

G. O. KUNKLE.
Railway Rails.

No. 146,599.

Patented Jan. 20, 1874.

Fig. 1

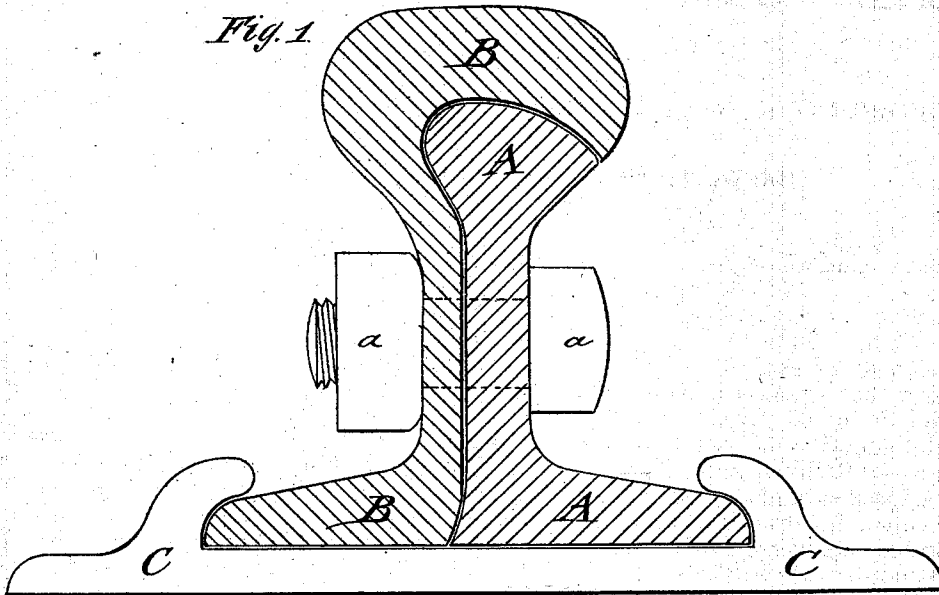
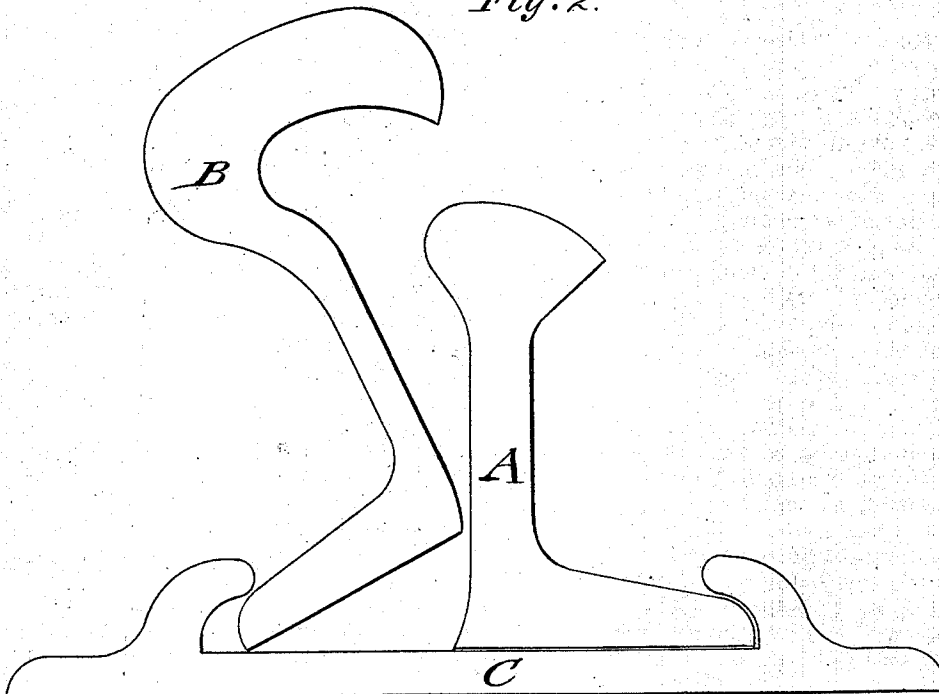


Fig. 2.



Witnesses.

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GEORGE O. KUNKLE, OF ZIEGLERVILLE, PENNSYLVANIA.

IMPROVEMENT IN RAILWAY-RAILS.

Specification forming part of Letters Patent No. **146,599**, dated January 20, 1874; application filed September 27, 1873.

To all whom it may concern:

Be it known that I, GEORGE O. KUNKLE, of Zieglerville, in the county of Montgomery and State of Pennsylvania, have invented a new and Improved Railroad-Rail, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a vertical transverse section of my improved railroad-rail; and Fig. 2, an end view of the same, with the upper rail slanting to be placed in position on the lower supporting-rail.

Similar letters of reference indicate corresponding parts.

The invention relates to rails made in two parts, and consists in a peculiar relative construction that not only allows them to be rolled in the usual manner, but enables them to be inserted under, and held entirely by overlapping projections of the chair.

In the drawing, A represents the base-rail, B the cap-rail, and C the chair for connecting them to the sills or cross-ties. The cap-rail is so shaped that its head overlaps that of rail A, passing then along its side, and being curved at the inner corner of the base, so as to slip easily along rail A, and be easily removed and replaced. The head and base of cap rail B are so constructed that its center of gravity will fall as near as practicable to the middle of the whole base, fitting in such a manner over the base-rail that when both are put in place any superimposed weight presses it still more in its place, even without being bolted to the lower rail. A train may therefore run over the rail with comparative safety without producing a separation of the rails, as the pressure forces

them together. The upper rail B can only be displaced by a direct upward motion, by being lifted and turned at the same time, so that the rails, if they are moved by top or side pressure, must move together. The rails are connected by cross-bolts *a* and set into chairs C of the ties. The base-rail A is first placed in position, being produced to correspond with the cap-rail B, with rounded head and forward-projecting lower corner, as indicated in Fig. 1. The cap-rail B is then placed with its outer edge under the chair-recess, and slid along the base-rail till the head overlaps the base-rail, resting fully thereon.

Both the upper and lower rails may be removed and substituted very quickly, and without drawing a spike. The wear is confined almost entirely to the upper rail, which may be made of steel, the lower of iron.

A chair may be used on every tie, or on alternate ties, as desired.

The joints of the upper rails are placed midway between those of the lower, making thereby a continuous rail without the battering at the joints of the rails.

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

A railroad-rail made in two parts, A B, constructed as shown in drawing, and adapted to be held in a chair by overlapping projections over the latter.

GEORGE O. KUNKLE.

Witnesses:

SAML. E. NYCE,
C. B. MILLER.