M. REEDY.

SPIKE.

APPLICATION FILED MAY 29, 1914.

1,127,090. Patented Feb. 2, 1915.

Fig. 1.

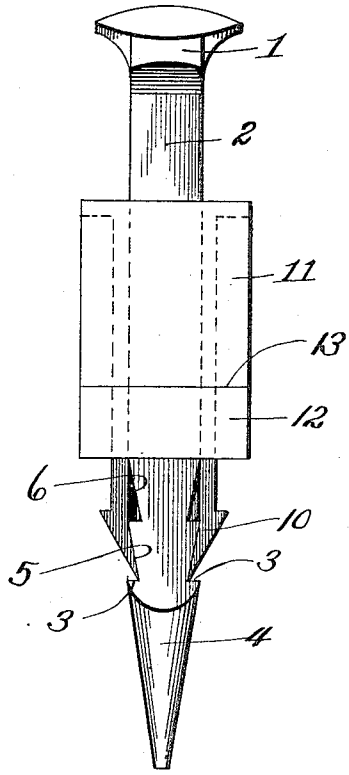


Fig. 2.

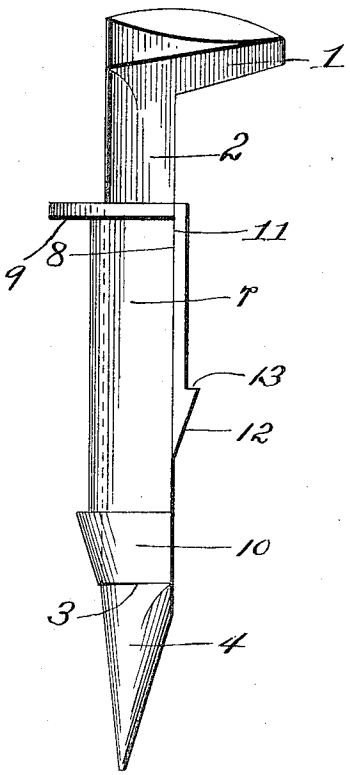


Fig. 3.

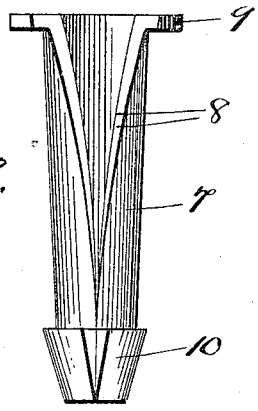
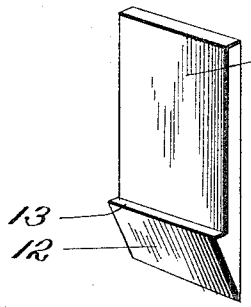


Fig. 4.



Witnesses

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UNITED STATES PATENT OFFICE.

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SPIKE.

1,127,090. Specification of Letters Patent. Patented Feb. 2, 1915.

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To all whom it may concern:

Be it known that I, MICHAEL REEDY, a citizen of the United States, residing at Memphis, in the county of Shelby and State of Tennessee, have invented new and useful Improvements in Spikes, of which the following is a specification.

My present invention pertains to railway spikes such as are constructed with a view to being locked or anchored in wooden sleepers or ties; and it has for one of its objects to provide a railway spike in combination with an anchoring lock; the spike and lock being constructed and combined in such manner that when the spike is driven into the lock after said lock is positioned in a sleeper or tie, the spike will operate to engage the lock with the tie and preclude withdrawal of the lock, and at the same time the spike will be engaged by the lock and securely held against upward movement.

Another object of the invention is the provision of a plate adapted to be embedded in the tie with a view to resisting lateral movement of the spike and spike lock in the direction of the thickness of the rail the spike is employed to hold.

Other advantageous characteristics of the invention will be fully understood from the following description and claims when the same are read in connection with the drawings, accompanying and forming part of this specification, in which:

Figure 1 is an elevation showing the side of my novel spike that is presented to the edge of a rail base. Fig. 2 is a view taken at right angles to Fig. 1. Fig. 3 is an elevation showing the inner side of the spike lock or anchor as the same appears prior to the driving of the spike into the said lock or anchor. Fig. 4 is a perspective of the plate for resisting lateral movement of the spike and spike lock or anchor in the direction of lateral thrust imposed against a rail held by the spike.

Similar numerals of reference designate corresponding parts in all of the views of the drawings.

My novel spike is provided with a head 1 and a shank 2, in common with the conventional railroad spike. It is peculiar, however, in that it is provided at opposite points with shoulders 3, and also in that it is provided below said shoulders 3 with a downwardly tapered portion 4, and above the shoulders 3 with downwardly tapered portions 5 and 6.

In combination with the spike described, I employ a sleeve-like anchor or lock 7. The said anchor or lock is preferably formed of steel, and is split longitudinally at one side throughout its length, as indicated by 8, and is provided at its upper end with an outwardly directed flange 9, and at its lower end with a beard or barb 10, the said beard or barb being tapered downwardly and inwardly, and having its upper end disposed at a right angle to the length of the lock or anchor, as illustrated. Normally or rather prior to being put into use, the anchor or lock 7 is in the state shown in Fig. 3, that is to say, the lower portion of the slot 8 is closed and the upper portion of said slot is open in a flared manner, as illustrated.

In the practical use of my improvement, a hole of suitable diameter is bored in a sleeper or tie, and the spike lock 7 is driven into said hole. With this done, the spike is driven downwardly through the lock or anchor 7, whereupon said lock or anchor will be spread to fasten it in the tie, and at the same time the shoulders 3 of the spike will be engaged with the lower end of the anchor or lock. By virtue of this, it will be manifest that the anchor or lock will be securely fixed in the tie, and the said anchor or lock will serve in turn to securely hold the spike against withdrawal. The spreading or opening of the lock or anchor to embed the beard or barb thereof in the wooden sleeper or tie, and the capacity of said lock or anchor in holding the spike are largely due to the fact that being made of steel, the lock or anchor is enabled to spring inwardly and hold the spike by friction as well as by reason of the engagement of the shoulders 3 of the spike with the lower end of the lock or anchor.

When my novel spike and spike lock or anchor are used at the inner side of the outer rail of a curve, and the spike is connected by a conventional tie-plate with a spike at the outer side of the rail, I employ in combination with the spike and the spike lock the metallic plate 11. This plate 11 is provided with a lower beveled end 12, and shoulder 13, and it is designed to be driven into the wooden sleeper or tie in a position against the open side of the spike anchor or lock. The said plate is adapted to be so

positioned in the sleeper or tie without damage to the fiber of the wood, and it is calculated to effectually resist lateral movement of the spike and spike lock in the direction of thrust that is ordinarily imposed on the outer rail of a curve incidental to the passage of a train through the curve.

Having described my invention, what I claim and desire to secure by Letters-Patent, is:

1. The combination with a sleeve-like spike lock or anchor, split longitudinally throughout its length and having at one end a beard or barb, of a spike driven into the lock or anchor and having shoulders opposed to the inner end of the lock or anchor and also having a tapered portion in advance of said shoulders and tapered portions in rear of the shoulders.

2. The combination of a sleeve-like spike lock or anchor having a beard or barb at its inner end, said lock or anchor being split throughout its length, a spike driven through the lock or anchor and having shoulders opposed to the inner end of the lock or anchor and also having a tapered portion in advance of said shoulders, and a plate positioned against the spike and spike lock or anchor at the open side of the latter, said plate having a lower beveled end and a shoulder.

3. The combination with a spike and a spike lock receiving the same, of a plate opposed to the spike and spike lock and arranged at a right angle to the head of the spike.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

MICHAEL REEDY.

Witnesses:
FRANK J. REEDY,
J. W. PATTON.

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