

No. 725,336.

PATENTED APR. 14, 1903.

W. E. GORTON.
BRAKE SHOE.

APPLICATION FILED NOV. 3, 1902.

NO MODEL.

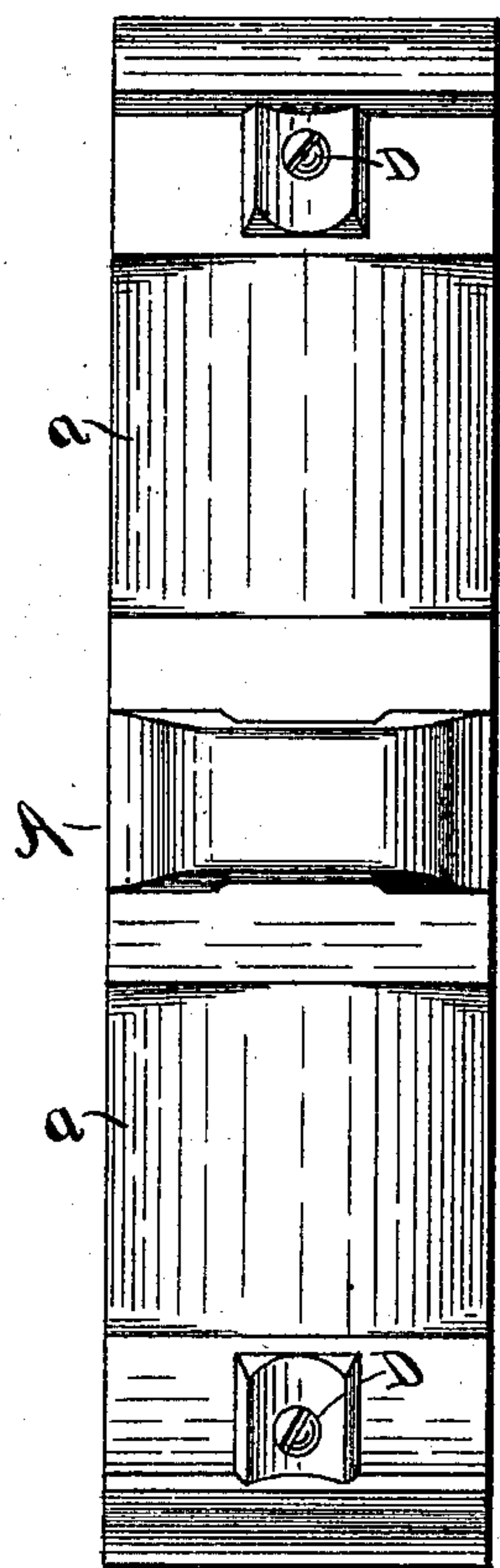


Fig. 1.

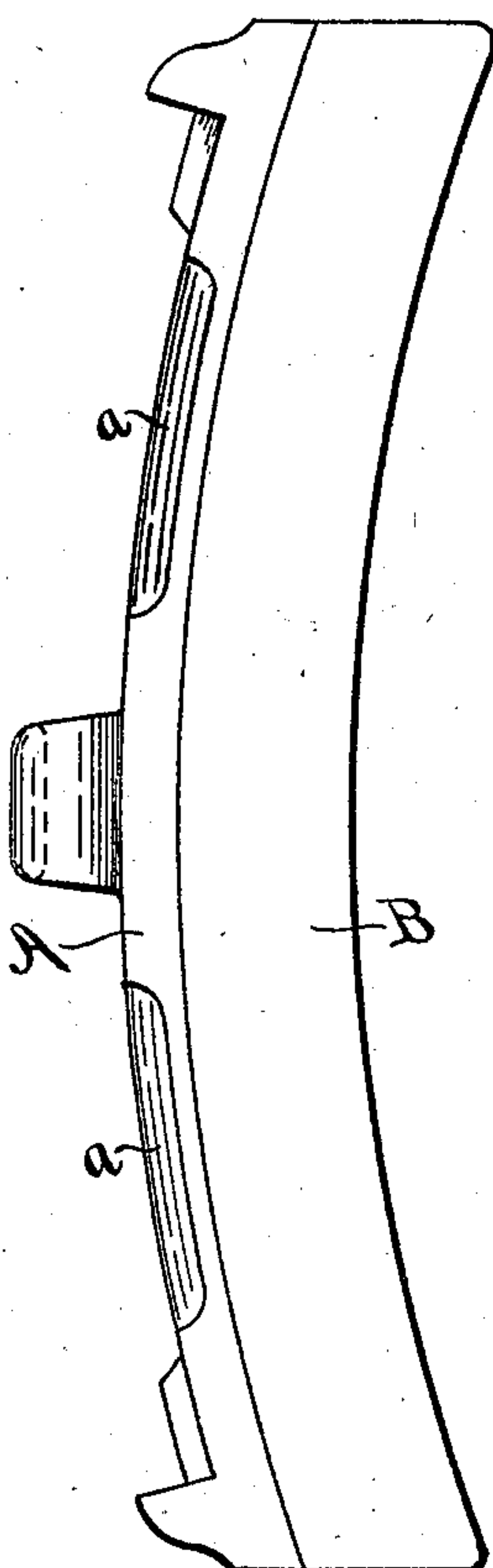


Fig. 2.

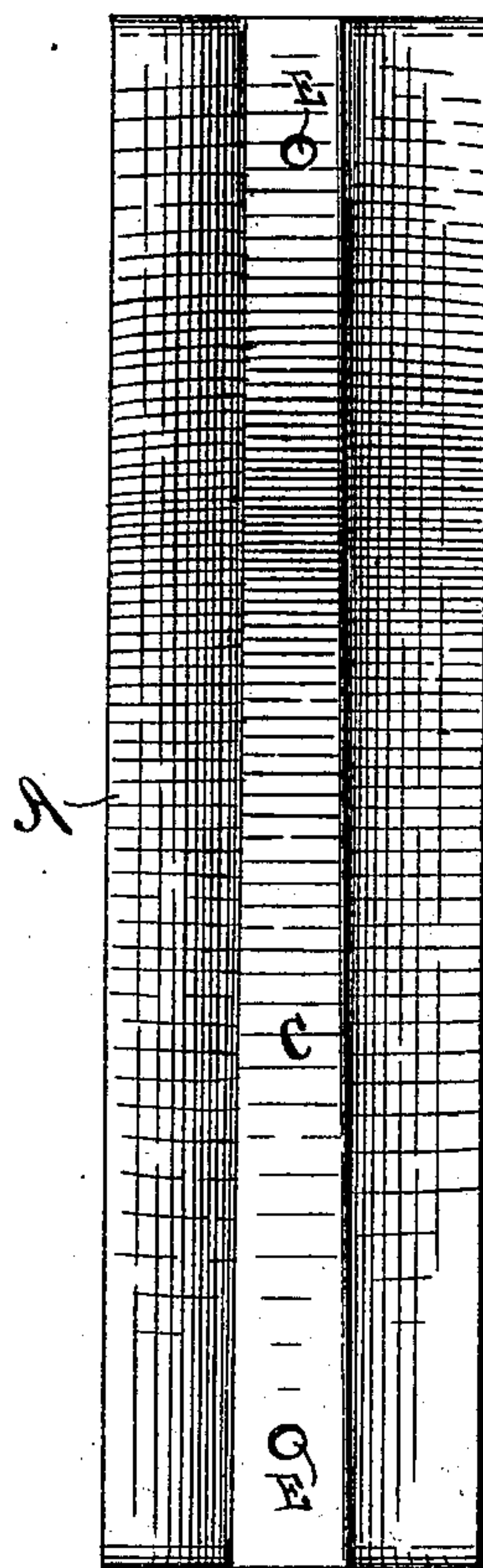


Fig. 3.

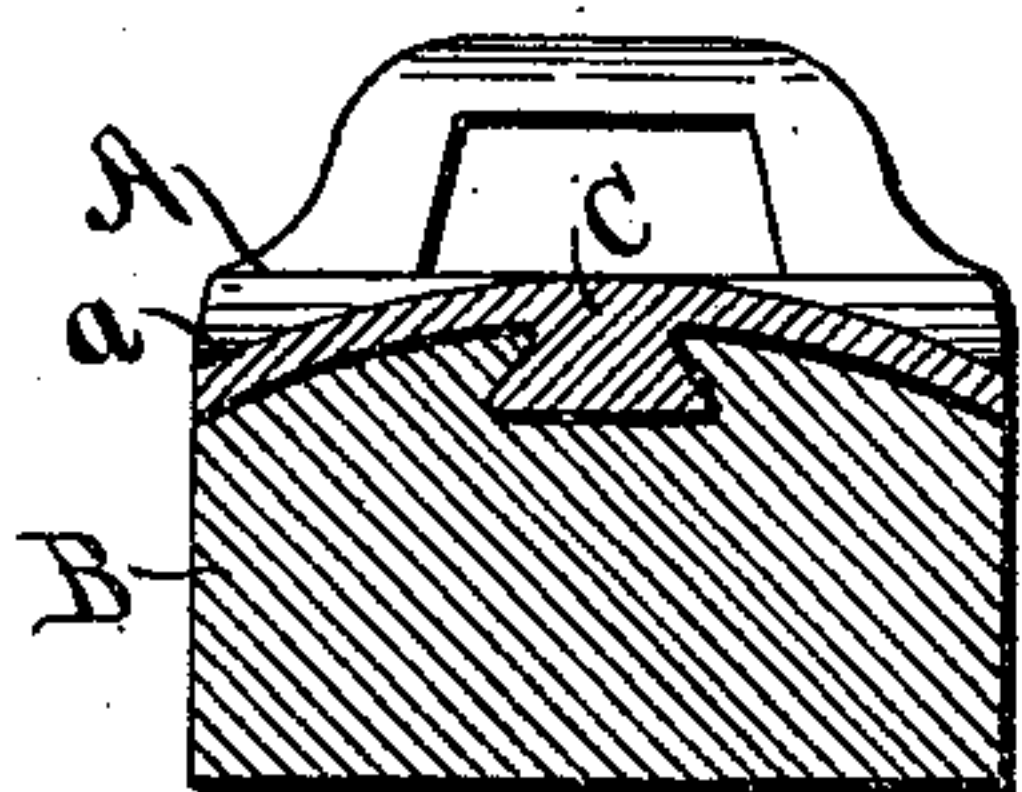


Fig. 4.

WITNESSES:

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WILLIAM EDWARD GORTON, OF CORNING, NEW YORK.

BRAKE-SHOE.

SPECIFICATION forming part of Letters Patent No. 725,336, dated April 14, 1903.

Application filed November 3, 1902. Serial No. 129,847. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM EDWARD GORTON, a citizen of the United States, residing at Corning, in the county of Steuben and State of New York, have invented certain new and useful Improvements in Brake-Shoes, of which the following is a specification.

My invention relates to improvements in cast-metal brake-shoes; and my object is to provide a two-part shoe comprising a back or strengthening plate adapted to be attached to a brake-head and a body portion which shall be separably attached to said back in order that when the body portion has become worn out it may be readily removed from the back and a new body inserted therein. The novel features involved will be further described hereinafter and pointed out more particularly in the claims.

In the drawings, Figure 1 represents an elevation of my improved brake-shoe as seen from the back; Fig. 2, a side elevation; Fig. 3, a front elevation of the back with the body portion removed, and Fig. 4 a cross-section of the two parts assembled.

Like letters of reference designate like parts in the several views.

A designates the back piece, which is preferably a malleable iron or steel casting to give strength to the shoe, and it is provided with the usual end and center lugs, by which it is secured in the brake-head.

B represents the body portion of the shoe, which may be either of solid cast-iron or of composite structure.

The front face of the back A is preferably concaved transversely as well as longitudinally and is provided with one or more longitudinal dovetail tongues C, preferably tapered from one end of the shoe to the other, and in forming the body portion B it is cast with a convex back and a longitudinal groove or grooves to correspond with the face of the back piece. When so formed, the two parts are assembled by sliding the tongue of the one into the groove of the other, the two being fitted snugly together by reason of the tapered joint and being secured from detachment the one from the other by means of set-screws D D, inserted in threaded holes E in the back piece at the points indicated. Other fastening devices, however, may be employed for this purpose.

I prefer to make the face of the back piece

transversely concave and to bring the outer edges into line with the face of tongue C in order that less metal may be required in forming the grooved portion of the body B. This arrangement of the parts also provides a guide at the outside joining lines to indicate when the body part has become worn away up to the tongue-and-groove connection. In so forming the back A, I make the portions *a a* thereof between the bearing-points for the brake-head convex in order to save material.

While I have shown and described the transversely-concaved back piece as my preferred form, I do not desire to be limited thereto, as it is quite evident that the two parts may be formed with straight instead of curved lines on their transverse sections; also, while I have shown one tongue-and-groove connection it will be apparent that more such connections may be used, especially where the braking-surface is required to be of considerable breadth, and, finally, the positions of the tongue and groove on the two parts may be reversed without departing from the spirit of my invention.

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

1. A two-part brake-shoe comprising back and body members, the former being provided with lugs by which to attach it to the brake-head and having a concave face with a longitudinal dovetailed tongue projecting therefrom, and the latter being provided with a corresponding convex face and a groove by which the two members may be separably united, and means for securing the parts together when so united.

2. A two-part brake-shoe, comprising a back piece provided on one face with lugs by which to attach it to the brake-head and having its other face transversely and longitudinally concave with a longitudinal dovetail tongue projecting therefrom, and a body portion having a face correspondingly convexed and grooved to receive said tongue, and means for securing the parts together when united.

In testimony whereof I have affixed my signature in presence of two witnesses.

WILLIAM EDWARD GORTON.

Witnesses:

D. S. DRAKE,

A. J. INGERSOLL.