

No. 629,926.

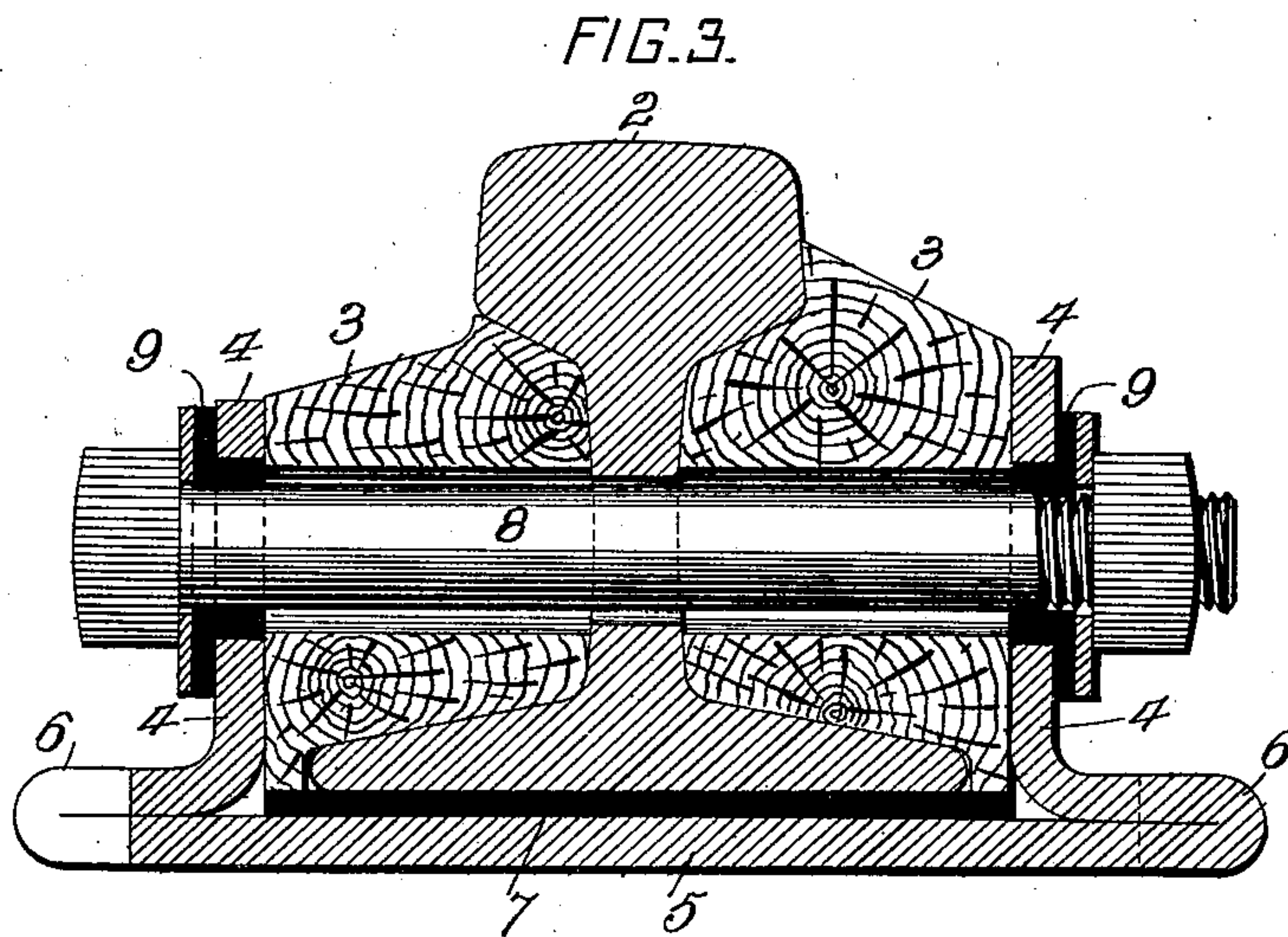
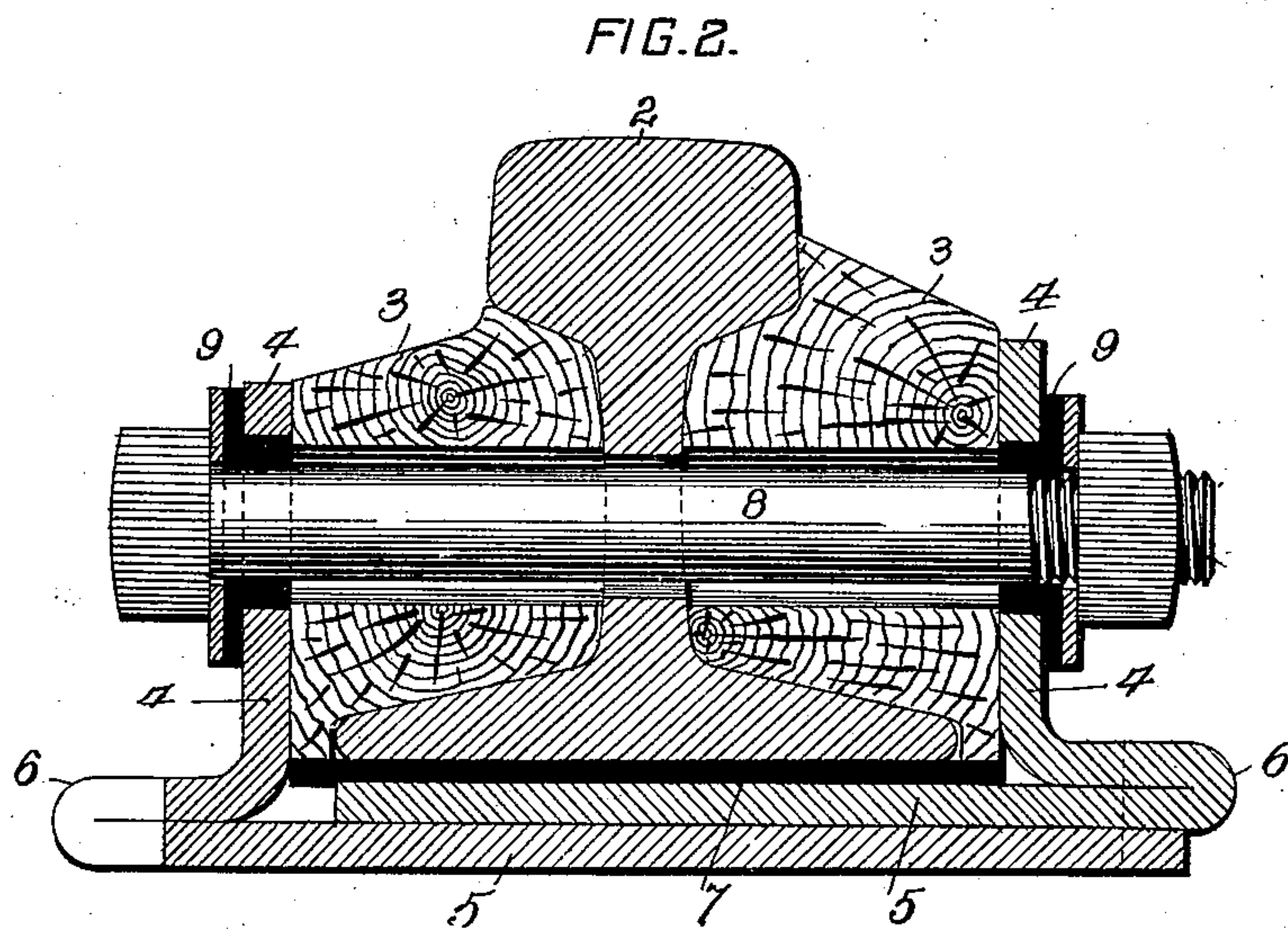
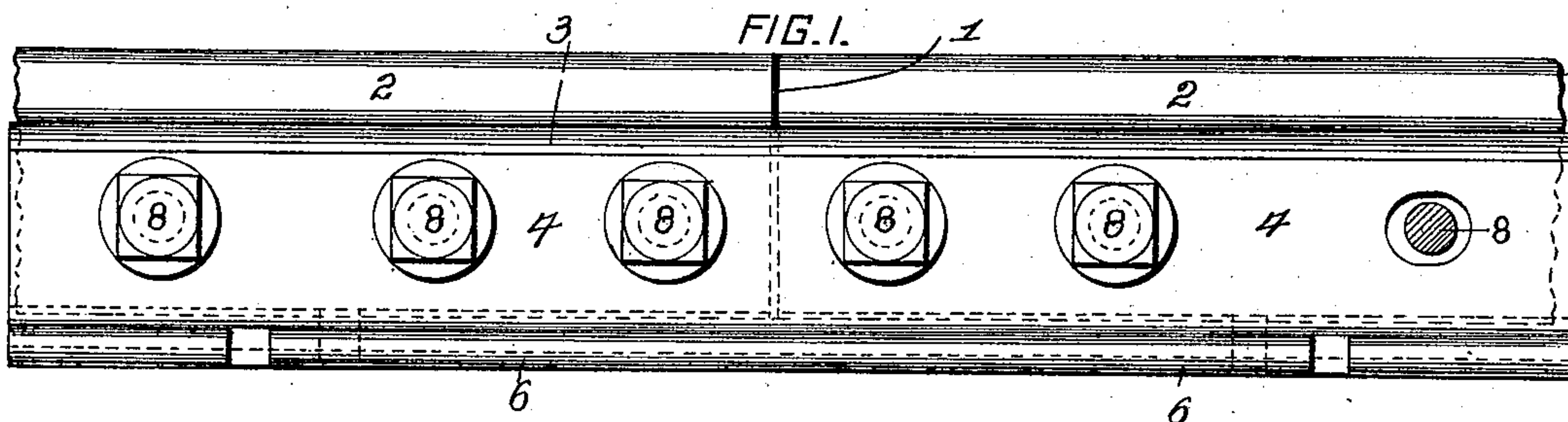
Patented Aug. 1, 1899.

J. G. SCHREUDER.

RAIL JOINT.

(Application filed May 10, 1899.)

(No Model.)



WITNESSES:

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Att'y.

UNITED STATES PATENT OFFICE.

JENS G. SCHREUDER, OF EDGEWOOD PARK, PENNSYLVANIA, ASSIGNOR TO
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RAIL-JOINT.

SPECIFICATION forming part of Letters Patent No. 629,926, dated August 1, 1899.

Application filed May 10, 1899. Serial No. 716,244. (No model.)

To all whom it may concern:

Be it known that I, JENS G. SCHREUDER, a citizen of the United States, residing at Edgewood Park, in the county of Allegheny and State of Pennsylvania, have invented or discovered certain new and useful Improvements in Rail-Joints, of which improvements the following is a specification.

The invention described herein relates to certain improvements in insulated joints for railway-tracks, and has for its object the provision of a combined fish-plate and clamp whereby the adjoining ends of rails are held in alinement with each other and the insulating material firmly held in position around the rail.

The invention is hereinafter more fully described and claimed.

In the accompanying drawings, forming a part of this specification, Figure 1 is a side elevation showing my improvement applied to the adjoining ends of rails. Fig. 2 is a sectional elevation of the same, and Fig. 3 is a similar view illustrating a modified structure.

In the practice of my invention a disk 1 of insulating material, having a contour corresponding to that of the rail, is interposed between adjoining ends of the rails 2. Blocks 3 of insulating material, preferably hard wood, are placed alongside of the rails. These blocks, which are shaped to fit against the web of the rail and bear against the under side of the rail-head and on top of the flange, are of sufficient length to extend along the rails a distance at least equal to that of the usual fish-plate and of sufficient thickness to project beyond the edges of the rail-flange, as shown in Figs. 2 and 3. The angle-bars are then placed in position. These bars are preferably made from a strip of plate metal by bending the latter longitudinally, so as to form a vertical clamp portion 4 and a horizontal bridge portion 5. These angle-bars are provided with flanges 6 at the junction of the horizontal and vertical portions. These flanges, which form bearings for the heads of spikes, may be formed by suitably folding the metal strips while bending the same to form the angle-bars.

While the angle-bars may be constructed,

as shown in Fig. 3, with the vertical clamp portions connected by an integral continuous bridge portion, it is preferred to construct the angle-bars, as shown in Fig. 2, in two independent sections, the bridge portion 5 of each section being made by preference sufficiently wide to extend entirely across under the rails. This construction permits of the placing of the angle-bars in position by a lateral movement and without any excessive lifting of the rails, and therefore is especially adapted for use in applying the improved construction to previously-laid tracks and in repairing tracks. In applying the angle-bars a strip 7 of insulating material is interposed between the bridge portion and the bottom of the rail.

In the construction shown in Fig. 2, where the bridge portions overlap the vertical portion 4 of the bar, the bridge portion of which is underneath, is made, preferably, a little higher than the corresponding portion of the other bar, and the bridge portion of the same bar is made sufficiently wide to extend under the flange 6 of the other bar, so as to prevent such flange from being bent down when the bars are being spiked to the cross-ties. As shown, suitable notches are cut in the flanges 5 for the reception of the spikes.

The angle-bars are drawn against the blocks and the latter against the rails by means of bolts 8, passing through said parts and the webs of the rails. In order to insulate the bolts from the angle-bars, flanged sleeves 9 surround the bolts where they pass through the angle-bars, the flanges of the sleeves extending between the angle-bars and the heads and nuts on the bolts.

It will be observed that while the angle-bars are entirely insulated from the rails they form a very efficient support and serve as fish-plates and tie-plates for the rails.

I claim herein as my invention—

1. In a rail-joint the combination of blocks of insulating material arranged on opposite sides of the rails and angle-bars constructed to bear against the blocks and support the rails extending across the rail-joint, substantially as set forth.

2. In a rail-joint, the combination of blocks of insulating material arranged on opposite

sides of the rails, and bars provided with vertical clamping portions and bridge portions extending under the rails, said bars being adapted to extend across the rail-joint, substantially as set forth.

3. In a rail-joint, the combination of blocks of insulating material arranged on opposite sides of the rails and bars provided with vertical clamping portions and with bridge portions constructed to overlap under the rail, said bars extending across the rail-joint, substantially as set forth.

4. In a rail-joint, the combination of blocks

of insulating material arranged on opposite sides of the rails and angle-bars constructed to bear against the blocks and support the rails and provided with flanges, said bars extending across the rail-joint, substantially as set forth.

In testimony whereof I have hereunto set my hand.

JENS G. SCHREUDER.

Witnesses:

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