(No Model.)

2 Sheets—Sheet 1.

A. J. MOXHAM.

RAILROAD RAIL AND CHAIR AND PROCESS OF UNITING SAME.

No. 498,074. Patented May 23, 1893.

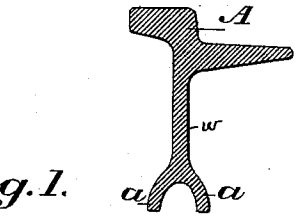
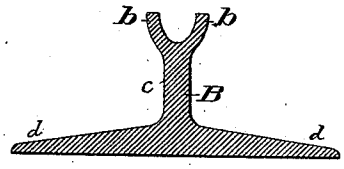


Fig. 1.



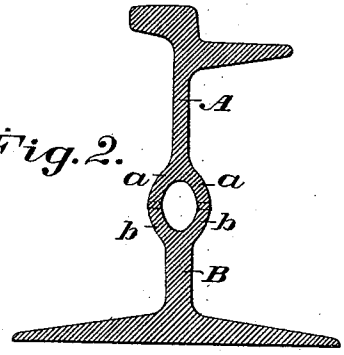


Fig. 2.

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(No Model.) 2 Sheets—Sheet 2.

A. J. MOXHAM.

RAILROAD RAIL AND CHAIR AND PROCESS OF UNITING SAME.

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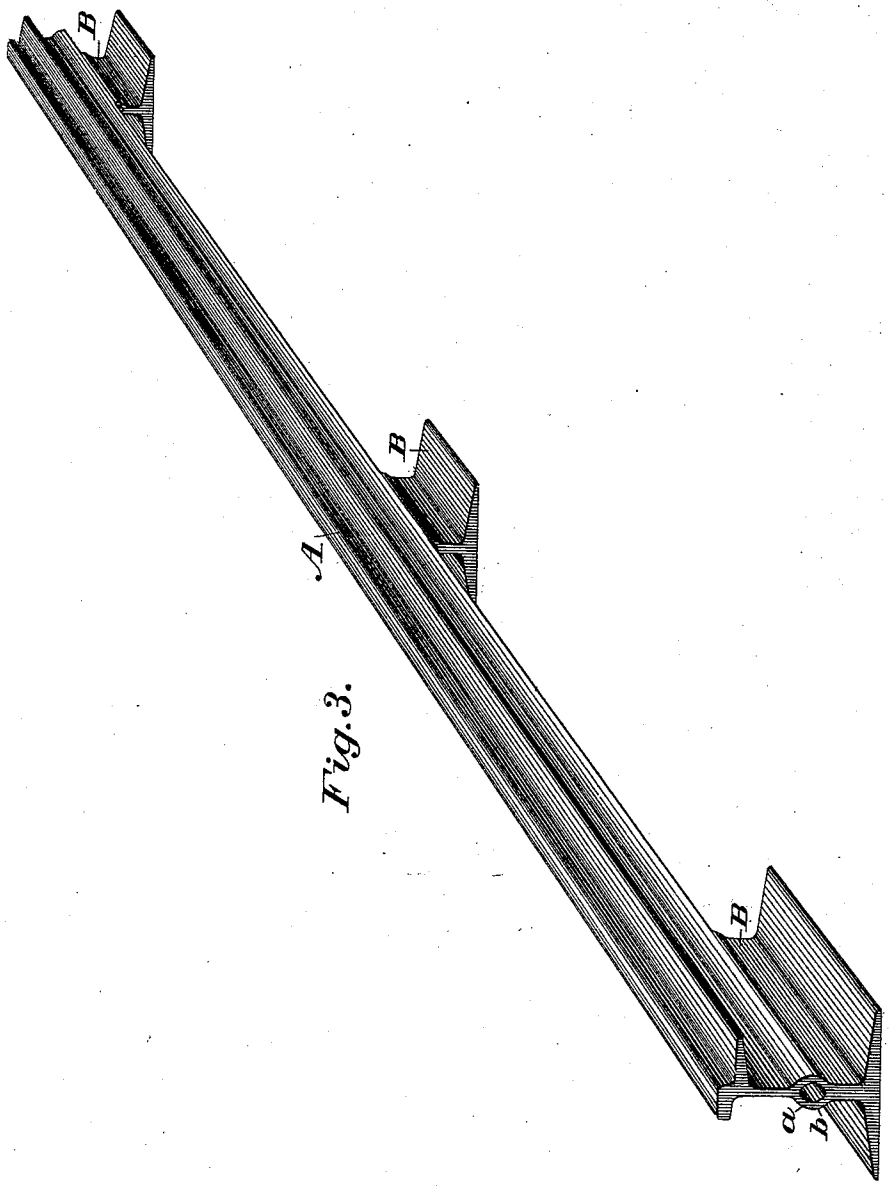

Fig. 3.

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UNITED STATES PATENT OFFICE.

ARTHUR J. MOXHAM, OF JOHNSTOWN, PENNSYLVANIA.

RAILROAD RAIL AND CHAIR AND PROCESS OF UNITING SAME.

SPECIFICATION forming part of Letters Patent No. 498,074, dated May 23, 1893.

Application filed April 27, 1892. Serial No. 430,921. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR J. MOXHAM, of Johnstown, in the county of Cambria and State of Pennsylvania, have invented a new and useful Railroad-Rail and Base or Support and Process of Uniting the Same, which invention is fully set forth and illustrated in the following specification and accompanying drawings.

The object of this invention is to unite a rail and base or support together so that the whole will form an integral structure.

The invention will first be described in detail and then particularly set forth in the claims.

In the accompanying drawings, Figure 1 shows, in cross-section, separate from each other, a rail and chair embodying my invention. Fig. 2 shows said rail and bases or supports united, as hereinafter described. Fig. 3 shows in perspective a rail having bases or supports united to it at intervals and embodying my invention.

In said figures the several parts are respectively indicated by reference letters as follows:—

The letter A, indicates a railroad rail having a web *w* and downwardly-projecting flanges *a* at the bottom of said web, forming a bifurcated or grooved bottom.

The letter B, indicates a base or support having base-flanges *d*, a vertical web *c*, and upwardly-projecting flanges *b* at the top of said web, forming a bifurcated upper portion, corresponding with the flanges *a* of the rail.

The process of uniting the rail and base or support is as follows:—The rail and base or support having been first separately rolled, or otherwise formed, the flanges *a*, *b*, are abutted to each other and are then welded together, or otherwise united so that the rail and base or support form an integral structure. This welding may be done by means of electricity or by any other suitable process or means of welding. The appearance of the complete rail and base or support after welding, is shown in cross-section in Fig. 2 and in perspective in Fig. 3, the latter figure showing several bases or supports welded to the rail at intervals. Instead, however, of locating the bases or supports at intervals, one continuous base or support may be used if desired.

Instead of integrally uniting the rail and base or support, it is obvious that they may be otherwise united so as to leave a channel or groove between the same.

Among the advantages secured by the structure herein described are the following:—A continuous and covered groove is provided the whole length of the track which may be utilized for the insertion and protection of wires or other electric conductors so much in use at the present day, such wires being held in place in said groove without any special connection with the track. The completed structure also takes up vibration and reduces rigidity in an advantageous manner, and will, in consequence, make an easier riding rail.

It is obvious that the shape of the upper portion of the rail and the lower portion of the base or support herein shown, may be varied without departing from my invention. And it is also obvious that the shape of the groove or channel in the completed structure may be varied from the circular shape shown, a lozenge or other shaped groove being equally adapted for the purposes desired.

Having thus fully described my said invention, I claim—

1. The combination with a railroad rail with a web having a groove or pocket at the bottom of its web, of a base or support with a web having a pocket or groove at its top, the edges of said grooves or pockets being united together and forming a continuous groove or pocket in the webs of the rail and support.

2. The combination with a railroad rail having a web with a continuous groove or pocket at its foot, of bases or supports with webs having a groove or pocket at the top united to the groove or pocket at the foot of the web of the rail at intervals, forming passageways.

3. The combination of a railroad rail having a bifurcated bottom and a base or support having a bifurcated upper portion, said bifurcated portions being united into an integral structure.

4. The combination of a railroad rail having a vertical web and downwardly-projecting flanges at the bottom of said web, and a

base or support having a vertical web and upwardly-extending flanges at the top of said web, said flanges being welded together.

5. The process herein described, consisting in first forming a rail with a vertical web having a pocket or longitudinal groove at its foot, and a base or support with a vertical web having a pocket or longitudinal groove at its top and then uniting the rail and base or support at their grooved portions into an integral structure, to form a web with a longitudinal passageway having open ends.

6. The process herein described, consisting in first forming a rail with a web having a downwardly-projecting flange at its foot, and a base or support with a web having upwardly projecting flanges, and then uniting the rail and base or support at the abutting edges of said flanges to form an integral structure with an open ended passage-way at the point of juncture of the webs.

7. The process herein described, consisting in first forming a rail with a vertical web and downwardly-projecting flanges at the bottom of said web, and a base or support with a vertical web and upwardly-extending flanges at the top of said web, and then welding said flanges together.

ARTHUR J. MOXHAM.

Witnesses:
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W. F. BRÜCKEL.