

(No Model.)

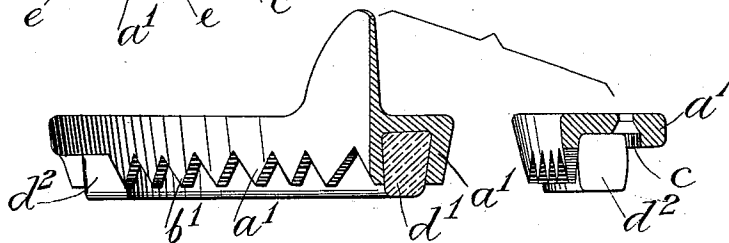
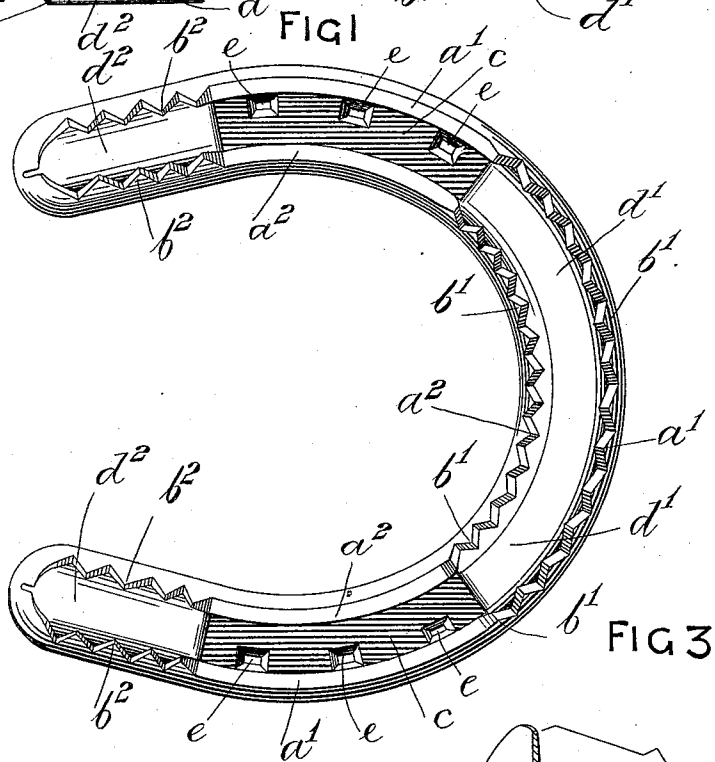
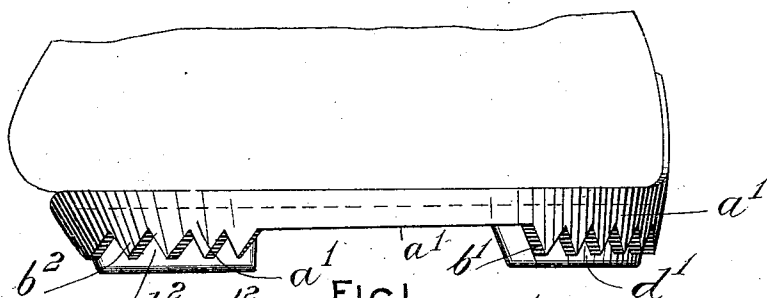
2 Sheets—Sheet 1.

J. BENFIELD.
SOFT TREAD HORSESHOE.

No. 543,976.

Patented Aug. 6, 1895.

FIG 2



WITNESSES

H. van Veden
E. H. Sturtevant

INVENTOR

Joseph Benfield

by *Richard A.*
his Attorneys

(No Model.)

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FIG 5

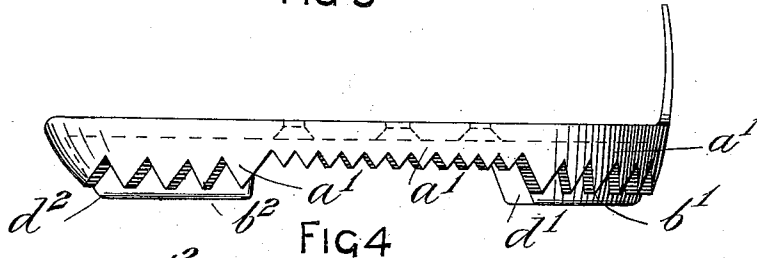


FIG 4

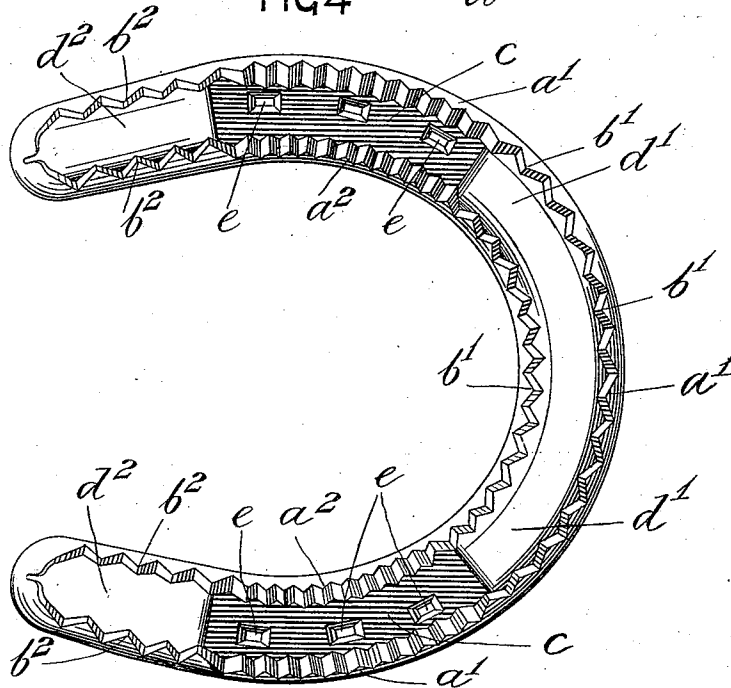
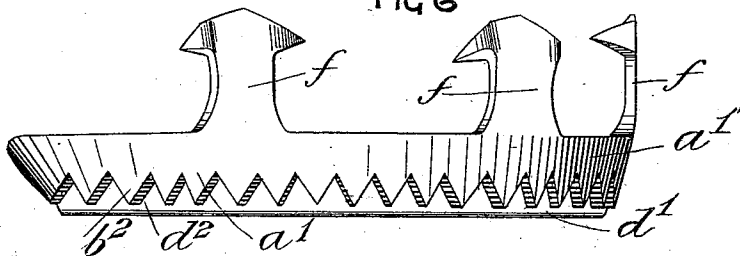


FIG 6



WITNESSES

H. van Oudenmeel
E. H. Sturdevant

INVENTOR
Joseph Benfield

by J. H. Richards
his Attorneys

UNITED STATES PATENT OFFICE.

JOSEPH BENFIELD, OF WALSALL, ENGLAND.

SOFT-TREAD HORSESHOE.

SPECIFICATION forming part of Letters Patent No. 543,976, dated August 6, 1895.

Application filed November 13, 1894. Serial No. 523,675. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH BENFIELD, a subject of Her Majesty the Queen of Great Britain and Ireland, residing at Walsall, in the county of Stafford, England, have invented certain new and useful Improvements in Shoes for Horses and other Draft-Animals, of which the following is a specification.

This invention consists of the herein-described improvements in shoes for horses and other draft-animals, the object being to effectually prevent slipping.

I will describe my invention by referring to the accompanying drawings, on which—

Figure 1 is an inverted plan of a horseshoe constructed according to my invention. Fig. 2 is a side elevation of the same shoe fixed to a horse's hoof. Fig. 3 is a part-sectional front elevation of the same. Fig. 4 is an inverted plan, and Fig. 5 is a side elevation, of a slightly-modified form of the said shoe; and Fig. 6 shows another arrangement of my invention.

My invention has reference to shoes of that class which are made of channel-section metal—that is to say, the shoe has a groove on its under side running all around the same and two downwardly-projecting ribs, one on each side of the shoe, the said groove commonly containing india-rubber, to improve the foothold and lessen the shock to the animal's hoofs.

According to this invention I make the said downwardly-projecting ribs marked a' a^2 of the shoe serrated at the front and at the back of the shoe, so as to prevent slipping, the teeth at the front of the shoe being marked b' and the teeth at the back marked b^2 , and in the groove c between these serrated portions of the ribs a' a^2 india-rubber is or may be fixed to prevent shock to the animal's hoof—that is to say, there is or may be a block of india-rubber d' at the front of the shoe between the serrated parts b' of the ribs and two other india-rubber blocks, (marked d^2 .) one

in each of the back parts of the shoe between the serrations b^2 . At each side of the shoe, between the termination of the front serrated part b' and the commencement of the back serrated parts b^2 , the side ribs a' a^2 are partly cut away, so as not to be in the way of striking the nail-heads when they are being driven in to fix the shoe, these nails passing through holes e in the channel part between the front serrated portion b' and the back serrated portion b^2 . The portions of the ribs a' a^2 , between the front serrations b' and the back serrations b^2 , may either be plain, as in the shoe illustrated by Figs. 1, 2, and 3, or they may be serrated, as in the shoe shown by Figs. 4 and 5.

When applying my invention to those shoes which are adapted to be fixed to the hoof by spiked clips—such as f , (see Fig. 6)—instead of by nails, the serrations b' b^2 are or may be continued all round the shoe, as shown in Fig. 6, and the india-rubber is or may be also continued all round the shoe in the said groove c .

My improved shoes above described can either be made of cast metal or by stamping or of rolled metal, as will be well understood.

It will be evident that my improved shoe above described can be made and used either with or without the india-rubber pieces.

What I claim as my invention, and desire to secure by Letters Patent, is—

A horse shoe having flanges along its inner and outer edges, said flanges being reduced at certain points, both the flanges and the reduced portions being serrated, substantially as described.

In witness whereof I have hereunto set my hand in presence of two witnesses.

JOSEPH BENFIELD.

Witnesses:

HERBERT WHITEHOUSE,
RICHARD ARTHUR BENOY.