

(No Model.)

E. H. TOBEY.
RAILROAD CROSS TIE.

No. 249,271.

Patented Nov. 8, 1881.

Fig. 1.

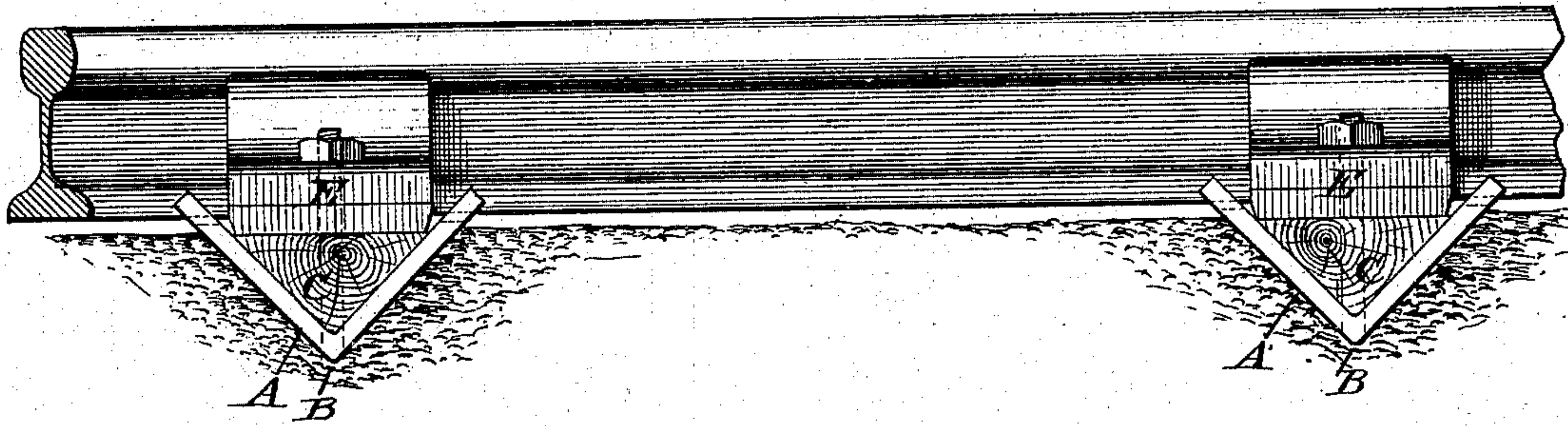


Fig. 2.

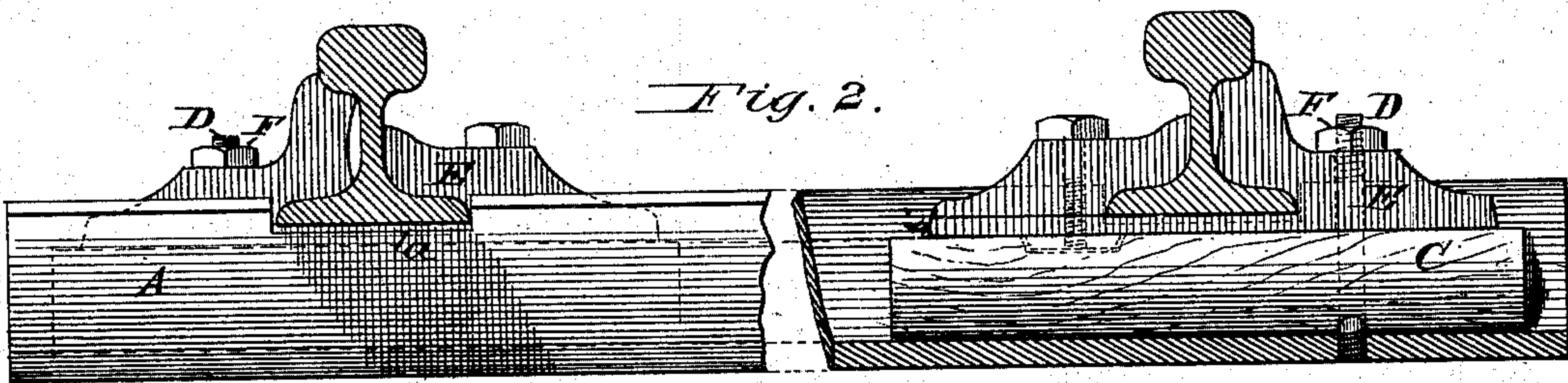


Fig. 3.

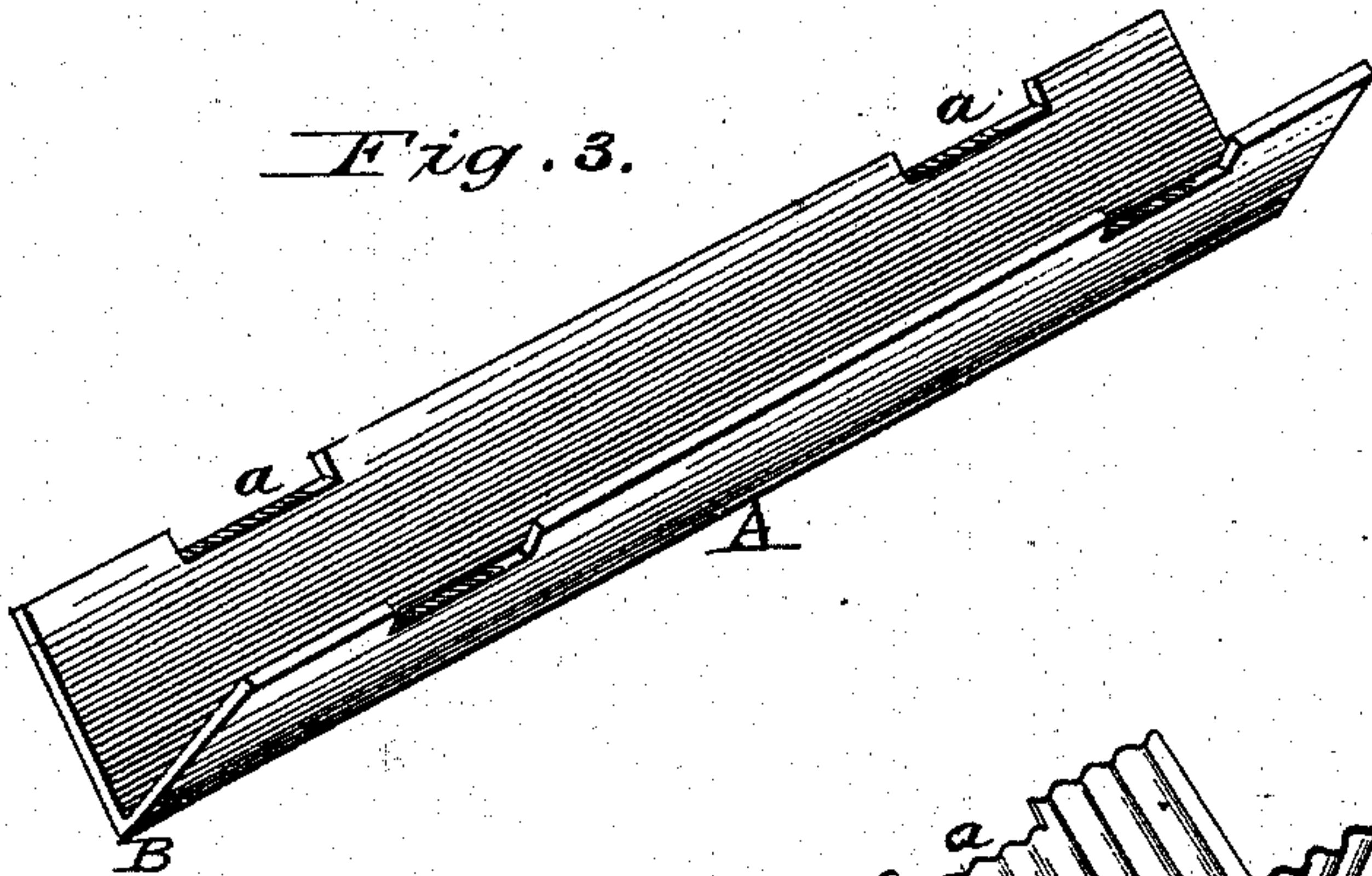


Fig. 4.

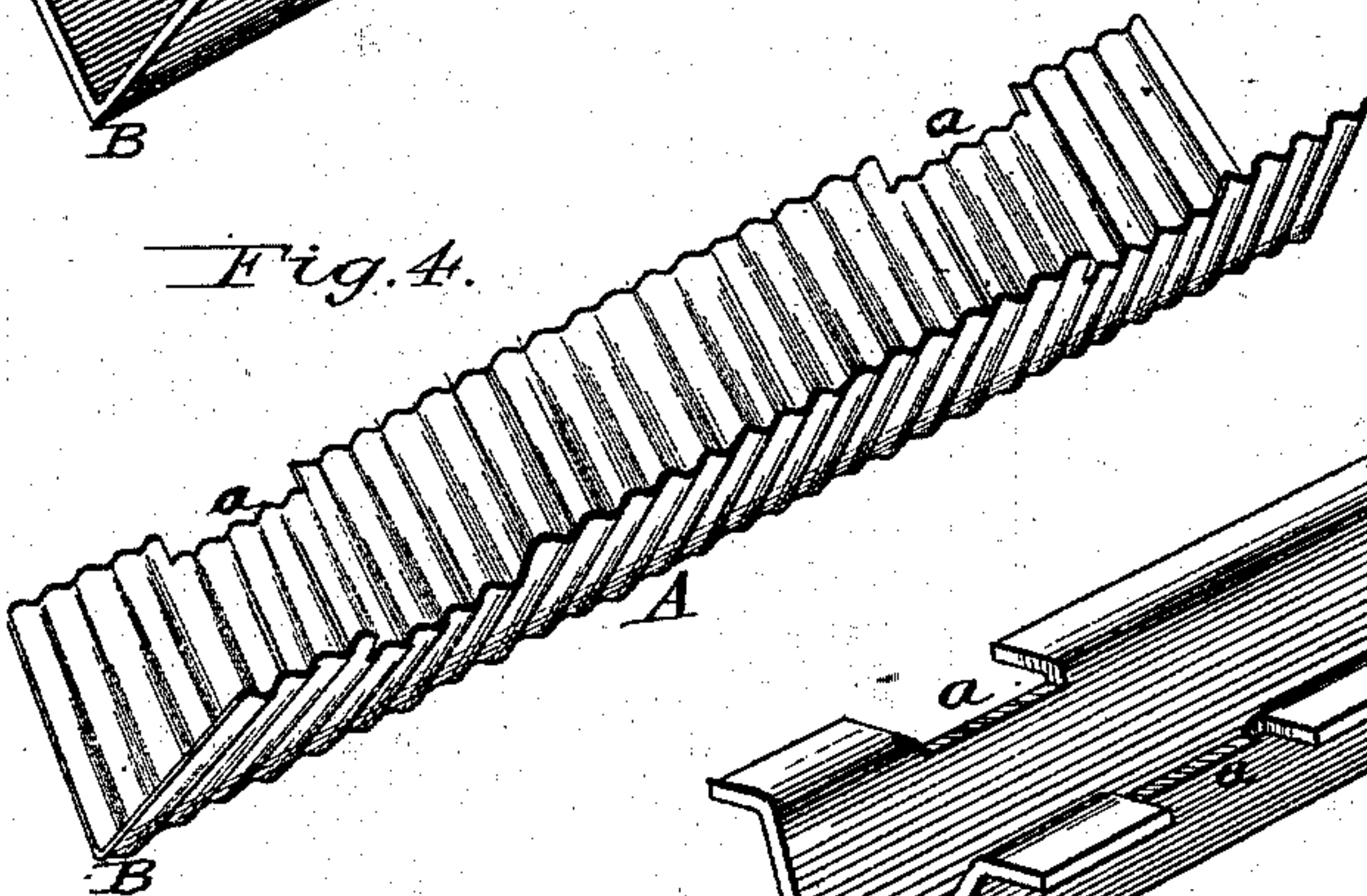


Fig. 5.

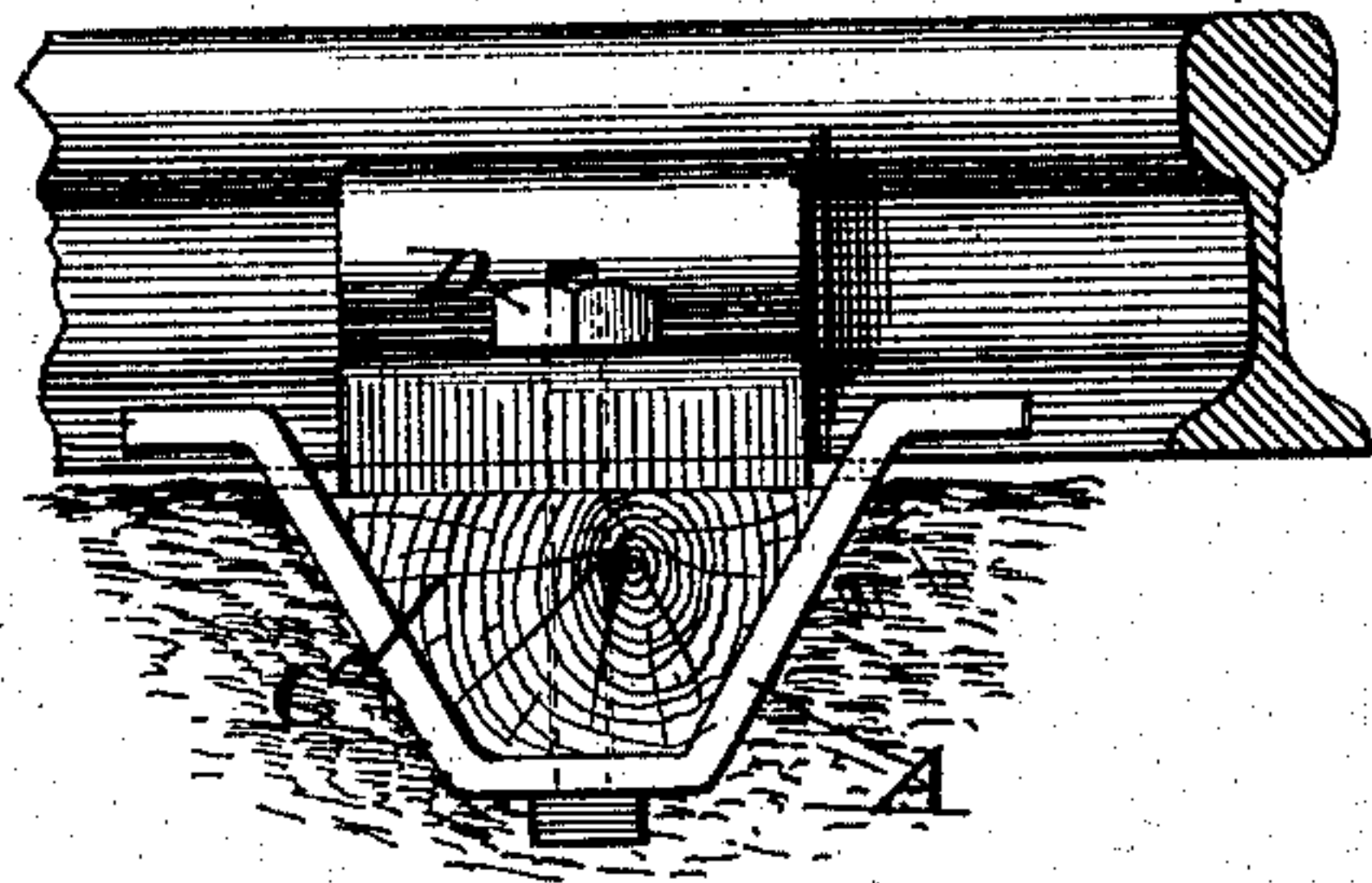
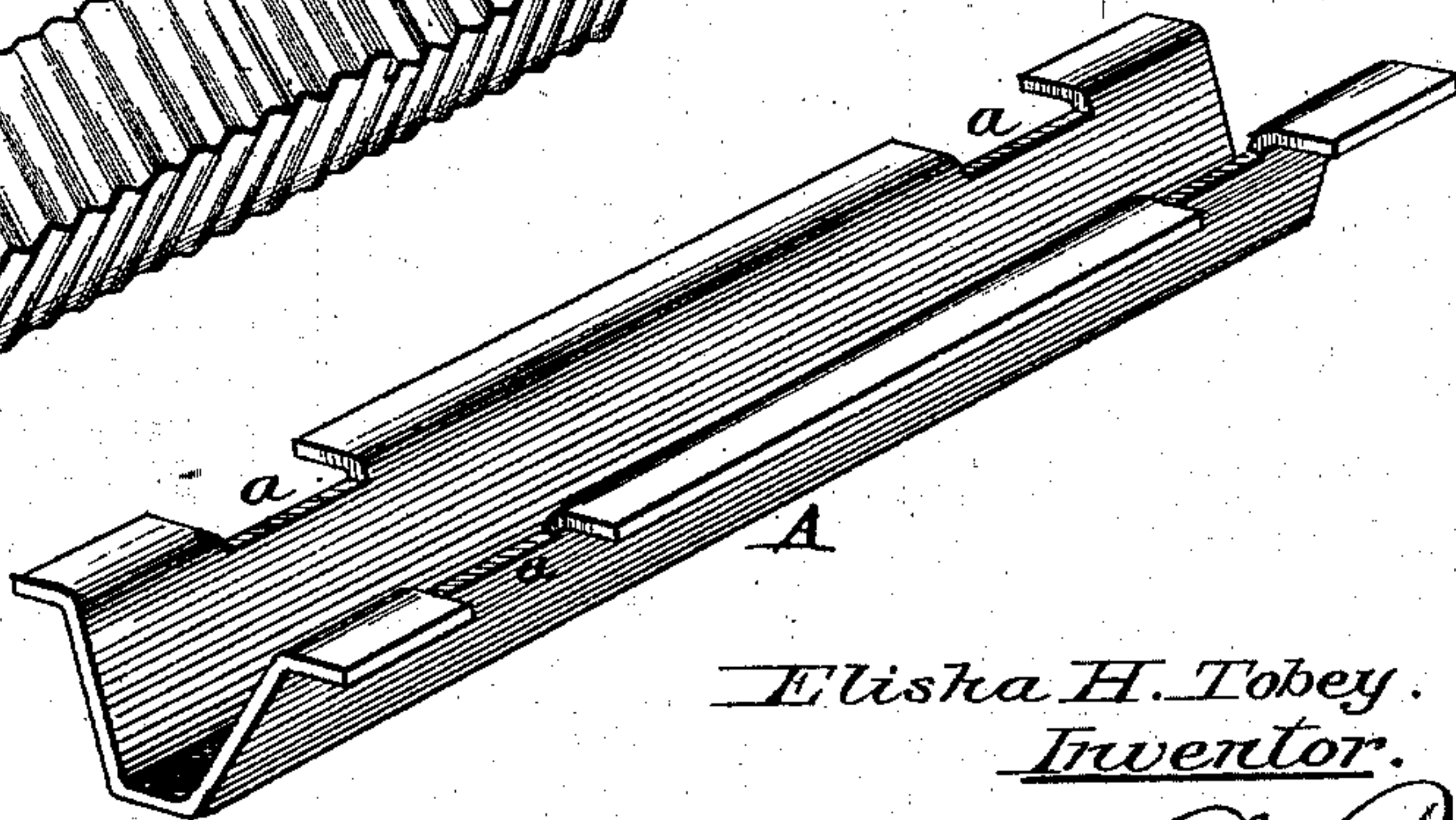


Fig. 6.



Attest:

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RAILROAD CROSS-TIE.

SPECIFICATION forming part of Letters Patent No. 249,271, dated November 8, 1881.

Application filed September 7, 1881. (No model.)

To all whom it may concern :

Be it known that I, ELISHA H. TOBEY, a citizen of the United States of America, residing at Denver, in the county of Arapahoe and State of Colorado, have invented certain new and useful Improvements in Railroad Cross-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, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification, and in which—

Figure 1 is an end view of two ties, showing a side elevation of a rail attached thereto. Fig. 2 is a side view of a tie, partly in section, showing the ends of two rails attached thereto. Fig. 3 is a perspective of the bed-plate with the wooden cushion removed. Fig. 4 is a perspective of the bed-plate, showing corrugated surfaces. Fig. 5 is an end view of tie and bed-plate, with a flattened bottom. Fig. 6 is a perspective of a bed-plate with a flattened bottom.

My invention relates to railroad cross-ties, and has for its object the securing of a well-rammed solid foundation for the seat of the tie; and it consists of a compound tie constructed as will be hereinafter more fully set forth.

In the accompanying drawings, forming a part of this specification, A represents the bed-plate, which may be made of any suitable material, but preferably of iron. The bed-plate A is composed of two sides of a right-angle triangle, corrugated or plain, with the right angle or corner B set in the ground. The sides of the base-plate are corrugated for the purpose of getting an increased bearing-surface, and preventing lateral displacement, and for strengthening the plate. The upper edges of the base-plate may be cut away, as shown at *a a a a*, to receive the rails, or they may be made with straight edges, the wooden cushion

being made comparatively thicker. The upper open side of the base-plate is filled or partly filled with a wooden cushion, C, cut with an angle corresponding to that of the bed-plate, and fitting the same, upon which the rails rest. The wooden cushion may extend the entire length of the bed-plate, or it may be made in two sections of suitable length, and one placed under each rail.

A bolt, D, is passed through the bed-plate A, cushion C, and chair E to secure the rail and tie together, and all the parts are secured firmly in place by a nut, F, on this bolt.

When the chair is suitably constructed one bolt on either the outer or inner side of the rail may be sufficient; but when it is necessary two bolts, one on each side of the rail, may be used for each tie.

The base-plate thus far shown and described is composed of two sides of a right-angled triangle; but, when desired, the angle may be a little greater or a little less than a right angle without departing from the spirit of my invention, the object being to present such an inclination of the sides as will enable the solid ramming of the road-bed beneath the tie from each side of it.

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

1. A railroad-tie composed of a triangular-shaped base-plate containing a triangular wooden cushion, substantially as and for the purpose set forth.

2. A railroad-tie composed of a triangular-shaped corrugated base-plate containing a wooden cushion, substantially as and for the purpose set forth.

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

ELISHA H. TOBEY.

Witnesses:

OLIVER S. MCCLAIN,
ARTHUR N. DEMOREST.