

(No Model.)

U. H. HANE.
RAILROAD JOINT.

No. 481,171.

Patented Aug. 23, 1892.

Fig. 1.

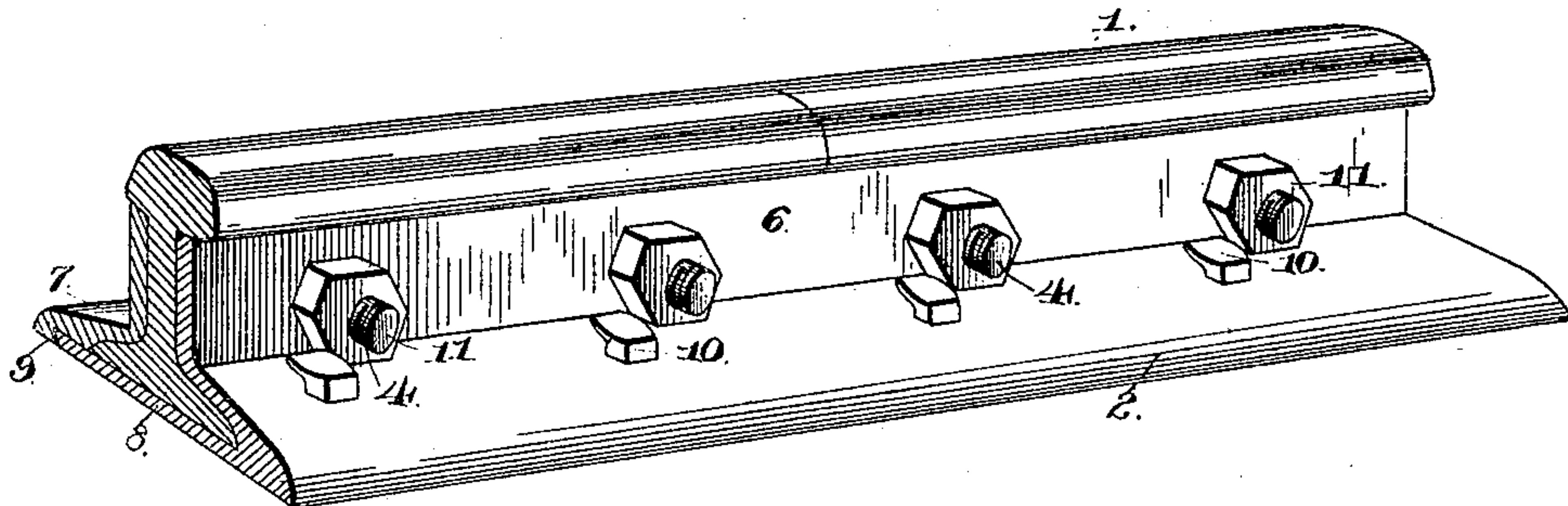


Fig. 2.

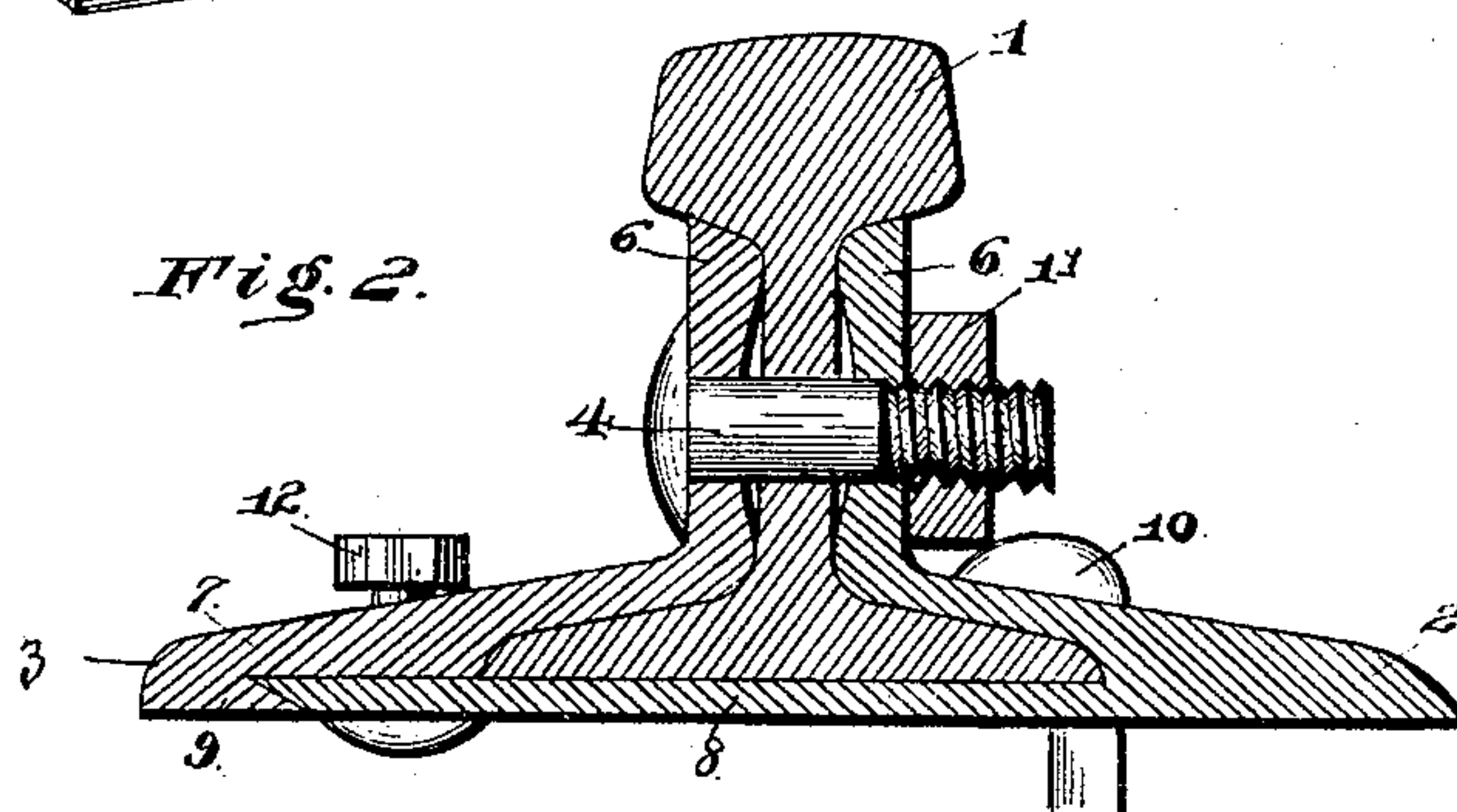


Fig. 3.

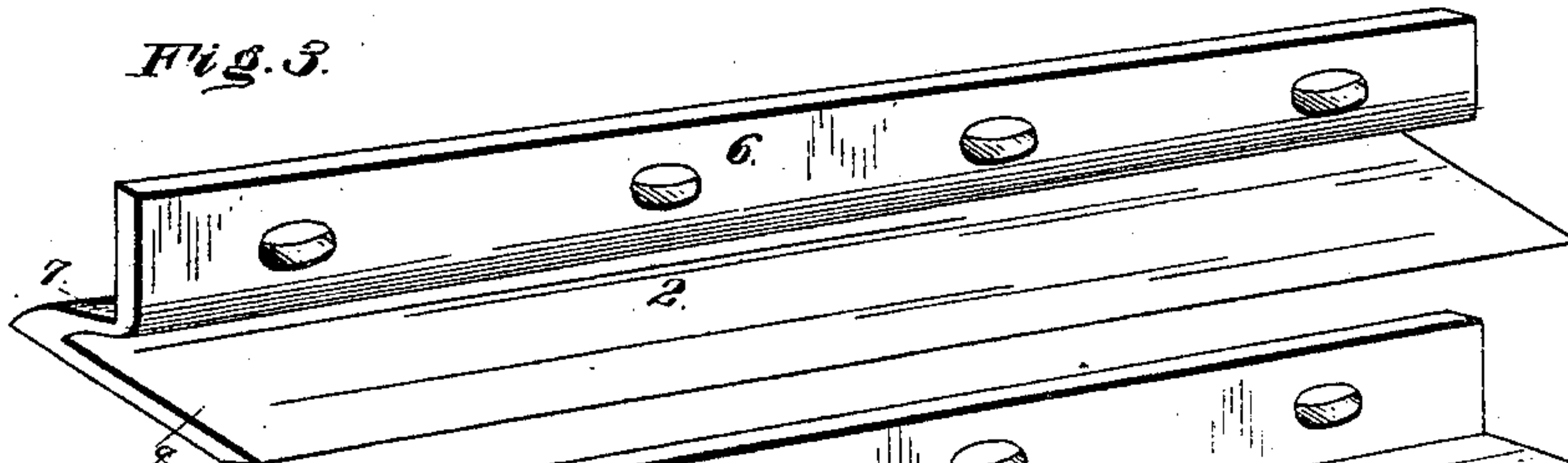


Fig. 4.

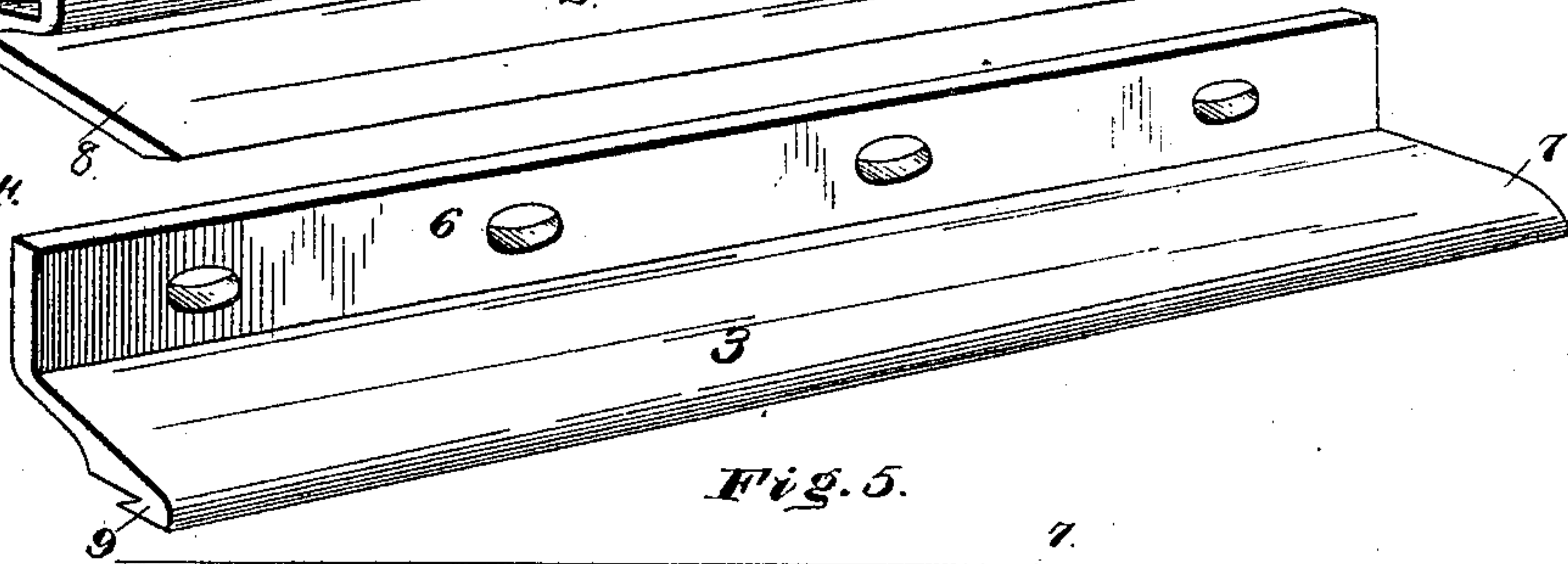
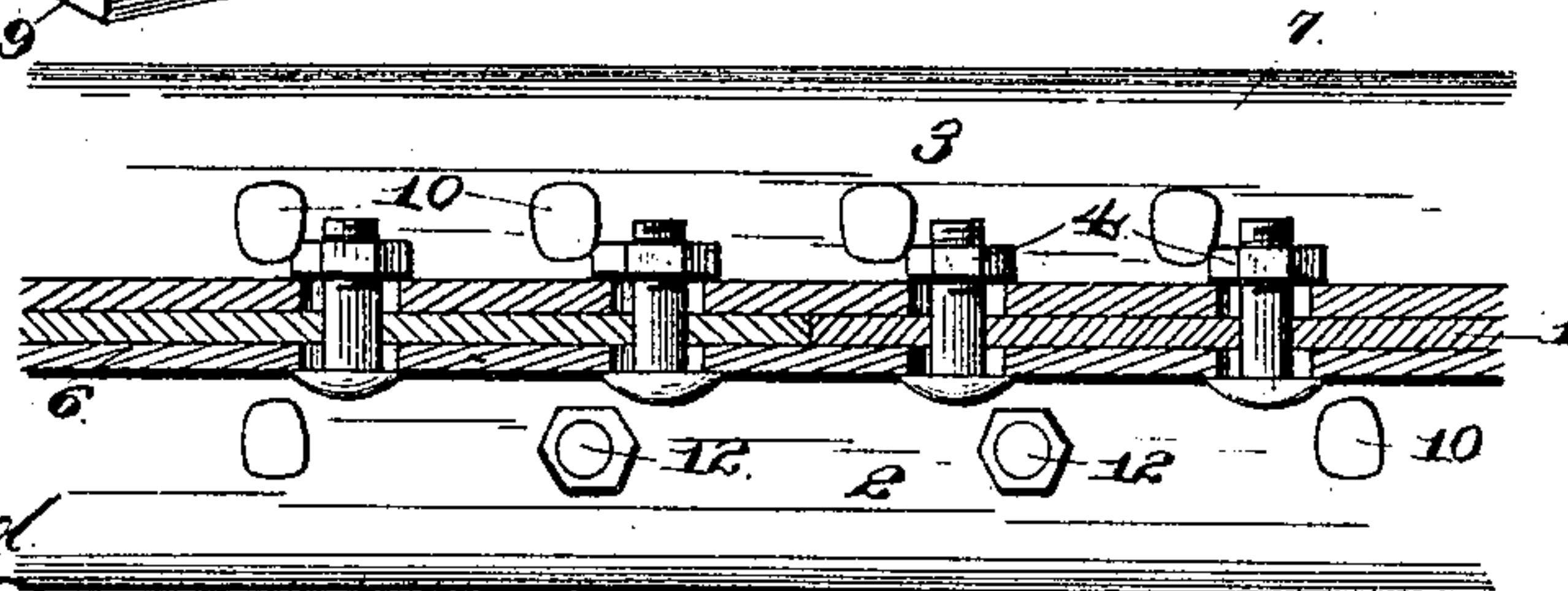


Fig. 5.



Witnesses

Chas. Ford
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By his Attorneys,

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UNITED STATES PATENT OFFICE.

URBAN H. HANE, OF LAKE LAND, FLORIDA.

RAILROAD-JOINT.

SPECIFICATION forming part of Letters Patent No. 481,171, dated August 23, 1892.

Application filed April 14, 1892. Serial No. 429,132. (No model.)

To all whom it may concern:

Be it known that I, URBAN H. HANE, a citizen of the United States, residing at Lakeland, in the county of Polk and State of Florida, have invented a new and useful Railroad-Joint, of which the following is a specification.

This invention relates to improvements in railroad-joints.

10 The object of the present invention is to provide a simple and inexpensive railroad-joint in which the meeting ends of the rails will be held perfectly steady and in which nut-locks will be unnecessary.

15 The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claim hereto appended.

20 In the drawings, Figure 1 is a perspective view of a rail-joint constructed in accordance with this invention. Fig. 2 is a transverse sectional view. Fig. 3 is a detail perspective view of the outside fish-plate. Fig. 4 is a similar view of the inside fish-plate. Fig. 5 is a horizontal sectional view.

Like numerals of reference indicate like parts in the several figures of the drawings.

1 designates rails having their meeting ends secured together and supported by an outer fish-plate 2 and an inner fish-plate 3, which are secured to the rails and connected together by horizontal bolts 4, passing through perforations in the webs of the rails and in the vertical portions 6 of the fish-plates. The fish-plates are angular and consist of the vertical portions 6, arranged opposite the webs of the rails, and inclined portions 7, arranged at the bottom flanges of the rails and spiked to the ties. The inner faces of the fish-plates conform to the configuration of the rails. The outer fish-plate is provided with an integral bottom plate 8, extending beneath the rails and across and beyond the same and forming a solid seat, and the inner fish-plate is provided on its lower face with a flange 9, having its edge beveled and adapted to receive the adjacent edge of the bottom plate, which is also beveled, whereby the bottom plate and the inner fish-plate are securely

locked, thereby forming a perfectly-solid seat for the rails, which are held perfectly steady. The fish-plates are secured to the cross-ties by spikes 10, which pass through suitable openings of the fish-plates, and those arranged adjacent to the nuts 11 of the horizontal bolts prevent those nuts turning, and thereby dispense with the necessity of employing the nut-locks for this purpose. The inner fish-plate is secured to the bottom plate by vertical bolts 12, which are arranged in the intervals between the cross-ties and which securely fasten the parts together and pass through perforations in the portion 7 of the fish-plate and through perforations of the bottom plate. The spikes on this side of the joint also assist the bolts in securing the fish-plate to the bottom plate and in preserving a perfectly-rigid seat for the rails.

From the foregoing description and the accompanying drawings the construction, operation, and advantages of the invention will be readily understood.

What I claim is—

In a rail-joint, the combination, with the rails, of an outer angular fish-plate provided with an integral bottom plate extending entirely across the lower faces of the rails and beyond the same and forming a solid seat and having its outer edge beveled, the inner fish-plate provided on its lower face with a beveled flange receiving the beveled edge of the bottom plate and securely locking the parts, horizontal bolts passing through the fish-plates and the webs of the rails, spikes passing through the fish-plates and securing the same to cross-ties, those spikes adjacent to the nuts of said bolts preventing the nuts from turning, and vertical bolts passing through the inner fish-plate and the bottom plate and securing the parts together, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

URBAN H. HANE.

Witnesses:

J. C. WILBUR,
J. A. HART.