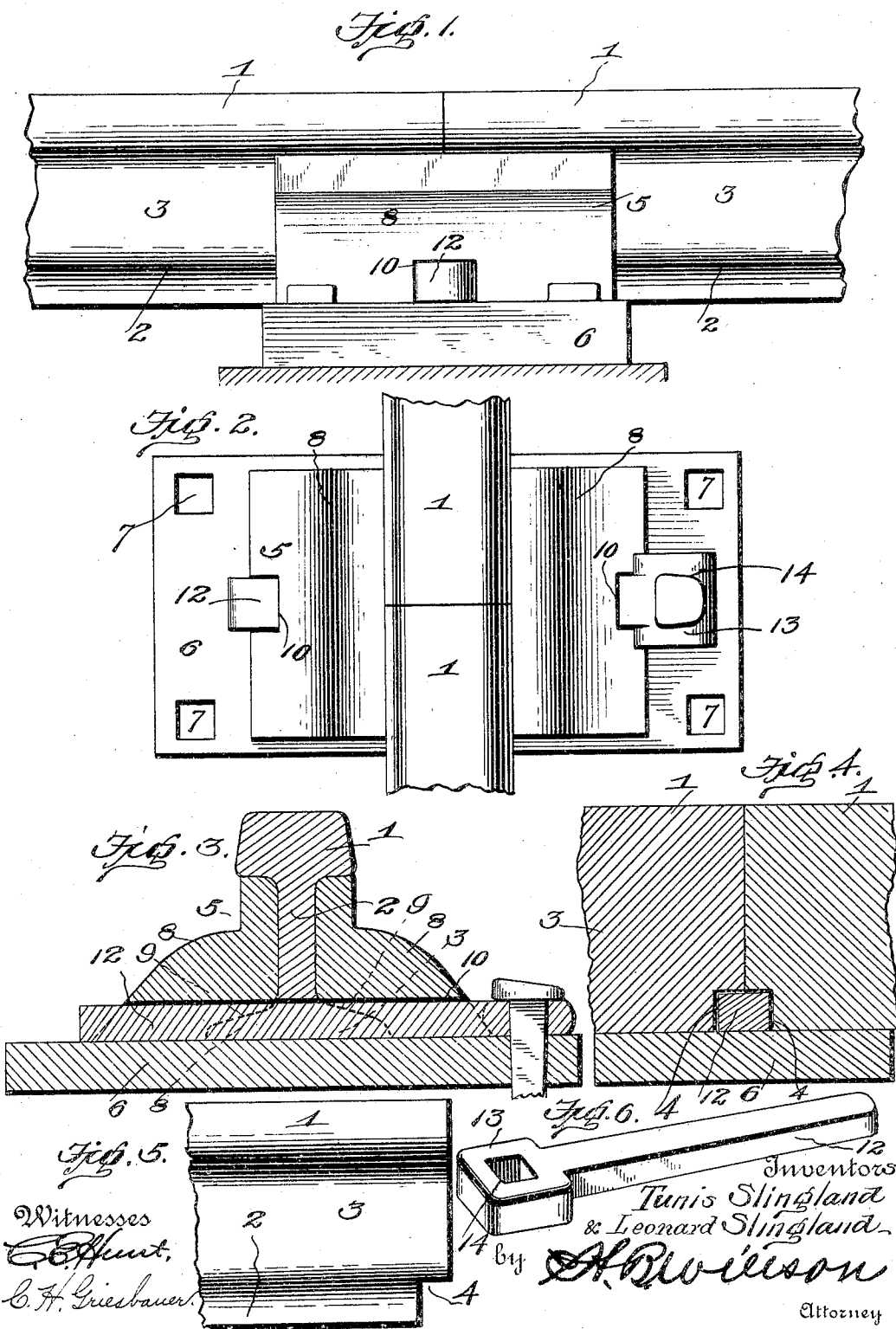


T. & L. SLINGLAND.
RAIL JOINT.
APPLICATION FILED APR. 3, 1905.



UNITED STATES PATENT OFFICE.

TUNIS SLINGLAND AND LEONARD SLINGLAND, OF PATERSON, NEW JERSEY.

RAIL-JOINT.

SPECIFICATION forming part of Letters Patent No. 794,322, dated July 11, 1905.

Application filed April 3, 1905. Serial No. 253,597.

To all whom it may concern:

Be it known that we, TUNIS SLINGLAND and LEONARD SLINGLAND, citizens of the United States, residing at Paterson, in the county of Passaic and State of New Jersey, have invented certain new and useful Improvements in Rail-Joints; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in joints for railway-rails.

The object of the invention is to provide a rail-joint whereby the end of the rail may be firmly secured to the ties and will be prevented from creeping.

A further object is to provide a rail-joint by which the ends of the rail may be connected together when firmly held in place without the use of bolts and nuts, thus increasing the strength of the rails by dispensing with the bolt-holes usually formed therein.

With these and other objects in view the invention consists of certain novel features of construction, combination, and arrangement of parts, as will be hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a side view of the meeting ends of two rail-sections, showing the application of the invention thereto. Fig. 2 is a top plan view of the same. Fig. 3 is a central transverse vertical sectional view. Fig. 4 is a longitudinal vertical sectional view. Fig. 5 is a fragmentary detail side view of the end of one of the rail-sections, and Fig. 6 is a detail perspective view of the locking-key.

Referring more particularly to the drawings, 1 1 denotes the meeting ends of two sections of rails, said rail-sections being of any desired construction, the flanges 2 being cut away at the base of the web 3 at each end of the sections, as shown at 4.

The ends of the rail-sections are adapted to be engaged with a joint-chair 5, said chair consisting of a base-plate 6, in the opposite corners of each end of which are formed spike-

holes 7, whereby the same is adapted to be spiked to the ties of the railway. Arranged on the upper side of the plate 6 and preferably cast integrally therewith are upwardly-projecting rail-engaging flanges 8. The inner walls of said flanges are shaped to fit the sides of the rails, the upper edges of said flanges engaging beneath the head or treads of the rails, thereby forming a brace or support for the same. The flanges of the rail are adapted to engage oppositely-projecting channels or recesses 9, formed at the base of the flange 8 immediately above the base-plate 6, thereby preventing the upward movement of the rails and keeping the same in perfect alinement at all times, thus preventing the bumping or hammering of the wheels of the train when passing over the ends of the rails.

In the base of the flanges 8 immediately above the base-plate 6 is formed a centrally-disposed transverse passage 10, which when the rails are placed in the chair is adapted to coincide or aline with the aperture or space 4 formed by the cut-away portions of the rail-flanges. When the rail-sections are thus engaged with the chair, the key-bar 12 is adapted to be inserted through the passage 10 and the recess 4, thereby preventing the longitudinal shifting or creeping of the rail. On one end of the key-bar is formed a head 13, in which is arranged an aperture or spike-hole 14. Through this spike-hole 14 is adapted to be driven a spike to hold the key-bar in position and to prevent the casual movement of the same from the passage 10.

By providing a rail-joint constructed as herein shown and described the necessity of bolting the ends of the rails together by fish-plates or other connections is dispensed with, thus obviating the many disadvantages of the latter form of rail-joint.

From the foregoing description, taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion, and the minor details of construction may be

resorted to without departing from the principle or sacrificing any of the advantages of this invention.

5 Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

10 In a rail-joint of the character described, the combination with a base-plate having formed therein spike-holes, of upwardly-projecting parallel flanges arranged on said plate to engage and fit the sides of the rails, said flanges having formed therein alined apertures, a key-bar adapted to be inserted through said alined apertures and through

coincident recesses formed in the meeting 15 ends of the rail-sections, a head on the key-bar provided with a spike-hole, and a spike driven through said spike-hole for securing said key-bar in place, substantially as described. 20

In testimony whereof we have hereunto set our hands in presence of two subscribing witnesses.

TUNIS SLINGLAND.
LEONARD SLINGLAND.

Witnesses:

ADRIANUS VAN DER WALL,
CORNELIUS JOHNSON.