T. STARBUCK.

SPIKE.

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1,114,305.

Patented Oct. 20, 1914.

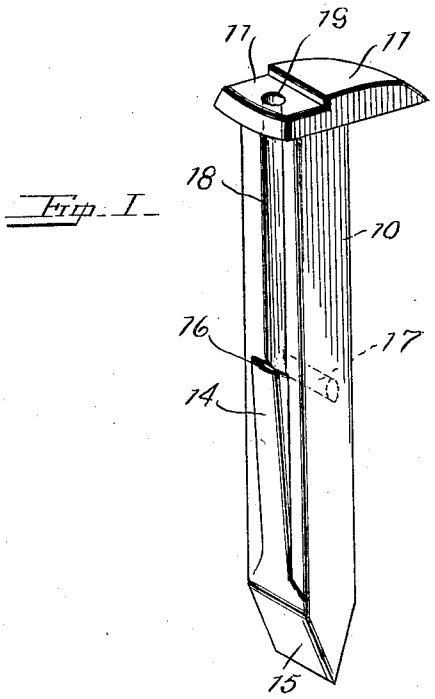


Fig. 1.

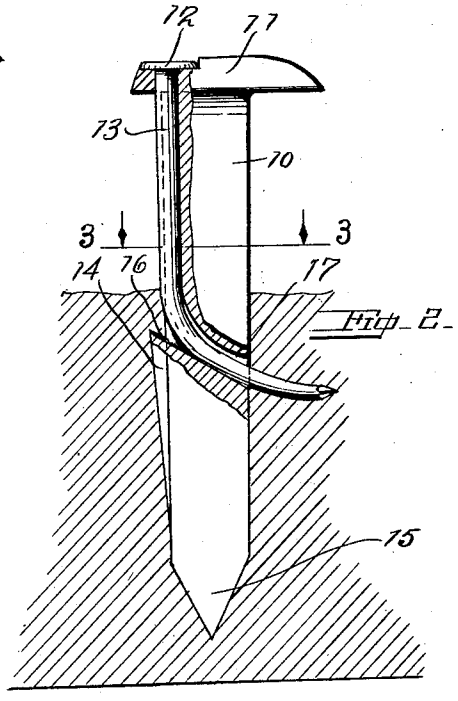


Fig. 2.

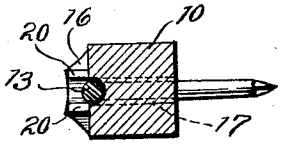


Fig. 3.

Witnesses
Edw. L. Hall.
Ross J. Woodward.

Inventor
Thomas Starbuck.

By Richard Lewis
His Attorney

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UNITED STATES PATENT OFFICE.

THOMAS STARBUCK, OF BRIDGEPORT, OHIO.

SPIKE.

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To all whom it may concern:

Be it known that I, THOMAS STARBUCK, a citizen of the United States, residing at Bridgeport, in the county of Belmont and State of Ohio, have invented certain new and useful Improvements in Spikes, of which the following is a specification.

This invention relates to a spike which is intended to be used to secure railroad rails to the ties.

The principal object of the invention is to provide the spike with improved means for releasably securing the spike in the tie, the spike being provided with improved means for causing the locking pin to be guided through an inclined opening extending transversely through the spike.

Another object of the invention is to provide a spike which can be cheaply made since the spike is so constructed that it may be cast in the finished form or may be cast with the exception of the inclined passage way and the inclined passage way then formed when finishing the spike.

Another object of the invention is to so construct the spike that the guiding means will form additional means for securing the spike in the tie

This invention is illustrated in the accompanying drawings wherein—

Figure 1 is a perspective view of the spike; Fig. 2 is a view showing the tie in section and the spike in place within the shank partially broken away to show the manner in which the securing pin or nail is connected with the spike and passes into the tie; Fig. 3 is a transverse sectional view taken along the line 3—3 of Fig. 2.

The spike 10 is provided with a head 11 which overhangs the sides of the spike and is provided with a cut-out portion forming a seat 11′ to receive the head 12 of the securing pin or nail 13. An inclined prong or tooth 14 is formed upon the spike near its penetrating end 15 and terminates in an inclined shoulder 16 which is flush with the lower face of the inclined passage way 17 leading transversely through the spike. A groove 18 is formed longitudinally in the spike and communicates with an opening 19 formed in the seat 11′ so that the nail 13 may be passed through the opening 19 into the groove 18. After the spike has been driven into the tie, the nail is passed through the opening 19 and is driven through the groove 18 until its point reaches the shoulder 16. The shoulder 16 which is formed at an incline will cause the nail to bend and pass through the passageway 17 so that the nail will extend into the tie as shown in Fig. 2. The spike will therefore be held in the tie by the securing pin or nail 13 and will also be held in the tie by the prong 14. It will thus be seen that the prong performs a double function of guiding the nail into the passage way 17 and of forming a locking means for assisting the nail in holding the spike in the tie.

An inspection of the figures in the drawing will readily show that the spike can be cast ready for use or can be cast into a desired shape and the opening 19 and passage way 17 then formed when finishing the spike. It should also be noted that the shoulder 16 of the prong 14 is provided with webs 20 which guide the nail and prevent it from moving transversely and thus missing the passage way 17. When it is desired to remove the spike, the nail can be withdrawn and the spike can then be removed from the tie.

What is claimed is:

1. A spike provided with a head having one end portion reduced to form a seat, said spike being provided with a longitudinally-extending groove leading from an opening formed in the base of said seat and communicating with a transversely-extending opening formed in said spike, and a prong formed upon said spike beneath said groove and terminating in an inclined guiding face formed flush with the transversely-extending opening.

2. A spike, a head for said spike, the shank of said spike being provided with a longitudinally-extending groove leading from a cut out formed in the head of said spike and communicating with a transversely-extending passage way formed in the shank of said spike, an auxiliary locking means for said spike formed upon the shank of the spike beneath the lower end of the groove formed therein and constituting means for guiding a securing member through the transversely-extending passage way formed in the shank of said spike.

3. A spike comprising a shank provided with a longitudinally-extending groove communicating with a transversely-extending passage way formed in said shank, a head provided with a cut out communicating with said groove, and common means

for locking said spike in place and for guiding the inner end portions of a second locking means through the transversely-extending passage formed in the shank of said spike.

4. A spike comprising a shank provided with a longitudinal groove and with a transversely-extending passage way communicating with the lower end of said groove, the head of said spike being provided with a seat and with an opening communicating with said groove, a locking prong carried by the shank of said spike beneath said groove, and a securing pin passing through the opening of said head into said groove and guided by said prong into said passage way and having its head seated in said seat when said pin is in a locked position.

5. A spike provided with a transversely extending passageway, locking means carried by said spike, and a movable locking means for said spike, guided into said passageway by said first mentioned locking means.

6. A spike provided with a transversely extending passageway, and a locking means carried by said spike and serving as a guide for directing a second locking device into said passageway.

7. A spike provided with a fastener receiving passage, a head provided with a cut out, and locking means carried by said spike and serving to guide a second locking device into said passageway.

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

THOMAS STARBUCK.

Witnesses:
R. M. SIMPSON,
E. W. HARRIS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."