

W. HALL.
RAILWAY.

No. 20,793.

Patented July 6, 1858.

Fig. 1.

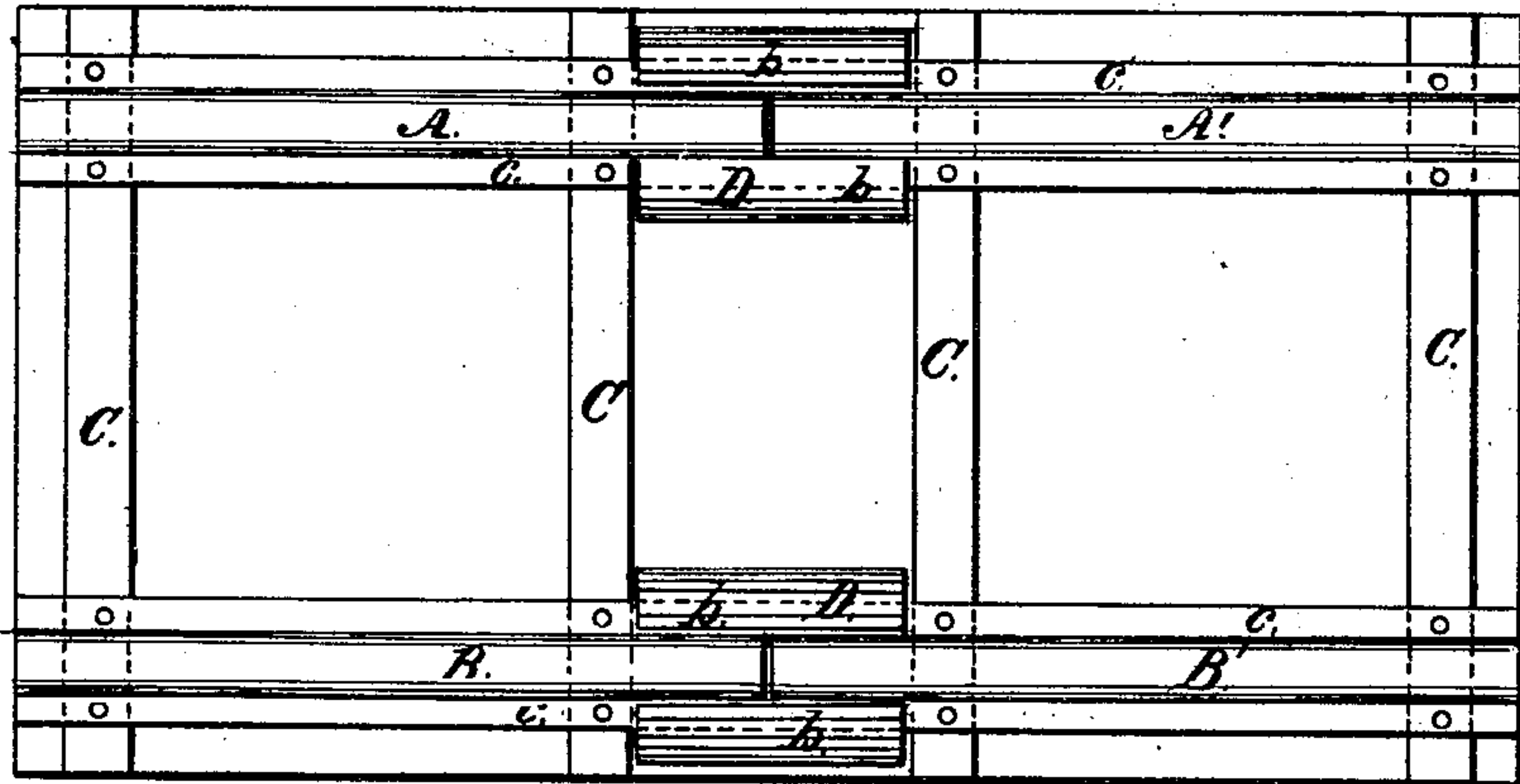


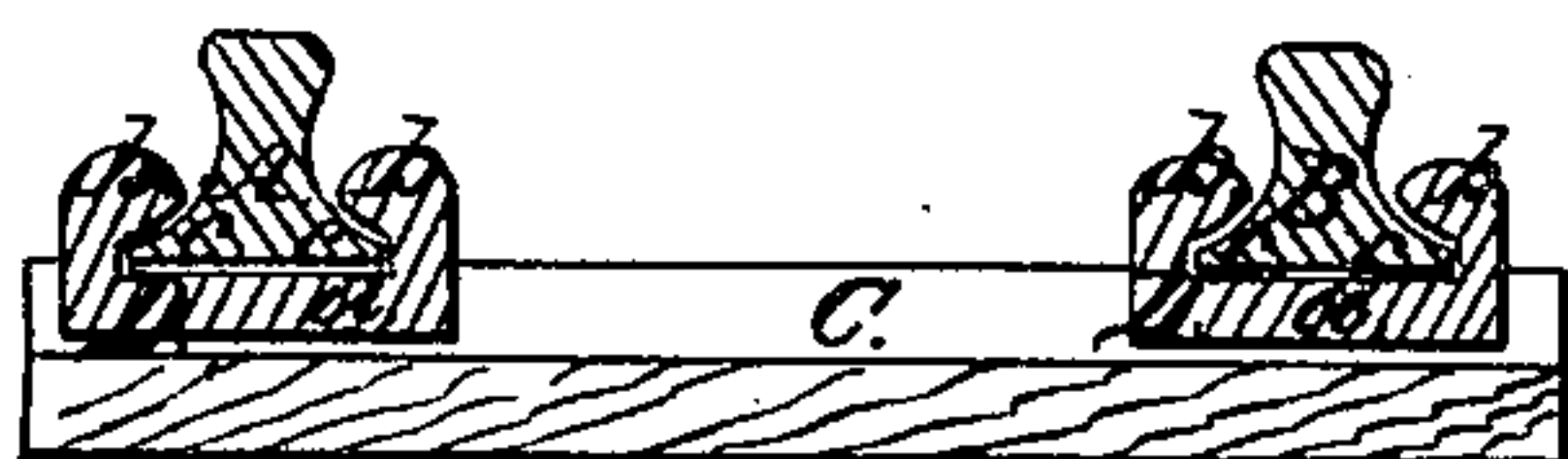
Fig. 2.



Fig. 3.



Fig. 4.



UNITED STATES PATENT OFFICE.

WILLIAM HALL, OF SPRINGFIELD, MASSACHUSETTS.

CHAIR FOR RAILWAYS.

Specification of Letters Patent No. 20,793, dated July 6, 1858.

To all whom it may concern:

Be it known that I, WILLIAM HALL, of Springfield, in the county of Hampden and State of Massachusetts, have invented a certain Improved Mode of Splicing the Rails of Railroads; and I do herein describe and ascertain said invention, referring to the accompanying drawing, in which—

Figure 1, is a top view or plan. Fig. 2 is a side elevation. Fig. 3, is a vertical longitudinal section through the center of the rails and splice. Fig. 4, is a transverse section through the splice.

The purpose of this invention is to furnish a cheap and convenient splice for joining the ends of the rails, which can be used without cutting or fitting the rails in any way therefor, by slitting, boring or otherwise, as is required in most splices now in use while I at the same time secure a permanent and sufficiently rigid fastening for the ends of the rails and avoid the defect of a solid chair upon the crossties which is found to act like an anvil upon which the end of the rail is struck by the wheels of the passing train and broken down rapidly.

With these objects in view I proceed to describe my invention which consists of a simple splice of metal D of proper thickness composed of the following parts, and clearly shown in the several figures.

a is the sole plate on which the ends of the rails rest. This should be about eight inches long more or less, and of a breadth corresponding with the base of the rail it is intended for. The sides are turned up over the base of the rail and grasp and hold it turning over up to the web as clearly seen in Fig. 4, and forming the lips *b*; when the splice is thus formed it

can be rapidly driven on to the ends of the rail and needs no fastening further, nor does the rail require preparation therefor, the squared end of the rail as it comes from the mill is ready to put down. In laying the rail with this splice it is necessary to employ two cross ties with just sufficient space between them to admit the splice—say eight inches in the clear, the ends of the two contiguous rails that are to be joined projecting each four inches over the tie and meeting midway between them, thus giving a proper support to the rail near the end and still leaving the splice free and unattached to any cross tie or other support beneath it while it sustains the rail with the whole strength due to the size of the rail from cross tie to cross tie. With this combination of a simple splice formed of a single piece and applied without any preparation of the rail therefor, with two cross ties immediately on either side thereof, I find to be the most reliable, cheap and expeditiously set fastening, I have seen for the rails of railroads.

Having thus fully described my new mode of securing the ends of rails of railroads what I claim therein as my invention and for which I desire to secure Letters Patent is—

The mode herein described for securing the ends of rails constructed arranged and combined in the manner and for the purposes set forth.

In testimony whereof, I have hereunto set my signature.

WILLIAM HALL.

Witnesses:

A. PHELPS,
CHARLES LAKIN.