## G. V. HARIMAN. RAILROAD RAIL.

(Application filed June 19, 1897.)

(No Model.)

Witnesses

G.V. Hariman,

## United States Patent Office.

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## RAILROAD-RAIL.

SPECIFICATION forming part of Letters Patent No. 609,024, dated August 16, 1898.

Application filed June 19, 1897. Serial No. 641,436. (No model.)

To all whom it may concern:

Be it known that I, GEORGE V. HARIMAN, residing at Denison, in the county of Grayson and State of Texas, have invented a new and 5 useful Railroad-Rail, of which the following

is a specification.

My invention relates to improvements in railroad-rails; and the object thereof is to provide a rail that will afford more wear and be to cheaper than the ordinary rail now employed. I accomplish this object by forming the rail in two parts and so arrange them that the tread-section will break joints with adjacent base-sections, thereby avoiding the use of 15 fish-plates and a large number of bolts. I also arrange the two parts so that the treadsection can be easily reversed, so that both sides will be able to be used.

My invention consists of the above arrange-20 ment of parts and such other novel arrangement and construction of parts as will be hereinafter more fully described, and specifically

pointed out in the claims.

In order that my invention may be fully 25 understood, I will proceed to describe the same with reference to the accompanying drawings, in which—

Figure 1 is a perspective view. Fig. 2 is a vertical transverse section, and Fig. 3 a de-

30 tached detail perspective view.

In the said drawings, A and B represent the two parts of the rail. The part A or base portion is provided with the flange C, by which it is secured in place on the ties, the longitu-35 dinal groove D, and the longitudinal curved groove E, which when the part A of the rail is in place forms a recess through which air passes, thereby reducing the expansion of the rail to a minimum. The part A is further 40 provided with the bevelor angle edge F, which fits in a corresponding angular or bevel recess G in the part B.

The part B of the rail is provided with the tread portion H and the web or flat extension | 45 I, which fits in the longitudinal groove D when the two parts are in position to be locked together. It is provided with the elongated bolt-openings I' to allow for contraction or expansion of that part when in position and 50 with the angular or bevel recesses G on each side, which allow for the reversing of this part, so as to present a new tread-surface to the

car-wheels. In practice the part A is first secured in po-

sition and the part B then secured in position 55 and so arranged that its middle point will be over the joint formed by the ends of adjacent parts A and in this manner avoiding the use of fish-plates and requiring a less number of bolts than is ordinarily used.

From the foregoing description it will be seen that I have provided a rail that can be produced at a very low figure and from which a greater amount of wear can be had, owing to the tread being enabled to be reversed; 65 also, by my particular arrangement of the two parts the danger arising from a broken rail is materially decreased, as the bevel and recess will hold the two parts in proper position. This arrangement also provides for the 70 easy and quick removal and substitution of any broken part.

Having thus fully described my invention, what I claim as new, and desire to secure by

Letters Patent, is—

1. A railroad-rail comprising a flange having a longitudinal groove centrally arranged in the upper surface thereof, a web formed on one side of said groove, and a head provided with a web extending downwardly from 80 the longitudinal center thereof and having a groove on the under side of the head at each side of the web, whereby the head portion may be reversed and its web, in either position, inserted in the groove in the flange, the 85 upper edge of the web of the flange portion being adapted to engage into either of the grooves in the bottom of the head, substantially as described.

2. A railroad-rail consisting of a flange or 90 base having a central longitudinal groove and a web extending upward on one side thereof, in combination with a reversible head provided with a single web depending therefrom and having longitudinal grooves in its 95 under surface on each side of said web, the webs being provided with suitable bolt-holes, and bolts engaging through the bolt-holes of both webs to secure them together, the head, by virtue of the provision of the single web 100 with a groove on each side, being adapted to be engaged with the base and its web when turned with either side out, substantially as described.

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Witnesses:

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