(No Model.)

A. B. LINDERMAN.

RAILROAD TIE.

No. 262,798. Patented Aug. 15, 1882.

Fig. 1.

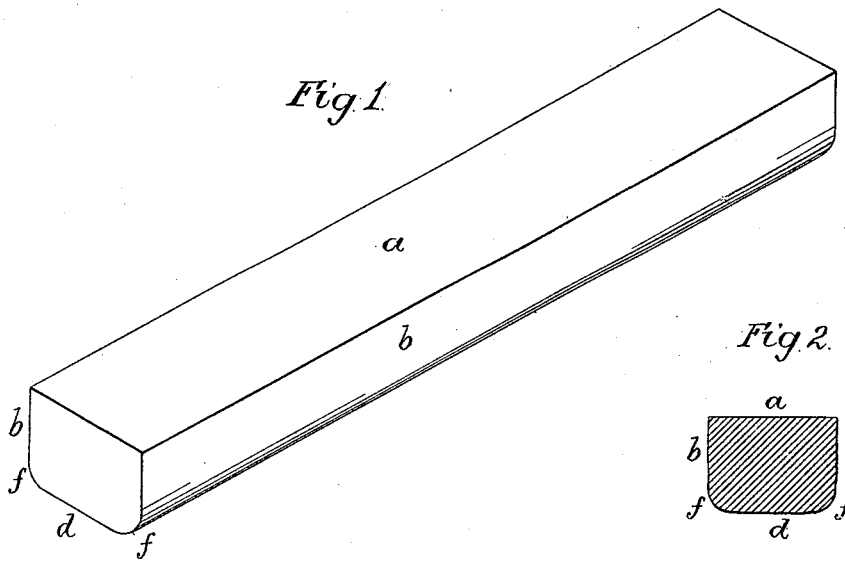
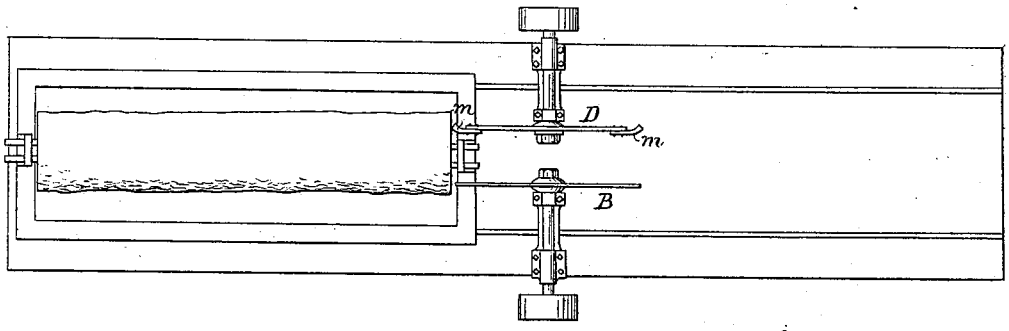


Fig. 2.

Fig. 3.



Witnesses
Harry Drury
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Inventor
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by his Attorneys
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UNITED STATES PATENT OFFICE.

ALBERT B. LINDERMAN, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO HAMILTON DISSTON, OF SAME PLACE.

RAILROAD-TIE.

SPECIFICATION forming part of Letters Patent No. 262,798, dated August 15, 1882.

Application filed July 10, 1882. (No model.)

To all whom it may concern:

Be it known that I, ALBERT B. LINDERMAN, a citizen of the United States and a resident of Philadelphia, Pennsylvania, have invented an Improved Railroad-Tie, of which the following is a specification.

My invention consists of an improved railroad-tie which possesses all the advantages of a sawed tie as regards economy and facility of transportation in compact masses, and has the advantage of a hewn tie as regards the character of its upper surface.

In the accompanying drawings, Figure 1 is a perspective view of my improved railroad-tie; Fig. 2, a transverse section, and Fig. 3 a plan view, of a machine which may be used in the manufacture of my improved tie.

It should be remarked in the first place that hewn ties are preferred to sawed ties by railroad-engineers, because the former are more lasting than the latter, the main objection to which is due to the character of the upper surface of the tie, which, when it has been reduced by sawing, is of a fibrous and absorbent character, and affords a lodgment for rain, which induces rapid decay. There is not the same objection to the sawed opposite edges and under surface of a tie.

The hewing of ties in remote districts, as in central Florida, is an expensive matter, the sawed ties being less expensive, owing to the plentiful supply of fuel which the waste wood affords for steam-boilers. The sawed ties, moreover, can be more economically transported, as they can be packed in smaller compass than hewn ties.

My improved tie has a planed or hewn upper surface, *a*, opposite sawed edges *b* and sawed under surface, *d*, so that while it can be packed with other ties in a small compass for transportation the upper surface is such as to resist the injurious effects of moisture.

In order that facilities may be afforded for properly laying a track composed of these ties, I round or bevel the lower corners, *f f*, thereby affording a better opportunity for solidly tamping the ballast on the under side of the tie than is afforded by the ordinary ties, which are hewn or sawed only on top and bottom and have the bark surfaces on opposite sides.

A crude log can be reduced to the proper width at one operation by passing it on a suitable carriage between two circular saws arranged at a proper distance apart; but for reducing a log in the other direction, so as to determine the thickness of the tie, I propose to use a circular saw, B, Fig. 3, in connection with a rotating disk or arms, D, carrying hewing or planing knives *m*, which impart the desired surface to the top of the tie. It should be understood, however, that the mechanism for making the tie forms no part of my present invention.

I claim—

The within-described railroad-tie, the same consisting of a slab of wood having a hewn or planed upper surface, sawed edges and under surface, and rounded or beveled lower corners, as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ALBERT B. LINDERMAN.

Witnesses:

HARRY DRURY,

HUBERT HOWSON.