

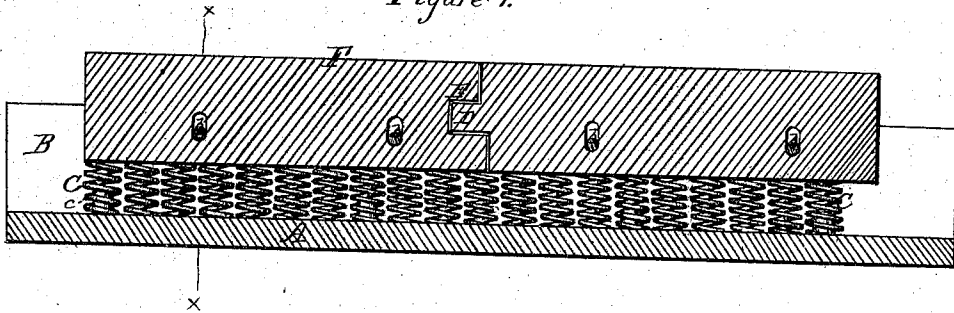
*F. A. Meredith,*

*Railway Rail.*

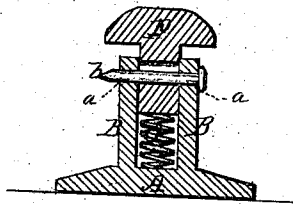
*No. 105,962*

*Patented Aug. 2, 1870.*

*Figure 1.*



*Figure 2.*



WITNESSES.

*J. H. Wopherrnan.*  
*J. W. Hamilton Johnson.*

INVENTOR.

*FENTON A. MEREDITH,*  
*by his Attys. A. L. W. Intire & Co.*

# United States Patent Office.

FENTON A. MEREDITH, OF MOUNT AIRY, MARYLAND.

Letters Patent No. 105,962, dated August 2, 1870.

## IMPROVEMENT IN RAILWAY RAILS.

The Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern:

Be it known that I, FENTON A. MEREDITH, of Mount Airy, in the county of Carroll and State of Maryland, have invented certain new and useful Improvements in Railroad Rails; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawing making a part of this application:

My invention relates to that class of compound rails in which the shank of the tread-piece is embraced between and secured to the two webs of the base-piece; and

It consists in placing springs between the upper and lower portions, and providing interlocking joints of the tread-piece, to prevent the end of one rail being depressed below the one next adjoining.

To enable those skilled to construct and use my improved rail, &c., I will proceed to describe the same, referring by letters to the accompanying drawing, in which—

Figure 1 is a vertical longitudinal section, and

Figure 2, a cross-section at line *x x*, fig. 1, of my improved rail.

Similar letters of reference denote like parts in the different figures.

A represents the continuous bed, formed with two projections, B B, which straddle the stem of the rail F when in position.

These projections are provided with holes *a a* for the passage of the bolts *b*.

Between the projections, and resting upon the base-plate proper, is a series of coiled springs, C, which is retained in place by an occasional raised point or tit, *c*.

The bottom of the stem of the rail rests upon these springs, and the said stem is provided with holes for the passage of the bolts *b* at points which coincide with the bolt-holes in the projections B B.

The bolt-holes in the stem differ, however, from

those in the projections in being oblong, so as to allow a slight vertical movement of the stem.

This stem upon each rail is cut away at one end, forming a tongue, as seen at D, and at the other forming a lip, as seen at E, so that the one exactly fits the other.

The base of the tread of one rail forms a stop to the upward movement of the end of the adjoining rail, and the upper edge of the lip prevents the downward movement of the end of said rail, in consequence of its forming a support for the tongue, so that neither end of the rail can rise above the next adjoining, forming an abrupt projection, likely to throw a car from the track, while at the same time the rails throughout their whole extent are permitted to be depressed by the weight of the rolling stock upon the yielding springs.

No chairs or splices are required in the construction of the road, and any rail may be taken out and replaced by another, and, in the event of a rail being broken and displaced, the car or engine may ride upon the projections B B with less likelihood of being thrown from the track than in the ordinary track.

Having described the construction and advantage of my invention,

What I claim as new, and desire to secure by Letters Patent, is—

A compound elastic rail, consisting of the base-piece A, the rails F, with interlocking ends, and the spiral springs C, the whole constructed and arranged substantially in the manner and for the purposes set forth.

In testimony whereof I have hereunto set my hand and seal this 3d day of June, A. D. 1870.

FENTON A. MEREDITH. [L. s.]

Witnesses:

A. ANDERSON,  
S. R. WATERS.