No. 768,880. PATENTED AUG. 30, 1904.

C. LOIBL.

HORSESHOE CALK.

APPLICATION FILED SEPT. 28, 1903.

NO MODEL.

Fig. 1.

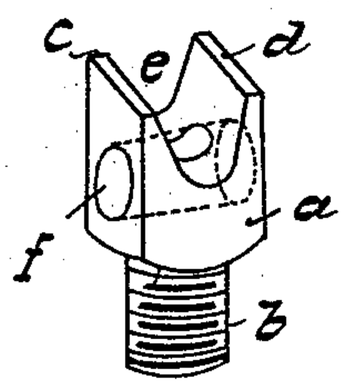


Fig. 2.

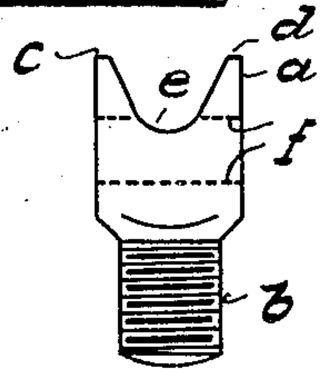


Fig. 3.

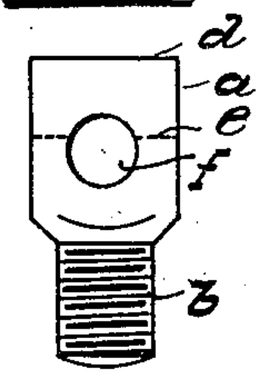
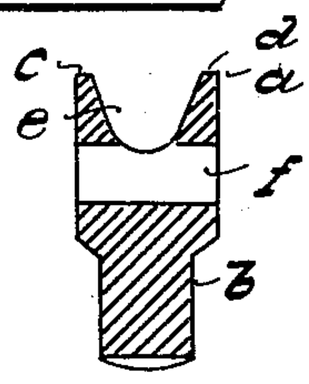


Fig. 4.



Witnesses:
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No. 768,880. Patented August 30, 1904.

UNITED STATES PATENT OFFICE.

CARL LOIBL, OF MUNICH, GERMANY.

HORSESHOE-CALK.

SPECIFICATION forming part of Letters Patent No. 768,880, dated August 30, 1904.

Application filed September 28, 1903. Serial No. 174,973. (No model.)

To all whom it may concern:

Be it known that I, CARL LOIBL, upholsterer, a citizen of Germany, residing at Munich, Bavaria, Germany, have invented certain new and useful Improvements in Horseshoe-Calks; and I do hereby 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.

This invention relates to calks for horseshoes, and has for its object the provision of means whereby the calk will be self-sharpening and not liable to breakage.

Calks have heretofore usually been of two kinds, those of a solid character and others having cavities formed therein between narrow wearing edges. In both cases the calks are ordinarily provided with screw-threaded studs for securing the same to the horseshoes. The first form of construction is subject to the criticism that it does not present a sufficiently sharp or rough bearing-surface to prevent slipping on smooth surfaces, while the second construction is either extremely liable to breakage, because of the small cross-section of the wearing edges, or to give the necessary stability the wearing edges are of such small height as to speedily wear away and lose their efficiency. Efforts have been made to remedy the defect pointed out with reference to the second class by having the wearing edges comparatively high and placing between the same braces to form a support. Such an arrangement is unsatisfactory at best and, moreover, adds greatly to the cost of the calks because of the expense incident to their manufacture.

This invention combines the durability of the solid calk with the efficiency of the hollow one in its new condition and is open at the same time to none of the objections to be urged against the hollow form of calk.

This calk is exceedingly simple in construction, inexpensive to manufacture, and very durable.

In the accompanying drawings I have illustrated a calk constructed according to my invention, in which—

Figure 1 is a perspective of the calk. Figs. 2 and 3 are side elevations at right angles one to the other, and Fig. 4 is a longitudinal section through the calk.

The calk *a* is provided with the usual screw-threaded stud *b*, by means of which it is removably secured in place in the shoe. The face of the calk is provided with two parallel wearing edges *c* and *d*, between which is formed a groove *e*. Passing through the body of the calk, preferably at right angles to the wearing edges *c* and *d*, is a perforation *f*, placed at such a distance from the face of the calk as to intersect or penetrate the groove *e* in its lower portion.

The advantages of this construction are that the wearing edges *c* and *d* need not be made of a great height, but are comparatively low and supported by the arch formed by the walls of the groove *e*. As the edges *c* and *d* are worn away in use their sharpness will not be materially diminished until the wearing shall have so far progressed as to reach the upper portion of the perforation *f*, at which time the worn-away edges *c* and *d* are replaced by the walls of the perforation *f*, forming wearing edges at right angles to *c* and *d*. In this way the calk is provided with a sharp tread until the calk shall have worn away to the level of the shoe itself.

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

1. A horseshoe-calk having formed in its face a groove between wearing edges, and a perforation passing through the body of the calk at an angle to the groove.

2. A horseshoe-calk having formed in its face a groove between wearing edges, and a perforation passing through the body of the calk at an angle to the groove and in a different plane.

3. A horseshoe-calk having formed in its face a groove between wearing edges, and a perforation passing through the body of the calk at an angle to the groove and cutting said groove at the point of intersection.

4. A horseshoe-calk having formed in its face a groove between wearing edges, and a perforation passing through the body of the

calk in a different plane at right angles to the groove and cutting the groove at the point of intersection.

5. A horseshoe-calk having formed in its face a groove between parallel wearing edges, and a perforation passing through the body of the calk at an angle to the groove and cutting said groove at the point of intersection.

6. A horseshoe-calk having formed in its face a groove between and parallel to wearing edges, and a perforation passing through the body of the calk at a distance from the wearing-face and at right angles to the groove, the perforation cutting the groove at the point of intersection.

7. A horseshoe-calk having formed in its face a groove between parallel wearing edges, a perforation passing through the body of the calk at a distance from the wearing-face and at right angles to the groove, the perforation cutting the groove at the point of intersection, and means for removably securing the calk in a shoe.

In testimony whereof I affix my signature to this specification in the presence of two witnesses.

CARL LOIBL.

Witnesses:
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