

(No Model.)

M. SELLERS.

SPLICE BAR FOR RAIL JOINTS.

No. 359,100.

Patented Mar. 8, 1887.

Fig. 1.

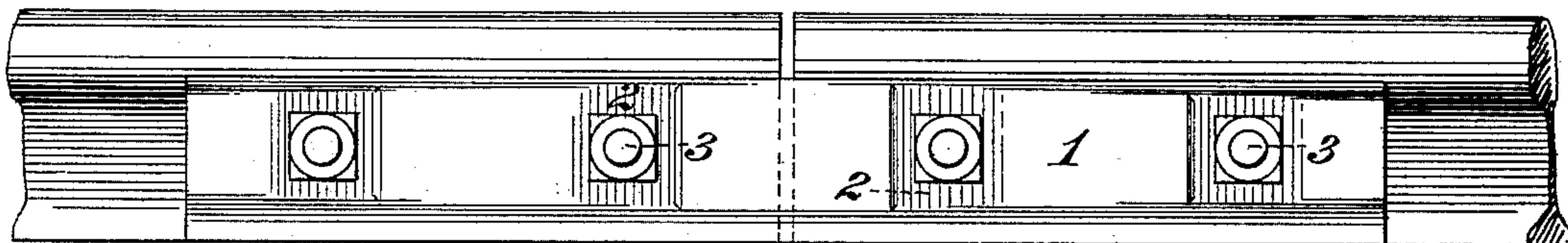


Fig. 2.

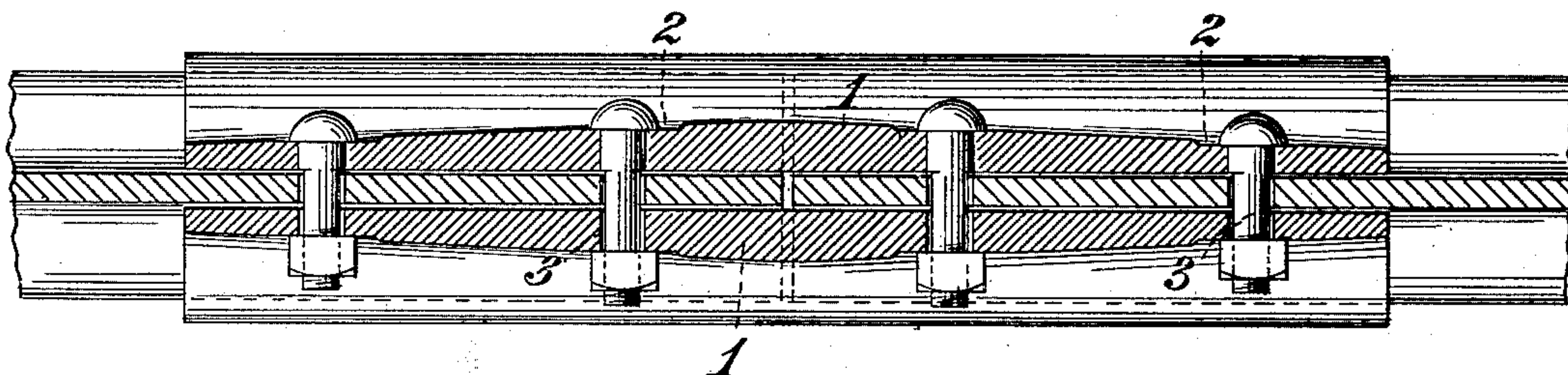
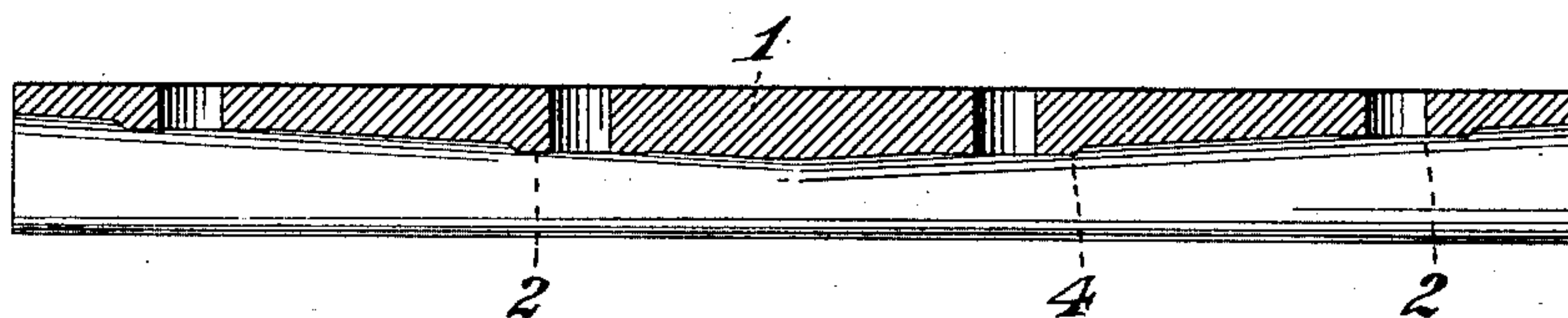


Fig. 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

MORRIS SELLERS, OF CHICAGO, ILLINOIS.

SPLICE-BAR FOR RAIL-JOINTS.

SPECIFICATION forming part of Letters Patent No. 359,100, dated March 8, 1887.

Application filed January 24, 1887. Serial No. 225,365. (No model.)

To all whom it may concern:

Be it known that I, MORRIS SELLERS, residing at Chicago, in the county of Cook and State of Illinois, a citizen of the United States, have invented or discovered certain new and useful Improvements in Splice-Bars for Rail-Joints, of which improvements the following is a specification.

In the accompanying drawings, which make part of this specification, Figure 1 is a view in side elevation of a railway-track joint embodying my invention. Fig. 2 is a horizontal sectional view through the plane of the bolt-holes. Fig. 3 is a view similar to Fig. 2 of a modification.

In Letters Patent No. 339,940, granted to me April 13, 1886, I have described a splice-bar for connecting the adjacent ends of rails in a railway-track, adapted to so support the rail ends as to insure a continuous and practically uniform wave of deflection along the entire line of rails. These splice-bars are made with a comparatively thick middle portion, and taper therefrom in thickness each way to or toward the ends, but preserving a uniform width or height from end to end with suitable shape and proportion, whereby the top and bottom edges of the splice-bar will take a firm bearing on the under side of the rail-head and on top of the flange throughout the entire length of the bar. It has been found in the practical application of these splice-bars that as the inclined face of the bars affords a bearing at one edge only of the bolt head or nut in tightening up the nut on the bolt, in order to secure the bars in place, either the head or nut are tipped over, thereby bending the bolt in such a manner as to render its removal from the rails and bars difficult, and its subsequent use impracticable.

The object of the invention herein is to so construct the bars above referred to as to provide seats for the bolt heads and nuts lying in a plane parallel, or approximately so, the rail-web or the rear face of the bar, while preserving the uniformity of taper in thickness from the middle portion of the bars to the end, said seats being in the nature of offsets or projections in the face of the bars.

In general terms, the invention consists in a

splice-bar uniformly tapering in thickness from its middle portion to the ends, and provided with seats for the bolt heads or nuts parallel to the web of the rail or rear face of the bar.

In the practice of my invention an iron or steel bar of suitable dimensions is passed between rolls, one of said rolls having its operative surface suitably constructed to effect a gradually-decreasing reduction in the thickness of the bar passing between them along a certain predetermined length of the bar, after which the reduction gradually increases along an equal length of bar, then the reduction again decreases, and so on for the entire length of bar.

As will be readily understood, the above-described operation will produce a series of bars, 1, tapering from the middle portions toward the ends, as fully described in Letters Patent No. 339,940, above referred to.

In order to form the seats 2 for the heads or nuts of the bolts 3 a series of projections are formed on the operative surface of the roll operative in effecting the tapering of the bar, as above described, said projections corresponding in number and relative location to the bolt-holes to be formed in the splice-bars. The operative surface of the projection on the roll is so constructed as to reduce the surface of the portions of the bars operated on by said projection to substantial parallelism with the rear face of the splice-bar.

The bars 1, having the seats 2 substantially parallel with the rear face of the bar, may have their entire body portion tapered, as above described, or the upper and lower edges may be formed of a uniform width throughout the length of the bar, or the upper edge may be made of a uniform width and the lower edge provided with an outwardly-projecting flange.

In lieu of forming the seats 2 by depressing a portion of the bar below the general plane thereof and at an angle thereto, the operative surface of the roll may be cut away, forming depressions corresponding in size and general contour and number to the projections above described. In rolling the bars with such a construction of roll a portion of the metal will be forced into the recesses or depressions in

the roll, thereby forming projections 4 on the inclined faces of the bars, the surface of said projections being substantially parallel with the rear face of the bars, as shown in Fig. 3.

5 The roll should be so constructed—*i. e.*, as regards the projections and recesses for forming the seats—that said seats shall extend entirely across the inclined or tapering portions of the bar.

10 The construction of splice bar as herein described not only affords a seat for the bolt heads or nuts at right angles, or approximately so, to the axis of the bolts, but also facilitates the punching or drilling of the bolt-

15 holes, as will be readily understood.

Although I have described with some degree of particularity the construction of roll employed in the manufacture of my improved splice-bar, no claim is made herein to such

20 roll, the same being reserved, in so far as it is patentable, as the subject-matter of an application to be filed in due time.

I claim herein as my invention—

1. A wrought-metal railway splice-bar rolled comparatively thick at its middle portion, tapering therefrom each way to its ends, and provided with seats for bolt heads or nuts substantially parallel with the rear face of the bar, substantially as set forth. 25

2. A wrought-metal railway splice-bar rolled comparatively thick at its middle portion, tapering therefrom each way to its ends, of suitable width, and with suitably-shaped edges for taking a continuous bearing or seat on the under side of the head and the top of the flange, and provided with seats for bolt heads or nuts substantially parallel with the rear face of the bar, substantially as set forth. 30 35

In testimony whereof I have hereunto set my hand.

MORRIS SELLERS.

Witnesses:

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