

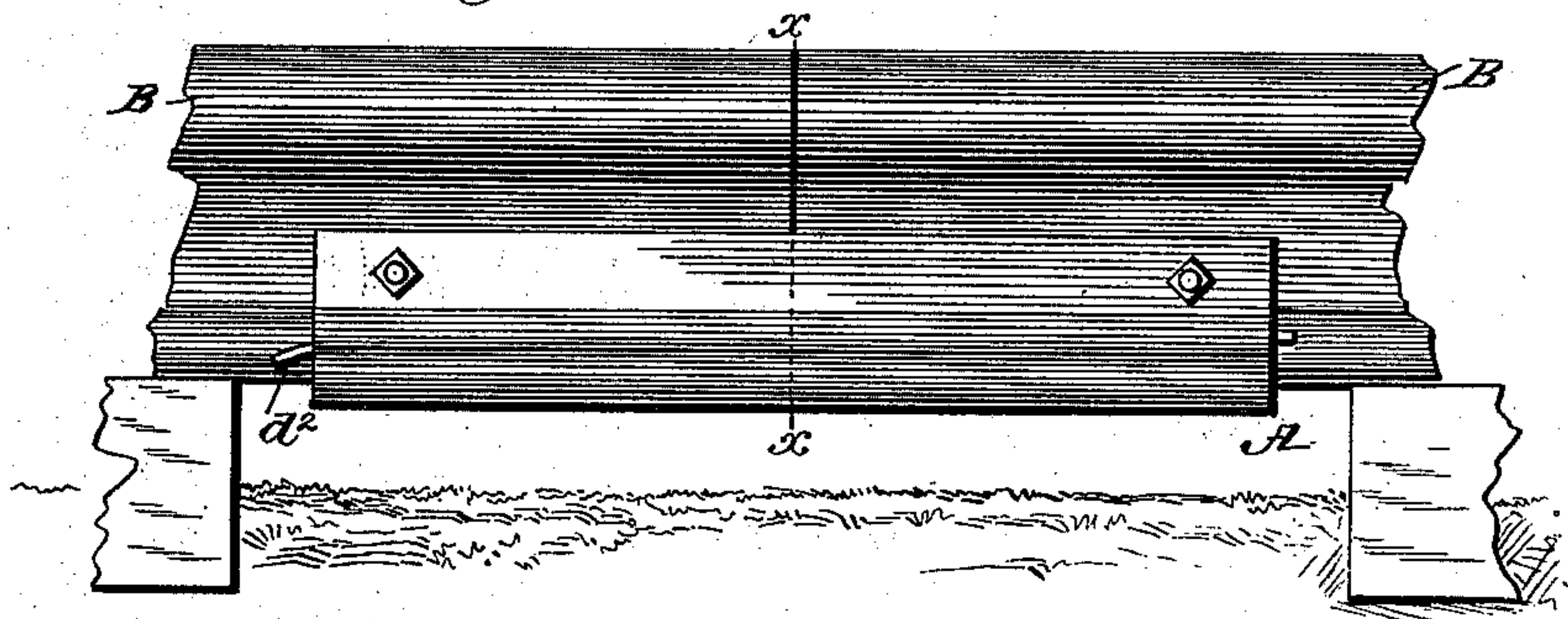
(No Model.)

E. M. COOKE.  
RAIL JOINT.

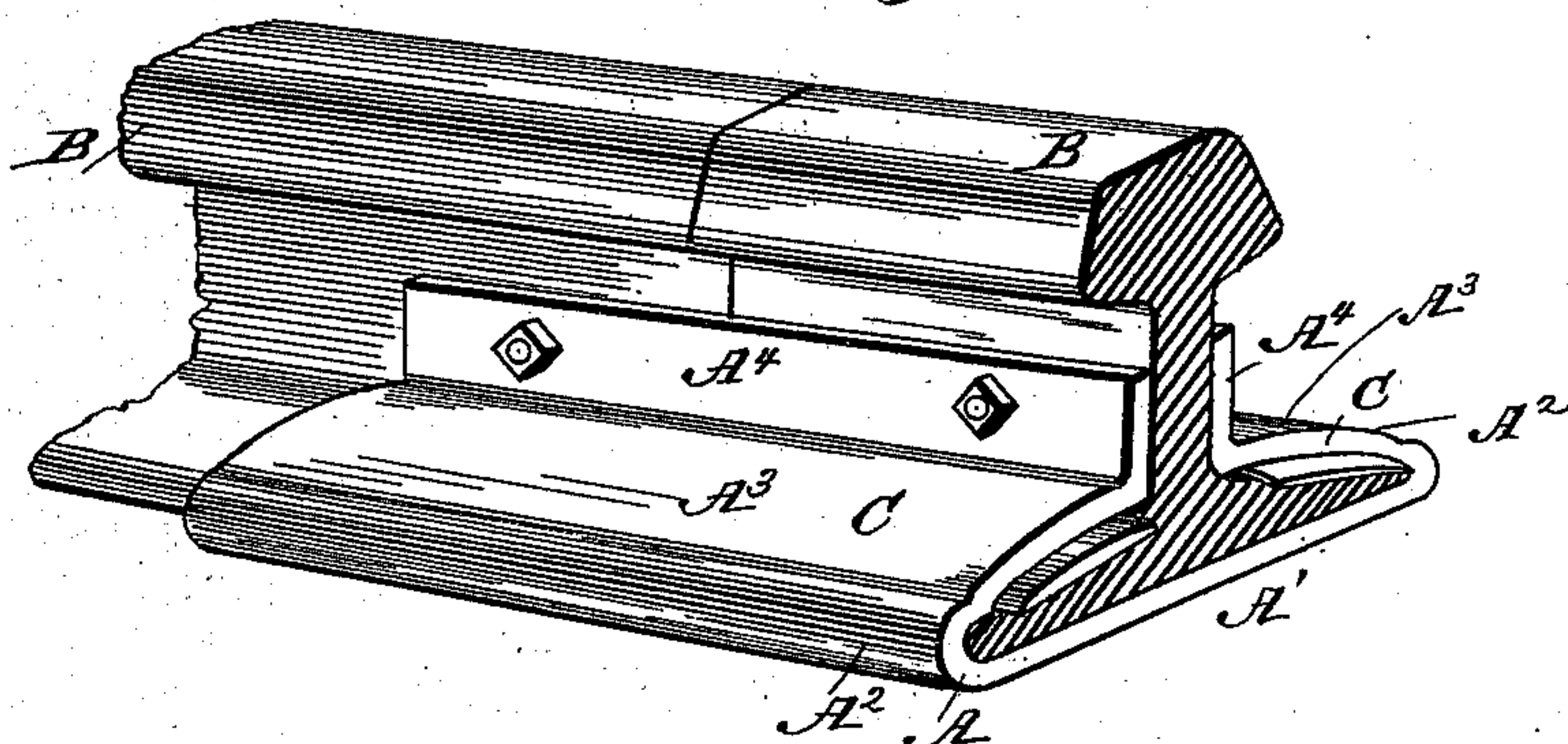
No. 402,308.

Patented Apr. 30, 1889.

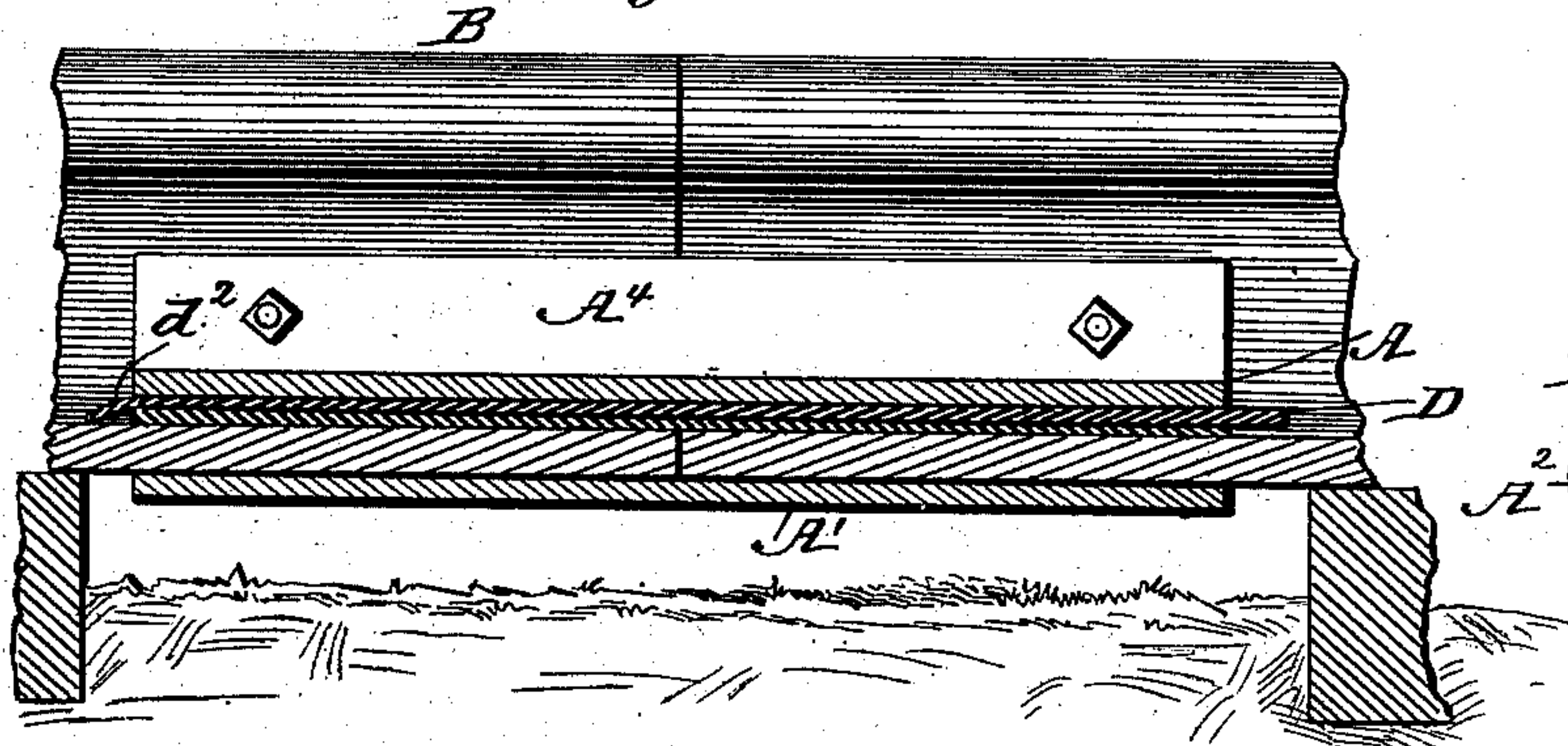
*Fig. 1.*



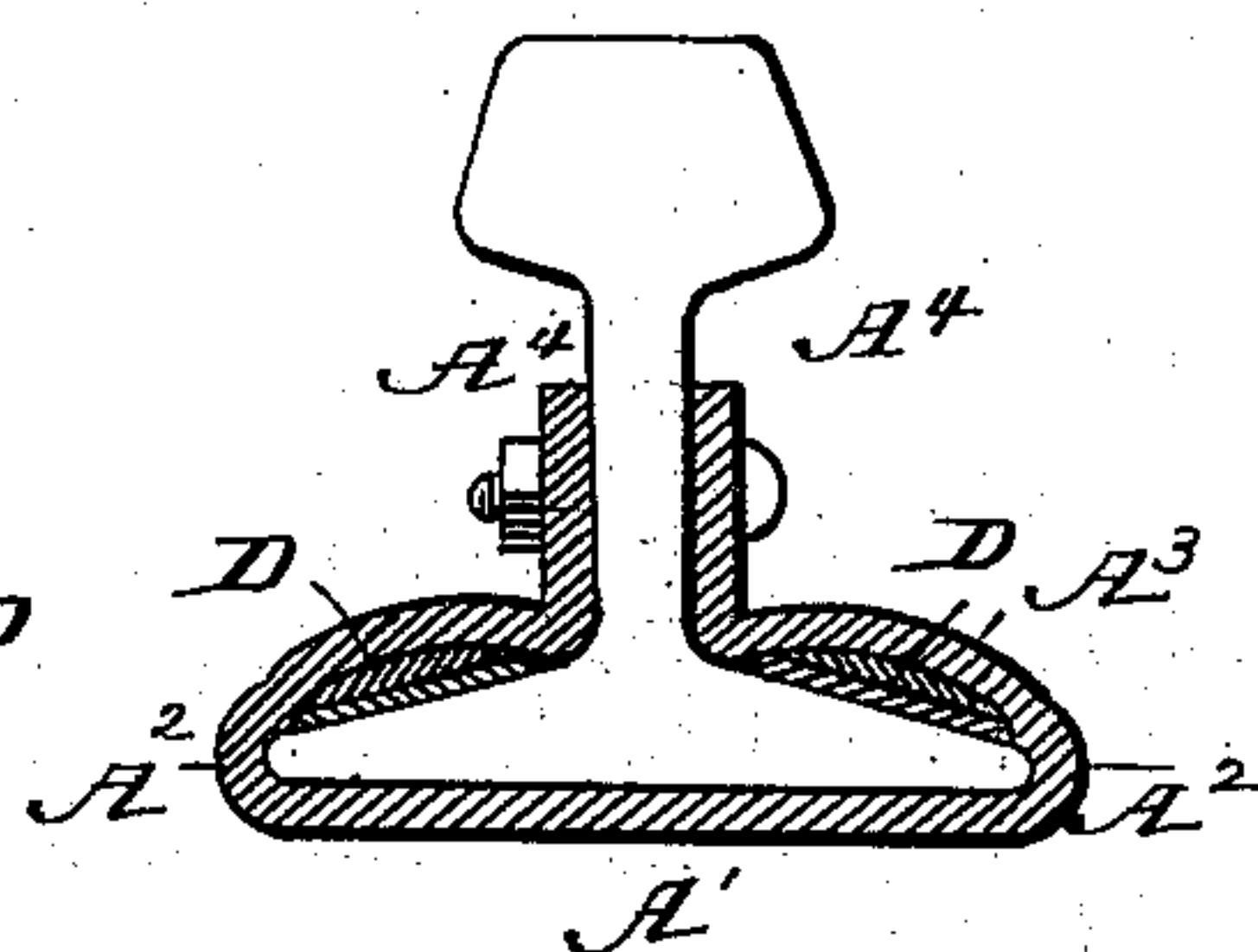
*Fig. 2.*



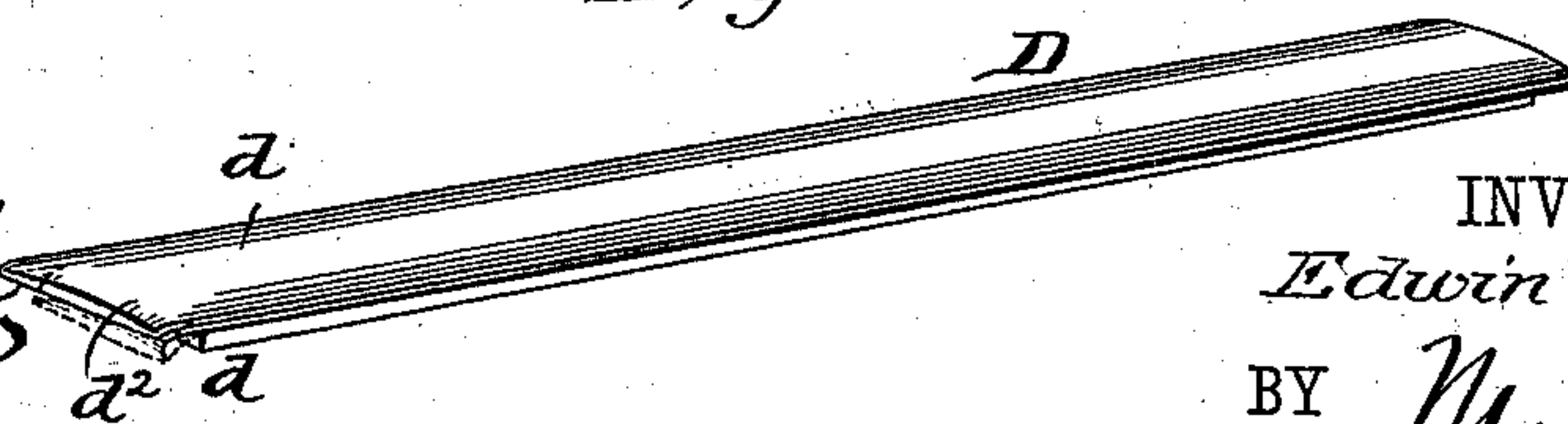
*Fig. 3.*



*Fig. 4.*



*Fig. 5.*



WITNESSES:

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# UNITED STATES PATENT OFFICE.

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## RAIL-JOINT.

SPECIFICATION forming part of Letters Patent No. 402,308, dated April 30, 1889.

Application filed February 4, 1889. Serial No. 298,684. (No model.)

*To all whom it may concern:*

Be it known that I, EDWIN M. COOKE, of Brooklyn, Kings county, and State of New York, have invented a new and useful Improvement in Rail-Joints, of which the following is a full, clear, and exact description.

My invention is an improvement in rail-joints, and has for an object to provide a simple, durable, and easily-applied construction which may be cheaply made and which will be efficient and practicable in use.

The invention consists in the novel construction and combination of parts, as will be described and claimed.

In the drawings, Figure 1 is a side view, Fig. 2 is a perspective view, Fig. 3 is a longitudinal section, and Fig. 4 a cross-section, of my improvement as in use; and Fig. 5 is a detail view of the wedge.

The jacket A is preferably formed by rolling a plate of metal into the desired shape, which will be more fully described hereinafter. In forming the jacket I goffer or corrugate it in such manner as to form the recesses for the wedges. I make the jacket of metal of equal thickness throughout, and it comprises the base-plate A', the edge portions A<sup>2</sup> at the edges of base A', the goffers or corrugated portions A<sup>3</sup> forming the walls of the wedge-recesses and the side plates, A<sup>4</sup>, such plates A<sup>4</sup> fitting against the opposite sides of the webs of the meeting-rails B, and being perforated for the passage of the fastening-bolts, as shown. It will be seen that the side plates, A<sup>4</sup>, do not extend up and bear under the treads of the rails, so that the pressure on such rails is borne wholly upon the base A' of the jacket. The strength of the jacket is materially increased by the goffering or corrugating, and such construction also results in forming the ways or recesses for the wedges. The under side of the portion A<sup>3</sup>, forming the top wall of the recess or way C for the wedge D, is formed longitudinally parallel with the upper side of the base of rail B.

The wedge D is formed of the sections d d', the former, d, consisting of a base-bearing, and the latter, d', constituting the driv-

ing-section, the upper face of section d and the lower face of section d' being beveled, the opposite sides of such sections being parallel, so that the section d will rest flat against the top of the rail-base and the section d' will rest flat against the under face of the goffer A<sup>3</sup>, the beveled faces of sections d d' bearing together, as shown, so that as the section d' is moved longitudinally on section d within the space between the rail-base and goffer A<sup>3</sup>, I effect a clamping together of such parts, as shown.

It will be understood that the sections d d' are driven in reverse directions on opposite sides of the rails. After the section d' has been properly driven it is secured to prevent it from moving back. This is preferably effected by forming the point of said section to extend, when driven up, slightly past the base of the section d, and to bend such point at d<sup>2</sup> down along the base of section d to secure such parts, as will be understood from the drawings.

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

1. In a rail-joint, the combination, with the rails and the jacket embracing the same, ways or recesses being provided between the upper side of the base of the rail and the jacket, of the wedges fitting said ways or recesses and formed of sections d d', having each a straight and an inclined face, the section d being inserted in the way, and the section d' being driven up on such section d and secured, substantially as set forth.

2. The improved rail-joint consisting of the jacket having a base-plate and provided with goffers or corrugations A<sup>3</sup>, having their under sides or faces formed on horizontal lines, whereby in operation such surfaces will be on lines parallel with the tops of the rail-base, and the wedge formed in sections and adapted to bear between said goffers and the rail-base, substantially as set forth.

3. The improvement in rail-joints, substantially as herein described, consisting of the rails, the jacket A, fitted thereto and formed

with goffers or corrugations  $A^3$ , having their under sides formed in lines parallel with the tops of the rails, and the wedges formed in sections  $d$   $d'$ , the sections  $d$  being inserted in  
5 the ways between the goffers  $A^3$  and the rail-base, and the sections  $d'$  being driven up on the sections  $d$  until the points pass the bases

of sections  $d$ , and bent at  $d^2$  down against the bases of sections  $d$ , all substantially as and for the purposes specified.

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Witnesses:

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