

(No Model.)

T. A. DAVIES.
RAILROAD RAIL SPIKE.

No. 330,570.

Patented Nov. 17, 1885.

Fig: 1.

Fig: 2.

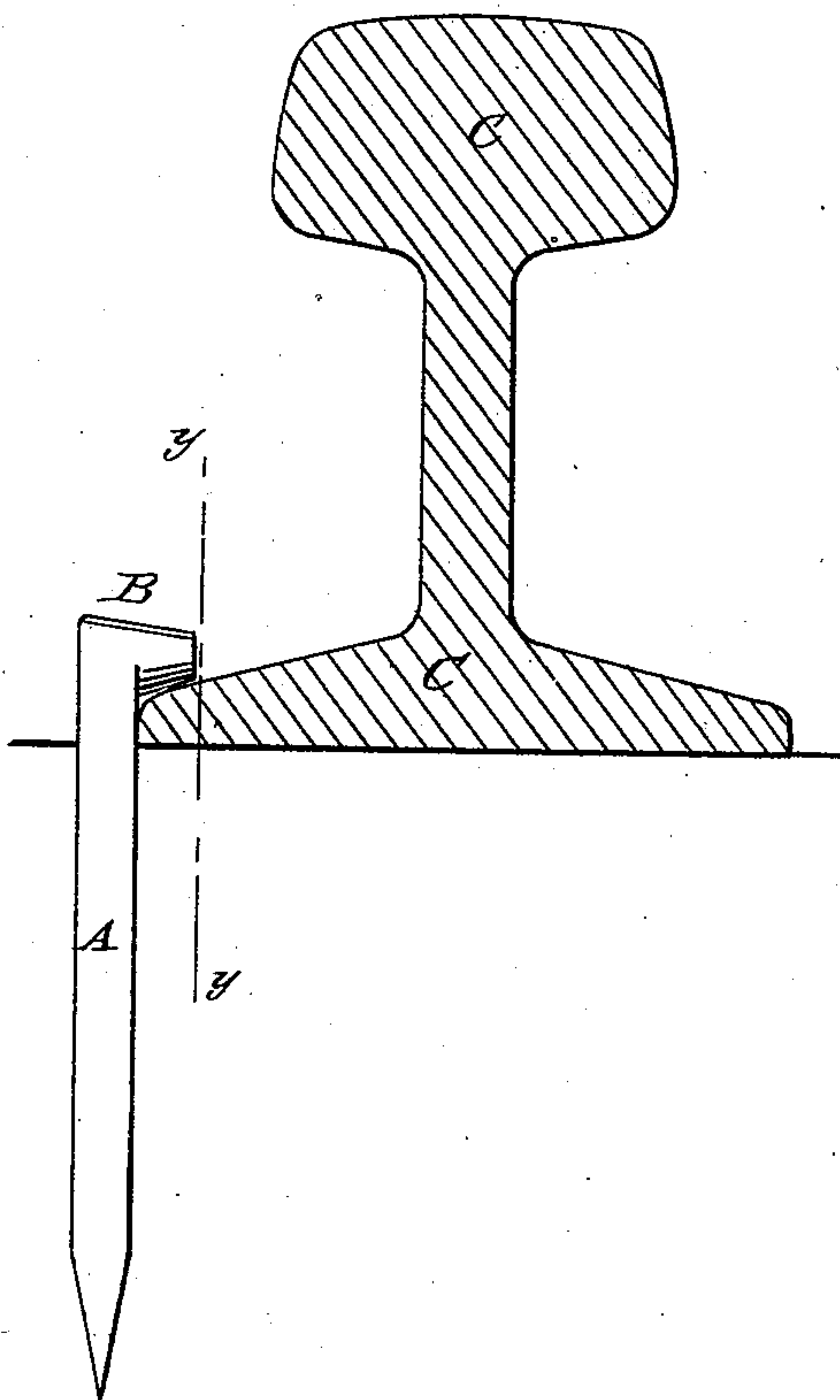
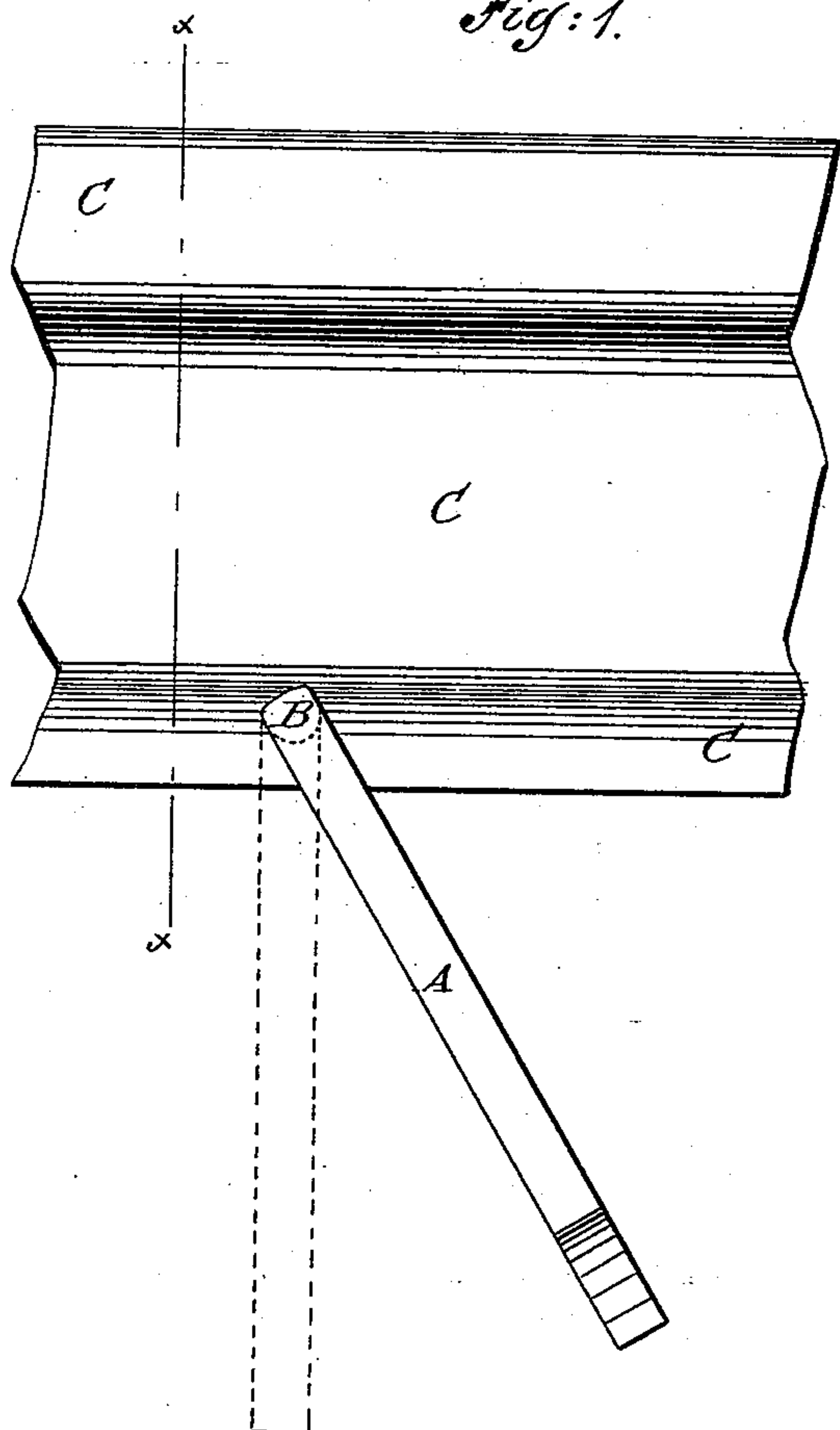
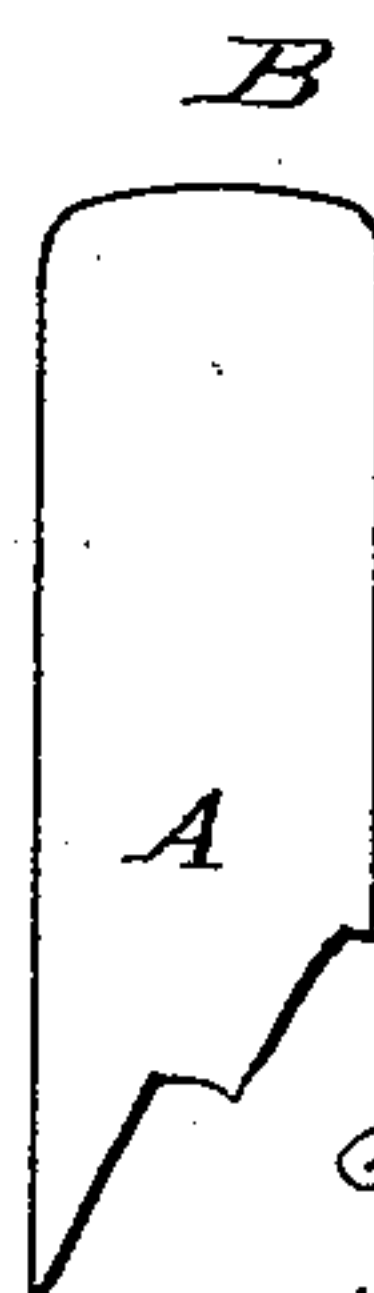
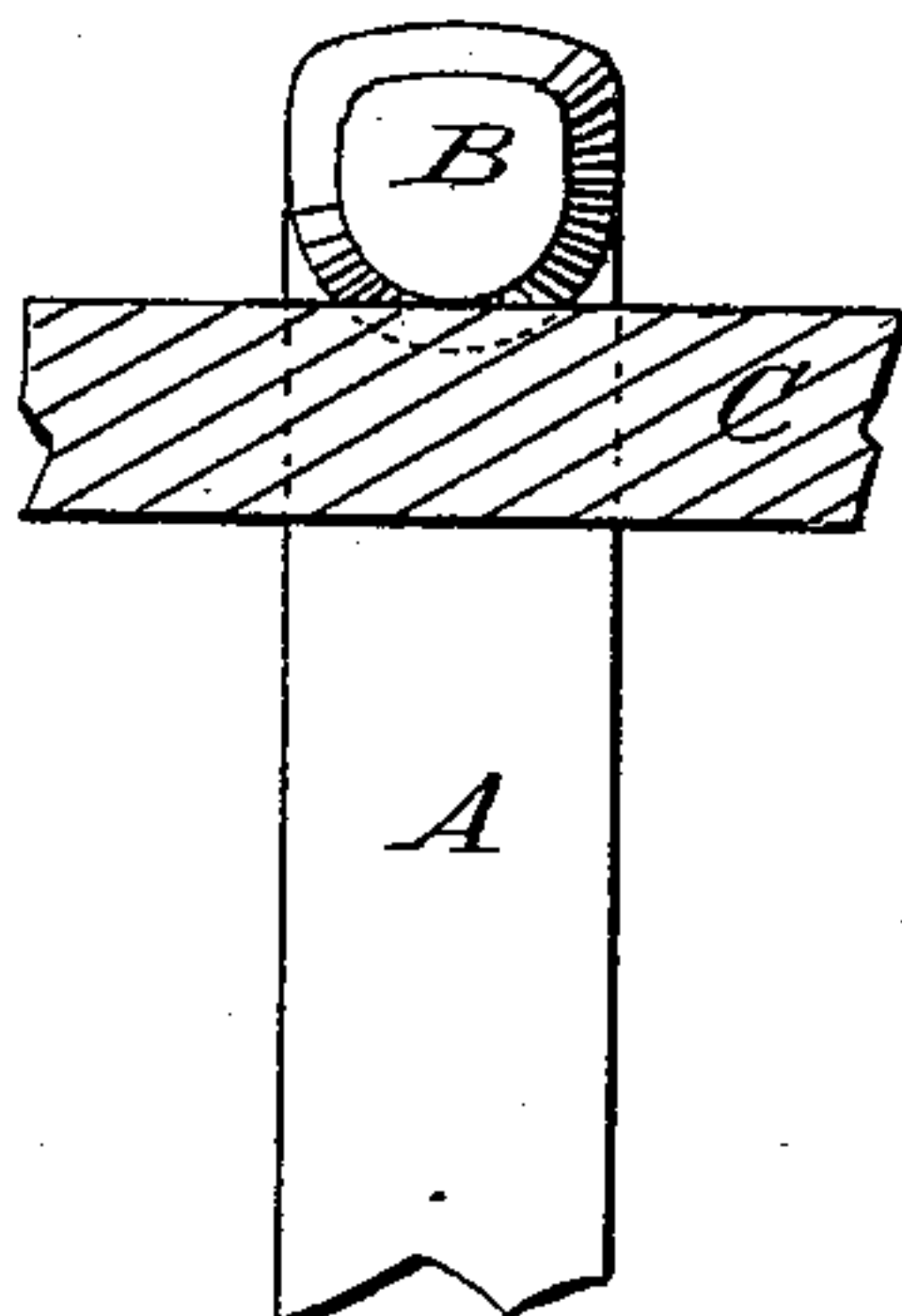
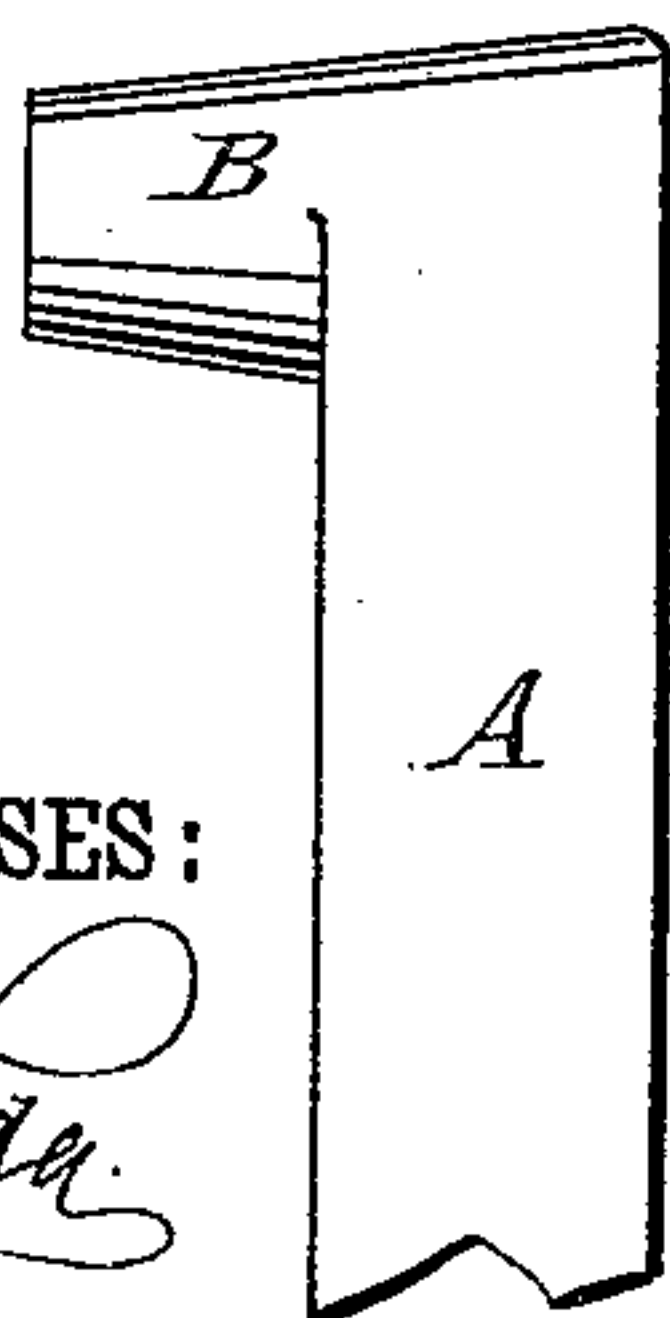


Fig: 4.

Fig: 3.

Fig: 5.



WITNESSES:

Chas. Nida
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INVENTOR:

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UNITED STATES PATENT OFFICE.

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

RAILROAD-RAIL SPIKE.

SPECIFICATION forming part of Letters Patent No. 330,570, dated November 17, 1885.

Application filed July 3, 1885. Serial No. 170,635. (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, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of a part of a railroad-rail to which one of my improved spikes has been applied, the spike being shown in rear elevation. Fig. 2 is a sectional end elevation of the same, taken through the line *x x*, Fig. 1, the spike being shown in side elevation. Fig. 3 is a sectional side elevation of a part of a rail-flange, taken through the line *y y*, Fig. 2, the upper part of the spike being shown in front elevation. Fig. 4 is a side elevation of the upper part of a spike. Fig. 5 is a rear elevation of the upper part of a spike.

The object of this invention is to provide railroad-rail spikes made in such a manner that the spike-heads will have a firm bearing on the rail-flanges, whether the said spikes be driven vertically or at an inclination toward either side.

The invention consists in a railroad-rail spike made with the lower part of its head in the form of the frustum of a cone, having its axis at right angles with the axis of the spike-body, as will be hereinafter fully described.

A represents the body of a spike, the lower end of which is tapered in the ordinary manner. B is the spike-head, the lower part of which is made in the form of the frustum of a cone, having its axis at right angles with the axis of the spike-body A, and thus parallel with the top of the tie and the bottom of the rail C. The upper part of the spike-head B

may be made flat with rounded edges, or rounded, or of any other desired shape. With this construction the lower part of the head B will have a firm bearing on the flange of the rail C when the said spike is driven into the tie vertically, as shown in Fig. 3, and when driven into the tie at an inclination, as shown in Figs. 1 and 2. With this construction, also, the greatest amount of metal will be at the angle between the head B and the body A of the spike, where the greatest strength is required, so that the heads of my improved spikes will be much less liable to be broken off than the heads of spikes made in the ordinary manner.

Another advantage of my improved spikes is that there will be an angular space at the sides of the spike-heads, between the side parts of the said heads and the upper surface of the rail-flanges, into which the point of a crow-bar or of a pinch-bar can be inserted or jammed when it is desired to draw the spikes, so that the said spikes can be drawn readily and without breaking down the fibers of the wood and preventing the spikes from having a suitable hold on the wood should they be driven a second time in the same place.

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, in the form of the frustum of a cone, having its axis at right angles with the axis of the spike-body, whereby the said spike-head will have a firm bearing on the rail-flange whether driven vertically or at an inclination toward either side, as set forth.

THOMAS A. DAVIES.

Witnesses:

JAMES T. GRAHAM,
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