J. M. BYRD.

SPIKE.

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1,154,482. Patented Sept. 21, 1915.

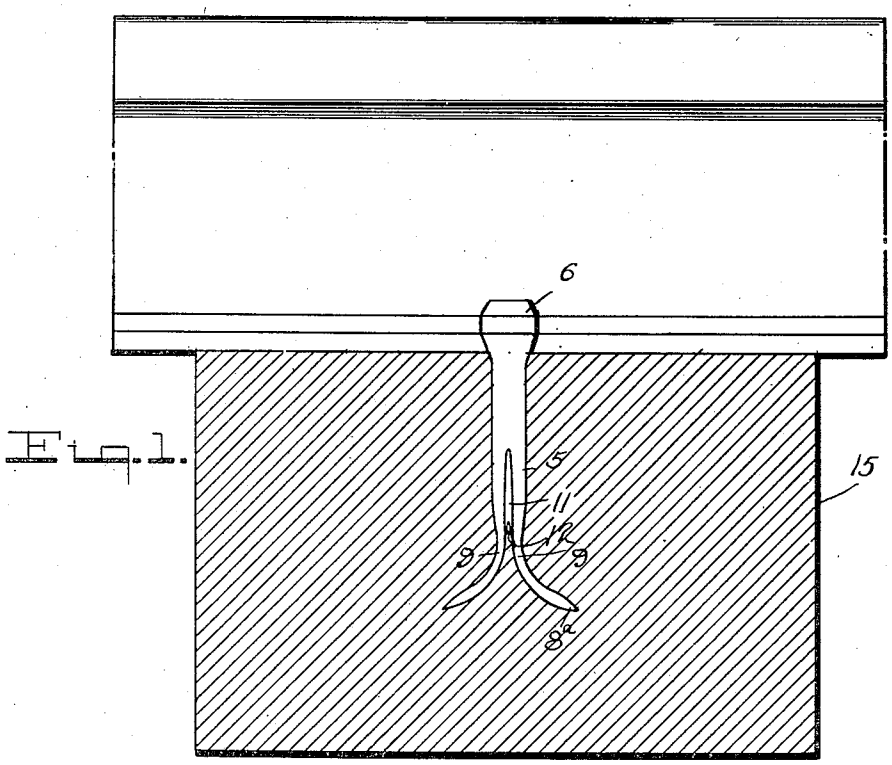


Fig. 1.

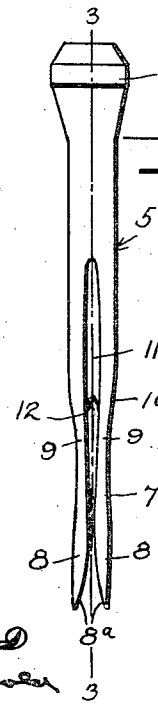


Fig. 2

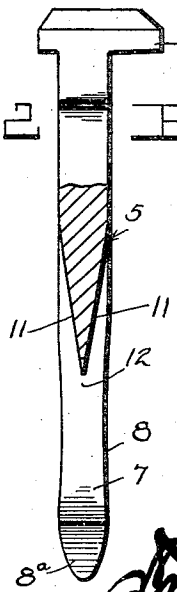


Fig. 3.

Witnesses

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SPIKE.

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To all whom it may concern:

Be it known that I, JOHN M. BYRD, a citizen of the United States, residing at Hazlehurst, in the county of Jeff Davis and State of Georgia, have invented certain new and useful Improvements in Spikes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to spikes, and more particularly to a spike especially designed for use in securing railway rails to ties.

The invention has for its object to provide a shank with an inwardly directed longitudinal slot defining a pair of prongs adapted, when the spike is driven into a tie or other object, to deflect or curve outwardly and thus reliably lock the spike against removal.

Another object is the provision of a spike having a cutting edge formed between and at the inner ends of the anchoring prongs to facilitate driving of the spike and to insure proper setting thereof.

With these and other objects in view, the invention consists in the novel construction, arrangement and formation of parts as will be hereinafter specifically described, claimed and illustrated in the accompanying drawing, in which:

Figure 1 represents a transverse sectional view through a railroad tie, illustrating the improved spike applied to use. Fig. 2 represents a front elevation of the spike removed, and Fig. 3 represents a longitudinal sectional view on the line 3—3 of Fig. 2.

Referring to the drawing in detail, wherein similar reference numerals designate corresponding parts throughout the several views, the numeral 5 indicates generally the shank of the spike which is formed at one end with a preferred type of head 6 and is formed at its opposite end with an inwardly directed longitudinal slit 7 defining a pair of anchoring tongues or prongs 8. Adjacent their inner ends, the prongs 8 are reduced in thickness, as indicated at 9, so as to weaken them at this point and thus insure bending thereof, and the inner surfaces of the free ends of the prongs are beveled downwardly and outwardly as at 8^a to insure outward deflection thereof. The reduced inner extremities of the prongs 8 define a pair of shoulders 10 on the opposite side faces of the spike.

Grooves or channels 11 are formed in the front and rear faces of the spike shank and constitute continuations of the slot 7. The grooves 11 gradually decrease in thickness toward the head 6 and terminate at a point substantially midway between the inner extremities of the prongs 9 and the head 6. The grooves 11 define a cutting edge 12 disposed centrally between the inner ends of the prongs 9.

In use, the spike is driven into a tie or other object 15 in the usual manner, the inner beveled surfaces 8^a of the prongs causing the free ends of the latter to be deflected or curved outwardly, as clearly illustrated in Fig. 1. The edge 12 cuts the fibers of the object 15 as the spike is driven therein and the oppositely inclined walls of the grooves 11 insure against the body or shank being deflected laterally, as will be understood.

What I claim is:

1. A spike including a pair of anchoring prongs, and a cutting edge formed between said prongs.

2. A spike including a shank having an inwardly directed longitudinal slot, and grooves formed in alinement with said slot extending longitudinally of the shank to define a cutting edge and terminating at a point intermediate the inner extremities of the prongs and the opposite end of the shank.

3. A spike including a shank having an inwardly directed longitudinal slot defining a pair of anchoring prongs, the inner extremities of said prongs being reduced in thickness and the inner surfaces of the outer ends being beveled downwardly and outwardly, said shank having opposed grooves extending longitudinally thereof in alinement with the slot and defining a cutting edge disposed between the prongs.

4. A spike including a shank having an inwardly directed slot at one end defining a pair of anchoring prongs, a head at the opposite end of said shank, said shank having opposed grooves correspondingly inclined with relation to the opposite faces of the shank and converged to define a cutting edge between the inner ends of the prongs.

5. A spike including a shank having an inwardly directed longitudinal slot defining a pair of anchoring prongs, and having opposed grooves defining a concaved cutting edge disposed between the prongs.

6. A spike including a shank having an

inwardly directed longitudinal slot defining a pair of anchoring prongs, and having opposed grooves extending longitudinally thereof and defining a cutting edge disposed between the prongs.

7. A spike including a shank having an inwardly directed longitudinal slot defining a pair of anchoring prongs, and having opposed grooves extending longitudinally thereof in alinement with said slot and defining a concaved cutting edge disposed between said prongs.

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

JOHN M. BYRD.

Witnesses:

JAMES R. GRANT,

R. T. WILLIAMS.