May 9, 1933. R. B. POGUE 1,907,573

BRAKE SHOE

Filed May 31, 1930

Fig. 1

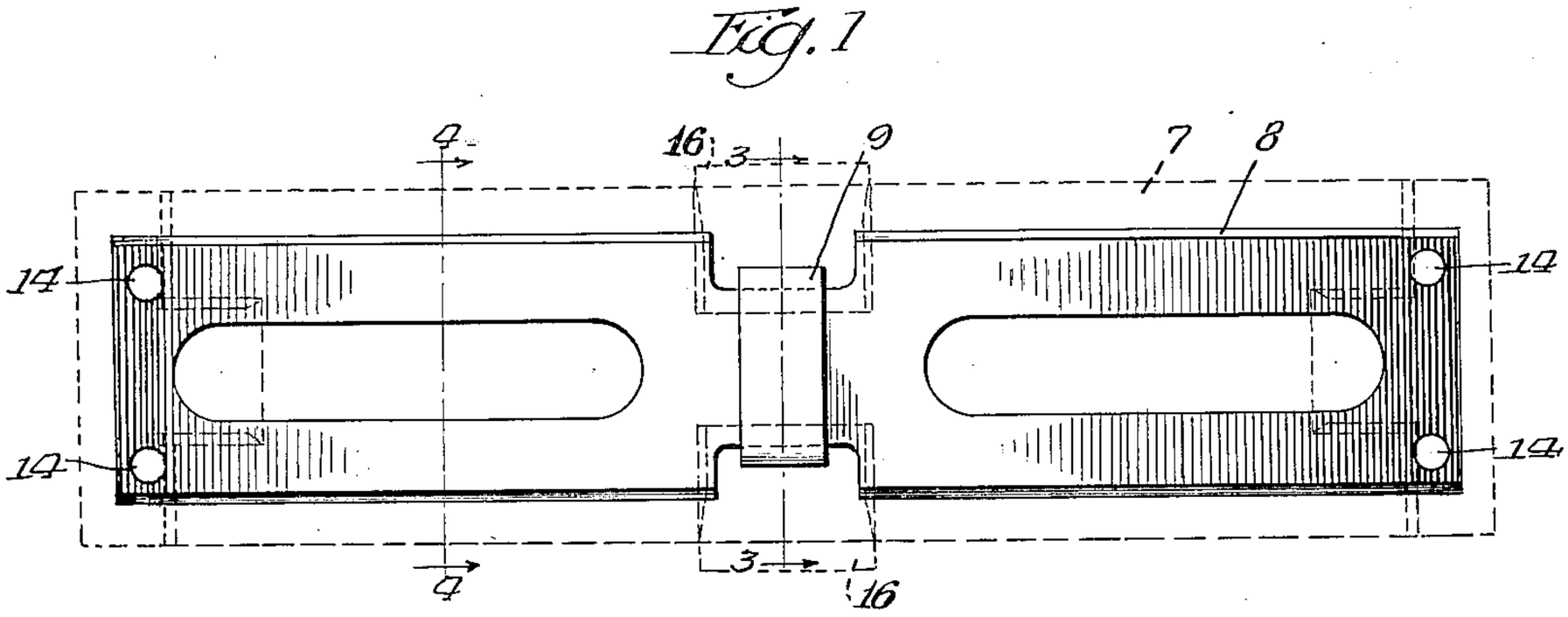


Fig. 2

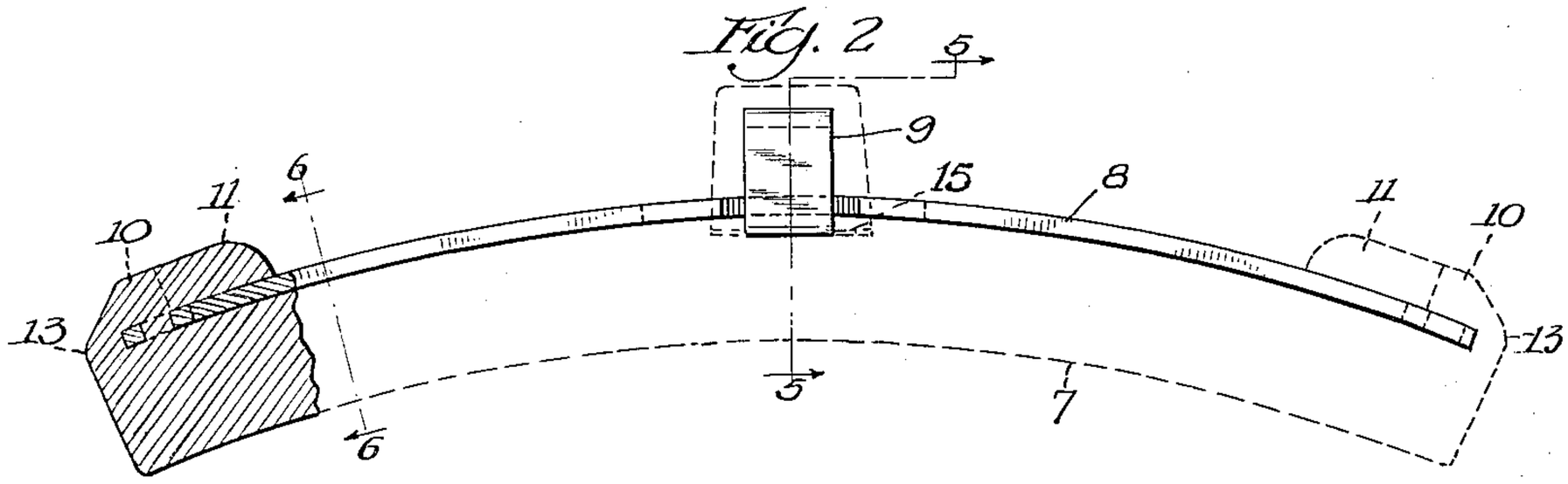


Fig. 3

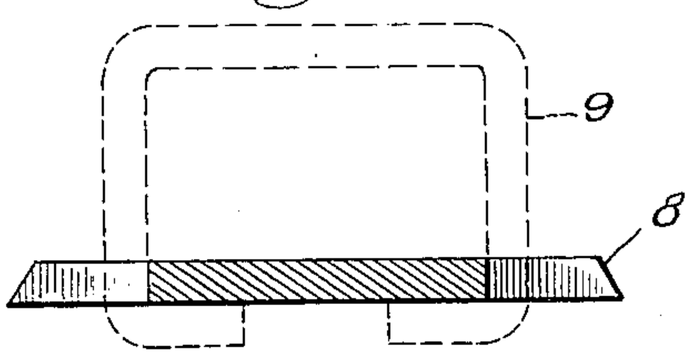


Fig. 4

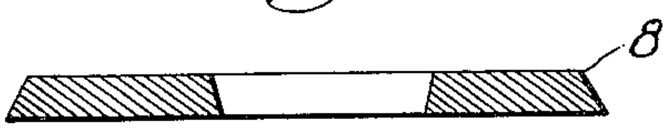


Fig. 5

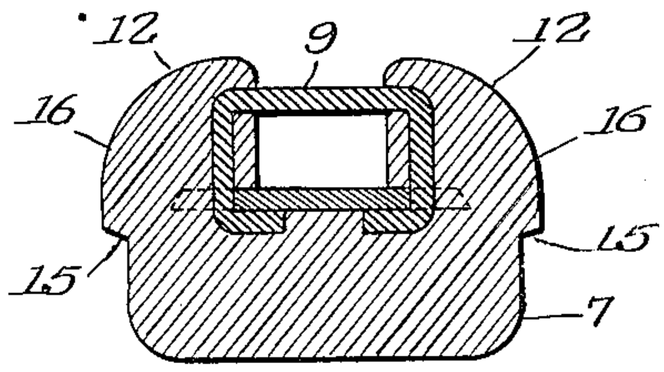
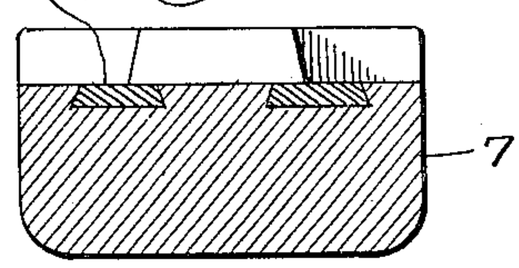


Fig. 6



Inventor:
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By Wm. S. Beck Atty.

Patented May 9, 1933

1,907,573

UNITED STATES PATENT OFFICE

ROBERT B. POGUE, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE AMERICAN BRAKE SHOE AND FOUNDRY COMPANY, OF WILMINGTON, DELAWARE, A CORPORATION OF DELAWARE

BRAKE SHOE

Application filed May 31, 1930. Serial No. 457,814.

This invention relates to brake shoes and more particularly to common cast iron shoes which are provided with reenforce backs and may be provided with inserts in the wearing face.

The object of the invention is to increase the body metal at the sides of the attaching lug thereby giving this portion of the cast iron body greater strength and resistance to the conditions met with in service.

I have shown the invention in a car shoe having a ductile metal back commonly called a steel back and with a solid cast iron body, and referring thereto.

Fig. 1 is a top plan view showing the back and lug strap in full lines and the body and the cast iron parts of the shoe in broken lines.

Fig. 2 is a side elevation of Fig. 1.

Fig. 3 is a section on the line 3—3 of Fig. 1 showing the back in full lines and the lug strap in broken lines.

Fig. 4 is a section of the back on the line 4—4 of Fig. 1.

Fig. 5 is a section on the line 5—5 of Fig. 2 showing all the parts in full lines.

Fig. 6 is a section on the line 6—6 of Fig. 2 showing all the parts in full lines.

Referring to the drawing 7 is the body, 8 is the ductile metal back and 9 is the lug strap. The back and the lug strap are assembled as indicated and placed in a mold, and then the molten cast iron is poured into the mold and embeds the back and lug strap therein. The cast iron forms the body, the end lugs 10, the end guides 11 and the projections 12 at the sides of the lug strap 9.

I provide the enlargements 13 at the upper portion of the body opposite the ends of the back so that there will be as much or substantially as much body metal beyond the ends of the back as there has been heretofore, and notwithstanding the lengthening of the back to extend under the end lugs. In the construction shown the enlargements taper toward the face of the shoe and the wearing face is no longer than it has been heretofore; and the enlargements taper toward the end lugs and add to the strength thereof. I also prefer to provide the ends of the back beneath the end lugs with openings 14 to receive the cast iron for more securely anchoring the end lugs and guide lugs to the body and to the back. It has been the practice to run the body metal up at the sides of the lug strap to form with the strap the attaching lug of the shoe. The outer faces of these projections have constituted in effect a curved continuation of the sides of the shoe and the transverse width of the lug has not been greater than the transverse width of the body of the shoe but I enlarge the projections 12 at 16 thereby increasing the width of each projection and the width of the attaching lug so that the outer faces of the projections will extend beyond the planes of the sides of the body. These enlargements extend somewhat forward of the reenforce back and form shoulders which may be employed to indicate the limit of wear of the body of the shoe. This enlargement of the projections 12 increases the strength of the projections and the attaching lug as a whole and enables it to withstand the service conditions to which it is subjected. The enlargement of the projections 12 at 16 increases the cross-sectional area of the cast iron lug reenforcement, which contacts with the brake head and thereby decreases the wear on the brake head in proportion to the increased cross-sectional area of contact. This is accomplished without changing the method of manufacture. The enlargements at the outer faces of the projections at the sides of the lug strap have the effect of increasing the strength of these projections thereby affording greater protection for the strap while at the same time the projections function with the strap in the same manner as before in forming the attaching lug.

I do not restrict the invention to the par-

ticular embodiment illustrated in the drawing but propose to employ it in any shoe for which it is or may be adapted and I reserve the right to make all changes in the form, construction and arrangement of parts within the scope of the following claim.

I claim:

A brake shoe comprising a body, a reenforce back embedded in the body at the back thereof, a lug strap engaged with the reenforce back, and projections from the body extending above the back of the body at the sides of the lug strap to form therewith an attaching lug, said projections being enlarged laterally of the shoe and extending beyond the sides of the body to increase the cross-sectional area of the attaching lug and reduce wear on the brake head.

ROBERT B. POGUE.