

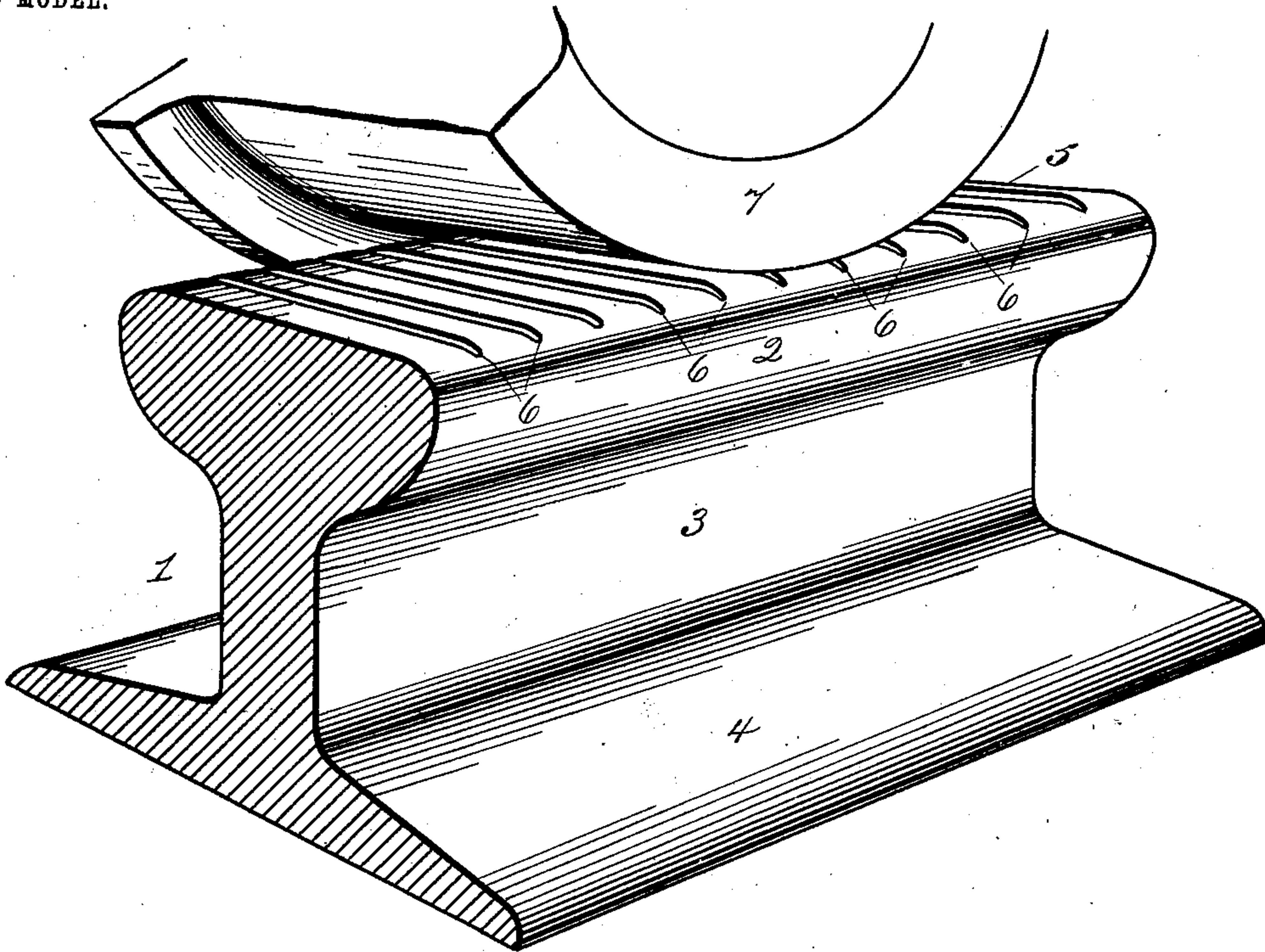
No. 749,183.

PATENTED JAN. 12, 1904.

R. B. GUYNAN.
RAILWAY RAIL.

APPLICATION FILED JULY 20, 1903

NO MODEL.



Witnesses

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UNITED STATES PATENT OFFICE.

RICHARD B. GUYMAN, OF PHILADELPHIA, PENNSYLVANIA.

RAILWAY-RAIL.

SPECIFICATION forming part of Letters Patent No. 749,183, dated January 12, 1904.

Application filed July 20, 1903. Serial No. 166,290. (No model.)

To all whom it may concern:

Be it known that I, RICHARD B. GUYMAN, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Railway-Rails; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawing, and to the figures of reference marked thereon, which forms a part of this specification.

My invention relates to railway-rails, and has for its object to provide a rail which is primarily designed to increase the friction between same and the wheels of the rolling-stock, particularly at points of starting, stopping, or on grades. In this connection I wish to say that I am aware that tracks having a rack-tread have been employed and used in conjunction with toothed wheels on the rolling-stock precisely the same as an ordinary rack and pinion; but I wish to be clearly understood as distinguishing between devices of this construction and the construction I employ, as my track is designed to be used in connection with the usual smooth-tread wheels of rolling-stock, and then only at points of starting, stopping, or on grades where sand is usually employed to produce friction.

My invention therefore consists in providing a rail on its tread with a series of closely-arranged transverse grooves, serrations, corrugations, or indentations.

Referring to the accompanying drawing, the figure is a perspective view of a section of a rail provided on its tread with a series of closely-arranged transverse grooves or corrugations.

Like numerals of reference indicate the same parts throughout the figure, in which—

1 indicates a rail of any size or construction, having the usual head 2, web 3, and foot 4. Along the face or tread 5 of the head I provide a series of transversely-arranged grooves or corrugations 6, which are of such a size and depth as to allow the wheel 7 to pass smoothly and noiselessly over the rail.

Having thus described my invention, its operation is as obvious, the wheels of the engine particularly being enabled to secure a grip upon the track sufficient to enable it to get a quick start without the use of sand and without in any way impairing or injuring either the wheels or the track. Should, however, it ever become expedient to use sand in connection with my rail, the grooves, serrations, corrugations, and indentations will so hold the sand as to cause a greater friction with the wheels by preventing the sand from being brushed off the track by the revolutions of the wheels necessary in starting. In stopping also the construction of my track reduces the liability of slipping and sliding of the wheels after brakes have been applied, thereby enabling a train to be stopped in a much shorter space and in a much shorter time.

Having thus set forth my invention, I do not wish to be understood as limiting myself to any particular form of roughening the tread of the rail, nor do I wish to be understood as laying any claim to a rail so constructed as to require any particular form of wheel—as, for instance, a rack and pinion—or, in fact, any rail which does not present a smooth surface which would enable the rolling-stock to pass over smoothly and noiselessly and without injurious effect upon the wheels of the rolling-stock; but

What I claim as my invention, and desire to secure by Letters Patent of the United States, is—

In a railway-rail to be used for rolling-stock a rail having its face or tread provided with a series of transversely-arranged grooves, corrugations or serrations, so located and of such a size that the face or tread of the rail between the said transversely-arranged grooves, corrugations or serrations is smooth and flat as in an ordinary rail thereby allowing the usual rolling-stock to pass smoothly and noiselessly over the same.

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

RICHARD B. GUYMAN.

Witnesses:

T. M. DALY,
JOHN F. SKELLY.