

J. O'BRIEN.
RAIL JOINT.

APPLICATION FILED JAN. 15, 1912.

1,034,140.

Patented July 30, 1912.

FIG. 1

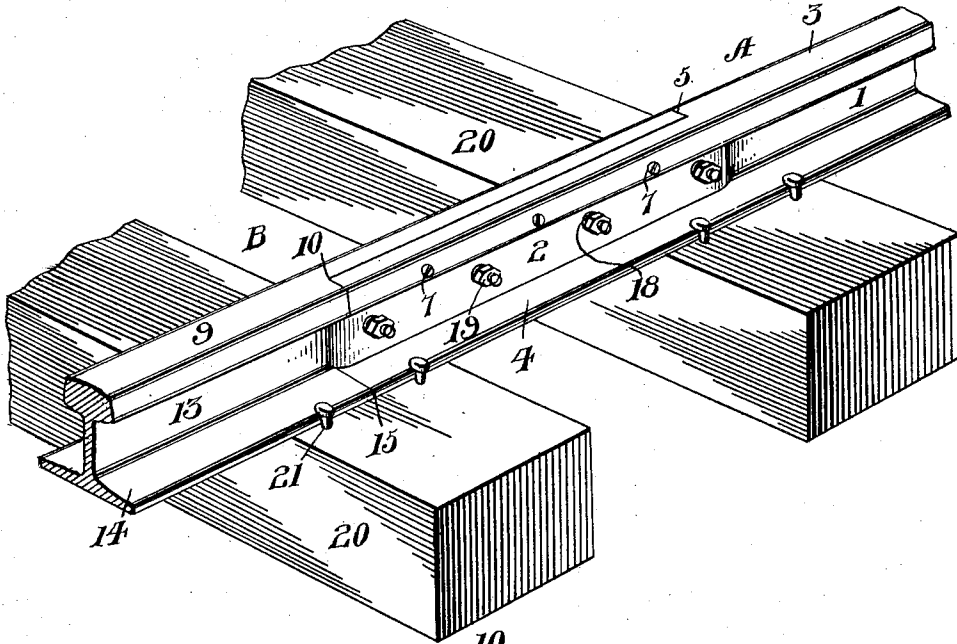
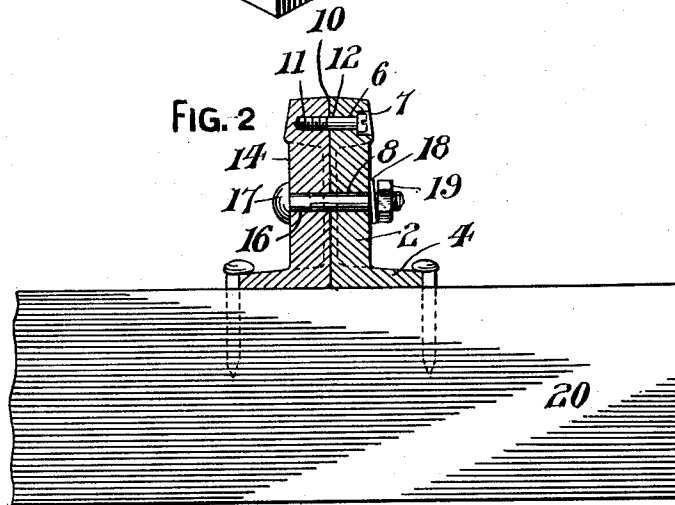


FIG. 2



WITNESSES

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JOSEPH O'BRIEN, OF JEANNETTE, PENNSYLVANIA.

RAIL-JOINT.

1,034,140.

Specification of Letters Patent.

Patented July 30, 1912.

Application filed January 15, 1912. Serial No. 671,379.

To all whom it may concern:

Be it known that I, JOSEPH O'BRIEN, a citizen of the United States of America, residing at Jeannette, in the county of Westmoreland and State of Pennsylvania, have invented certain new and useful Improvements in Rail-Joints, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to rail joints, and my invention aims to connect the abutting ends of rails as will be hereinafter set forth, whereby practically a continuous tread will be provided for rolling stock to eliminate the jarring, bumping and breaking down of the abutting ends of rails and the wheels of rolling stock.

The invention further aims to provide a rail joint that can be easily and quickly installed by unskilled labor, the joint being strong, durable and highly efficient for the purposes for which it is intended.

The invention still further aims to accomplish the above results by a mechanical construction that will be hereinafter specifically described and then claimed, and reference will now be had to the drawing, wherein:—

Figure 1 is a perspective view of the rail joint, and Fig. 2 is a cross sectional view of the same.

The rail generally designated A has the web 1 provided with a longitudinal side enlargement 2 bracing the head 3 of the rail, and the base flange 4 of the rail is cut away upon the opposite side of the enlargement 2, the cut away portion corresponding in length to the enlargement 2. The head 3 of the rail is also cut away, as at 5 and said head is provided with transverse openings 6 having the outer ends thereof enlarged, as at 7. The enlargement 2 has transverse equally spaced openings 8 for a purpose that will presently appear. The adjoining rail is generally designated B and this rail has the head 9 thereof cut away, as at 10 similar to the head 3 of the rail A, whereby the heads can be placed together. The head 9 has sockets 11 with the walls thereof screw threaded, said sockets registering with the openings 6 of the head 3 whereby screw bolts 12 can be placed in the openings and screwed into the sockets 11 to lock the heads together, said screw bolts having the heads thereof countersunk in the

enlarged ends 7 of the openings 6. The rail B has the web 13 thereof provided with an enlargement 14 similar to the enlargement 2, and the base flange 14 of the rail B is cut away, as at 15 to accommodate the base flange 4 of the rail A. The enlargement 14 of the rail B has openings 16 registering with the opening 8 of the enlargement 2 and mounted in said openings are bolts 17 provided with nut locks 18 and nuts 19.

The rails are secured to ties 20 by spikes 21, and the manner of connecting the abutting ends of the rails provides practically a solid joint. With the screw bolts 12 assisting the bolts 17, it is impossible for the abutting ends of the rails A and B to become loose and accidentally displaced.

What I claim is:—

A rail joint comprising a pair of rails each having a head integral with and of greater width than its web, and each having its head, web and base thereof at one end cut away at the longitudinal center thereof to provide a shoulder and with the vertical wall of the cut away portion plane and extending from the lower face of the base to the upper face of the head, the end of one of said rails abutting against the shoulder of the other of said rails, with the vertical wall of one cut away portion abutting against the vertical wall of the other cut away portion, each of said rails having its web at its cut away end formed with a lateral enlargement of the same height as the height of the web and extending in close proximity to the plane of the outer side edge of the head of its respective rail and of greater length than the cut away portion of its respective rail, means extending through said enlargements for connecting the cut away ends of the rails together, and transversely extending screws extending through the head of one rail at its cut away end and engaging in the head of the cut away end of the other rail for securing said heads together, said screws having the heads thereof countersunk in that head through which the screws extend.

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

JOSEPH O'BRIEN.

Witnesses:

MAX H. SROLOVITZ,
CHRISTINA T. HOOD.