(No Model.)

G. P. ROSE.

RAILWAY SPIKE.

No. 395,925. Patented Jan. 8, 1889.

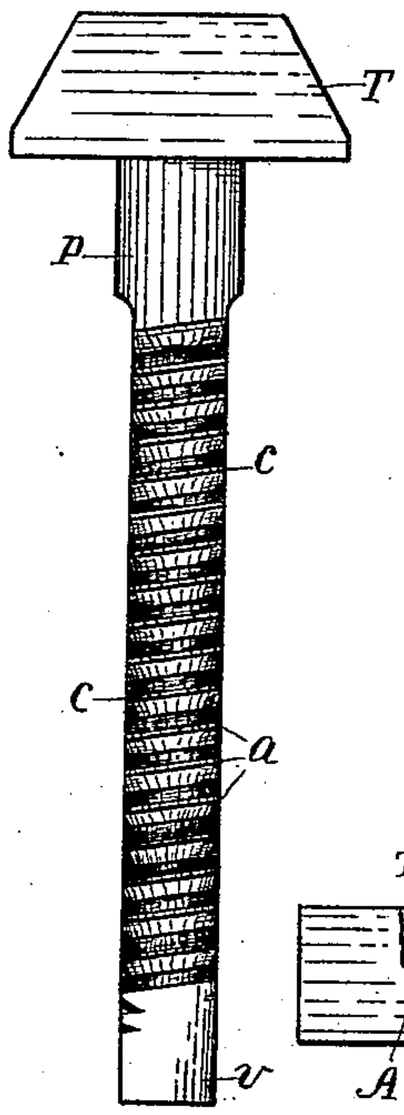

Fig. 1

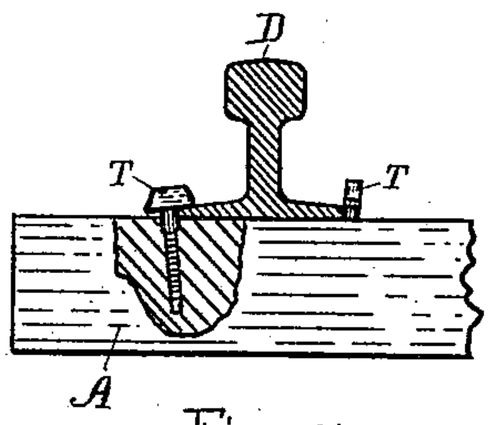

Fig. 5

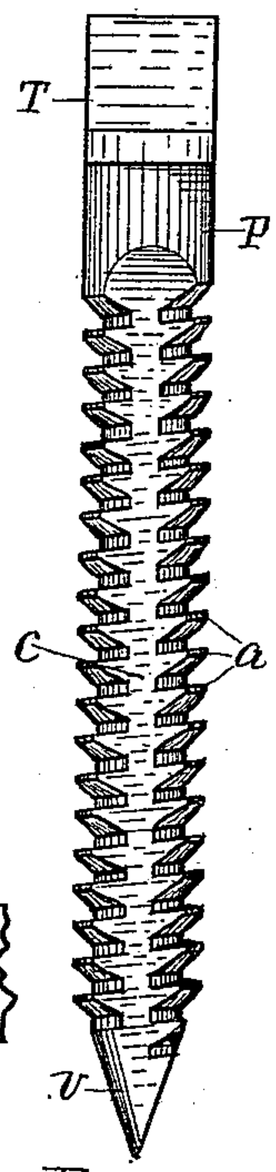

Fig. 2

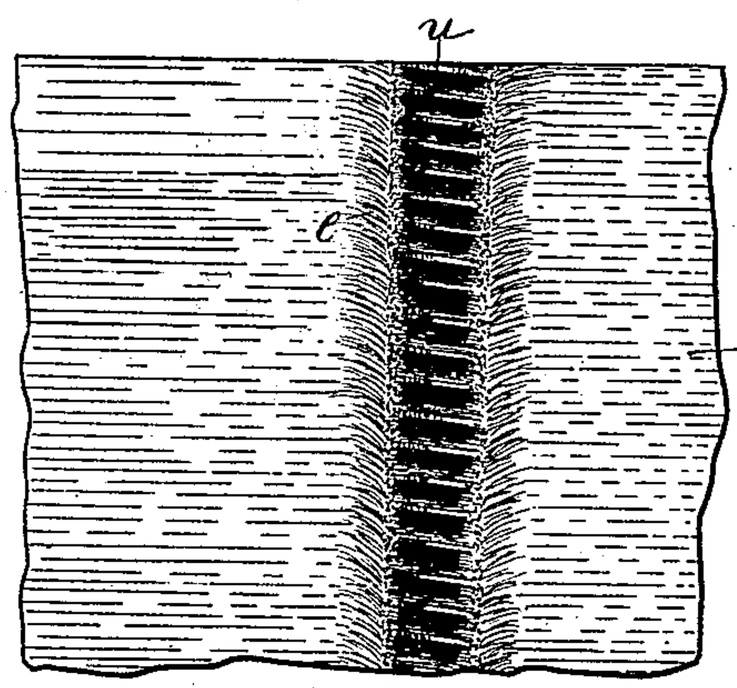

Fig. 4

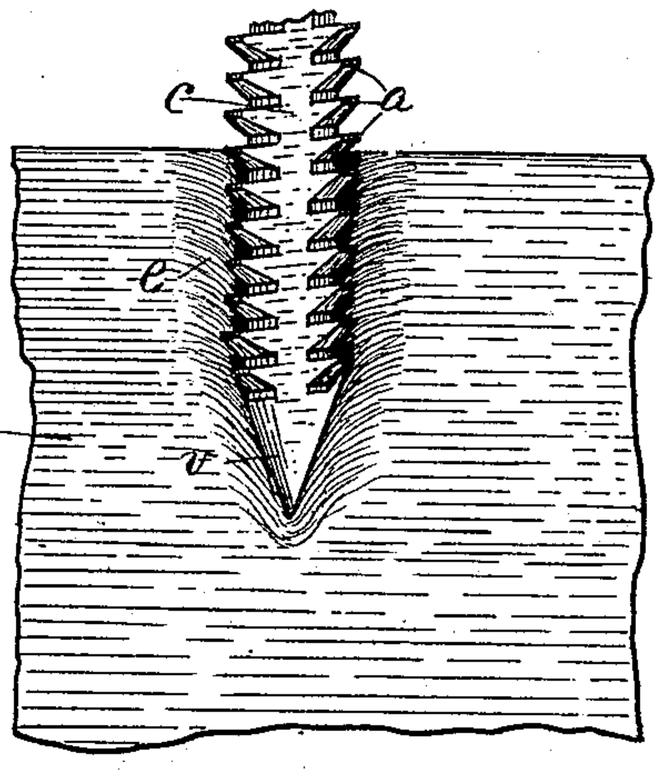

Fig. 3

Witnesses.
Jno. G. Perkins.
E. D. Chase.

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George P. Rose.
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UNITED STATES PATENT OFFICE.

GEORGE P. ROSE, OF FENTON, MICHIGAN.

RAILWAY-SPIKE.

SPECIFICATION forming part of Letters Patent No. 395,925, dated January 8, 1889.

Application filed May 31, 1888. Serial No. 275,559. (No model.)

To all whom it may concern:

Be it known that I, GEORGE P. ROSE, a citizen of the United States, residing at Fenton, county of Genesee, State of Michigan, have invented a new and useful Railway-Spike, of which the following is a specification.

This invention has for its object certain useful improvements in railway-spikes, designed to prevent them from working loose and obviating the necessity of drawing them from the ties when replacing the rails.

In the drawings forming a part of this specification, Figure 1 is an elevation looking from a point at left of Fig. 2; Fig. 2, an elevation looking against the right side of Fig. 1; Figs. 3 and 4, pieces of tie, showing the operation; and Fig. 5 shows a broken tie and a rail in end elevation.

Referring to the lettered parts of the drawings, P is the spike, having a T-shaped head, T. Two opposite sides of the spike are made straight or flat, as at *c*, and the other opposite sides are rounded in cross-section and are screw-threaded. The upper surface of the threads *a* is at right angles to the spike and the under surface is beveled. By this means the spike will drive easily and turn easily in the wood after being driven. The surface of the spike between the threads is round in cross-section, is of a width to distinctly separate one thread from another a little space, and the spike in these spaces is vertically straight and all of a like diameter. Thus the surface between the threads forms a uniform bearing throughout its length when the spike is turned in the wood.

The point of the spike is wedge-shaped, the beveled sides being on the sides the threads of the bolt are on. At *r* the corner of the wedge-point is beveled or rounded off, and the corner diagonally opposite is formed in like manner. Thus the spike can be turned more easily after being driven; but the point, if preferred, may be otherwise formed.

The spike is driven in the position shown in Fig. 3, (and at the right in Fig. 5,) one threaded side being toward the rail D of the track, (rail shown in Fig. 5,) so that the wedge-point cuts crosswise of the grain, the same as a nail which is properly driven, so as not to split the timber, but to break and broom the wood, as at *e*, Figs. 3 and 4. The spike is driven until the round part above the threads enters the wood, which part forms a bearing in the wood when turning the spike. The spike is then given a quarter-turn with a wrench, which action carries the thread out of the broomed wood into the solid wood, the latter of which before the spike was turned was at the flat sides of the spike, and this explains why the sides *c* are flat. After the spike is given the quarter-turn, it then becomes a screw. When the rails wear into the ties, the spike can be given a half-turn to tighten them again.

In Fig. 4 the spike has been removed from the tie B, and at *u* are shown the indentations made in the solid wood. It should be stated that the spike is driven by pounding sufficiently far that when it is given the quarter-turn above explained the head will firmly catch on the flange of the rail, Fig. 5, at left hand.

Having thus described the invention, what I claim, and desire to secure by Letters Patent of the United States, is—

The T-headed spike having threads on the two opposite sides, the upper side of which threads is at right angles to the spike, and having vertically-straight spaces between the threads and a bearing portion between the T-head and upper thread, which portion is circular in cross-section, and the wedge-point of the spike having two of its diagonally-opposite corners chamfered off to facilitate turning in the wood, substantially as set forth.

In testimony of the foregoing I have hereunto subscribed my name in presence of two witnesses.

GEORGE P. ROSE.

Witnesses:
GEO. W. LOCKE,
E. D. CHASE.