

(No Model.)

I. L. BLAKESLEE.
METALLIC RAILROAD TIE.

No. 450,132.

Patented Apr. 14, 1891.

Fig 1

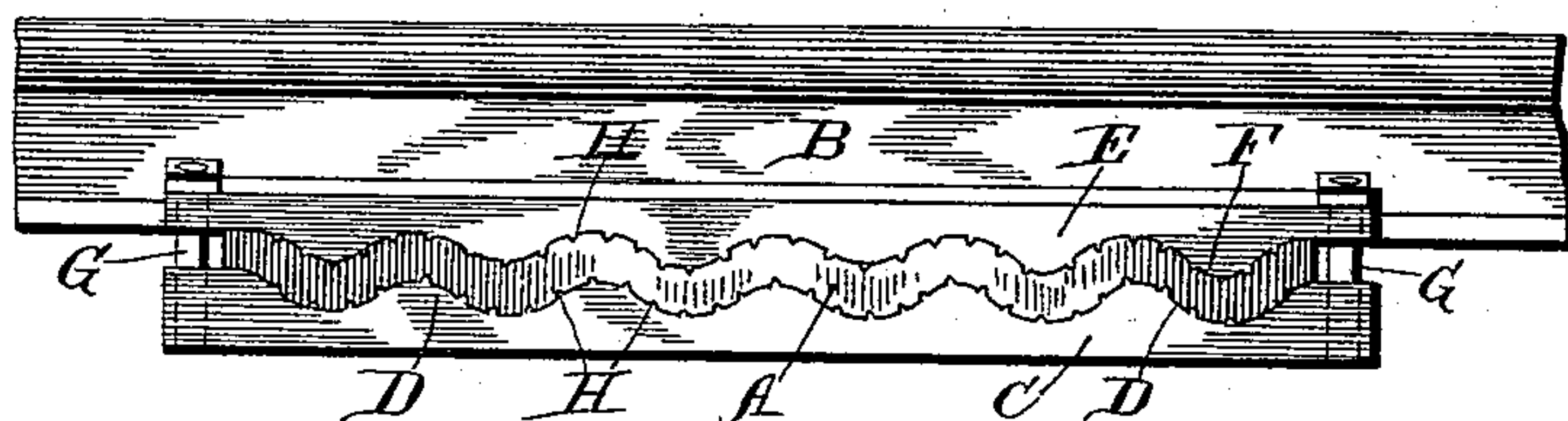


Fig 2

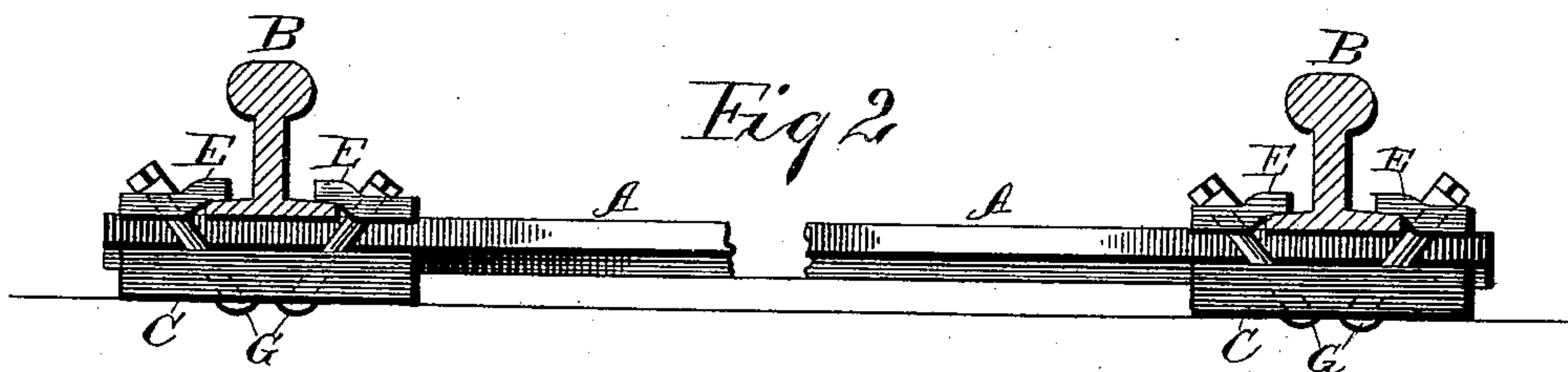
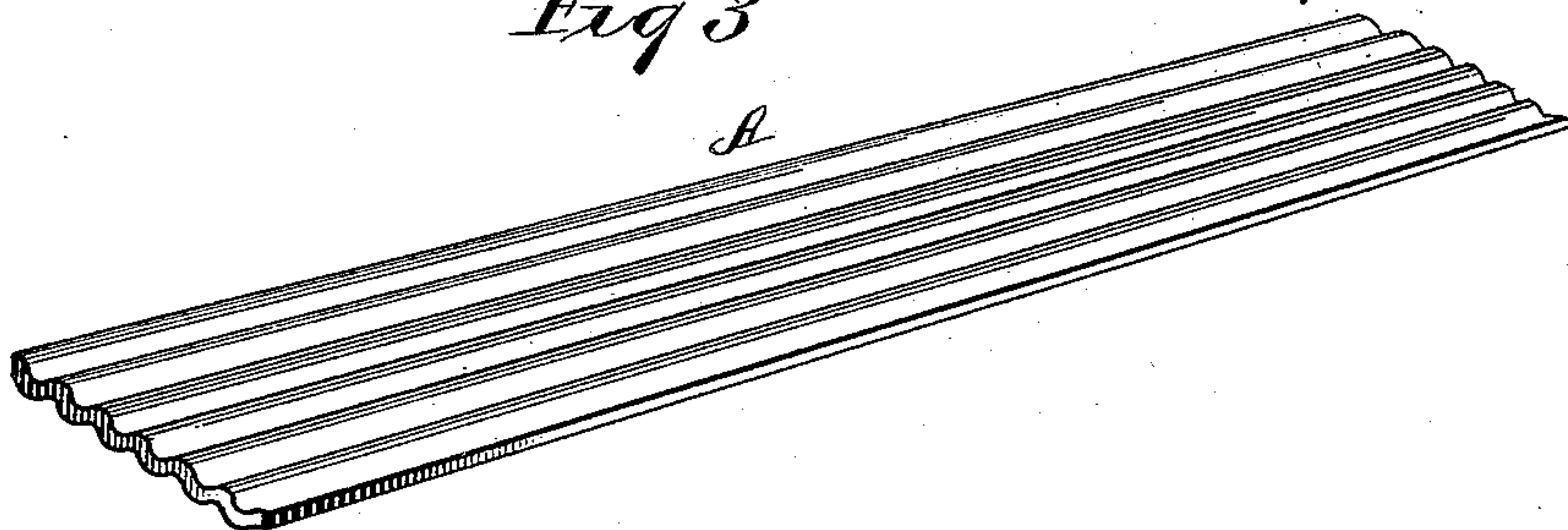


Fig 3



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UNITED STATES PATENT OFFICE.

IRA L. BLAKESLEE, OF KIRKWOOD, NEW YORK.

METALLIC RAILROAD-TIE.

SPECIFICATION forming part of Letters Patent No. 450,132, dated April 14, 1891.

Application filed December 11, 1890. Serial No. 374,381. (No model.)

To all whom it may concern:

Be it known that I, IRA L. BLAKESLEE, a citizen of the United States, residing at Kirkwood, in the county of Broome and State of New York, have invented certain new and useful Improvements in Metallic Railroad-Ties; 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 appertains to make and use the same.

This invention relates to an improvement in metallic railroad-ties; and has for its object to produce a comparatively inexpensive construction, which will be exceedingly strong and durable, and which will effectually prevent spreading of the rails or any movement of the same.

With these ends in view my invention consists in the peculiar features of construction and combination of parts more fully described hereinafter, and pointed out in the claims.

Referring to the accompanying drawings, Figure 1 represents an end view of a tie constructed after my improved method; Fig. 2, a side view, and Fig. 3 a detail in perspective of the tie proper.

I form the tie itself of a section of corrugated iron of suitable length and width, and indicated in the drawings by the letter A, and the rails B are adapted to rest upon the ridges of said iron, which thus affords a strong and durable base. A plate C is disposed transversely beneath the tie, where the rail crosses the same, and its upper surface is provided with corrugations D corresponding with those of the tie and closely fitting them, as seen in Fig. 1. The top plates E are formed in similar manner, being provided on their under sides with corrugations F engaging those in the tie, and said plates are two in number and are formed in the usual manner with beveled inner edges which overlap and confine the flange of the rail. Both the top and bottom plates project beyond the sides of the corrugated cross-tie, and they are clamped upon the latter by the bolts G, which do not, however, extend through the tie itself, but only through the projecting ends of the plates, and these bolts pass obliquely through the latter converging toward

their lower ends or heads, as seen more clearly in Fig. 2. They are provided on their upper ends beyond the top plates E with suitable locking-nuts, preferably of the form shown in my prior patent, No. 437,327. It will be seen that by reason of the oblique position of the bolts their tendency is to draw the top plates down upon the flange of the rail, and thus securely bind the latter upon the tie. When the plates are thus clamped together, it will be evident that the interlocking of their corrugations with those of the tie will effectually prevent any twisting or sidewise play of the rails on curves or steep descents.

To further guard against any possible spreading of the rails, I provide the corrugated surfaces of the plates with teeth or nibs H, which cut into the tie when the plates are clamped together and act to yet more inseparably connect the parts.

It will be seen from the foregoing description that the construction is quite simple, requiring but few parts to complete it, and when complete constituting a very serviceable and stable tie.

It is evident that many slight changes which might suggest themselves to a skilled mechanic could be resorted to without departing from the spirit and scope of my invention; and hence I do not wish to limit myself to the precise construction shown.

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

1. The combination, with a corrugated metallic tie, of cross-plates having corrugations interlocking with the latter, said plates being adapted to engage and confine the flange of the rail, as described.

2. The combination, with a corrugated metallic tie, of a cross-plate beneath the same and provided with corrugations interlocking with those of the tie, a pair of similar plates on top of the latter and arranged to engage and confine the flange of the rail, and suitable bolts connecting said top and bottom plates and clamping them upon the tie, as set forth.

3. The combination of a corrugated tie, a cross-plate beneath the same provided with corrugations interlocking with those of said

tie, similar plates on top of the latter and arranged to confine the flange of the rail, and oblique bolts connecting said top and bottom plates and clamping them upon the tie, as and
5 for the purpose described.

4. The combination, with a metallic tie, of top and bottom cross-plates provided with teeth or nibs arranged to cut into said tie and prevent the rails held by said plates from
10 spreading, as described.

5. The combination, with a corrugated me-

tallic tie, of top and bottom cross-plates having corresponding corrugations and provided with teeth or nibs arranged to cut into said tie to prevent the rails held by said plates 15 from spreading, as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

IRA L. BLAKESLEE.

Witnesses:

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F. L. BEEBE.