

(No Model.)

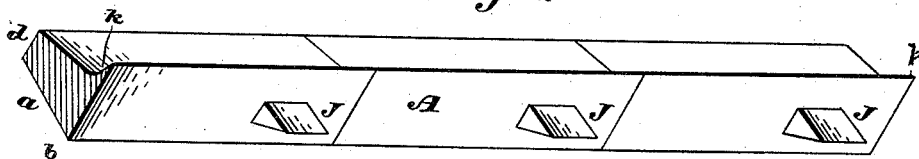
J. D. HALL.

TOE CALK BAR.

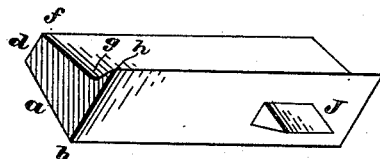
No. 342,007.

Patented May 18, 1886.

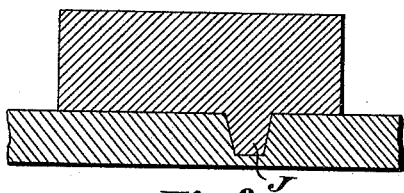
*Fig. 1.*



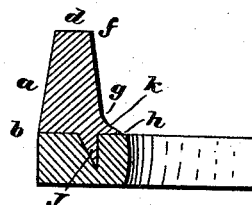
*Fig. 2.*



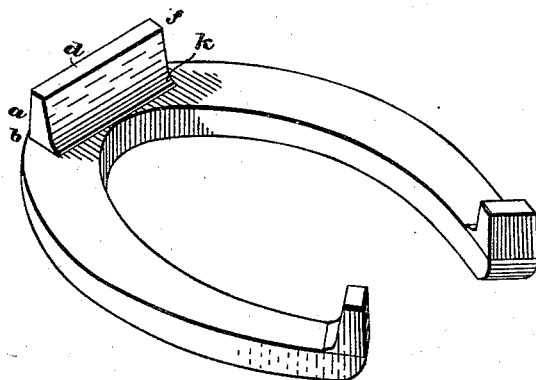
*Fig. 3.*



*Fig. 4.*



*Fig. 5.*



WITNESSES:

*Harry Freese*

*Chas. T. Miller*

*John D. Hall*

INVENTOR

BY

*W. K. Miller*

ATTORNEY

# UNITED STATES PATENT OFFICE.

JOHN D. HALL, OF ORRVILLE, OHIO.

## TOE-CALK BAR.

SPECIFICATION forming part of Letters Patent No. 342,007, dated May 13, 1886.

Application filed March 13, 1886. Serial No. 195,112. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN D. HALL, a citizen of the United States, and a resident of Orrville, county of Wayne, State of Ohio, have invented a new and useful Improvement in Horseshoe Toe-Calks, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification.

My invention relates to improvements in horseshoe toe-calks; and it consists in the formation, as an article of manufacture, of a bar of the form hereinafter described, containing any desired number of sections that may be separated, each section thereof forming a toe-calk.

My invention also relates to the detail and combination of parts, as described, and set forth in the claims.

Similar letters of reference indicate corresponding parts in all the figures of the drawings hereunto attached.

Figure 1 is an isometrical view of my invention in multiform turned over on its front face, showing the under side. Fig. 2 is same view of a single toe-calk. Fig. 3 is a view in longitudinal section. Fig. 4 is a view in transverse section of calk welded to shoe. Fig. 5 is an isometrical view of the calk and shoe.

Letter A, Fig. 1, represents my invention in multiform, and consists of a rolled bar of metal, preferably of steel, having a vertical side, *a*, of such height as may be required, a horizontal base, *b*, and a top surface, *d*, parallel thereto. The rear face of the toe-calk bevels back, as shown in cross-section, Fig. 4, on a line from *f* to *g*, terminating in a more obtuse angle from *g* to *h*, the end of base *b* forming a wide base, terminating in a welding-lip, *k*, which, when welded to the shoe, as shown in Fig. 5, forms a brace to the toe-calk.

The angles and lines hereinbefore mentioned may be varied to suit circumstances and the various sizes of calks required.

From the base-line *b* of the bar A there is projected a spur, J, about three-eighths of an inch long and about one-fourth of an inch wide and three-sixteenths of an inch thick at

the base, and sharpened in the form of a wedge. The number of these spurs to the bar and their location or distance apart may be regulated by the number of calks required to the bar and the length of the toe-calk. They may be so arranged as to allow one spur to each calk, and so placed that when the bar is cut into toe-calks the spur may be at one end of or in the middle of the calk.

I know that toe-calk bars have been made having angular sides and a spur projected from the base to "stick" them to the shoe. I do not claim such formation, as it is more difficult to weld them to the shoe, because of the tendency of the hard steel to settle into the soft iron instead of welding to the surface; but toe-calks formed as hereinbefore described as my invention may be easily welded upon the surface of iron or steel shoe. The lip *k*, being thin, will unite perfectly with the shoe, leaving no crack or flaw as a starting-point for the toe to pull off; also forms a wide and bracing base to the calk.

I am also aware that toe-calk bars have been made with lip or pins projecting from the body of the bar on a line with either the front or rear face of the bar; but I do not claim such a form of bar; but,

Having described the nature and object of my invention, what I do claim, and desire to secure by Letters Patent, is—

1. As an article of manufacture, a toe-calk bar formed as hereinbefore described, having a continuous lip or fin, *k*, projecting from the base of the bar, substantially as shown and described, and for the purpose set forth.

2. As an article of manufacture, the combination, in a toe-calk bar, of the bar A, having the projecting lip *k*, as described, and the spur J, substantially as described, and for the purpose set forth.

In testimony whereof I have hereunto set my hand this 27th day of February, A. D. 1886.

JNO. D. HALL.

Witnesses:

S. N. COE,  
JOHN W. WINKLER.