

No. 635,021.

Patented Oct. 17, 1899.

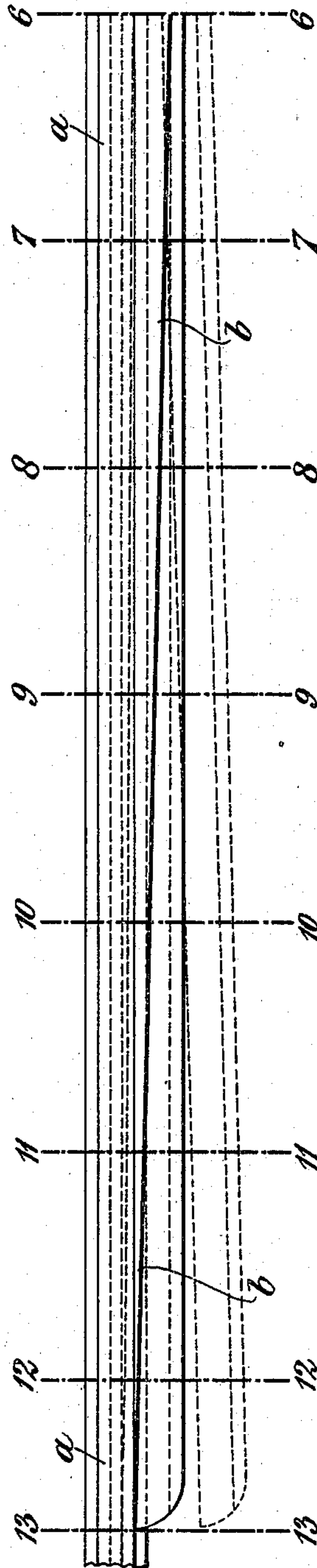
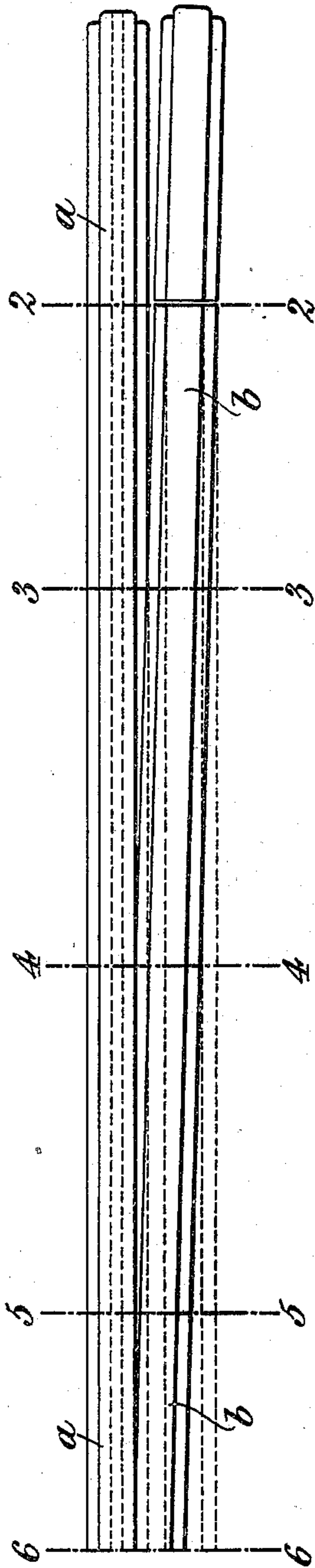
E. P. MARTIN & R. PRICE-WILLIAMS.
TONGUE RAIL FOR RAILWAY SWITCHES.

(Application filed Apr. 14, 1899.)

(No Model.)

3 Sheets—Sheet 1.

Fig. 1.



Witnesses.
Ed. Balloch,
A. M. Perkins

Inventors.
E. P. Martin and
Richard Price-Williams
By their Attorneys,
Baldwin Davidson & Knight

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Fig. 2.

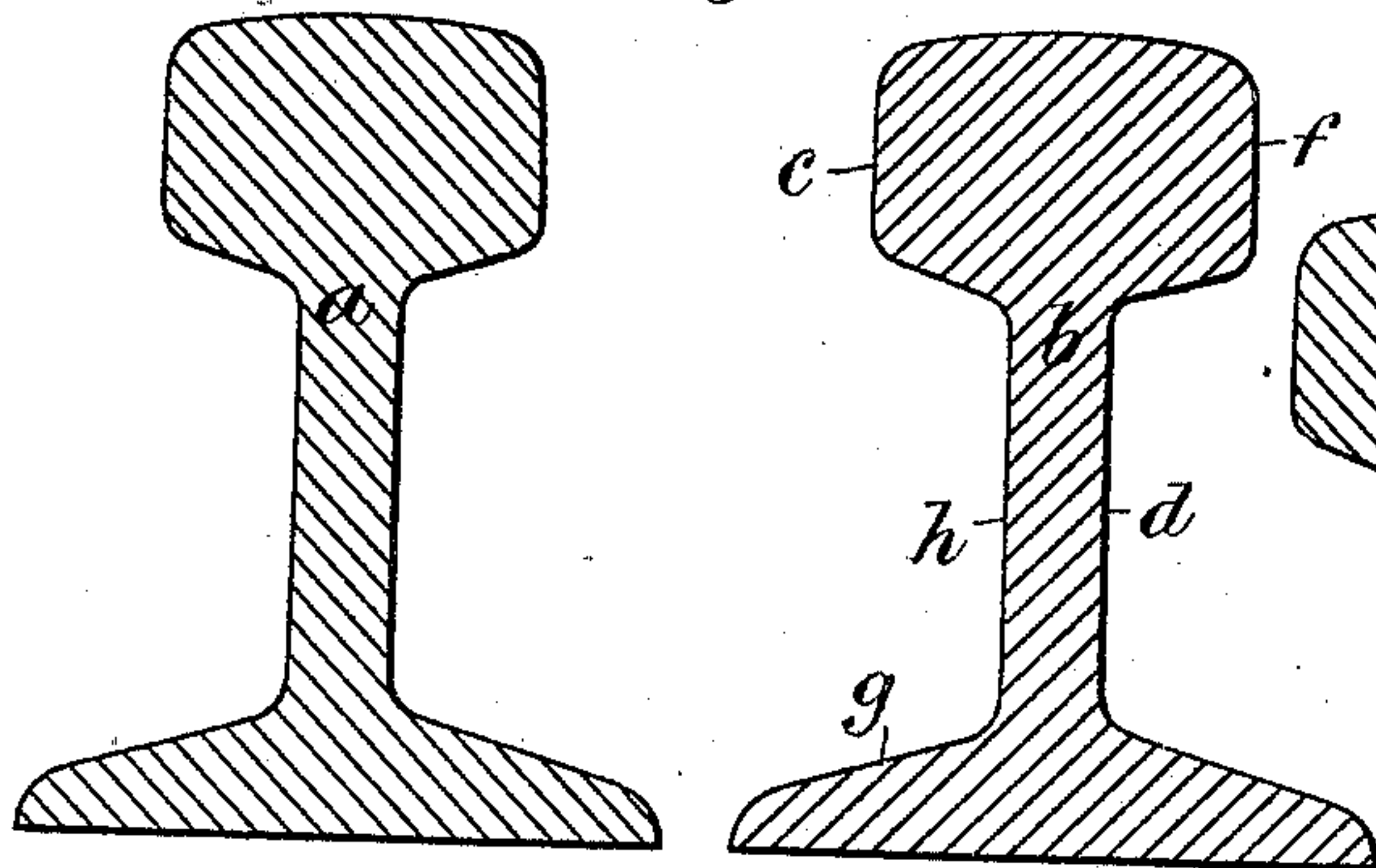


Fig. 3.

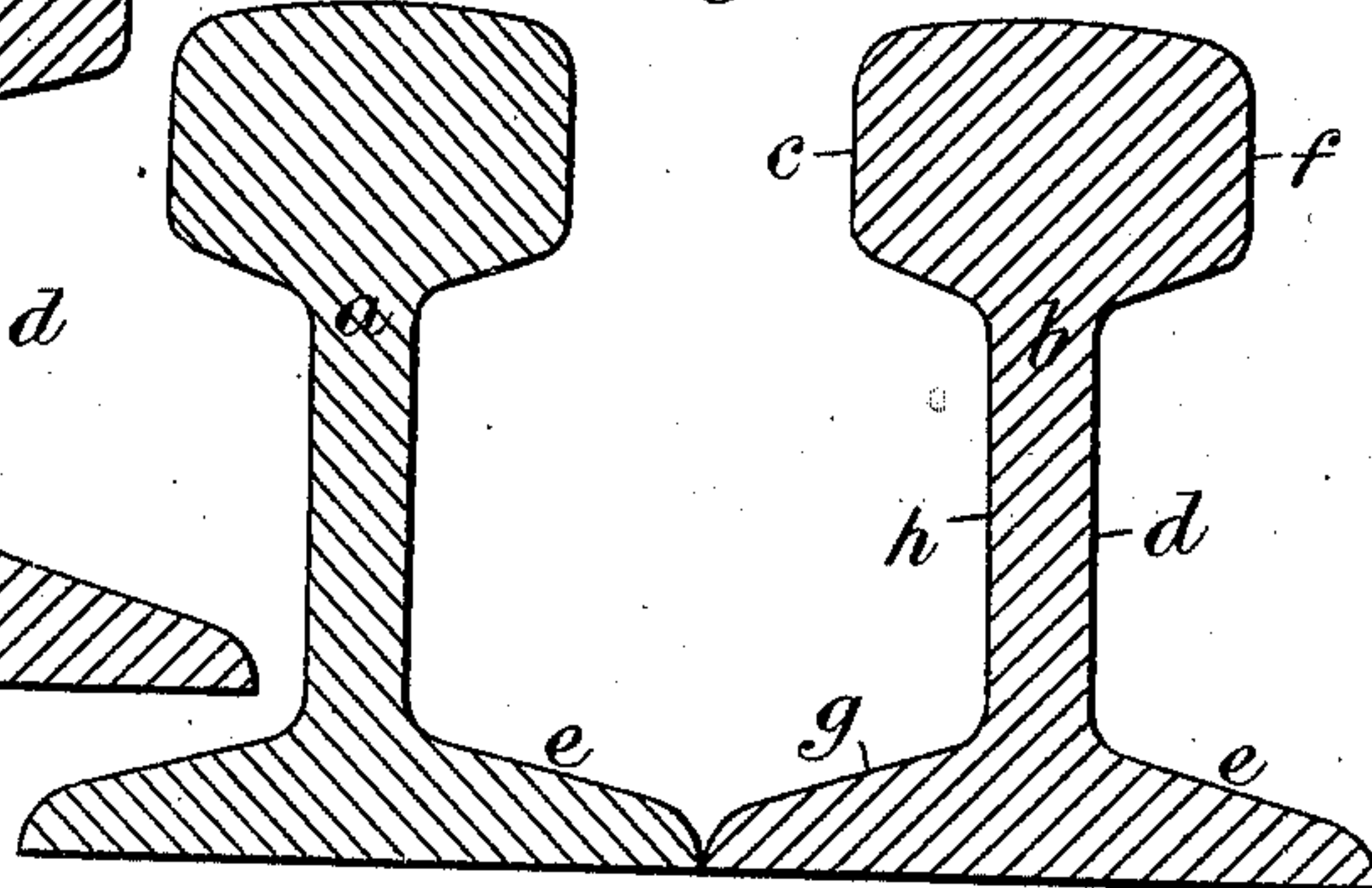


Fig. 4.

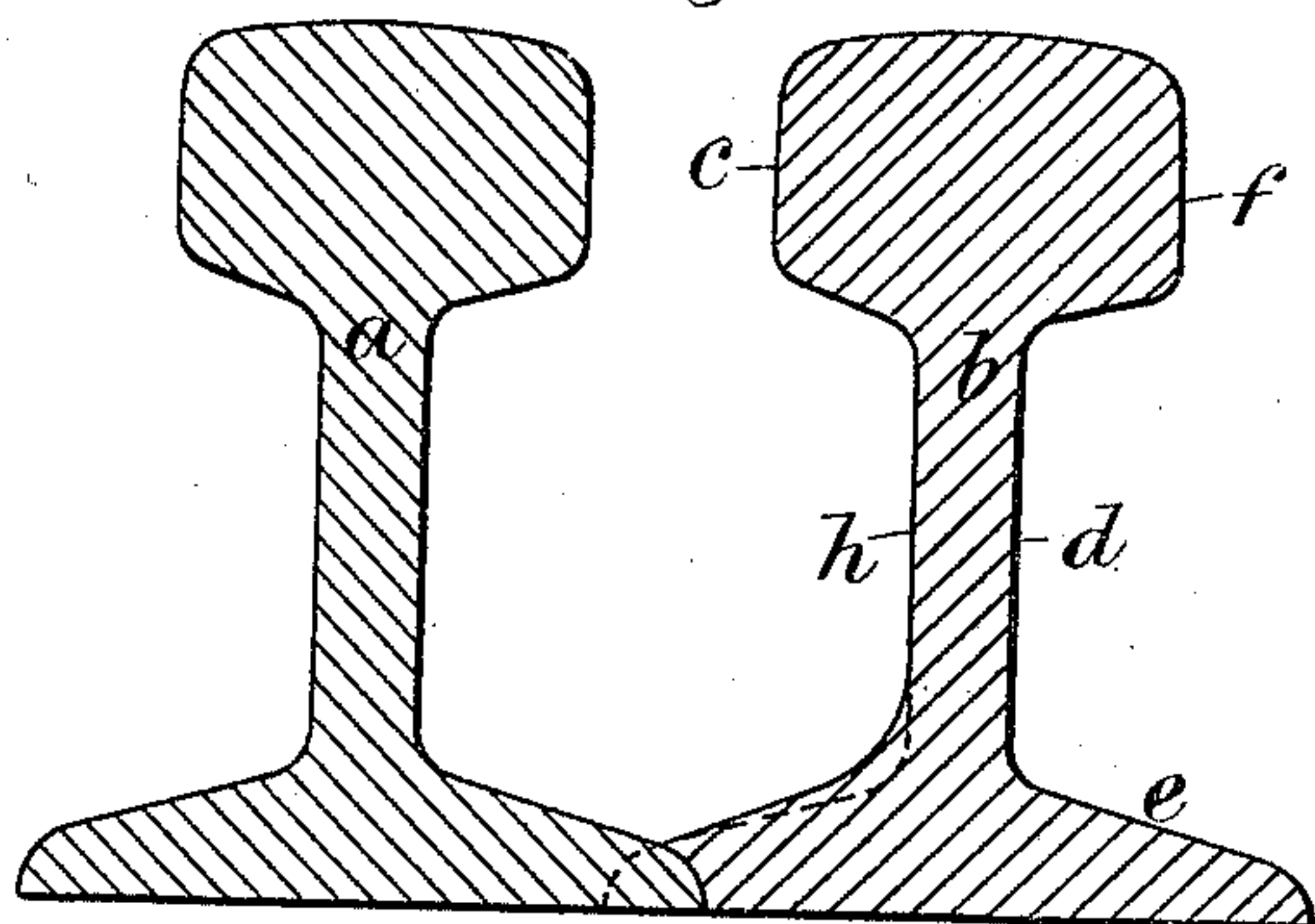


Fig. 5.

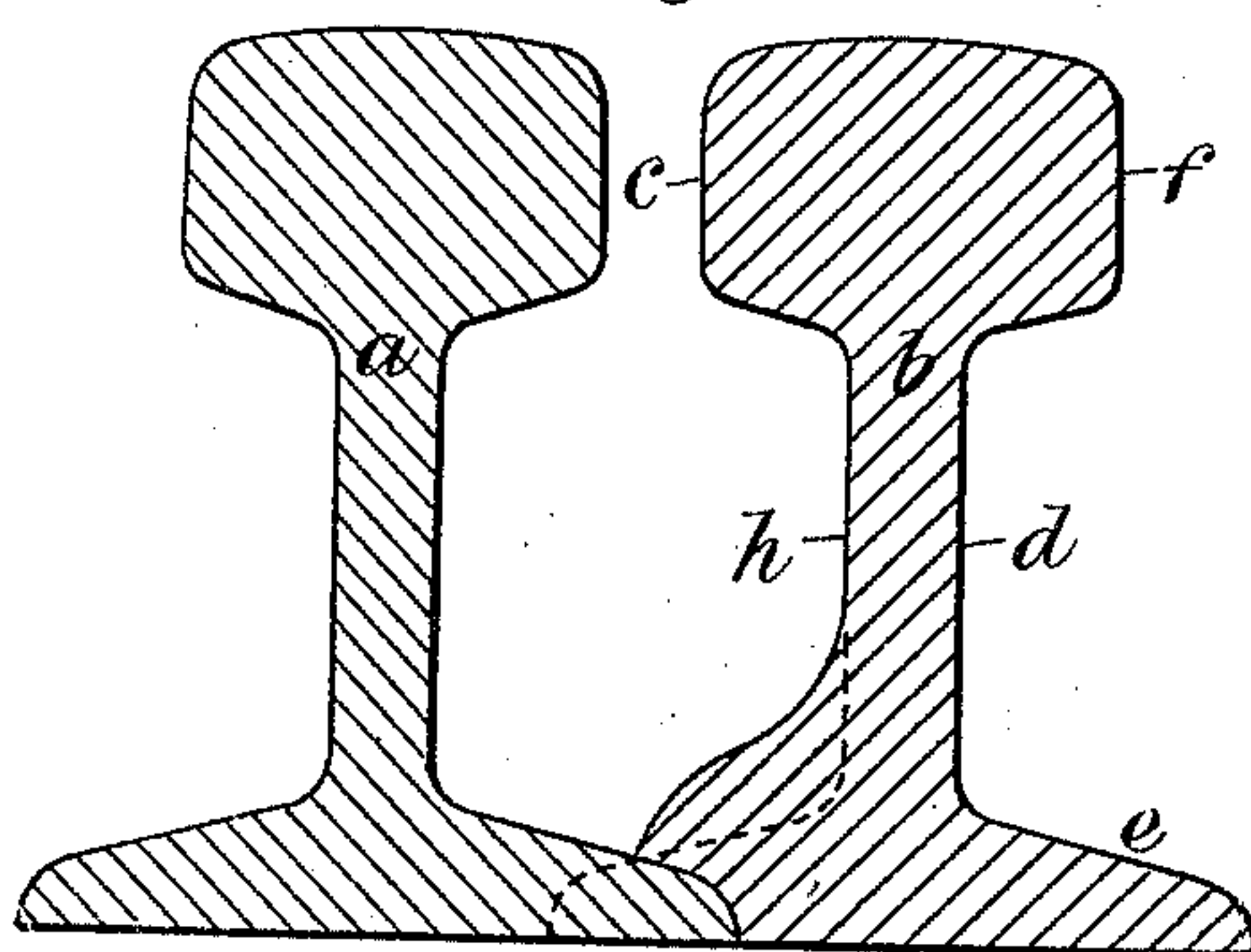


Fig. 6.

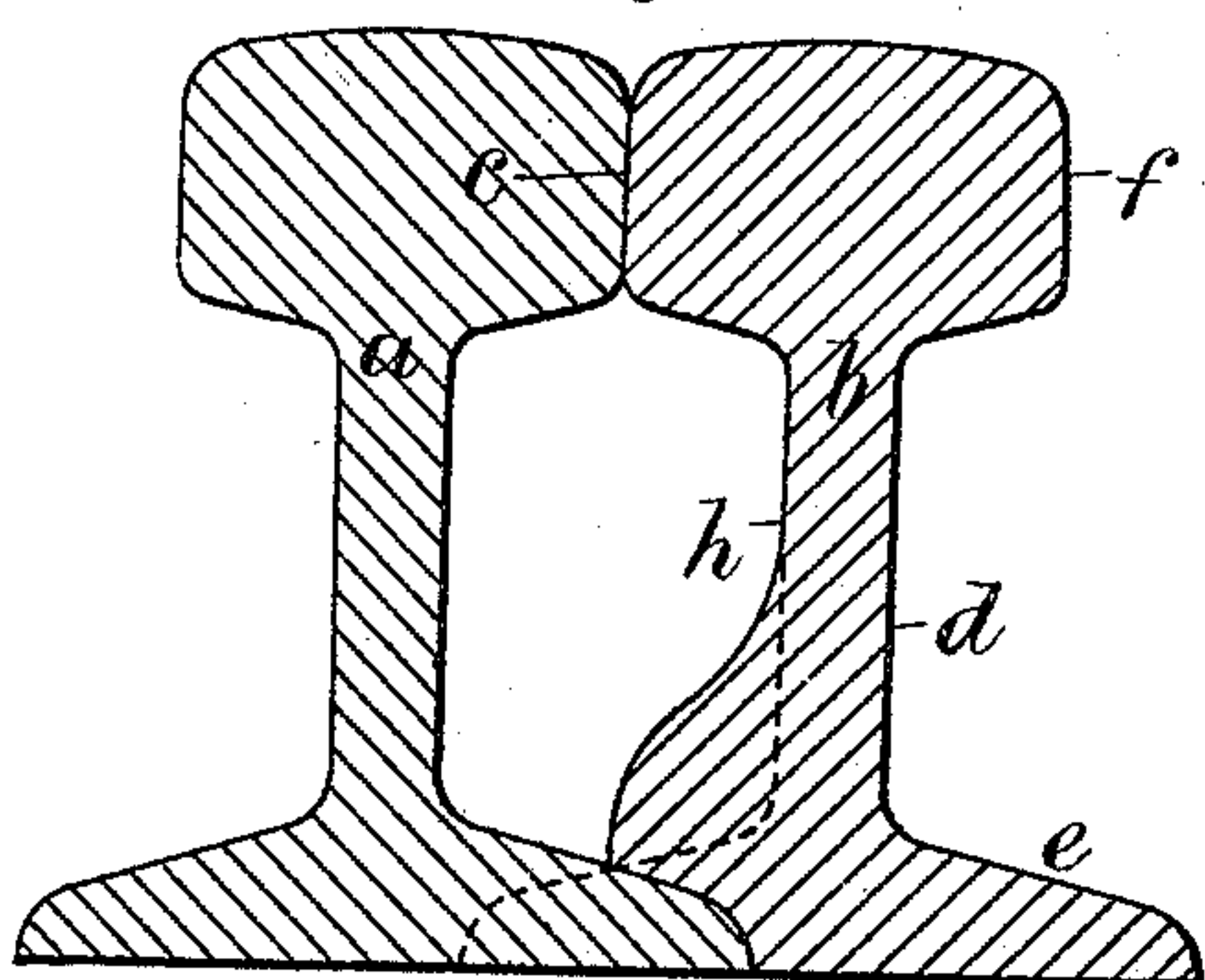
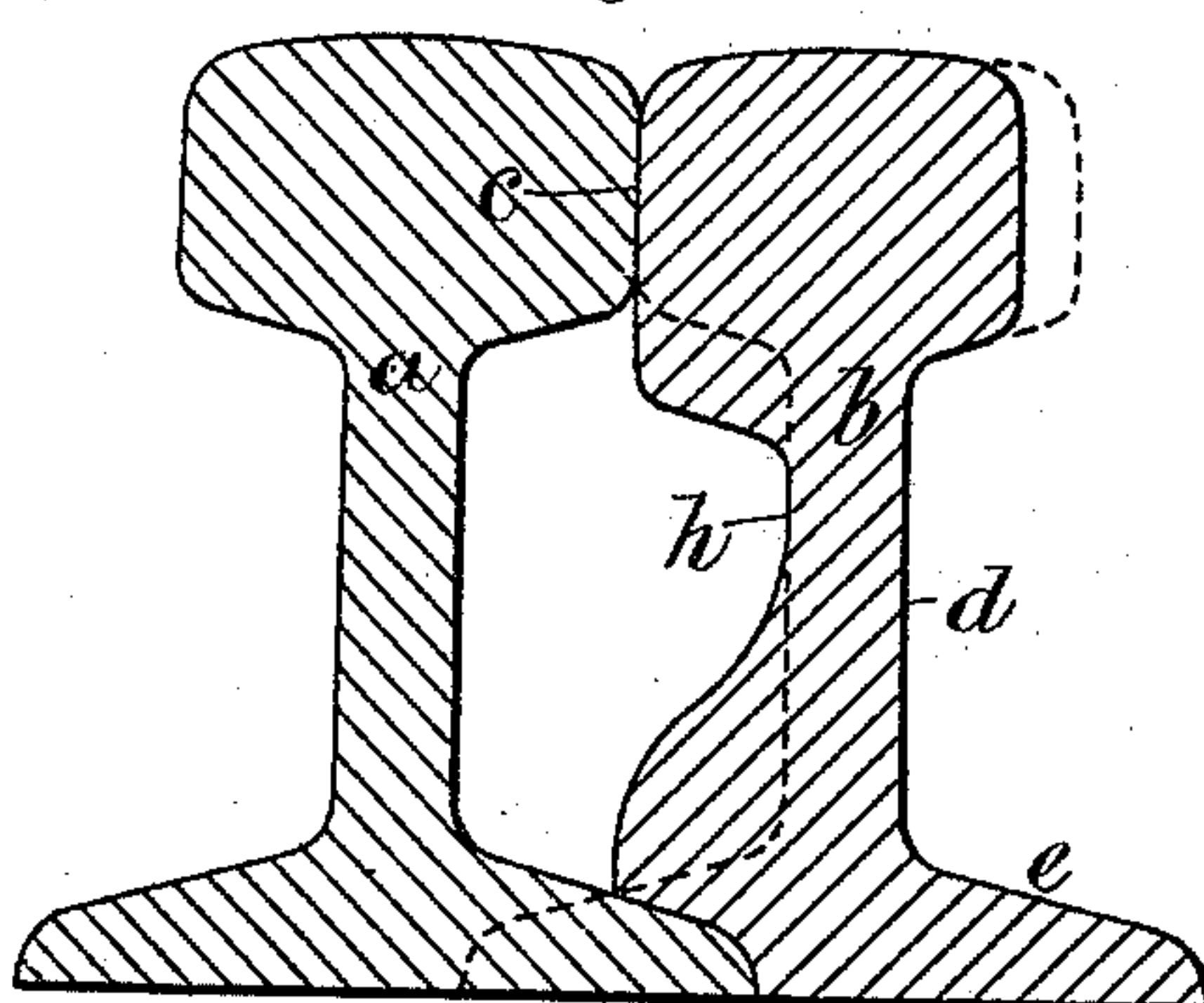


Fig. 7.



Witnesses

E. A. Balloch,
A. M. Parkins.

Inventors

E. P. Martin and
Richard Price-Williams
By their Attorneys
Baldwin Davidson Wright.

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Fig. 8.

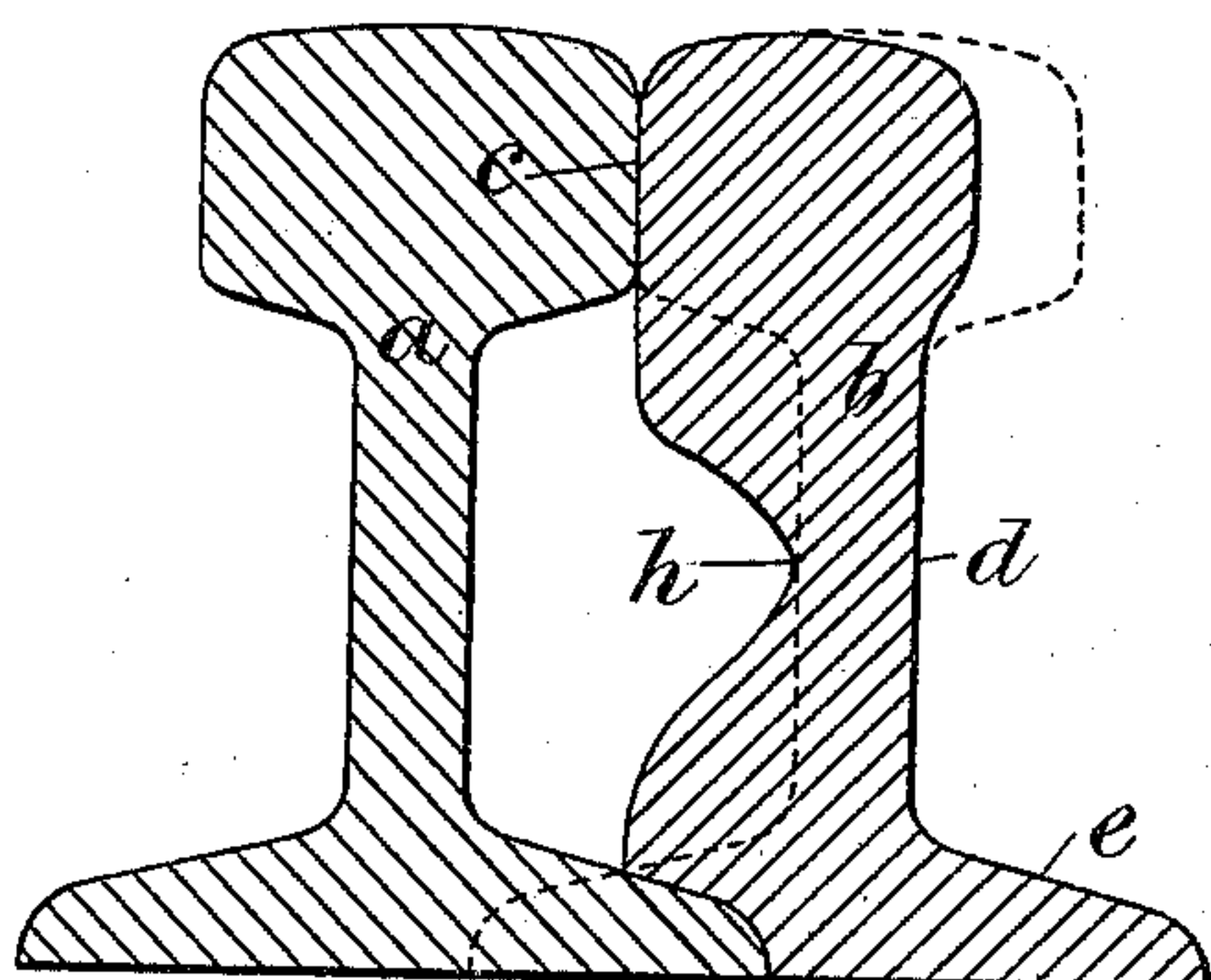


Fig. 9.

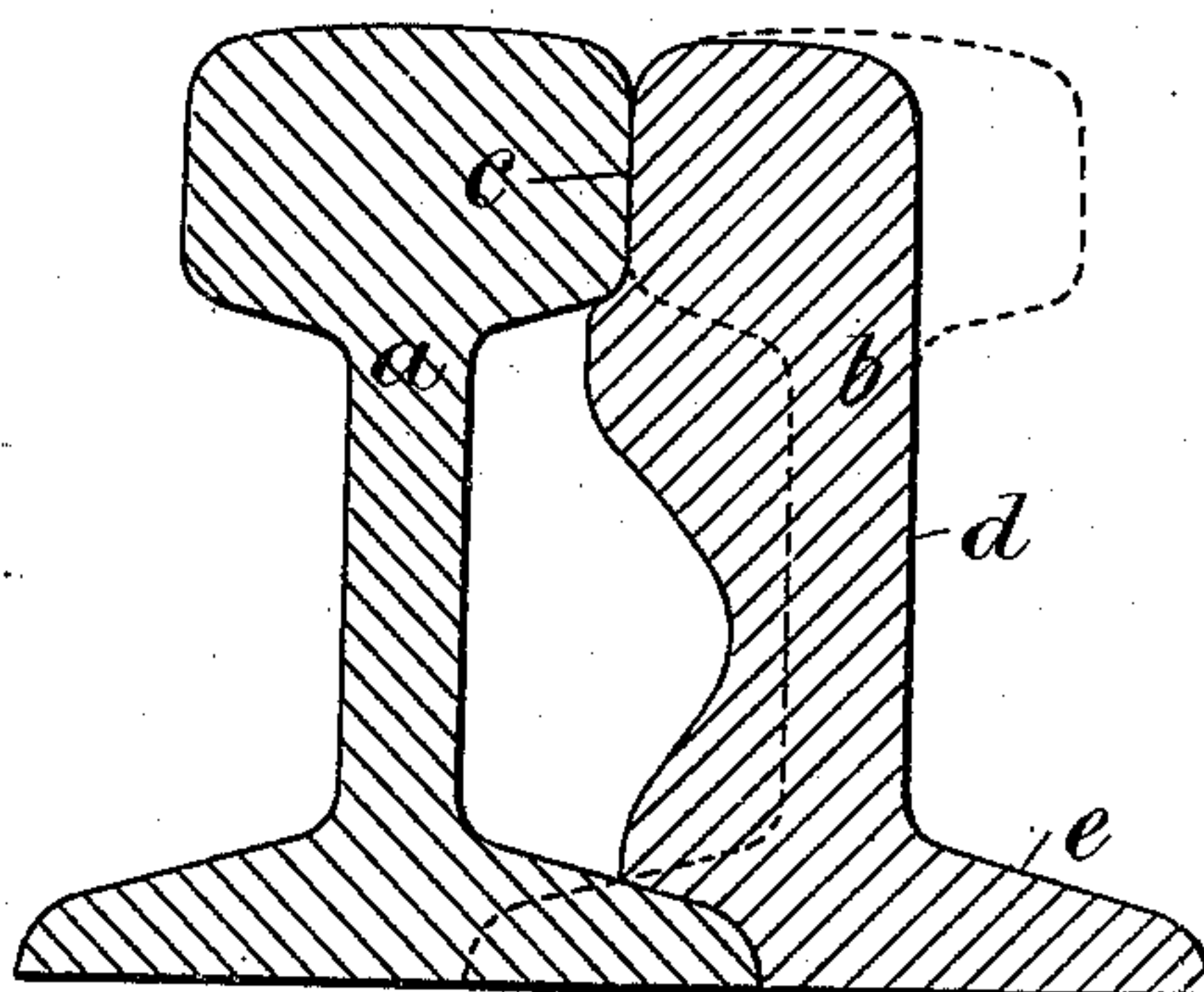


Fig. 10.

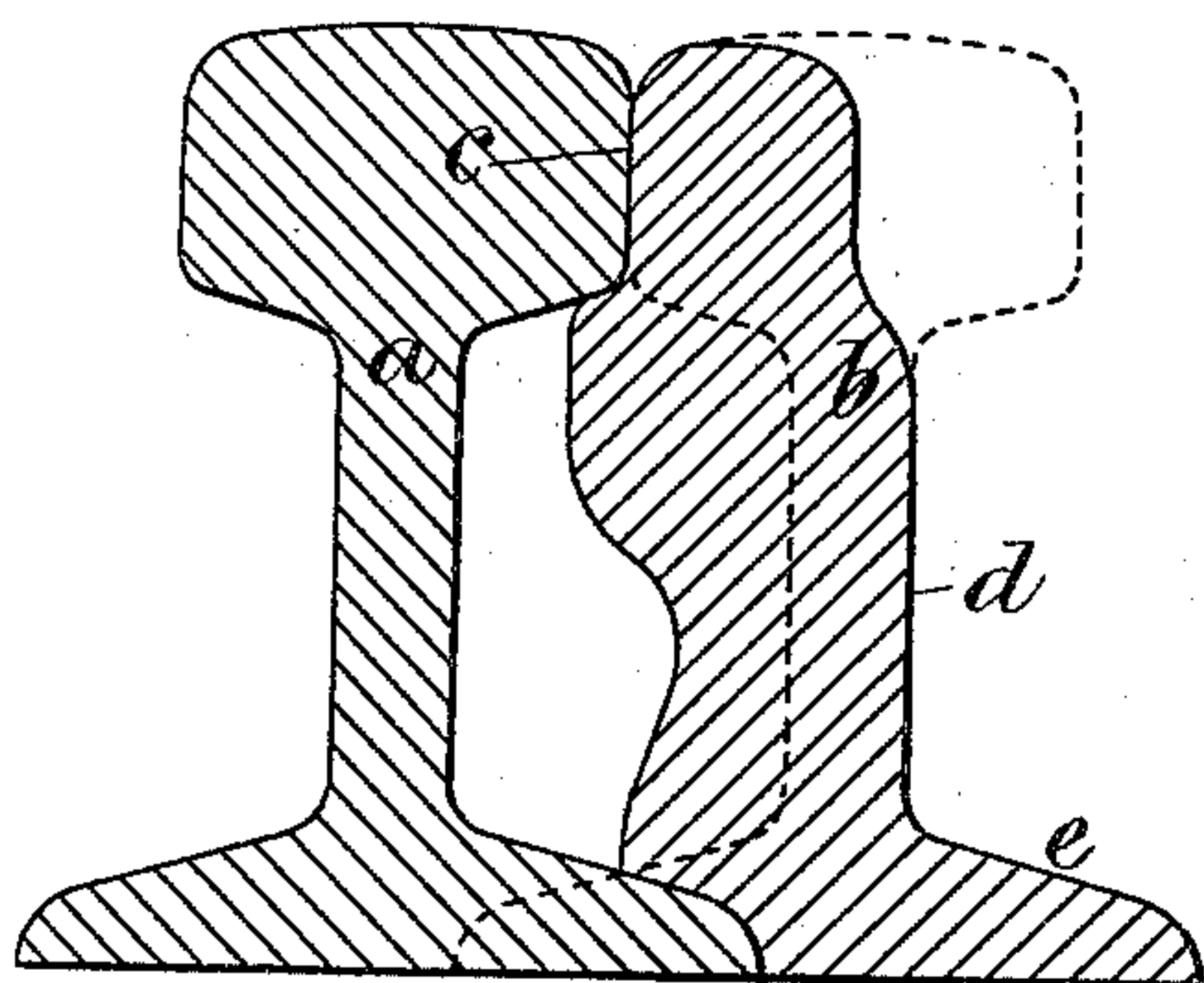


Fig. 11.

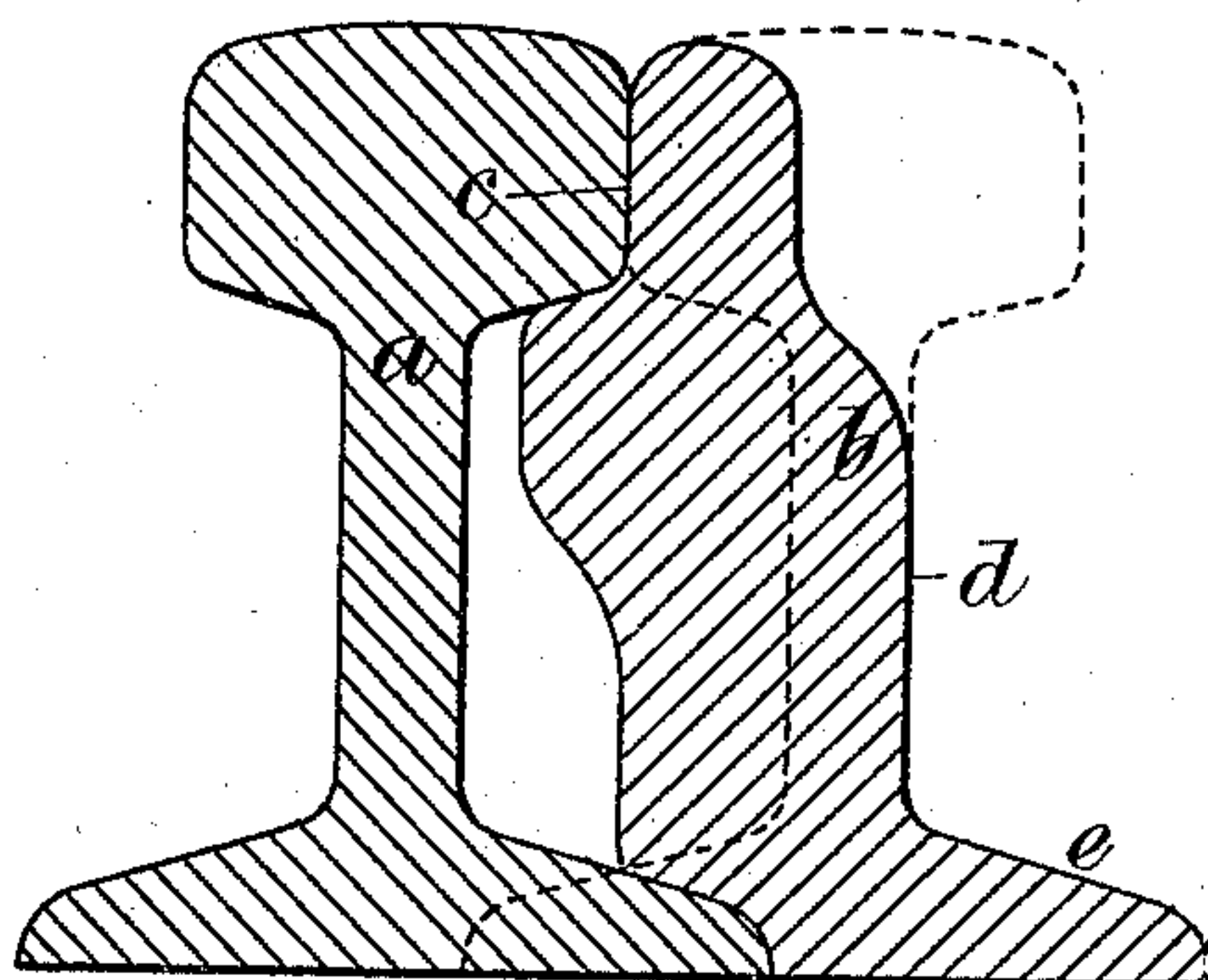


Fig. 12.

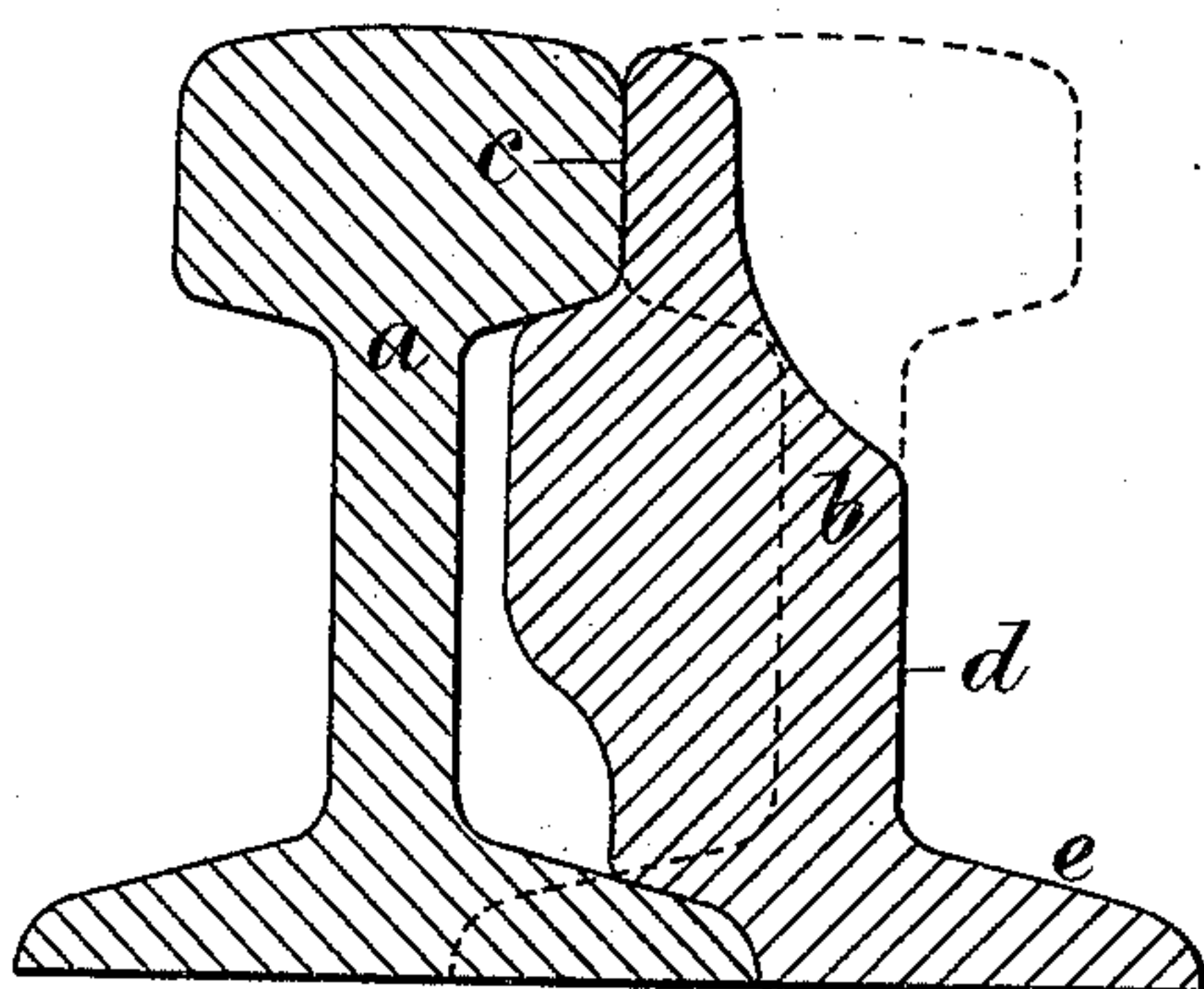
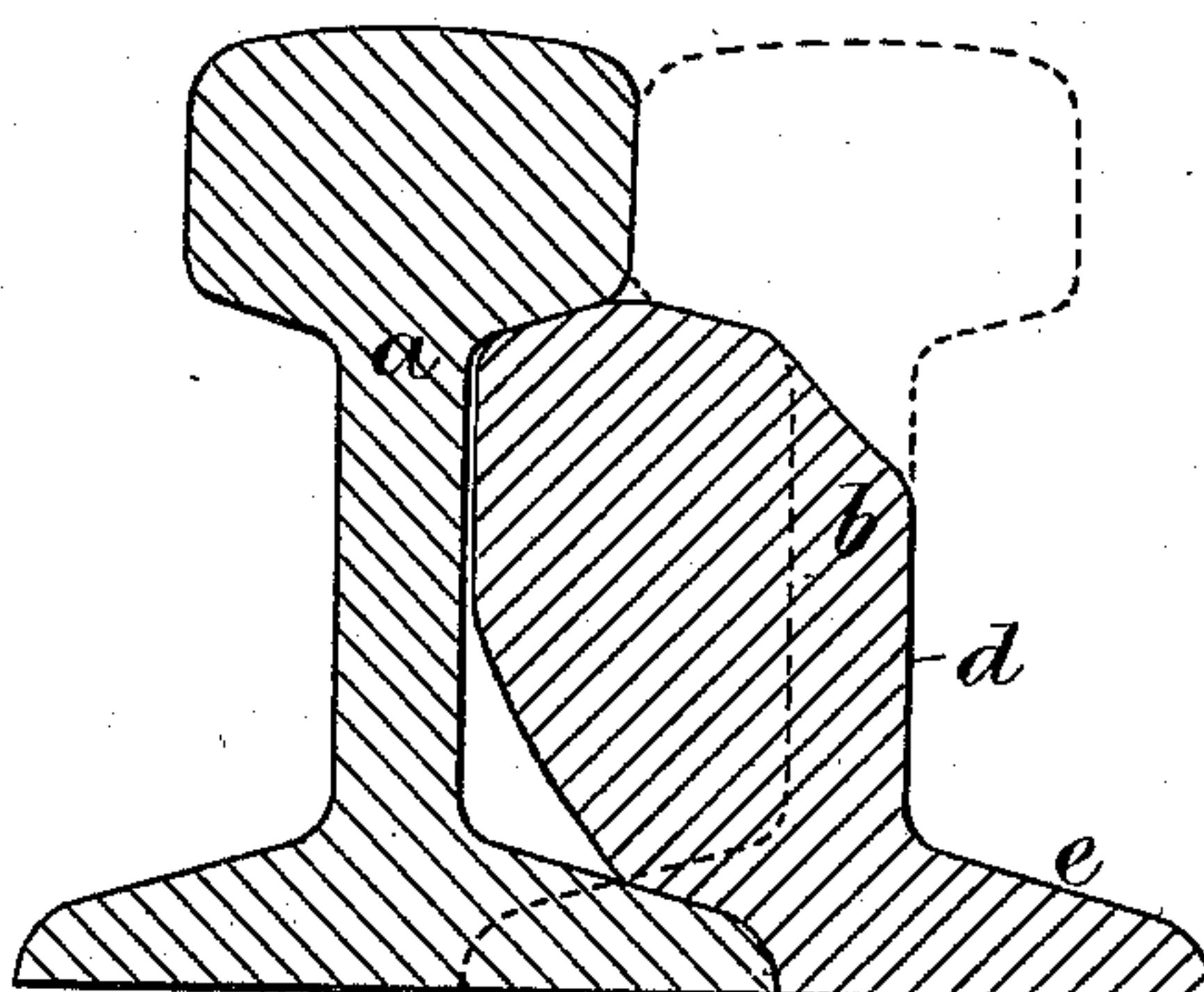


Fig. 13.



Witnesses

E. A. Lalloch
A. M. Perkins

Inventors

E. P. Martin and
Richard Price-Williams
By Their Attorneys
Baldwin, Davidson & Hight.

UNITED STATES PATENT OFFICE.

EDWARD PRITCHARD MARTIN, OF DOWLAIS, AND RICHARD PRICE-WILLIAMS, OF LONDON, ENGLAND, ASSIGNORS TO THE RAILWAY SWITCH AND CROSSING COMPANY, LIMITED, OF LONDON, ENGLAND.

TONGUE-RAIL FOR RAILWAY-SWITCHES.

SPECIFICATION forming part of Letters Patent No. 635,021, dated October 17, 1899.

Application filed April 14, 1899. Serial No. 713,049. (No model.)

To all whom it may concern:

Be it known that we, EDWARD PRITCHARD MARTIN, ironmaster, residing at Dowlais Iron Works, Dowlais, in the county of Glamorgan, and RICHARD PRICE-WILLIAMS, civil engineer, residing at 32 Victoria street, Westminster, London, in the county of Middlesex, England, subjects of the Queen of Great Britain, have invented a certain new and useful Tongue-Rail for Railway-Switches, of which the following is a specification.

In our United States Patent No. 591,412, granted October 12, 1897, we have shown a tongue-rail for railway-switches of substantially the same sectional area throughout the greater part of its length, the metal being displaced from the head and from the foot, such metal as is displaced from the head being forced to the inner side of the web, while the metal displaced from the foot is forced to the outside of the foot.

According to our present invention the relative positions of the inner face of the head, the outer face of the web, and the outer side of the foot remain unaltered throughout the entire length of the rail, metal being only displaced from the outer side of the head and the inner side of the foot to the inner side of the web, such metal as is displaced from the foot being forced to the inner side of the web instead of being forced to the outer side of the foot, as in our former patent. The displacement from the foot extends throughout the whole length of the rail, but the displacement from the head throughout a portion only of the rail.

In the accompanying drawings, Figure 1 is a plan, and Figs. 2 to 13 are sections on the lines 2 2 to 13 13 of Fig. 1.

a is the stock or fixed rail, and *b* the tongue-rail. It will be seen that in all the cross-sections, Figs. 2 to 13, the positions of the inner face *c* of the head of the tongue-rail, the outer face *d* of its web, and the outer side *e* of its

foot are the same, (in Fig. 13 the face *c* has disappeared without altering its position,) while metal has been displaced from the outer side *f* of the head and the inner side *g* of the foot to the inner side *h* of the web, the former displacement being along part only of the length of the rail and the latter throughout the whole length of the rail. It will also be observed that such metal as is displaced from the foot is forced to the inner side of the web and not to the outer side of the foot, as in our former patent.

By our improvements we adapt our former invention to flat-footed T-rails and also reduce the deformation of the rail and the displacement of the metal to a minimum.

We claim as our invention—

1. A flat-footed tongue-rail for railway-switches of substantially the same sectional area throughout the greater part of its length, the relative positions of the inner face of the head, the outer face of the web, and the outer side of the foot being the same throughout the entire length of the rail, such metal as is displaced from the foot being displaced from the inner side thereof, only, and forced to the inner side of the web.

2. A flat-footed tongue-rail for railway-switches, of substantially the same sectional area throughout the greater part of its length, the relative positions of the inner face of the head, the outer face of the web, and the outer side of the foot being the same throughout the entire length of the rail, metal being displaced from the outer side of the head through part only of the length of the rail and from the inner side of the foot throughout the whole length to the inner side of the web.

EDWARD PRITCHARD MARTIN.
RICHARD PRICE-WILLIAMS.

Witnesses:

JOHN D. VENN,
CHAS. ROCHE.