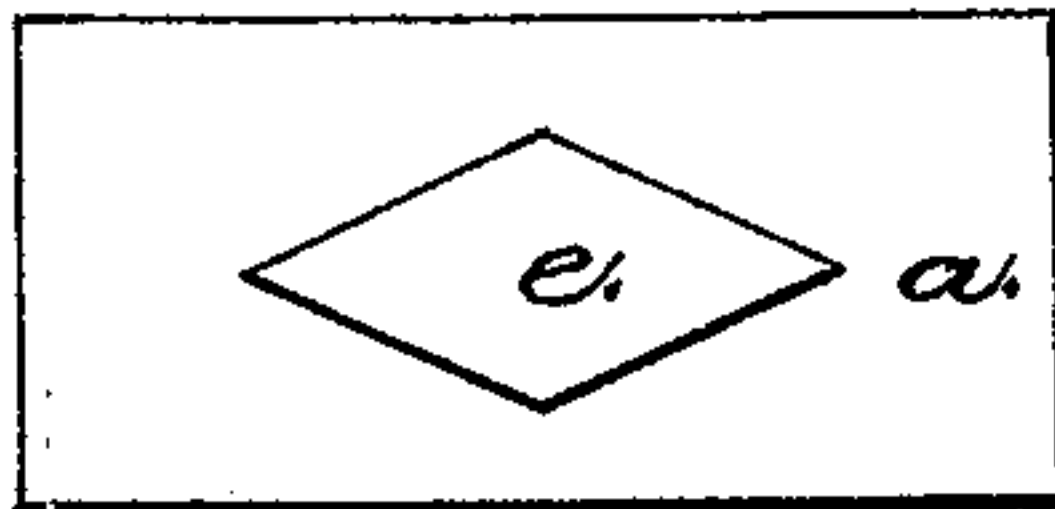
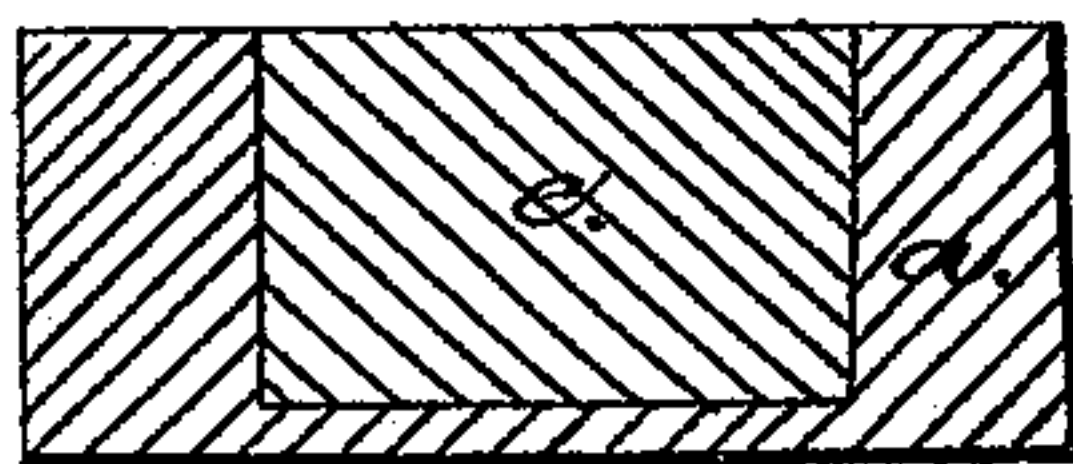
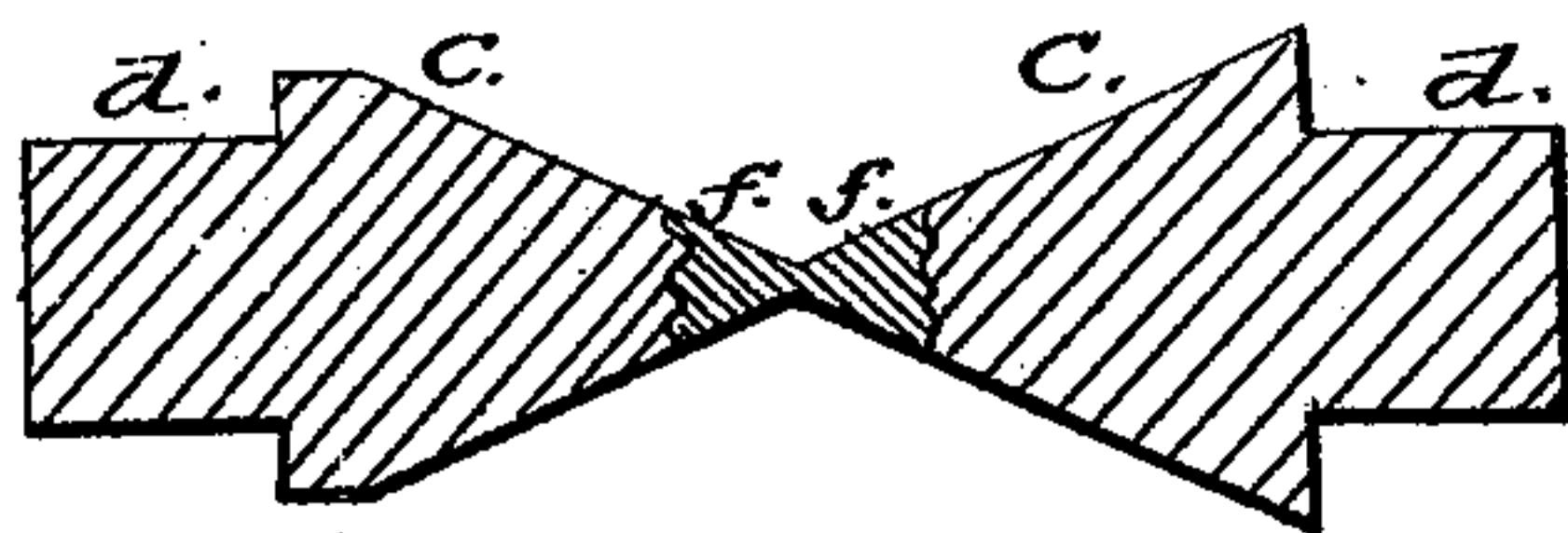


J. Jorey,
Horseshoe Calk.

No. 91,237.

Patented June 15. 1869.



Witnesses:
J. W. Bamforth
E. M. Keefe

Inventor
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United States Patent Office.

JOSEPH JOREY, OF NORTH MANCHESTER, CONNECTICUT.*

Letters Patent No. 91,237, dated June 15, 1869.

IMPROVEMENT IN HORSESHOE-CALKS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, JOSEPH JOREY, of North Manchester, county of Hartford, and State of Connecticut, have invented certain new and useful Improvements in the Manufacture of Horseshoe-Calk; and, to enable others skilled in the art to make and use the same, I will proceed to describe, reference being had to the drawings, in which the same letters indicate like parts in each of the figures.

The nature of this invention consists in enveloping a piece of steel in a bar of iron, from which the calk is formed, so that the calk, when formed, will have a steel centre or point surrounded with iron, the object of which is to surround or embody the steel point in iron, so that, as the steel wears away, the iron, being softer than the steel, will wear away faster, and thus keep the calk sharp, or in good working-order, and thereby less liable to break than when all made of steel, cheaper, and more durable for use.

In the accompanying drawings are shown this improved calk, and the blank from which they are formed.

a is a blank, prepared after my invention, from which the calk is swaged, and a steel-point centre, surrounded with iron, is produced.

c are two calks, swaged into shape from a blank, *a*.

d are dowels, formed at the base of the calk, for the purpose of securing said calk to the shoe, by means of inserting the dowel into an orifice and riveting, or by a screw-thread, formed on the dowel, fitted closely into a threaded orifice in the shoe, and, by means of a nut-formation at the base of the calk, is closely and firmly secured in the shoe.

I first take a bar of iron, about five-eighths of an inch in diameter, and drive a punch nearly through

the bar. Then, I insert into the orifice, thus formed, a piece of steel, *e*, about the same size of the punch, or the orifice formed by the punch, and about as long as the depth of the orifice, and weld it into the bar. These blanks are then cut from the bar the length for forming two calks. I then subject the blank to the swaging-operation, by means of which I produce an iron calk, having a steel point or centre, *f*, susceptible of being hardened to any desired degree; and this result I propose to secure by swaging-dies, formed of the proper or desired shape, so that a uniform size and shape may be secured, and the calks rapidly produced.

It will thus be seen that I am enabled to produce a self-sharpening calk, having all the advantages of an all-steel calk, and the further advantage of an iron base and dowel, while the calk proper is surrounded by the iron, which wears away around the point faster than the point itself, and rendering it self-sharpening, thus avoiding the liability of breakage experienced in the use of the all-steel calks, and, at the same time, secure a better and cheaper article of manufacture, trade, and use.

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

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

The herein-described horseshoe-calk, with steel point and core, constructed from the blank *a*, in the manner and for the purpose set forth.

JOSEPH JOREY.

Witnesses:

J. W. BAMFORTH,

E. W. BLISS.

**Assignor to himself & Samuel Stone.*