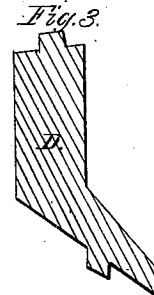
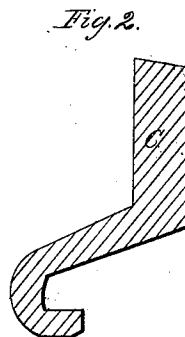
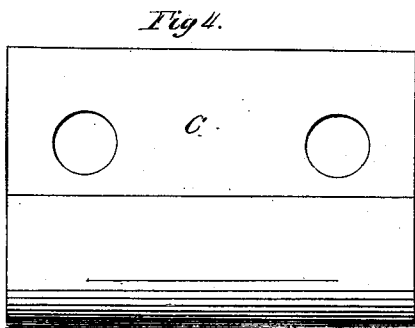
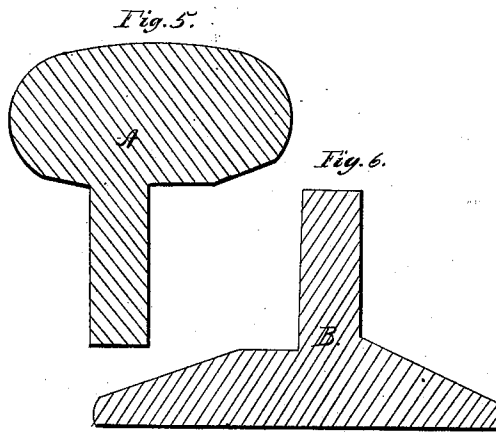
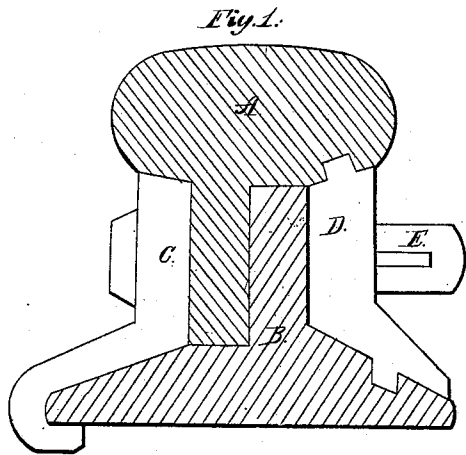


W. Watson,
Railroad Rail,
N^o 33,503, Patented Oct. 15, 1861.



Attest:
J. B. Deakin
W. S. Deakin

Inventor:
William Watson

UNITED STATES PATENT OFFICE.

WILLIAM WATSON, OF TONICA, ILLINOIS.

IMPROVEMENT IN RAILROAD-RAILS.

Specification forming part of Letters Patent No. 33,503, dated October 15, 1861.

To all whom it may concern:

Be it known that I, WILLIAM WATSON, of Tonica, in the county of La Salle and State of Illinois, have invented a new and useful Improvement in Railroad-Rails; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is an end view of the rail as laid down on the track, formed of two parts and bolted together, making an endless rail.

The same letters indicate the same parts in all the figures.

A is the upper part of the rail; B, the lower part.

C and D are braces, C on the inside of the rail and D on the outside.

E is a bolt with a slot and key to clamp the rail and braces together.

The upper and lower parts of the rail are of equal lengths and the joints are broken in the center of each, forming a more perfect endless rail than has heretofore been in use, and to allow the upper part of the rail when worn out to be removed and a new section put in its place without removing the lower half of the rail, and it is believed that by using this device there will be a saving of seventy-five per cent. in the repairs of rails and fifty per cent. in the cost of replacing the old ones,

as the lower half will probably last for generations. It is also believed that this form of rail will prevent the water from getting into the joint and bursting the rail apart by freezing, a difficulty that cannot be overcome in some of the endless rails. It is also believed that it will be more durable than the solid rail, because the tread on the wheels and the bearing on the ties are equally solid and the joint is as stationary as any part of the rail.

Fig. 2 is the brace on the inside of the rail, made with a hook to pass over the edge of the rail. Fig. 3 is the outside brace with teats or dowel-pins on the upper and lower sides and corresponding holes in the upper and lower parts of the rail to receive the same. The object of the braces is to support the upper part of the rail and prevent it from breaking over while the load is passing. Fig. 4 is a side view of the brace C and needs no explaining. Figs. 5 and 6 are sections of the rail shown apart.

What I claim as my invention is—

The improved mode of construction of the railroad-rail in its several parts, as herein described, in combination with its supports and braces bolted and fitted together in the manner and for the purposes herein described.

WILLIAM WATSON.

Witnesses:

ELIAS W. WOOD,
HENRY GUNN.