

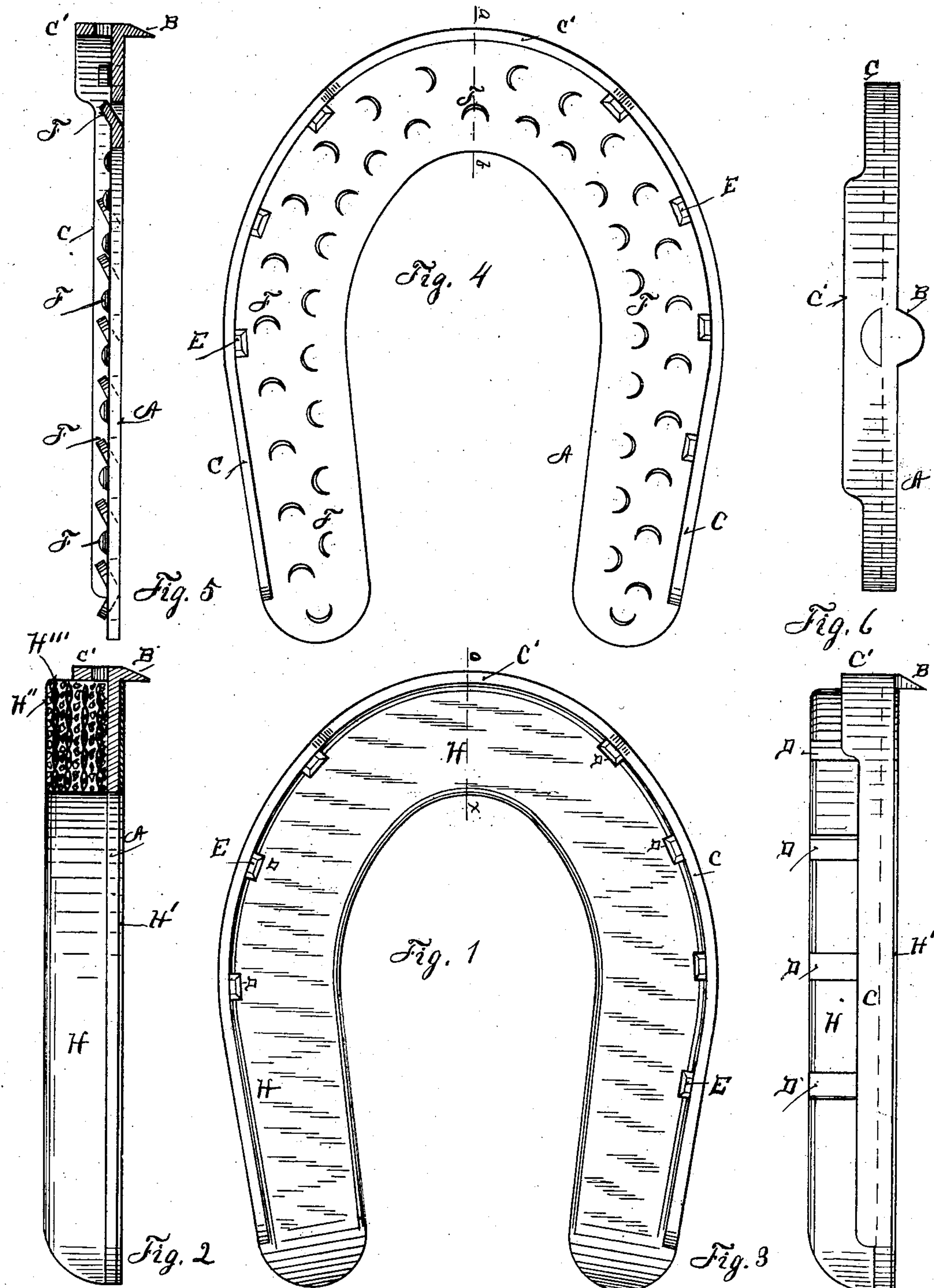
No. 734,024.

PATENTED JULY 21, 1903.

J. E. WATTS.
HORSESHOE.

APPLICATION FILED JUNE 28, 1901.

NO MODEL.



Witnesses:
Chas. H. Hunt

Inventor
John E. Watts

UNITED STATES PATENT OFFICE.

JOHN E. WATTS, OF TOPEKA, KANSAS.

HORSESHOE.

SPECIFICATION forming part of Letters Patent No. 734,024, dated July 21, 1903.

Application filed June 28, 1901. Serial No. 66,418. (No model.)

To all whom it may concern:

Be it known that I, JOHN E. WATTS, a citizen of the United States, residing at Topeka, in the county of Shawnee and State of Kansas, have invented certain new and useful Improvements in Horseshoes; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to improvements in horseshoes that have a metal base to which are attached semi-elastic webs of such construction and material as to insure strength and lasting properties. I attain these objects by the devices herewith illustrated in the accompanying drawings, in which—

Figure 1 is a plan view of a complete horseshoe. Fig. 2 is a semisection taken through the line *o x* of Fig. 1. Fig. 3 is a side view of Fig. 1. Fig. 4 is a plan view of the metal base. Fig. 5 is a semisection of same, taken through the line *a b* of Fig. 4; and Fig. 6 is a front view of Fig. 4.

Similar letters refer to similar parts throughout the several views.

The resilient metal base *A* may be of iron, steel, or any suitable metal. Its outer edge is projected downward, as shown at *c c'*, the object of such projection being to protect the semi-elastic formation *H* from the results of any blow or sharp concussion that might be produced by the stumbling of a horse to which the shoe was attached. The punched projecting lips *F* are inclined to and so formed as to allow an opening through the metal base *A*, and if the said base be of sheet steel or iron the nail-holes *E* are punched therein, and also the toe-clip *B*, as shown at Fig. 6. The conformation of the projecting lips *F* may be varied to suit the construction called for by the different sizes and the form of the shoes.

The semi-elastic web *H* is composed of a mixture of webbing, as indicated at *H'*, Fig. 2, of tanite, as indicated at *H''*, Fig. 2, and of rubber sufficient to unite the same in a semi-

homogeneous body, which may be forced under pressure to enter the various openings of the base *A* and conform to the various conformations of the lips *F*. The nailing-slots of the web *H* may be produced by formers set in the nail-holes *E* at the time of pressing the said web into its final conformation. The semi-elastic base-tread *H'* may consist of a single or double course of rubbered webbing.

In constructing the shoe as a whole the primal parts *A*, *H*, and *H'* having been made ready for being united, the formers used to form the nail-slots *D* are put in place in the vulcanizing-case, and the rubbered tanite web *H* is forced into position therein. After this is done the metal base is placed on top of the said web *H* with lipped side downward, and the final rubbered web *H'* is placed on the upper side of the said base *A*. The top of the vulcanizing-case is then put in place and sufficient pressure given to so press and compact the web *H* that it fully surrounds the lips *F* and passing through the openings created by the formation of said lips it is forced in contact and unites with the upper rubbered base-tread *H'*. It is then placed in the vulcanizer and kept therein until such time as the requisite hardness is obtained, when the shoe as an article of manufacture is ready for use.

As a result of the above mechanical combination, I get an intermeshing of the tanite with the vulcanized rubber and the webbing, firmly holding the tanite in place, and thereby preventing undue wear of the semi-elastic portion of the shoe *H*. In addition to the advantages to be derived from the combination in the web *H* is the added metal base *A*, which insures the holding said web *H* firmly to the hoof, while in the base-tread *H'*, which intervenes between the said metal base *A* and the hoof of the animal, I have a continuance of the semi-elastic web, an arrangement or combination that must prove of marked value to all horses that are subjected to hard driving over paved roadways.

I am aware that prior to my invention efforts along this line have been made by other inventors, and I do not, therefore, claim my combination broadly; but

What I do claim, and desire to secure by Letters Patent, is—

1. In a horseshoe, a resilient metal base formed with punched inclined lips so as to
5 leave openings through the base beneath the same, a semi-elastic base-tread, and a semi-elastic web with said projecting lips engaging therein, the said web extending through
10 the said openings and being firmly attached to said base-tread.

2. In a horseshoe, a resilient metal base provided with punched angular lips projecting from one face of said base and openings
15 through the same, a semi-elastic base-tread upon the upper side of said resilient metal base, and a semi-elastic web upon the lower side of the base, firmly engaged by said angular lips, said web extending through the

openings in the base beneath the lips and securely engaging the base-tread, substantially
20 as described.

3. In a horseshoe, a resilient metal base formed with lips punched therefrom and inclined to said base, with openings there-
25 through beneath said inclined lips, and a semi-elastic web engaged by the angular lips of the metal base, and extending through said openings firmly securing a semi-elastic tread upon the upper face of the resilient base,
30 substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN E. WATTS.

Witnesses:

F. M. COMSTOCK,
J. H. HUNT.