

A. PLUMP.
RAILROAD SPIKE.
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1,409,403.

Patented Mar. 14, 1922.

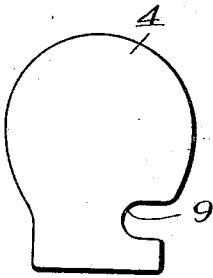


Fig. 3.

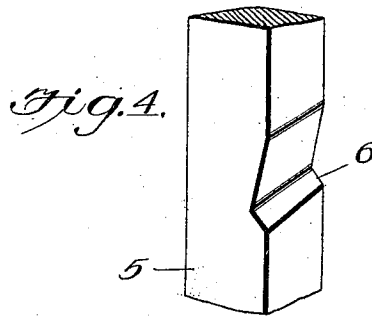


Fig. 4.

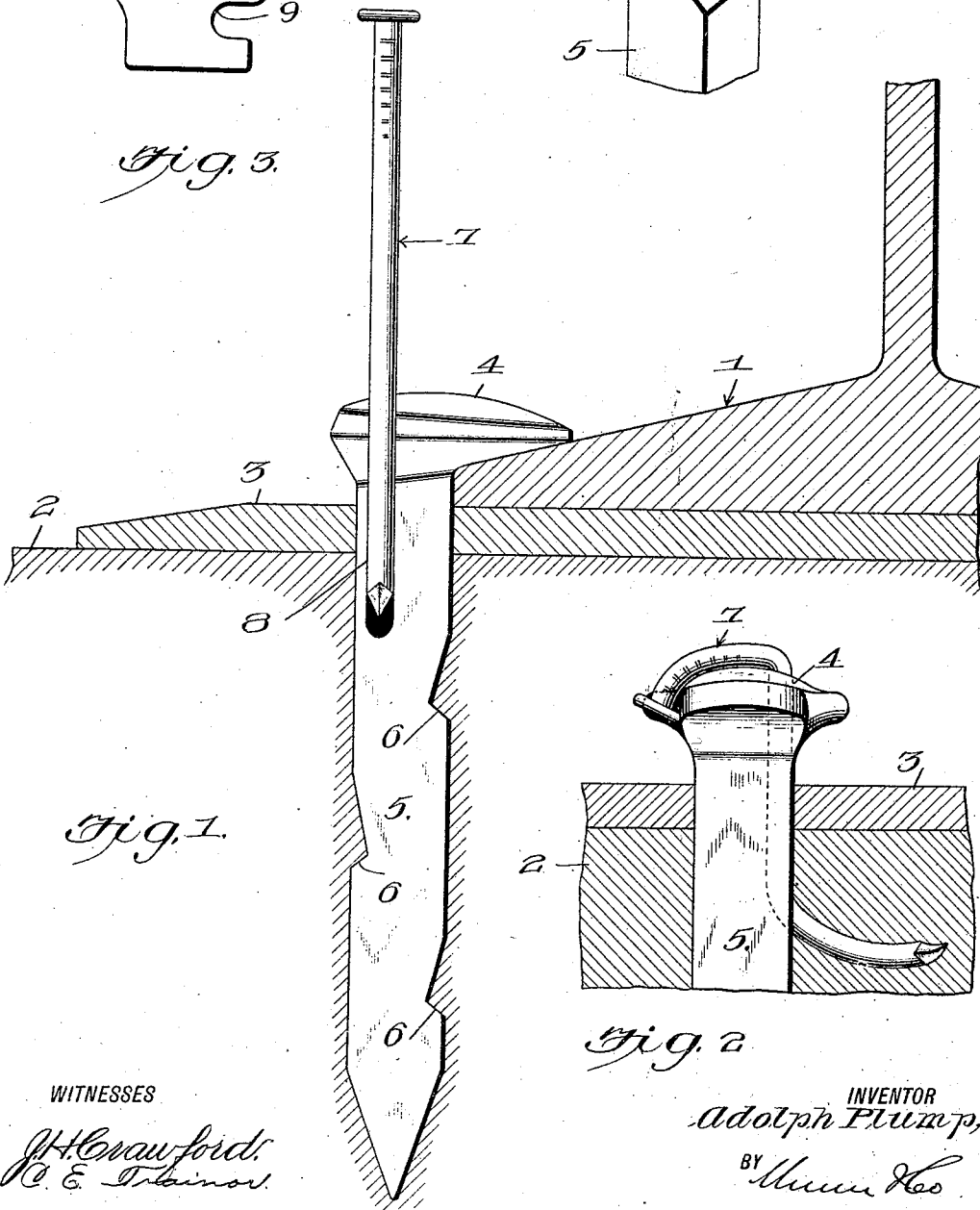


Fig. 1.

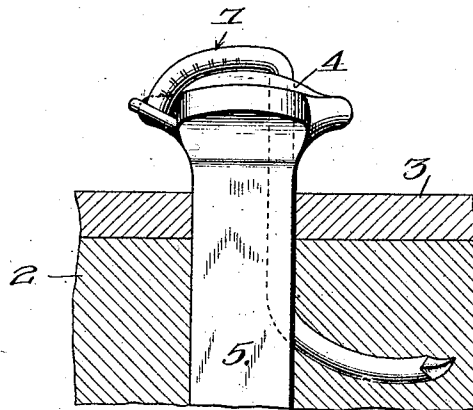


Fig. 2.

WITNESSES

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RAILROAD SPIKE.

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To all whom it may concern:

Be it known that I, ADOLPH PLUMP, a citizen of the United States, and a resident of Redwood City, in the county of San Mateo and State of California, have invented certain new and useful Improvements in Railroad Spikes, of which the following is a specification.

My invention is an improvement in railroad spikes, and has for its object to provide means in connection with the spike used for connecting rails to ties, for firmly holding the spike in place against the possibility of accidental displacement or loosening, and which may be easily withdrawn.

In the drawings:—

Figure 1 is a sectional view of a tie and rail showing the improved spike in place,

Figure 2 is a view at right angles to Figure 1 showing the securing means in holding position,

Figure 3 is a top plan view of the spike,

Figure 4 is a partial perspective view.

In the present embodiment of the invention, the improved spike is shown in connection with the base flange of a rail 1, and a tie 2, the spike holding the rail to the tie, and the usual tie plate 3 is arranged between the rail and the tie. The improved spike is of the usual shape and of suitable size, consisting of a head 4 and a body 5, the body having the usual point at the end remote from the head.

In order to prevent loosening of the spike, the body thereof is provided at opposite sides with upwardly and outwardly facing shoulders 6, the said shoulders being at the faces of the spike which will be nearest the rail and farthest from the rail when the spike is driven. Each of these notches has two faces meeting at an obtuse angle, and the lower face faces upwardly and slightly outward. It will be evident that when the spike is driven the material of the tie will be forced into these notches 6, and will prevent the loosening of the tie.

In order to firmly lock the spike in place

in the tie, I use a securing means in the form of a wire nail 7 of usual construction. One face of the spike 1—2 has a vertically extending groove 8, made on a continuous curve and this groove extends through the head as shown at 9 in Figure 3. The upper and lower ends of this groove 8 curves outwardly as shown in dotted lines in Figure 2, so that when the spike is driven downward in the groove the point thereof will be deflected downwardly and laterally into the material of the tie, as shown in Figure 2.

In use, the improved spike is driven in the usual manner. After it has been driven home, the nail 7 is inserted in the groove, and driven for approximately two-thirds of its length. The head end is then bent over the top of the spike head, as shown in Figure 2, and the head of the spike 7 is turned beneath the edge of the spike head, thus anchoring the spike 7 to the spike 4—5.

The curved lower end of the groove 8 deflects the point of the spike 7 outwardly, and approximately lateral to the body of the spike, into the material of the tie, and the spike 4—5 is thus firmly locked to the tie. When it is desired to withdraw the spike, the lock nail 7 may first be removed, after which the spike may be withdrawn. The lock 7 is easily removed with the usual tool used in pulling the spike.

I claim:—

A spike of the character specified formed in one side face with a longitudinal groove extending downwardly, said groove having its lower end curved laterally and outwardly from said side face only, said groove adapted to receive a headed nail, a headed nail driven longitudinally in said groove whereby curvature of said lower end of the groove will cause the nail to be projected from the side of the spike in a plane perpendicular to the plane of the side face of the spike, the head of the nail bent over the top of the spike and held to spike head at the opposite side thereof.

ADOLPH PLUMP.