

(No Model.)

V. ANGERER & E. SAMUEL.
RAILWAY TIE PLATE.

No. 438,395.

Patented Oct. 14, 1890.

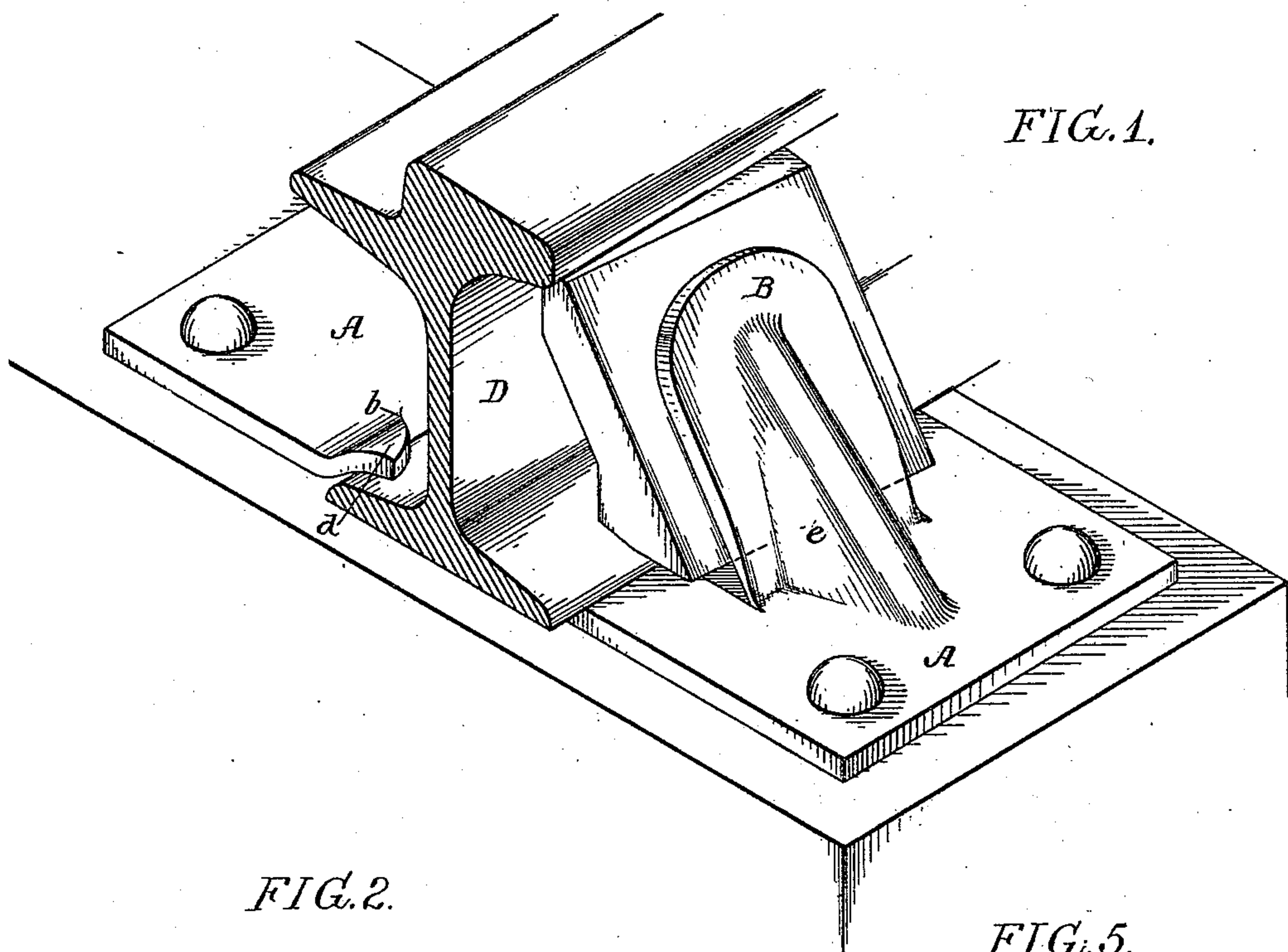


FIG. 2.

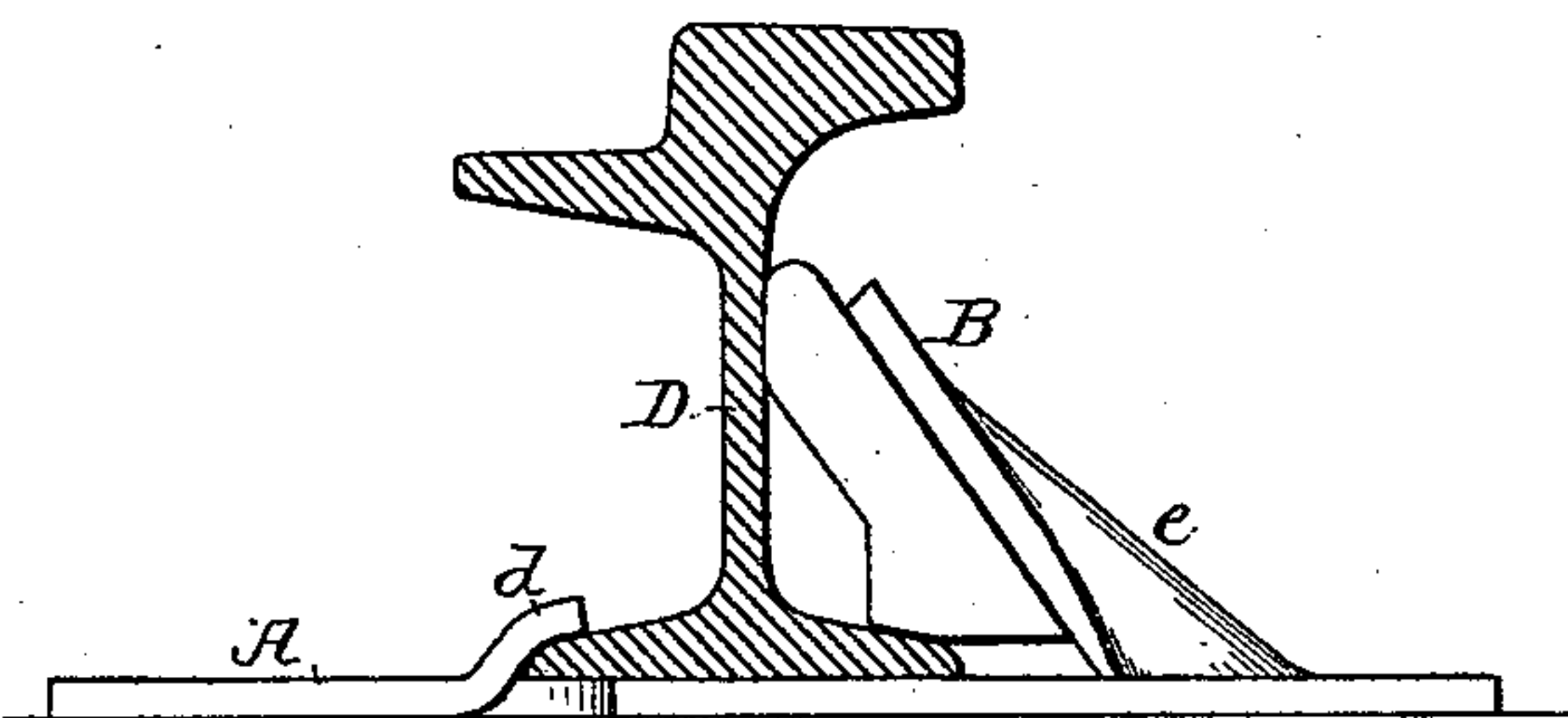


FIG. 5.

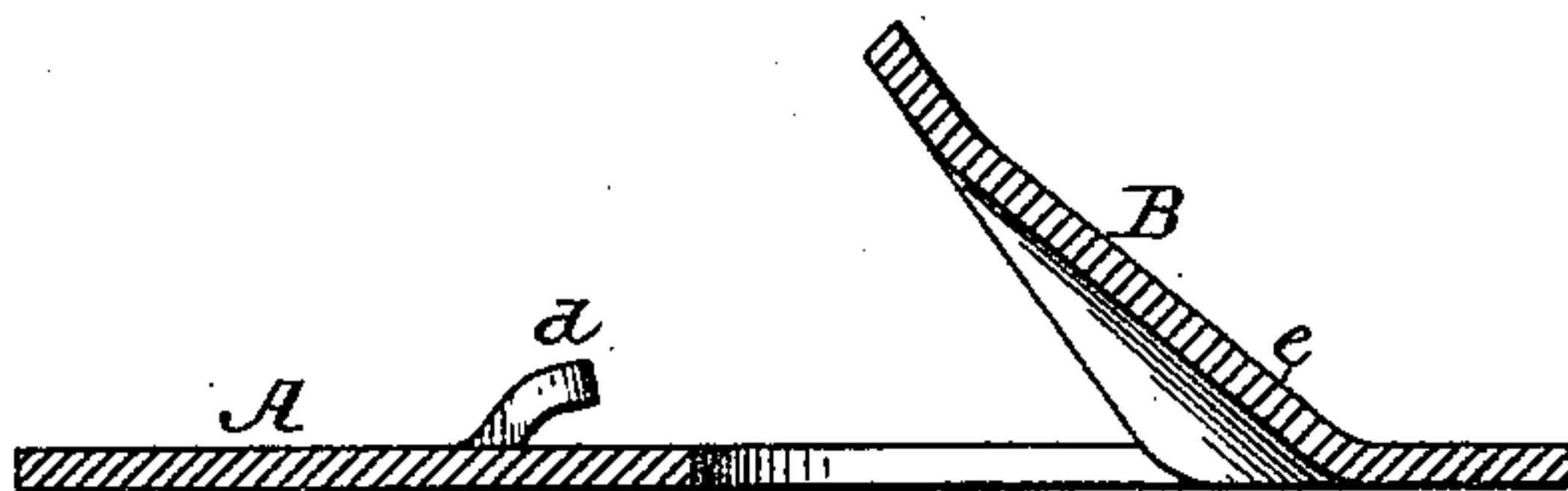


FIG. 3.

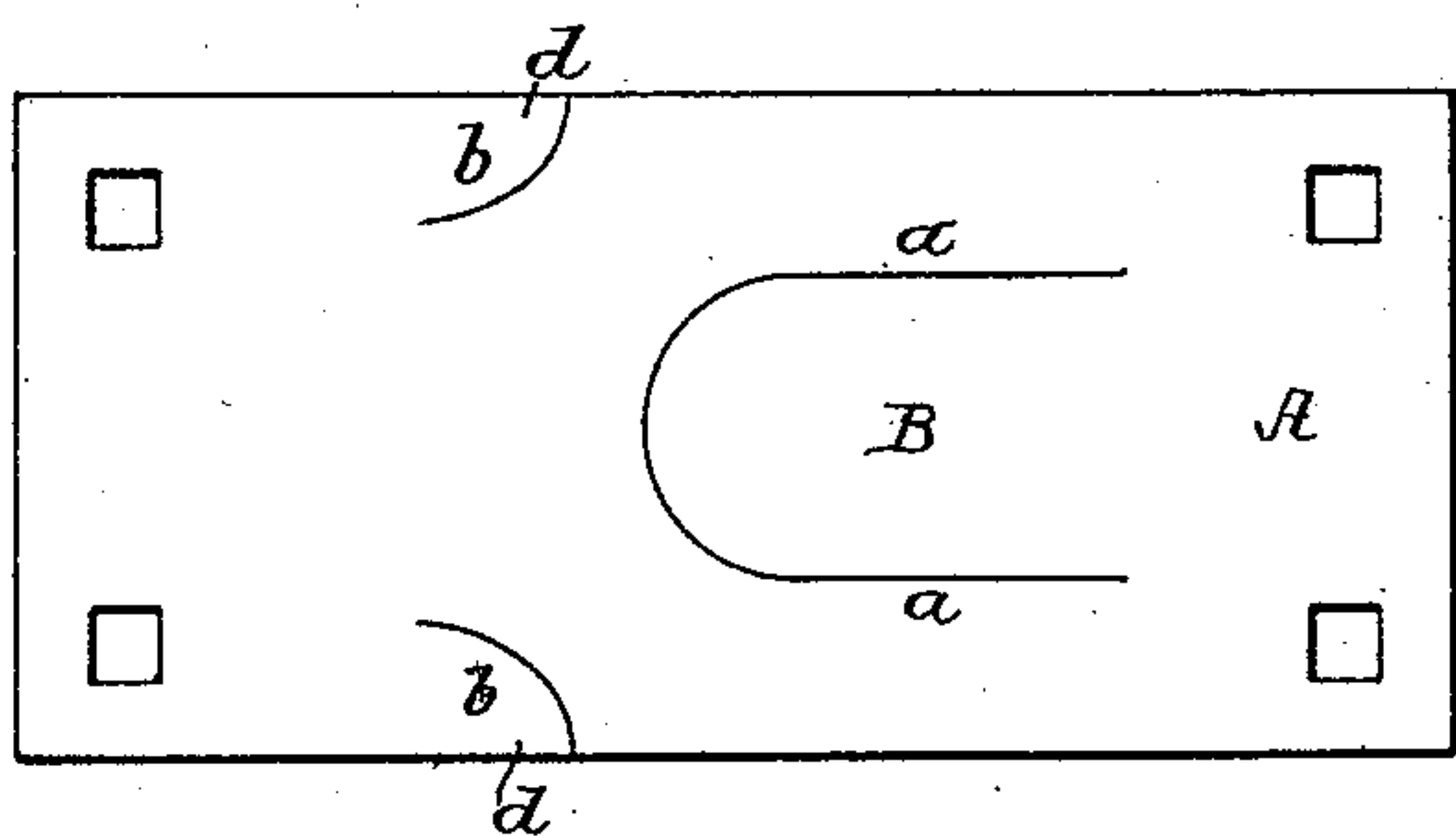


FIG. 4.

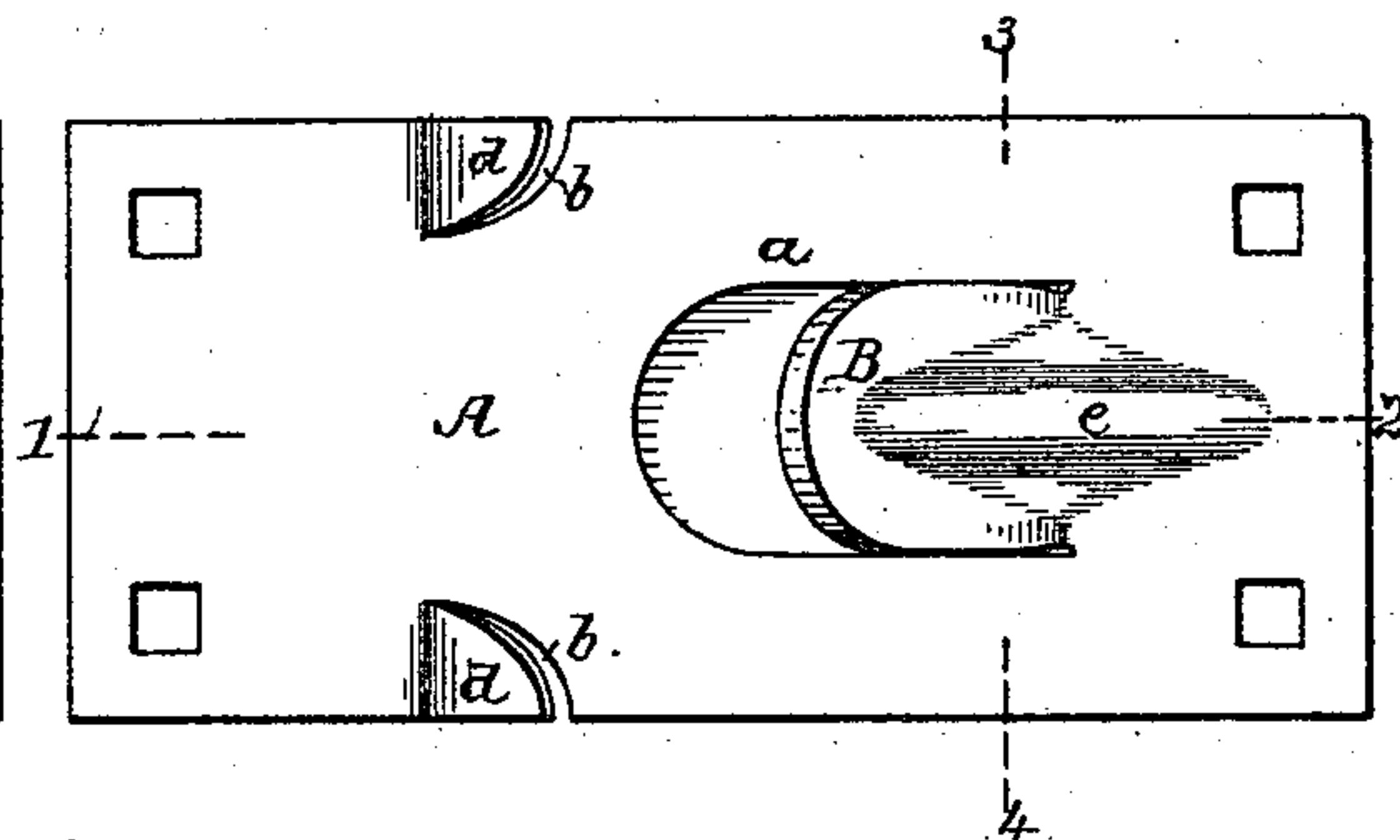
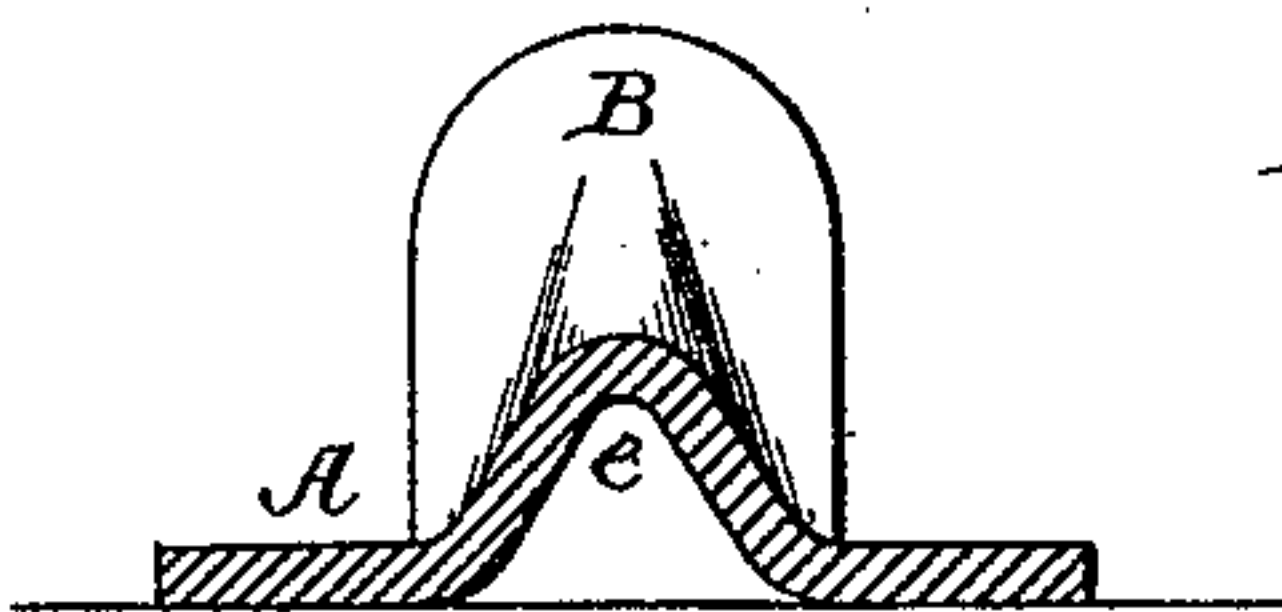


FIG. 6.



Witnesses:
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by their Attorneys
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UNITED STATES PATENT OFFICE.

VICTOR ANGERER AND EDWARD SAMUEL, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNORS TO THE WILLIAM WHARTON, JR., AND COMPANY, INCORPORATED, OF SAME PLACE.

RAILWAY TIE-PLATE.

SPECIFICATION forming part of Letters Patent No. 438,395, dated October 14, 1890.

Application filed May 28, 1890. Serial No. 353,446. (No model.)

To all whom it may concern:

Be it known that we, VICTOR ANGERER and EDWARD SAMUEL, both citizens of the United States, and residents of Philadelphia, Pennsylvania, have invented certain Improvements in Railway Tie-Plates, of which the following is a specification.

The object of our invention is to form a cheap and substantial tie-plate with rail retainers and braces in one piece therewith, and this object we attain as fully described hereinafter, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view showing the tie-plate with the rail in position thereon. Fig. 2 is a side view. Fig. 3 is a plan view of the tie-plate, showing the cuts formed therein for the rail retainers and braces. Fig. 4 is a plan view of the plate after the retainers and brace have been struck up. Fig. 5 is a section on the line 1 2, Fig. 4; and Fig. 6 is a section on the line 3 4, Fig. 4.

A is the plate or strip of sheet metal, preferably sheet-steel, which constitutes the tie-plate, and in this plate is formed a U-shaped incision *a* and incisions *b*, forming lugs B and *d d*, which, when bent up to the required angle, as shown in Figs. 1, 2, and 5, form lips by which the rail is fastened to the plate, the lips *d d* bearing upon and confining one flange of the rail, and the lip B serving as a bearing for a retaining-wedge E, which bears upon the web and flange upon the opposite side of the rail.

In striking up the lip B a hollow tapering rib *e* may be formed on the back of the plate, as shown in Figs. 5 and 6, thus strengthening and stiffening this lip B, so that when the wedge E is forced between the lip and the rail D, as shown in Figs. 1 and 2, the lip will effectually withstand the pressure, thus insuring a secure fastening for the rail. The side-thrust of the car-wheel upon the rail is effectually resisted by the wedge, the retaining-lip B, and the bracing-rib *e*.

It will be evident that the plate may be elevated, forming a rail-chair, and the plate may extend from side to side of the track, having the lips and braces struck up at each end, without departing from our invention.

We claim as our invention—

As a new article of manufacture, a rail tie-plate having lips struck up from the edge thereof to form retainers for one flange of the rail, and an opposite central lip having a tapered hollow rib, forming a bearing on the opposite side of the rail, substantially as specified.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

VICTOR ANGERER.
EDWD. SAMUEL.

Witnesses:
W. J. BURNS,
HARRY SMITH.