(No Model.)

H. OLSON.

HORSESHOE.

No. 296,996. Patented Apr. 15, 1884.

Fig. 1.

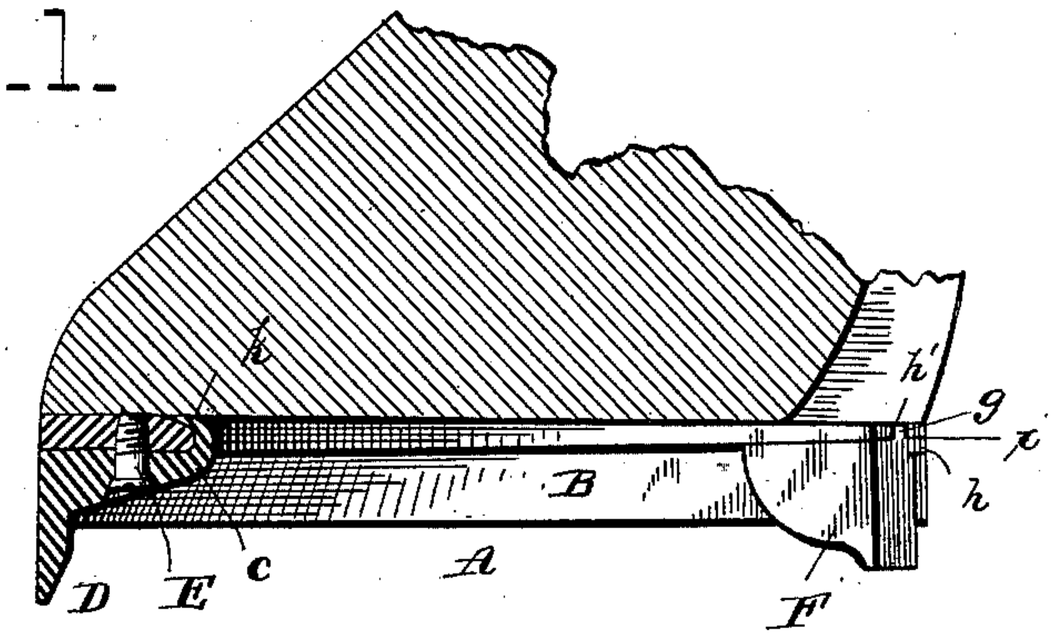


Fig. 2.

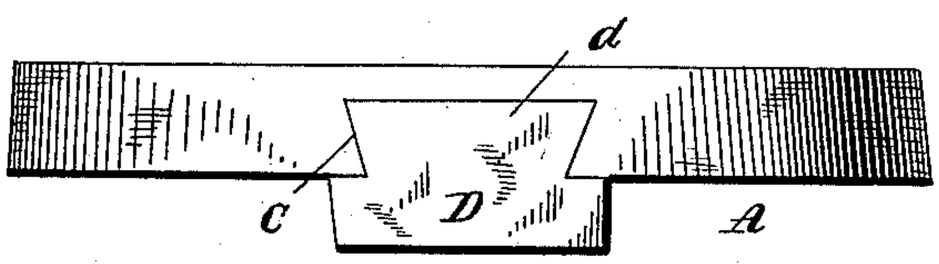


Fig. 3.

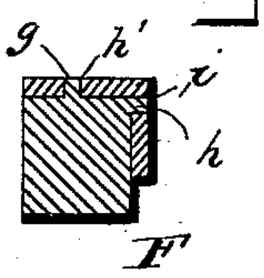


Fig. 4.

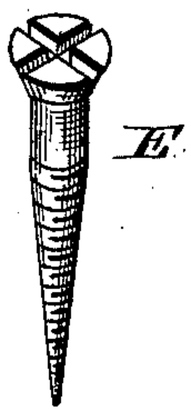
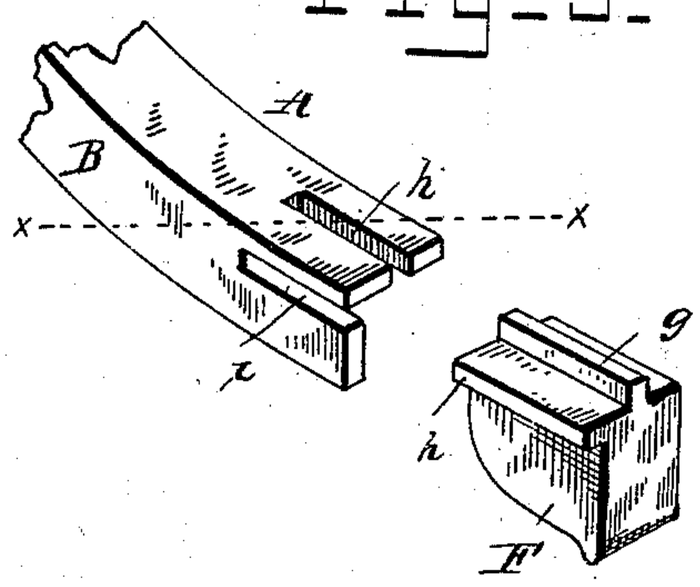


Fig. 5.



WITNESSES

Edwin L. Jewell.

J. J. McCarthy.

INVENTOR

Holcom Olson,

By C. M. Alexander

Attorney

UNITED STATES PATENT OFFICE.

HOLCOM OLSON, OF MARIADAHL, KANSAS.

HORSESHOE.

SPECIFICATION forming part of Letters Patent No. 296,996, dated April 15, 1884.

Application filed November 12, 1883. (No model.)

To all whom it may concern:

Be it known that I, HOLCOM OLSON, a citizen of the United States, residing at Mariadahl, in the county of Pottawatomie and State of Kansas, have invented certain new and useful Improvements in Horseshoes, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to horseshoes; and the object I have in view is to provide the shoe with heel and toe calks, which may be removed readily while the shoe is on the foot of the horse, for the purpose of sharpening or renewing said calks.

In the accompanying drawings, making a part of this specification, Figure 1 represents a sectional view of a horse's hoof with my improved shoe secured thereto. Fig. 2 is a front view of the shoe detached. Fig. 3 is a sectional view of the heel of the shoe at one side. Fig. 4 is a detached view of a screw that I use in securing the toe-calk in place. In Fig. 5 I show a perspective of one heel of the shoe and also a perspective of the calk which is to be secured thereto.

In the figures, A represents a horseshoe, formed in any of the well-known and usual ways upon its upper or inner face. This shoe has a flange, B, around its outer edge, on its under side, such as is frequently used upon winter shoes, and this flange, together with a small portion of the body of the shoe, is cut away at the toe, so as to form a dovetailed recess to receive a correspondingly-shaped tongue, *d*, upon the toe-calk D. The toe-calk has an extension, *c*, rearward, which lies against the under side of the toe of the shoe, and is secured thereto by means of a screw, E, which has, preferably, cross-cut slots in its head. The outer end of this extension is turned up and then over the web of the shoe, and thus forms an additional safeguard for holding the calk in its place. Two slots, *h* and *i*, are formed in each of the heels of the shoe, and run longitudinally, one being vertical and the other horizontal in position. The horizontal slot is made at the base of the flange B, so that the bottom of the calk will have a flat bearing upon the under face of the shoe. The vertical slot is made in the shoe proper or web of the shoe.

F F represent the heel-calks, which are, of course, sharpened, as usual, for ice, sleet, &c. Upon two sides of these calks are formed splines, which are intended to fit closely in the slots in the shoe-heels. The splines are at right angles to each other, and when they enter the grooves or slots in the ends of the shoe and the calks are driven forward with a hammer a very tight fit is effected. The calks may be secured in place by means of screws or by partially closing the ends of the slots by any suitable instrument; but as a general thing they will remain without the aid of such means. When the horse is traveling forward, the pressure of the calk is forward. In stopping quickly or in backing the reverse is the case; but the curve of the shoe makes a diagonal pressure, as seen by the line *x x*, Fig. 5, so that the friction caused on the side of the calks and splines, together with that caused by the weight of the horse, being thrown upon the calks, prevents their backward movement. When a horse either stops suddenly or backs, his front feet are thrown well forward of, and his hind feet well under, his body, thus throwing his entire weight upon the heel-calks. This weight tends to clamp the calks and to produce sufficient friction upon it to keep it in the shoe.

I do not claim, broadly, a toe-calk lying against the web of the shoe and having its rear extension turned up and over said web; but

What I do claim is—

1. A horseshoe having a downwardly-projecting flange on its under side, and having a dovetailed opening in said flange and partially in the toe of the shoe, in combination with a toe-calk which is adapted to fit into said opening, and which has a rear extension which lies against the web of the shoe and turns up and over said web, as and for the purpose set forth.

2. A horseshoe having a downwardly-projecting flange on its under side, and provided at its heel with a longitudinal lateral slot at the base of the flange and a longitudinal vertical slot in the web of the shoe, in combination with the calk having splines on two of its sides to fit into said slots, substantially as and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

HOLCOM OLSON.

Witnesses:
J. W. WILLIAMS,
CHARLES SUNDERLAND.