

W. H. SKIDMORE.
 Railway Rail-Joints.

No. 142,954.

Patented September 16, 1873.

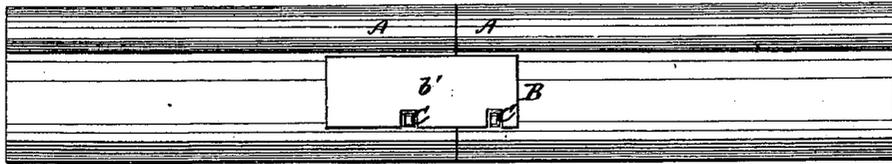


Fig. 1.

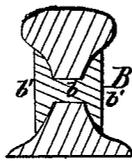


Fig. 2.

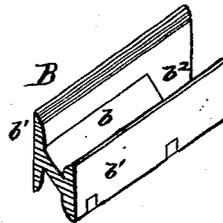


Fig. 3.

Fig. 4.

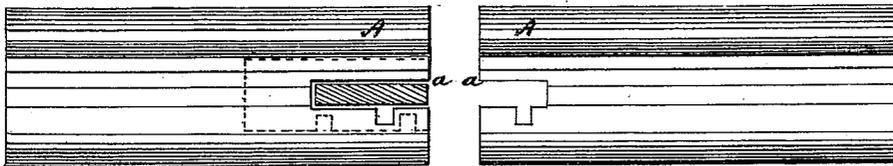
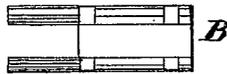


Fig. 5.

WITNESSES.

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UNITED STATES PATENT OFFICE.

WILLIAM H. SKIDMORE, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF ONE-HALF HIS RIGHT TO CALVIN A. ELLIS, OF SAME PLACE.

IMPROVEMENT IN RAILWAY-RAIL JOINTS.

Specification forming part of Letters Patent No. **142,954**, dated September 16, 1873; application filed August 13, 1873.

To all whom it may concern:

Be it known that I, WILLIAM H. SKIDMORE, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Railroad-Rail Joints; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification, in which—

Figure 1 is a side view of two connected rails with the coupling-block in place. Fig. 2 is a vertical transverse section of rail and block. Fig. 3 is a perspective view of block. Fig. 4 is an under-side view of the block. Fig. 5 is a side view of two disconnected rails, showing the block in section.

This invention has relation to that class of railway-rail joints in which is employed a block consisting of two plates adapted to embrace the sides of a rail, and united by means of a transverse web fitting notches formed in the ends of the rails. The present invention consists in the combination, with said block and with the rails, which are correspondingly notched, of transverse pins or bolts, to prevent the rails from being drawn apart in the direction of their length, all as hereinafter more fully described.

Referring to the accompanying drawing, A A are rails, which have oblong notches *a a* at each end to receive the block B, the web *b* of which fits in said notch, while the flanges or lips *b¹ b¹* embrace the sides of the rails in the manner and with the same effect as fish-plates, preventing the ends of the rails from coming apart laterally. In order to prevent the rails from being drawn apart in the direction of their length, I insert pins or bolts C C. I prefer to make these pins square in cross-section, as shown in the drawing, and to turn down or split their ends after being inserted in po-

sition. Ordinary rail-spikes will answer for this purpose, or even round bolts with nuts may be used; but these last I do not deem advisable. In order to allow free play for the contraction and expansion of the rails, I make the holes therein, through which the pins C C pass, of greater width than the corresponding notches in the block. In order to permit (for a purpose hereinafter explained) the block to be slid back so that its end will be flush with that of the rail, as shown in Fig. 5, I form the notch in one end of each rail deeper or longer than that in the other end, and cut out the web of the block, as shown plainly at *b²* in Fig. 3. In laying the track the block is inserted in place, as shown in Fig. 5, and subsequently is drawn into the position shown in Fig. 1, and the pins inserted and secured in place, as above described.

The advantage of the above construction, in addition to its simplicity and cheapness, and the ease with which it can be applied, is that the block can never get out of position. The side plates or flanges, being cast in one piece with the web, are always secure, and do not require to be drawn toward one another by screw-bolts, thus permitting the use of square pins with split or turned ends, which are not liable to come out of place, and dispensing with the necessity of nut-locks; also, when the rails are drawn longitudinally apart, the web of the block affords a firm and valuable support.

What I claim as my invention is—

In combination with the block B and notched rails A A, the pins C C, as set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 8th day of August, 1873.

WILLIAM H. SKIDMORE.

Witnesses:

JAMES P. PETIT,
EUGENE P. EADSON.