

(No Model.)

E. M. COOKE.

RAIL JOINT.

No. 358,840.

Patented Mar. 8, 1887.

Fig. 1.

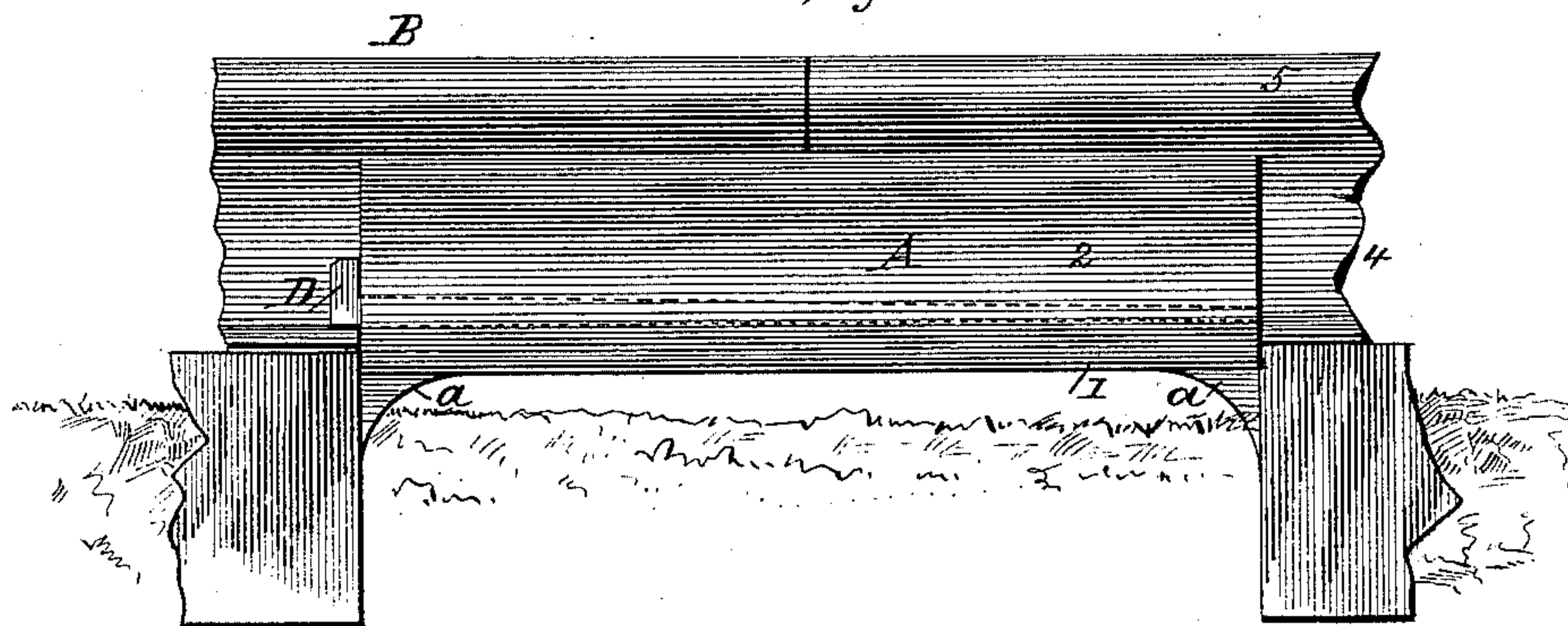


Fig. 2.

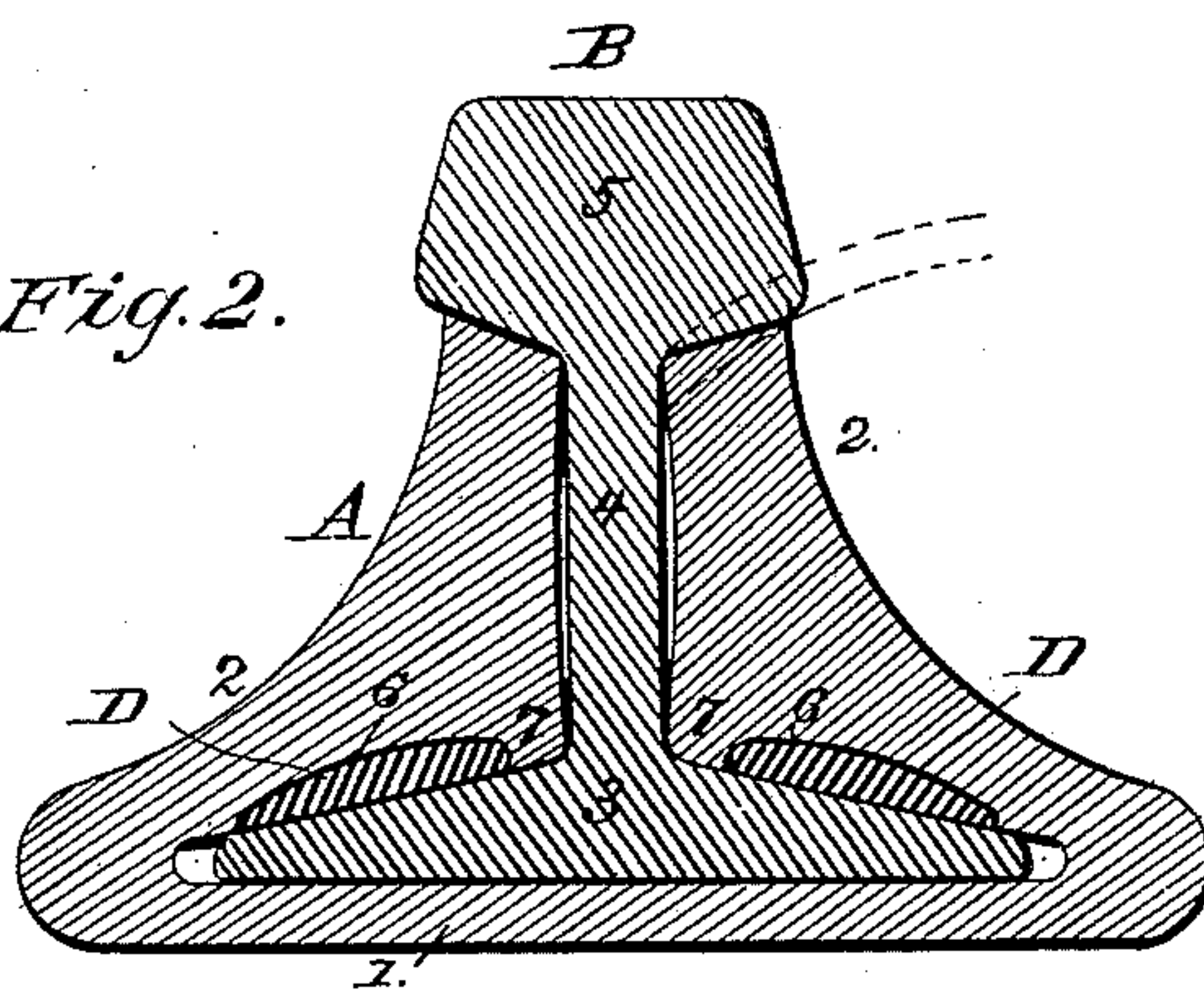
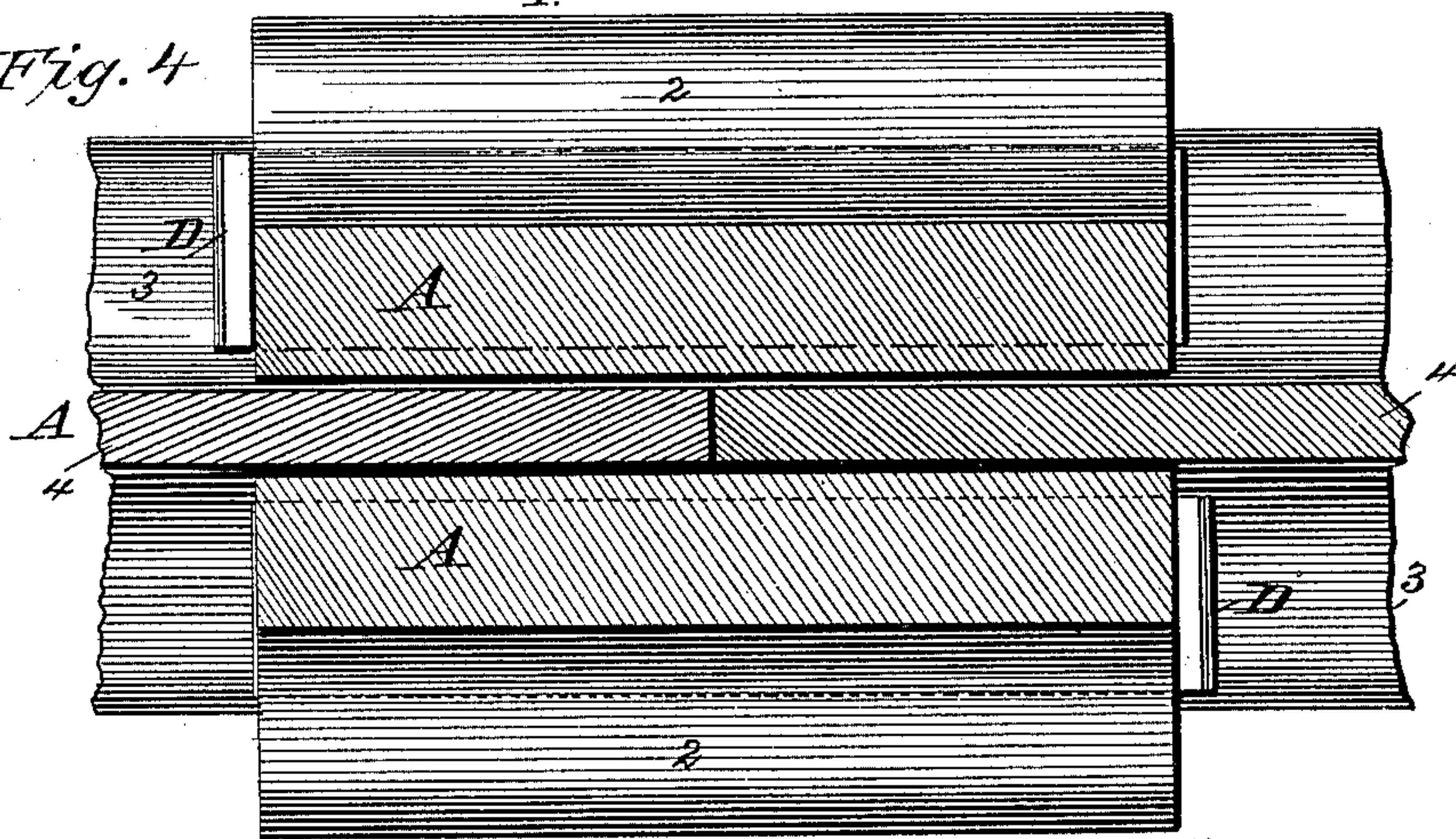


Fig. 4.



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Fig. 3.

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EDWIN M. COOKE, OF HOT SPRINGS, ARKANSAS.

RAIL-JOINT.

SPECIFICATION forming part of Letters Patent No. 358,840, dated March 8, 1887.

Application filed July 26, 1886. Serial No. 209,123. (No model.)

To all whom it may concern:

Be it known that I, EDWIN M. COOKE, of Hot Springs, in the county of Garland and State of Arkansas, have invented a new and useful Improvement in Rail-Joints, of which the following is a specification.

This invention is an improvement in rail-joints, and has for its objects to so connect the ends of adjoining rails as to form them practically into a single rail, to lock the jacket from sliding longitudinally of the rails without the intervention of fastening bolts or spikes, and to connect the said jacket and rails without fastening-bolts, to prevent the creeping of such rails, all as will be described.

To such ends the invention consists in certain features of constructions and novel combinations of parts, as will be hereinafter specified.

In the drawings, Figure 1 is a side view of a rail-joint constructed according to my invention. Fig. 2 is a cross-section thereof. Fig. 3 is a detail view of one of the keys, and Fig. 4 is a horizontal section drawn immediately above the keys.

The jacket A is formed in a single piece, with a base, 1, and side wings, 2, projected up from the edges of such base and conformed to the hollow of the rail B. This rail may be of ordinary construction, with a base, 3, a web, 4, and a tread or cap, 5. As before stated, the wings 2 fit the hollow of the rail between the cap and base thereof, and the upper ends of such wings fit closely under the tread or cap of the rail in such manner that the wings cannot be forced outward from the rail without tearing away a portion of either the rail or the wings of the jacket, as will be understood from Fig. 2.

In the inner walls of the wings 2 I form at 6 longitudinal recesses directly above the base of the rail, and the wings are extended at 7, to provide bearings against the rail at the juncture of the base and web, and at the same time form walls for the grooves 6, and thereby prevent the keys driven in said grooves from any considerable lateral play. The grooves 6 taper from end to end, as will be understood from Fig. 1.

In practice, the ends of two rails it is desired to unite are inserted into a jacket constructed

according to my invention, and such jacket is then fitted snugly between and extends down between two adjacent sleepers or ties, C, which are securely ballasted, as usual. This extension of the jacket down between the ties is preferably accomplished and increased by providing at the opposite ends of the jacket depending lugs or lips a, as shown most clearly in Fig. 1, as by such construction a considerable bearing may be secured against the ties without materially adding to the weight of the jacket. When the jacket and rails are so arranged, the keys D are driven into place. These keys are driven in reverse directions on opposite sides of the rail, one into each of the grooves 6, and bind the rails so securely to the jacket as to prevent any slipping of the rails independently of such jacket, and the latter is prevented from any longitudinal movement by its arrangement between the ties, as shown most clearly in Fig. 1. I prefer to form these keys of spring metal, and to make them normally curved, so that when driven into the grooves they will operate by their spring action to increase the binding and retaining force of the keys, which are also preferably tapered, as will be understood from Fig. 3.

By my invention the ends of two rails may be united in such manner as to form practically a single rail, the ends of such rails being firmly and solidly supported, as will be manifest from the drawings and the foregoing description.

Having thus described my invention, what I claim as new is—

1. A jacket for rail-joints, having the inner walls of the horizontal portions of its side wings recessed or grooved longitudinally, and provided with extensions 7, forming walls for said grooves, and adapted to provide bearings against the rail at the juncture of the base and web, substantially as described, and for the purposes specified.

2. The combination, with two adjacent sleepers and two rails having their ends united midway between said sleepers, of the jacket fitting the rails at the juncture thereof and extended down between and snugly against the sides of the sleepers, substantially as set forth.

3. The combination of two adjacent sleepers, two rails having their ends united midway be-

ween said sleepers, the jacket fitting the rails at the juncture thereof and extended down between and snugly against the sides of the sleepers, and keys driven between said rails and jacket and in reverse directions on opposite sides of the rail, substantially as set forth.

4. The combination, in a rail-joint, with the rails to be joined and a jacket embracing said rails at their juncture, of a bent spring-key driven between said jacket and rail, substantially as set forth.

5. The improved jacket for rail-joints, having a base provided with depending lips or lugs at its opposite ends, and having side wings projected upward from the edges of said base, said wings having longitudinal recesses formed in their inner walls, all constructed and arranged substantially as set forth.

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Witnesses:

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