No. 741,153. PATENTED OCT. 13, 1903.

S. MALMQUIST.

HORSESHOE CALK.

APPLICATION FILED APR. 6, 1903.

NO MODEL.

Fig. 1.

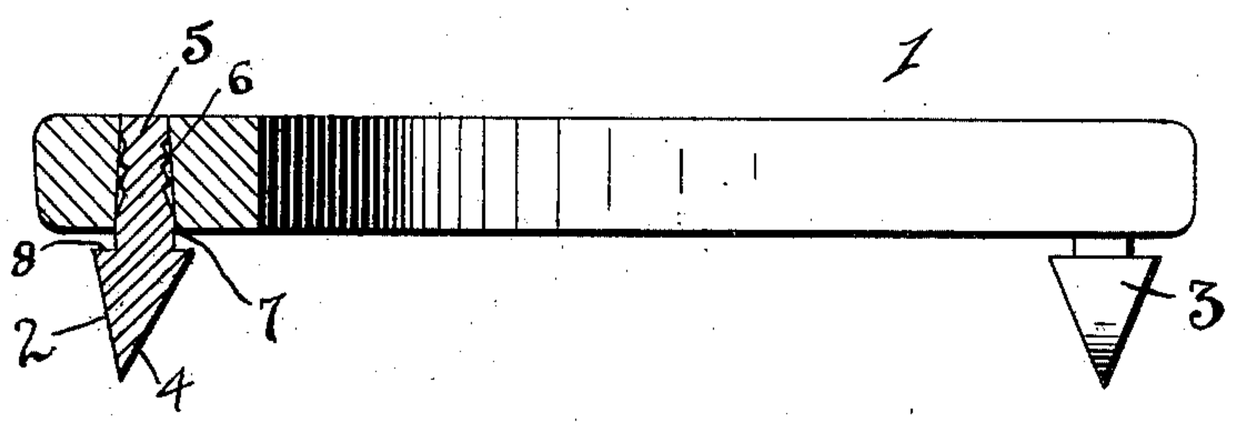
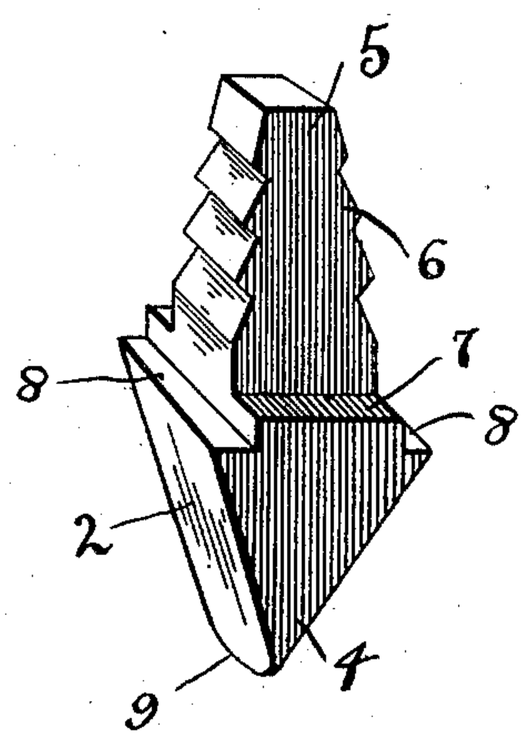


Fig. 2.



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No. 741,153. Patented October 13, 1903.

UNITED STATES PATENT OFFICE.

SWAN MALMQUIST, OF CARLTON, MINNESOTA.

HORSESHOE-CALK.

SPECIFICATION forming part of Letters Patent No. 741,153, dated October 13, 1903.

Application filed April 6, 1903. Serial No. 151,387. (No model.)

To all whom it may concern:

Be it known that I, SWAN MALMQUIST, a citizen of the United States, residing at Carlton, in the county of Carlton and State of Minnesota, have invented certain new and useful Improvements in Horseshoe-Calks; and I do 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 improvements in horseshoe-calks.

The object of the invention is to provide a calk which may be quickly applied to a horseshoe and which will not become casually displaced.

A further object is to provide a calk having means whereby the same may be removed from a shoe and which is so constructed that the horse will not cut himself and the danger of side slipping is reduced.

With these and other objects in view the invention consists of certain novel features of construction, combination, and arrangement of parts, as will be more fully described, and particularly pointed out in the appended claims.

Figure 1 is a longitudinal vertical section through a horseshoe, showing the application of the toe and heel calks. Fig. 2 is a detail perspective view of the calk removed.

In the drawings, 1 denotes the shoe, which may be of any form. 2 denotes the toe-calk, and 3 denotes the heel-calk. The toe and heel calks are alike except that the points of the toe-calks are tapered more on one side than another, while the points of the heel-calks taper alike on both sides.

The calks consist of a substantially V or wedge shaped point 4 and a rectangular slightly-tapering shank 5, provided on two of its sides with a series of horizontally-disposed shoulders or serrations 6, having downwardly-directed edges or points which when the calk is driven in place engage the walls of the hole into which the shank is driven and securely hold the same therein.

7 denotes longitudinal horizontally-disposed shoulders formed at the base of the shank or at its point of juncture with the point, the said shoulders forming a stop or support, which is engaged by the bottom of the shoe.

8 denotes shoulders arranged transversely across the calk below the shoulders 7, so that when the calk is in place a space is left between the lower side of the shoe and the top of the shoulder 8, whereby the same may be engaged by a pair of tongs and drawn out of the shoe.

The lower edge of the point 4 of the calks is rounded or curved, as shown at 9, the object of which is to prevent side slipping, which frequently occurs in the use of "chisel" calks. The curved edge also prevents the horse from cutting himself should he "overreach" or "interfere."

The calks are applied to the shoe in a perpendicular manner, the toe-calk point being tapered or beveled slightly more on the rear side than on the front, imparting to the calk the form in end elevation or vertical front-to-rear section of a scalene triangle. This construction and application of the calks gives the horse a firm sure footing on icy roads and prevents slipping in any direction.

The construction of the calk is also such that it permits the same to be applied and removed without removing the shoe from the horse, the shoulders 8 facilitating the engagement of tongs with the calk to enable the same to be drawn out.

A further advantage claimed for the calk is the small size and shape of the shank, which requires but a small hole or opening in the shoe, and therefore in light shoes the same are not materially weakened. Furthermore, the rectangular shape of the shank prevents the calk from turning and always retains the same in proper position.

From the foregoing description, taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

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

1. The combination with a horseshoe having a calk-opening, of a calk provided with

a serrated shank forming downwardly-projected points to impinge against the wall of said opening and thus hold the calk in place, substantially as described.

2. A horseshoe-calk, comprising a body portion of scalene-triangular form, the rear face forming the long side and the point being curved or rounded, and provided with a shank having serrated sides, and shoulders of less width than the upper part of the body portion and of the same width as the shank, and front and rear shoulders coextensive in width with the upper part of the body portion and disposed on opposite sides of the shank and end shoulders, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

SWAN MALMQUIST.

Witnesses:
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