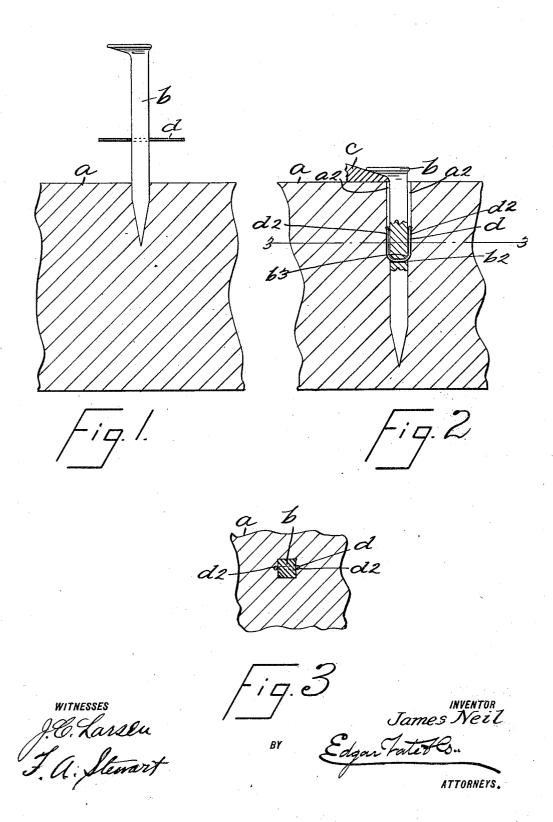
J. NEIL.
SPIKE LOCK.
APPLICATION FILED DEC. 4, 1905.



UNITED STATES PATENT OFFICE.

JAMES NEIL, OF NEW YORK, N. Y.

SPIKE-LOCK.

№0. 838,203.

Specification of Letters Patent.

Patented Dec. 11, 1906.

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To all whom it may concern:

Be it known that I, James Neil, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Spike-Locks, of which the following is a specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to locks or securing devices for railway-spikes and other spikes or large nails; and the object thereof is to provide a device of this class which when the spike or nail has been driven into a tie or other article will operate to prevent the spike or nail from working out and will securely hold the spike or nail in position.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which the separate parts of my improvement are designated by suitable reference characters in each of the views, and in which—

Figure 1 is a sectional view of a part of a railway-tie and showing a spike provided with my improved lock partially driven thereinto; Fig. 2, a similar view showing the spike fully driven into the tie, and Fig. 3 a transverse section on the line 3 3 of Fig. 2.

In the drawings forming part of this specification I have shown at a a part of a railwaytie and at b an ordinary spike, and in Fig. 2 I have shown at c a part of the base-flange of a railway-rail in connection with which the

head of the spike operates.
In the practice of my invention I form in the spike b transversely thereof and at any desired point between the head thereof and the pointed end thereof, a transverse hole b², through which is passed a metal lock d, which consists of a rod which will bend freely without breaking. The rod or lock d may be of any desired length; but the

length thereof is preferably from three to four times the transverse thickness of the 45 spike, and the upper walls of the hole b^2 , through which the rod or lock d is passed, are preferably beveled, as shown at b^3 , so as to prevent said rod from being broken when the spike is driven into the tie.

In the operation of driving the spike the ends of the rod d fold upwardly, as shown in Fig. 2, and are carried down into the material of the tie, and the said ends form in the tie and at the opposite sides of the spike 55 grooves a^2 . These grooves, however, are practically filled by the expansion of the material of the tie after the spike is driven, and the ends d^2 of the side or end portions of the rod d cut into the material of the tie and form 60 teeth, which operate as locks to prevent the removal of the spike and to prevent the said spike from working out or becoming loose.

This device may be used in connection with any kind or class of spikes, and also in 55 connection with large nails, and instead of using but one of the locks, as herein shown and described, a spike or nail may be provided with a plurality thereof.

Having fully described my invention, what 70 I claim as new, and desire to secure by Letters Patent, is—

A spike or nail provided between the point and head thereof with a transverse opening, and a lock of flexible metal passed through 75 said opening and the length of which is greater than the transverse thickness of the spike or nail.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 2d day of December, 1905.

JAMES NEIL.

Witnesses:

C. J. KLEIN, F. A. STEWART.