J.S. H.11161.

Making Failroad Pails.

TY 9/339.

Patented Jun. 15, 1869.

Fig. 1

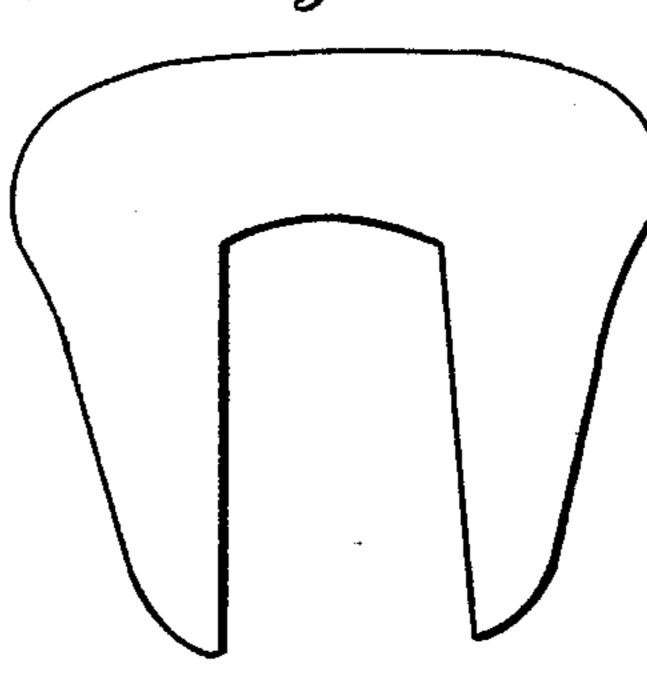


Fig. 2.

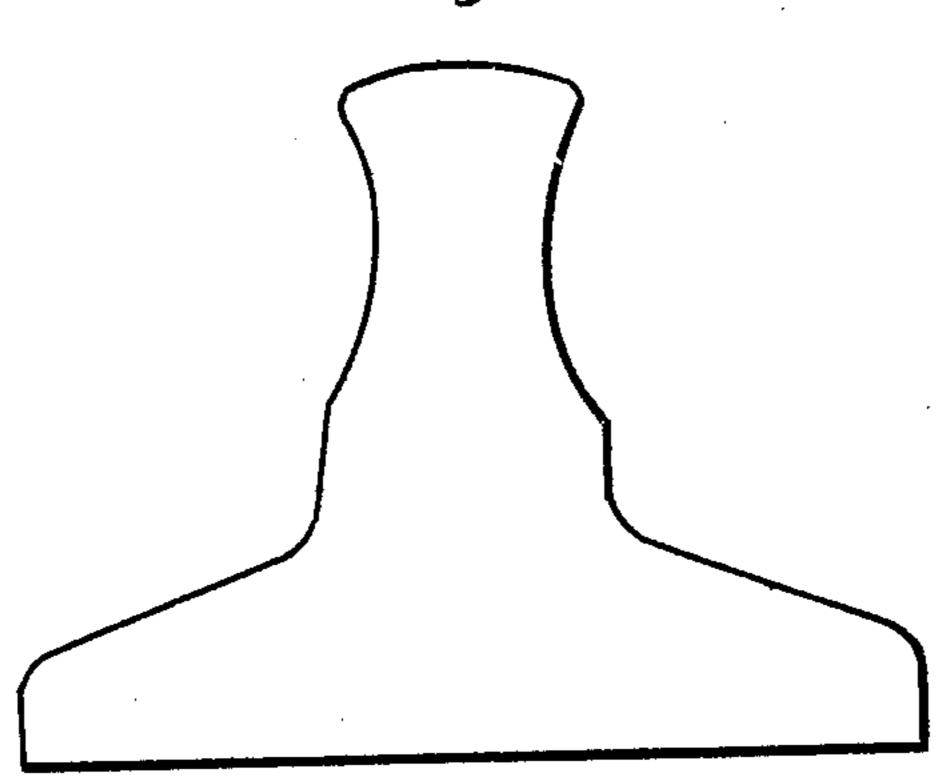


Fig.3.

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Witnesses; Auton Gramfund,



JOHN S. HUNTER, OF LOWELLVILLE, OHIO.

Letters Patent No. 91,339, dated June 15, 1869.

IMPROVEMENT IN THE MANUFACTURE OF RAILWAY-RAILS.

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, John S. Hunter, of Lowell-ville, in the county of Mahoning, and State of Ohio, have invented a new and improved Mode of Making a Steel and Iron Rail for Railroads; and I do hereby declare the following to be a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in forming a steel-headed rail for railroads by combining a steel-grooved cap-bar, with an iron bar and foot-plate, having a head smaller than the web of the finished rail to be formed therefrom, but so grooved laterally, and enlarged at its upper edge, as to constitute a dove-tailed tongue.

I effect the combination of the two by placing the steel cap-bar upon the dovetailed tongue of the iron rail-bar, and then passing them through suitable rolls, which shall press and close the edges of the steel bar into the grooves and around the head of the tongue of the iron rail-bar, and subsequently welding together in a suitable furnace the steel and iron bars thus longitudinally dovetailed together.

The steel-capped bar thus produced, is taken, after being thus submitted to a proper welding-heat, and finally rolled, in the usual manner, into a rail of the proper form, size, and length, for use on a railroad.

In the accompanying drawings—

Figure 1 illustrates, in section, the form of the steel cap-bar.

Figure 2, the iron bar, having a suitable foot-piece for the rail, carrying a projecting tongue, grooved laterally, and enlarged at its upper part to present in transverse section a dovetailed form.

Figure 3, the steel-capped bar produced by rolling the steel bar, fig. 1, down upon the tongue of the iron bar, fig. 2.

The compound bar illustrated by fig. 3 is exposed to a welding-heat, and the head and body are then thoroughly welded by rolling, when it is finished into a perfect, solid, steel-headed rail by passing it finally through suitable rolls for the purpose.

I do not claim as my invention the welding of a steel cap to the head of an iron railway-rail, for this has become a common practice; but

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

The improved forms or shapes herein described and illustrated of the iron portion of the rail and of the steel cap-piece, said parts producing, when welded together, in the main, as described, a finished rail, of the character substantially as illustrated in fig. 3 of the drawings.

JOHN S. HUNTER.

Witnesses:

R. B. McCome, Jas. D. Bryson.