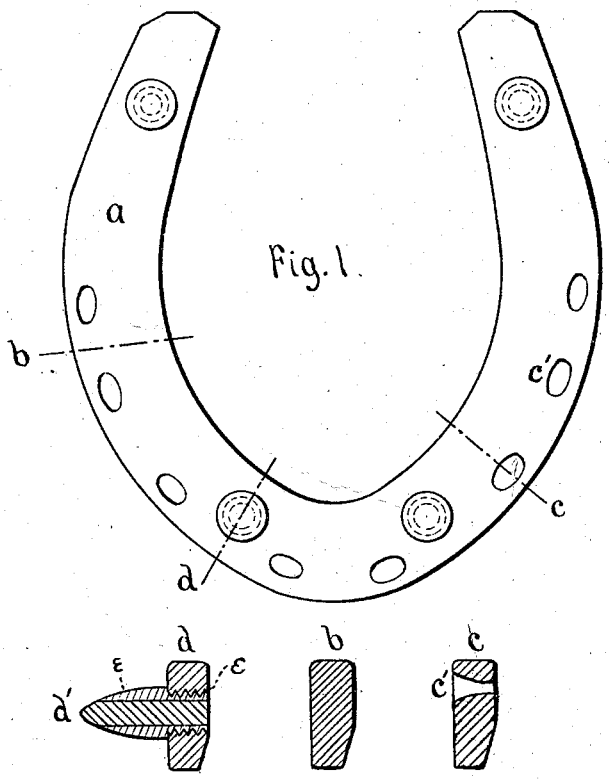
S. STONE.

HORSESHOE.

No. 169,495. Patented Nov. 2, 1875.



Witnesses

E. M. Bliss.

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UNITED STATES PATENT OFFICE.

SAMUEL STONE, OF NORTH MANCHESTER, CONNECTICUT, ASSIGNOR TO THE STEEL-CENTERED CALK AND SET-SCREW COMPANY, OF SAME PLACE.

IMPROVEMENT IN HORSESHOES.

Specification forming part of Letters Patent No. **169,495**, dated November 2, 1875; application filed November 3, 1873.

To all whom it may concern:

Be it known that I, SAMUEL STONE, of North Manchester, county of Hartford and State of Connecticut, have invented a certain new and useful Improvement in the Manufacture of Horseshoes; and to enable others skilled in the art to make and use the same, I will proceed to describe it, referring to the drawings, in which the same letters indicate like parts in each of the figures.

The nature of this invention consists in forming the bar from which they are made into its proper shape in the common way. Then in passing said bar between rollers having protuberances or punches formed or secured thereon, for the purpose of making nail-holes tapering shape through the thickness of the bar, and diametrically oval shape, so that the nail-head may be driven wholly into the orifice flush with the surface of the face of the shoe, and of the desired distance apart, as may be required to properly secure the shoe to the animal's foot; and providing suitable distance between each set of orifices or holes to form the heel portion or length of each shoe, thus specially adapting this shoe for inserting screw-threaded calks, having steel core or center through its entire length, into threaded orifices formed alternately between said nail-holes, and at the same time produce a stronger, better shoe, and better and more durable calk.

In the accompanying drawings, Figure 1 is a face view of a shoe, showing the shape of the nail-holes and calks.

a is the shoe. *b* is a cross-section of the bar; *c*, a cross-section of the bar through the nail-holes. *d* is a cross-section of the bar and steel core or center screw-threaded calk.

I first prepare the bar in the shape shown in section *b*, by drawing the stock between rollers in the common way. Then I pass said bar between another set of rollers, while the bar is in a heated state, one of said rollers having protuberances or punches formed or secured on its surface, which makes or produces the holes *c'* the required distance apart for receiving the nails for securing the shoe to the animal's foot, and alternately leaving space or blank on the bar unpunched sufficient distance to allow (when cut off) the proper length or heel of each shoe, so that by cutting the said blank space of the bar between the holes, a blank will be produced the desired length to form a shoe. After this the shank or heel portion of the shoe is swaged to its proper shape; then bent or formed into the required shoe shape in the common way.

It will be observed that these nail-holes are formed diverging or tapering through the thickness of the shoe, and diametrically oval shape, so that in driving the nail its head will be firmly embedded into the orifice or hole flush with the face-surface of the shoe.

The calk *d'* is formed into the desired shape from a steel center-bar, thus having a core or steel center through its entire length, and having a screw-thread at its base end for securing it into the shoe.

The screw-threaded orifices or holes for the reception of the screw of the steel core or center calk are formed between the nail-holes, which is specially designed to secure the full strength of the stock in the shoe.

I have thus shown the nature, construction, and advantage of this invention, so as to enable others skilled in the art to make and use the same therefrom.

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

As a new article of manufacture, the horseshoe *a*, provided with calks *d'*, having a steel center from end to end, and fitted in place by means of a screw-end, substantially as described.

SAMUEL STONE. [L. S.]

Witnesses:
E. W. BLISS,
JEREMY W. BLISS.