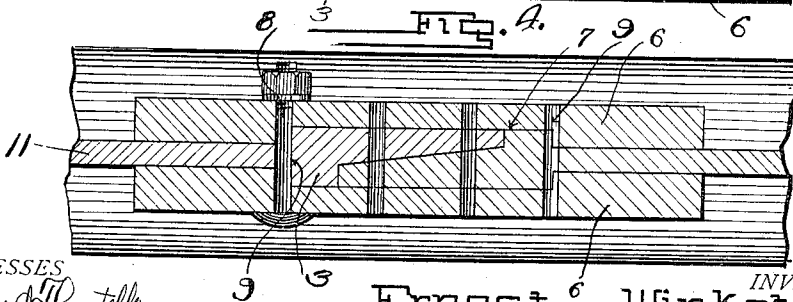
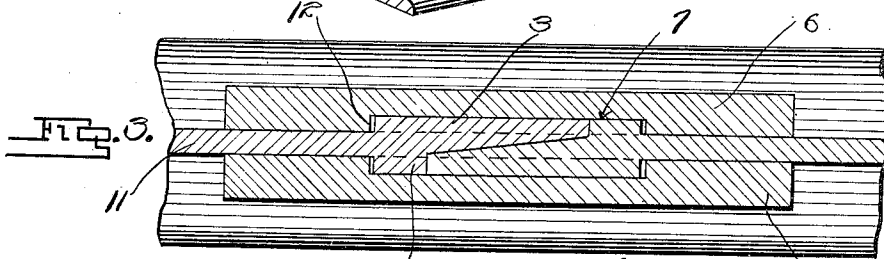
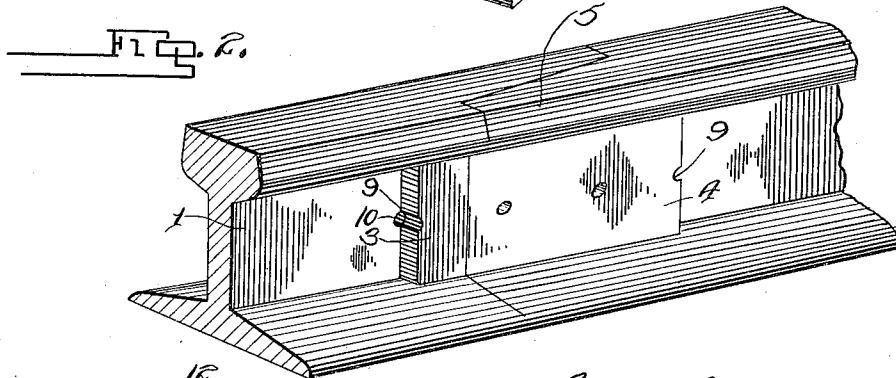
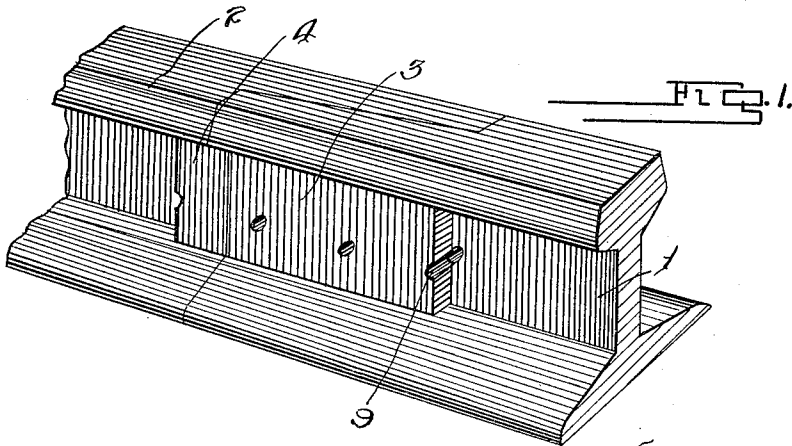


E. WINKSTERN.
RAILROAD JOINT.

APPLICATION FILED NOV. 13, 1911. RENEWED NOV. 12, 1912.

1,064,803.

Patented June 17, 1913.



WITNESSES
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UNITED STATES PATENT OFFICE.

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RAILROAD-JOINT.

1,064,803.

Specification of Letters Patent.

Patented June 17, 1913.

Application filed November 13, 1911, Serial No. 660,074. Renewed November 12, 1912. Serial No. 731,038.

To all whom it may concern:

Be it known that I, ERNEST WINKSTERN, a citizen of the United States, residing at Medina, in the county of Orleans and State of New York, have invented certain new and useful Improvements in Railroad-Joints, of which the following is a specification, reference being had therein to the accompanying drawing.

10 This invention relates to rail joints and has particular reference to a rail joint which may be easily manufactured and form an efficient rail securing means.

One of the principal objects of the present invention is the production of a rail joint wherein the rails are provided with similarly constructed ends so that it will only be necessary to use one common die in forming the same.

20 Another object of this invention is the production of an efficient means whereby the longitudinal movement of the different rails will be limited.

In the drawings, Figure 1 is a perspective view of the rail joint showing the same as viewed from one side. Fig. 2 is a perspective view of the rail joint looking from the opposite side of the rail from that disclosed in Fig. 1. Fig. 3 is a longitudinal sectional view of the rail joint taken just below the securing bolts. Fig. 4 is a longitudinal sectional view taken through the securing bolts.

Referring to the accompanying drawings by numerals 1 designates one rail and 2 designates the other rail. Each of the rails is provided with a long reinforced web portion 3, and a short reinforced web portion 4 placed upon opposite sides. The long reinforced web portion 3 of one of the rails is adapted to abut against the reinforced portion 4 of the opposite rail so as to form a continuous reinforced web along the joint of the two rails upon each side thereof. Each rail is provided with a tapering end 5 having a pocket formed upon one side thereof for receiving the tapering end of the adjacent rail.

By having the rails formed as just described, it will be obvious that an interchangeable rail has been produced.

A fish plate 6 is placed upon each side of the rail and this fish-plate is provided with a socket 7 within which is adapted to fit the

reinforced web portions of the rails as clearly disclosed in Fig. 4. Of course, the usual bolts 8 pass through the reinforced web portions, and fish-plates for firmly securing the fish-plates in engagement with the rails. The reinforced portions are provided with cut-out sockets 9 which are formed adjacent to the apertures 10 through which the securing bolts 8 pass. One of these sockets is formed upon the outer end of each of the reinforced webs 3 and 4.

In Fig. 3, I have shown the relative width of the usual web 11 of the rail in dotted lines so that the enlargement of the reinforced portions 3 and 4 may be readily determined. The sockets 7 are provided upon their ends with shoulders 12 which normally limit the longitudinal movement of said reinforced portions within the sockets 7. The sockets 7 are, however, made slightly longer than the length of the reinforced portions 3 and 4 so as to allow for the lineal expansion of the rails under certain conditions.

From the foregoing description, it will be obvious that a very efficient and easily constructed joint has been produced and the rails of which are interchangeable.

It will further be obvious that through the medium of the enlarged webs 3 and 4 which are provided with squared shoulders as illustrated in Figs. 3 and 4 the longitudinal movement of the rails will be limited only allowing sufficient movement to compensate for the lineal expansion of the rail.

What is claimed is:—

A rail joint comprising a pair of similarly constructed interchangeable rails, each rail being provided with a short reinforcing portion upon one side thereof, and a long reinforcing portion upon the other side, each rail being provided with a tapering end upon one side thereof, constituting a pocket upon one side thereof, the tapering end of one rail fitting in the pocket of the other rail, the long reinforcing portion of one rail abutting against the short reinforcing portion of the other rail for constituting a continuous reinforcing web at the joint of the rails, a pair of fish plates fitting upon the sides of said rails and being provided with socket portions fitting over said reinforcing portions, shoulders formed at the ends of

said sockets and being adapted to limit the longitudinal movement of said rails, said rails being each provided with a plurality of transversely extending apertures through
5 their long reinforcing portions and an aperture formed adjacent the outer end of said short reinforcing portion, the end of each of said short reinforcing portions being provided with a transversely extending groove
10 communicating with said aperture formed adjacent the outer end of said short rein-

forcing portion, bolts passing through said apertures, and said transversely extending grooves in said short reinforcing portions constituting bearings for said bolts seated 15 therein.

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

ERNEST WINKSTERN.

Witnesses:

LEON M. SHERWOOD,
LOUISE QUINN.

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