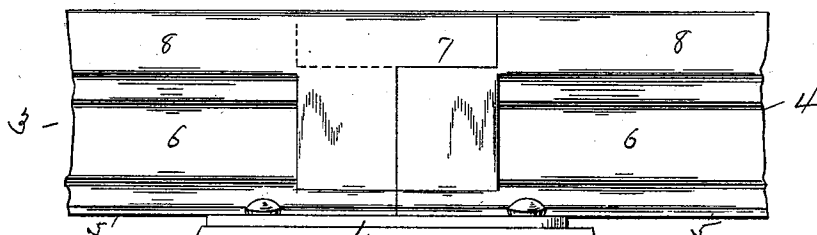
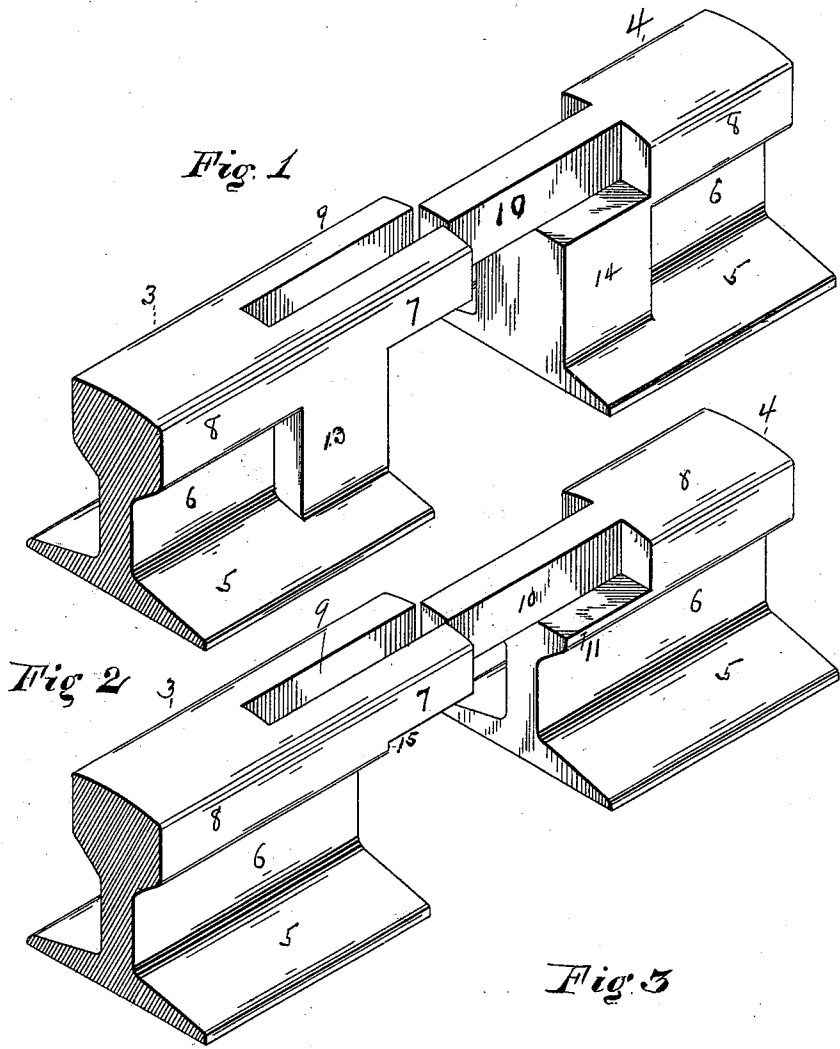


(No Model.)

H. ROBERTS.
RAILWAY RAIL JOINT.

No. 521,866.

Patented June 26, 1894.



WITNESSES:
W. S. Hulke
H. H. Hartman



Hara Roberts
INVENTOR

BY
A. C. Hartman
his ATTORNEY.

UNITED STATES PATENT OFFICE.

HARA ROBERTS, OF FORT WAYNE, INDIANA.

RAILWAY-RAIL JOINT.

SPECIFICATION forming part of Letters Patent No. 521,866, dated June 26, 1894.

Application filed August 26, 1893. Serial No. 484,107. (No model.)

To all whom it may concern:

Be it known that I, HARA ROBERTS, a citizen of the United States, residing at Fort Wayne, in the county of Allen, in the State of Indiana, have invented certain new and useful Improvements in Railway-Rail Joints; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to improvements in railway rail joints, and has for its objects to provide a joint which will lock the ends of the rails in place, afford a sure and firm construction to hold the parts in place, and permit the rails to be easily placed in the track. And the invention consists in the construction and novel combination of parts hereinafter described, pointed out in the appended claims, and illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of my preferred form of construction. Fig. 2 is a perspective view of another form of construction; and Fig. 3 is a side elevation of the rails in place on a tie.

Referring to the drawings by numerals, the opposing rails 3 and 4 are of the ordinary construction of T rails having a head 8, base 5 and web 6 joining the head to the base. The base 5 and the web 6 on the rail 3 are cut out and removed so as to leave a front projection 7 of the head 8 of the rail 3. This cutting out includes a slight portion 15 of the head 8 of the rail 3. This projection 7 has a slot 9 made through it and extended back into the head 8 of the rail to a distance about equal to that of the projection 7, which slot is of the same depth throughout. The other rail 4 has its head 8 cut out so as to form a tongue 10 which projects beyond the end of the rail as shown; the end of the rail being cut off so as to make such extension of the tongue 10. This tongue 10 is adapted to fit readily into the slot or groove 9 of the head 8 of the rail 3, and is so constructed that when the parts

are together as shown in Fig. 3, the heads of both rails are on a uniform line, or tread.

A portion 11 of the head 8 is left so that when the parts are together, the projecting end 7 of the rail 4 rests upon such portion. I prefer to reinforce these parts by placing a bracing block 14 between the head 8 of the rail 4 and the base 5, constructing the same integrally with the web 5 and the said head and base, whereby when the projecting ends 7 rest upon the portion 11, there will be a solid support from the web up. I also construct the rail 4 with a similar integrally constructed support, by placing blocks 13 between the head 8 and the base 5 at that portion of the head 8 through which the slot 9 passes, and thus more firmly support both sides of the slot 9 upon the web 5 of the rail 4.

It will be found that when the parts are moved together as shown in Fig. 3, they are to a certain extent braced, so that the rail is held in a uniform line with great force by means of the construction shown.

In placing the rails together, the projecting end of the tongue 10 can be slipped into engagement with the slot 9, and then the two rails forced together by horizontal movement so as to complete the joint, as shown in Fig. 3. I prefer to put a plate 12 underneath such joint on top of the tie supporting the same, and fasten both the web 5 and plate 12 to the tie with spikes in the ordinary manner.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A joint for railway rails consisting of the tongue 10 formed partly on the head of the rail and projecting beyond its end; the bracing blocks placed between the head and the base of the rail integrally with said parts and the web: a grooved head on the opposite rail adapted to receive the tongue 10, the grooved part of the head extended to correspond with the extension of said tongue; and bracing blocks placed between the head and the base of the opposite rail integrally with said parts and the web.

2. A joint for railway rails consisting of the tongue 10 formed partly on the head of the

5 rail and projecting beyond its end: and a projecting head 7 on the opposite rail, provided with a slot 9 extending back and over the web, the parts being adjusted to each other so as to form a closed joint when the ends of the rails are brought together substantially as described.

In testimony whereof I hereunto subscribe my name, in the presence of two witnesses, this 23d day of August, 1893.

HARA ROBERTS.

Witnesses:

H. C. SCHRADER,
E. M. WILSON.