

C. M. OLSON & F. O. HELLSTROM.
RAILROAD RAIL.
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1,057,578.

Patented Apr. 1, 1913.

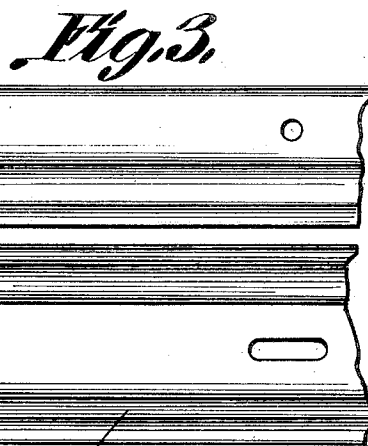
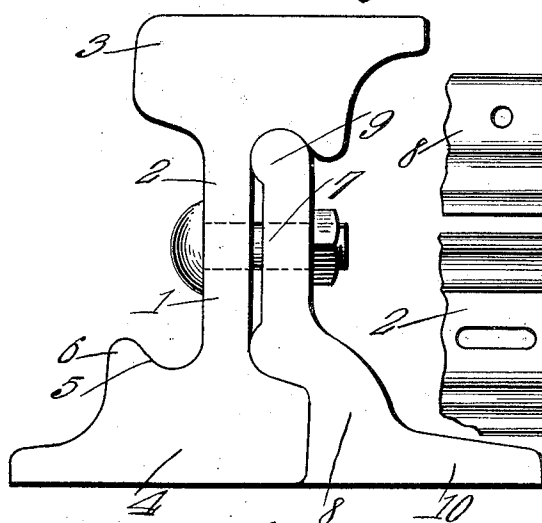
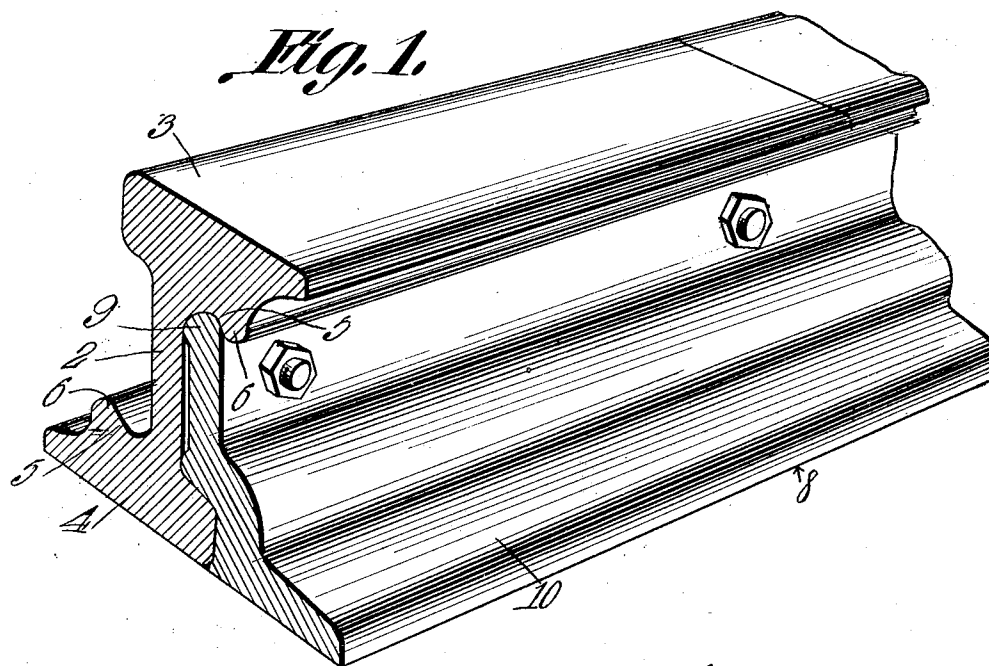


Fig. 4.

Witnesses

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UNITED STATES PATENT OFFICE.

CARL M. OLSON AND FRANK O. HELLSTROM, OF GROVE, NORTH DAKOTA, ASSIGNORS
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RAILROAD-RAIL.

1,057,578.

Specification of Letters Patent.

Patented Apr. 1, 1913.

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To all whom it may concern:

Be it known that we, CARL M. OLSON and FRANK O. HELLSTROM, citizens of the United States, residing at Grove, in the county of Burleigh, State of North Dakota, have invented a new and useful Railroad-Rail, of which the following is a specification.

This invention relates to the improvement of railroad rails.

10 The invention has for its object to provide for the longevity of the use of rails, the same being reversible, and also provides a factor of safety in that the rail is constructed of two separate component parts of metal
15 permitting the combination and use of metal of different degrees of temper and hardness, the same being joined together by means of bolts or rivets, being so constructed as to form a continuous rail and with that general
20 end in view.

A further object is to so construct or devise the individual parts of the rail structure as to obtain certain advantages which shall be conducive to the aforesaid general
25 end.

A still further object is to carry out these ends in a simple, effective and expeditious manner.

30 The invention consists of certain instrumentalities and features substantially as hereinafter fully disclosed and defined by the appended claim.

35 In the accompanying drawing is illustrated the preferred embodiment of the invention.

It will be understood that various changes and modifications can be made as to the detailed construction and arrangement of the parts, within the scope of what is claimed
40 without departing from the spirit of the invention.

Figure 1 is a sectional perspective view of the invention. Fig. 2 is an end elevation of the same. Figs. 3 and 4 are separate views
45 in elevation of the primary members of the rail structure.

In carrying out the invention, there is formed a rail-member proper 1 of approximately Z-formation, the web-forming member 2 thereof, however, being perpendicular
50 to the duplicate tread forming members 3 and 4, which latter are adapted to be reversed or inverted for use either as the tread, or as the base when wear and tear make

this reversal necessary. Thus, the life of the 55 rail is lengthened.

The duplicate treads 3 and 4 are formed each with a flat surface adapted to constitute a base as well as the tread. The tread-
60 portions 3 and 4 extend in the opposite directions beyond the web 2 to afford additional stability and also to provide for the ready engagement therewith of the securing spikes. The duplicate tread members 3 and 4 also
65 have their inner edge-portions formed in ogee configuration, as seen at 5, the purpose of which will presently appear. The ogee curve 5 defines a rib 6, whereby the tread is thickened and reinforced and, further, the
70 web-portion 7 of the cooperating angle members 8 may be shortened, by reason of which construction certain other advantages follow, as will later be described.

An angle member 8, which is employed for aiding in retaining the rail-member 1, is
75 formed with a knee 9 which rests upon a lateral flange 9^a of the tread member 4, or upon a corresponding part 9^b of the tread member 3, when the rail 1 is inverted. The upper edge of the angle member 8 engages
80 with the upper tread-member in the resultant seat of the ogee-curve 5, whereby the vertical arm 7 of the angle-member 8 is thus centralized with respect to the rail-
85 tread, to aid in reinforcing that member, where the greatest stress occurs. The angle member 8 has, it will be noted, a laterally extended lower flange 10 constituting a supporting base, whereby said angle member
90 may be utilized to compensate for less or reduced thickness of web of the steel rail, as well as to allow of lowering or rendering lighter such steel-rail member, as is thought
apparent.

The angle member 8 is connected to the 95 web 2 of the rail-member 1 by bolts 11 passing through openings 12 in the member 8 and through elongated openings 14 in the web 2.

What is claimed is:—

100 A railway-rail of approximately Z-shaped outline, having duplicate tread-members said tread-members having their inner-edge portions of ogee-like formation, an angle
105 member having its upper end received within a resultant seat of the ogee-like formation, said angle-member having a knee adapted to fit upon the base of said rail-

member, and means for securing said angle-member to said rail, in such a manner as to fit and interlock with the inner flange of said reversible approximately Z-shaped rail, and said angle-member and Z-shaped rail being united together and supported continuously.

In testimony that we claim the foregoing

as our own, we have hereto affixed our signatures in the presence of two witnesses.

CARL M. OLSON.

FRANK O. HELLSTROM.

Witnesses:

A. O. SHAMANSKY,

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
