No. 849,712. PATENTED APR. 9, 1907.

T. J. AKERS.

SPIKE.

APPLICATION FILED OCT. 19, 1904.

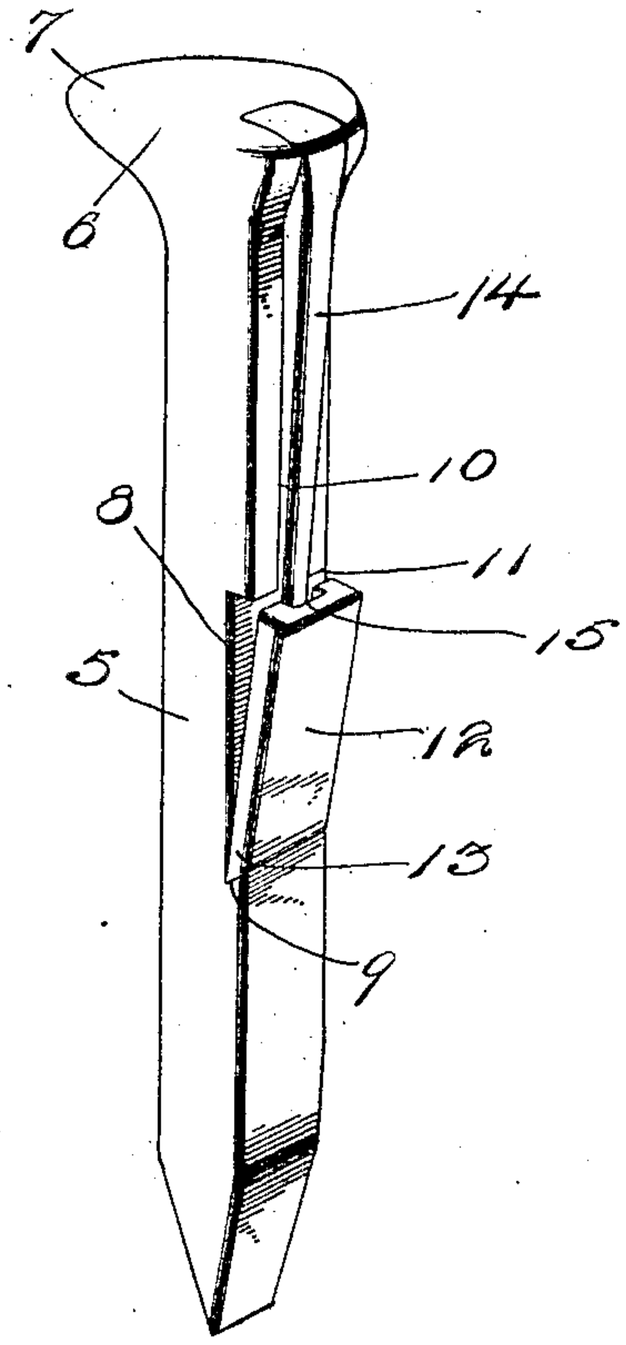

Fig. 1.

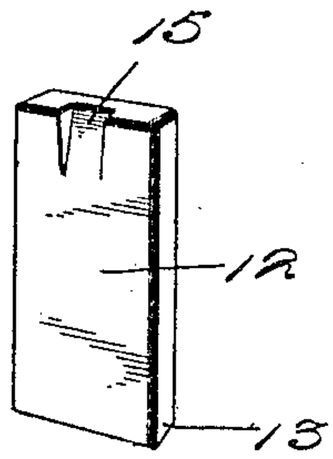

Fig. 3.

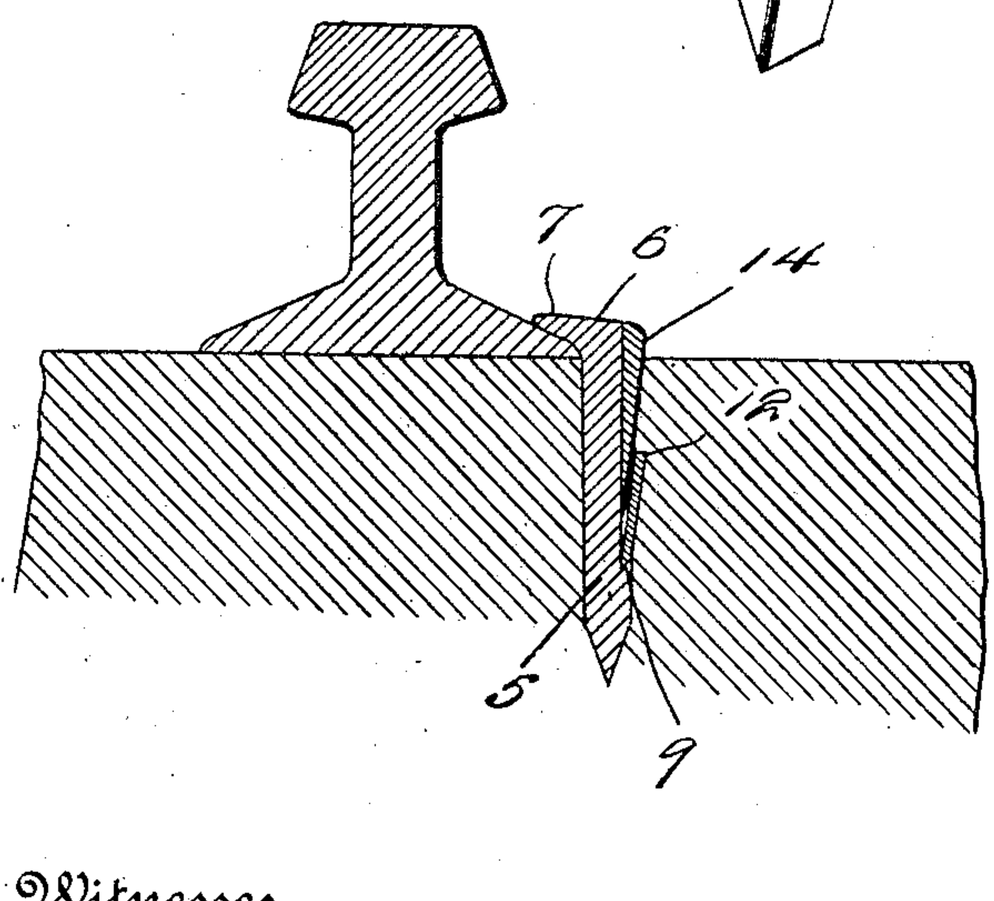

Fig. 2.

Witnesses
[illegible]
H. M. Baldwin.

Inventor
T. J. Akers
By [illegible]
Attorneys

UNITED STATES PATENT OFFICE.

THOMAS J. AKERS, OF RINER, VIRGINIA.

SPIKE.

No. 849,712. Specification of Letters Patent. Patented April 9, 1907.

Application filed October 19, 1904. Serial No. 229,139.

To all whom it may concern:

Be it known that I, THOMAS J. AKERS, a citizen of the United States, residing at Riner, in the county of Montgomery, State of Virginia, 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 in general, and more particularly to that class employed in connection with railways, the object of the invention being to provide a spike having a lock which will effectually hold the spike in engagement with a tie, and which lock may be thrown into active position after the spike is driven and may be released to permit it to move to inactive position when the spike is to be withdrawn from a tie.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a perspective view showing the spike with its locking member or barb projected. Fig. 2 is a vertical section through the spike and a portion of a tie in which it is engaged. Fig. 3 is a perspective view of the locking-plate.

Referring now to the drawings, there is shown a spike comprising a body portion 5 and a head 6, which latter projects at one side of the body to engage over the base-flange of a rail, said head projecting beyond the other faces of the body to a lesser degree.

In the longitudinal face of the body portion 5 of the spike opposite to the projecting lip 7 of the head 6 there is formed a seat 8, which opens through both side faces of the body of the spike and the bottom wall 9 of which is beveled inwardly. In the rear face of the body 5 of the spike above the seat 8 there is formed a longitudinal channel 10, which opens through the upper wall 11 of the seat 8 and is continued through the head 6.

A locking member is provided and consists of a plate 12, the lower end portion 13 of which is beveled to fit the bevel 9 and prevent outward movement of the lower end of the plate from the seat 8. In the groove or channel 10 is disposed an actuatng member 14, the lower end of which is beveled or wedge-shaped to engage behind the upper end of the plate 12 to force the latter outwardly so that it will project from the seat 8. To facilitate engagement of the actuatng member behind the plate 12, a channel 15 is formed in the rear face of the upper portion of the plate 12, the channel gradually decreasing in depth downwardly of the plate, so that at the upper edge of the plate there is sufficient space to permit the wedge to enter readily behind the locking-plate.

In the use of the spike the actuating-wedge is not driven into place until after the spike has been driven home, when the upper edge of the locking-plate bites into the material of the tie and holds the spike securely. If the actuating-wedge be first withdrawn and sufficient pressure is then applied, the spike may be drawn from the tie by means of the usual bar, the resultant lateral pressure against the locking-plate serving to move it into its seat.

What is claimed is—

A spike comprising a head and a shank, said shank having a recess formed in its rear face and extending the entire width of the shank, the bottom wall of the recess being undercut, a plate disposed within the recess and having its lower edge beveled to seat in the undercut lower wall of the recess to prevent movement of the lower end of the plate from the recess, said plate having a width equal to the width of the recess in which it is seated and being provided with a channel opening through its inner face and its upper edge, the recessed face of the shank of the spike being provided with a groove, and a wedge seated in the groove and arranged to be driven into position between the shank and plate to force the plate into the wood into which the spike is driven and at an angle to the shank of the spike, said wedge being tapered to such a degree that it may be driven to its fullest extent into such position without unseating the lower edge of the plate from the recess in the shank of the spike.

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

THOMAS J. AKERS.

Witnesses:

CHAS. A. WUNSTON,

ARCHER P. WANS.