

J. L. PIKE.
HORSESHOE CALK.

No. 46,262.

Patented Feb. 7, 1865.

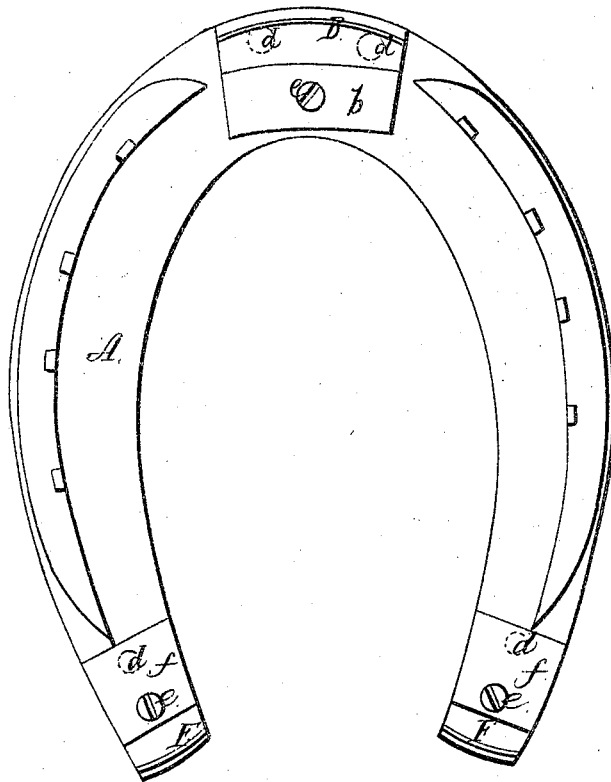
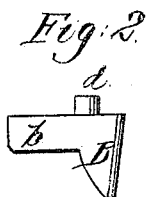


Fig. 1.



Witnesses:
N. Ames
B. C. Porter.

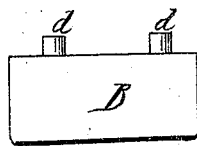


Fig. 3.

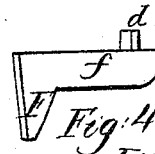


Fig. 4.

Inventor:
James L. Pike

UNITED STATES PATENT OFFICE.

JAMES L. PIKE, OF LYNN, MASSACHUSETTS.

IMPROVED HORSESHOE-CALK.

Specification forming part of Letters Patent No. 46,262, dated February 7, 1865.

To all whom it may concern:

Be it known that I, JAMES L. PIKE, of Lynn, in the county of Essex and State of Massachusetts, have invented a new and useful Improvement in Horseshoe-Calks; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a plan of the bottom of a shoe with the calks attached; Fig. 2, a side elevation of the toe calk; Fig. 3, a front elevation of the same, and Fig. 4 a side elevation of a heel-calk.

Like parts are indicated by the same letters in all the drawings, which are intended to be full-sized.

The nature of my invention consists, first, in constructing horseshoe-calks of cast-iron or cast-iron "chilled" or "case-hardened," instead of the forged iron and steel calks in general use, whereby I am enabled to produce a much cheaper and neater-looking article than any known or used before, and as hard and durable as hardened steel; second, in casting one or more starts or dowel-pins on the upper side of the calks, to enter corresponding holes in the body of the shoe, and thereby prevent the calk, when attached to the shoe, from slipping on it in any direction; and, third, in confining the calk to the shoe by means of a dowel pin or pins and a screw passing through the calk into the shoe.

To enable others skilled in the art to make and use my invention, I will now proceed to describe its construction and operation.

The calks, instead of being forged of malleable iron or steel, I construct of cast-iron, either cast in sand or in a metallic mold, so as to be thoroughly chilled; or, instead of casting the calk in an iron mold to harden it by chilling, I cast it in sand in the usual manner, and then case-harden it in any of the ordinary methods

of case-hardening; or in some cases a simple cast-iron calk may be used without being chilled or hardened. Thus constructed, it is obvious that calks can be made a great deal cheaper as well as neater in appearance and more uniform in shape than it is possible to forge them.

The toe-calk B, I construct with two cylindrical starts or dowel-pins, *d*, as shown in Figs. 2 and 3, long enough to pass entirely through the shoe, which is provided with two round holes to receive them, as shown by the dotted lines in Fig. 1.

b is an extension of the calk, and shaped as clearly shown in Figs. 1 and 2.

e is a screw, which passes through the calk and enters an internal screw in the body of the shoe, keeping the calk fast upon the same, the two starts preventing it from slipping on the shoe in any direction.

The heel-calks are cast with a single start, *d*, and in about the relative position indicated in Figs. 1 and 4, said start entering a suitable hole in the body of the shoe and preventing the calk from sliding on the shoe in the direction of the principal strain. The heel-calks are further confined to the shoe by means of a screw, *e*, in the same manner as the toe-calks. Calks thus constructed can be very readily attached to a shoe or removed therefrom while on the animal's foot, by any one as well as a horseshoer, by means of a screw-driver, the utility of which is obvious and very great.

Having thus described the construction and operation of my invention, what I claim as new, and desire to secure by Letters Patent, is—

As a new article of manufacture, a horseshoe-calk of chilled or case-hardened cast-iron, constructed substantially as and for the objects specified.

JAMES L. PIKE.

Witnesses:

N. AMES,
B. C. PORTER