No. 45,713. PATENTED JAN. 3, 1865.

D. H. HISE.

RAILWAY COUPLING.

Fig. 1

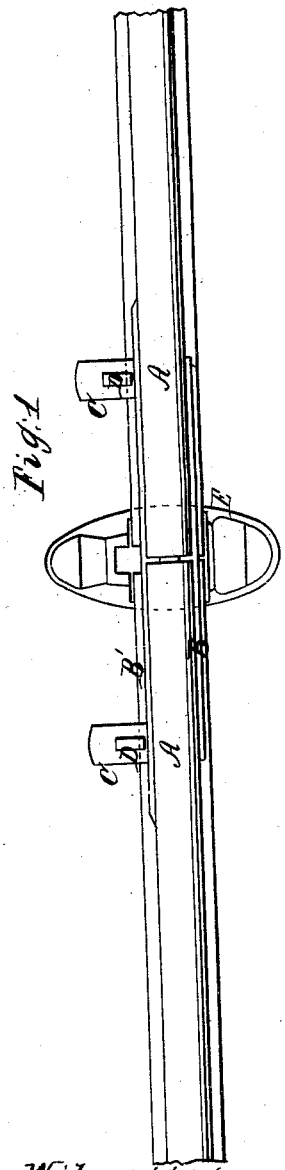


Fig. 2

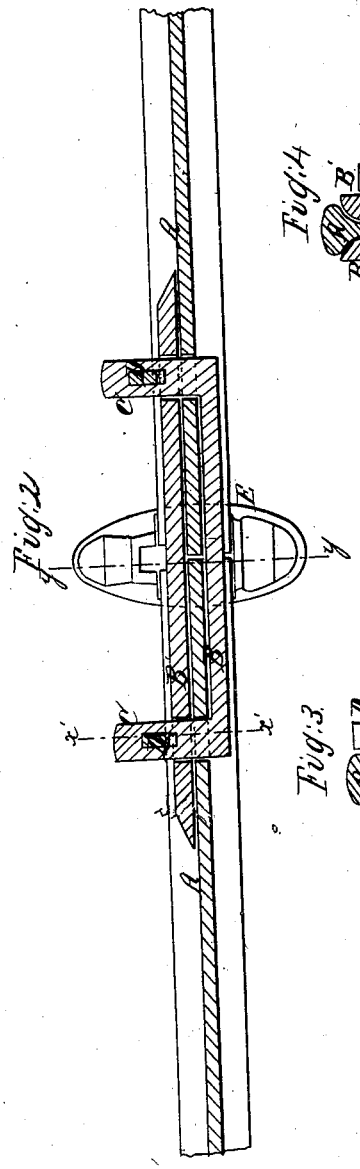
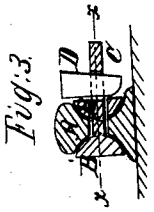


Fig. 4

Fig. 3



Witnesses

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UNITED STATES PATENT OFFICE.

D. H. HISE, OF SALEM, OHIO.

IMPROVEMENT IN RAILWAY-COUPLINGS.

Specification forming part of Letters Patent No. **45,713**, dated January 3, 1865.

To all whom it may concern:

Be it known that I, D. H. HISE, of Salem, in the county of Columbiana and State of Ohio, have invented a new and Improved Mode of Connecting or Coupling the Rails of Railways; and I 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, making a part of this specification, in which—

Figure 1 is a plan or top view of two railway-rails connected together according to my invention; Fig. 2, a horizontal section of the same, taken in the line *x x*, Fig. 3; Fig. 3, a transverse section of the same taken in the line *x' x'*, Fig. 2; Fig. 4, a transverse section of the same taken in the line *y y*, Fig. 2.

Similar letters of reference indicate like parts.

The object of this invention is to obtain a coupling for railway-rails which will hold the ends of the same in line with each other so as to avoid the injury now occasioned by the hammering of the car-wheels against the projecting ends of the rails, a contingency which soon injures the rails and renders their removal for repairs necessary long before any other portion is materially affected by wear.

A A represent two rails of a railway, and B B′ are two metal bars which are placed at opposite sides of the rails at their joints, and so formed transversely as to fit snugly in the concave sides of the rails against what is commonly termed the "neck," as shown in Figs. 3 and 4. These bars B B′ extend or lap over the ends of both rails at about an equal distance, and the bar B has two key-bolts, C C, which project from its ends at right angles and pass horizontally through the rails A A—one through each, as shown in Fig. 2—said bolts also passing through openings in the bar B′ and having holes made in them through which keys D pass vertically, said keys confining the bars B B′ snugly to the sides of the rails and holding the ends of the same in line, so that one cannot project above the other or one be forced down below the level of the other as the car-wheels pass over them.

E is a chair, which may be spiked to the sleeper in the usual or in any proper manner. This chair has its lips projecting up at each side of the rails at the joint, and a key is driven vertically into the chair at one side of the rails. By having the keys D D driven vertically into their respective parts they are not liable to be loosened and forced out of place by jars and concussions, produced by the wheels passing over the rails.

I would remark that if desired the key-bolts C C may be made separately from the bars B B′, provided with heads at one end and fitted in holes made horizontally in the bar B.

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

The two bars B B′, one, B, provided with the key-bolts C C and the other provided with holes through which and holes in the rails the key-bolts or tangs pass, in connection with the keys D D, all arranged substantially as and for the purpose specified.

D. H. HISE.

Witnesses:
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