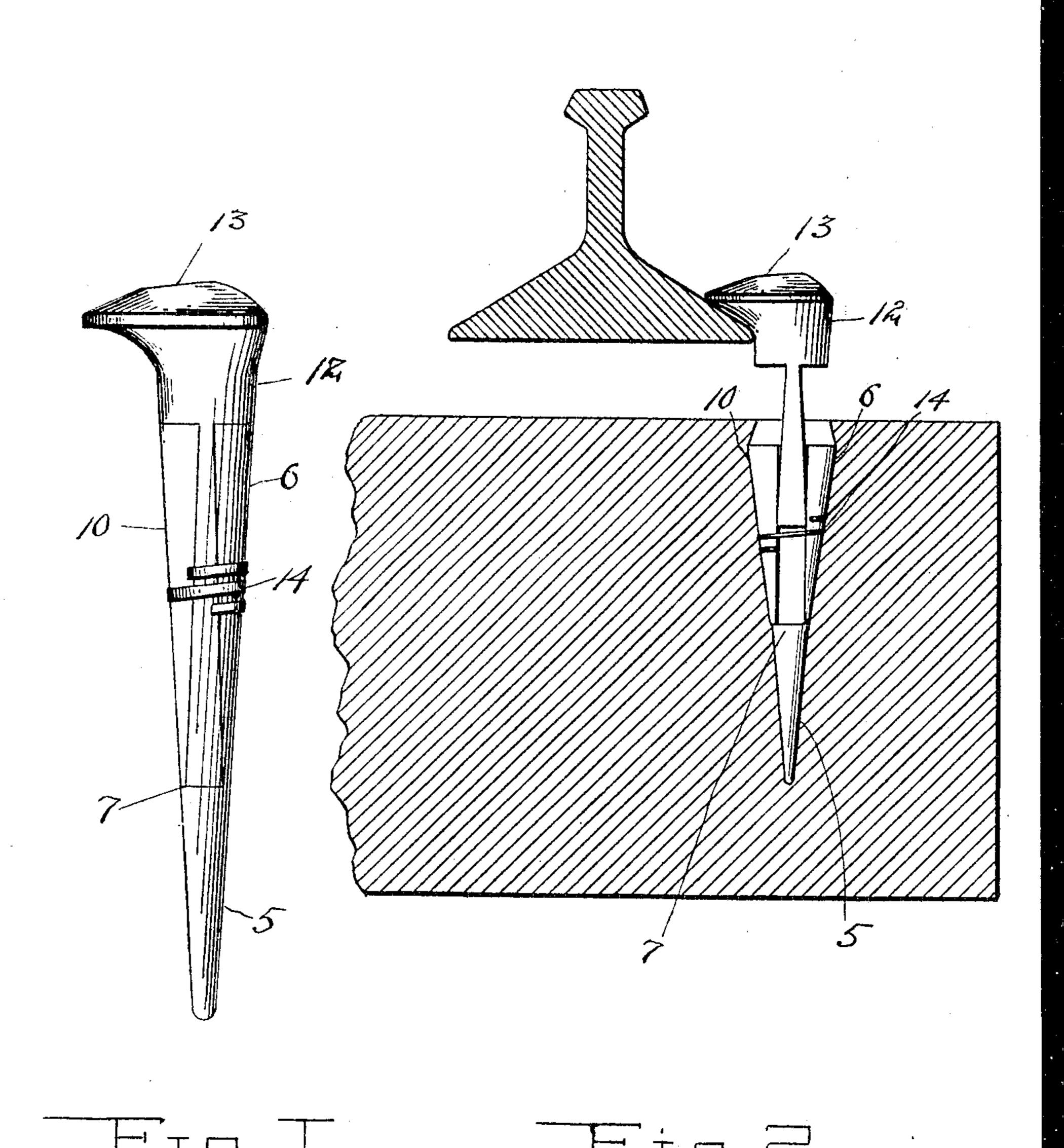
J. I. BOND.

SPIKE.

APPLICATION FILED FEB. 7, 1905.



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UNITED STATES PATENT OFFICE.

JOHN I. BOND, OF TAYLORS STORE, VIRGINIA.

SPIKE.

No. 799,298.

Specification of Letters Patent.

Patented Sept. 12, 1905.

Application filed February 7, 1905. Serial No. 244,569.

To all whom it may concern:

Be it known that I, John I. Bond, a citizen of the United States, residing at Taylors Store, in the county of Franklin, State of Virginia, 5 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 the class of railway-spikes, the object of the invention being to provide a construction wherein any attempt to withdraw the spike by upward movement of the rail will serve only to anchor the spike

more securely into the tie.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in both views, Figure 1 is a side elevation showing a spike embodying the present invention. Fig. 2 is a sectional view through a railway-tie into which the spike is driven, a portion of a rail being shown in transverse section raised from the tie and the members of the spike being shown in the positions they would assume if the rail were raised from the tie.

Referring now to the drawings, there is shown a spike comprising a head portion and a body portion, the body including three members and a temporary binder, with one of which members the head of the spike is inte-

gral.

One of the members of the body of the spike includes the entire lower end portion 5 of the spike, which is tapered to a point and which may have any desired cross-sectional shape, although in the present instance it is rounded. From one side of the point portion 5 said member extends upwardly and is gradually increased in thickness, this upwardly-extending portion being illustrated at 6, and there being at the base of said portion, or the upper end of the point portion, a shoulder 7.

A second member of the body of the spike is illustrated at 10 and corresponds in every detail to the portion 6, the lower end of the member 10 in practice resting upon the shoulsolder 7. The portions 6 and 10 are spaced apart throughout their lengths, and the interspace between them is gradually narrowed

upwardly.

The third member of the body of the spike is in the form of an inverted wedge in that 55 its major end is disposed downwardly, so that it initially or normally rests upon the shoulder 7, and upon the upper or minor end of the wedge is the portion 12 of the body which carries the head 13 and which portion 12 is 60 flush with the side faces of the portions 6 and 10 when the wedge is upon the seat or shoulder 7.

In practice the several members of the body are held together by means of a band 14 of 65 such arrangement that it will normally hold the parts close together, but will yield to slight outward pressure. This band may consist of a strip of block-tin wrapped about the spike and retain its place only by reason of 7°

its own stiffness.

The spike is driven in the usual manner, and any upward pull upon the head of the spike will draw the wedge upwardly to force the parts 6 and 10 apart, so as to expand the 75 body of the spike and force the upper ends of the parts 6 and 10 outwardly beyond the face of the portion 12. The spike being driven into the tie beyond the upper ends of the portions 6 and 10, the latter prevent withdrawal 80 of the spike, as will be understood.

It will be understood that in practice modifications of the specific construction shown may be made, and any suitable materials and proportions may be used for the various parts 85 without departing from the spirit of the in-

vention.

What is claimed is—

A spike comprising a body including a point member having an upward gradually-broad- 90 ened extension and a shoulder at the base thereof, a loose upwardly-broadened member exposed with its minor end upon the shoulder, an upper member having a downwardly-broadened extension disposed between the sec- 95 ond member and the extension of the first member and a head carried by said upper member.

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

JOHN I. BOND.

Witnesses:

M. A. Ridgway, F. L. Bond.