

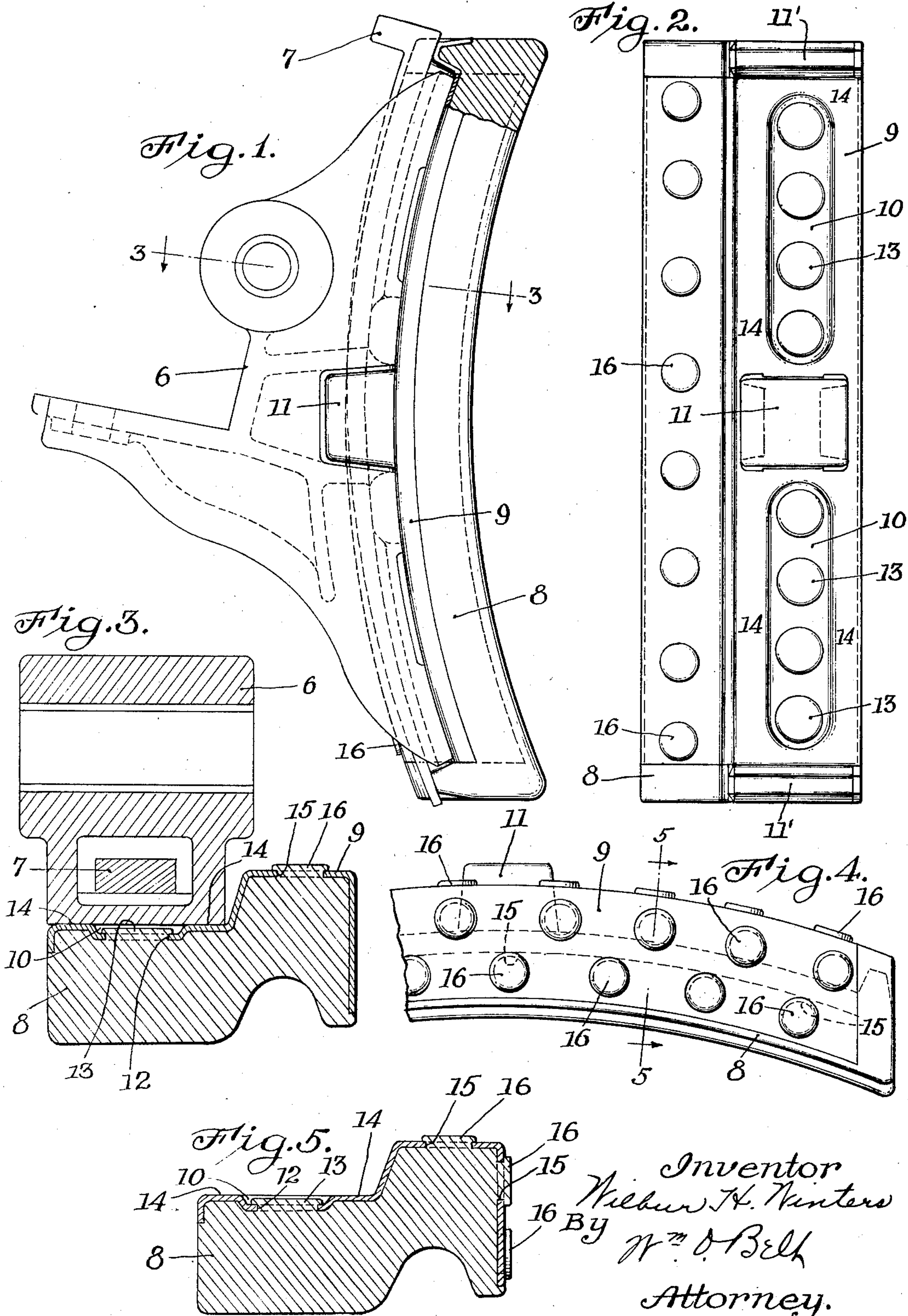
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BRAKE SHOE

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UNITED STATES PATENT OFFICE

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BRAKE SHOE

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1 Claim. (Cl. 188—254)

This invention relates to improvements in brake shoes and more particularly to composition shoes comprising a composition body and a metal back which carries the body.

5 The object of the invention is to secure the back and the body together by permitting the body material to pass into and through openings in the back and button on the back during the molding process, and to arrange the buttons on
10 that part of the back which is engaged by the brake head or other support so that they will not be damaged when the shoe is mounted thereon.

In the accompanying drawing illustrating a selected embodiment of the invention,

15 Fig. 1 is an elevation of a brake head with a brake shoe mounted thereon and partly in section.

Fig. 2 is an elevation showing the back of the shoe.

20 Fig. 3 is a sectional view on the line 3—3 of Fig. 1.

Fig. 4 is an elevation of one side of a portion of the shoe.

Fig. 5 is a sectional view on the line 5—5 of
25 Fig. 4.

Referring to the drawing, 6 is a brake head and 7 is the key which secures the shoe on the head. The shoe comprises a composition body 8 and a metal back 9 which may be made in any shape
30 desired for different varieties and sizes of shoes. In the drawing I have shown a back stamped from sheet metal in a channel or shell form and the body 8 is molded therein. The back is provided with openings and the body material passes into
35 and through these openings in the molding process and is buttoned on the outer side of the back to secure the body and the back together. These openings may be variously located in the back and, if any of the buttons engage the head 6,
40 they are liable to be broken off or otherwise damaged. To prevent this, I provide depressions 10 in the back between the attaching lug 11 and the end lugs 11' and locate the openings 12 in these depressions so that the body material may flow
45 through the openings and form buttons 13 on the back and within the depressions below the outer surface of the back around the depressions. These depressions are spaced from the sides of the shoe and bearing surfaces 14 are provided at
50 each side of each depression and between the attaching lug and the end lugs to engage the brake head. The brake head 6, as shown in Fig. 3, engages the opposite bearing surfaces 14 and bridges the intermediate depression 10 without engaging
55 the buttons 13. This location of the buttons 13

in the depressions 10 in the back not only protects them from damage in mounting the shoe on the head and in the use of the shoe in service but it also enables the shoe to be held rigidly and snugly in contact with the head without interference by
60 the buttons. Other openings 15 may be provided in the back to permit additional buttons 16 to be formed if desired.

While it is contemplated that my invention will be used primarily in composition shoes, it may also
65 be used in metal brake shoes to enable the key to hold the shoe tightly and rigidly in place on the head without interference from projecting buttons. As many openings may be provided in the back as required by different shoes and, while
70 these openings are preferably circular, they may be made in other shapes if desired. My invention is adaptable for a great variety of shoes, both composition and metal, and to backs of different shapes and sizes, and I reserve the right to make
75 all such changes in the form, construction and arrangement of parts within the scope of the following claim:

I claim:

A brake shoe comprising a back, a body secured
80 on the back, an attaching lug intermediate the ends of the shoe and end lugs at the ends of the shoe, in combination with a brake head, and a key engaging the brake head and said attaching
85 lug whereby the shoe is fastened to the brake head with the back of the shoe against the face of the head, said back having elongated depressions extending substantially from the attaching lug to the end lugs and spaced from the sides of the shoe and openings in said depressions, and parts of the
90 body extending through said openings and buttoned on the outer side of the back in said depressions, said buttons being located below the surface of those parts of the back at the sides of said depressions and said parts of the back forming bearing surfaces for the brake head whereby
95 the buttons will be below the line of contact of the brake head with the back so that the shoe may be snugly and tightly keyed to the brake head with the buttons protected from engage-
100 ment with the brake head.

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