

W. Morehouse, 2d Sheet, Sheet 1.

Rail Joint.

No. 111,135.

Patented Jan. 24, 1871.

Fig. 1

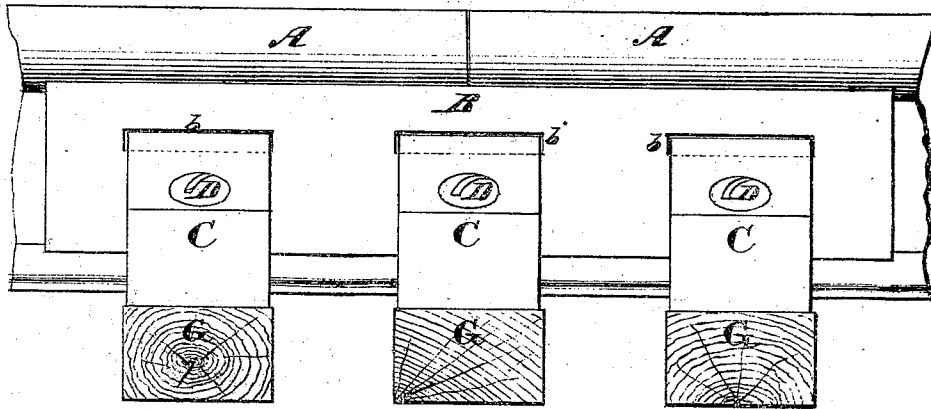
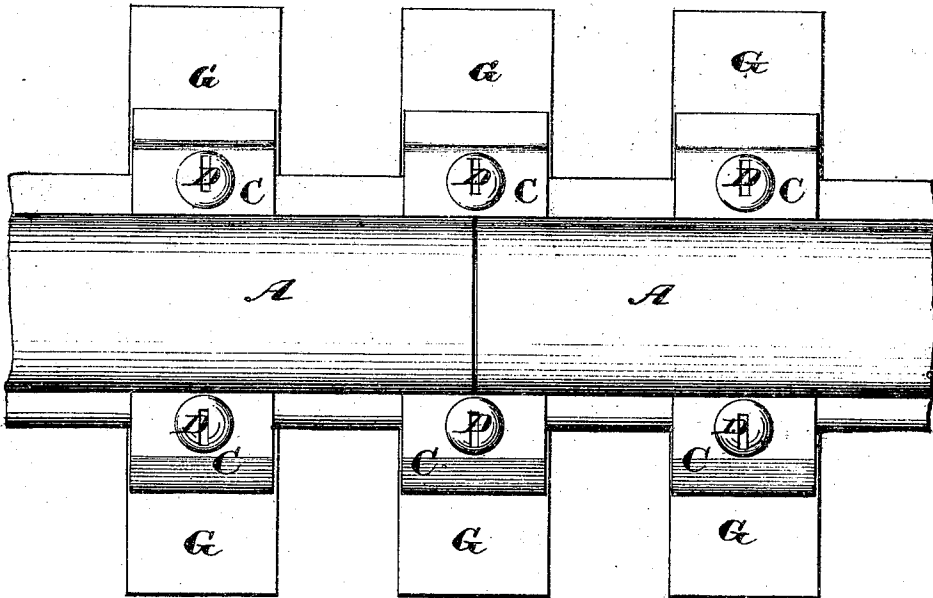


Fig. 2



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W. Morehouse,

2, Streets, Sheet 2.

Rail Joint.

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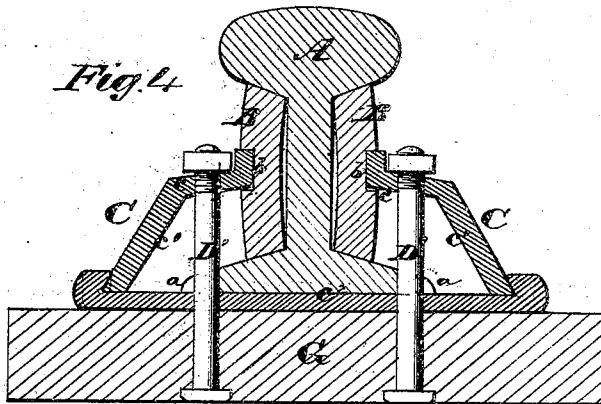
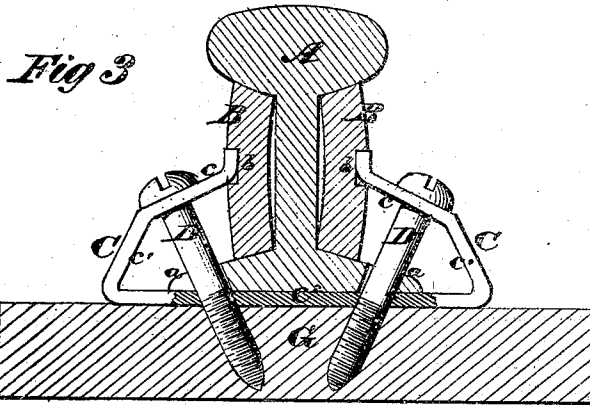
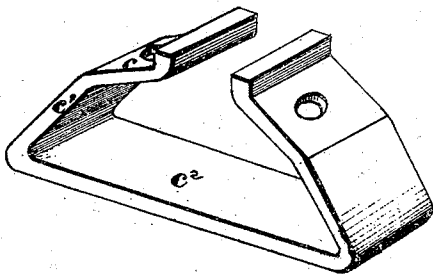


Fig 5



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# United States Patent Office.

WILLIAM MOREHOUSE, OF BUFFALO, NEW YORK.

Letters Patent No. 111,135, dated January 24, 1871.

## IMPROVEMENT IN CHAIR-CLAMPS FOR RAILWAY-RAILS.

The Schedule referred to in these Letters Patent and making part of the same.

### To all whom it may concern:

Be it known that I, WILLIAM MOREHOUSE, of Buffalo, in the county of Erie and State of New York, have invented a new and improved Railroad-Rail Clamp; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing making part of this specification, in which—

Figure 1, plate 1, is an elevation of one side of a rail-joint, showing the chairs applied to the same.

Figure 2, plate 1, is a top view of the joint.

Figure 3, plate 2, is a cross-section of the joint.

Figure 4, plate 2, shows a modification of the chair-clamp.

Figure 5, plate 2, is a perspective view of the chair-clamp of figs. 1, 2, and 3.

Similar letters of reference indicate corresponding parts in the several figures.

This invention relates to an improvement which is designed for firmly clamping, supporting, and holding down railroad-rails at their joints, where fish-bars or splicing-bars are employed between the heads and bases of the rails.

The object is to render unnecessary the punching of the fish-bars and the webs of the rails, which is not only expensive, but which weakens the rails at those points where they should be the strongest.

The nature of my invention consists—

First, in a combined chair and clamp, so constructed that, in the act of confining it to the cross-ties or to blocks between the cross-ties, its jaws will firmly clamp and hold the fish-bars in place on opposite sides of the rail, as will be hereinafter explained.

Second, in adapting the fish-bars to receive and be held in place by the ends of the improved clamping-chairs, as will be hereinafter explained.

The following is a description of my invention:

In the accompanying drawing—

A A represent the ends of the two rail-sections of the well-known T-shape; and

B B represent two fish-bars, which are used on opposite sides of the webs of the sections for splicing the sections and supporting the lips thereof at the joint, and, if desirable, at intermediate points between the

ends of the rails. These fish-bars are preferably made concavo-convex, as shown in the sectional views, figs. 3 and 4, although they may be made of a different shape.

Each bar B is constructed with depressions *b*, in its outer side, adapted to receive the ends of the clamping-chairs. As the equivalent of these depressions lugs may be formed in any suitable manner on the surfaces of the bars.

The combined chair and clamp C is so constructed that it affords a base portion, *c*, and two side-gripping jaws, terminating upwardly in lips which are received into the depression *b* in the fish-bars B B.

By reference to figs. 1, 2, and 3, it will be seen that the jaws of the clamp are bent at obtuse angles, and that the portions *c c* are punched to receive through them the bolts, spikes, or screws which confine the clamp down in place upon the cross-ties, or upon blocks G between the ties.

The rails are notched at *a a* to receive the bolts, screws, or spikes, which not only hold down the parts, but at the same time cause the ends of the clamping-jaws to approach each other and hold the fish bars rigidly in their places.

The combined clamp and chair of fig. 4 is made of three pieces, to wit: a base or chair, *c*, with shoulders formed on its extremities, and two angular gripping-jaws. This device of fig. 4 I consider the equivalent of the single-piece chair and clamp. The shoulders on the extremities of the base-piece prevent the jaw-pieces from spreading out when the parts are clamped to a rail.

Having described my invention,

What I claim as new is—

1. The chair and clamp, consisting of a base, *c*, jaws C C, and bolts D or D', substantially as and for the purpose described.

2. The combination of the recessed fish-bars B *b*, chair and clamp C C *c*, and bolts D or D', substantially as described.

WILLIAM MOREHOUSE.

Witnesses:

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