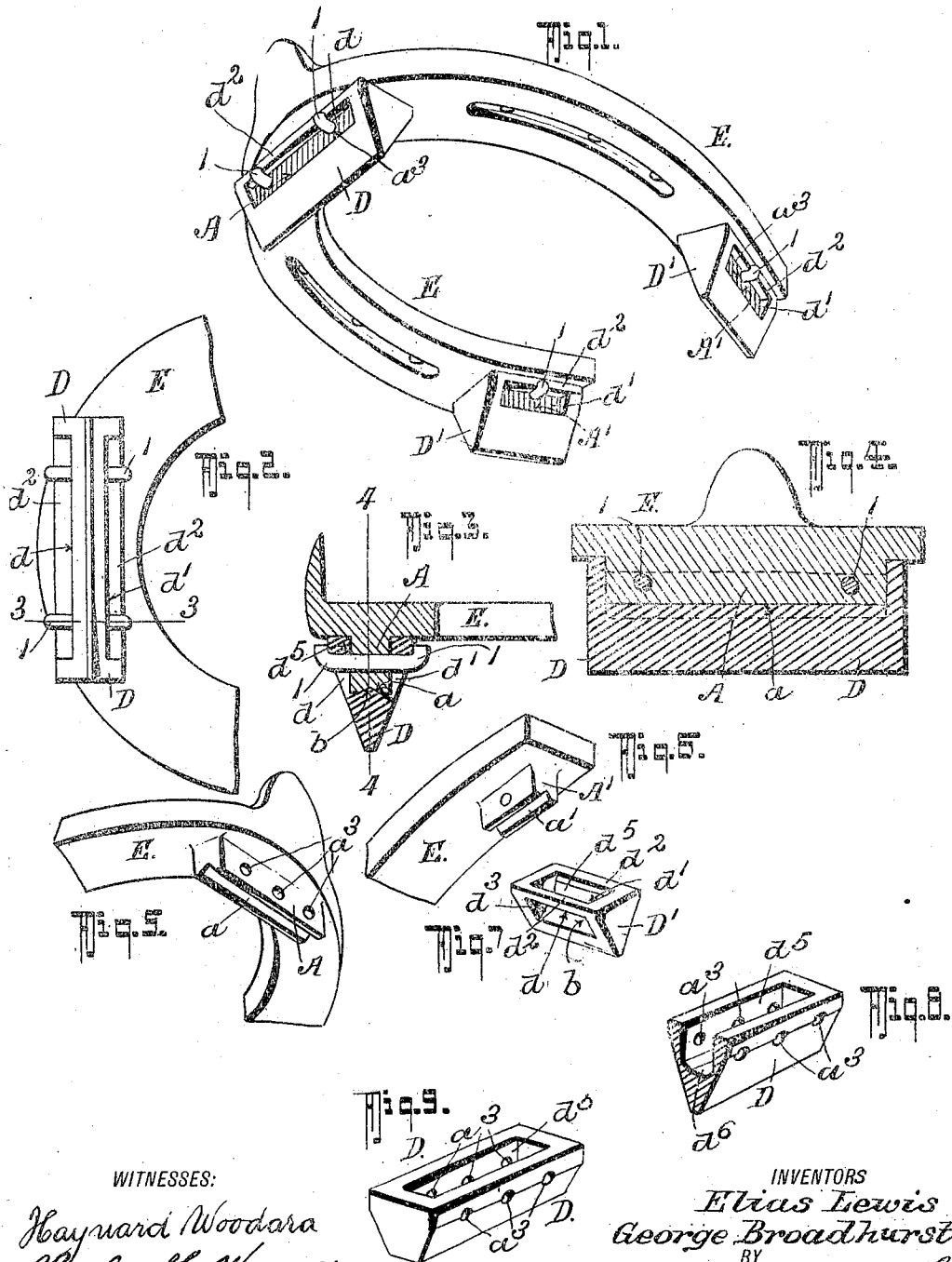


E. LEWIS & G. BROADHURST.
HORSESHOE.
APPLICATION FILED FEB. 13, 1911.

1,032,552.

Patented July 16, 1912.



WITNESSES:

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UNITED STATES PATENT OFFICE.

ELIAS LEWIS AND GEORGE BROADHURST, OF TERRE HAUTE, INDIANA.

HORSESHOE.

1,032,552.

Specification of Letters Patent.

Patented July 16, 1912.

Application filed February 13, 1911. Serial No. 608,183.

To all whom it may concern:

Be it known that we, ELIAS LEWIS and GEORGE BROADHURST, citizens of the United States, and residing at Terre Haute, in the county of Vigo and State of Indiana, have invented a new and Improved Horseshoe, of which the following is a specification.

Our invention, which relates to improvements in horse shoes, more particularly has for its object to provide a simple and economical construction of the toe and calk portions of the shoe and our said invention consists in the peculiar construction and novel arrangement of the parts hereinafter described, specifically pointed out in the appended claim and illustrated in the accompanying drawing, in which,

Figure 1, is a perspective view of a horse shoe that embodies our invention. Fig. 2, is an inverted plan view of the front end of the shoe with the toe calk member applied. Fig. 3, is a transverse section thereof on the line 3—3 on Fig. 2. Fig. 4, is a longitudinal section of the toe calk and the shoe taken on the line 4—4 on Fig. 3. Fig. 5, is a perspective view of the toe end of the shoe with the calk removed and formed with the preferred form of saddle lug. Fig. 6, is a perspective view of one of the heel ends of the shoe. Fig. 7, is a similar view of one form of the heel calks. Fig. 8, is a perspective view of a modified form of toe calk, partly in section and Fig. 9, is a similar view of a shallow or blunt calk.

The horse shoe body E is of the conventional form and at the toe and heel ends it has lugs for receiving the calk members which are detachably secured and in such manner that when worn they may be readily removed and replaced by new ones.

As is best shown in Figs. 2, 3 and 4, the toe end of the shoe has a lug A integral with the shoe body that extends transversely and nearly the full width of the said toe end of the shoe and in the preferred construction the lower edge has a V shaped groove *a* that forms a saddle seat for the correspondingly shaped bearing portion *b* of the toe calk D as is best shown in Fig. 3. The toe calk D is of a size to extend over the full length of the lug A and at the opposite sides it is longitudinally recessed as at *d—d'* whereby to form side flanges or bars *d²* and the lower edges of the said recesses taper upwardly as at *d³* and merge at *b* to form the V shaped bearing portion of the calk that

rests in the saddle seat or groove *a* in the toe lug, and *d³* indicates the longitudinal socket in the calk for receiving the lug A and with the said sockets *d³* the side recesses *d—d'* communicate to provide a transverse passage in the calk. Lug A has a number of transverse apertures *a³* located just above the side flanges or bars *d²* and the said apertures are provided for the fastening or key pins 1 that are driven through the calks and the lugs to retain the calk onto the shoe and one or both ends of the said pins are bent up over the flanges *d²—d²*, it being understood that to remove the calk, it is only necessary to turn back or chisel off the turned over ends of the pins which can be then readily punched out of the lugs.

The heel calks D' are constructed like the toe calks, and the heel lugs A' are also like the lugs A except they have but a single locking aperture, see Figs. 6, and 7.

Instead of forming the calk members with the V shaped bearing portions they may be formed with the saddle seats as indicated by *d³* on Fig. 7. When thus formed, the lugs A—A' on the shoe are correspondingly shaped to fit into the said seats *d³*.

The calks may be made with sharp edges as in Fig. 3 for winter use and instead of making high calks they may be of a shallow depth and very blunt tread face as is shown in Fig. 9.

From the foregoing taken in connection with the drawing the complete construction of our improved horse shoe and the advantage thereof will be readily apparent.

By reason of the manner in which the calks are attached to the shoe body, as shown and described, the said calks can be readily removed and replaced at any time or place, where or when it becomes necessary, thereby making it possible for a set of shoes to last much longer, reducing the shoeing expense to the minimum, as well as relieving the horse's foot of the danger of injury, incident to too frequent removal and replacing of the shoes.

What we claim is:

As an improvement in horse shoes; the shoe body having a pendent and transversely apertured lug, the lower edge of which has a V-shaped bearing, a calk having a longitudinal socket whereby to fit over the shoe lug, the base of the said socket having a V-shape whereby to engage the V-bearing on the lug, the upper end of the said

calk having portions for flatwise engaging the shoe body at each side of the lug, the said calk having elongated slots in its sides that open into the aforesaid longitudinal
5 socket, and flexible pins for engaging the apertures in the lug, the ends of the said pins extending through the slots in the calk

and being bendable up over the upper bearing portions of the calk.

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