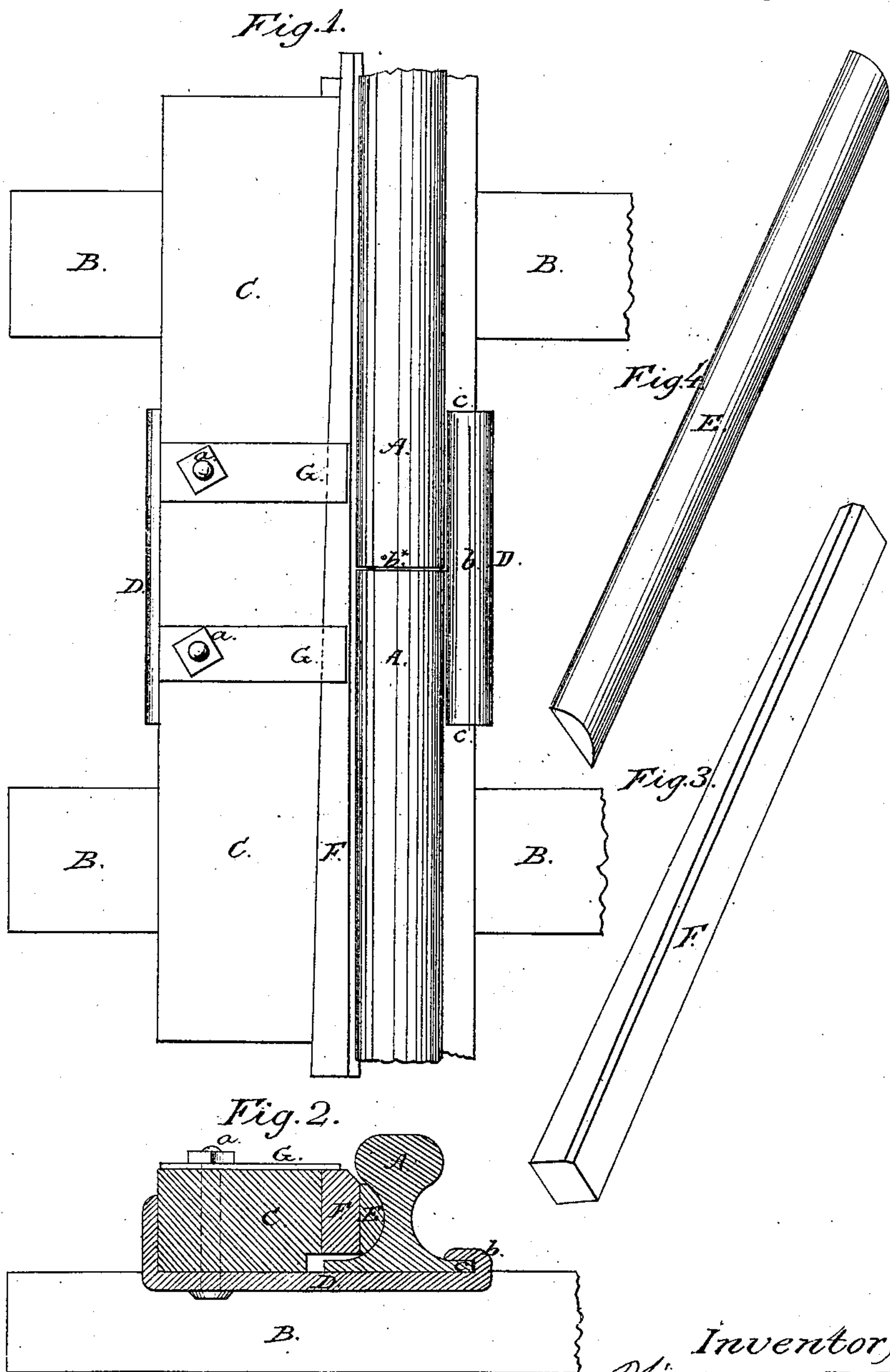


W. Foster,
Railroad Chair,
N^o 67,280, Patented July 30, 1867.



Witnesses;
J. M. Coombes,
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United States Patent Office.

WILLIAM FOSTER, OF LOGANSFORT, INDIANA

Letters Patent No. 67,280, dated July 30, 1867.

IMPROVED RAILWAY CHAIR.

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 FOSTER, of Logansport, in the county of Cass, and State of Indiana, have invented certain new and useful Improvements in Rail-Joints; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a portion of this specification, in which—

Figure 1 is a plan view of a rail-joint constructed according to my invention.

Figure 2 is a transverse section of the same.

Figure 3 is a detached view of a portion of the same.

Figure 4 is a detached view of another portion of the same.

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

This invention consists in the combination of a locking-wedge and gib with the rails of a railroad track and a suitable supporting-bar and chair, whereby the firm and permanent retention of the ends of the rails in the chair is very effectually secured, at the same time that a considerable degree of elasticity is allowed to the joint thus formed, thereby obviating any injury to the ends of the rails from the jarring or concussion of the cars thereon. The invention further consists in a novel means whereby the locking-wedge is prevented from being thrown upward out of its place.

To enable others to understand the nature and construction of my invention, I will proceed to describe it with reference to the drawings.

A indicates the rails, the ends of which are to be joined, and B represents two of the transverse ties upon which the rails are placed, the said ties being placed at suitable distances from the extremities of the said rails. A strong wooden bar, C, is placed upon the outer side of the rails A, in a position nearly longitudinal or parallel with such rails, and with its ends resting upon the transverse ties B. Attached, by means of vertical bolts *a*, to the under side of this longitudinal supporting-bar, is the chair D, which consists of a strong metallic plate which extends inward underneath the adjacent ends or extremities of the rails, and has its inner end or edge *b* turned upward and over the innermost flanges *c* of the rails, as shown in figs. 1 and 2. The gib E, made of wrought iron or other metal, and shown separately in fig. 4, has one of its sides of rounded or semicircular form, and is fitted into the longitudinal recesses formed between the heads and the flanges of the rails, at the outer side thereof, as shown more clearly in fig. 2, the said gib extending across the joint or space *b** between the ends of the two rails. A wedge or tapering key, F, shown separately in fig. 3, and made preferably of wood, is then driven longitudinally between the supporting-bar C and the aforesaid gib, and forcing the gib tightly against the outward side of the rails, clamps the end portions thereof firmly between the turned-over edge of the chair D on one side, and the aforesaid gib on the other, thus firmly bringing them into line with each other and holding them against lateral displacement, while the aforesaid ends of the rails resting upon the horizontal portion of the chair, which is itself firmly sustained by the supporting-bar C, are securely supported against downward pressure, at the same time that the bar C, being made of wood, is sufficiently elastic to allow the ends of the rails to yield to the degree requisite to prevent injury thereto from the concussion or jarring action of the railway trains in passing over the joint. The displacement of the wedge or key F, in an upward direction, is prevented by the inwardly-projecting ends of horizontal transverse plates G, which are secured upon the upper side of the supporting-bar C by the same bolts *a* by which the chair D is secured to the under side of the said bar.

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

1. The wedge F and gib E, in combination with the chair D, supporting-bar C, and rails A, substantially as herein set forth for the purpose specified.

2. The plates G and bolts *a*, in combination with the supporting-bar C, chair D, wedge F, gib E, and rails A, substantially as herein set forth for the purpose specified.

WILLIAM FOSTER.

Witnesses:

R. DAVIDSON,

JAS. KOOKEN,