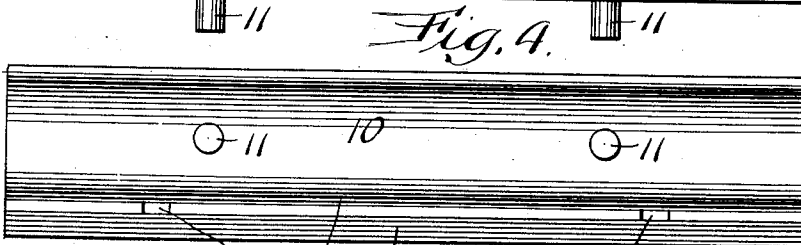
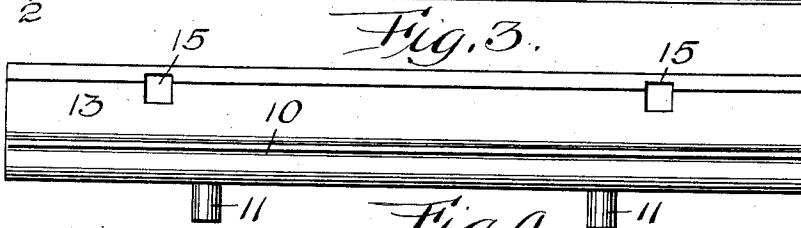
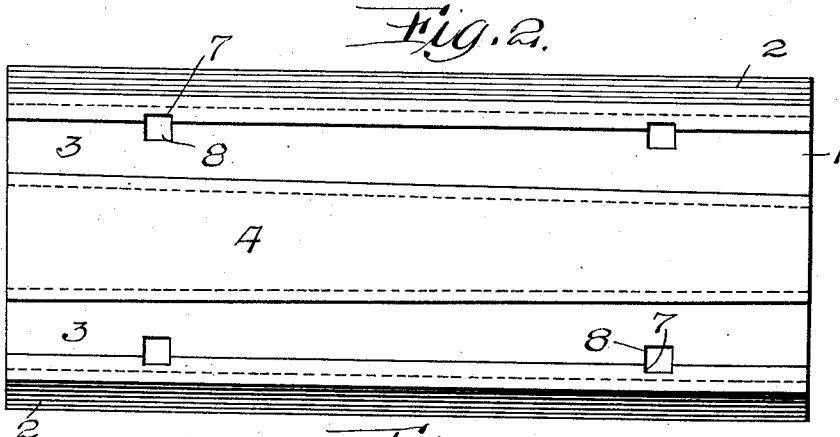
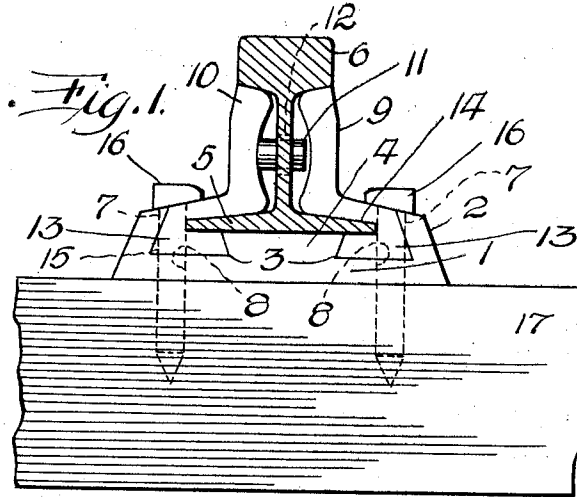


W. L. EBY.
RAIL FASTENER.

APPLICATION FILED JULY 19, 1912.

1,062,957.

Patented May 27, 1913.



WITNESSES

Samuel Payne
J. C. Appleman,

INVENTOR

By W. L. Eby.

R. C. Everett & Co.
Att'ys

UNITED STATES PATENT OFFICE.

WILLIAM LINLEY EBY, OF WELLSVILLE, OHIO.

RAIL-FASTENER.

1,062,957.

Specification of Letters Patent.

Patented May 27, 1913.

Application filed July 19, 1912. Serial No. 710,503.

To all whom it may concern:

Be it known that I, WILLIAM LINLEY EBY, a citizen of the United States of America, residing at Wellsville, in the county of Columbiana and State of Ohio, have invented certain new and useful Improvements in Rail-Fasteners, of which the following is a specification, reference being had therein to the accompanying drawing.

10 This invention relates to rail fasteners, and the objects of my invention are to provide a rail chair upon which the confronting ends of rails can be easily mounted, and to furnish the chair with rail fasteners that prevent vertical and lateral displacement of the rails mounted thereon.

Other objects of my invention are to obviate the necessity of using bolts and nuts for connecting splice-bars to the sides of rails, and to provide a rail chair to which splice-bars can be easily and quickly connected by unskilled labor.

Further objects of my invention are to provide a strong and durable rail chair that can be easily mounted upon the present type of a wooden tie or anchored in a concrete body, and to accomplish the above results by a mechanical construction that is inexpensive to manufacture and highly efficient for the purposes for which it is intended.

With the above and other objects in view, the invention resides in a novel construction, combination and arrangement of parts to be hereinafter specifically described and then claimed.

Reference will now be had to the drawing, wherein:—

40 Figure 1 is an end view of a rail chair in accordance with this invention. Fig. 2 is a plan of the same. Fig. 3 is a plan of a detached splice-bar, and Fig. 4 is a side elevation of the same.

45 The reference numeral 1 denotes a metallic rail chair having inclined side walls 2. The chair 1 can be of any desired length to bridge one or more ties, and said chair, adjacent to the side walls 2 thereof, is provided with longitudinal dove-tailed grooves 3 that extend the entire length of said chair. The grooves 3 leave a longitudinal central seat 4 for the base flanges 5 of rails 6 mounted upon the chair, the base flanges 5 extending over the grooves 3. The outer walls of the grooves 3 are of a greater height than the inner walls thereof and said

outer walls have the inner sides thereof provided with vertical spike grooves 7 alining with the spike openings 8 in the chair 1.

The reference numerals 9 and 10 denote splice-bars and these splice-bars are identical in construction, with the exception that the inner side of the splice-bar 10 is provided with pins 11 adapted to extend through openings 12 provided therefor in the webs of the rails 6. The pins 11 are adapted to prevent longitudinal displacement of the rails relatively to the chair 1. The lateral flanges of the splice-bars 9 and 10 have depending longitudinal dove-tailed tongues 13 that fit in the grooves 3 of the chair 1. The longitudinal tongues 13 have the inner side walls thereof provided with longitudinal grooves 14 to receive the base flanges 5 of the rails 6. The tongues 13 are provided with vertical spike openings 15 and these openings are adapted to register with the openings 8 whereby spikes 16 can be driven through said openings into a tie 17. The spikes 16 prevent the rail chair 1 from becoming displaced relatively to the tie 17, also preventing longitudinal displacement of the splice-bars 9 and 10, while the tongues 13 of said bars prevent vertical displacement thereof.

By inclining the outer walls of the chair 1, the chair has a dove-tailed shape in cross section which permits of said chair being anchored in a concrete body.

As illustrated in Fig. 2, the dove-tailed grooves 3 of the chair taper from one end of the chair to the opposite end thereof, consequently creeping of the splice-bars 9 and 10 is prevented in one direction, but I reserve the right to make these grooves of the same width throughout, whereby the rail chair 1 can be easily rolled.

While in the drawing there is illustrated a preferred embodiment of my invention, it is to be understood that the structural elements are susceptible of such changes as fall within the scope of the appended claim.

What I claim is:—

In a rail fastener, a rail chair adapted to be mounted upon a tie and having its upper face formed with spaced longitudinally extending parallel dove-tailed grooves each having its outer wall of greater height than its inner wall, said chair further having its upper face provided with a centrally disposed seat for the bases of a pair of rails and arranged in a plane below the top of

the outer walls of said grooves, a pair of
splice bars bracing the sides of said rails
and one formed with integral pins extending
into the openings of the rails, each of said
5 splice bars having lateral flanges seated
upon the upper faces of the bases of the
rails, depending longitudinally extending
dove-tailed angle-shaped tongues carried by
the lateral flanges of said splice bars and
10 fitting in said grooves, the upper face of
the horizontal member of said tongues form-
ing a continuation of said seat, said flanges
and tongues flush with the top of said chair,
spikes extending through the top of said

chair and through the vertical member of 15
said tongues and adapted to engage in the
tie for securing the chair in position, said
spikes adapted to abut against the longitu-
dinal edges of the bases of the rail, and the
heads of said spikes engaging with the upper 20
face of the flanges and chair.

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

WILLIAM LINLEY EBY.

Witnesses:

A. NOBLE,
W. A. O'GRADY.

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