

(No Model.)

J. ROHLIN.
RAIL JOINT.

No. 587,235.

Patented July 27, 1897.

Fig. 1.

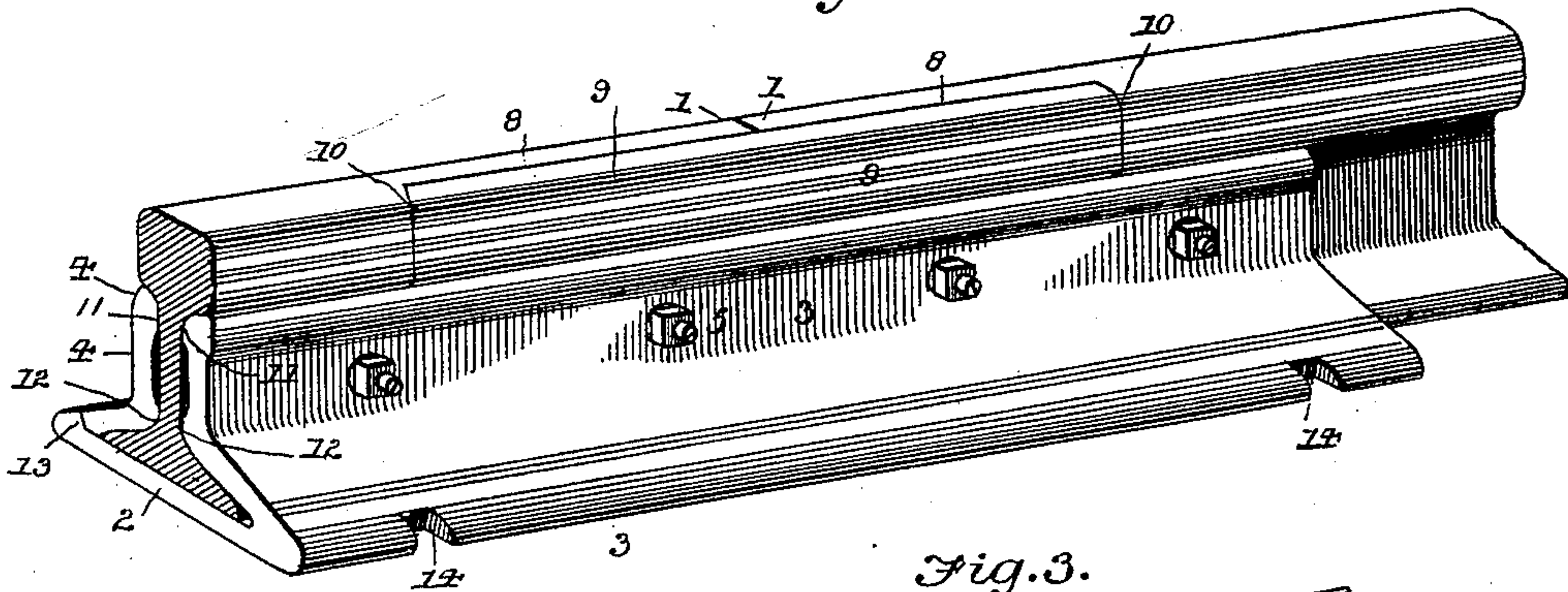


Fig. 2.

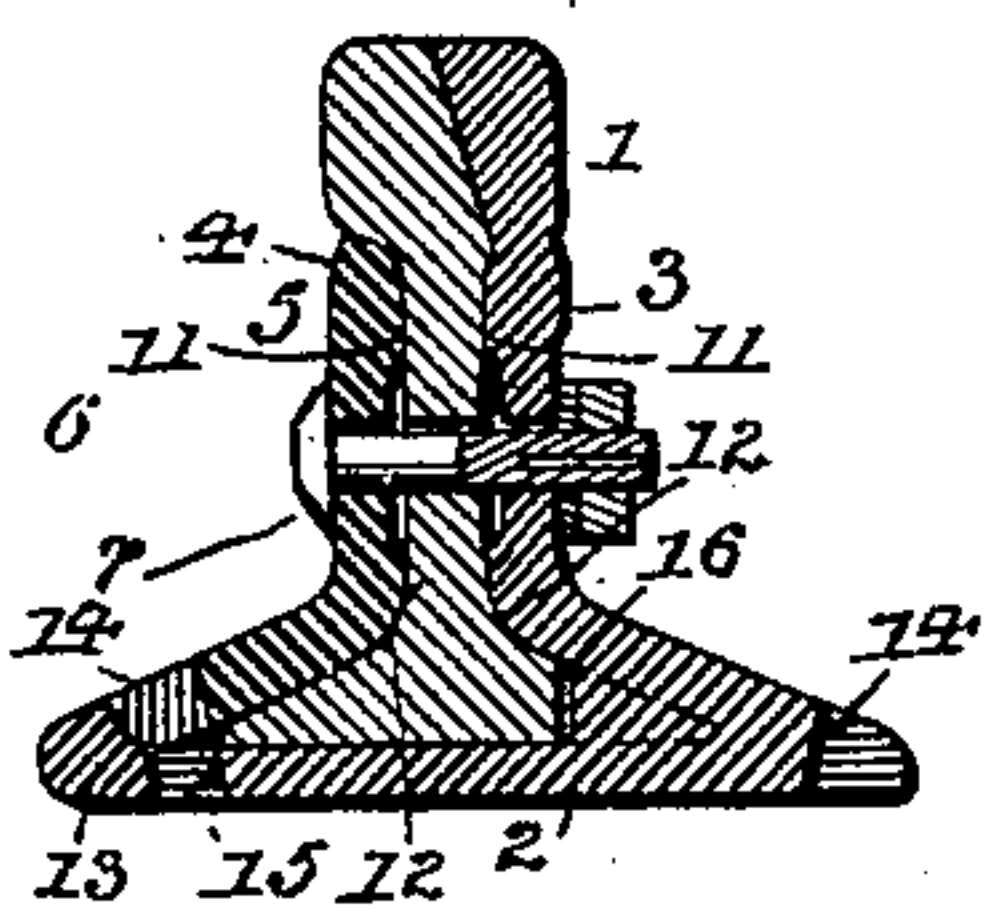


Fig. 3.

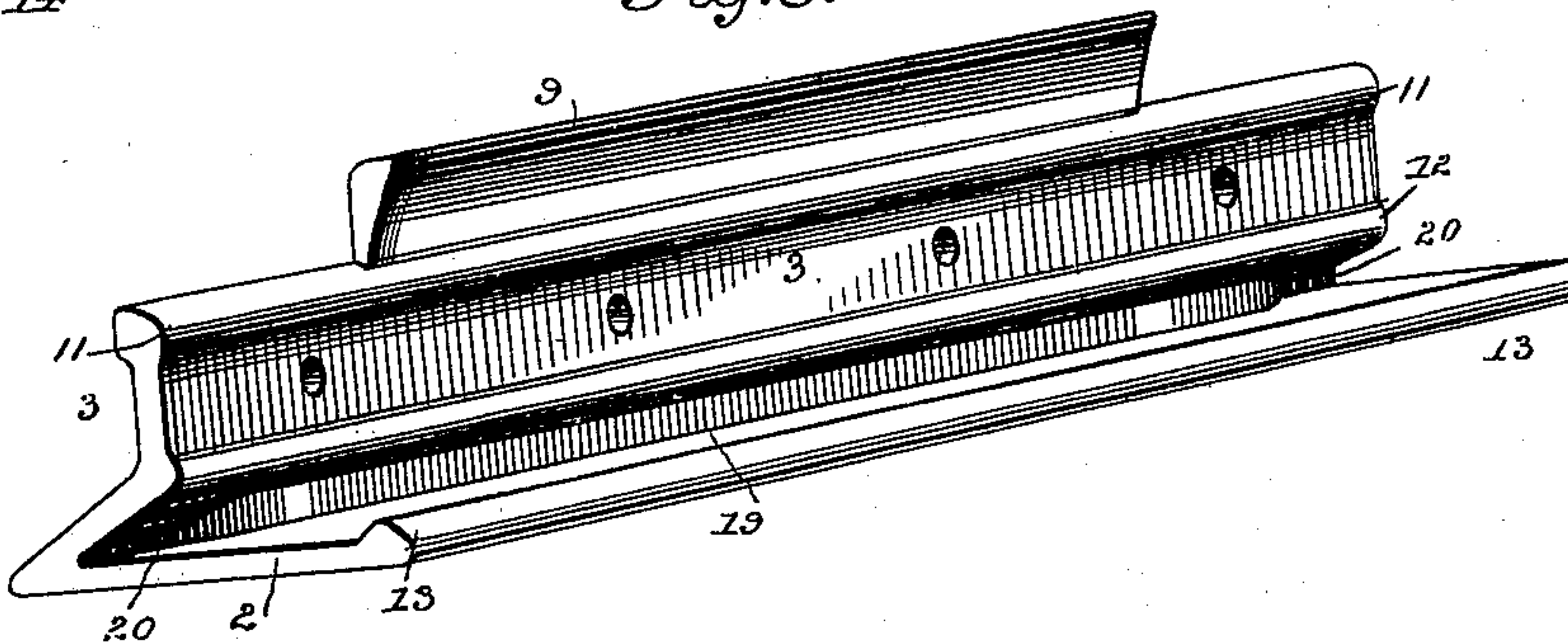


Fig. 4.

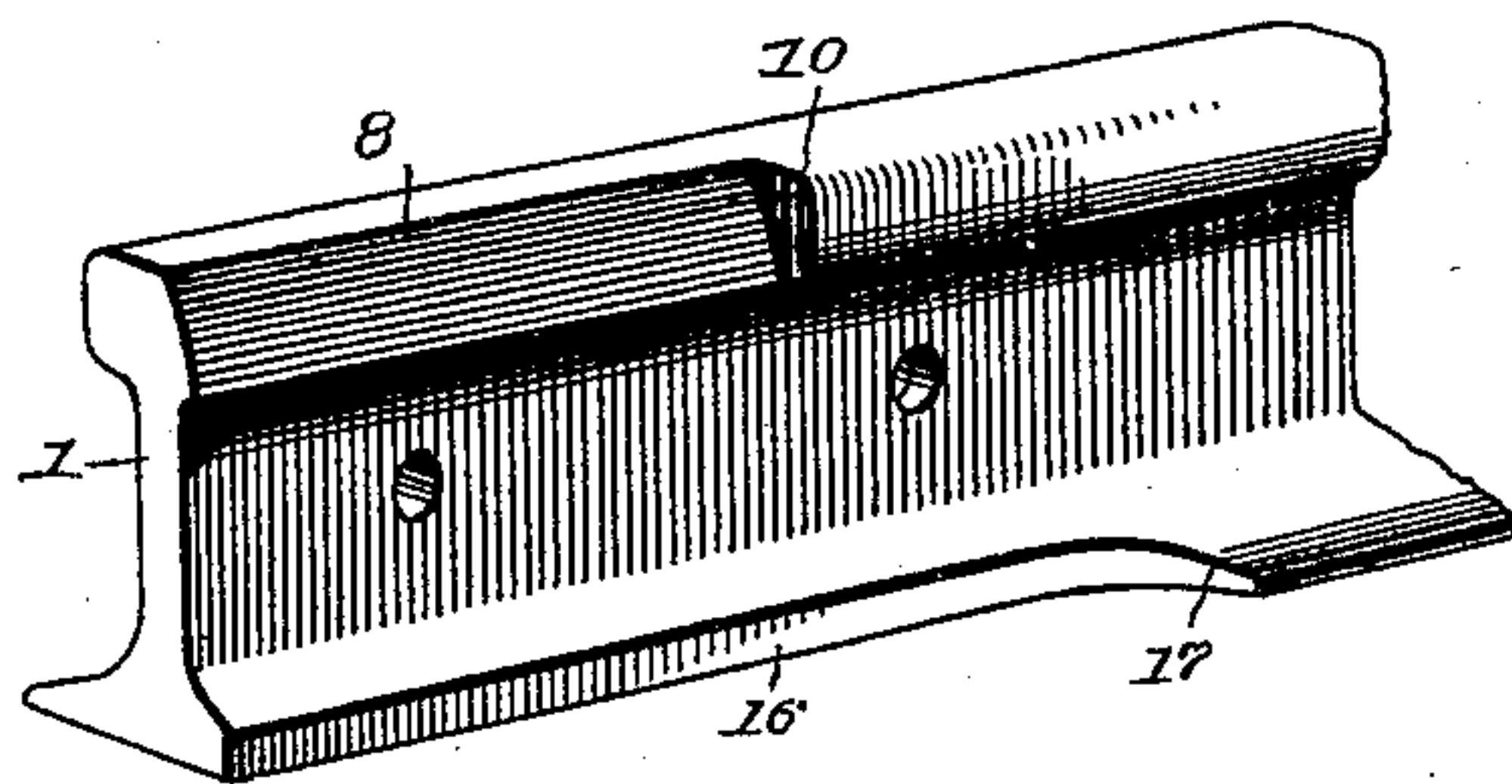
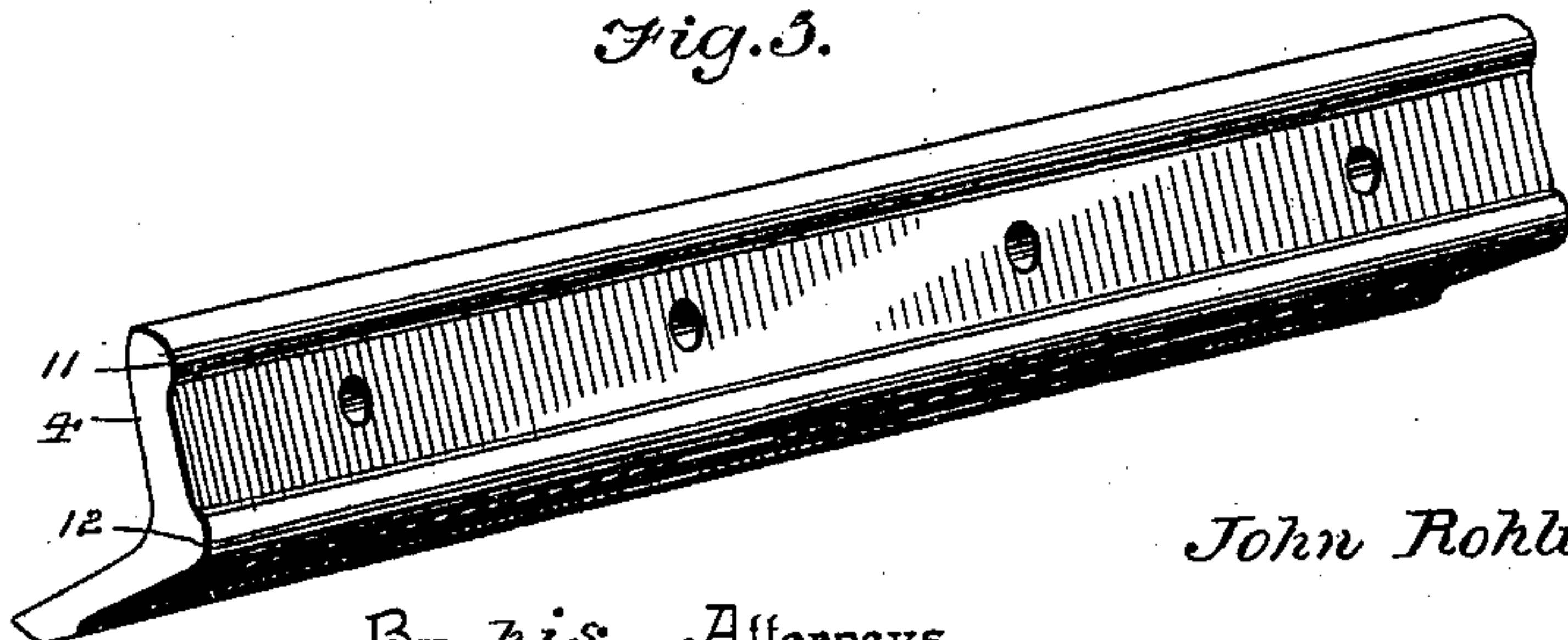


Fig. 5.



Inventor

John Rohlin

By his Attorneys,

Witnesses

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UNITED STATES PATENT OFFICE.

JOHN ROHLIN, OF EUREKA, KANSAS, ASSIGNOR OF ONE-HALF TO
A. E. SHAW, OF SAME PLACE.

RAIL-JOINT.

SPECIFICATION forming part of Letters Patent No. 587,235, dated July 27, 1897.

Application filed May 13, 1897. Serial No. 636,344. (No model.)

To all whom it may concern:

Be it known that I, JOHN ROHLIN, a citizen of the United States, residing at Eureka, in the county of Greenwood and State of Kansas, have invented a new and useful Rail-Joint, of which the following is a specification.

This invention relates to improvements in rail-joints.

The object of the present invention is to improve the construction of rail-joints and to provide a simple and inexpensive one which will support the ends of the rails and form practically a continuous rail and prevent the wheels of a train from wearing and injuring the rail ends and avoid jar and noise in passing over the same.

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

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 perspective view of the chair portion. Fig. 4 is a similar view of one end of a rail. Fig. 5 is a detail perspective view of the fish-plate.

Like numerals of reference designate corresponding parts in the several figures of the drawings.

11 designate the meeting ends of rails, which are supported by a horizontal plate 2 and secured thereon between an integral angle or fish plate 3 and a removable angle or fish plate 4 by horizontal bolts 5, passing through perforations of the several parts and having their threaded ends split at 6 and slightly spread to lock the nuts 7 against accidental unscrewing. The horizontal bottom plate 2 and the integral angle or fish plate 3 form a chair for the ends of the rails, which have their heads recessed at 8 and receiving a flange or extension 9 of the integral fish plate, whereby the ends of the rails are bridged and practically a continuous rail is formed to prevent car-wheels from striking and injuring the ends of the rails. By forming a practically continuous rail noise and jar are prevented and injury from such causes to the rolling-stock is obviated. The recesses 8 form shoul-

ders 10, which are arranged adjacent to the ends of the flange or bridge portion of the integral plate, and sufficient space is provided to allow for the expansion and contraction of the rails.

The integral and removable fish-plates are provided at their inner faces with longitudinal convex ribs 11 and 12, which abut against the webs of the rails and fit tightly against the same, being held in such close contact by the horizontal bolts.

The removable fish-plate abuts against a longitudinal rib 13 of the bottom plate 2 and engages under the heads of the rails, and recesses 14 are provided at the lower edges of the fish-plates to receive spikes for securing the rails to the cross-ties. The rib 13 is arranged at one edge of the bottom plate 2, and spike-openings 15 are provided adjacent to the inner edge of the rib to register with the recesses of the fish-plate 4.

The bottom flanges at one side of the rails are cut away at 16 to form a narrow projecting edge 17, which engages a longitudinal groove or recess 19 of the rail-chair, and the terminals of the groove or recess 19 are enlarged at 20 and receive the adjacent portions of the bottom flanges of the rails and firmly hold the same on the chair and prevent any lateral rocking.

It will be seen that the rail-joint firmly supports the ends of the rails and forms, practically, a continuous unbroken rail, that it prevents the wheels of cars from striking and injuring the ends of rails and avoids the jar and noise incident to such concussion, and that the durability of the rails and the rolling-stock is increased by preventing much wear and damage. Furthermore, it will be apparent that the parts are readily assembled and that as the ends of rails are firmly connected accidents in a great measure will be prevented; also, it will be clear that the rails cannot give or settle by pressure or use and that friction on the wheels and rails is reduced to a minimum.

What I claim is—

In a rail-joint, the combination of a chair comprising a bottom plate provided at one of its longitudinal edges with an upwardly-extending rib, and a fish-plate formed integral

with the bottom plate and located at the opposite edge thereof and provided at its upper edge with a flange, said fish-plate being provided at its inner face with longitudinal convex ribs and forming with the bottom plate a longitudinal recess 19 and extensions 20 at the ends thereof, the rails recessed at their heads to receive the said flange and having their bottom flanges cut away at one side and fitting in the recess or groove 19 and the extension 20 thereof, the removable fish-plate engaging under the heads of the rails and

abutting against the rib of the bottom plate, and fastening devices passing through the fish-plates and the webs of the rails, substantially as described. 15

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

JOHN ROHLIN.

Witnesses:

A. E. SHAW,

G. R. STEWART.