

F. WYNNE.
SPIKE.

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1,064,415.

Patented June 10, 1913.

Fig. 2

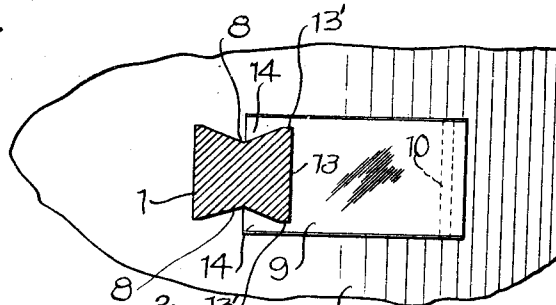


Fig. 1

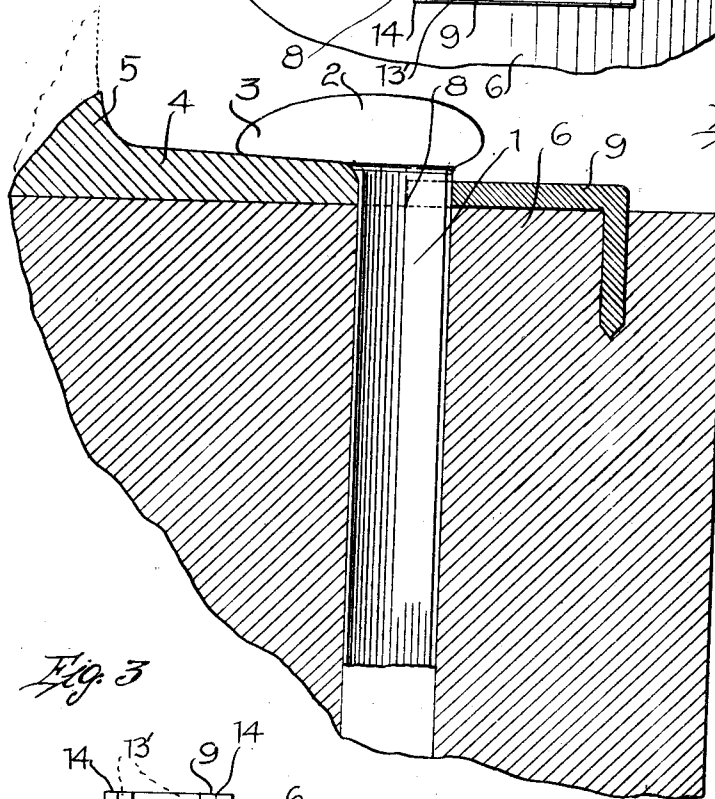


Fig. 3

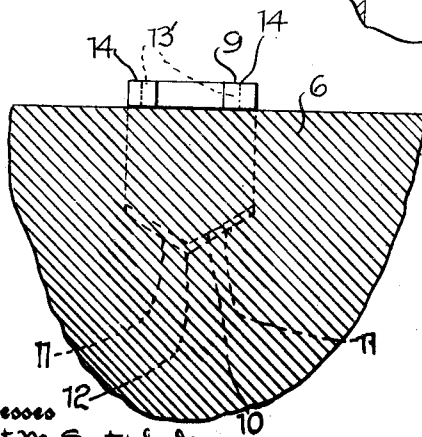
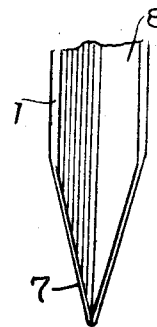


Fig. 4



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To all whom it may concern:

Be it known that I, FRANK WYNNE, a citizen of the United States, residing at Burlington, in the county of Chittenden and State of Vermont, have invented certain new and useful Improvements in Spikes, of which the following is a specification, reference being had to the accompanying drawings.

10 This invention comprehends certain new and useful improvements in spikes, and has for its primary object to provide a railway spike with guiding and anchoring means, whereby the spike may be properly driven 15 into the tie without danger of splitting the latter.

Another object is to provide a spike of this character having guide channels extending longitudinally of the sides thereof 20 to receive one end of the guide and anchoring means, the latter extending rearwardly of the spike and having its free end directed downwardly and sharpened for engagement in the tie to properly guide the spike during 25 the operation of driving the same into the tie, said guiding and anchoring means also serving to securely anchor the spike and prevent the same from working loose.

A further object is to provide a spike of 30 this nature with longitudinal channels formed in such manner as to provide the spike with eight cutting edges, two such cutting edges being located at each corner of the spike, thereby making it possible for the 35 latter to properly cut its way into the tie without following the grain of the material and thereby splitting the tie or bending the spike and throwing the head of the latter out of its proper horizontal plane.

40 A still further object is to generally improve and simplify the construction of devices of this character and increase the efficiency and value of the same.

With these and other objects in view this 45 invention consists of certain novel details of construction, combination and arrangement of parts to be hereinafter more fully described, claimed, and illustrated in the accompanying drawings, in which—

50 Figure 1, is a vertical sectional view through a portion of a tie and rail, showing my improved spike with its guide and anchoring means employed for securing the rail to the tie, the spike being shown in elevation with its lower portion broken away 55 while the anchoring and securing means is

shown in section. Fig. 2, is a top plan view of Fig. 1, the rail being removed and the spike shown in cross section. Fig. 3, is an elevational view of the spike guiding and 60 anchoring means secured in a tie, said tie being shown in section. Fig. 4, is a detail view of the lower end of the spike.

Referring more particularly to the drawings, the numeral 1 designates the body of 65 my improved spike, and 2 the head thereof, with a portion projecting for some distance beyond the body 1, as shown at 3, said projecting portion preferably extending from the front side of the body 1 and adapted for 70 engagement upon the base 4 of a rail 5 of ordinary construction, and positioned upon the tie 6.

The spike body 1 is beveled upon its front and rear faces at its lower end to produce 75 the point 7, and said body 1 is provided in its side faces with the longitudinally extending V-shaped channels 8, said channels 8 terminating at their upper ends a short distance below the head 2, the purpose of 80 which will presently be understood. The outer edges of the channels 8 are positioned inwardly of the front and rear faces of the body 1, thus providing two sharp edges at 85 each corner of the body 1, said sharp edges extending substantially the full length of the body.

The guiding and anchoring means consists of a substantially L-shaped member 9, 90 formed of a flat strip of material and having its short arm beveled from the opposite sides thereof, as shown at 10, and also from the opposite edges 11, at the lower end of said arm to produce the point 12, whereby the short arm may be readily driven into 95 the tie 6. The long arm has a substantially dove-tailed shape opening 13 formed in its free end to receive the rear portion of the spike body 1, the arms 14 formed by producing the opening 13, being adapted for 100 slidable engagement in the longitudinal channels 8. It will be understood that the short straight walls 13' are formed at the inner ends of the arms 14 for the straight portions of the sides of the body 1 between 105 the rear corners thereof and the rear edges of the longitudinal channels 8.

When this device is to be employed to secure a rail upon a tie, the point 7 of the spike 1 is positioned upon the tie 6 and the 110 spike driven into the tie for a short distance, it being understood that the guide

and anchoring means is slidably positioned in the spike body 1 and held at the upper end thereof during this first step of the operation. After the spike body 1 has been driven inwardly for a short distance, the guide and anchoring means is moved downwardly and the short arm thereof driven into the tie until the long arm rests upon the upper surface of the tie. The operation of driving the spike 1 into position is then continued, it being evident that the member 9 serves to properly guide the spike during its downward movement. After the spike has been driven into the tie until the end of the long arm of the member 9 is engaged in the upper ends of the longitudinal channels 8, and the extended portion 3 of the head 2 is engaged upon the base of the rail, it will be evident that the member 9 will serve to securely anchor the spike and prevent the same from working loose, as all strain upon the upper end of the body 1 or the head 2, will simply cause the arms 14 to bind against the walls of the longitudinal channels 8 and prevent movement of the spike in any direction.

From the foregoing, it will be evident that I have provided a spike and guide and anchoring means therefor of extremely simple construction and which will be highly efficient and durable in use.

It will be understood that while I have shown the preferred embodiment of my invention, however, I do not wish to be limited to this specific construction, as minor changes may be made in the details of construction within the scope of the appended claims without departing from the spirit of my invention.

What is claimed is:—

1. The combination with a spike having channels therein, of anchoring and guide means having one arm slidably engaged in said channels and the other arm directed

downwardly and terminating in a point for engagement in a tie.

2. The combination with a spike comprising a body having longitudinal channels in its side faces and a head with an extended portion projecting from the front face of the body, of anchoring means having one arm slidably engaged in the channels of the spike body, while the other arm is adapted for engagement with the material with which the spike body is engaged.

3. The combination with a spike having longitudinal channels in the side faces of the body thereof, the outer edges of the channels being spaced from the front and rear edges of the spike member, said spike body being beveled upon its front and rear faces at the lower end of the body, of guide and anchoring means having one end engaged around the rear portion of the spike body and in the longitudinal channels in the side faces of the body.

4. The combination with a spike having longitudinal channels in opposite faces of its body portion, of an angular guide and anchor means having a dove-tailed opening in the free end of one arm to receive one edge of a spike body, the arms providing the dove-tailed opening in the end of the guide and anchoring means being adapted for slidable engagement in the longitudinal channels of the spike body, while the opposite end of the guide and anchor means is directed downwardly and pointed for engagement in a solid member with which the spike is engaged, said downwardly directed end of the guide and anchoring means being parallel with the spike body.

In testimony whereof I hereunto affix my signature in the presence of two witnesses

FRANK WYNNE.

Witnesses:

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PETER LANGERINE.