

W. HADDOCK.
 Railway-Rail Joints

No. 164,369.

Patented June 15, 1875.

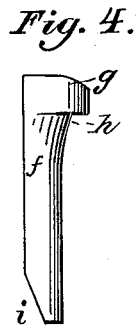
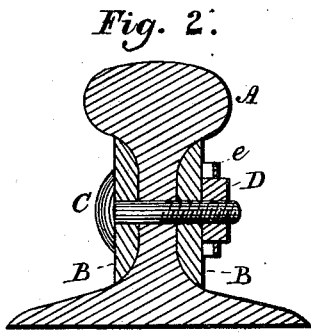
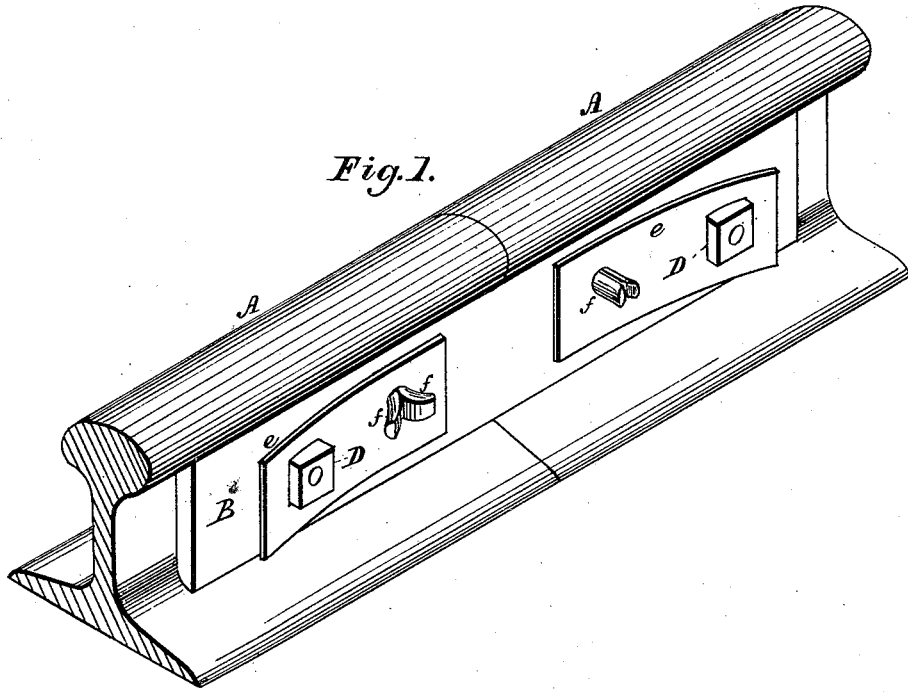
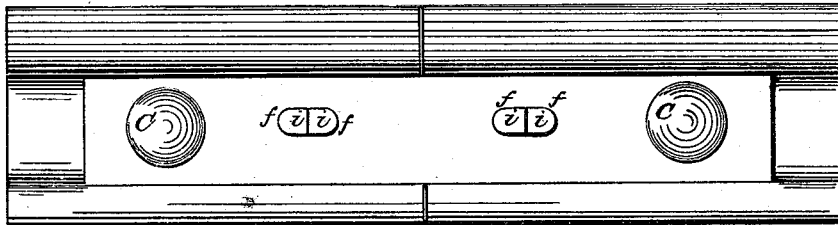


Fig. 3.



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WORCESTER HADDOCK, OF PITTSBURG, PENNSYLVANIA.

IMPROVEMENT IN RAILWAY-RAIL JOINTS.

Specification forming part of Letters Patent No. **164,369**, dated June 15, 1875; application filed November 3, 1874.

To all whom it may concern:

Be it known that I, WORCESTER HADDOCK, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Nut-Locks; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention relates to an improvement in device for securing fish-bars at the joints of rail of railways; and consists in the use of a key or bolt constructed in two parts, the points of which are beveled, and the neck enlarged, as will hereinafter more fully appear.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

In the accompanying drawings, which form part of my specification, Figure 1 is a perspective view of two sections of rails jointed and forming what is known as a "fish-joint," the same having my improvement. Fig. 2 is a transverse section of the same. Fig. 3 is a side elevation of the same. Fig. 4 is a side view of my improvement in key or bolt for securing the fish-bar B to the rails A.

C represents an ordinary bolt, and D its screw-nut. *e* represents a thin plate of iron or steel, slightly curved, and provided with a square opening, adapted in size to the square of the nut D. The plate *e* has an opening for the key or bolt *f*, which is constructed in two parts, and is made of half-round iron, and is furnished with a head, *g*, with an enlargement

in the neck, as shown at *h*. The points of the key or bolt are beveled, as shown at *i*.

In the operation of inserting the key or bolt *f* in forming the fish-joint, the two flat sides are placed together, and then placed in the openings of the fish-bars B, rail A, and plate *e*, as shown in Fig. 1. The operator then, by means of a suitable tool, bends or spreads the beveled points *i*, as indicated in Figs. 1 and 3, which will secure the fish-bars B to the rails A, and the plate *e* to the fish-bar B, causing one end of the plate *e* to be thrown out, so that it will hold the nut D in a fixed position on its bolt C.

The skillful operator or railway engineer will readily understand that the bolts C and plates *e* may be dispensed with, and that the fish-bars B may be secured to the rails A through the medium of the keys or bolts *f*.

Cheapness of construction and facility in forming the fish-joint are the advantages of my improvement.

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

A key or bolt for fish-bars for railways, made in two pieces, the points of which are beveled and the necks enlarged, substantially as herein described, and for the purposes set forth.

WORCESTER HADDOCK.

Witnesses:

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