

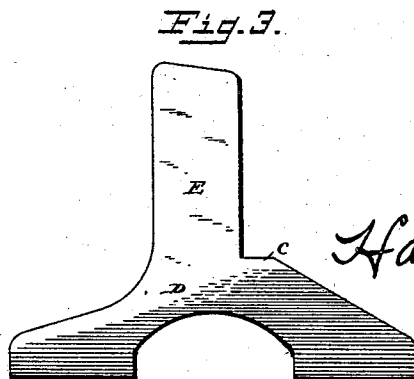
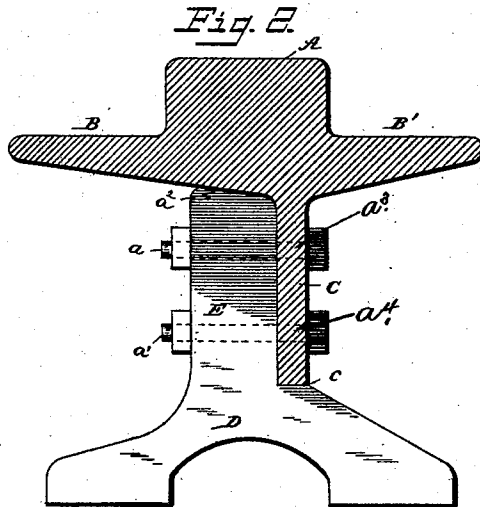
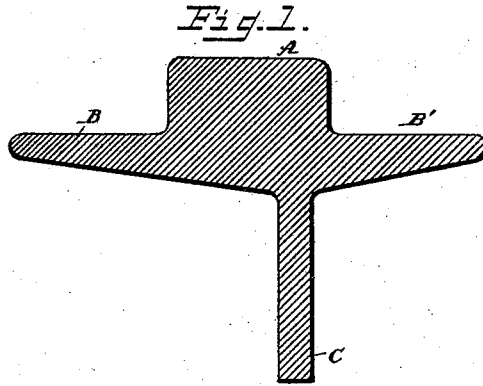
(No Model.)

H. H. LITTELL.

GIRDER RAIL.

No. 369,187.

Patented Aug. 30, 1887.



Witnesses
Edwin L. Bradford
Geo. C. Poulton

Hardin H. Littell.
Inventor

By His Attorney in fact.
Chas. O. Barber

UNITED STATES PATENT OFFICE.

HARDIN H. LITTELL, OF LOUISVILLE, KENTUCKY.

GIRDER-RAIL.

SPECIFICATION forming part of Letters Patent No. 369,187, dated August 30, 1887.

Application filed July 1, 1886. Serial No. 206,803. (No model.)

To all whom it may concern:

Be it known that I, HARDIN H. LITTELL, a citizen of the United States, residing at Louisville, in the county of Jefferson and State of Kentucky, have invented new and useful Improvements in Girder-Rails, of which the following is so full, clear, and exact a description as will enable others skilled in the art to which my invention appertains to make and use the same, reference being had to the accompanying drawings.

This invention has relation to improvements in railroad-rails; and it consists in the novel construction and arrangement of parts, as will be hereinafter described, and more particularly pointed out in the claim.

The object of my invention is to construct a cheap durable rail which may be firmly and quickly secured in its bearings in the track, and which may be readily and easily removed when worn out or broken without the necessity of removing the chair.

The other objects in general are to construct a practical, inexpensive, and durable rail which may be secured in place in the street, and which may be held in position by chairs placed at suitable intervals along the bed of the road to support the head of the rail, its shank or girder.

In the accompanying drawings, Figure 1 is an end view of my improved rail. Fig. 2 is a cross-section showing the rail secured to the chair. Fig. 3 is an end view of the chair, with its flange and step.

Referring to the drawings, the letter A represents the head of the rail, having flanges B B'

extending outward in line with each other and at right angles with said head. The under surface of the head of the rail is provided with a shank or girder having perforations $a^3 a^4$, 40 said shank being formed integral with the head. This girder is in a line, or nearly so, with one side of the head, and the under surface of the flange B extends downward beyond the center of the head A to form a shoulder, a^2 . 45

The letter D represents the perforated chair, having a flange, E, which abuts against the under side of the head of the rail at the shoulder a^2 . The chair is also provided with a step, c , on which rests the lower end of the shank, said shank and flange being secured together by means of bolts $a a'$, passing through the perforations of the shank and chair.

Having described my invention, what I claim is— 55

The combination, with the head of the rail, having outwardly-extending flanges, a shank or girder on a line, or nearly so, with one side of the head, and the under surface of the outer flange extending inward beyond the center of said head to form a shoulder, of a chair having a flange and step, the former supporting the head at the shoulder and the latter supporting the lower end of said shank or girder, and bolts for securing the parts together, as shown and described. 65

In testimony that I claim the above I hereunto set my hand in presence of two witnesses.

HARDIN H. LITTELL.

Witnesses:

R. A. WATTS,
J. M. PETTUS.