

No. 773,558.

PATENTED NOV. 1, 1904.

C. G. FORD.
RAIL JOINT.

APPLICATION FILED MAY 28, 1904.

NO MODEL.

Fig 1.

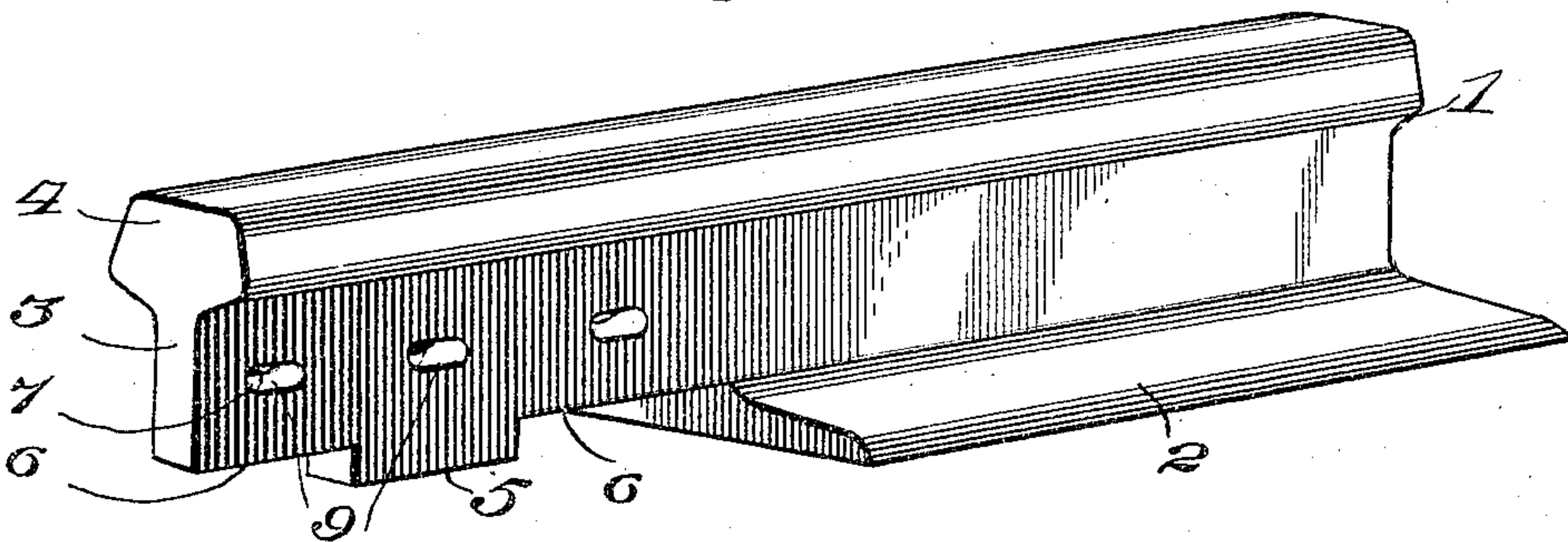


Fig 2.

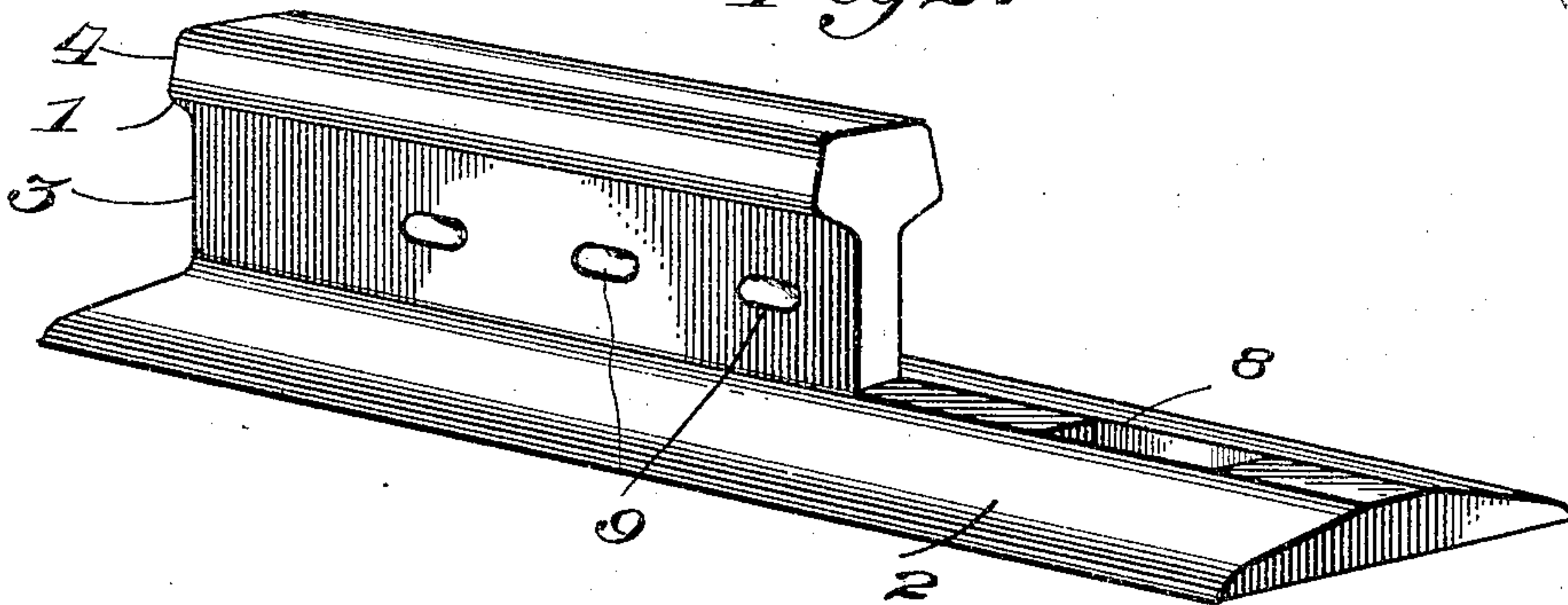


Fig 3.

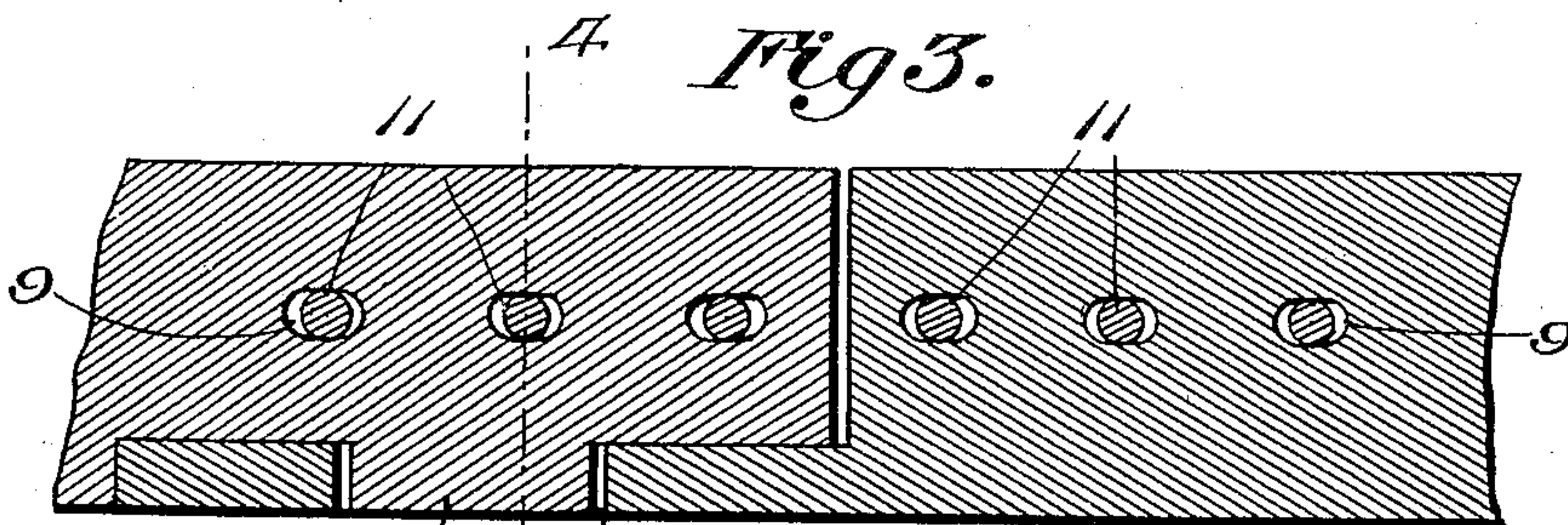
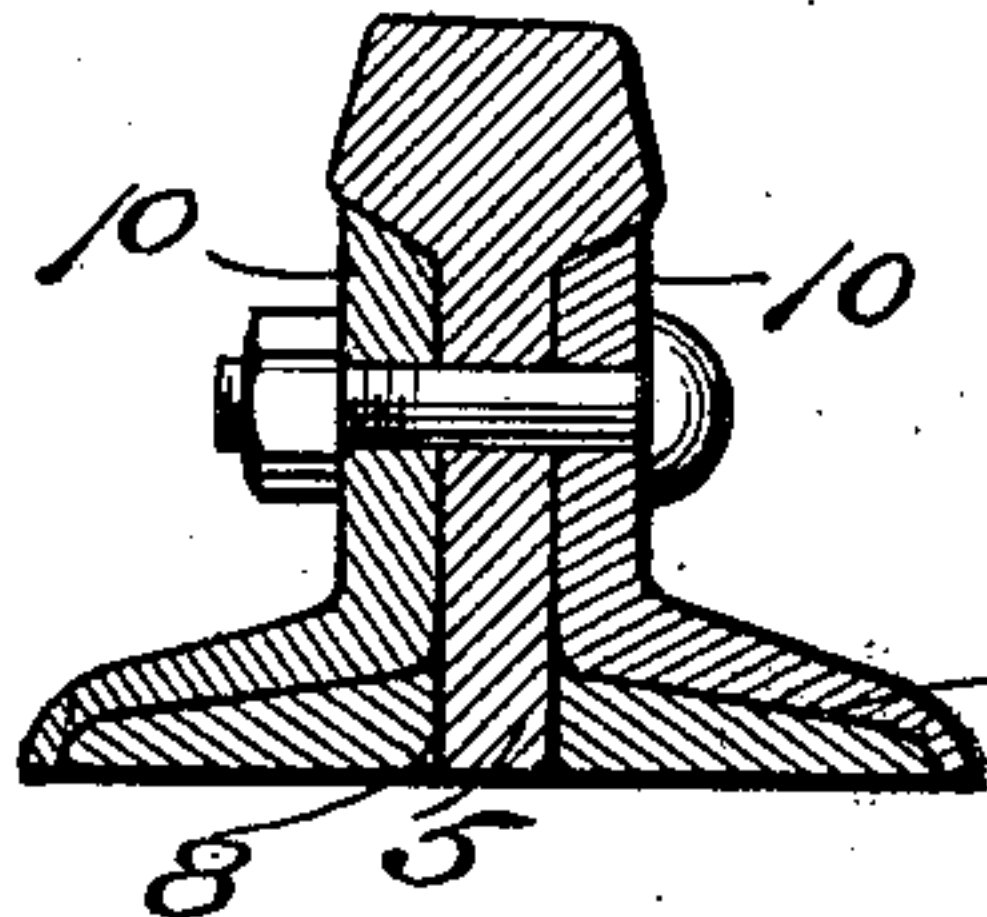


Fig 4.



Witnesses

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RAIL-JOINT.

SPECIFICATION forming part of Letters Patent No. 773,558, dated November 1, 1904.

Application filed May 28, 1904. Serial No. 210,248. (No model.)

To all whom it may concern:

Be it known that I, CHARLES G. FORD, a citizen of the United States, residing at Roseville, in the county of Muskingum and State of Ohio, have invented new and useful Improvements in Rail-Joints, of which the following is a specification.

My invention relates to new and useful improvements in rail-joints; and its object is to provide rails having their ends so shaped as to interlock, one of said rails forming a seat for the end of the adjoining rail and preventing the same from sagging.

The invention is more particularly an improvement upon the device shown and described in Patent No. 746,487, granted to me on December 8, 1903.

The invention consists of a rail having the base-flanges cut away from one end and the tread and web cut away from its other end. A tongue extends downward from the projecting portion of the web where the base-flanges have been removed and an aperture is formed in the projecting base-flanges at the other end of the rail and in alinement with the web thereof. Where rails of this character are employed, the projecting webs are adapted to be placed over the projecting base-flanges with the tongues in the apertures, and the ends of the rails are thus securely bound together and are prevented from sagging.

The invention also consists of the further novel construction and combination of parts hereinafter more fully described and claimed, and illustrated in the accompanying drawings, showing the preferred form of my invention, and in which—

Figure 1 is a perspective view of one end of a rail constructed in accordance with my invention. Fig. 2 is a similar view of the other end of said rail. Fig. 3 is a central longitudinal section through the adjoining ends of two connected rails; and Fig. 4 is a section on line 4 4, Fig. 3.

Referring to the figures by numerals of reference, 1 is a rail, having its base-flanges 2 cut away at one end, so as to form a projecting web 3 and tread 4. A tongue 5 is formed integral with the lower edge of the projecting

portion of web 3, and this tongue is removed from the ends of the projecting portion of the web, so as to form bearing-faces 6 at opposite ends thereof. Bolt-holes 7 are located in the projecting portion of the web 3. The other end of rail 1 has the tread 4 and web 3 cut away at a distance from the end substantially equal to the length of the projecting portions of the web and tread at the other end of the rail. It will be understood that the base-flanges 2 project beyond this end of the rail and an aperture 8 is formed therein in alinement with the web 3, and this aperture is substantially equal in area to the tongue 5. The distance between the aperture and the end of the projecting portion of the flanges 2 is equal to the distance between tongue 5 and the end of the web 3. Bolt-holes 9 are formed in the web 3 adjacent its end.

When it is desired to assemble rails constructed in the manner herein described, the projecting webs 3 are placed over the projecting base-flanges 2 and the tongues 5 are inserted into the apertures 8. The bearing-faces 6 of the webs will rest on the base-flanges 2 at opposite ends of the apertures 8, and therefore the projecting portion of the tread 4 is prevented from sagging without the necessity of increasing the thickness of the web. Fish-plates 10 are then placed at opposite sides of the adjoining ends of the rails and are fastened thereto by means of bolts 11, which extend through the apertures 7 and 9.

It will be seen that a joint of this character does not require the use of rails of special construction, for the reason that ordinary rails may be utilized by cutting away the tread and web at one end and the base-flanges at the other end. The web is of uniform thickness throughout its length.

In the foregoing description I have shown the preferred form of my invention; but I do not limit myself thereto, as I am aware that modifications may be made therein without departing from the spirit or sacrificing any of the advantages thereof, and I therefore reserve the right to make such changes as fairly fall within the scope of my invention.

Having thus fully described the invention, what is claimed as new is—

1. A rail having a web of uniform thickness, a tread and base-flanges, said base-flanges
5 being cut away at one end to form a projecting web and tread, and a depending tongue integral with and removed from the ends of the projecting web, the tread and web at the
10 other end of the rail being cut away to form projecting base-flanges having an aperture therein in alinement with the web.

2. The combination with a rail having projecting base-flanges at one end provided with an aperture alining with the web of the rail;
15 of a second rail having a projecting tread and web seated upon the base-flanges and abutting against the tread and web of the first-mentioned rail, and a depending tongue integral with the projecting web and seated within the
20 aperture, said tongue being removed from the ends of the projecting web, whereby bearing-faces are produced at opposite ends thereof,

the webs of the rails being of uniform thickness.

3. The combination with a rail having projecting base-flanges at one end provided with an aperture alining with the web of the rail;
25 of a second rail having a projecting tread and web seated upon the base-flanges and abutting against the tread and web of the first-mentioned rail, and a depending tongue integral
30 with the projecting web and seated within the aperture, said tongue being removed from the ends of the projecting web, whereby bearing-faces are produced at opposite ends thereof,
35 the webs of the rails being of uniform thickness, fish-plates at opposite sides of the web, and means for securing the same thereto.

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

CHARLES G. FORD.

Witnesses:

J. N. OWENS,
C. E. PORTER.