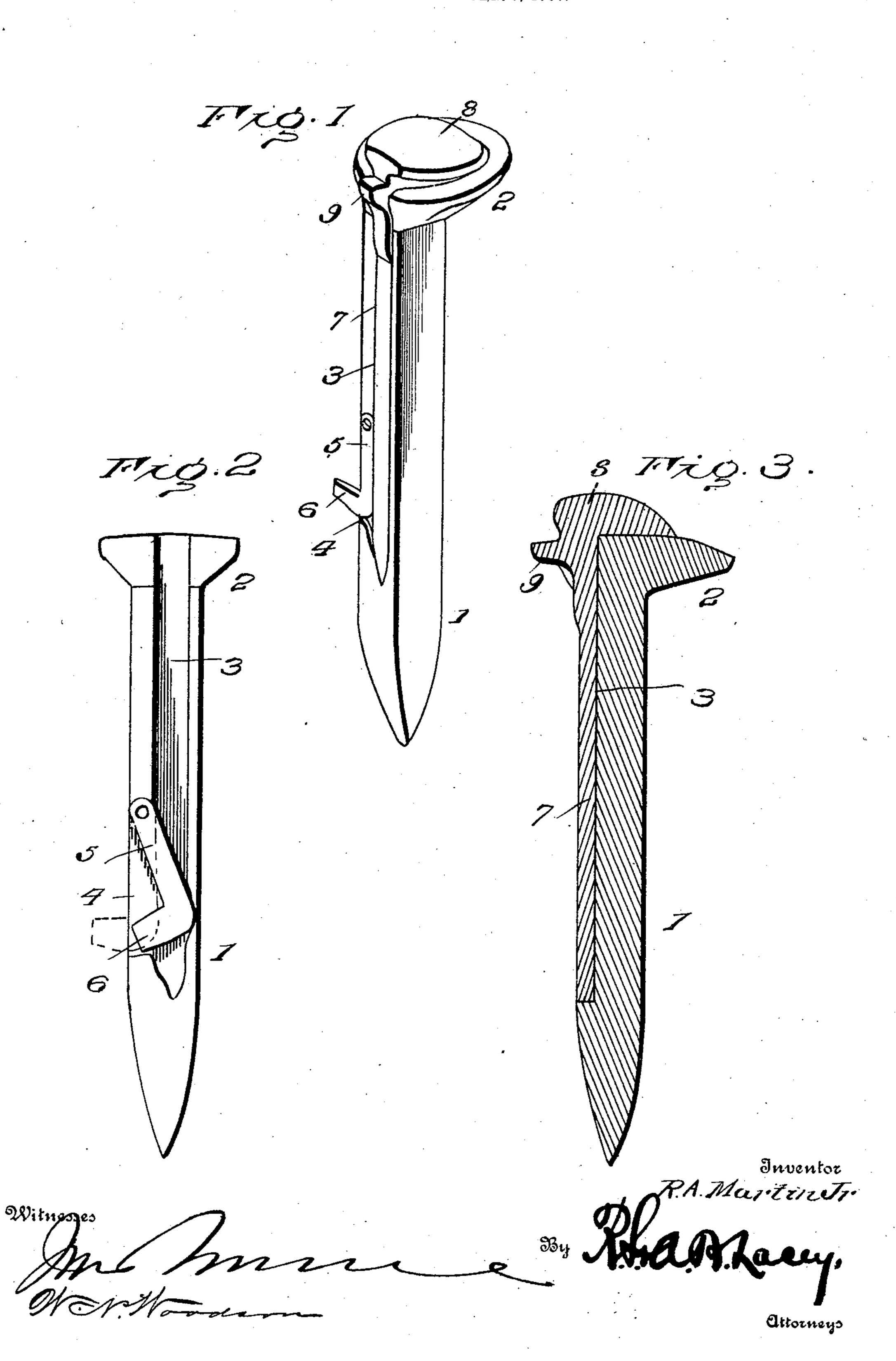
R. A. MARTIN, JR.
RAILROAD SPIKE.
APPLICATION FILED JAN. 7, 1907.



## UNITED STATES PATENT OFFICE.

RICHARD A. MARTIN, JR., OF WEST WARREN, MASSACHUSETTS.

## RAILROAD-SPIKE.

No. 868,353.

Specification of Letters Patent.

Patented Oct. 15, 1907.

Application filed January 7, 1907. Serial No. 351,232.

To all whom it may concern:

Be it known that I, Richard A. Martin, Jr., a citizen of the United States, residing at West Warren, in the county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in Railroad-Spikes, of which the following is a specification.

This invention has for its object an improved construction of railroad spike which will securely hold itself in the tie as against accidental displacement and which may be withdrawn whenever it is desired to do so.

With this and other objects in view as will more fully appear as the description proceeds, the invention consists in certain constructions, arrangements and combinations of the parts hereinafter described and particularly pointed out in the appended claims.

For a full understanding of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result, reference is to be had to the following description and accompanying drawings, in which:

Figure 1 is a perspective view of my improved rail-road spike; Fig. 2 is a rear edge view thereof with the key detached; and, Fig. 3 is a longitudinal sectional view.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

My improved spike 1 is provided with the usual head 2 and is formed with the longitudinal groove 3 which 30 extends from and through the head and downwardly towards the opposite end of the spike. One wall of this groove 3, near the lower end of the groove is cut away to form the laterally opening recess 4, and a dog 5 is pivotally suspended from its upper end within said recess and is adapted to turn back into the groove 3, so that its angularly disposed end or nose 6 will lie with its extrem-

ity approximately flush with the side of the spike. Preferably, the shank of the dog is of a size to take up, when the dog is moved to its outer position, the amount of metal that has been removed to provide the recess 4. 40 In combination with this main spike 1, I provide a key 7 which is formed with a relatively broad head 8 and a rearwardly extending lug 9 close to said head. In the practical operation of applying my improved railroad spike, the dog is retracted into the groove 3 and the spike 45 1 is then driven down into the tie with its head 2 engaging the face of the rail in the usual manner. The key 7 is then driven downwardly within the groove 3 and engages the rear edge of the dog 5 and thereby forces the dog laterally out into the tie, the nose 6 penetrating the 50 grain of the wood at right angles to the penetration of the spike 1. When the key is in place, its head 8 extends over and rests upon the head 2 of the spike 1. Hence, it is manifest that the spike will be securely held in place as against accidental withdrawal. Whenever it 55 is desired to detach the spike, the key 7 may be readily removed from the groove by some suitable tool applied to its lug 9 and the spike 1 may then be pulled out, the dog 5 retreating into the groove during this movement.

Having thus described the invention, what is claimed 60 as new is:

A railroad spike provided with a longitudinal groove and a recess leading outwardly through one wall of the groove, a dog pivotally suspended from its upper end in said recess and adapted to be retracted into the groove, 65 said dog being provided with a beveled nose, and a key adapted to be driven down into said groove so as to engage the dog and force its nose outwardly.

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

RICHARD A. MARTIN, Jr. [L. s.]

Witnesses:

WILLIAM N. CUTLER, KATE MACK.