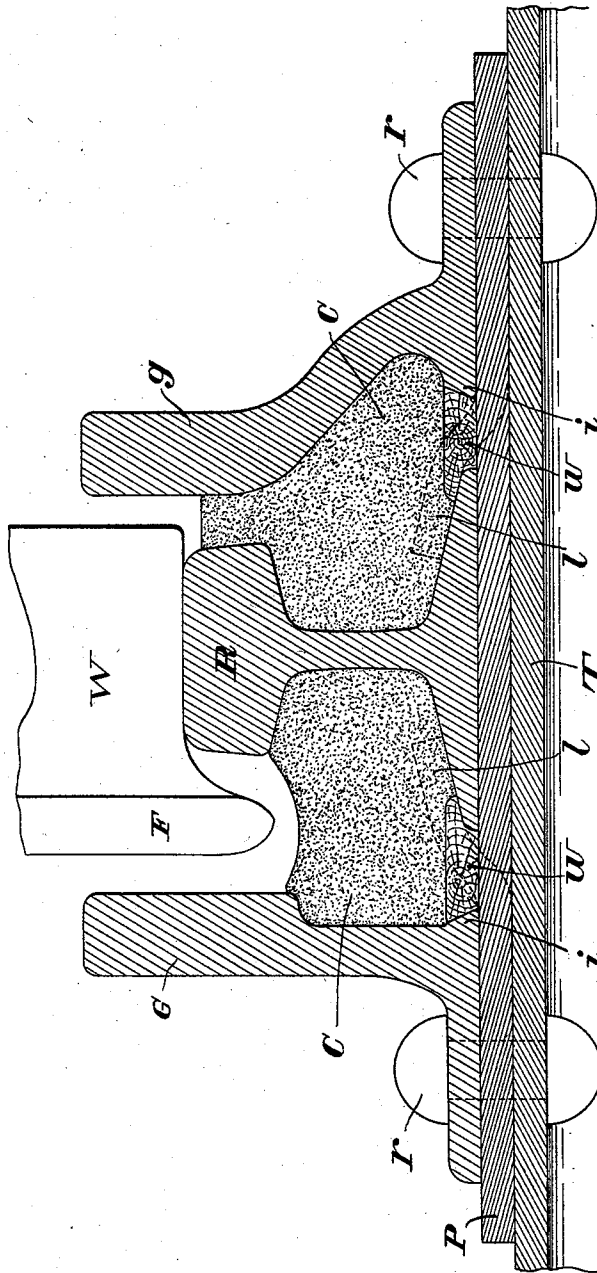


(No Model.)

A. J. MOXHAM.  
RAILWAY TRACK.

No. 531,446.

Patented Dec. 25, 1894.



WITNESSES:  
C. M. Balasinger  
C. F. Knepp Jr.

INVENTOR  
Arthur J. Moxham  
BY  
Ward Raymond  
ATTORNEY.

# UNITED STATES PATENT OFFICE.

ARTHUR J. MOXHAM, OF JOHNSTOWN, PENNSYLVANIA.

## RAILWAY-TRACK.

SPECIFICATION forming part of Letters Patent No. 531,446, dated December 25, 1894.

Application filed June 21, 1894. Serial No. 515,289. (No model.)

*To all whom it may concern:*

Be it known that I, ARTHUR J. MOXHAM, of Johnstown, county of Cambria, State of Pennsylvania, have invented a new and useful Improvement in Railway-Tracks, of which the following specification is a true and exact description, due reference being had to the accompanying drawing.

My invention relates to an improved construction of railway track, and has for its object to provide a track which shall be rigid and stiff and held to true alignment when made continuous with non-expansible connections or joints and in which there is little vibration.

In the drawing which represents a cross section of one line of such a track, W is a car wheel having the flange F.

R is the track rail and G, g, two metallic guard rails, one on the inside and the other on the outside of the wheel.

P is a tie plate upon which the three rails are secured.

I have shown the guard rails riveted by rivets r, while the track rail is held by lugs l. The tie plate is shown secured upon a metallic tie T.

Between the guard rails and on each side of the track rail is a cement, concrete or similar filling C. To prevent this from falling out when first put in, a thin strip of wood w, may be placed between the guard rails and the track rail. This may be supported by inclines i on the guard rails and the flanges of the track rail. The filling is put in after the track is laid and secured in place. The cement or concrete is well rammed in, and when hard, firmly bonds the whole into one structure. Part of the strains are thus distributed to the guard rails. The track rail being embedded it will be restrained from moving out of level or alignment when subjected to strains induced by change of temperature, and moreover in this non-elastic

body the tendency to vibrate will be largely neutralized and the noise will be materially lessened.

The guard rails may be of various shapes, but they should be of a contour that will afford an opportunity for the filling to bond with them, that is, they should have more or less of a recessed face or pocket into which the filling may flow. If desired the inclines i might be omitted and the wood strips be supported by the tie plates, and instead of the metallic tie T, any other suitable support may be employed.

I have described cement as the filling C, but other material may be used, as, for instance, asphalt.

Having thus fully described my invention, what I claim, and desire to protect by Letters Patent, is—

1. In a railway track, a track rail having a pocket or recess on each side, a guard rail on each side of the track rail, said guard rails also having pockets or recesses on the sides next the track rail, and a filling material between the several rails, whereby they are so bonded together that the guard rails are adapted to support the track rail.

2. In a railway track, in combination with a track rail having pockets or recesses in its sides, an inner guard rail and an outer guard rail, said guard rails having pockets or recesses in their sides next the track rail, and filling blocks between the track rail and guard rails and entering the pockets therein, said filling blocks being adapted to transmit a portion of the load upon the track rail to the guard rails.

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

ARTHUR J. MOXHAM.

Witnesses:

D. BRYAN,  
A. B. MOSES.