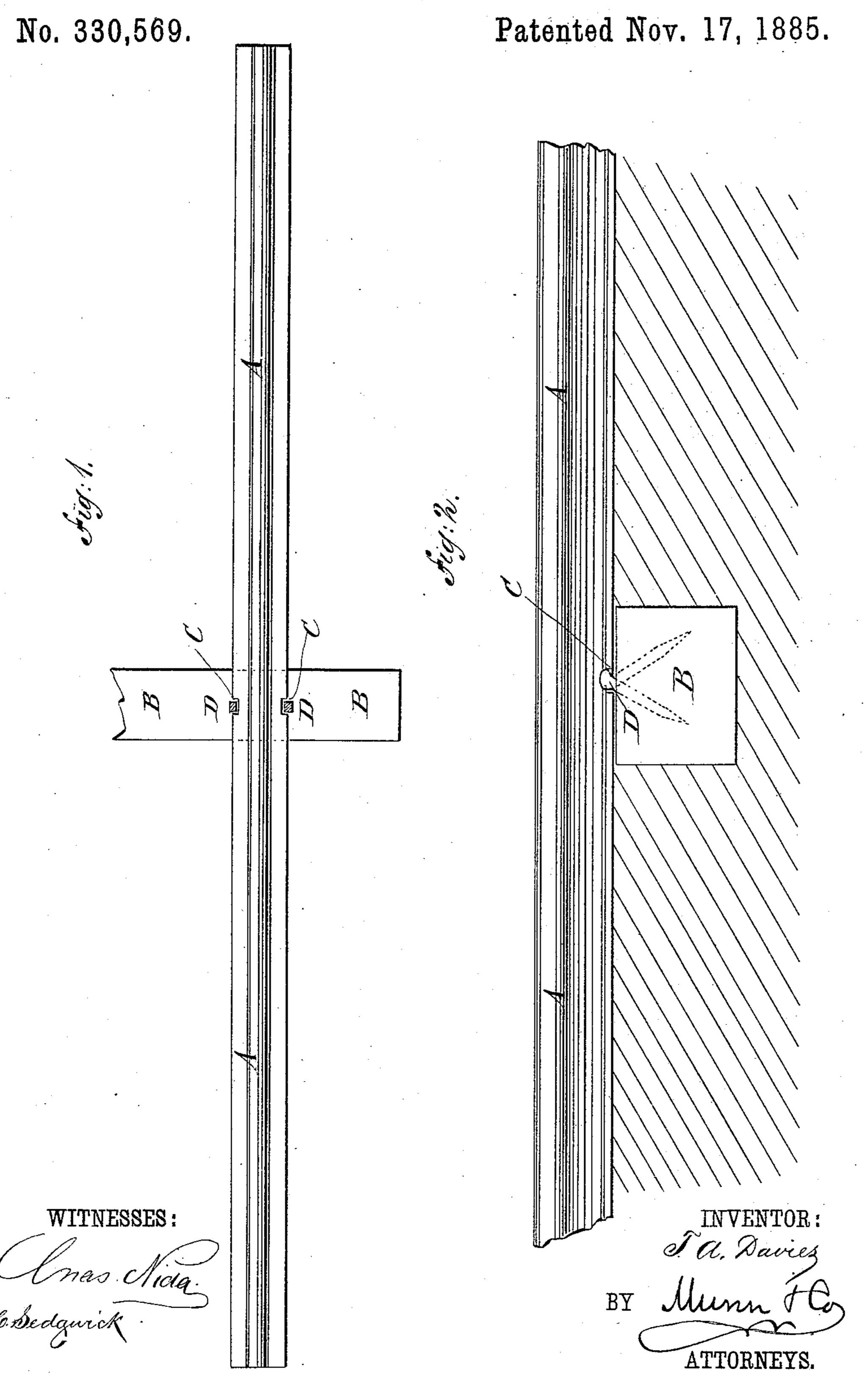
T. A. DAVIES.

CENTER FASTENING FOR RAILROAD RAILS.



United States Patent Office.

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

CENTER FASTENING FOR RAILROAD-RAILS.

SPECIFICATION forming part of Letters Patent No. 330,569, dated November 17, 1885.

Application filed June 11, 1885. Serial No. 168,423. (No model.)

curely in place.

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 Center Fastenings for Railroad-Rails, 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 both the figures.

Figure 1 is a plan view of a railroad-rail and a part of the center tie, the fastening-spikes being shown in section. Fig. 2 is a side elevation of the same, parts being broken away.

The object of this invention is to hold railroad-rails from longitudinal movement, while allowing them to expand and contract freely.

The invention consists in the combination, with the railroad-rails having recesses in the centers of the edges of their flanges and the ties, of the inclined spikes, as will be hereinafter fully described.

A represents a railroad-rail, and B represents its central tie. In the flanges of the rail A, at the centers of their edges, are formed recesses C to receive the spikes D, that secure the said rail to the said tie. By this construction the center of the rail A will be held stationary while its ends will be free to move as the said rail expands and contracts, so that the said rail cannot get out of place and cannot affect the joints of the adjacent rails.

The spikes may be driven into the ties B at

right angles with the plane of the rails; but I

as to resist the tendency of the rails to creep in either direction. This is important in all parts of the track, but is especially important on a steep grade, where the tendency of the rails is to creep down the grade and open the weakest joint, so as to leave a gap between

rails is to creep down the grade and open the 50 weakest joint, so as to leave a gap between the ends of adjacent rails, and thus loosen the said joint and destroy the continuity of the rails.

prefer to drive the spikes with their points

inclined toward the direction in which the

rails tend to creep, so as to more strongly re-

sist the said tendency and hold the rails se- 40

When the improvement is applied to a sin-

their points inclined in opposite directions, so 45

gle-track road, the central spikes upon the op-

posite sides of each rail should be driven with

Having thus described my invention, what 55 I claim as new, and desire to secure by Letters Patent, is—

The combination, with the railroad-rail A, having recesses C in the centers of the edges of its opposite flanges, and the central tie, B, 60 of the inclined fastening-spikes D, driven into the ties at opposite inclinations, substantially as herein shown and described, whereby the center of the rail will be held securely in place while the ends will be allowed a free longitudinal movement as the said rail expands and contracts, and the rail will be held securely against creeping, as set forth.

THOMAS A. DAVIES.

Witnesses:

JAMES T. GRAHAM, C. SEDGWICK.