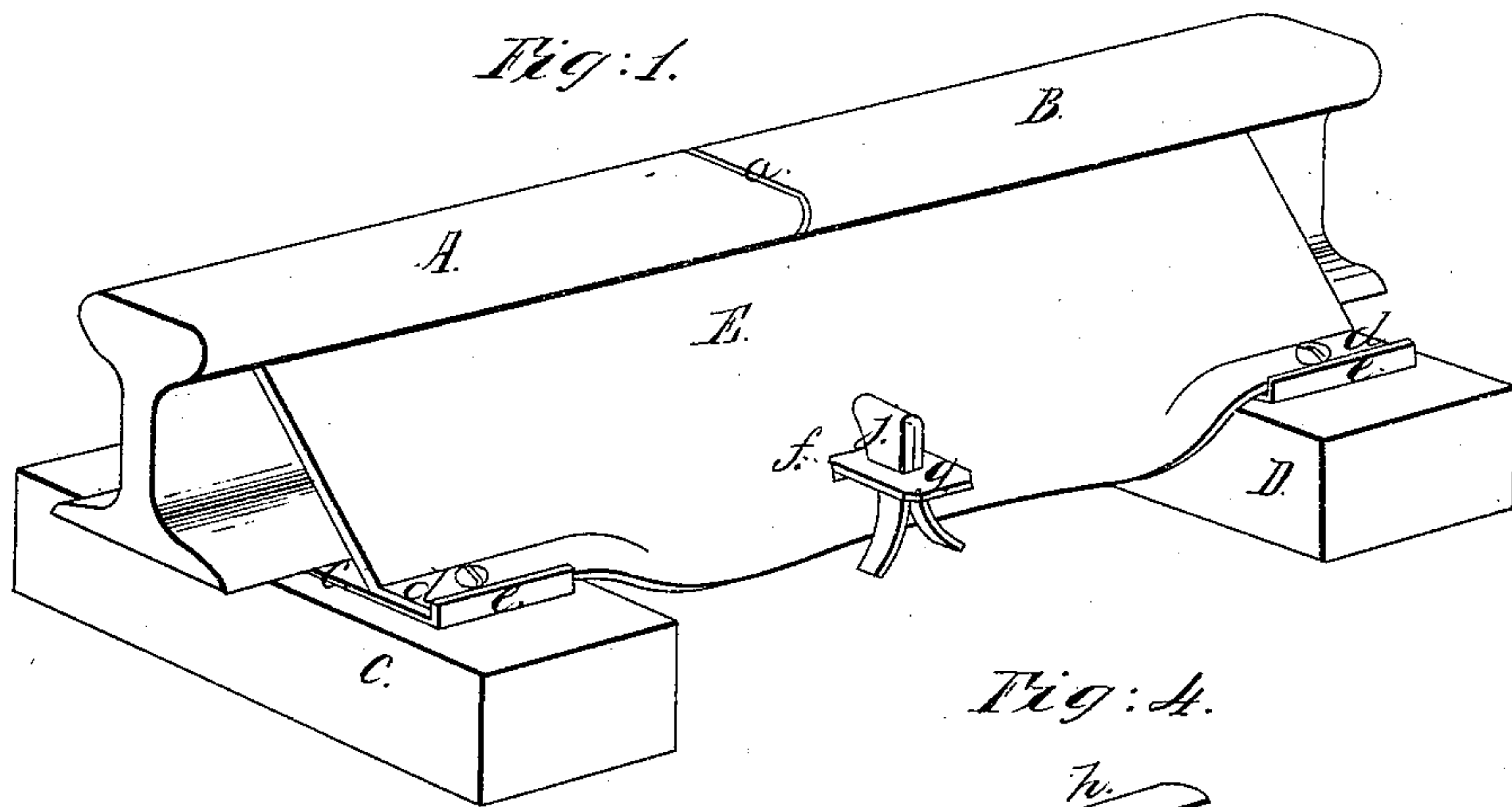


*J. T. Wilson.*

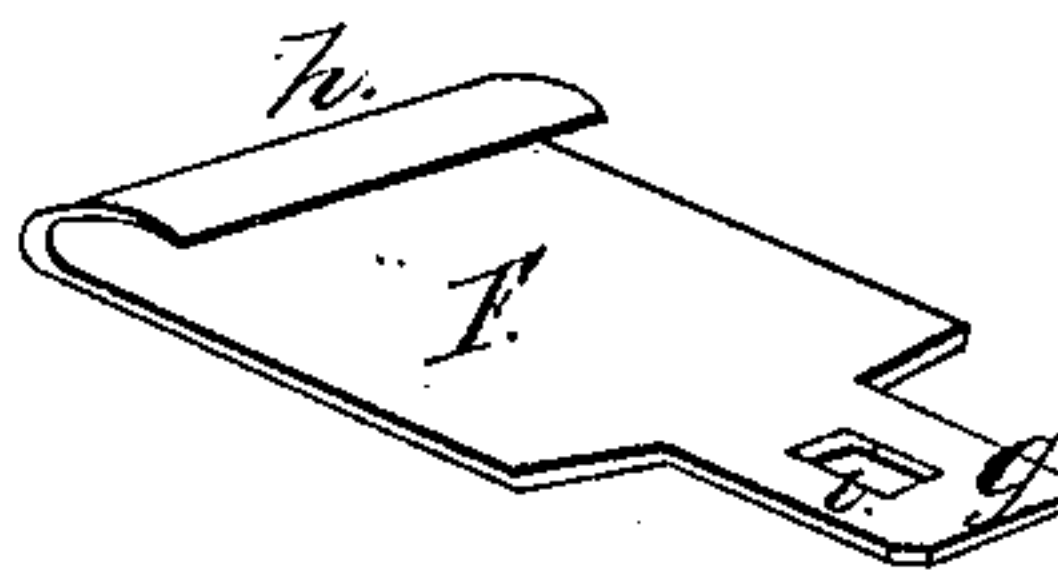
*Railroad Rail Joint.*

*N<sup>o</sup> 84,152.*

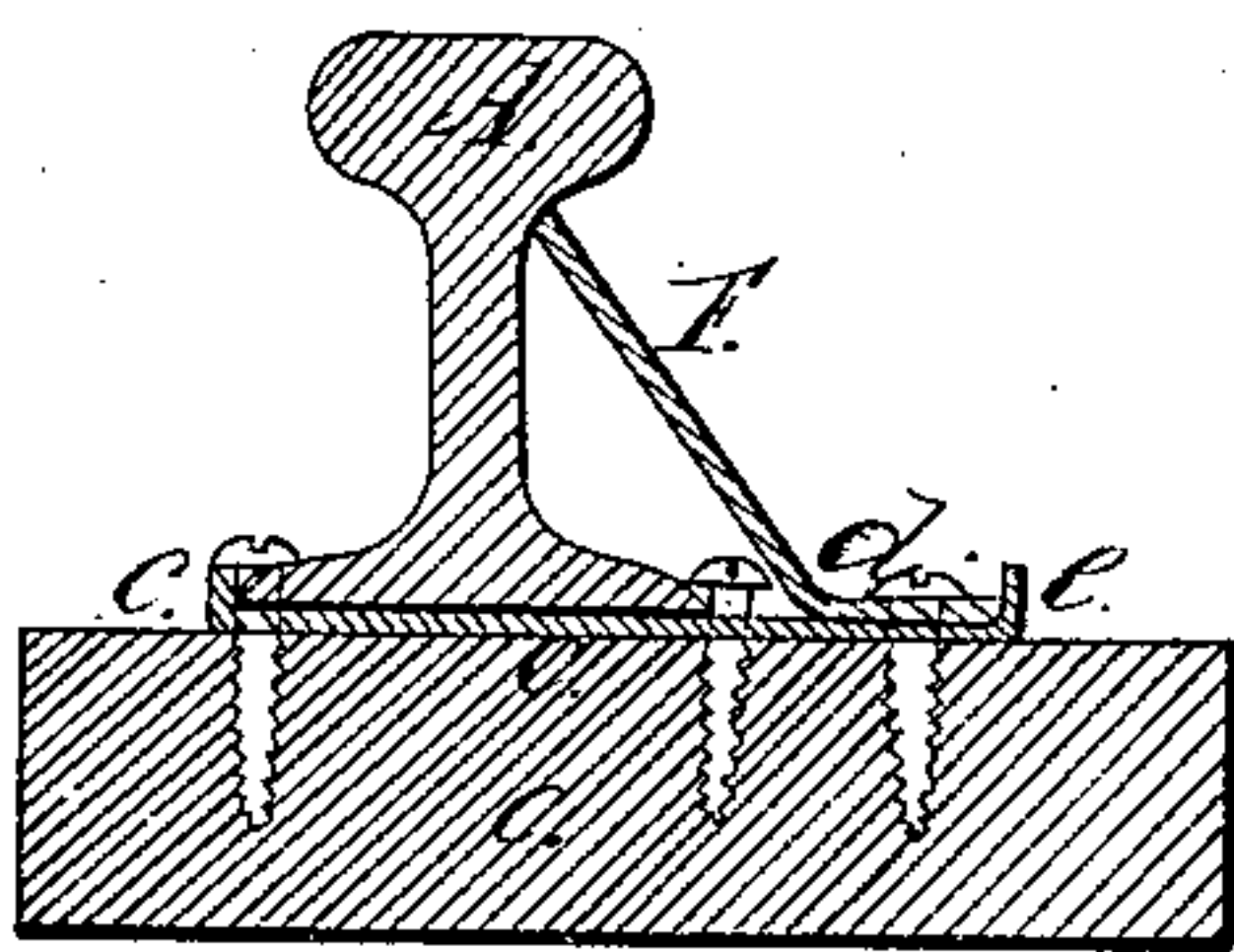
*Patented Nov. 17, 1868.*



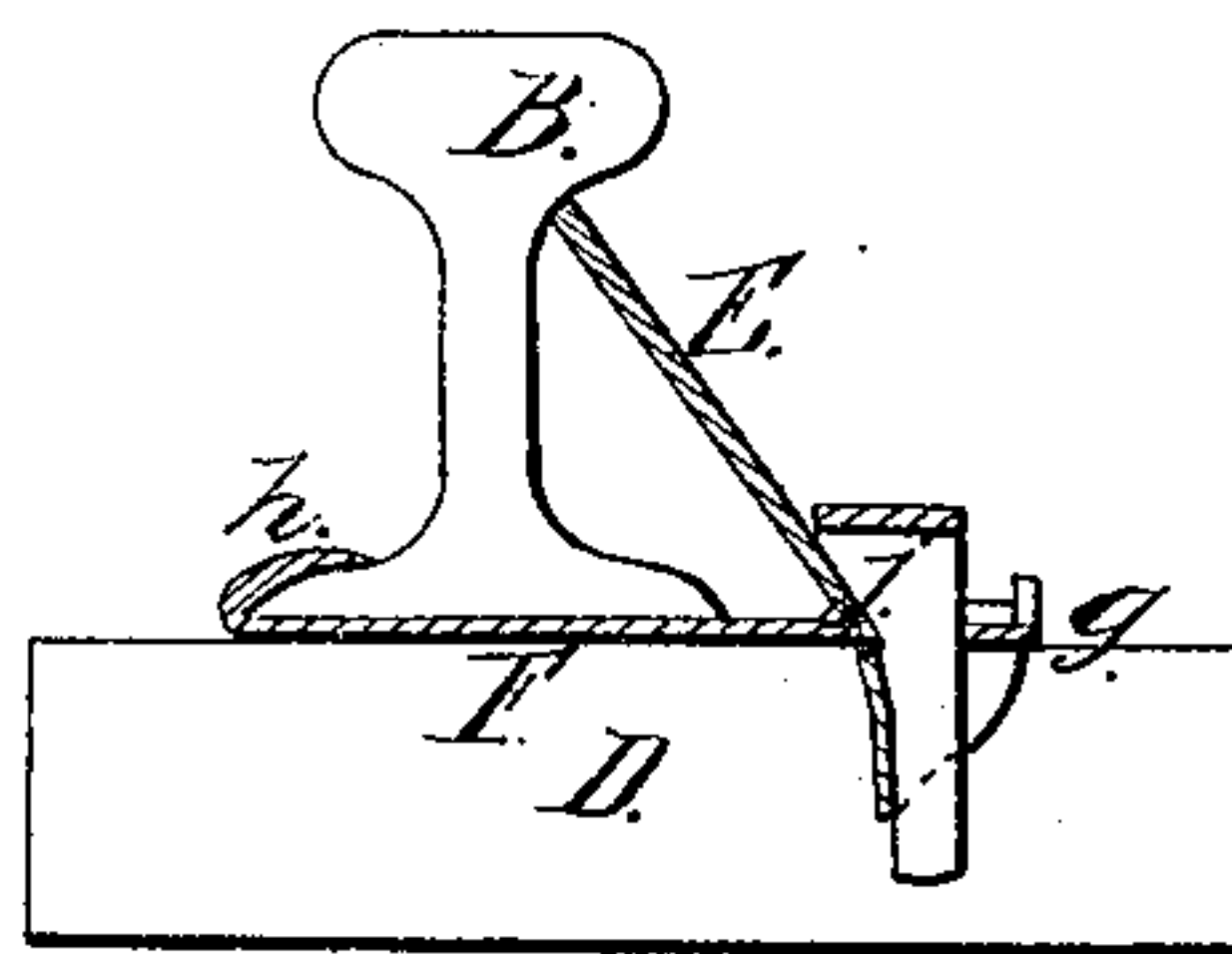
*Fig: 4.*



*Fig: 2.*



*Fig: 3.*



*Witnesses:*

*Jno. D. Patton*  
*Chas. D. Phillips*

*Inventor:*

*Jno. T. Wilson.*

*By*

*A. B. Stoughton*

*Att'y*

# United States Patent Office.

JOHN T. WILSON, OF PITTSBURG, PENNSYLVANIA, ASSIGNOR TO HIMSELF, FRANK RAHM, AND THOMAS J. LOUIS, OF SAME PLACE.

Letters Patent No. 84,152, dated November 17, 1868.

## IMPROVED RAILWAY-RAIL COUPLING.

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, JOHN T. WILSON, of Pittsburg, in the county of Allegheny, and State of Pennsylvania, have invented certain new and useful Improvements in Chairs and Splice-Pieces for Railroads; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 represents, in perspective, the chairs and splice-piece, as applied to the ends of adjacent rails.

Figure 2 represents a transverse section through the rail-splice piece and chair.

Figure 3 represents an end view of the rail, with the splice-piece, key, and chair in section.

Figure 4 represents, in perspective, the joint-plate, with its flange and key-seat, for keeping the ends of the rails in longitudinal line.

Similar letters of reference, where they occur in the separate figures, denote like parts in all the drawings.

My invention consists in the combined use of certain chairs, and a splice-piece or a splice-piece brace, at and near the ends of contiguous rails, for the purpose of holding, strengthening, and keeping in line the ends of said rails.

To enable others skilled in the art to make and use my invention, I will proceed to describe the same with reference to the drawings.

A B represent two adjacent rails, resting upon cross-ties C D, and the joint between the rails being at *a*.

Underneath the rails, and between them and the cross-ties, are placed chairs or flanged plates, *c*, much greater in length than the width of the base of the rail, said rails being spiked down to the cross-ties through the chairs, and the spikes passing through notches in the edge of the base of the rail, in the usual well-known way.

E is a splice-piece or splice-piece brace, extending

from cross-tie to cross-tie, past the joint between the rails; and where it rests in the chairs *c*, it has a flange, *d*, turned upon it, so as to lie firmly on the chairs, and brace against the flanges *e* on said chairs. The splice-piece or brace is spiked also through the chairs to the sills or cross-ties.

The central portion of the splice or brace is left plain, but has an opening through it at *f* for the tongue *g* of the joint-plate F to pass through.

The joint-plate F has a flange, *h*, formed on it, which takes over the base of the ends of both of the adjacent rails, and its tongue *g* has a hole, *i*, through it, to receive a key, bolt, or wedge, *j*, when it is in proper position.

The splice-piece or splice-brace E extends, in an inclined position, from the chairs up to and bears against the under part of the heads of the rails, or where said heads join the waist of the rails.

The chairs, splice-piece, and joint-plate may all be struck up, or shaped in dies or formers, from wrought plate-iron, and thus be cheaply made.

Having thus fully described my invention,

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

Strengthening the joints between contiguous rails by means of the chairs *c* and the inclined wrought-iron splice-piece E, having horizontal flanges *d* struck up upon it, and connected together and supporting the ends of said rails, in the manner and for the purpose described.

Also, in combination with the chairs, splice-piece, and ends, or joint between the rails, the joint-plate F, held to the base of the rails, and to the splice-piece; substantially as and for the purpose described.

JOHN T. WILSON.

Witnesses:

A. B. STOUGHTON,  
EDMUND MASSON.