

No. 614,638.

Patented Nov. 22, 1898.

W. S. WARD.
RAILROAD TIE.

(Application filed Nov. 18, 1897.)

(No Model.)

Fig. 1.

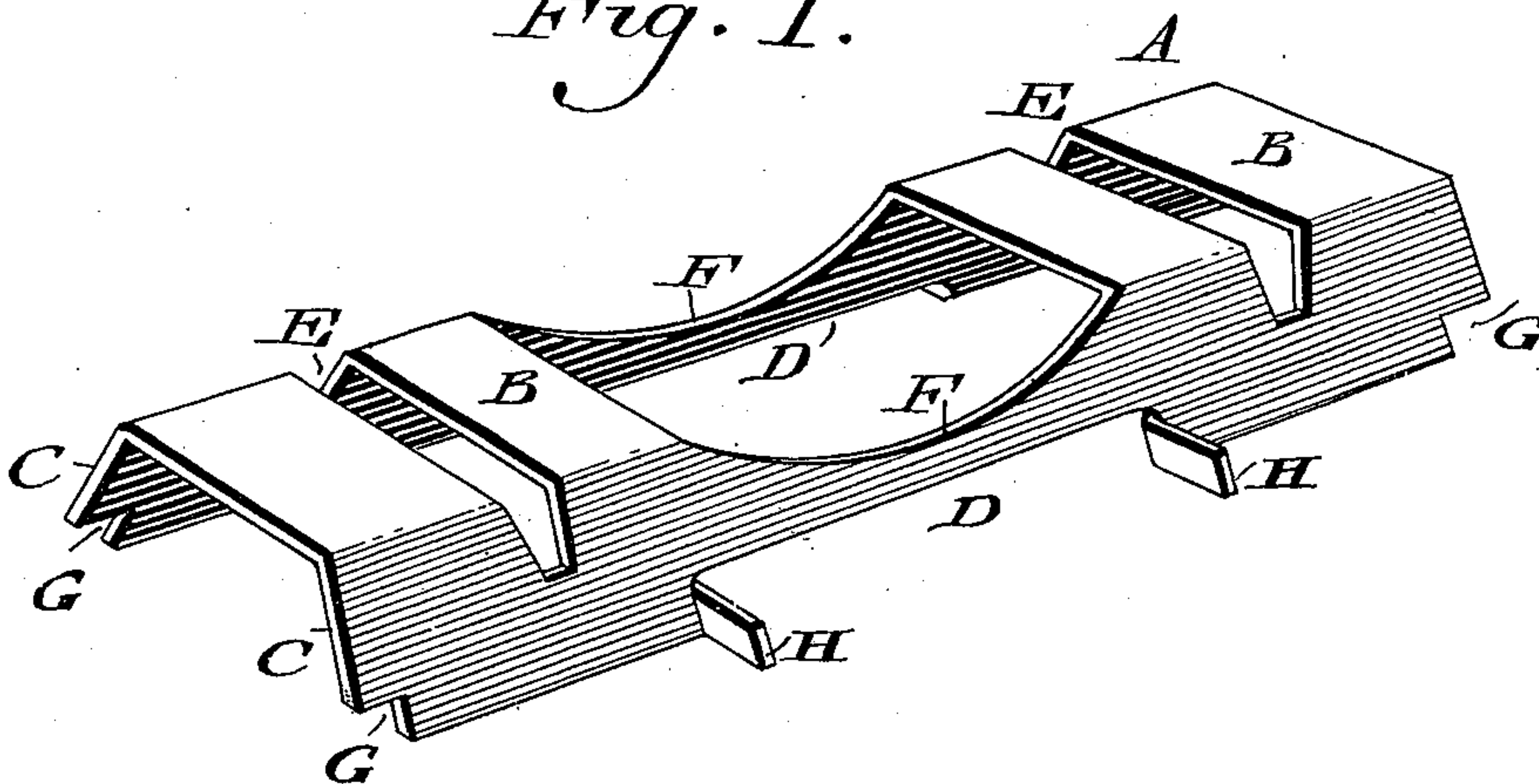
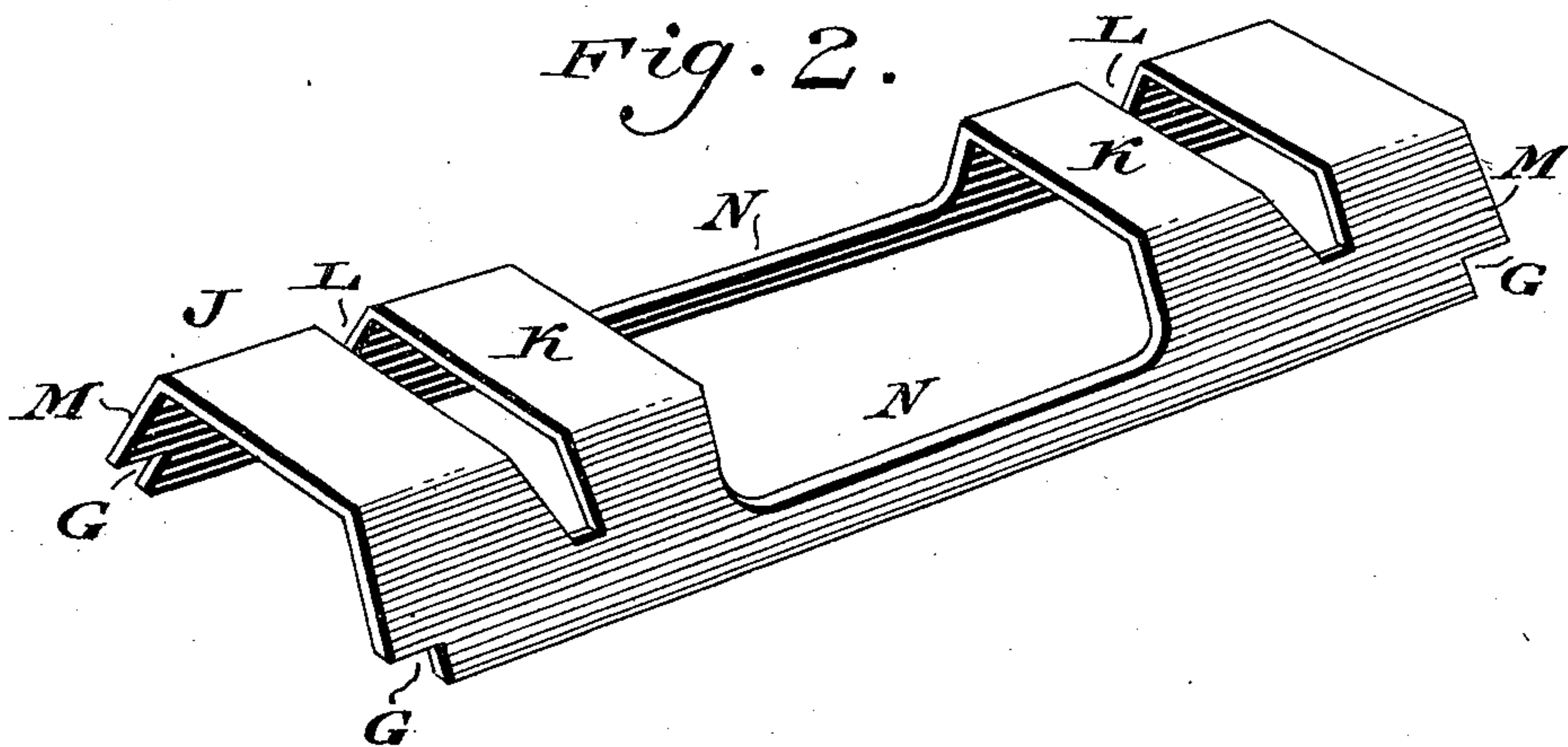


Fig. 2.



WITNESSES:

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RAILROAD-TIE.

SPECIFICATION forming part of Letters Patent No. 614,638, dated November 22, 1898.

Application filed November 16, 1897. Serial No. 658,678. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM S. WARD, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Railroad-Ties, which improvement is fully set forth in the following specification and accompanying drawings.

My invention consists of an improved construction of railroad-tie which can be cheaply manufactured and is effective in its operation, the same consisting of a top having flaring or diverging legs, cut-away portions intermediate the ends of said top, said legs also having recesses therein meeting said cut-away portions, and said tie being also provided, if desired, with anchors or similar devices which are adapted to be embedded in the road-bed or ballast and serve to prevent longitudinal shifting of the tie.

It further consists of novel details of construction, all as will be hereinafter set forth, and particularly pointed out in the claims.

Figures 1 and 2 represent perspective views of railroad-ties embodying my invention.

Similar letters of reference indicate corresponding parts in the figures.

Referring to the drawings, the tie A (seen in Fig. 1) consists of the top B, having the diverging or flaring legs C, said legs having the recessed or cut-away portions D in the lower edge thereof, whereby the weight is reduced to a minimum, while the top of said tie has the recess F therein, the latter being located intermediate of the transverse recesses E, which are adapted for the reception of rails, said recess F being formed by the junction of a cut-away portion in the top B, which meets recesses in the upper portion of the legs C.

If desired, I may provide the recessed flaring legs C with the anchors H, located at substantially the point indicated, and I may also recess the corners of the legs C, as indicated at G, if desired, for the reception of wood or other sleepers. (Not shown.)

In Fig. 2 I have shown another embodiment of the principle of my invention, the tie J seen therein having a top K provided with the transverse recesses L, between which latter is located the recessed portion N, it being

noted that the lower edge of each of the legs M is not recessed, as indicated at D in Fig. 1.

If desired, I may provide the outer corners of the legs M in Fig. 2 with recesses G, and it will also be evident that I may also provide the legs M with anchors similar to those seen at H in Fig. 1, which may be integral with said legs or secured to the same, said anchors being embedded in the road-bed or ballast and serving to prevent longitudinal shifting or spreading of the tie, as is evident.

The tie is preferably constructed of sheet or wrought metal or similar material, and it will be evident that the same can be cheaply struck up, rolled, or otherwise manufactured, and is effective in its operation.

By providing the ties, constructed as above described, with the recessed portions F and N it will be evident that a certain amount of resiliency will be attained, which is very desirable, and, furthermore, if desired, a conduit can be laid in the recessed portions F and N thus enabling said conduit to pass over the tie, according to requirements. It will also be evident that slight changes may be made which will come within the scope of my invention, and I do not, therefore, desire to be limited in every instance to the exact construction I have herein shown and described.

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

1. A railroad-tie, having a top adapted for the reception of the rails, and a cut-away portion intermediate the ends of said top, the latter having divergent or flaring legs which are recessed in their upper portion contiguous with said cut-away portion.

2. A railroad-tie, having a top adapted for the reception of the rails and a cut-away portion intermediate the ends of said top, the latter having divergent legs having recesses in their upper portion contiguous to said cut-away portion and forming a continuation thereof, said legs being also recessed at their lower edges.

3. A railway-tie having a top, a substantially centrally-located cut-away portion in said top, the latter having divergent legs, said legs having recesses in their upper por-

tion which form a continuation of said cut-away portions, anchors attached to said legs and recesses in the lower corners of the latter.

4. A railroad-tie, having a top provided
5 with transverse recesses therein, a cut-away
portion intermediate of said recesses, divergent
legs having recesses in their upper portion,
contiguous to said cut-away portion, and forming
a continuation thereof, said legs
10 being also recessed on their lower edges and
provided with anchors intermediate the ends
of the tie.

5. A railroad-tie having a top provided with
transverse recesses therein, for the reception
of the rails, and a cut-away portion interme- 15
diate said recesses, said top having divergent
or flaring legs which are recessed in their
upper portion contiguous with said cut-away
portion, and said tie having anchors attached
thereto.

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Witnesses:

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