

L. E. CAMPBELL.
RAILROAD SPIKE.
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950,040.

Patented Feb. 22, 1910.

Fig. 1.

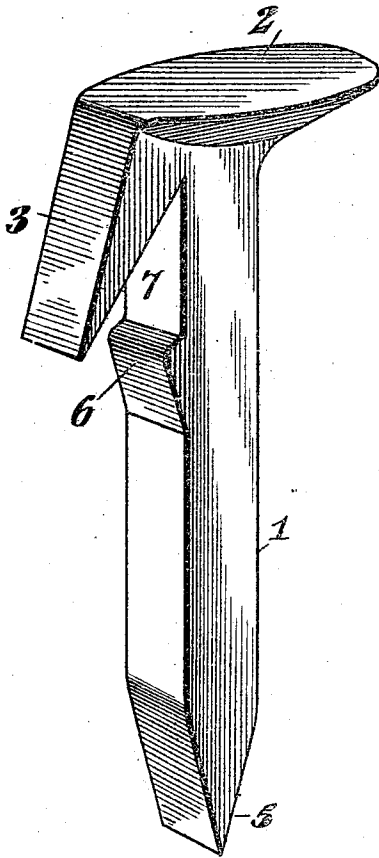
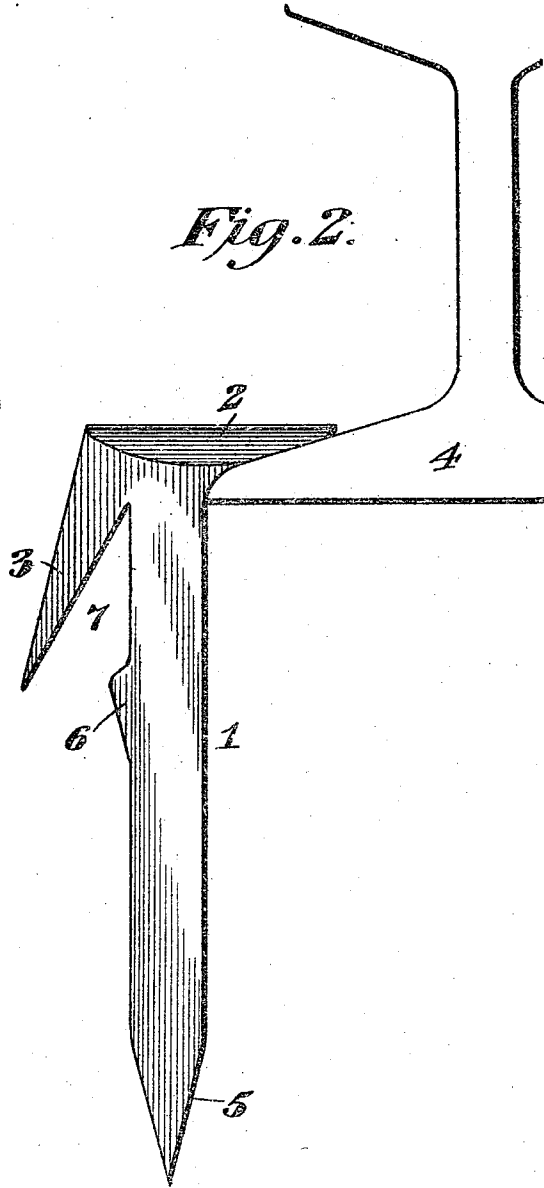


Fig. 2.



Witnesses
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UNITED STATES PATENT OFFICE.

LUTE ENSIGN CAMPBELL, OF TULSA, OKLAHOMA, ASSIGNOR OF ONE-HALF TO LEVI W. LINDSEY, OF TULSA, OKLAHOMA.

RAILROAD-SPIKE.

950,040.

Specification of Letters Patent.

Patented Feb. 22, 1910.

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To all whom it may concern:

Be it known that I, LUTE ENSIGN CAMPBELL, a citizen of the United States, residing at Tulsa, in the county of Tulsa and State of Oklahoma, have invented a new and useful Railroad-Spike, of which the following is a specification.

The invention relates to improvements in railroad spikes.

The object of the present invention is to improve the construction of railroad spikes, and to provide efficient means for locking the spike against both upward and backward movement, whereby the rail will be prevented from spreading and the spike from becoming loose.

With these and other objects in view, the invention consists in the construction and novel combination of parts hereinafter fully described, illustrated in the accompanying drawing, and pointed out in the claims hereto appended; it being understood that various changes in the form, proportion, size and minor details of construction, within the scope of the claims, may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawing:—Figure 1 is a perspective view of a railroad spike, constructed in accordance with this invention. Fig. 2 is a side elevation, showing the spike in engagement with the rail.

Like numerals of reference designate corresponding parts in all the figures of the drawing.

The railroad spike, which consists of a straight shank 1 and a rail-engaging head 2, is provided at the outer side with an inclined brace 3, tapered downwardly and extending from the outer end of the head 2 and arranged at an angle to the upper portion of the shank 1. The head 2, which projects from the inner or front side of the shank for engaging the bottom flange of the rail 4, also extends outwardly or rearwardly from the shank and has a flat upper face and is of the usual construction. The lower end 5 is tapered to enable it to be readily driven into a cross tie. The downwardly and rearwardly inclined tapered brace 3, which has straight faces, terminates in a point to enable it to readily penetrate the wood of a cross tie, and when the spike is driven into a cross tie, the brace prevents the spike from

being forced backward by the rail, and it thereby prevents the latter from spreading to eliminate accidents resulting from such a cause. The upper end of the brace is of a thickness substantially coextensive with the rearwardly projecting portion of the head. The brace also prevents the spike from turning in the cross tie and becoming loose or disengaged from the rail.

In order to lock the spike in the cross tie and prevent the former from becoming loose, the shank 1 is provided at the rear face with a downwardly tapered enlargement 6, forming an upper shoulder and located at the bottom of the recess 7, formed by the brace and the upper portion of the shank. The inner face of the brace is arranged at an acute angle to the outer face of the shank, and it merges into the said outer face at the upper end of the shank, and the recess or space between the inner face of the brace and the outer face of the shank is relatively long and upwardly tapered. The upper edge or shoulder formed by the enlargement is located in a plane slightly above the point of the brace, and it thereby confines the wood of the cross tie within the recess. The space between the point of the brace and the shank is constricted by the enlargement, and the wood of the cross tie engages the upper end of the same. The enlargement besides co-operating with the brace to lock the spike in the cross tie also strengthens the shank at a point where it would otherwise be liable to bend and thereby assist the brace in preventing the spike from being forced backward out of engagement with the rail. When the spike is extracted, the enlargement resists the upward movement until the wood confined in the recess 7 is freed, then it offers no further material resistance to the pulling of the spike.

Having thus fully described my invention, what I claim as new and desire to secure by Letters Patent, is:—

1. A spike consisting of a shank, a rail-engaging head, an enlargement extending outwardly from the rear side of the shank at a point below the head, and an inclined brace extending downwardly and rearwardly from the head at the upper end of the shank and having its inner face arranged at an acute angle to the outer face of the shank at the upper portion thereof and coöperating with the shank to form a

long relatively narrow upwardly tapered recess, said brace extending to a point sufficiently near the enlargement to cause the latter to constrict the mouth of the recess and
5 confine the wood therein.

2. A spike consisting of a shank, a rail-engaging head, a downwardly tapered enlargement extending from the rear side of the shank at a point below the head and
10 forming an upper shoulder, and a tapered inclined brace extending downwardly from the upper end of the shank and having its inner face arranged at an acute angle to and merging into the outer face of the shank at
15 the upper end thereof and cooperating with the said outer face of the shank to form a recess, said brace extending to a point sufficiently near the enlargement to cause the same to project into the recess and the shoulder
20 of the enlargement being arranged to engage the wood to confine the same in the recess.

3. A spike consisting of a shank, a rail-engaging head projecting in advance and
25 in rear of the shank, a downwardly tapered enlargement extending from the rear side

of the shank at a point below the head and forming an upper shoulder, and a brace extending downwardly from the upper end of the shank and having its inner face arranged
30 at an acute angle to and merging into the outer face of the shank at the upper end thereof and cooperating with the said outer face of the shank to form a recess, said brace having its upper end of a thickness co-
35 extensive with the length of the rearwardly projecting portion of the head of the spike and provided with a pointed lower end and extending to a point sufficiently near the shoulder of the enlargement to cause the lat-
40 ter to project into the said recess, the shoulder of the enlargement being arranged to engage the wood to confine the same in the recess.

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

LUTE ENSIGN CAMPBELL.

Witnesses:

EDWARD J. KENNEDY,
FRED DOLL.