

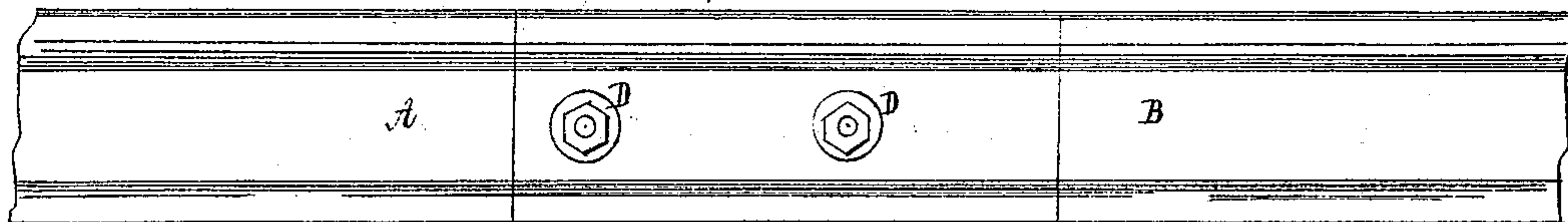
H. P. ADAMS.

Splices for Railroad Rails.

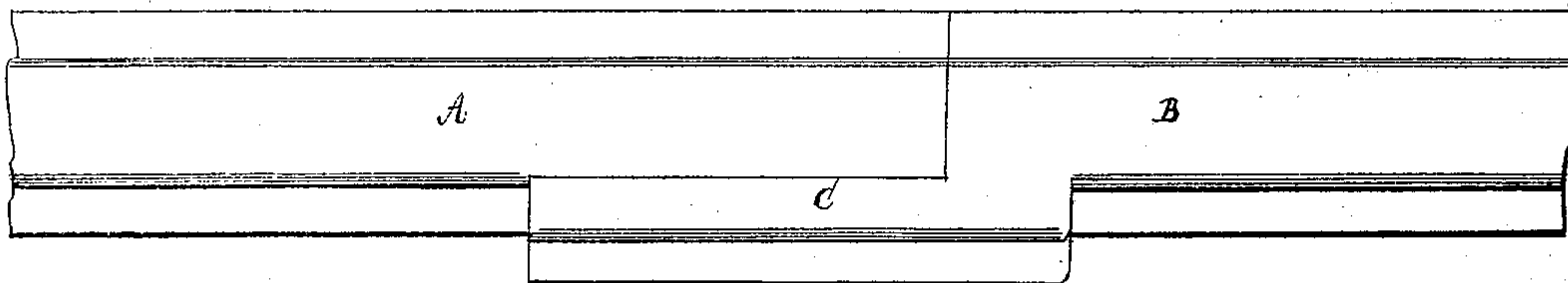
No. 136,402.

Patented March 4, 1873.

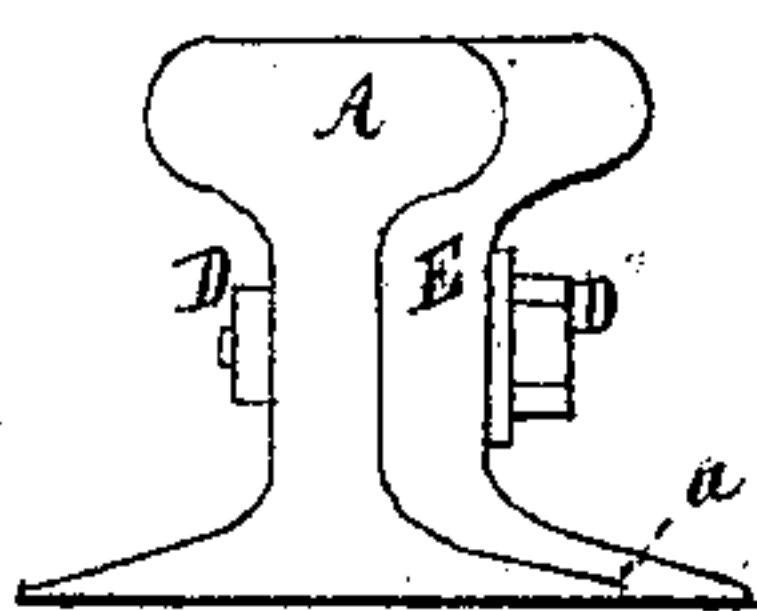
*Fig. 1.*



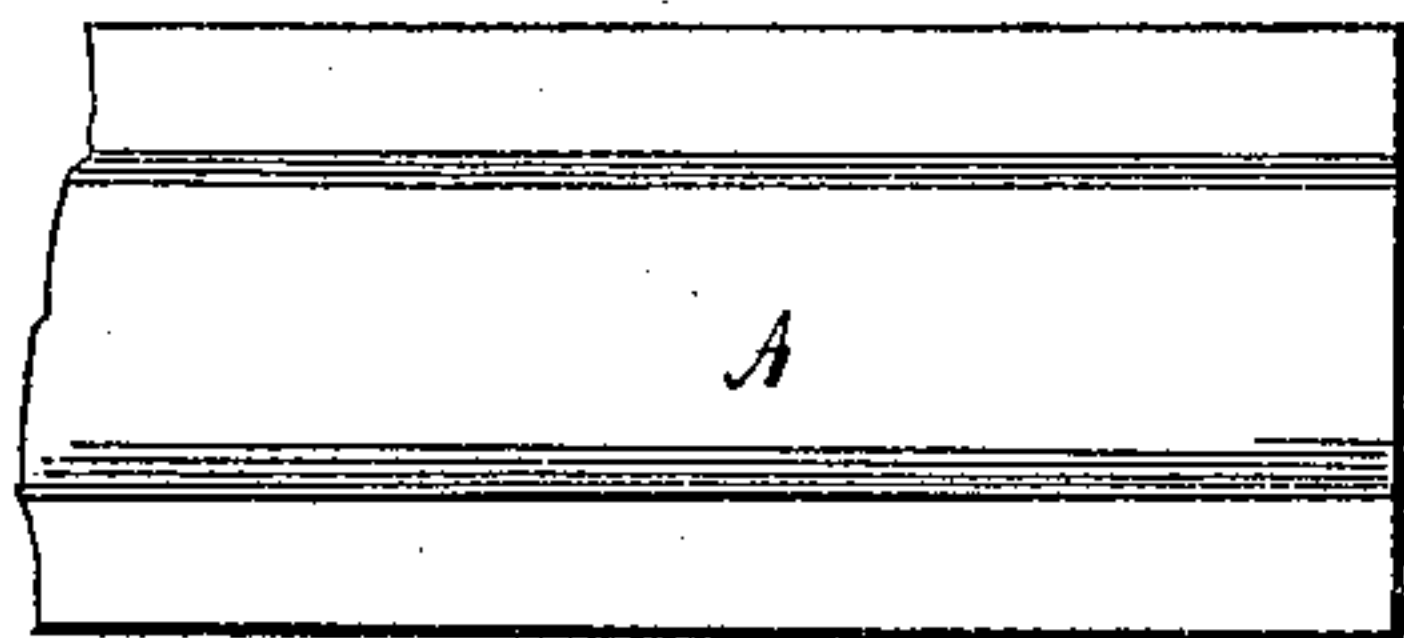
*Fig. 2.*



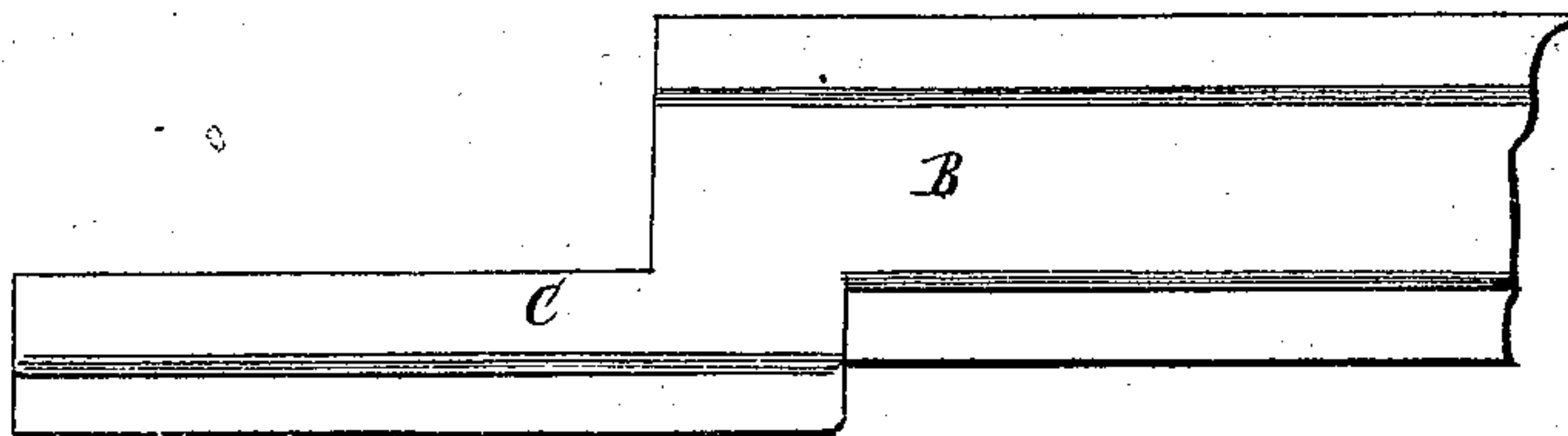
*Fig. 3.*



*Fig. 4.*



*Fig. 5.*



Inventor  
H. P. Adams.  
per Burridge & Co.  
Atty

Witnesses.  
J. H. Burridge.  
D. S. Humphrey

# UNITED STATES PATENT OFFICE.

HENRY P. ADAMS, OF CLEVELAND, OHIO.

## IMPROVEMENT IN SPLICES FOR RAILROAD RAILS.

Specification forming part of Letters Patent No. 136,402, dated March 4, 1873.

*To all whom it may concern:*

Be it known that I, HENRY P. ADAMS, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented new and useful Improvements in a Splice for Railway Rails, of which the following is a description, reference being had to the accompanying drawing making part of this specification.

Figure 1 is a side view of the rail-splice. Fig. 2 is a top view. Fig. 3 is an end view. Figs. 4 and 5 are detached sections.

Like letters of reference refer to like parts in the different views.

This invention has for its object the splicing of the ends of railway rails together, so that the ends of the tread of the rails shall be relieved from being pounded upon by the wheels of the train, thereby preventing the rails or ends thereof from being crushed or splintered.

The construction of the splice is as follows: In the drawing, Fig. 2, A and B represent two sections of rails, which are or may be of the ordinary shape and size. The end of section B is offset at a right angle, forming an arm, C, Fig. 5, projecting forward beyond the end of the rail, as shown in said figure. The upper part or face of the arm C is about half the width of the face or tread of the rail, and the side of the arm corresponds to the web or neck of the rail, and the base thereof is made to fit closely and snugly to the web of the rail and upon its base, as shown in Fig. 3, in which it will be seen that the under side of the head of the rail rests upon the web E of the arm, and that the edge of the foot or base of the rail lies against a shoulder, *a*, formed on the under side of the foot of the arm.

When the two sections A B are together, as shown in Figs. 1 and 2, the arm laps by and over unto the side of the rail A, serving in the

capacity of a splice-plate, and which is secured to the rail by one or more bolts, D.

It will be observed that the upper edge of the arm is even with the face of the rail, and that it laps over the joint of the abutting end of the same; hence, as the wheels of the train run over the joint, the rim of the wheel will run upon the face of the arm or splice bar, and thereby protect the ends of the rails from being pounded as the wheels may pass over the joint.

The arm or splice plate, being on the outside of the rail, offers no obstruction to the flange of the wheels; it also makes a strong joint, as the foot of the rail is braced laterally by the shoulder *a* of the arm.

I am aware that rails have been heretofore spliced in a similar way—that is, by having the rails meet each other upon an obtuse angle—thereby requiring the outside of the web to be formed at an acute angle to contract the strain given outwardly by the first-named angle should the rails from any cause expand, as is frequently the case in warm weather; nor do I claim the use of iron or wooden keys between the rails; but

What I do claim, and desire to secure by Letters Patent, is—

The rails A B meeting at right angles, the rail B being provided with the arm C, constructed to closely fit the rail A from top to bottom and having the shoulder *a*, the several parts being constructed and arranged to form the splice, as described, and for the purpose set forth.

HENRY P. ADAMS.

Witnesses:

J. H. BURRIDGE,  
D. L. HUMPHREY.