

S. NUNAMAKER.

Railroad Rail-Joints.

No. 134,924.

Patented Jan. 14, 1873.

Fig. 1.

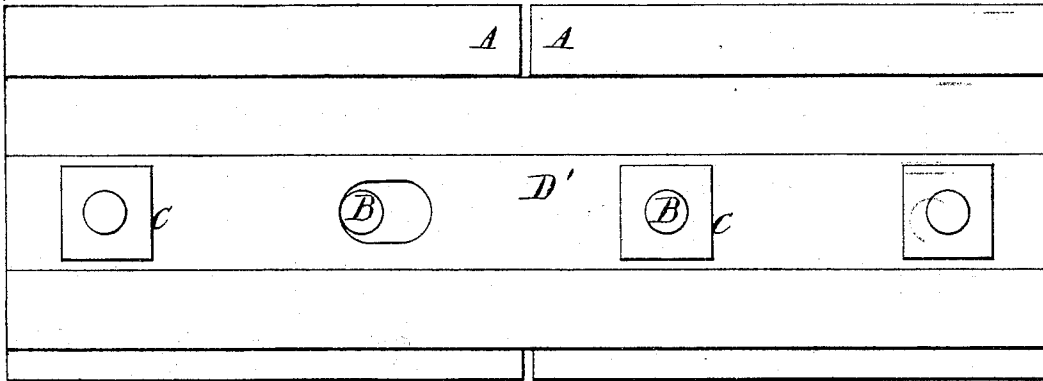


Fig. 2.

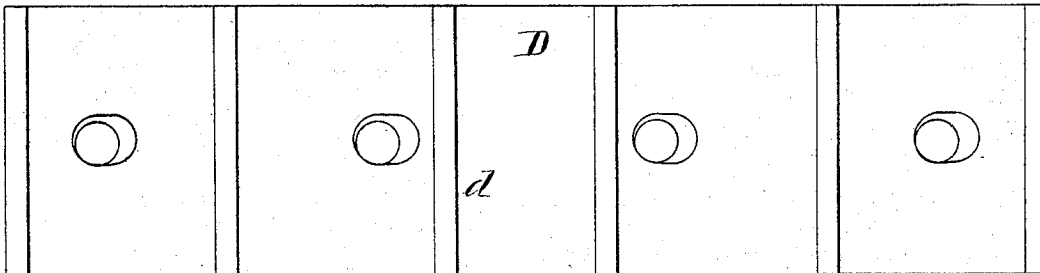
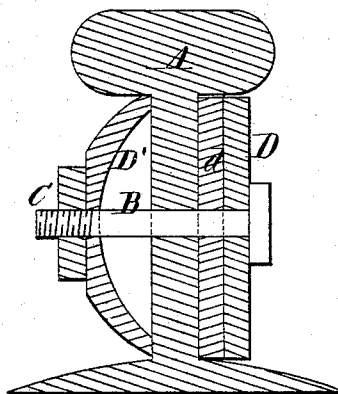


Fig. 3.



Witnesses.

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UNITED STATES PATENT OFFICE.

SOLOMON NUNAMAKER, OF NINEVEH, PENNSYLVANIA.

IMPROVEMENT IN RAILROAD-RAIL JOINTS.

Specification forming part of Letters Patent No. 134,924, dated January 14, 1873.

To all whom it may concern:

Be it known that I, SOLOMON NUNAMAKER, of Nineveh, in the county of Westmoreland and State of Pennsylvania, have invented a new and valuable Improvement in Railroad Splice; and do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a top view of my railroad splice. Fig. 2 is a view of the rib-plate. Fig. 3 is a vertical transverse section of my railroad splice.

This invention has relation to railroad-rail splices; and it consists in the construction and novel arrangement of elastic fish-plates adapted to prevent the bolts or nuts from turning, substantially as hereinafter described.

Referring to the drawing, A designates the rails, B the bolts, C the nuts, and D D' the improved fish-plates. The plate D consists of a straight bar of steel or other elastic material, with vertical ribs *d*, which rest against the side of the rails and bolt-holes *d'*, of an elongated form, to admit of the contraction and expansion of the rails. The holes *d'* are between the ribs; hence when the nuts are turned on the bolts tightly the plate D is caused to spring between the ribs, thus exerting sufficient pressure upon the nuts and bolt-heads to hold both in place. This plate may be used

with an ordinary fish-plate or with the peculiar plate D'. The latter is of a concavo-convex form, and has on its outer surface the middle part flattened longitudinally to receive the inner faces of the nuts, applied as shown. The inner and outer surfaces of the plate D' converge toward their edges so as to give the plate greater elasticity. When the nuts are tightened this plate spreads toward its edges and exerts a pressure also adapted to hold the nuts and bolts in place. Sometimes the plate D is dispensed with and the plate D' used in connection with an ordinary fish-plate. The bolt-holes in the plate D' are also of an elongated form, to allow for expansion and contraction of the metal of the rails.

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

1. The improved rail-splice and nut-lock, consisting of the concavo-convex elastic fish-plate D' and the ribbed elastic fish-plate D, substantially as specified.

2. The ribbed elastic fish-plate D, constructed and applied substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

SOLOMON NUNAMAKER.

Witnesses:

W. N. HAYS,
FRANCIS FORD.