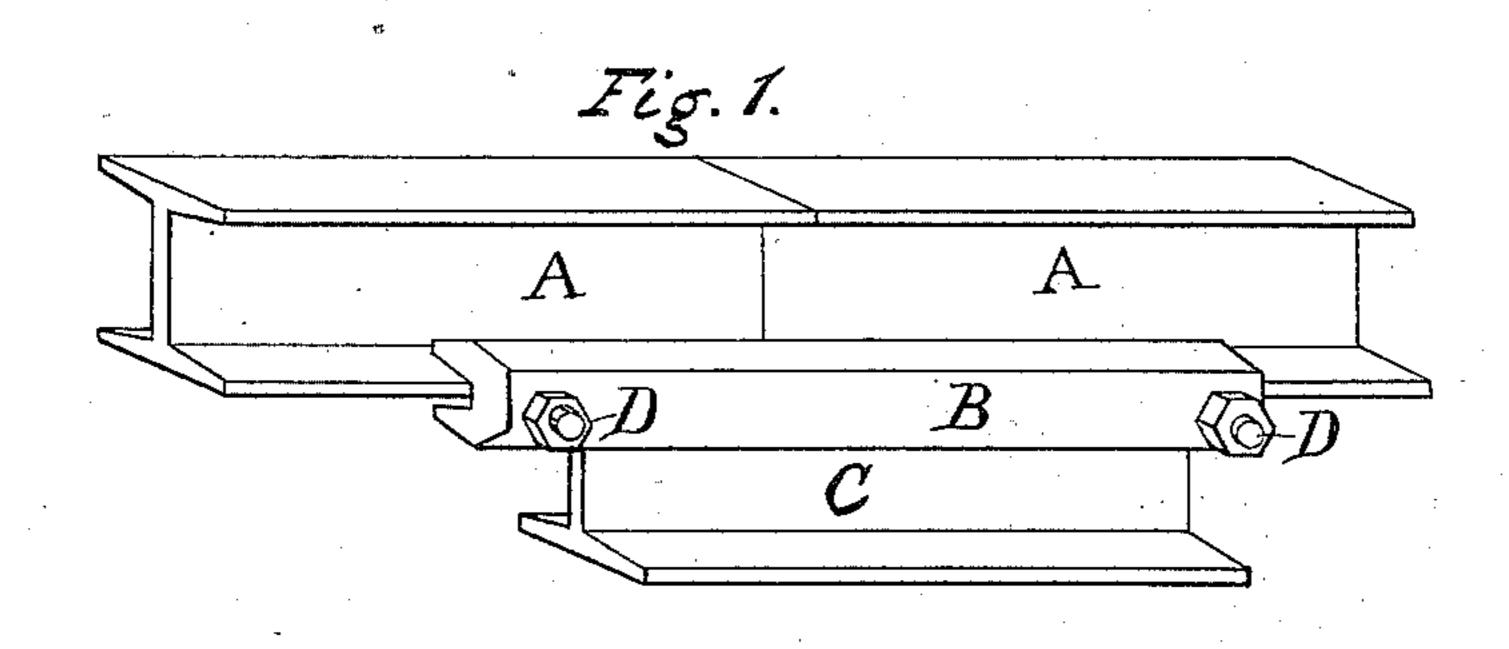
(No Model.)

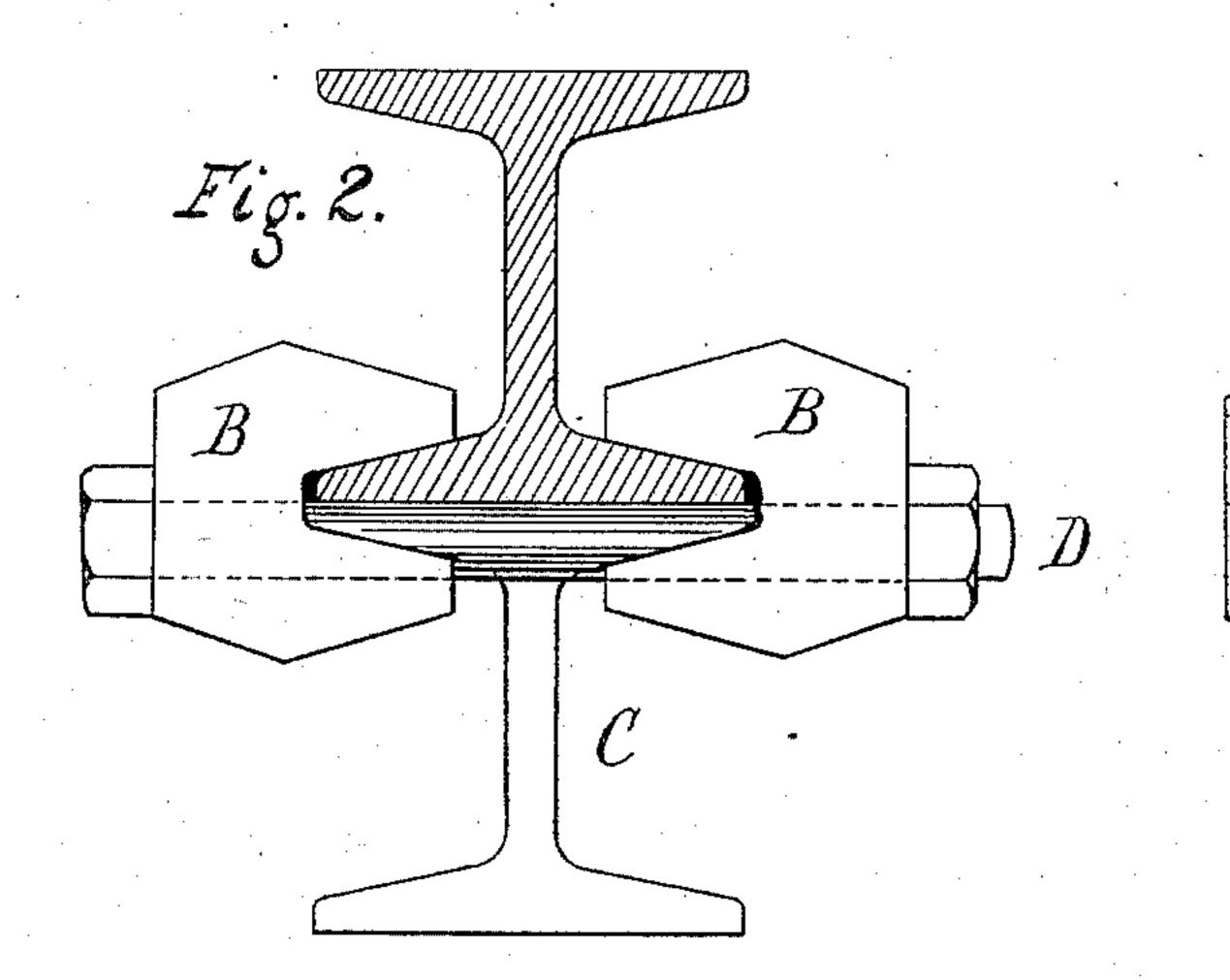
J. F. WARD.

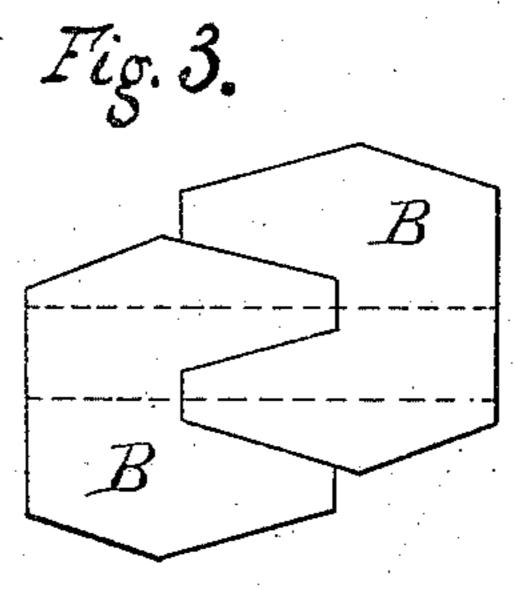
SPLICE FOR METAL BEAMS OR RAILS.

No. 335,165.

Patented Feb. 2, 1886.







WITNESSES:-WINW Eightman

M. C. Vig Niman M. C. Vanderen INVENTOR:-Sku F. Ward By L. a. Kill 10

Attys

United States Patent Office.

JOHN FROTHINGHAM WARD, OF JERSEY CITY, NEW JERSEY.

SPLICE FOR METAL BEAMS OR RAILS.

SPECIFICATION forming part of Letters Patent No. 335,165, dated February 2, 1886.

Application filed June 18, 1885. Serial No. 169,142. (No model.)

To all whom it may concern:

Be it known that I, John F. Ward, a citizen of the United States, and a resident of Jersey City, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Splices for Metal Beams or Rails, of which the following is a specification.

My invention relates especially to means for splicing iron beams or rails at their meeting ends, and has for its object the provision of devices whereby a rigid and secure joint may be made without the use of rivets or holes through the flanges or web of the beams or rails.

To attain the desired end my invention consists, essentially, in two longitudinal clamps perforated at each extremity for the reception of a bolt, said bolts passing through the per-20 forations in the clamps beyond the ends of the short section. These clamps are made of such a shape as to fit into each other while boring, enabling me to perforate two at a time, lessening the cost of construction. In forming a 25 splice a short piece of metal beam or rail is placed beneath the meeting extremities of the beams or rails, and the two clamps passed over the flanges, and the bolts placed in position, securely holding the parts in place, all of 30 which will be hereinafter first fully described, and then pointed out in the claim.

In the drawings, Figure 1 is a perspective view of a splice made in accordance with my

invention, and Fig. 2 is a vertical sectional view at the end of the splice. Fig. 3 illus-35 trates the method of placing the clamps for boring.

Like letters of reference, wherever they occur, indicate corresponding parts in all the figures.

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A A are the main beams or rails to be spliced. B B are the clamp-irons, and C is the short section of beam or rail. D D are the bolts securing the parts together.

Having now fully described my invention, 45 what I claim as new therein, and desire to secure by Letters Patent, is—

The splice for metal beams or rails, consisting of the short piece of metal or section of beam or rail placed beneath the extremities of 50 the parts to be spliced, and the clamping irons B, provided with the perforations near each extremity and fitting over each flange and the short section therebeneath, the whole secured together by the straight bolts D, passing 5; through the perforations in the clamps beyond the ends of the short section, as shown and described.

Signed at New York, in the county of New York and State of New York, this 10th day 6c of June, A. D. 1885.

JOHN FROTHINGHAM WARD.

Witnesses:

JAS. B. KILSHEIMER, C. F. GILMAN.