G. W. SKAATS.

Railroad Rail-Joints.

No. 137,253. Patented March 25, 1873.

Fig. 1

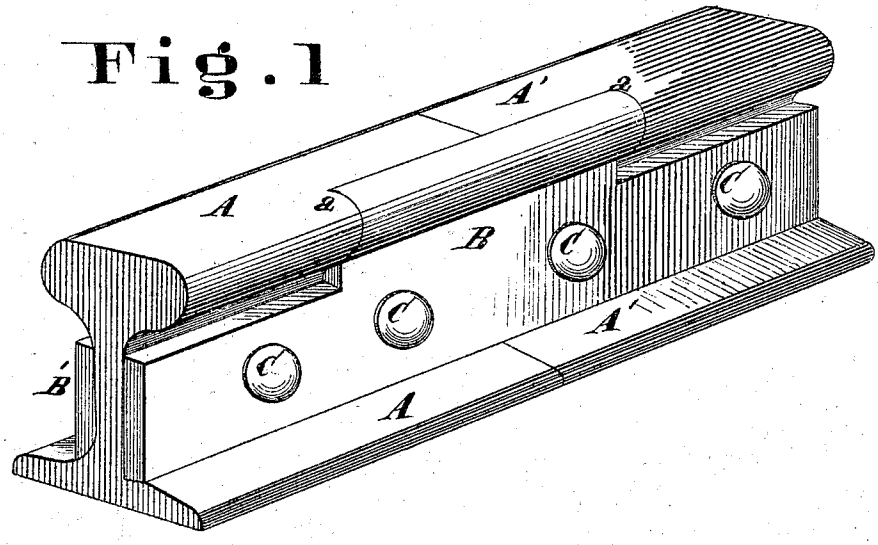


Fig. 2

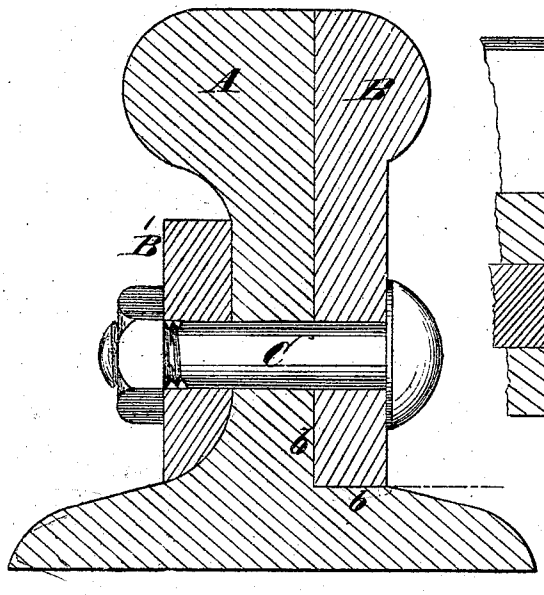
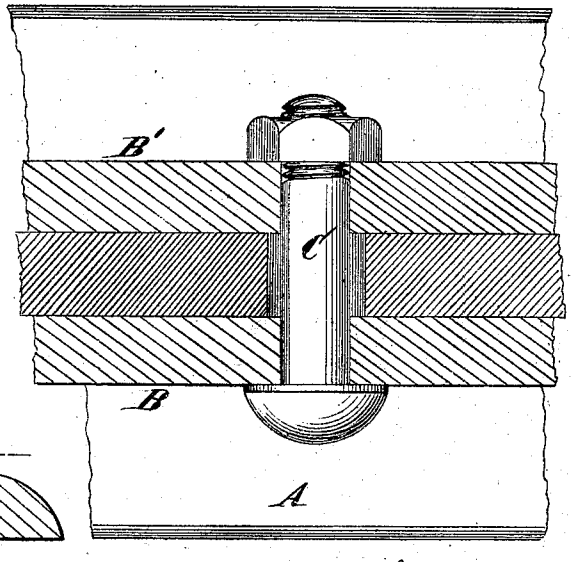


Fig. 3



Attest

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UNITED STATES PATENT OFFICE.

GEORGE W. SKAATS, OF CINCINNATI, OHIO.

IMPROVEMENT IN RAILROAD-RAIL JOINTS.

Specification forming part of Letters Patent No. **137,253**, dated March 25, 1873.

To all whom it may concern:

Be it known that I, GEORGE W. SKAATS, of Cincinnati, Hamilton county, State of Ohio, have invented a certain new and useful Improvement in the Joints of Railroad-Rails, of which the following is a specification:

Nature and Objects of Invention.

My invention relates to the class of devices for forming lapped joints for rails in which the fish-plate fits a prepared gap in the ends of the rails, and forms a part of the tread or face of the rail; and my invention consists in such a construction of the fish-plates and rails that a bed is prepared in the sides of the rails at the joints, into which the fish-plate rests for support against the weight of the rolling-stock traversing the rail, the invention being designed to prevent the fish-plate from slipping down out of place under a load, as is the case with the fish-plate used in this class of joints, where the plate is supported only on the curved side of the ordinary rail.

Description of the Accompanying Drawing.

Figure 1 is a perspective view of the joint of a track embodying my invention. Fig. 2 is a cross-section of the same at the joint. Fig. 3 is a sectional plan.

General Description.

A A′ represent the ends of two rails, in which the recesses *a a′* are cut to enable the upper side of the fish-plate B, which fits the recesses, to form a lap-joint and constitute part of the rail-tread, in the manner shown. Bolts C connect the ends of the rails and the fish-plates B B′ together. A bed, *b*, is cut or otherwise prepared in each end of the rails, near the joint, of such a character as that, when the fish-plate B fits into or upon it, the fish-plate shall have no tendency to move out of place under the load of a passing train. I make a bed having a face at right angles to the vertical side of the rail, the latter being cut vertical from the top of the rail to the bottom line of the fish-plate B, as shown in Fig. 2.

In this class of lap-joints the fish-plate B heretofore has been only supported on the curved side of the rail, such as is shown supporting the plate B′; and it has been found that although the bolts C were of the customary tight fits, that the plate which supported in part the passing load would work entirely out of place, so as to be inoperative and cause the thin ends of the rails to be exposed and battered up.

Claim.

The combination of rails A A′ *a a′*, fish-plates B B′, and bolts C, when the plate B not only forms a part of the rail-tread, but is fitted and supported in a prepared bed, *b*, in the rails, substantially as and for the purpose specified.

In testimony of which invention I hereunto set my hand.

G. W. SKAATS.

Witnesses:

FRANK MILLWARD,

JNO. G. JONES.