

No. 647,045.

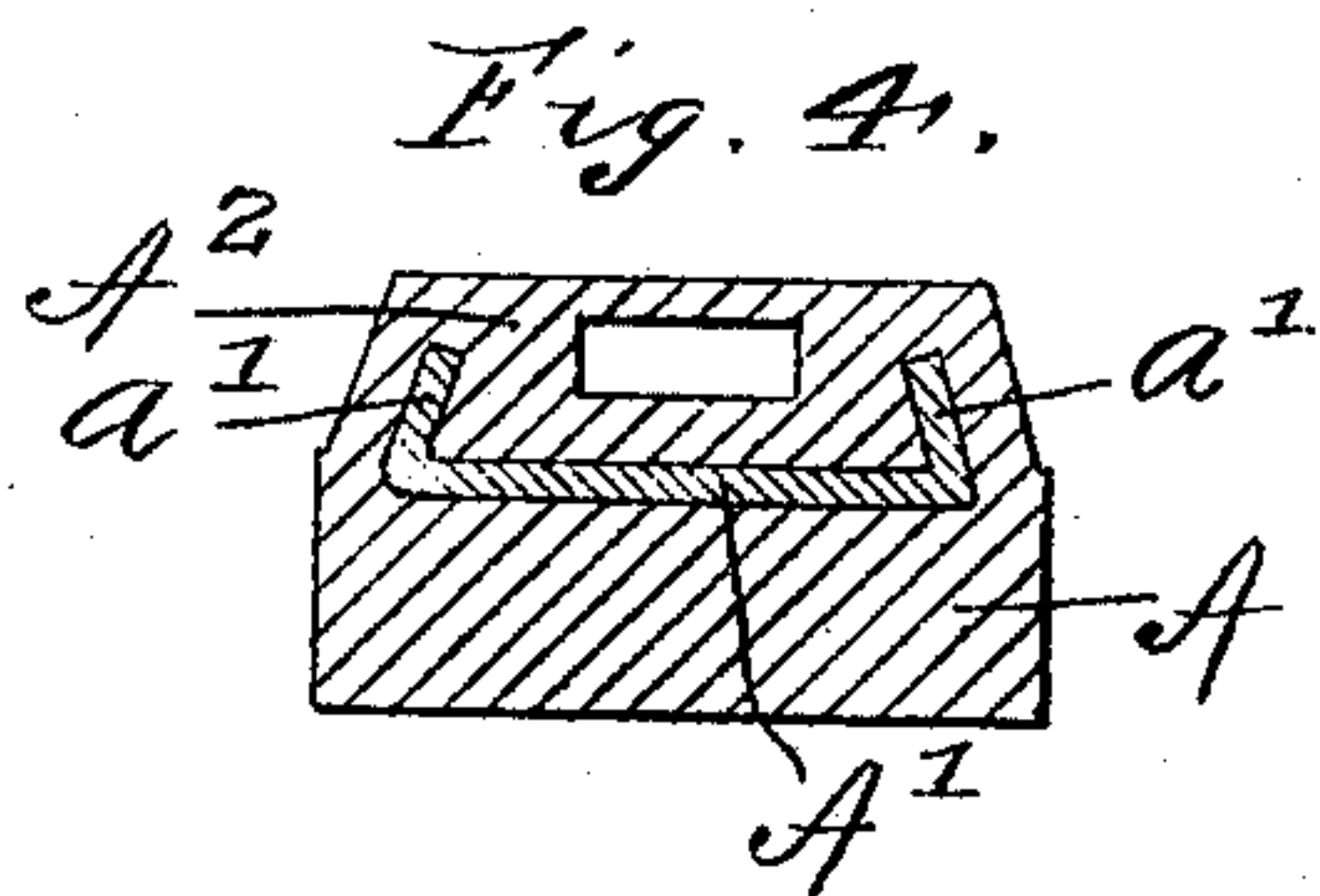
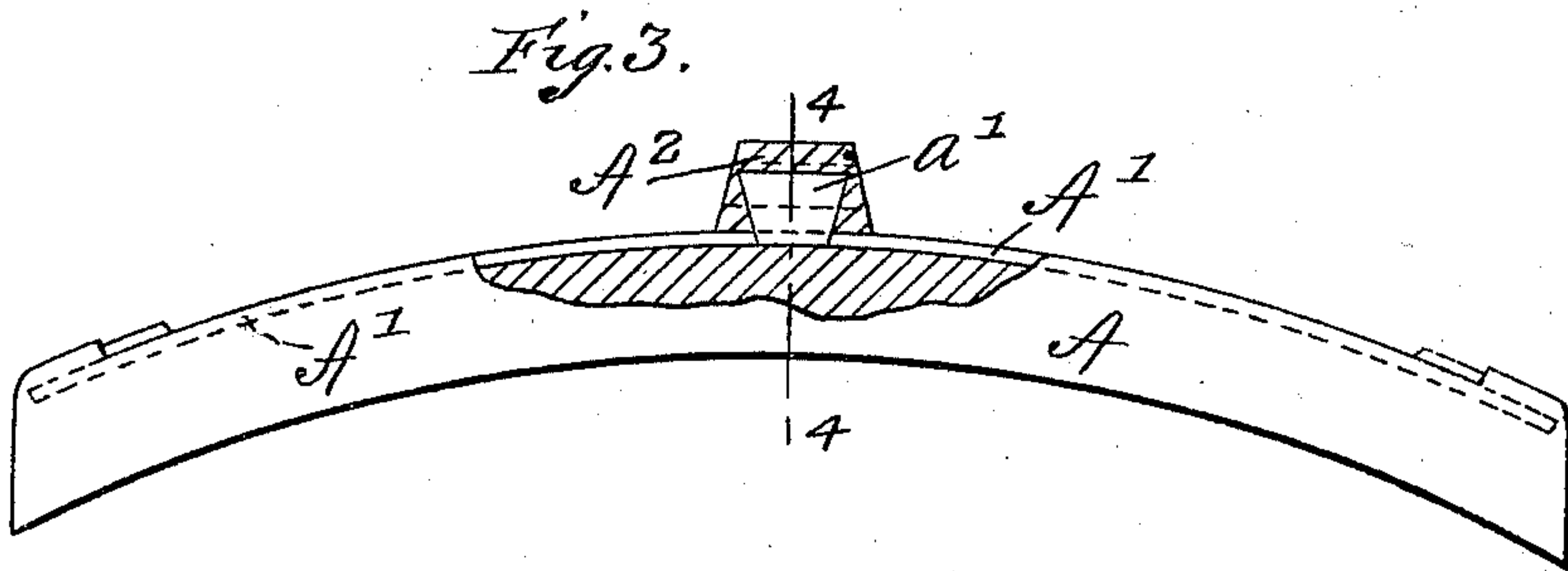
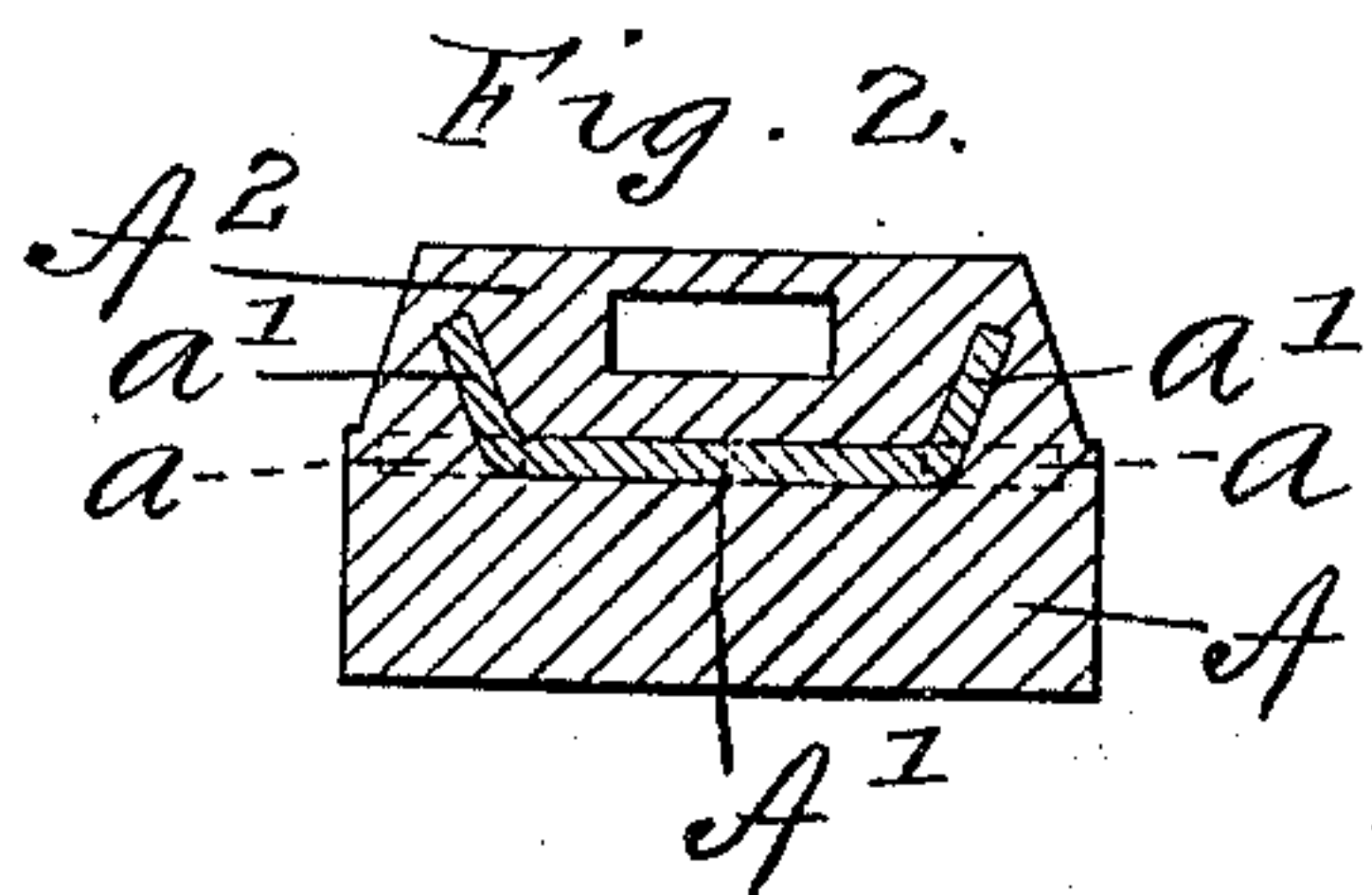
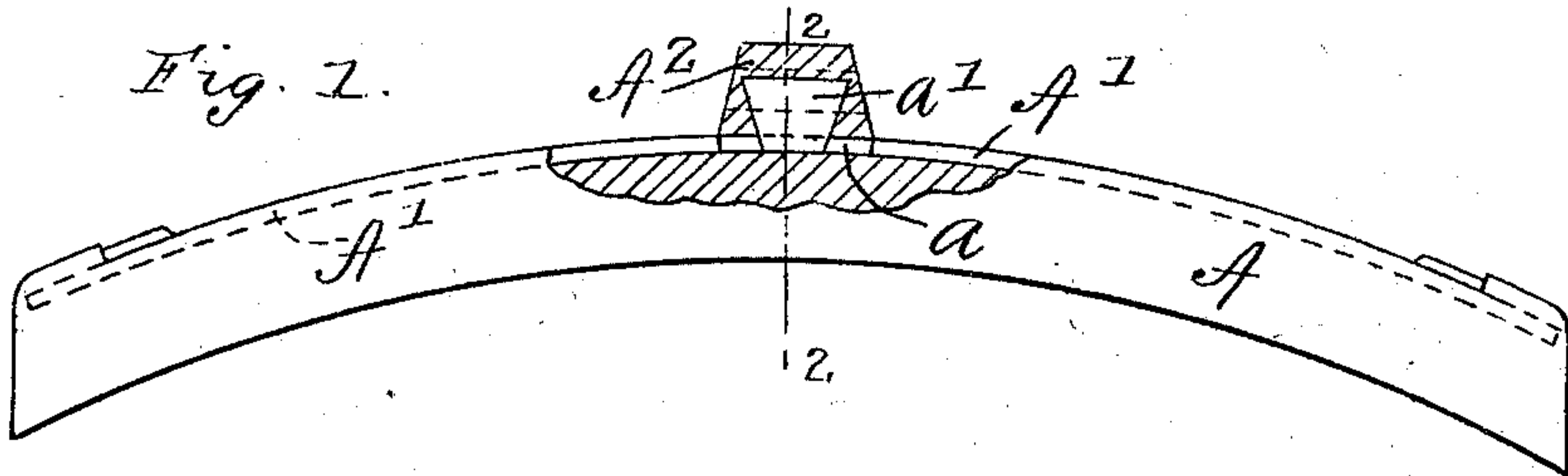
Patented Apr. 10, 1900.

A. L. STREETER.

BRAKE SHOE.

(Application filed Oct. 28, 1899.)

(No Model.)



Witnesses,
H. M. Linn
J. H. Frumback

Inventor,
Alfred L. Streeter,
by Geo. E. Waldo,
his atty.

UNITED STATES PATENT OFFICE.

ALFRED L. STREETER, OF CHICAGO, ILLINOIS.

BRAKE-SHOE.

SPECIFICATION forming part of Letters Patent No. 647,045, dated April 10, 1900.

Application filed October 28, 1899. Serial No. 735,034. (No model.)

To all whom it may concern:

Be it known that I, ALFRED L. STREETER, a citizen of the United States, and a resident of Chicago, in the county of Cook and State of Illinois, have invented an Improved Brake-Shoe, of which the following is a specification.

This invention relates to brake-shoes, and relates particularly to brake-shoes of the general type heretofore patented to me by Letters Patent of the United States No. 595,588, dated December 14, 1897, comprising a cast-iron body portion and a strengthening-plate secured to the back thereof.

The object of the invention is to provide means to prevent the attaching-lug of the shoe from breaking off, thus allowing the body of the shoe to fall when the body portion of the shoe approaches the limit of its wear.

To this end my invention consists in providing lugs, preferably formed integral with the strengthening-plate, which are embedded in the attaching-lug and serve to connect said attaching-lug securely to said strengthening-plate even when the body-portion of the shoe is entirely worn away, so as to expose said strengthening-plate at the face of said shoe. Said lugs will preferably be wider at their outer ends than at their inner ends and will preferably be disposed at an angle relatively to each other in the direction of their length.

In the accompanying drawings a brake-shoe embodying my invention is fully illustrated.

Figures 1 and 3 are side views, partly in section, of brake-shoes of my invention, showing slightly-different forms of strengthening-plate; and Figs. 2 and 4 are transverse sectional views on the lines 2 2 and 4 4 of Figs. 1 and 3, respectively.

Referring now to the drawings, A designates a body portion of the brake-shoe, and A' a strengthening-plate, usually steel or wrought-iron, secured to the back thereof, preferably by dovetailing the edges thereof into said body portion of the shoe, which can be conveniently and economically effected by beveling the edges of said plate and casting the body of the shoe around it. In both forms of shoe shown the attaching-lugs A² are formed integral with the body portions A thereof.

The strengthening-plate A' (shown in Figs. 1 and 2 of the drawings) is like that shown in said Letters Patent No. 595,588, issued to me December 14, 1897, being but slightly narrower than the body of the shoe and being recessed or cut away at opposite sides, as shown at *a*, to form a connection of desired size and strength between said attaching-lug and the body portion of the shoe.

The strengthening-plate shown in Figs. 3 and 4 of the drawings is somewhat narrower than the body of the brake-shoe, the longitudinal edges thereof being continuous—that is, not being recessed.

The attaching-lugs are secured to the strengthening-plates A' by lugs or projections *a'*, preferably formed integral with said strengthening-plates, which are embedded in said attaching-lugs.

In the preferable construction shown there is a lug *a'* at each side of the shoe. Preferably, also, said lugs *a'* are wider at their outer than at their inner ends and diverge from each other in the direction of their lengths. With this construction it is obvious that said lug *a'* will be secured in the attaching-lugs A² by what may be described as a "double dovetail," making a very strong connection between the plates A' and said attaching-lugs A² and effectually preventing said attaching-lugs A² from breaking off or becoming detached, even if the cast-iron body portion A of the shoe is entirely worn away, all in the manner desired.

I claim—

1. In a brake-shoe, the combination with a body portion, a strengthening-plate and an attaching-lug, of a projection or projections on said strengthening-plate embedded in said attaching-lug, substantially as described.

2. In a brake-shoe, the combination with a body portion, a strengthening-plate and an attaching-lug, of a projection or projections on said strengthening-plate embedded in said attaching-lug, said projection or projections being wider at their outer than at their inner ends, substantially as described.

3. In a brake-shoe, the combination with a body portion, a strengthening-plate and an attaching-lug, of projections on said strengthening-plate embedded in said attaching-lug, said projections extending at an angle, rela-

tively to each other in the direction of their lengths, substantially as described.

4. In a brake-shoe, the combination with a body portion, a strengthening-plate and an
5 attaching-lug, of projections on said strengthening-plate embedded in said attaching-lug, said projections being wider at their outer than at their inner ends and extending at an angle, relatively to each other in the direction of their length, substantially as described.
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5. In a brake-shoe, the combination with a body portion, an attaching-lug formed integral therewith and a strengthening-plate pro-

vided with recesses at its sides to form a connection of desired strength between said attaching-lug and the body of the shoe, of projections on said strengthening-plate which are embedded in said attaching-lug, substantially as described. 15

In testimony that I claim the foregoing as my invention I have hereunto set my hand this 21st day of October, 1899. 20

ALFRED L. STREETER.

Witnesses:

C. J. BROUGHTON,
J. H. FEAMBACH.