No. 752,455. PATENTED FEB. 16, 1904.

F. H. KINDL.

RAILWAY TIE.

APPLICATION FILED JUNE 1, 1900.

NO MODEL.

Fig. 3.

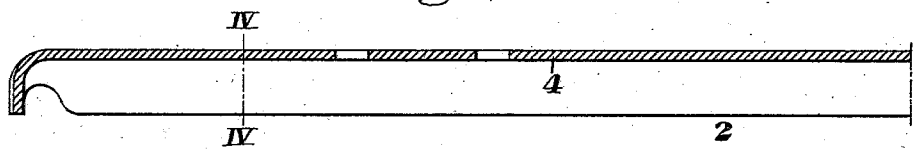


Fig. 4.

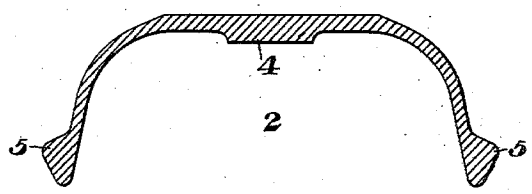


Fig. 1.

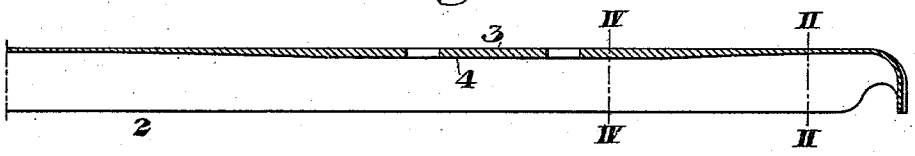
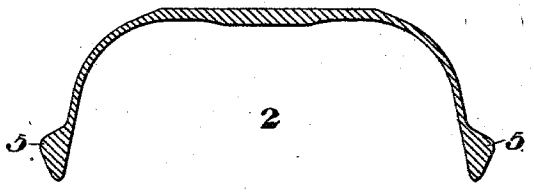


Fig. 2.



WITNESSES

Geo. B. Fleming

Chas. C. Bittner

INVENTOR

F. H. Kindl

No. 752,455. Patented February 16, 1904.

UNITED STATES PATENT OFFICE.

FREDERICK H. KINDL, OF PITTSBURG, PENNSYLVANIA.

RAILWAY-TIE.

SPECIFICATION forming part of Letters Patent No. 752,455, dated February 16, 1904.

Application filed June 1, 1900. Serial No. 18,725. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK H. KINDL, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Railway-Ties, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a longitudinal section of one-half of a railway-tie constructed in accordance with my invention. Fig. 2 is a vertical cross-section, on a larger scale, at the line II II of Fig. 1. Fig. 3 is a vertical longitudinal section of a modified construction, and Fig. 4 is a vertical cross-section at the lines IV IV of Figs. 1 and 3 on a larger scale.

My invention relates to railway-ties; and it consists in the improved form and construction hereinafter more particularly shown and described.

As shown in Fig. 1 of the drawings, the railway-tie 2 is made of a trough-shaped metal piece formed by rolling. It is not, however, of uniform cross-section throughout; but at the portions 3, forming the rail-seats, and a short distance beyond the entire section of the tie is thickened, as at 4, and tapers from this point in both directions. This affords a very strong device, since it imparts to the tie a construction similar in principle to a cantaliver and distributes the metal throughout the tie in the most efficient manner.

In Fig. 3 I show a modified construction, in which the entire section of the tie remains the same thickness throughout the whole length instead of being tapering, as in Figs. 1 and 2. In each of the figures I show the tie formed at its lower edges with thickened portions 5, which taper downwardly and contribute greatly to the strength and serve to anchor the tie.

I claim—

1. A metal railway-tie formed of rolled metal bent into trough shape, said tie having thickened lower edges with the thickened portions tapering downwardly, and top thickened portions beneath the rail-seats; substantially as described.

2. A metal railway-tie formed of rolled metal bent into trough shape of the same width throughout, said tie having thickened lower edges with the thickened portions tapering downwardly; substantially as described.

3. A metal railway-tie formed of a rolled section bent into trough shape and having on the under side of the top thickened portions extending longitudinally of the tie and beneath the rail-bases; substantially as described.

In testimony whereof I have hereunto set my hand.

FREDERICK H. KINDL.

Witnesses:
GEO. B. BLEMING,
CHAS. C. BITTNER.