

No. 731,253.

PATENTED JUNE 16, 1903.

J. G. WENTZEL.
RAILROAD RAIL.

APPLICATION FILED MAR. 3, 1903.

NO MODEL.

Fig. 1.

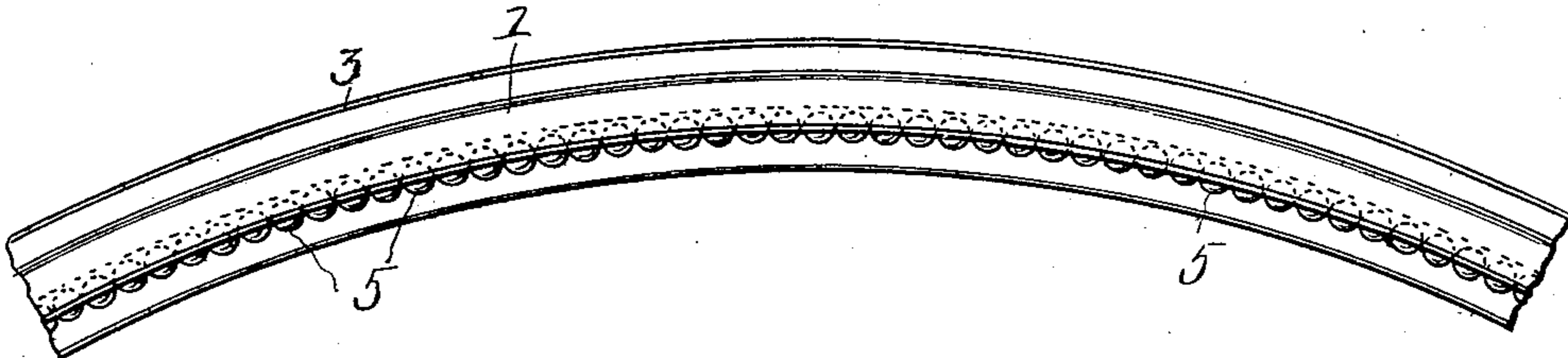
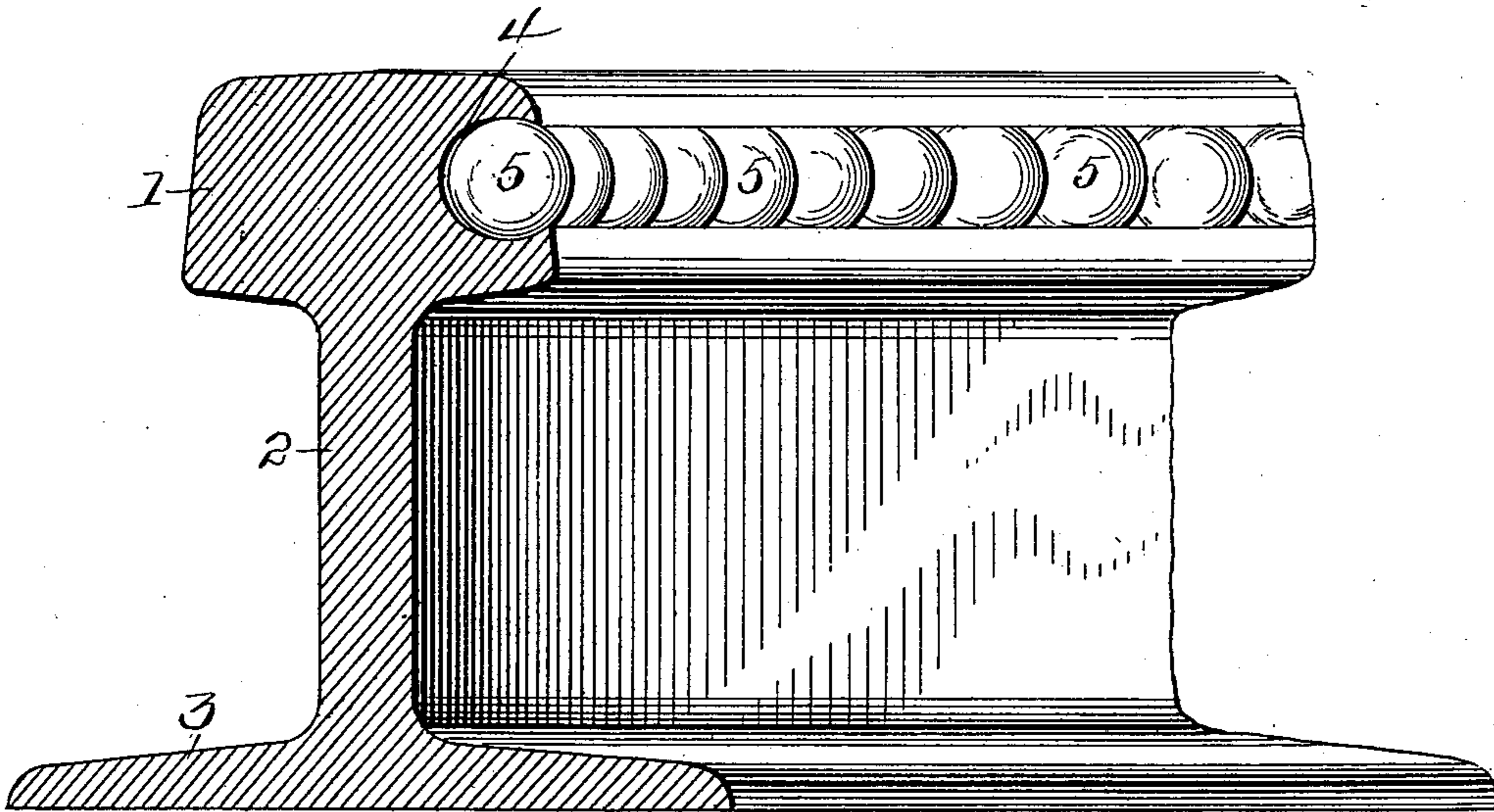


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

JAMES G. WENTZEL, OF WELLSBURG, WEST VIRGINIA.

RAILROAD-RAIL.

SPECIFICATION forming part of Letters Patent No. 731,253, dated June 16, 1903.

Application filed March 3, 1903. Serial No. 145,890. (No model.)

To all whom it may concern:

Be it known that I, JAMES G. WENTZEL, a citizen of the United States of America, residing at Wellsburg, in the county of Brooke and State of West Virginia, have invented certain new and useful Improvements in Railroad - Rails, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in railroad - rails, and relates more particularly to rails that are employed on curves, the primary object of the invention being to reduce the friction of the wheel-flange with the rail when rounding a curve.

In describing the invention in detail reference is had to the accompanying drawings, forming a part of this specification, and wherein like numerals of reference indicate like parts throughout both views, in which—

Figure 1 is a top plan view of a portion of a curve-rail constructed in accordance with my invention. Fig. 2 is a cross-sectional view of the rail in perspective.

In accordance with my invention the tread 1 of the rail, the web 2, and base 3 are of the ordinary construction. In the side of the tread to be engaged by the flange of the wheel I form a groove 4, opening out at the side of the rail, but the said opening at the side being of less width than the largest diameter of the groove. This groove has placed therein a series or plurality of antifriction-bearings 5, contacting with each other and held in position by the overhanging edges of the grooved wall, the antifriction bearings or balls being inserted into the rail from the end thereof.

As the flange of the car-wheel engages with these balls instead of direct with the side of the rail-tread by reason of the balls projecting beyond the side of the tread, the friction of the wheel in rounding a curve of the track may be materially reduced.

In the practice of the invention it will be noted that various slight changes may be made in the details of construction without departing from the general spirit of the invention.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A device of the type set forth comprising a rail having a web and base, a tread carried by the said web having a circular recess formed therein, the sides of the tread of said rail being brought together to partially close said recess, and balls carried in the recess and held therein by the sides of the tread, substantially as described.

2. A device of the character described, comprising in combination with a rail having a base and web, a tread formed integral with said web, a longitudinal circular recess formed in one side of said tread, said recess opening at the ends of the rail, balls of smaller diameter than the recess seated therein, and adapted to extend partially beyond the same to form a contact for wheels, substantially as described.

In testimony whereof I affix my signature in the presence of two witnesses.

JAMES G. WENTZEL.

Witnesses:

A. M. WILSON,

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