

McCaughey & Adams,

Rail Joint.

No. 103,480.

Patented May. 24. 1870.

Fig. 1.

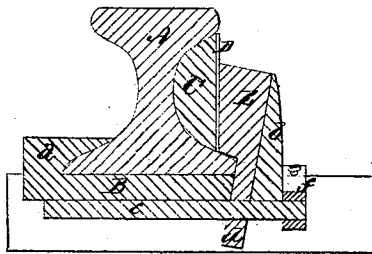
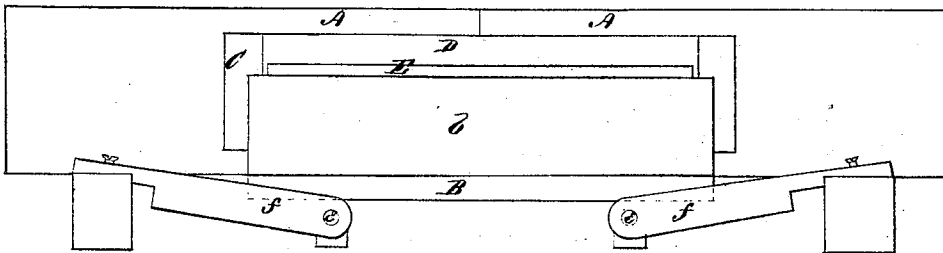


Fig. 2.



Witnesses
J. W. Ellis.
J. O. White.

Inventors
Thomas B. McCaughey & James Adams
J. H. Alexander
Attys

United States Patent Office.

THOMAS B. McCONAUGHEY AND JAMES ADAMS, OF NEWARK, DELAWARE.

Letters Patent No. 103,480, dated May 24, 1870.

IMPROVEMENT IN RAILWAY RAIL-JOINT FASTENING.

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

To all whom it may concern:

Be it known that we, THOMAS B. McCONAUGHEY and JAMES ADAMS, of Newark, in the county of New Castle and State of Delaware, have invented certain new and useful Improvements in Railroad Track-Joint Fastenings; and we do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The nature of our invention consists in the construction and arrangement of a "railroad joint-fastening," as will be hereinafter fully set forth.

In order to enable others skilled in the art to which our invention appertains to make and use the same, we will now proceed to describe its construction and operation, referring to the annexed drawings, in which—

Figure 1 is a cross-section, and

Figure 2 is a side elevation.

A A represent the adjoining ends of two rails.

B is the railroad-chair, placed under the rails A A at the joint, said chair being on one side provided with a flange, *a*, which projects inward, so as to fit over the base of the rails on one side.

On the other side, the chair B is provided with a flange, *b*, which, on the inside, is perpendicular, or nearly so, to the base B.

On this side of the rails A A is placed a bar, C, curved on the inner side, so as to fit closely to the sides of the rails between their tread and base.

On the outside of the bar C is placed a plate or washer, D, and between this plate and the flange *b* of the chair is inserted a wedge-shaped bar, E, which is provided at its lower edge with two arms *d d*, projecting downward through notches in the base of the rails and through openings made for that purpose in the chair B.

The arms *d d* have each an elongated slot in their lower ends. Through each of these slots is inserted an oval or elliptical-shaped rod or bar, *e*, provided at one end with a lever, *f*.

The rod or bar *e* is inserted through the slot in the arm *d*, with its flat or rather widest side against the under side of the chair B, and the lever *f* standing in an upright position. Then, by turning the lever downward toward the end of the chair, the rod or bar *e* is turned edgewise, so as to draw the wedge-shaped bar E tightly down, securing the chair and the ends of the rails firmly together. The end of the lever *f* is then fastened by a screw, or other suitable means, to one of the cross-ties.

When it is desired to loosen the joint-fastening, it is only necessary to raise the levers *f f* up, when the rods *e e* can be taken out and the wedge-shaped bar E removed.

Having thus fully described our invention,

What we claim as new, and desire to secure by Letters Patent, is—

1. The oval or elliptical-shaped rod or bar *e*, provided with lever *f*, and used substantially in the manner and for the purposes herein set forth.

2. The combination and arrangement of the rails A A, chair B, with flanges *a b*, curved bar C, wedge-shaped bar E, with slotted arms *d d*, rods or bars *e e*, and levers *f f*, all constructed as described, and operating substantially as and for the purposes herein set forth.

In testimony that we claim the foregoing as our own, we affix our signatures in presence of two witnesses.

THOS. B. McCONAUGHEY.
JAMES ADAMS.

Witnesses:

JOS. H. RAY,
EDWARD WILSON.