

(No Model.)

T. A. DAVIES.  
RAILROAD SPIKE.

No. 362,252.

Patented May 3, 1887.

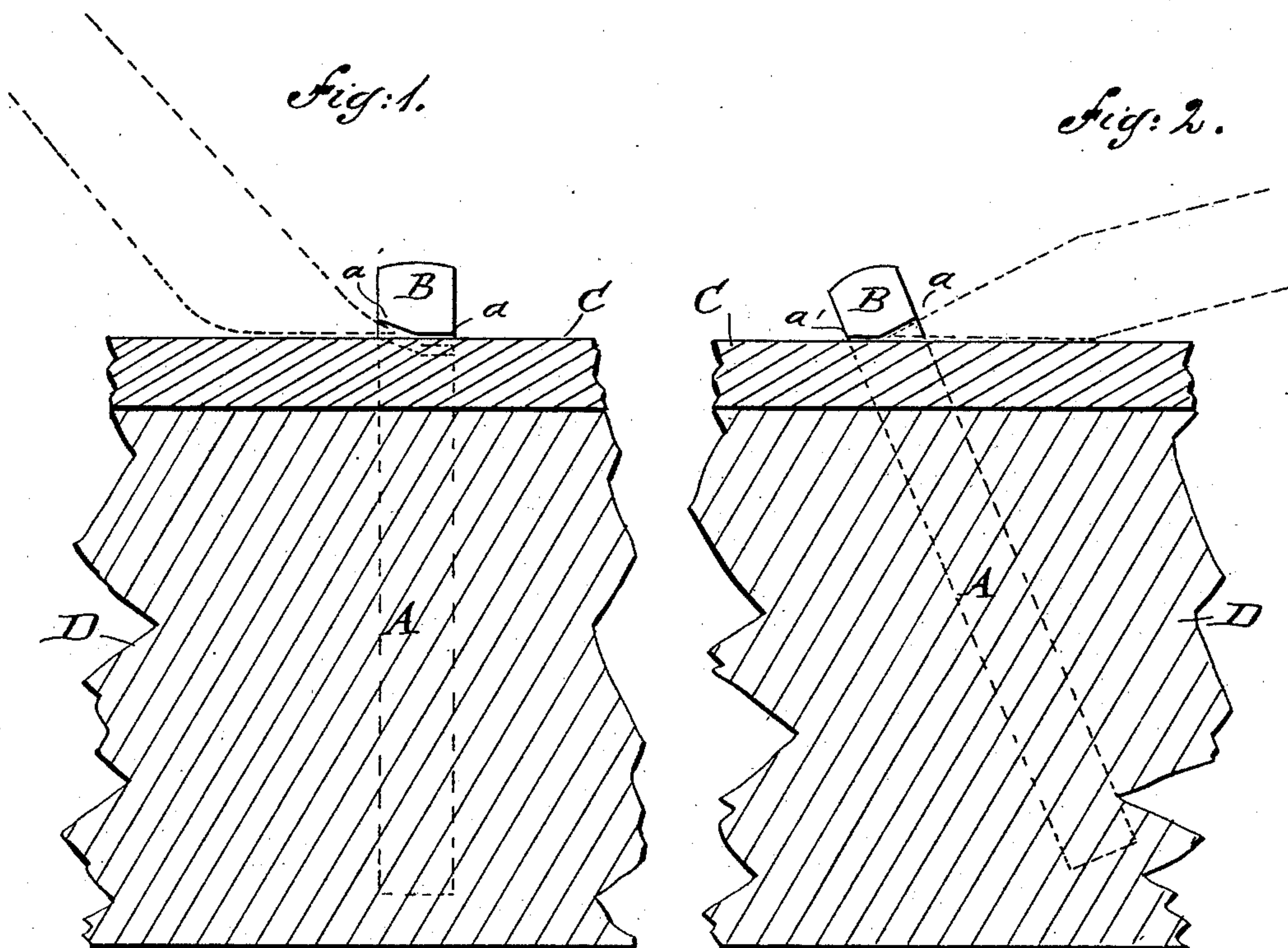


Fig. 5.

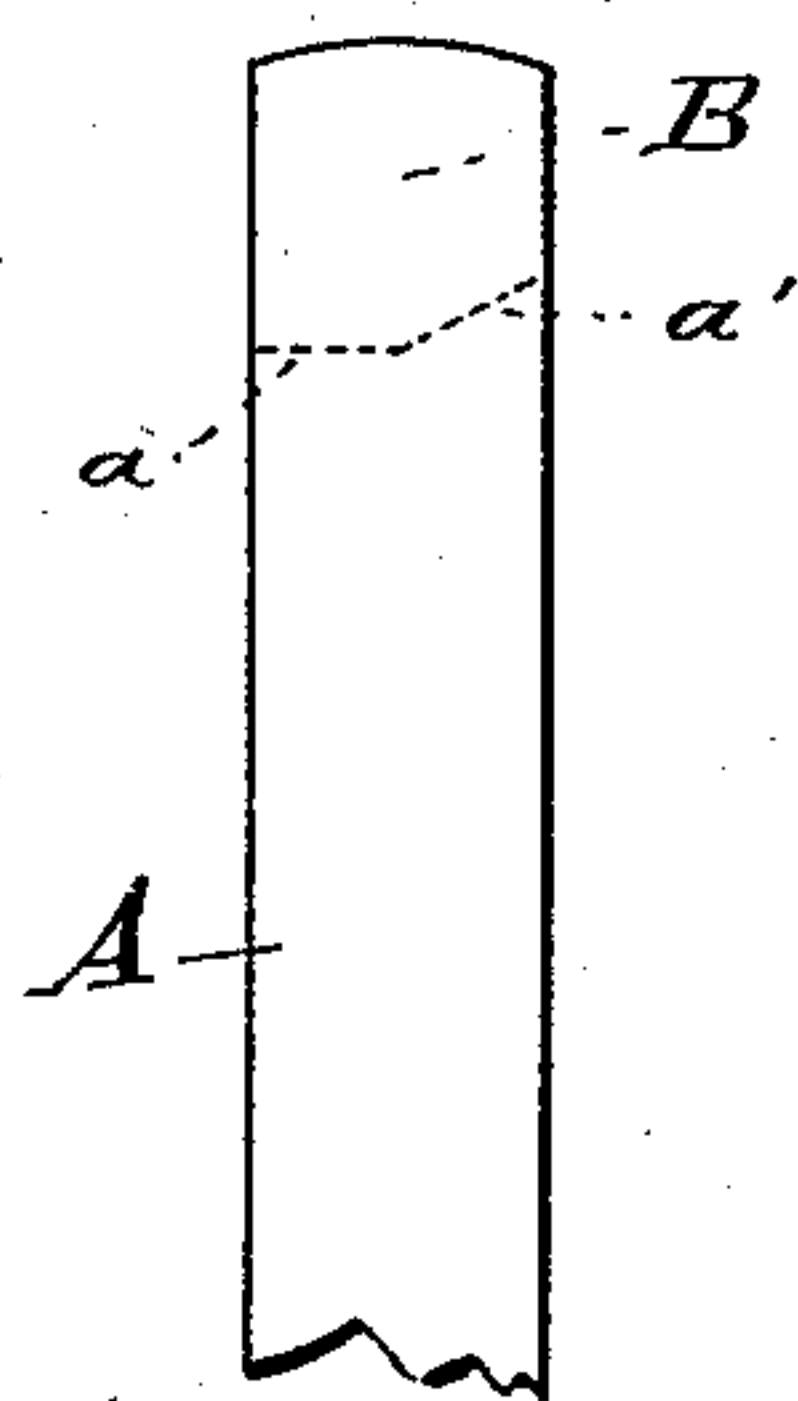


Fig. 3.

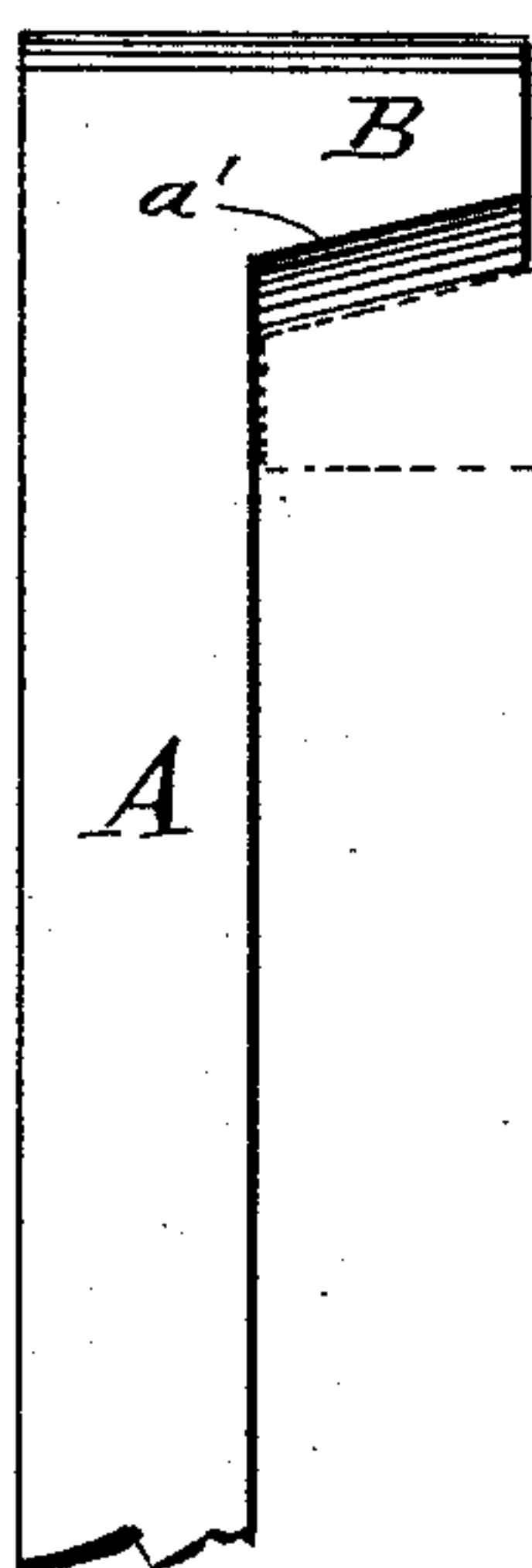
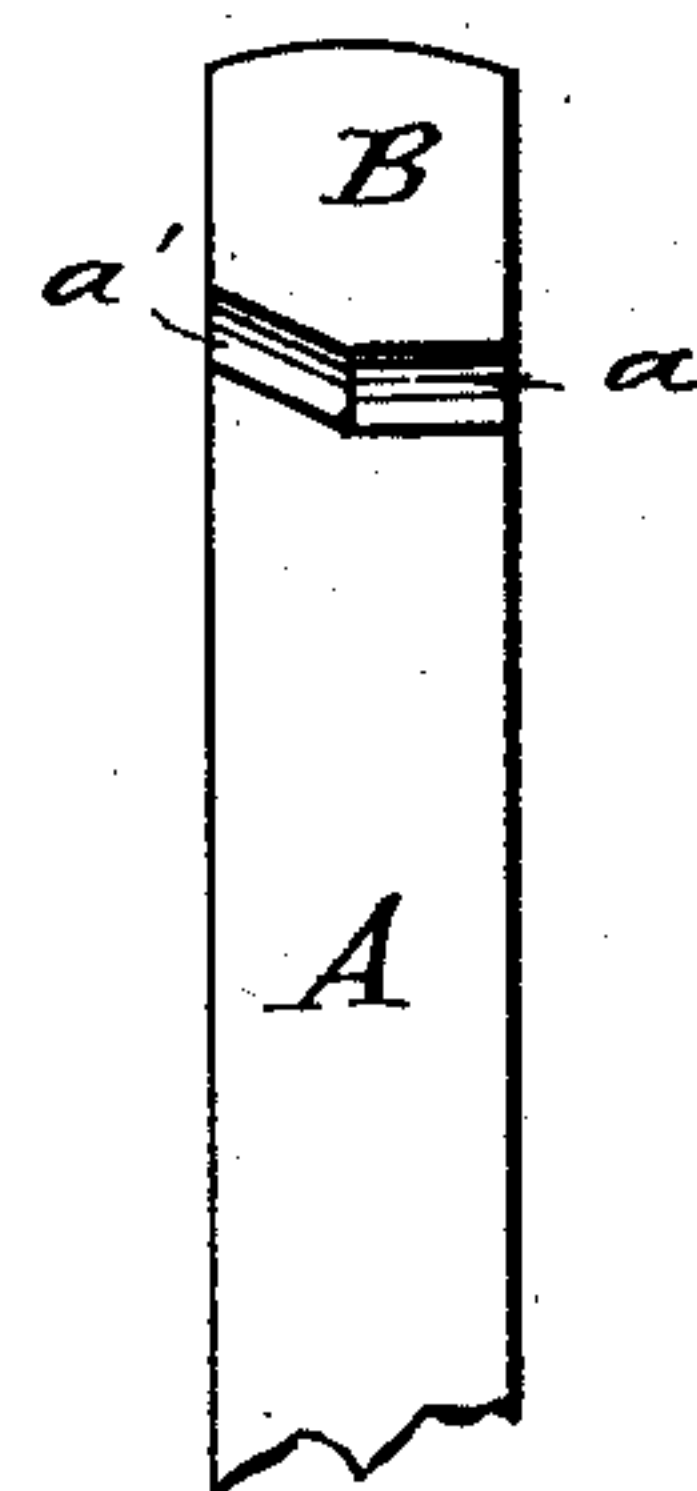


Fig. 4.



WITNESSES:

*Chas. Vida.*  
*W. Sedgwick*

INVENTOR:

*T. A. Davies*  
BY *Munn & Co.*  
ATTORNEYS.

# UNITED STATES PATENT OFFICE.

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

## RAILROAD-SPIKE.

SPECIFICATION forming part of Letters Patent No. 362,252, dated May 3, 1887.

Application filed February 23, 1887. Serial No. 228,551. (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 a new and Improved Railroad-Rail Spike, of which the following is a full, clear, and exact description.

This invention relates to certain improvements in the construction of railroad-rail spikes covered by Letters Patent No. 330,570, granted to me November 17, 1885; and my present invention consists in a railroad-rail spike having the under surface of its head formed with two flat faces, adapting the spike to have a broad bearing upon the base of the rail, whether the spike be driven vertically or at an inclination in the cross-tie, and also adapting the spike to be drawn out from the cross-tie without bending the spike.

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

Figure 1 is a sectional elevation of a part of a railway cross-tie and a part of the flange of a railroad-rail having one of my improved spikes applied thereto, the spike being driven vertically in the cross-tie, and illustrating, also, in dotted lines the application of a crow-bar to the spike for drawing the same. Fig. 2 is a similar view showing the spike driven at an angle in the cross-tie. Fig. 3 is an enlarged side elevation of the upper part of the spike, showing the flange of a railway-rail in dotted lines, and Figs. 4 and 5 are respectively front and rear elevations of the upper part of the spike.

A represents the body of a spike, the lower end of which is sharpened to facilitate driving in the ordinary manner.

B is the spike-head formed upon its under surface with two flat faces,  $a$   $a'$ , slightly in-

clined upward from the body A, to suit the slant of the upper surface of the base or flange C of a railway-rail. The flat face  $a$  in its transverse plane is at right angle to the length of the body A, so that it will rest squarely upon the flange C of the railway-rail when the spike is driven vertically into the cross-tie D, as shown in Fig. 1. The flat face  $a'$  is formed at an obtuse angle with the flat face  $a$ , so that it will rest squarely upon the flange C when the spike is driven at an angle into the cross-tie, as illustrated clearly in Fig. 2. In this manner the spike-head always presents a broad flat surface to the flange of the rail, and when the spike is driven home this flat surface prevents all danger of deflection of the upper end of the spike, which occurs to a greater or less extent when the lower surface of the spike-head is rounded. The two flat surfaces  $a$   $a'$  also facilitate the drawing of the spike from the cross-tie, as an angular space is left at the sides of the spike-head between the flat surfaces and the rail-flange, into which the point of a crow-bar may be placed, and the spike lifted by force applied by the bar directly in line with the length of the spike, so that danger of deflecting and bending the body of the spike is almost altogether obviated.

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

A railroad-rail spike made, substantially as herein shown and described, with the lower part of its head formed with flat surfaces  $a$   $a'$  at an angle to each other, as and for the purposes set forth.

THOMAS A. DAVIES.

Witnesses:

H. A. WEST,  
C. SEDGWICK.