No. 883,508. PATENTED MAR. 31, 1908.

J. P. H. BAILEY.

RAIL JOINT.

APPLICATION FILED MAY 6, 1907.

2 SHEETS—SHEET 1.

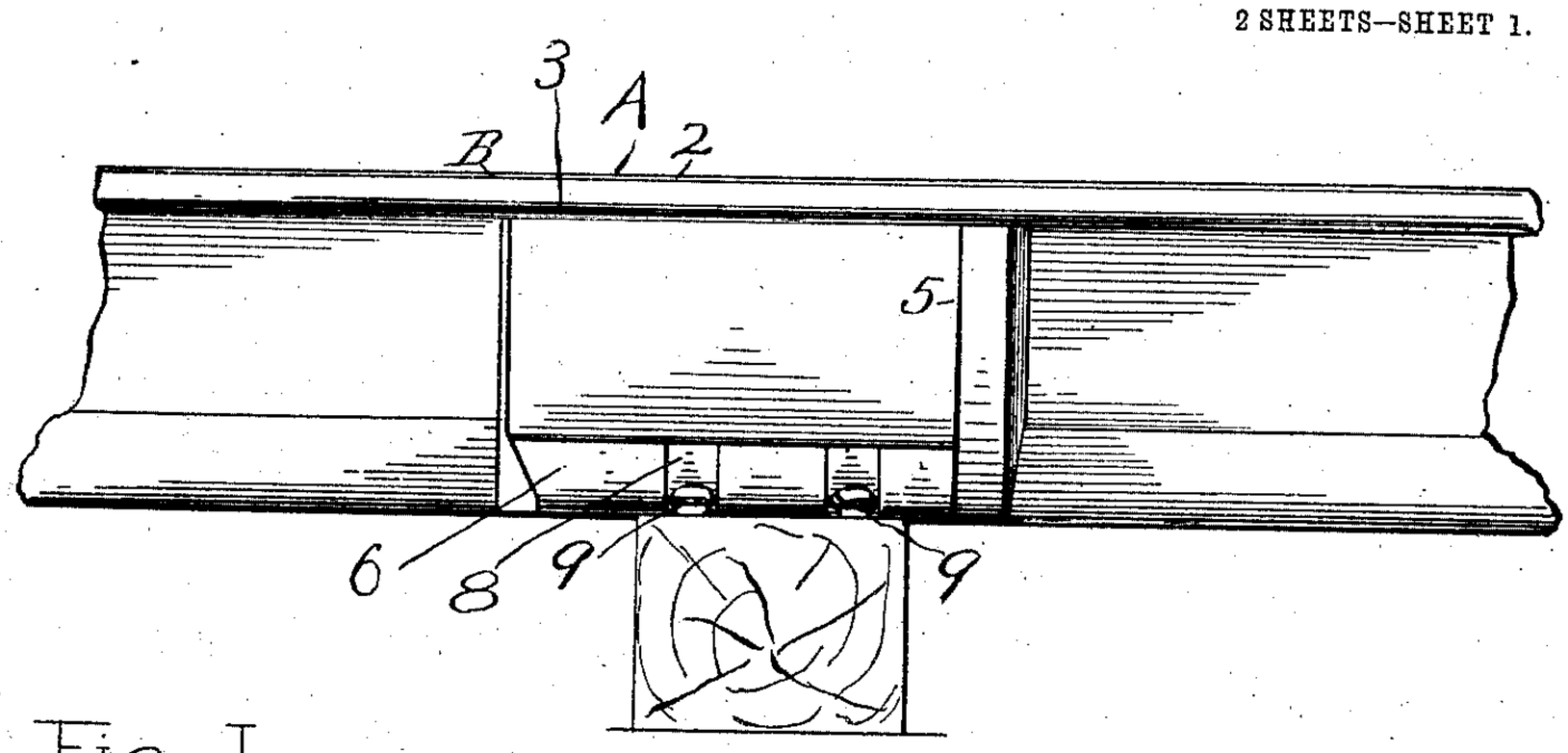

Fig. 1

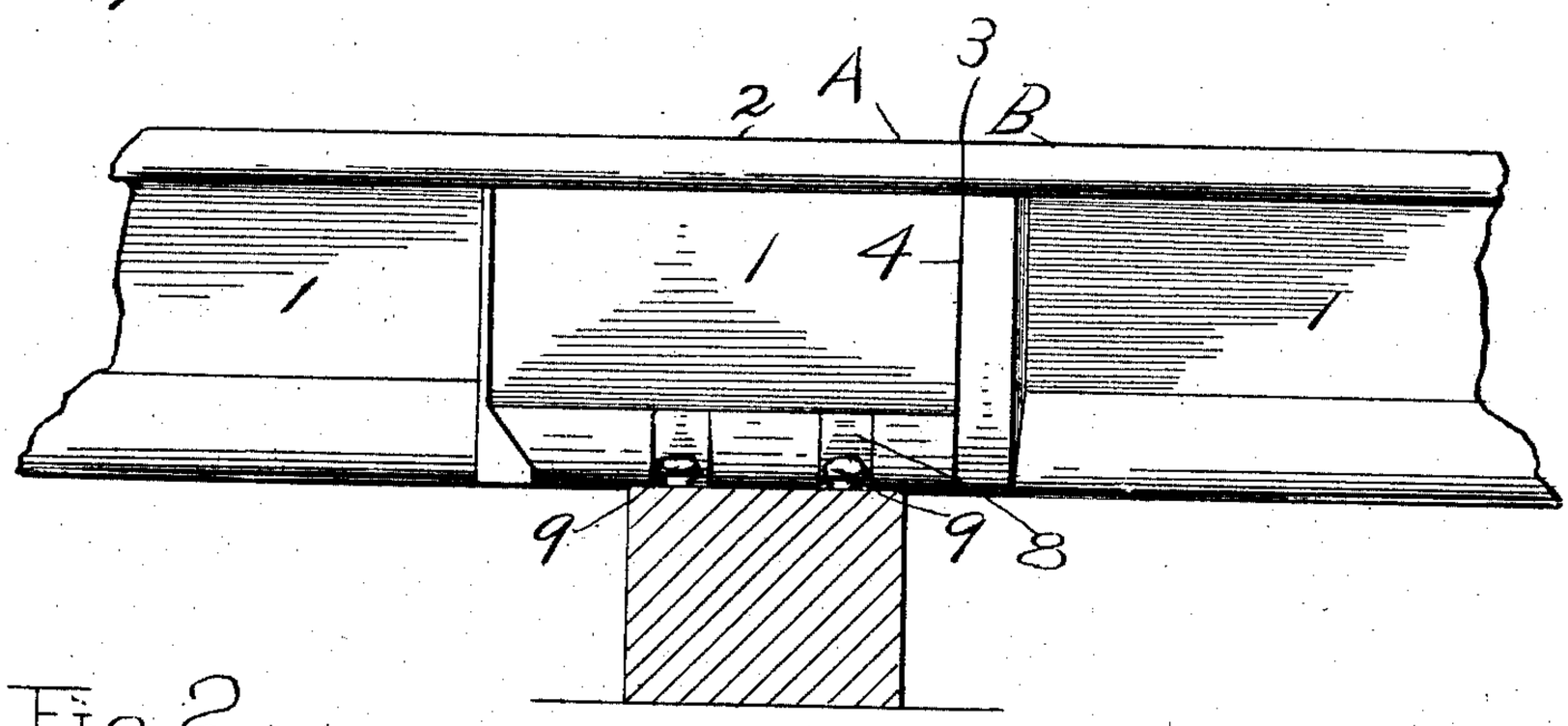

Fig. 2

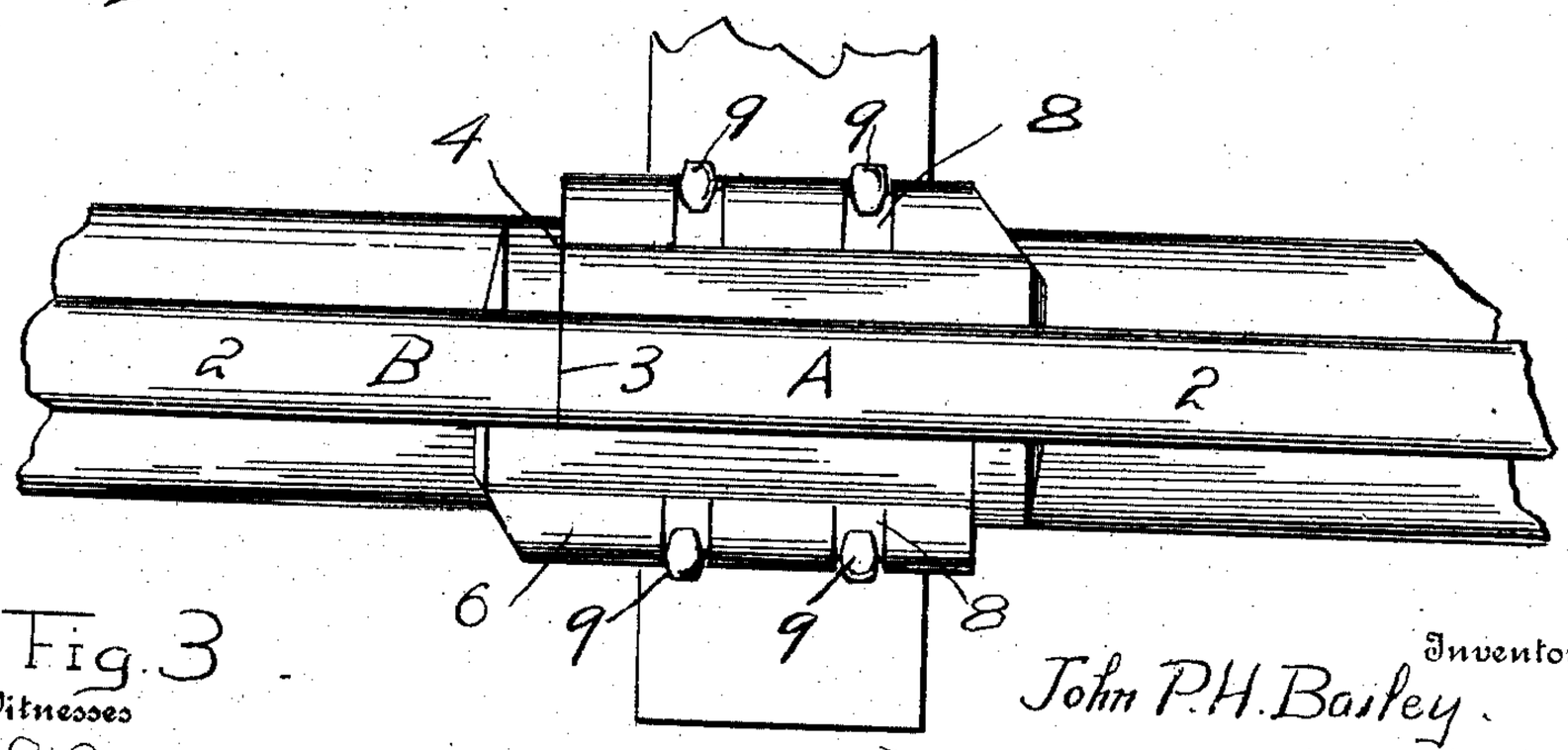

Fig. 3

Witnesses

J. C. Simpson.

Arthur W. Crossley

Inventor

John P. H. Bailey.

By Munn & Co

Attorneys

No. 883,508. PATENTED MAR. 31, 1908.

J. P. H. BAILEY.

RAIL JOINT.

APPLICATION FILED MAY 6, 1907.

2 SHEETS—SHEET 2.

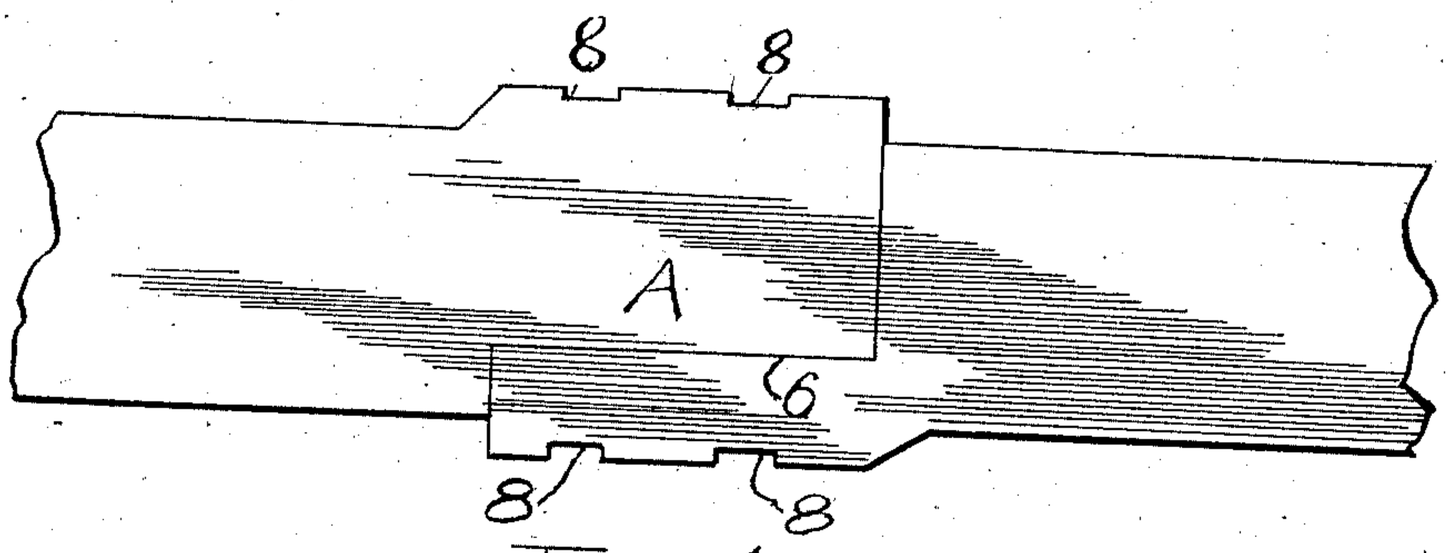

Fig. 4

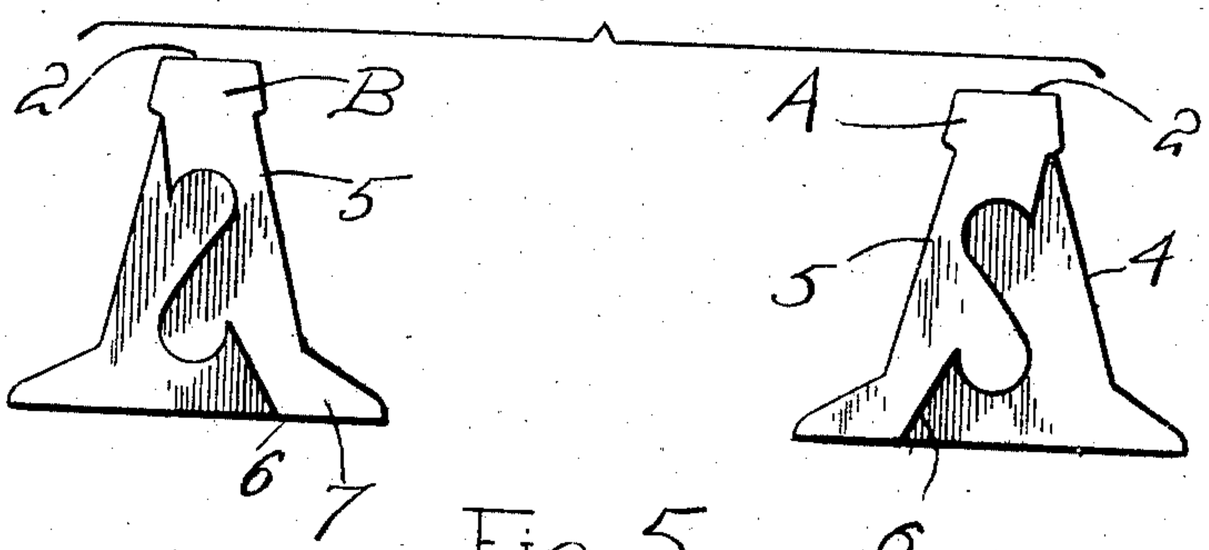

Fig. 5

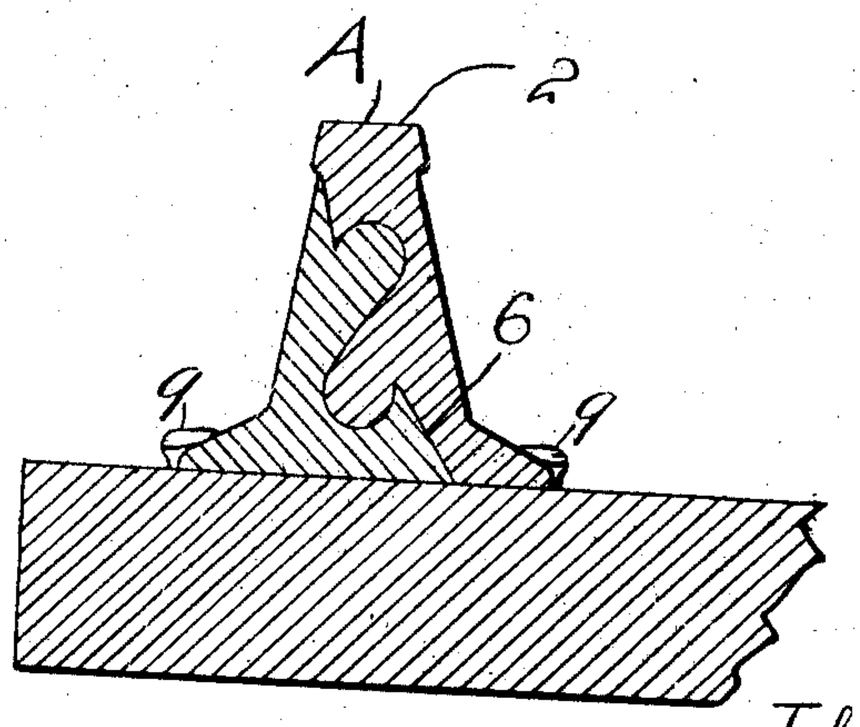

Fig. 6

Witnesses

J. C. Simpson.

Arthur W. Crossley.

Inventor

John P. H. Bailey.

By Dyrenforth & Lee

Attorneys.

UNITED STATES PATENT OFFICE.

JOHN P. H. BAILEY, OF BURNET, TEXAS.

RAIL-JOINT.

No. 883,508. Specification of Letters Patent. Patented March 31, 1908.

Application filed May 6, 1907. Serial No. 372,125.

To all whom it may concern:

Be it known that I, JOHN P. H. BAILEY, a citizen of the United States, residing at Burnet, in the county of Burnet, State of Texas, have invented certain new and useful Improvements in Rail-Joints; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention has relation to that class of railway-rail joints that have overlapping ends, so formed as to do away with the necessity of fish bars or plates.

It is the object of my invention to so form the overlapping ends that they will mutually and evenly support the weight that may be brought thereon throughout the joint, and so that the greater the weight brought upon them the more complete will be the union of the jointed parts, absolutely avoiding the yielding of one end without a like yielding of the other.

The nature of the invention is fully and clearly ascertainable from the device portrayed in the annexed drawing, forming a part of this specification, in view of which it will first be described with respect to its construction and mode of operation, and then be pointed out in the subjoined claims.

Of the said drawings—Figure 1 is a side elevation of the meeting ends of two rails joined in accordance with my invention. Fig. 2 is a view of the side opposite to that seen in Fig. 1. Fig. 3 is a plan of the same. Fig. 4 is a bottom view of the same. Fig. 5 is an end view of each part. Fig. 6 is a transverse section.

Similar numerals of reference designate similar parts or features, as the case may be, wherever they occur.

In the drawings A designates the meeting end portion of one rail and B the meeting end portion of the other rail.

The web 1 of the rails at their meeting and overlapping portions, and for a slight distance beyond the overlapping portions is thickened, as is clearly indicated in the drawings, the sides of the thickened portions being inclined from their upper edges outwardly.

The tread 2 of the overlapping ends is divided on a line 3 extending in a plane transversely of the longitudinal extension of the rails near one end of the thickened parts of the web 1, and the latter is divided on one side on a vertical line 4, in the plane of the line 3 on the tread while on the opposite side, the division line extends from the line 3 horizontally below the ball of the end A to near the opposite end of the thickened part of the web, whence it extends on a vertical line 5, to the base of the rails.

Between the division lines 3 and 5, each overlapping end is cut away on opposite sides on lines in the form of an ogee molding, the molding of one part being the reverse of the other, so that when the two ends are joined by an endwise movement the end portions will not only overlap, but become interlocked on a matching ogee surface, in such manner as to form a complete union that cannot be broken by lateral stress or strain without breaking at least one-half of at least one of the end portions to the full extent that it overlaps the other.

By dividing the end portions between the tread and the base of the rails on an ogee surface, I am enabled to leave the tread 2 intact except as to the single transverse divisional line 3, and to so join the overlapping ends that it is practically impossible to separate them laterally. At the same time the vertical strain brought upon the tread of the rails is borne equally by each overlapping part.

The overlapping portion of the end of the rail A is cut from the lowermost margin of the ogee surface to the base on an inclined line 6, leaving the base flange 7 intact. This construction affords opportunity for notching the side edges of the base as at 8 for the driving of the usual spikes 9 in the ties at the sides of the bases of the rails to maintain them in place laterally.

By my improvement I not only secure a perfect interlocking of the jointed ends so as to secure their perfect alinement under all conditions without fish bars or plates, but also without chains or other vertical supports than is afforded by the joint itself.

One of the peculiar advantages of the matching ogee surface of union between the overlapping ends of the rails, is that it contains no angular turns.

The invention obviates the necessity of

employing fish bars or like devices on the sides of the webs of the rails across the line of junction of the two ends.

What is claimed is—

A railway-rail joint comprising overlapping webs provided with matching ogee surfaces.

In testimony whereof, I affix my signature, in presence of two witnesses.

JOHN P. H. BAILEY.

Witnesses:
JAS. G. COOK, Jr.,
GEO. T. LAMON.