W. W. FAY.
Rail-Joint.

No. 223,899. Patented Jan. 27, 1880.

*Fig. 1.*

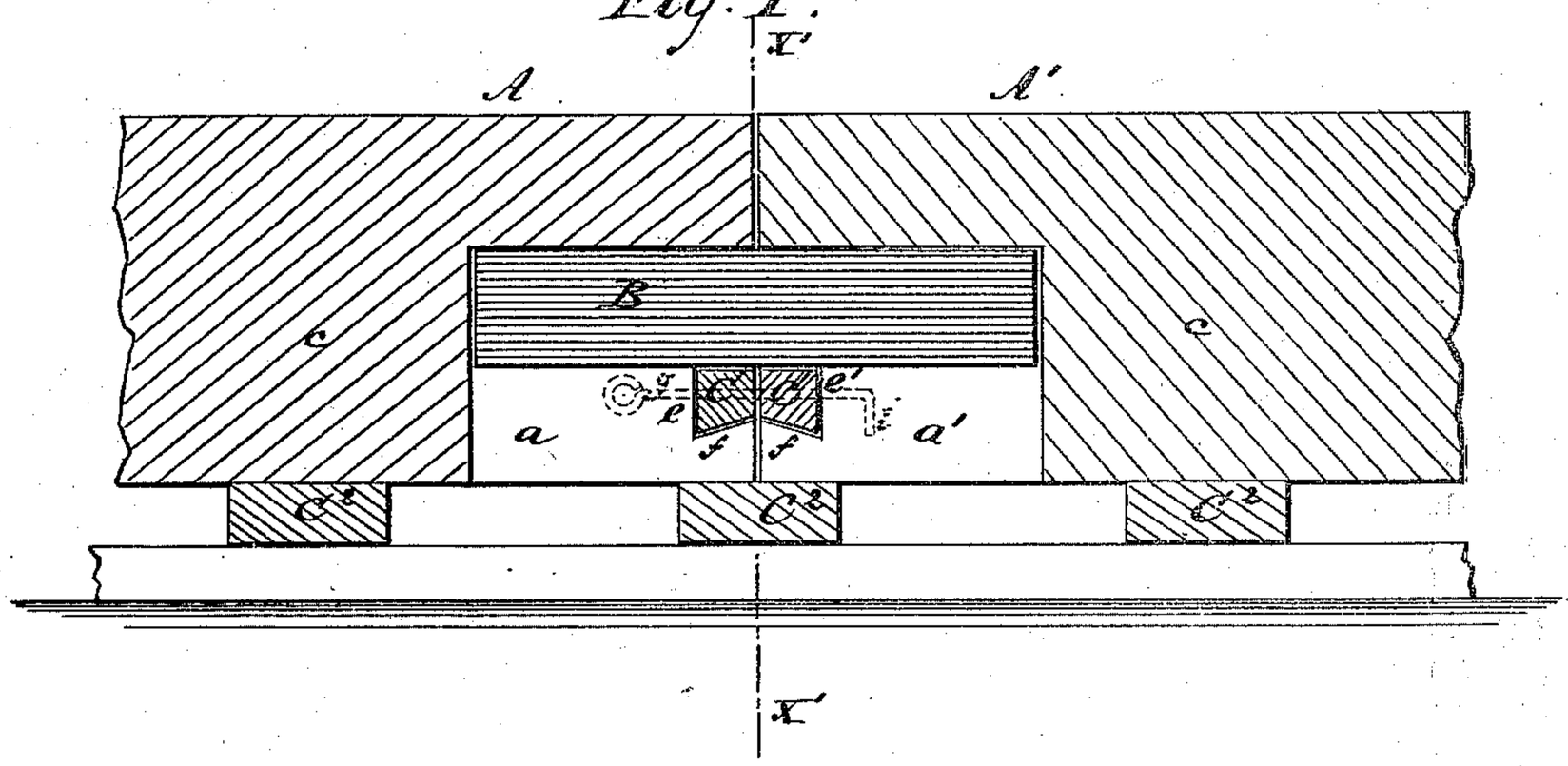
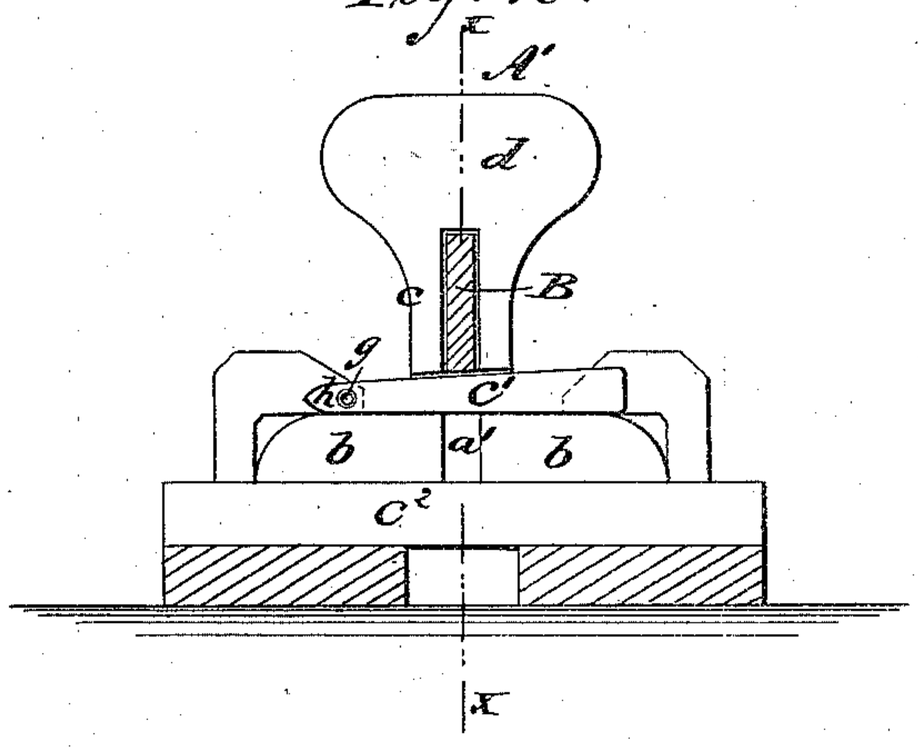



*Fig. 2.*




WITNESSES:

A. Schehl.
C. Sedgwick

INVENTOR:

W. W. Fay
BY Munn & Co
ATTORNEYS.

# UNITED STATES PATENT OFFICE.

WILLIAM W FAY, OF JEFFERSON CITY, MISSOURI, ASSIGNOR TO HIMSELF AND CHARLES O. ADAMS, OF SAME PLACE.

## RAIL-JOINT.

SPECIFICATION forming part of Letters Patent No. 223,899, dated January 27, 1880.

Application filed November 28, 1879.

*To all whom it may concern:*

Be it known that I, WILLIAM W. FAY, of Jefferson City, in the county of Cole and State of Missouri, have invented a new and Improved Railway-Rail Joint, of which the following is a specification.

The object of my invention is to form a strong and substantial joint between the ends of adjoining railway-rails.

The invention consists in connecting the ends of adjoining rails together by means of a metal plate inserted in slots in the adjacent ends, and also in fastening and tightening said connecting-plate in its place by means of laterally-driven dovetailed wedges.

In the accompanying drawings, Figure 1 is a vertical longitudinal section, taken on line *x x* of Fig. 2, of my improved railway-rail joint; and Fig. 2 is a vertical cross-section of the same on line *x' x'* of Fig. 1.

Similar letters of reference indicate corresponding parts.

Referring to the drawings, A A' are the ends of two railway-rails. In these ends A A' are central longitudinal vertical slots, *a a'*, extending through the base *b* of the rails and upward into the webs *c* to the base of the heads *d*.

The ends A A', respectively, are likewise provided with transverse dovetailed slots *e e'*, made through the webs *c*, with the lower dovetailed sides, *f*, of said slots next to the bases *b* of the rails.

B is a steel plate inserted in the vertical slots *a a'*, so as to join the ends A A' of the rails together. C C' are dovetailed wedges, which are driven, respectively, through transverse slots *e e'* under the lower edge of steel plate B. $C^2$ represents the ties on which the rails rest.

The ends A A' are held together by the plate B, which is driven firmly up against the top of slots *a a'* by wedges C C'. The said plate B also prevents the ends A A' from becoming displaced or detached vertically or laterally, and, further, it supports the ends A A' against sagging.

When the wedges C C' are driven through slots *e e'* they are prevented from coming out by a rod, *g*, passed through holes *h* in the smaller ends of said wedges, said rod having its end *i* bent to prevent it from slipping out of the said holes *h*.

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

As an improvement in railway-rail joints, the rail ends A A', provided, respectively, with slots *a a'* and *e e'*, in combination with the steel connecting-plate B and wedges C C', substantially as described.

WILLIAM W. FAY.

Witnesses:
C. W. THOMAS,
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