A. D. CURRY.

RAILWAY SPIKE.

APPLICATION FILED NOV. 29, 1915.

1,214,436. Patented Jan. 30, 1917.

Fig 1

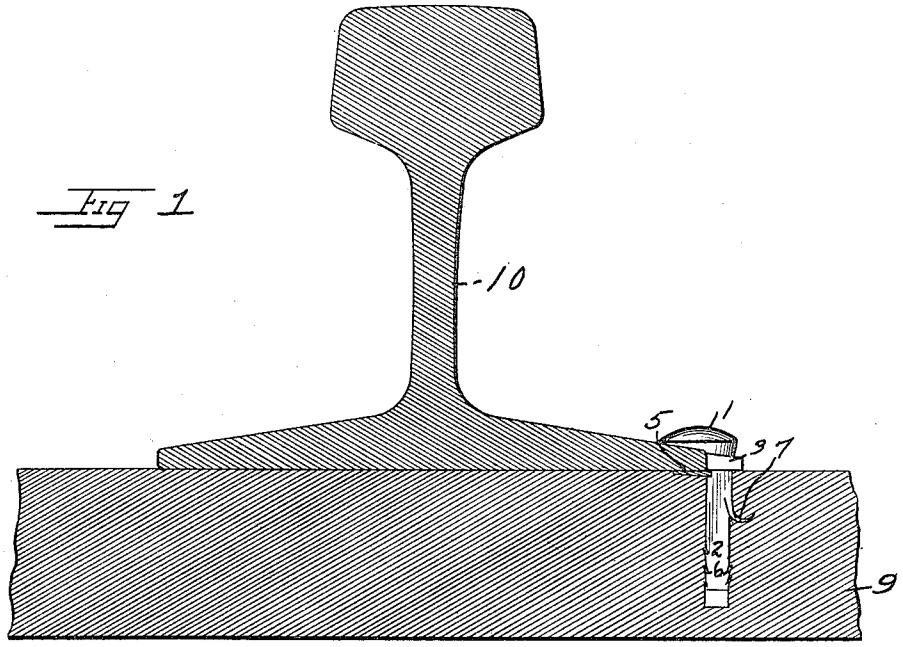


Fig 2

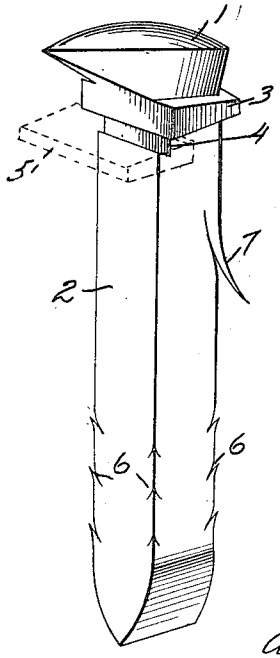
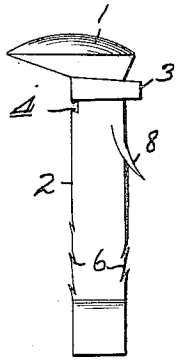


Fig 3



Inventor

Alexander D. Curry

By Geo. P. Kimmel.

Attorney

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

ALEXANDER D. CURRY, OF HAWKINSVILLE, GEORGIA.

RAILWAY-SPIKE.

1,214,436. Specification of Letters Patent. Patented Jan. 30, 1917.

Application filed November 29, 1915. Serial No. 64,078.

To all whom it may concern:

Be it known that I, ALEXANDER D. CURRY, a citizen of the United States, residing at Hawkinsville, in the county of Pulaski and State of Georgia, have invented certain new and useful Improvements in Railway-Spikes, of which the following is a specification.

This invention relates to the class of railway ties and fasteners, and more specifically to improvements in railway spikes.

The object of my invention is to provide a spike of a relatively simple construction that will so engage with the tie into which it is driven as not to become loosened and disengaged from the rail it is designed to hold. It is a well-known fact that the conventional type of spike now used on our railways does not effectively secure the rails, and that they frequently work loose, thus permitting the rail to turn, spread, or get out of alinement, and causing serious wrecks. With my novel type of spike this would be impossible, since it is formed with pronged members which make its removal, after being driven into a tie, almost impossible by ordinary traffic.

My device also embodies a novel chair for the base of the rail to seat upon, whereby the pounding of the rail upon a tie does not tend to loosen the spike as with the conventional type of spike, but only forces my spike more firmly into the tie and the rail into closer contact therewith.

Furthermore, my spike is provided with a shoulder which serves as a water shed, thus leading water away from the side of the spike and also preventing any water from seeping into the tie alongside of the spike. It is this seepage of water around the shanks of other types of spikes that causes them to become loosened in the wood, and the shoulder construction of my spike is designed to overcome this fault.

A still further object of my invention is to provide a spike with a relatively large bearing surface upon the front face thereof so that the pressure against the edge of the rail base will be greatly increased, thus holding the rail more firmly, and also lengthening the life of the spike.

Other objects of this invention not at this time more particularly enumerated, will be clearly understood from the detailed description and drawings forming a part of this specification.

Furthermore, this invention consists in the novel arrangement and combination of parts more particularly described in the following specification and embodied in the claims appended hereunto and forming a part of this application.

Referring now to the drawings, which are merely illustrative of my invention: Figure 1 is a longitudinal sectional view of a railway tie showing the application of my spike in operative position. Fig. 2 is a perspective view of the spike. Fig. 3 is a side elevation of a modified form of my spike.

Referring further to the drawings wherein similar reference characters designate similar parts throughout the respective views, 1 designates the head and 2 the shank of a spike, said shank being formed adjacent the head, with outwardly extending shoulders 3 upon both sides and the rear thereof, the upper surface of the shoulder being slanted downwardly to provide a water shed. A dovetailed groove 4 is formed transversely of said shank 2 and upon the front face thereof, at a certain point beneath said head 1. Said groove 4 is adapted to receive and retain a dovetailed rail chair 5 of relatively small dimensions.

The shank 2 of my spike is formed with a plurality of upwardly extending projections 6 upon the corners of the lower portion thereof, and relatively larger downwardly extending projections 7 upon the rear corners of the upper portion thereof. In the modified form shown in Fig. 3 of the drawings, a downwardly extending projection 8 is formed transversely of the shank 2 of the spike, upon the rear face of the upper portion thereof.

Before driving my spike into a tie 9, adjacent the rail 10, I first insert the dovetailed rail chair 5, into the dovetailed groove 4, and then drive the spike almost its entire length into the tie and then rest the edge of the rail on the said chair and against the spike after which the spike is driven home. To retain the rail in rigid position I provide a spike of the class now generally used on the opposite side of the rail. As the spike is driven into the wood, the downwardly extending projections will be caused to flare outwardly assuming a substantially hook shape which will anchor the spike securely in the tie. The shoulder 3 will act as a stop to regulate the distance which the shank may enter the tie.

The utility, adaptability, and advantages of my improved form of railway spikes being obvious, it is unnecessary to further enlarge upon the same herein.

Having now described and pointed out the new and useful features of my invention, I do not limit myself to the shape of certain parts where the shape is not essential, nor do I restrict myself to the exact details of construction shown and described, but mean and intend to claim all equivalents and variations thereof, not departing in principle from my invention, and falling within the purview of the appended claims.

What I claim as my invention and desire to secure by Letters Patent is:

1. A railway spike consisting of a head, a shank formed integral with said head, a shoulder formed upon said shank beneath said head, a dovetailed groove formed transversely in the front face of said shank adjacent said shoulder, and a dovetailed rail chair removably mounted in said groove.

2. A railway spike consisting of a head, a shank formed integral with said head, a plurality of oppositely disposed projections formed upon said shank, a shoulder formed upon said shank adjacent said head, a dovetailed groove formed transversely in the front face of said shank immediately below said shoulder, and a rail chair removably mounted within said groove.

3. The combination with a railway spike consisting of a head, a shank formed integral with the said head, a shoulder formed on the said shank, the upper surface of the said shoulder being slanted downwardly to provide a water shed, said spike being provided with a dovetailed groove, a dove tailed rail chair slidably mounted in the said groove to retain the edge of the flange of a rail between the said head and chair in rigid position.

In testimony whereof I affix my signature hereto.

ALEXANDER D. CURRY.

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