removable rails and extending from one of said guide rails to the other, a wedge portion between said rails for holding them in proper alinement with said wing rail portions, and means for fastening said wedge and rails to said central portion.

7. A railway frog comprising the guide rails, the filler, portions of the wing rails and portions of the point formed into an integral central portion, two removable wing rail portions detachably connected with said central portion.

8. A railway frog comprising an integral central portion with a receiving space therein, two removable rail portions having their ends projecting into said receiving space, a wedge located between said rail portions and extending beyond the inner ends thereof, and means for holding the rail portions and wedge in position.

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Witnesses:

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