

(No Model.)

C. L. WHEELER.  
RAIL JOINT.

No. 512,852.

Patented Jan. 16, 1894.

Fig. 1

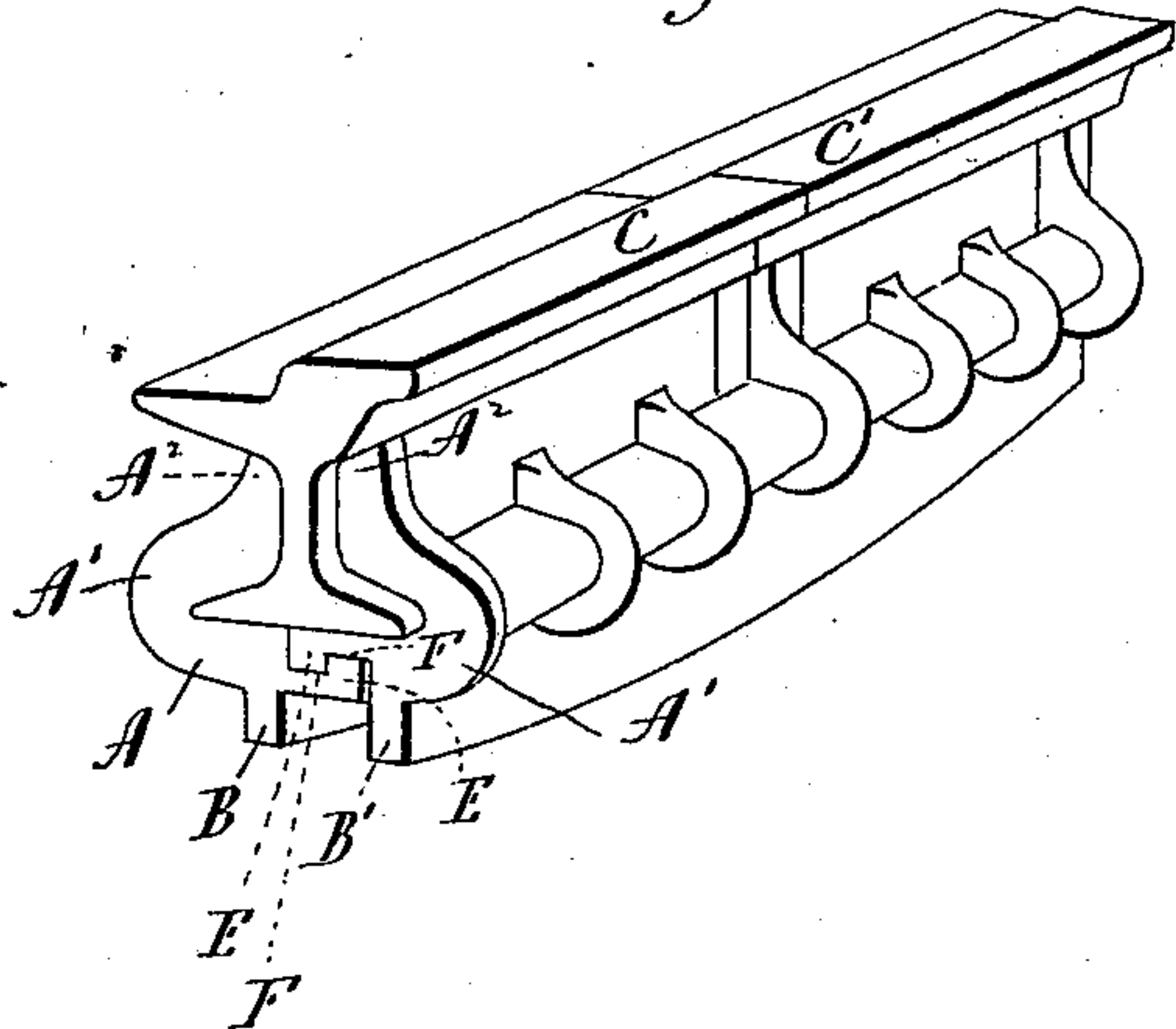


Fig. 2

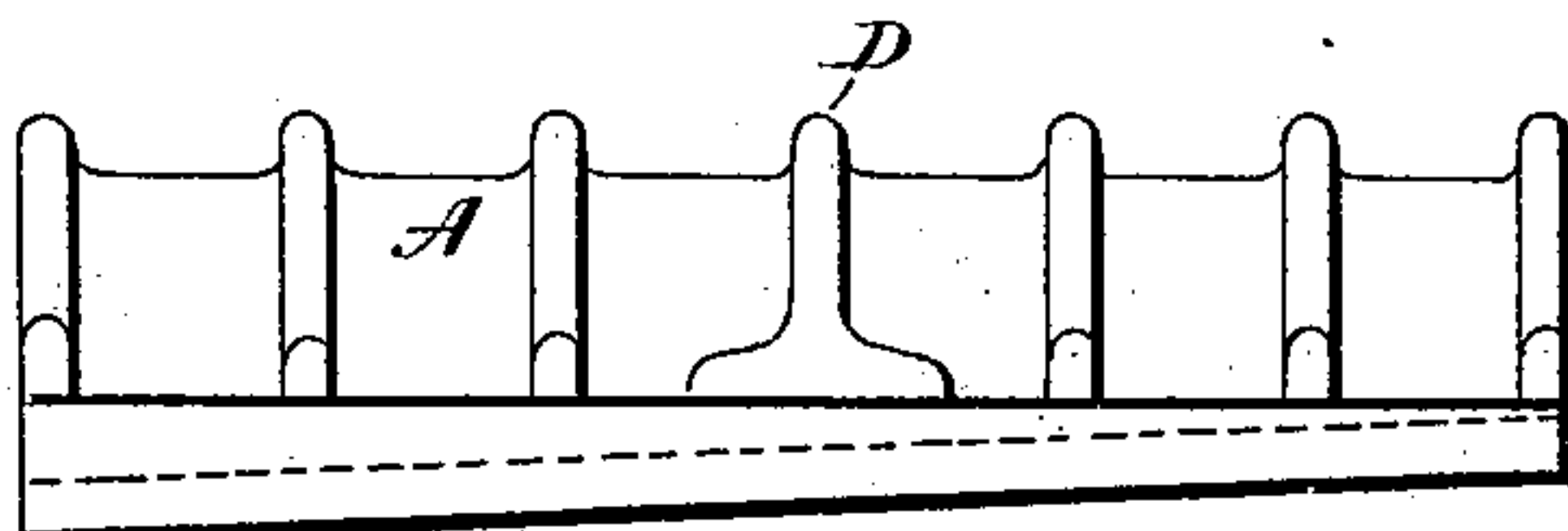


Fig. 3

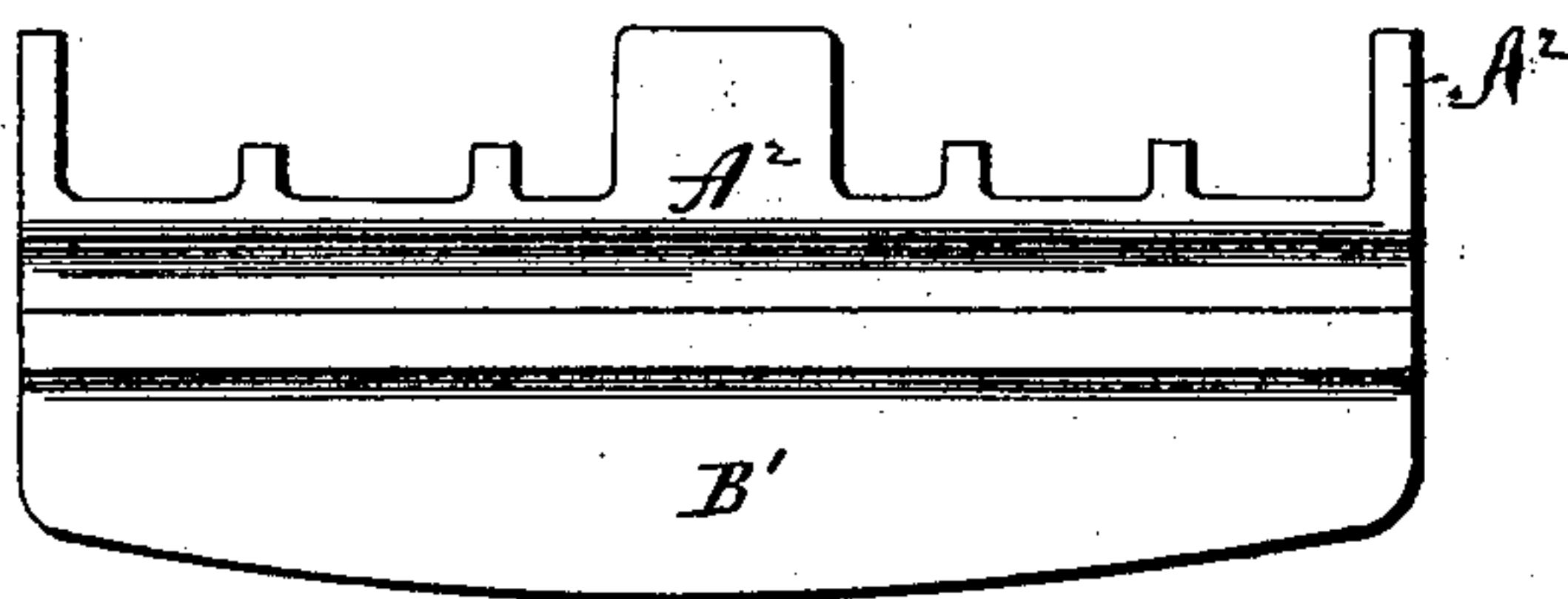
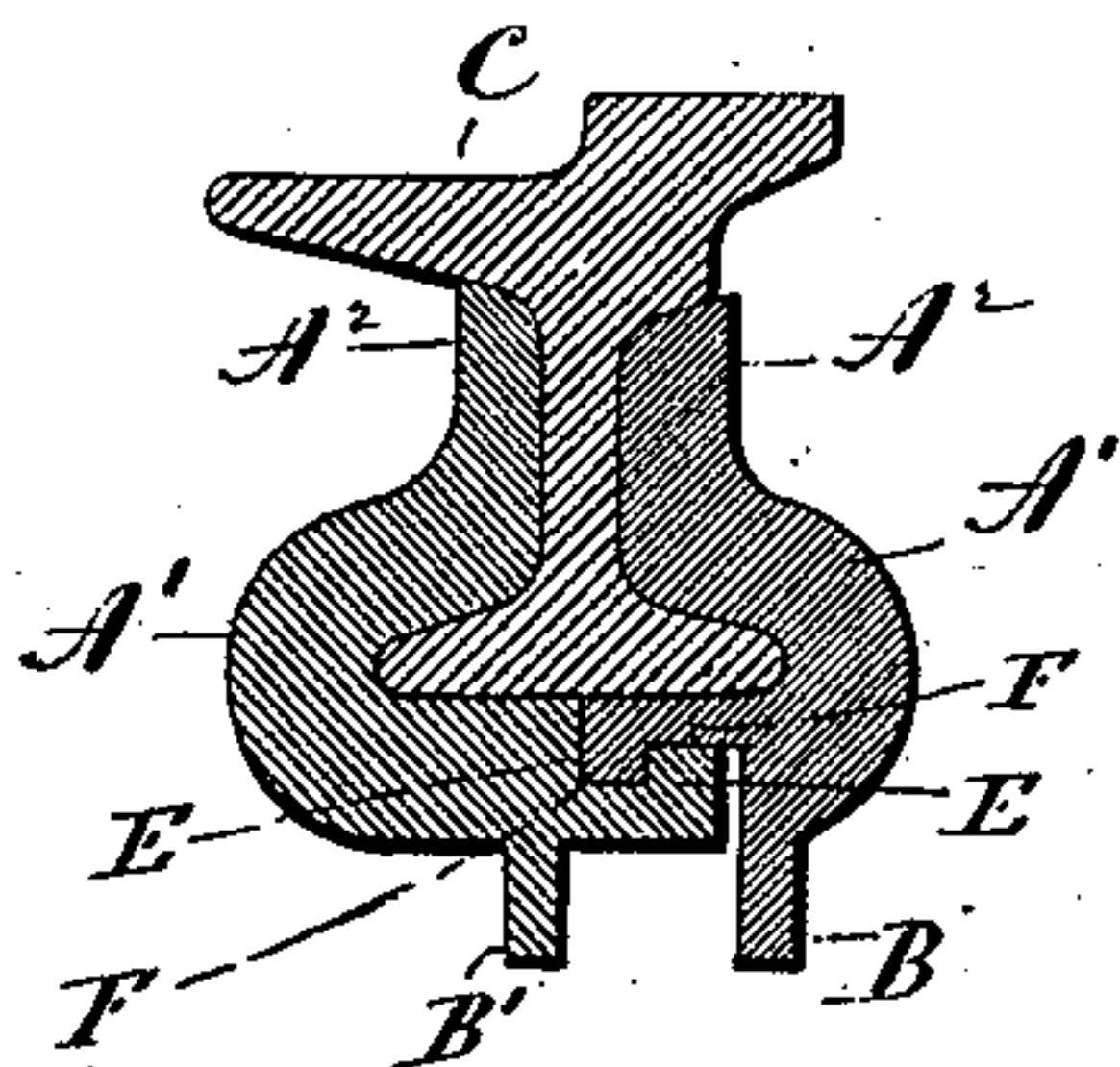


Fig. 4



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# UNITED STATES PATENT OFFICE.

CLARENCE L. WHEELER, OF MARION, INDIANA.

## RAIL-JOINT.

SPECIFICATION forming part of Letters Patent No. 512,852, dated January 16, 1894.

Application filed May 1, 1893. Serial No. 472,485. (No model.)

*To all whom it may concern:*

Be it known that I, CLARENCE L. WHEELER, of Marion, in the county of Grant and State of Indiana, have invented a new Improvement in Rail-Joints, (Case B;) and I do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which  
10 said drawings constitute part of this specification, and represent, in—

Figure 1, a view in perspective of one form which a rail-joint constructed in accordance with my invention may assume; Fig. 2, a plan  
15 view showing the two members of the said joint in position for being coupled together; Fig. 3, a view in inside elevation of one of the said members; Fig. 4, a view of the joint in transverse section, as in use.

20 My invention relates to an improved rail-joint of the suspension type, and designed particularly for street-railways, the object being to produce a stiff and effective device, of simple and compact form, containing but few  
25 parts, comparatively inexpensive, and adapted to hold the rails firmly for an indefinitely long time without the need of attention.

With these ends in view, my invention consists in a suspension rail-joint having certain  
30 details of construction as will be hereinafter described and pointed out in the claims.

In carrying out my invention, I provide each of the respective members A, A' of the joint with a depending longitudinal truss B, B',  
35 extending throughout their length, and parallel with each other. These trusses give great strength to the joint, and enable it to bear any strain which may be imposed upon it. Otherwise than as described, the joints  
40 may be of any approved construction, but by preference I construct the upper edge of each with three inwardly projecting upwardly extending fingers A<sup>2</sup> A<sup>2</sup> A<sup>2</sup>, located at and between their ends respectively, and adapted to  
45 impinge against the respective faces of the webs of the rail-ends C C', whereby the said rail-ends are more firmly held, their webs stiffened, and their bases relieved of some considerable strain. The middle fingers, which  
50 are much wider than the others, engage with

the rails where they "break joints" as the expression is, and prevent them from side-wise displacement. Preferably, also, I reinforce the respective members A A' of the joint by transverse ribs D. The said members of  
55 the joint are adapted to be coupled together, and are drawn toward each other when being so coupled, by their provision with oppositely inclined ribs E, and grooves F, not new with me, and not needing detailed description, and  
60 forming a joint under the bases of the rail-ends.

My improved joint is not only very strong, and adapted to carry great weight, but is also comparatively simple and light in construction, and the nature of the grip that it secures  
65 on the rail-ends is such that it will hold them firmly for a long time without attention.

I would have it understood that I do not limit myself to the exact construction herein  
70 shown and described, but hold myself at liberty to make such changes and alterations therein as fairly fall within the spirit and scope of my invention.

Having fully described my invention, what  
75 I claim as new, and desire to secure by Letters Patent, is—

1. A rail-joint composed of two longitudinal members adapted to be coupled together on the draw principle below the bearing of the  
80 rail-ends, and each having a depending truss extending throughout its length below the said bearing and below the line on which they are coupled together, substantially as described.

2. A rail-joint composed of two longitudinal members adapted to be coupled together on the draw principle at a point below the bearing for the rail-ends, and each having a depending truss extending throughout its length  
90 below said bearing and below the line on which they are coupled together, and each having also inwardly extending upwardly projecting fingers adapted to impinge against the webs of the rail-ends, substantially as de-  
95 scribed.

3. A rail-joint composed of two longitudinal members adapted to be secured together on the draw-principle below the bearing of the  
100 bases of the rail-ends, and each having a de-



pending truss extending throughout its length at a point below the said bearing and the line on which they are united, and each having also transverse reinforcing ribs located above the said trusses, substantially as described.

4. A rail-joint composed of two longitudinal members coupled together on the draw principle at a point below the bearing for the bases of the rail-ends, and each having a longitudinal truss extending throughout its length and located below the said bearing and below the said joint on which the two mem-

bers are united, and each member being adapted also to impinge against the respective faces of the webs of the rail-ends and the upper faces of the bases thereof, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

CLARENCE L. WHEELER.

Witnesses:

ROBINSON H. WHEELER,  
E. STERNE WHEELER.