

(No Model.)

J. A. FOLEY.
RAILROAD RAIL JOINT.

No. 313,661.

Patented Mar. 10, 1885.

Fig: 1

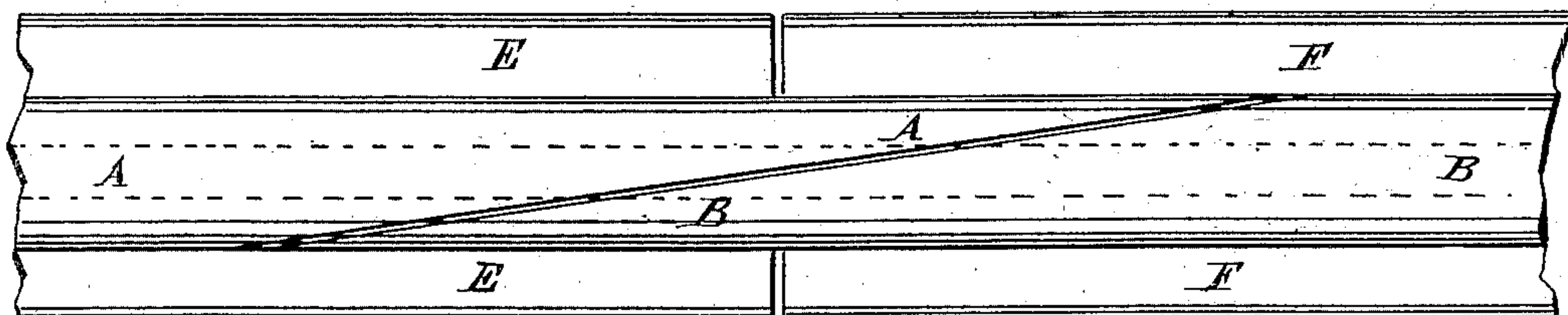


Fig: 2.

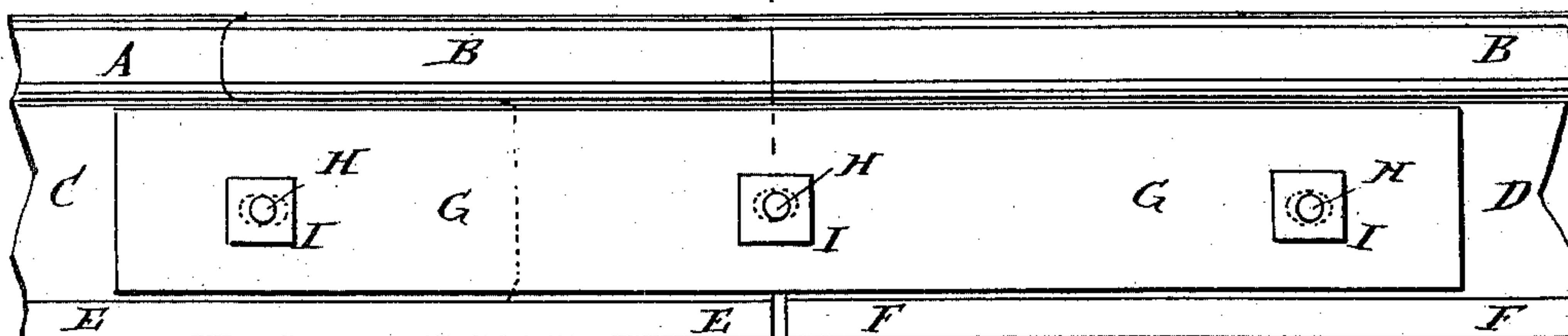


Fig: 3.

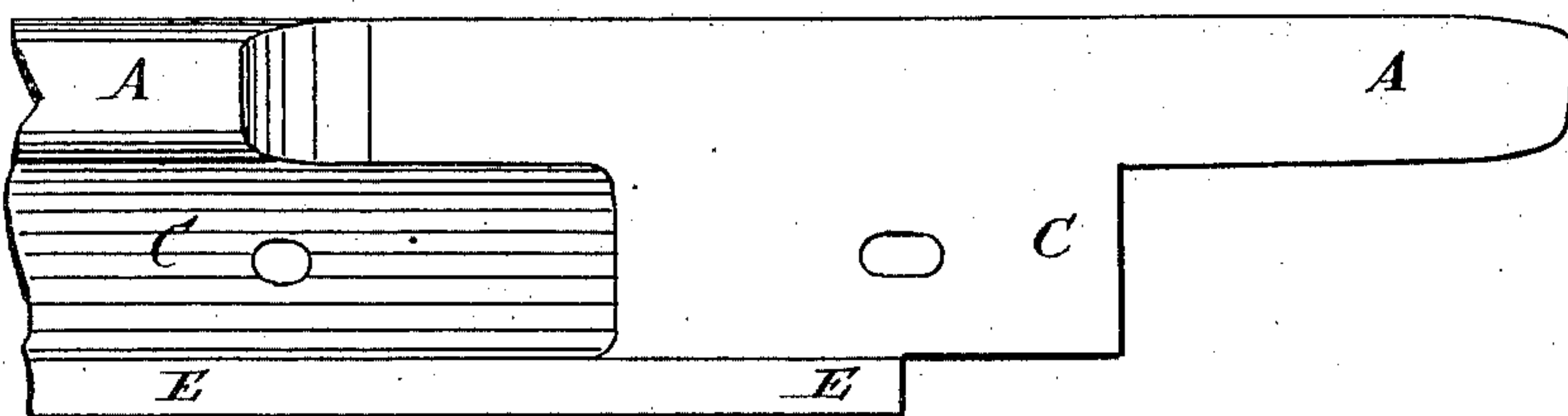
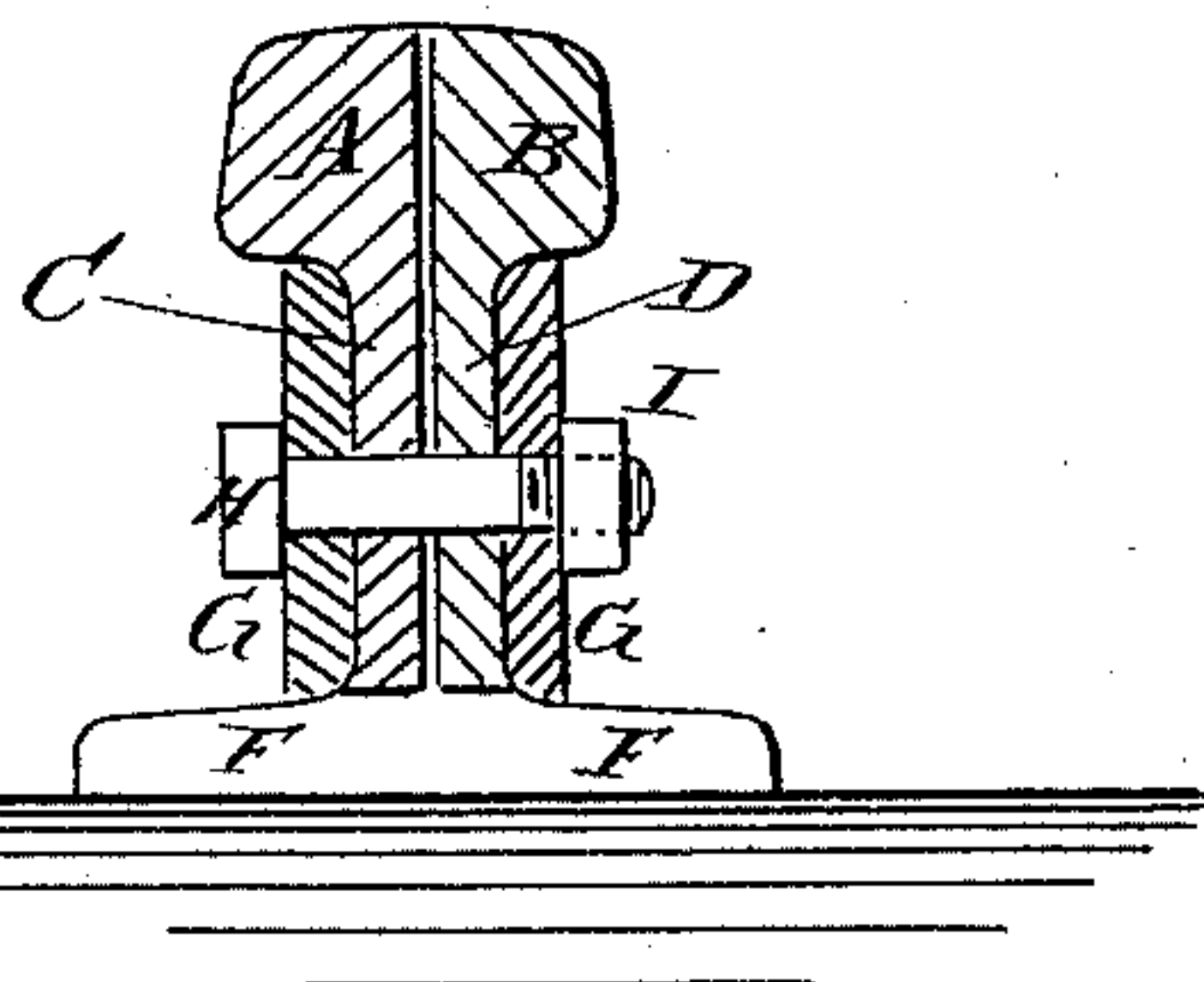


Fig: 4.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JOHN A. FOLEY, OF NEW YORK, N. Y., ASSIGNOR TO HIMSELF AND SAUL DOMROE, OF SAME PLACE.

RAILROAD-RAIL JOINT.

SPECIFICATION forming part of Letters Patent No. 313,661, dated March 10, 1885.

Application filed August 8, 1884. (No model.)

To all whom it may concern:

Be it known that I, JOHN A. FOLEY, of the city, county, and State of New York, have invented a new and useful Improvement in Railroad-Rail Joints, of which the following is a full, clear, and exact description.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a plan view of the adjacent ends of two railroad-rails to which my improvement has been applied. Fig. 2 is a side elevation of the same. Fig. 3 is a side elevation of the end of one of the rails. Fig. 4 is a sectional end elevation of one of the joints, taken through the line *x x*, Fig. 2.

The object of this invention is to provide railroad-rail joints constructed in such a manner that the said joints will form a smooth surface for the car-wheels to travel over, so as to prevent the hammering of the ends of the rail-heads by the car-wheels and the consequent injury to the rails, wear of the cars, and jarring and discomfort of the passengers.

The invention consists in railroad-rail joints formed of the adjacent ends of rails having the ends of their bases square, and the ends of their webs and heads beveled and projecting beyond the said square ends of the bases, and connected by fish-plates and bolts and nuts, as will be hereinafter fully described.

A B represent the heads of two rails forming a joint. C D represent the webs of the rails, and E F their bases. The bases E F of the rails are made with square ends, and the webs C D and heads A B are beveled in such a manner that the beveled ends of the adjacent rails will fit smoothly against each other. The beveled ends of the webs and heads project beyond the square ends of the bases, so that the middle part of the lap will be between the adjacent ends of the bases, as shown in Fig. 1.

G are the fish-plates, which are secured to the overlapped ends of the rails by bolts H

and nuts I, the bolt-holes through the webs of the rails being elongated to provide for the contraction and expansion of the said rails. With this construction the engine and car wheels will always have a smooth surface to travel over, all hammering of the ends of the rails by the engine and car wheels, and the consequent wear of the rails and cars, and jarring and discomfort of the passengers, being prevented.

I am aware that a railway-joint has been made of T-rails whose ends are cut with the head or tread at an acute angle and the base and web at a right angle to the line of the rail; also, that similarly constructed rails have been formed with mortises and tenons on their beveled portions to interlock and make a firm joint; also, that a railway-joint has been formed of two laterally-swaged rail-ends lapping onto each other in or approximately in the vertical central plane of the rails, each thickened in its web, but having a less area of metal than the original rail, and I do not claim any of such constructions as of my invention.

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

1. In a railroad-rail joint, a rail made, substantially as herein shown and described, with the ends of the base square and the ends of the web and head beveled and projecting beyond the ends of the base, as set forth.

2. The combination, with the adjacent ends of rails having the ends of their bases square, and the ends of their webs and heads beveled and projecting beyond the ends of the said bases, of the fish-plates G and the bolts and nuts H I, substantially as herein shown and described, whereby a smooth surface will be provided for the wheels of the engine and cars to travel upon, as set forth.

JOHN A. FOLEY.

Witnesses:

JAMES T. GRAHAM,
C. SEDGWICK.