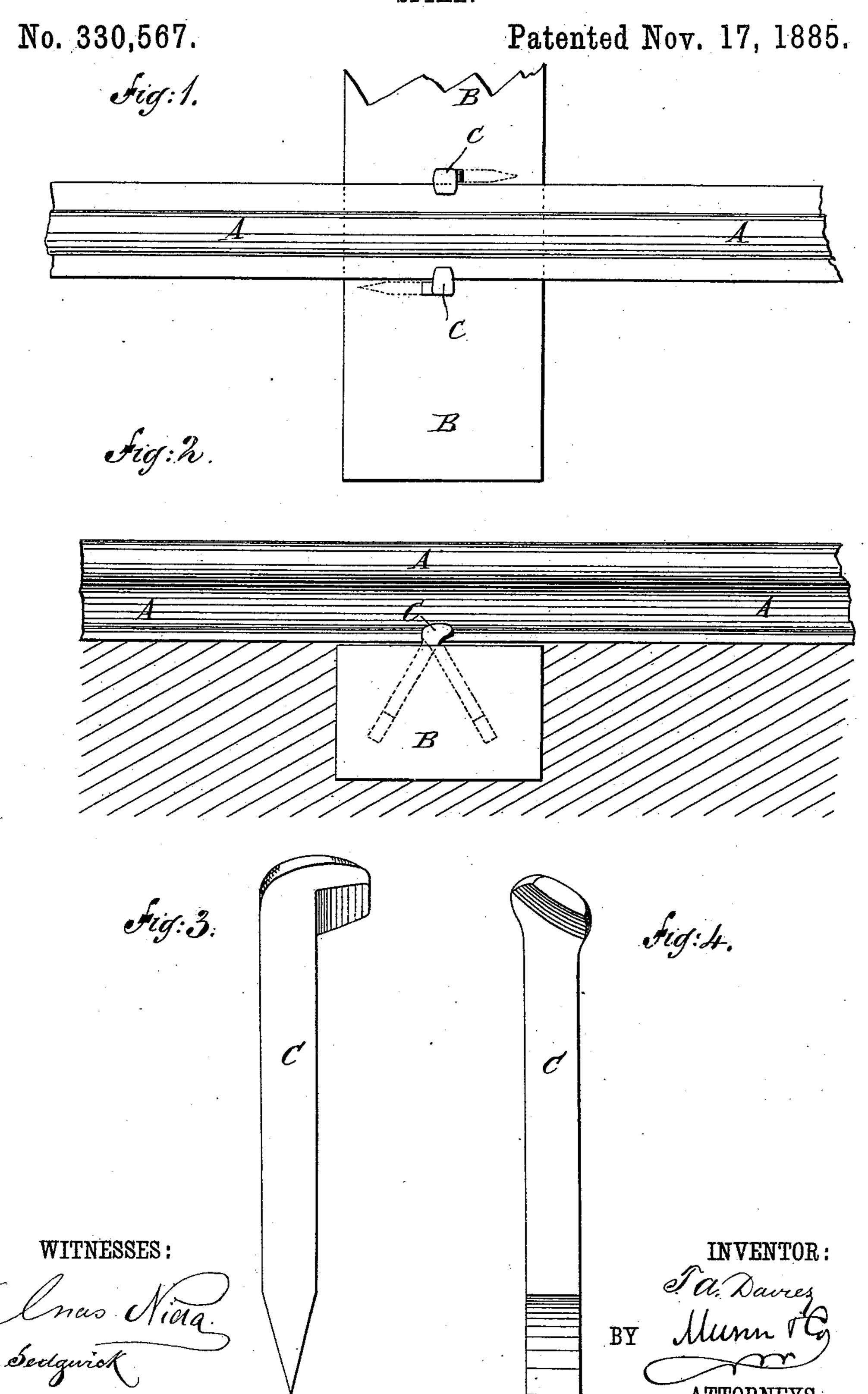
T. A. DAVIES.

SPIKE.



United States Patent Office.

THOMAS A. DAVIES, OF NEW YORK, N. Y.

SPIKE.

SPECIFICATION forming part of Letters Patent No. 330,567, dated November 17, 1885.

Application filed June 11, 1885. Serial No. 168,421. (No model.)

To all whom it may concern:

Be it known that I, Thomas A. Davies, of the city, county, and State of New York, have invented certain new and useful Improvements in Railroad-Rail Spikes, of which the following is a full, clear, and exact description.

Reference is to be had to the accompanying drawings, forming part of this specification, to in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a plan view of a portion of a railroad-rail and of a tie to which my improved spikes have been applied. Fig. 2 is a side elevation of the same. Fig. 3 is a side elevation of one of my improved spikes. Fig. 4 is a front elevation of the same.

The object of this invention is to secure rail-road-rails to ties in such a manner that any upward movement of the rails will raise and carry with them the ties, without tendency to draw the spikes from the said ties.

The invention consists in the spikes constructed with oblique heads, and also in driving the spikes at an angle of twenty degrees or more with the transverse sectional plane of the rails, as will be hereinafter fully described.

A represents a railroad-rail, and B represents a tie upon which the said rail rests. C is a spike, the stem and point of which are made in the ordinary manner. The head of the spike C that overlaps the flange of the rail A is made oblique or with a lateral inclination upon its lower side. The inclined lower side of the head of the spike C is preferably slightly

rounded, as shown in Fig. 4, so that the said head will always have a substantial bearing upon the flange of the rail A, whatever be the angle at which the spike C is driven into the tie B.

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In securing rails to their ties with my improved spikes the spikes C are driven into the ties at an angle of twenty degrees or more with a plane passing transversely through the rail at that point, so that any rise of the rails 45 will cause the upper sides of the inclined spikes to press upward against the grain of the wood, and thus carry the said ties with them, without tending to draw the spikes from the ties. This upward rise of the ties 50 will allow sand to gradually work in beneath the said ties and cause the track to level itself, and thus ultimately prevent the rails from having any up and down movement, so that the said rails will be held firmly to their 55 seats.

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

A railroad - rail spike made substantially 65 as herein shown and described, with heads laterally inclined upon their lower sides, to give the said heads a substantial bearing upon the flanges of the rails when the spikes are driven into the ties in an inclined direction, 65 as set forth.

THOMAS A. DAVIES.

Witnesses:

JAMES T. GRAHAM, C. SEDGWICK.