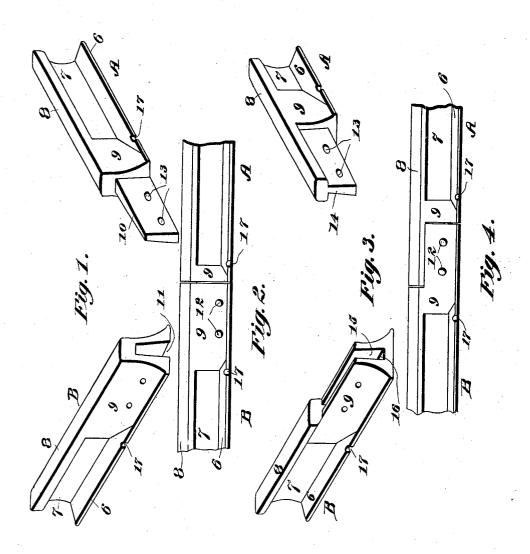
## Z. E. FIVEASH. RAILWAY RAIL JOINT.

(Application filed May 7, 1902.)

(No Model.)



WITNESSES: F. W. Barrow. O. E. Murray.

Zian E. Fiveash

BY

Milo B. Stevens + leo.

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## UNITED STATES PATENT OFFICE.

ZIAN ELMORE FIVEASH, OF HATTIESBURG, MISSISSIPPI.

## RAILWAY-RAIL JOINT.

SPECIFICATION forming part of Letters Patent No. 713,083, dated November 11, 1902.

Application filed May 7, 1902. Serial No. 106,247. (No model.)

To all whom it may concern:

Be it known that I, ZIAN ELMORE FIVEASH, a citizen of the United States, residing at Hattiesburg, in the county of Perry and State of 5 Mississippi, have invented certain new and useful Improvements in Railway-Rail Joints; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the 10 art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the characters of reference marked thereon, which form a part of this specification.

My invention relates to improvements in rail-joints, more particularly that class known as "searf-joints." It has for its object to produce a rail-joint which will be strong and durable and also simple in its construction.

A further object is to produce a rail-joint by which the rails may be easily assembled and separated.

The invention is embodied in novel parts, arrangements, and combinations of parts here-25 inafter described, and particularly set forth in the claims.

In the drawings, Figure 1 is a perspective view of the adjacent ends of the rails constructed in accordance with my invention, so showing them separated. Fig. 2 is a side elevation of the completed joint. Figs. 3 and 4 are views similar to Figs. 1 and 2, showing a modified form of my invention.

Referring to the drawings, the adjacent 35 rails are designated A and B. The base of the rail is indicated at 6. 7 is the web, and 8 is the head. The webs of both rails are widened somewhat for some distance from their respective ends, as indicated at 9. The 40 end of the rail A is provided with a tongue 10, extending from the bottom of the rail to the head. This tongue is wedge-shaped with respect to its length and height and is adapted to enter a corresponding-shaped channel 11

in the adjoining rail B. By making the 45 tongue wedge-shaped a very strong and durable joint is obtained. The rails are further secured together by bolts 12, passing through the enlarged web of the rail B and the tongue. The bolt-holes 13 in the tongue 50 are oblong-shaped, as usual, to allow contraction and expansion of the rail.

In the modified form of my invention a tongue 14 of a height the same as the web enters a corresponding channel 15 in the ad- 55 joining rail, the parts being bolted together as in the other construction. This tongue 14 is also wedge-shaped with respect to its length and height. In this construction the tongue does not rest on the sleeper directly, but on 60 the bottom 16 of the channel.

The rails are spiked to the sleepers, as usual, the spikes being driven through notches 17,

cut in the base of the rail.

Having thus described my invention, what 65 is claimed as new, and desired to be secured by Letters Patent, is-

1. The combination with a rail having a tenon wedge-shaped with respect to both length and height projecting from the end 70 thereof, of a meeting rail having a mortise at the end, thereof, to receive said tenon, substantially as shown and described.

2. The combination with a rail having a wedge-shaped tenon projecting from the web 75 at the end thereof, the base of the rail being cut away below said tenon, of a meeting rail having a mortise at the end in the web only, thereof, to receive said tenon, the head of the rail being cut away above said mortise, sub- 80 stantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

ZIAN ELMORE FIVEASH.

Witnesses:

A. B. McGill, J. A. McGill.