

No. 609,853.

Patented Aug. 30, 1898.

A. VIETOR.  
RAILWAY RAIL JOINT.

(Application filed Dec. 27, 1897.)

(No Model.)

Fig. 1.

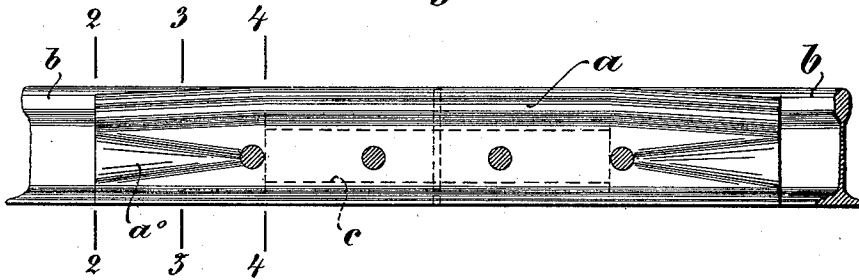


Fig. 2.

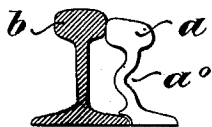


Fig. 2 a.

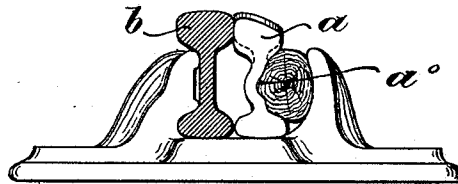


Fig. 3.

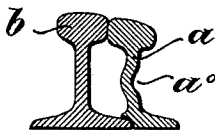
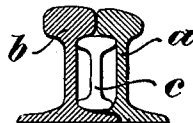


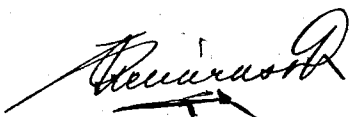
Fig. 4.



Witnesses:

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# UNITED STATES PATENT OFFICE.

ALWIN VIETOR, OF WIESBADEN, GERMANY, ASSIGNOR TO AUSFÜHRUNGEN FÜR EISENBAHN - OBERBAU - ABTHEILUNG STOSSFANGSCHIENE SIEGM EPPENSTEIN, OF BERLIN, GERMANY.

## RAILWAY-RAIL JOINT.

SPECIFICATION forming part of Letters Patent No. 609,853, dated August 30, 1898.

Application filed December 27, 1897. Serial No. 663,593. (No model.)

*To all whom it may concern:*

Be it known that I, ALWIN VIETOR, doctor of philosophy, a subject of the King of Prussia, German Emperor, residing at Wiesbaden, in the Kingdom of Prussia, German Empire, have invented a new and useful Railway-Rail Joint, of which the following is a specification.

The invention relates to railway-rail joints which are provided with an auxiliary rail arranged aside of the joined ends of the main rails on the outside of the track and fastened on the sleepers, as shown and described in Letters Patent No. 532,421. Such auxiliary rails have a top surface which slopes toward both ends; and the invention consists in a rail having such sloping surfaces and capable of being produced at a lower price and with a higher degree of durability. Up to today the auxiliary rails are rolled as the ordinary railway-rails and cut in pieces of proper length. Then the upper surface of the rail-head is made sloping at both ends by planing, milling, or the like. This work is very expensive and the inclined surfaces shaped in such a manner are more liable to wear than the intermediate horizontal part of the top surface of the rail-head, this middle part being still coated with the rolling-skin, which has, as is well known, a superior strength. According to the present invention the sloping surfaces in question are produced by pressing down the ends of the head of the auxiliary rail either still hot from rolling or reheated, so that the web is compressed and the head of the rail lowered at both ends, while the foot of the rail keeps its straight

shape throughout its length. When applying suitable dies, the lowering of the rail-head ends may be facilitated by bending out the web ends. This method is very cheap and preserves the rolling-skin even at the ends of the rail-head.

Figure 1 represents an elevation of a rail-joint with an auxiliary rail, the head of the latter being bent down at both ends to produce inclined top surfaces. Fig. 2 is a cross-section taken along line 2 2 at Fig. 1. Fig. 2<sup>a</sup> is a similar cross-section showing double-headed rails supported in chairs. Figs. 3 and 4 are cross-sections on lines 3 3 and 4 4 of Fig. 1, respectively.

The middle part of the auxiliary rail *a* is of equal height to the track-rails *b*, while at the ends the rail-head is sloping, the web being bent out at *a*<sup>0</sup> in proportion to the depression of the rail-head. A double fish-plate *c* may be placed between both rails to stiffen the joint.

What I claim as my invention, and desire to secure by Letters Patent of the United States, is—

In an auxiliary rail for railway-rail joints the head pressed down at both ends and the web bent out in proportion to the depression of the head, essentially as shown and described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

ALWIN VIETOR.

Witnesses:

RICHARD PRIEST,  
CHAS. H. DAY.