

No. 682,435.

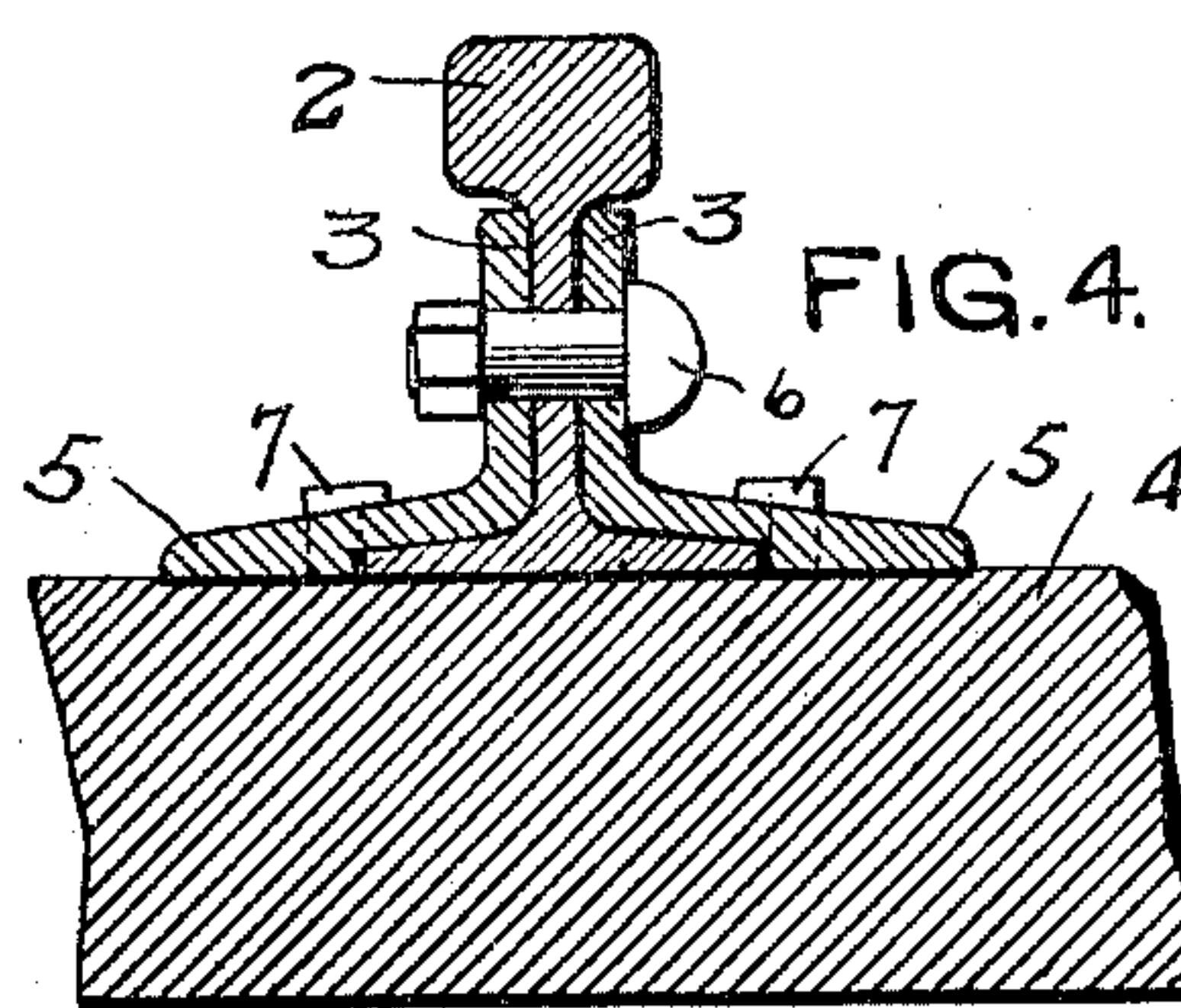
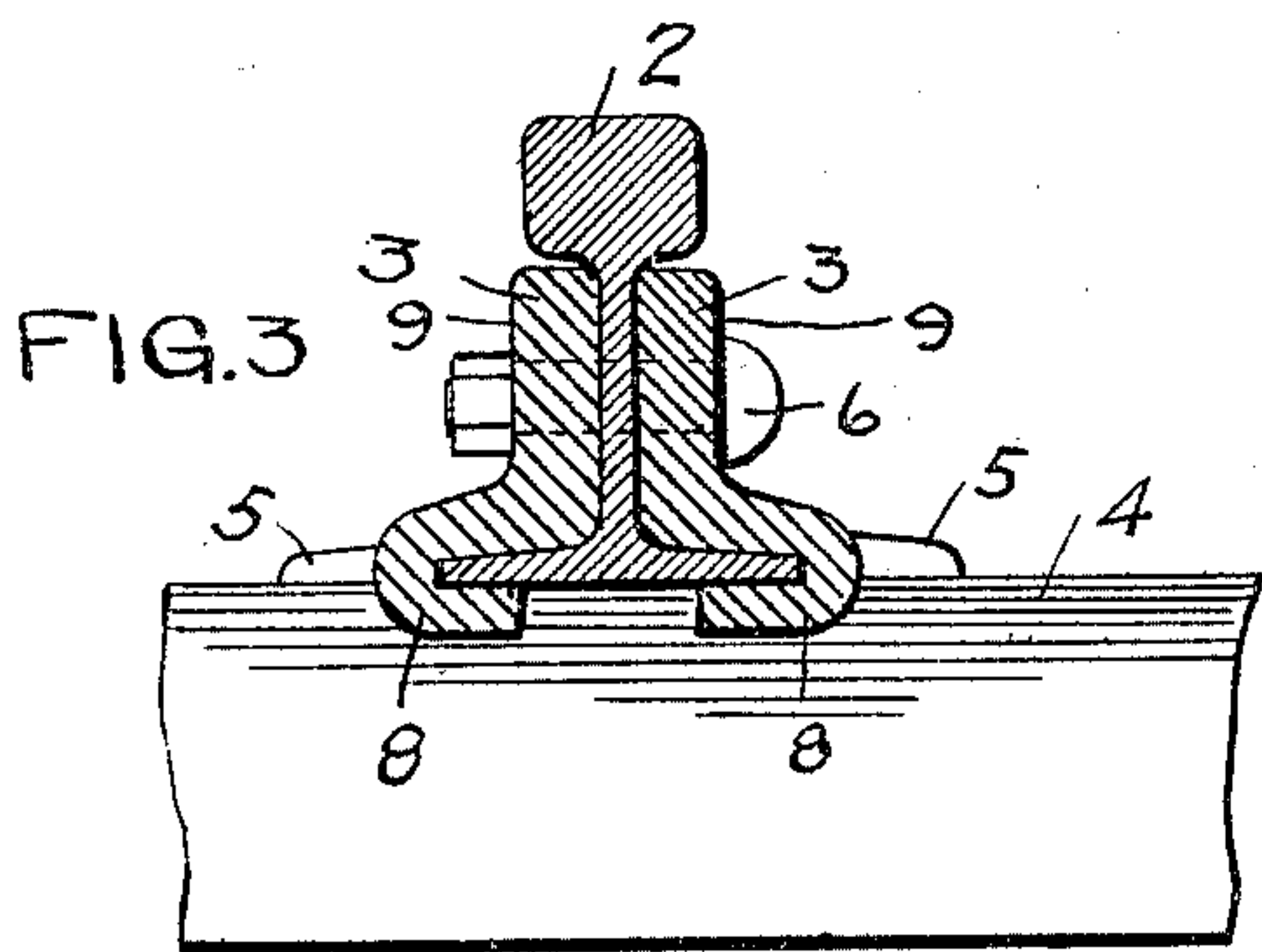
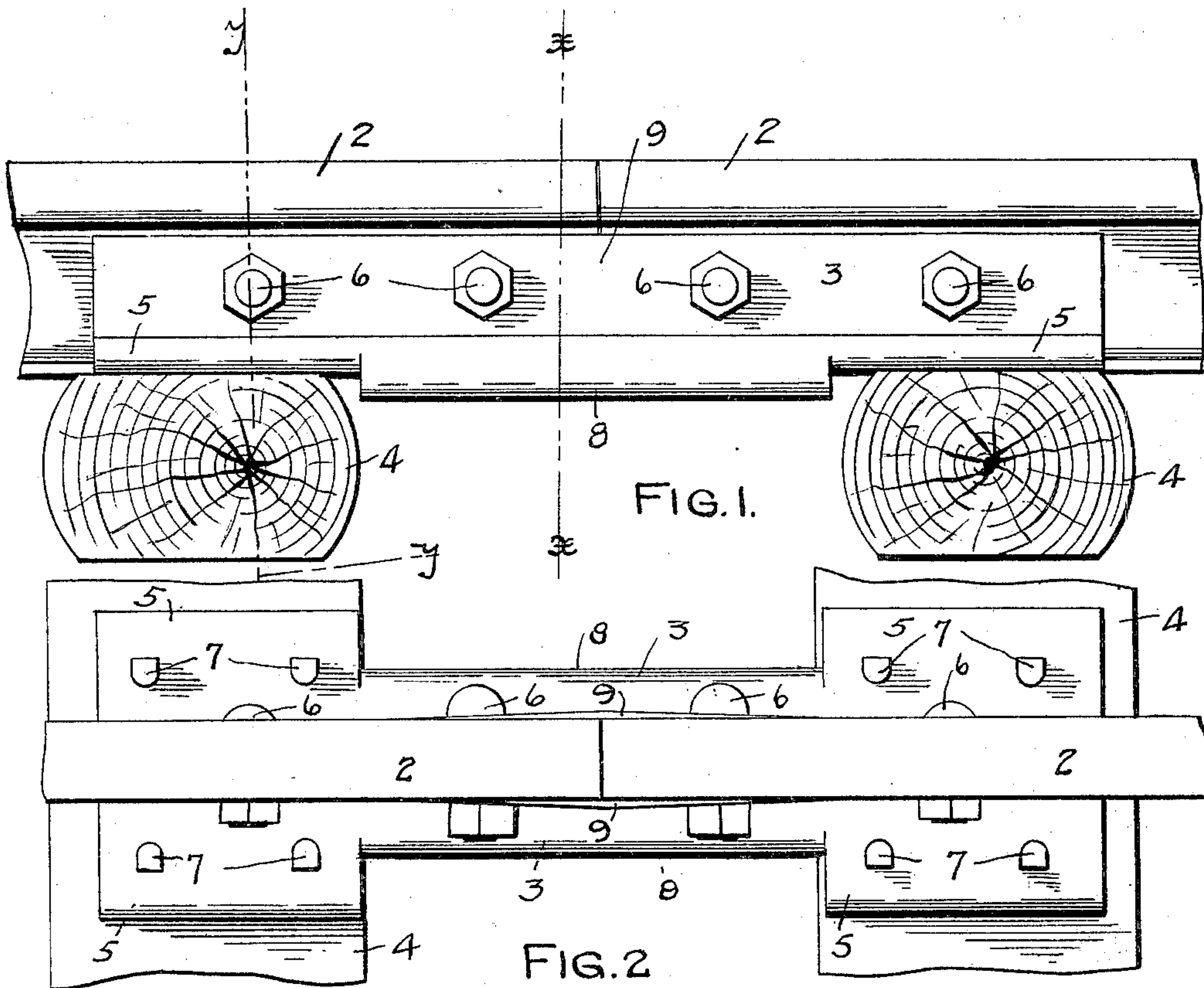
Patented Sept. 10, 1901.

J. SWANSON.

FISH PLATE.

(Application filed Nov. 26, 1900.)

(No Model.)



WITNESSES

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FISH-PLATE.

SPECIFICATION forming part of Letters Patent No. 682,435, dated September 10, 1901.

Application filed November 26, 1900. Serial No. 37,855. (No model.)

To all whom it may concern:

Be it known that I, JOHN SWANSON, a citizen of the United States, residing at Greatbend, in the county of Richland, State of North Dakota, have invented certain new and useful Improvements in Fish-Plates, of which the following is a specification.

My invention relates to fish-plates or splice-bars for railway-joints; and the object of the invention is to provide a plate that will be stronger and more durable than those heretofore used and that will prevent the rails from spreading at the joint.

A further object is to provide a plate especially adapted for use on rail-joints at curves in the track.

The invention consists generally in various constructions and combinations, all as hereinafter described, and particularly pointed out in the claim.

In the accompanying drawings, forming part of this specification, Figure 1 is a side elevation of a rail-joint embodying my invention. Fig. 2 is a plan view of the same. Fig. 3 is a cross-section on the line xx of Fig. 1. Fig. 4 is a cross-section on the line yy of Fig. 1.

In the drawings the reference character 2 indicates the abutting track-rails resting upon ties 4 4 and connected by fish-plates or splice-bars 3 3, said bars being rigidly secured to the rails by means of bolts 6 6 passing therethrough. These bars or plates are provided with thickened or enlarged portions 9 at or near their centers and with the downwardly-turned portions 8, which extend under and engage the flanges or bases of the rails between the ties. The bars are provided at each end with laterally-projecting flattened portions 5, that extend down over the rail-base and are provided with shoulders to engage the edges of the same, thereby preventing spreading or turning of the rails. The portions 5 extend out over the ties and are secured thereto by spikes 7, which also serve to hold the rail-base in position. The plates

thus have a broad bearing-surface on the tops of the ties and prevent any twisting or rolling movement of the rails, especially on curves, and the thickened portions 9, overlapping the joint between the rails, hold the same securely, preventing any buckling or lateral movement of the joint during the passage of the train, and the rails are further braced and strengthened by the downwardly-turned portions passing under the base of the same. It will be understood that the flattened portions 5 may be made to extend a greater or less distance over the ties and that the downwardly-turned portions 8 may be carried farther under the base of the rails, if preferred. I regard these changes, however, as obvious modifications and not as a departure from my invention.

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

The within-described fish-plate consisting of the two bars, each bar at its central portion being thicker in cross-section at the part that bears against the rail-web between the ties than at its opposite ends and at such central portion having a downwardly and inwardly turned part adapted to receive and lap under the base of the rail, such downwardly and inwardly turned part being lighter in thickness than the part bearing against the rail-web, the opposite ends of each bar having enlarged flattened portions to rest upon the ties, such flattened portions having recesses in their underface to receive the flanges of the rails, the outer walls of said recesses constituting shoulders against which the edge of the rail-flange will abut, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN SWANSON.

Witnesses:

WM. WORNER,
GEORGE WONEUP.