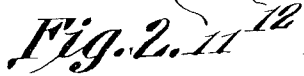


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1,032,221.

Patented July 9, 1912.



Witnesses
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UNITED STATES PATENT OFFICE.

THEODORE H. KRUSE, OF ARVADA, COLORADO.

RAILROAD-RAIL.

1,032,221.

Specification of Letters Patent.

Patented July 9, 1912.

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To all whom it may concern:

Be it known that I, THEODORE H. KRUSE, a citizen of the United States, residing at Arvada, in the county of Jefferson and State of Colorado, have invented a new and useful Railroad-Rail, of which the following is a specification.

It is the object of the present invention to provide a joint for a railroad rail which will not sag or move out of alinement.

A further object of the invention is to provide a novel form of rail chair, adapted to support a rail against sagging.

A further object of the invention is to provide novel means for holding the balls of a pair of scarfed rails against sagging.

With the foregoing and other objects in view, which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of invention herein disclosed can be made within the scope of what is claimed without departing from the spirit of the invention.

In the accompanying drawings, Figure 1 shows the invention in perspective; Fig. 2 is a section upon the line 2—2 of Fig. 1; Fig. 3 is a sectional perspective showing one of the scarfed ends of the rails; Fig. 4 is a perspective of the rail chair upon which the rails are supported; and Fig. 5 is a perspective of the rod which is inserted between the balls of the rails, to prevent the same from sagging.

In the accompanying drawings, a pair of rails are shown, and denoted by the numerals 1 and 2. The rails 1 and 2 are scarfed together, as shown at 3, the rails including a transverse shoulder 4 and a tongue 5, the end of the tongue of one rail being adapted to abut against the shoulder of the other rail.

Referring particularly to Fig. 3, it will be seen that grooves 6 extend longitudinally of the meeting faces 7 of the tongues 5, the grooves 6 being located opposite the balls of the rails. These grooves 6 unite to form an opening, preferably of circular contour, the opening extending from the shoulder 4

in one rail to the shoulder 4 in the other rail. Into the opening formed by the cooperating grooves 6, a rod 8 is placed, the rod 8 preferably, although not necessarily, being circular in cross section. Owing to the fact that the rod 8 is removable, there is no outstanding projection upon the face 7, which projection is likely to be damaged and battered, in the shipment and in the placing of the rails. The rod 8 cannot become damaged or battered, by the handling of the rails, and the fitting together of the parts rests solely upon the small, inexpensive rod 8, which may be cast aside, in case it does not fit perfectly in the mating grooves 6. If the rod 8 is formed integrally with one rail, as an outstanding rib, any damage to this rib, would necessitate the supplying of a new rail. Applied to the opposite faces of the rails, and extending from the balls to the flanges of the rails, are fish plates 9, attached to the rails by means of bolts 10 or other securing elements adapted to a like end.

The invention further includes a rail chair, seen most clearly in Fig. 4 of the drawings. This rail chair comprises a flat base plate 11, provided with transverse heads 12 of the same thickness as the plate 11, the heads 12 being provided with openings 14, located beyond the edges of the base plate 11. The longitudinal edges of the base plate 11 are turned inwardly, to form flanges 15, adapted to engage the flanges of the rails 1 and 2. A pair of ties are shown at 16, the heads 12 resting upon the ties 16. Spikes 17 or the like are inserted through the openings 14, into engagement with the ties 16.

The construction of the entire device is such that the rail will be prevented from sagging, and from losing its alinement. The device may readily be assembled, and is not likely to damage in shipment.

Having thus described the invention, what is claimed is:—

In a device of the class described, a pair of scarfed rails, each comprising a transverse shoulder and a tongue, the end of the tongue of one rail being disposed in close relation to the shoulder of the other rail,

there being mating grooves in the adjacent faces of the tongues only, the grooves extending from the shoulder of one rail to the shoulder of the other rail; and a rod removably seated in the grooves, the rod being held by the shoulders against longitudinal movement.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

THEODORE H. KRUSE.

Witnesses:

JOHN J. WEAVER,

WALTER E. LUPTON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
