

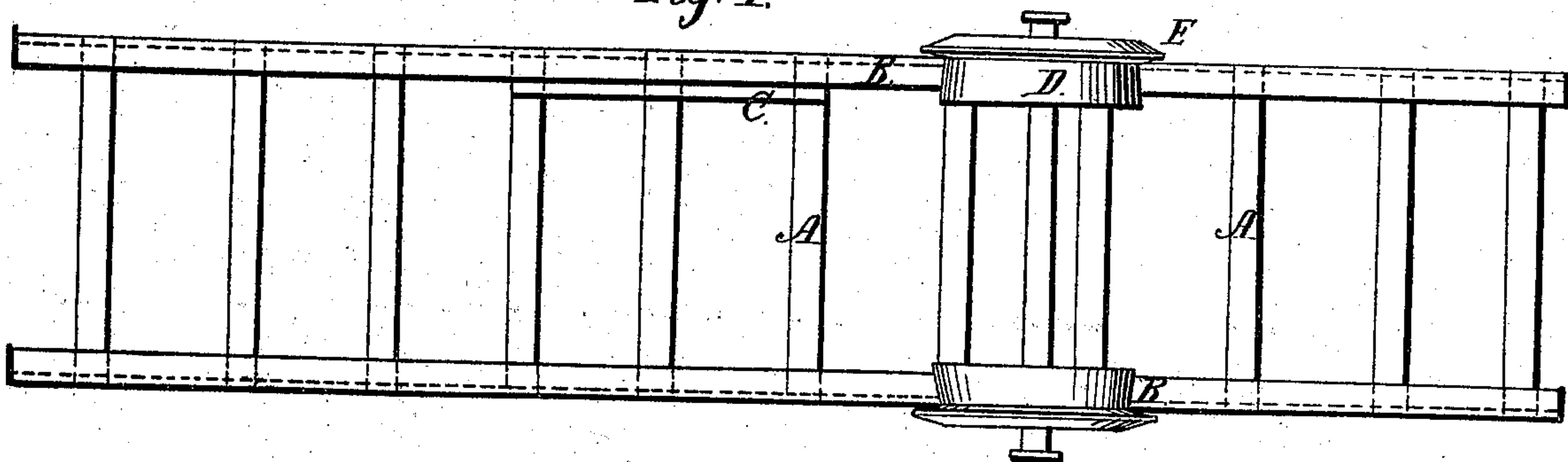
*Sheffield & Coburn*

*Railroad*

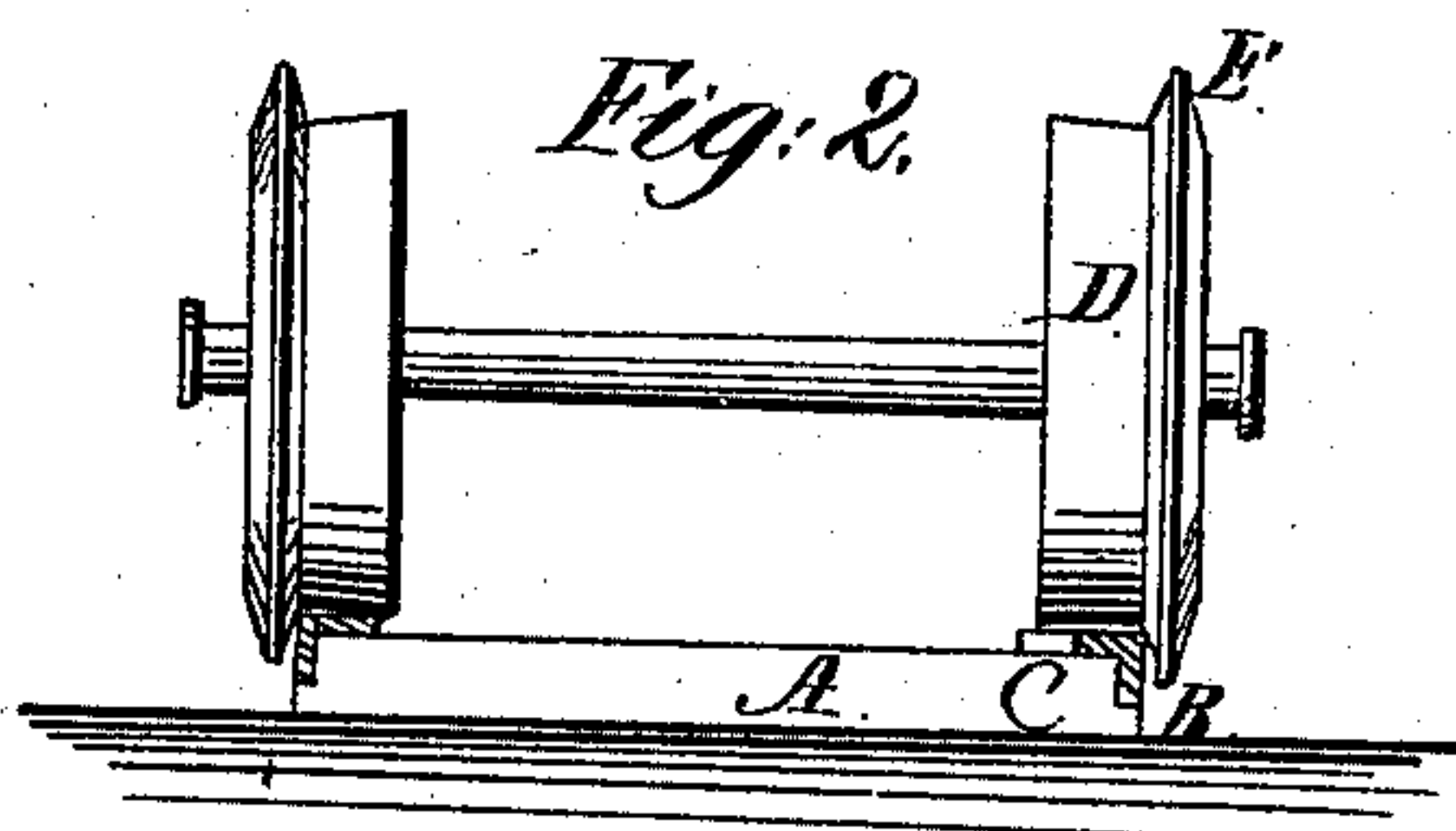
*Nº 95,051.*

*Patented Sep. 21, 1869.*

*Fig. 1.*



*Fig. 2.*



*Witnesses:*

*Finchman*  
*Moat Brooks*

*Inventors*

*J. L. Sheffield*  
*J. P. Coburn*  
*PER* *Wm. H. Camp.*



# UNITED STATES PATENT OFFICE.

GEORGE V. SHEFFIELD AND JAMES F. COBURN, OF HOPKINTON, MASS.

## IMPROVED RAILWAY.

Specification forming part of Letters Patent No. **95,051**, dated September 21, 1869.

*To all whom it may concern:*

Be it known that we, GEORGE V. SHEFFIELD and JAMES F. COBURN, of Hopkinton, in the county of Middlesex and State of Massachusetts, have invented a new and useful Improvement in Railroads; and we do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to new and useful improvements in railroads, having reference both to the rail and track and the flange and tread of the wheel to run thereon; and it consists in the form of the rail and method of forming the road, and in the form of the tread of the wheel and position of the flange thereon, as will be hereinafter more fully described.

In the accompanying plate of drawings, Figure 1 represents a top or plan view of the track with truck-wheels thereon. Fig. 2 is a cross-section showing the form of the rail and the method of forming the track.

Similar letters of reference indicate corresponding parts.

A is the tie. B is the rail. C is the joint or supplementary rail. D represents the car-wheel on the rail.

The rail is in the form of right-angled "angle-iron," which is placed on the ends of the ties, as seen in the drawings. The ends of the ties are rabbeted to receive and support the rail, as seen, and they are fastened in two ways by means of countersunk spike or screws.

It will be seen that when one face of the rail becomes worn the rail may be turned end for end or placed on the other side of the track, which will allow the other face to be used.

In laying the track the ties are cut to a uni-

form length, which length determines the gage of the road, thus preventing any variations in the gage of the road, besides making a material saving in the quantity of timber used for ties.

The sub or joint rail C is designed to take the tread of the wheel and relieve the ends of the rails, and also prevent the constant and disagreeable clatter or noise occasioned by the collision of the wheel with the ends of the rails. In combination with this rail we employ a peculiarly-constructed car-wheel, D. This wheel, it will be seen, has its flange E on the outside instead of the inside. This prevents any possibility of the track spreading, while the liability to run off the track is lessened. The tendency to run off the track is also prevented by the peculiar form of the tread of the wheel, which, it will be seen, is highest on its inside. This formation throws the tread onto the supplementary rails C at all the joints of the rail, thus not only preventing the splitting and brooming up of the ends of the rails, but preventing the unpleasant noise and motion constantly experienced on common railroads.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

1. The angle-rail B, supplementary rail C, and the wheel D, in combination, substantially as and for the purposes described.

2. The combination of the angle-rail B and the tie A, arranged as described, and for the purposes set forth.

GEORGE V. SHEFFIELD.  
JAMES F. COBURN.

Witnesses:

L. H. WAKEFIELD,  
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