

(No Model.)

O. T. BEDELL.
Fish Plate and Joint.

No. 241,908.

Patented May 24, 1881.

Fig 1.

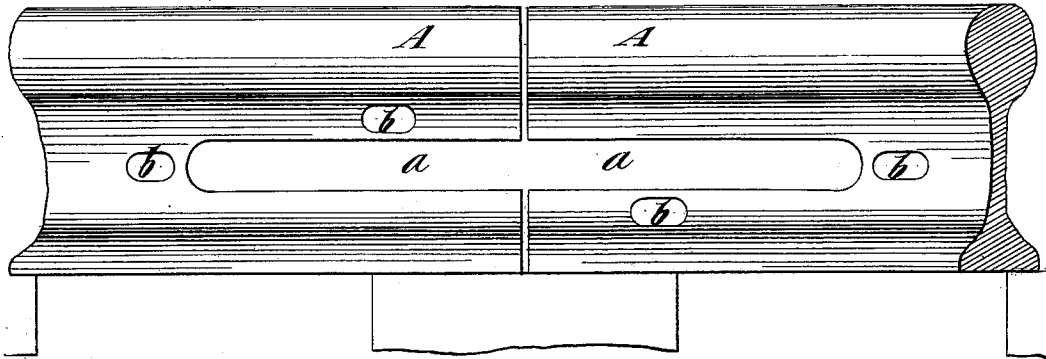


Fig 2.

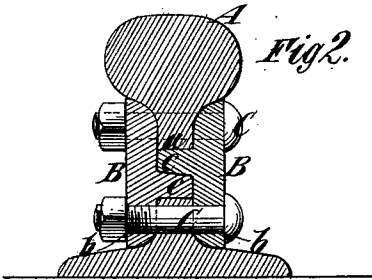


Fig 3.

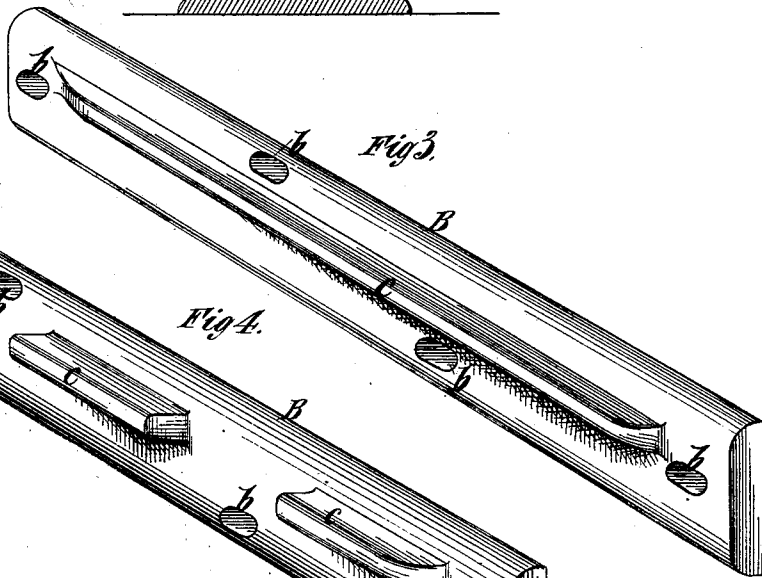
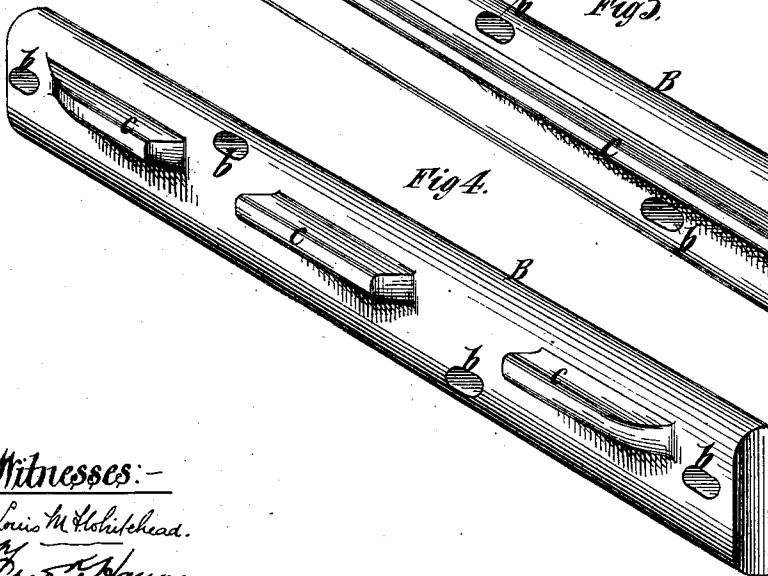


Fig 4.



Witnesses:-

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OTIS T. BEDELL, OF NEW YORK, N. Y.

FISH PLATE AND JOINT.

SPECIFICATION forming part of Letters Patent No. 241,908, dated May 24, 1881.

Application filed October 28, 1880. (No model.)

To all whom it may concern:

Be it known that I, OTIS T. BEDELL, of the city and county of New York, in the State of New York, have invented a certain new and useful Improvement in Fish-Joints and Fish-Plates for Railway-Rails, of which the following is a specification.

The object of my invention is to provide a more secure fish-joint for uniting adjacent sections of railway-rails; and to this end the invention consists in the combination, with the adjacent ends of two rails having in their webs longitudinal slots or recesses, of fish-plates, bolted one to each side of the rails, and provided with longitudinal ribs, which enter said slots and lap one over the other.

In the accompanying drawings, Figure 1 represents a side view of the adjacent ends of two rails to be united by a fish-joint and slotted for the reception of my improved fish-plates. Fig. 2 represents a transverse section of a fish-joint embodying my invention. Fig. 3 represents a perspective view of a fish-plate embodying my invention detached from the rails, and Fig. 4 represents a fish-plate of modified form.

Similar letters of reference designate corresponding parts in all the figures.

A A designate the adjacent end portions of two rails, in the webs of which are formed slots *a*, which, when the rails are placed end to end, are coincident with each other.

B B designate fish-plates, the inner faces of which conform in outline with the sides of the web of the rail, and which are applied one upon each side of the joint and secured by bolts C, passing through holes *b* in the webs of the rails and the fish-plates. These holes are preferably slightly elongated, as is usually done, to allow of the longitudinal expansion and contraction of the rails in hot and cold weather.

Upon the inner faces of the fish-plates B B are formed longitudinal ribs *c*, each equal in width to about half the width of the slots *a*

in the rails, and adapted, when the fish-plates are applied to opposite sides of the rails, to lap over each other and entirely fill said slots, as shown clearly in Fig. 2. The faces of the ribs *c*, which bear upon each other, may be, and preferably are, inclined or slanted, as seen clearly in Fig. 2, so that when the bolts C are screwed up the inclined surfaces will act upon each and cause the ribs to tightly fill the slots *a*.

It is very desirable that one pattern of fish-plate should be adapted for either side of the rails by simply turning it over, and if the rib *c* be formed entirely upon one side of the center of the width of the fish-plate, so that one side of the rib will be coincident with the center of the width of the fish-plate, this may be easily done.

In case it should be thought that the long slots *a* in the rails may weaken them I may form the fish-plate with an interrupted rib, *c*, as shown in Fig. 4, instead of a continuous rib, as shown in Fig. 3, and in such case the rails would have three slots at each joint, one slot at the meeting ends, half in each rail, and one slot in each rail, at a little distance from the end thereof.

It will be seen that by my invention I provide for bracing and holding adjacent rails immovable relatively to each other, and therefore lessen the wear of rails at the joints, where the greatest wear always occurs, and provide a more even track, which greatly lessens the wear upon the rolling-stock of the road.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination, with two rails the adjacent ends of which have slots formed in their webs, of two fish-plates, bolted one to each side of the rails, and provided with longitudinal ribs which enter said slots and lap one over the other, substantially as specified.

OTIS T. BEDELL.

Witnesses:

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