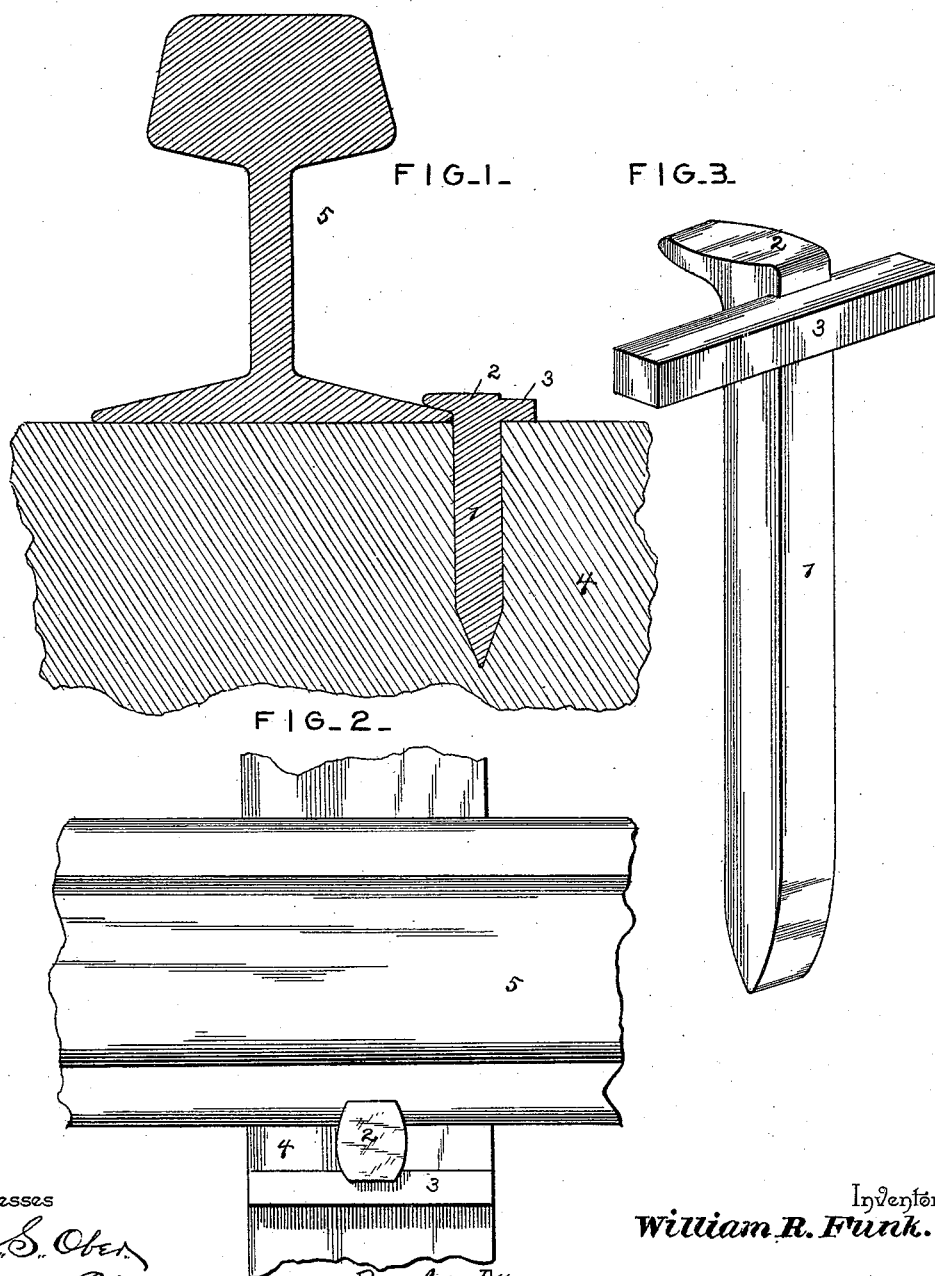


(No Model.)

W. R. FUNK.
RAILROAD SPIKE.

No. 457,267.

Patented Aug. 4, 1891.



Witnesses

B. S. Ober

W. S. Duval

By *his* Attorneys,

C. Snow & Co.

Inventor
William R. Funk.

UNITED STATES PATENT OFFICE.

WILLIAM R. FUNK, OF NEBRASKA CITY, NEBRASKA.

RAILROAD-SPIKE.

SPECIFICATION forming part of Letters Patent No. 457,267, dated August 4, 1891.

Application filed March 27, 1891. Serial No. 386,603. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM R. FUNK, a citizen of the United States, residing at Nebraska City, in the county of Otoe and State of Nebraska, have invented a new and useful Railroad-Spike, of which the following is a specification.

This invention relates to improvements in railroad-spikes, and the objects in view are to provide a spike which by its peculiar construction is especially adapted for curves of roads where the liability of spreading is great and where by the use of such a constructed spike the danger of spreading of the rails is decreased.

With the above objects in view the invention consists in a spike of the usual formation with the exception that the outer side of the spike near its upper end is provided with a lateral extension or brace projecting at each side of the spike and adapted to extend longitudinal with the rail, whereby said spike is prevented from yielding to the force exerted by the rails when traveled upon and tending to spread.

Referring to the drawings, Figure 1 is a transverse section of a rail, its tie, and a spike securing the former upon the latter, the spike being constructed in accordance with my invention. Fig. 2 is a plan of the rail, tie, and spike. Fig. 3 is a detail in perspective of the spike.

Like numerals of reference indicate like parts in all the figures of the drawings.

In constructing my spike I form the usual body portion or shank 1, which latter is tapered at its lower end, is rectangular in cross-section, and is provided at its upper end with the enlarged head 2, extended beyond the inner face of the spike in the usual manner. The outerside or face of the spike thus formed is provided with a horizontal brace 3, preferably rectangular in cross-section and of about the thickness of the base of a rail, so that being located at the upper end of the spike the under surface of the brace will rest flatly upon the tie when the head of the spike engages the rail and the spike is driven to position. This extension is formed integral with the spike and projects beyond the opposite sides of the same, thus constituting a rigid brace at the sides and rear of the spike to prevent any

movement thereof, as will hereinafter appear, and also serves to strengthen the neck of the spike, which point is subjected to the severest strain.

4 designates an ordinary tie, and 5 an ordinary rail-section, the spike constructed in accordance with my invention being driven into the former and having its head overlapping the base of the latter.

The spike is driven in the ordinary manner in the tie, and when so driven it will be observed that the brace is disposed at a right angle to the grain of the wood of which the tie is formed, so that said brace resists any tendency upon the part of the rails to force the spike in either direction. In the ordinary spike the rear edge of the same has but little resistance from the grain of the tie, and hence may be easily forced in the direction of the same, so that it has been found almost impossible to depend upon the ordinary spike for holding guard-rails, frogs, or the rails of curves in position, and for this reason numerous braces with more or less good effect have been employed. By experience, however, I have found that the spike herein described, while costing but little more than the ordinary spike, possesses great advantages in resisting the displacement of rails and may be applied with the same ease as an ordinary spike.

Having described my invention, what I claim is—

The herein-described improved spike, consisting of the body portion 1, the head 2, formed upon the upper inner side of the same and overlapping the base of the rail, and furthermore in the rectangular transverse brace 3, located at the outer side of the spike and made integral therewith, extending at each side of the same, adapted for longitudinal disposition with relation to a rail, and having its under surface resting flatly upon the tie, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

WILLIAM R. FUNK.

Witnesses:

D. T. HAYDEN,
J. S. MILLER.