

W. A. ROWLAND.
Railroad Rail Chairs.

No. 138,698.

Patented May 6, 1873.

Fig.1.

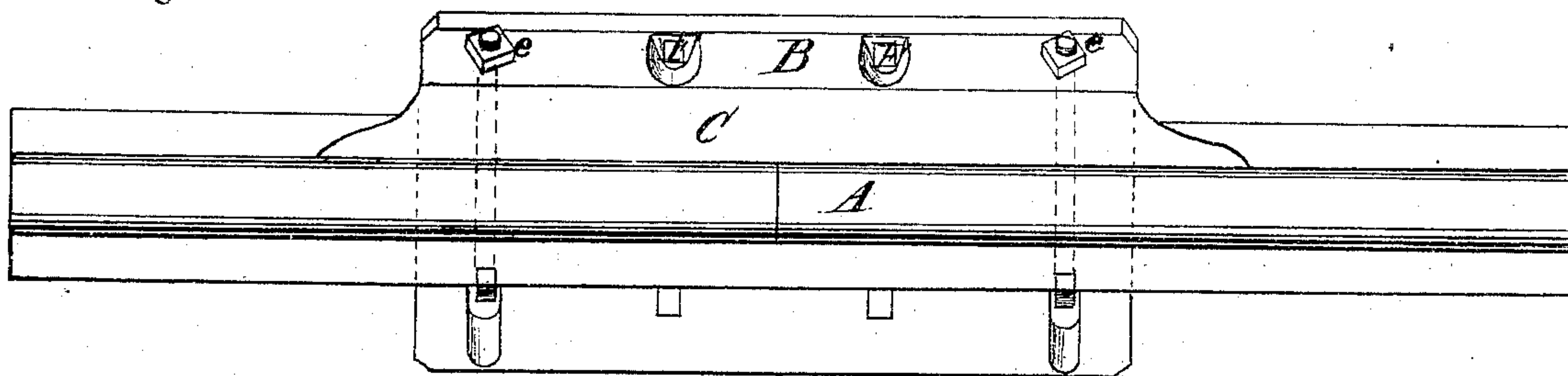
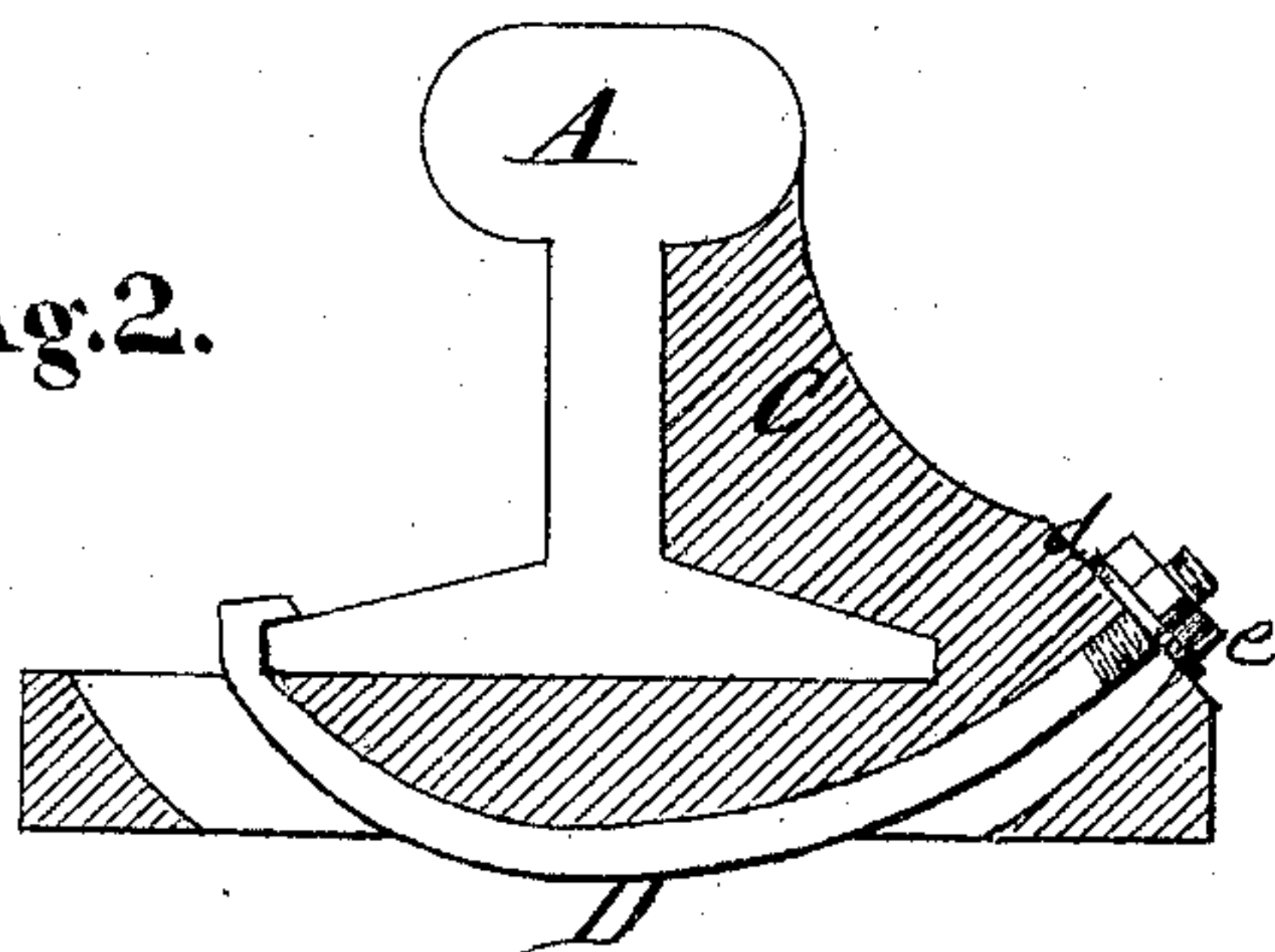


Fig.2.



Witnesses.

Cha. Kemper.

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UNITED STATES PATENT OFFICE.

WILLIAM A. ROWLAND, OF WAVERLY, NEW YORK.

IMPROVEMENT IN RAILWAY-RAIL CHAIRS.

Specification forming part of Letters Patent No. **138,698**, dated May 6, 1873; application filed April 12, 1873.

To all whom it may concern:

Be it known that I, WILLIAM A. ROWLAND, of Waverly, in the county of Tioga and State of New York, have invented a new and valuable Improvement in Railway Chair and Coupling; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a plan view of my invention. Fig. 2 is a vertical transverse section of the same.

This invention has relation to the improved construction and mode of application of railroad chairs for coupling the ends of the rails; and consists in so forming said chair with a single jaw to grasp the outside of the rail that it may be put in place by inserting the base under the rail from the outside instead of passing it over the end, and in forming said chair with a curved bearing to receive the bend of a curved bolt, which is arranged to grasp the edge of the flanch of the rail, and, passing beneath the base of the rail through the chair, is secured by suitable devices, as hereinafter described.

In the accompanying drawing illustrating my invention, A represents the rails and B the base of the chair inserted under the ends to be coupled. On one side of said base is cast a jaw, C, to fit the rail snugly. This jaw is on the outside, so that the base may be inserted as before stated. D represents a bolt with a hook on its inner end to grasp the base of the rail. This bolt is curved, and is

made to pass under the rail A and base B, its outer end projecting in an upward direction through the beveled part *d* of the chair, and having a screw-thread formed thereon to hold a nut, *e*. The jaw C may be lengthened somewhat beyond the ends of the base B for greater firmness. F designates spikes inserted through the chair and into the sleepers at points between the curved bolts D.

The advantages of this coupling are as follows: The chair, being made of one piece, may be either of cast or wrought iron. It may be applied on or between ties. When any jar or strain occurs, it is exerted on the bolts in the direction of their length, and cannot loose the nuts. It is not necessary to punch holes in the rails in order to secure the coupling, which, consequently, may be applied to broken rails, or those cut to fit the track. When placed upon a tie the spikes on the inside of the chair act also as keys to hold the ends of the rails in their places.

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

The combination, with the curved bolt D, of the chair C provided with a curved bearing to fit the bolt and to give a downward draw to the ends of the same, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

WILLIAM A. ROWLAND.

Witnesses:

JOHN R. MURRAY,
J. NEWTON DEXTER.