(No Model.)

P. H. GUYTON.

HORSESHOE CALK.

No. 505,898. Patented Oct. 3, 1893.

Fig. 1.

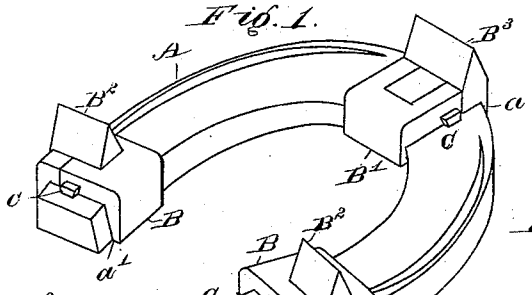


Fig. 5.

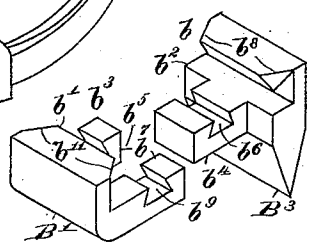


Fig. 4.

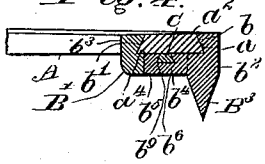


Fig. 2.

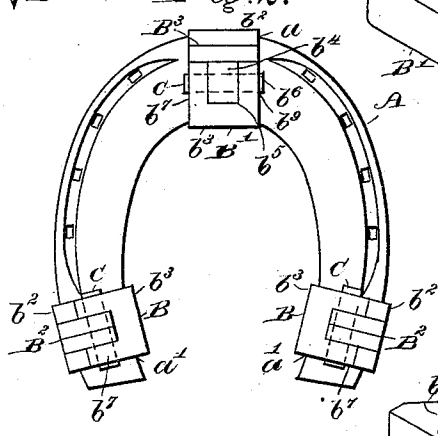


Fig. 6.

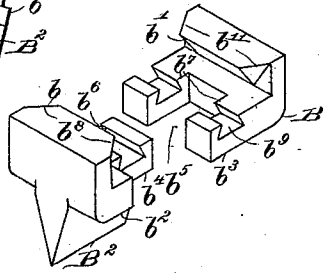
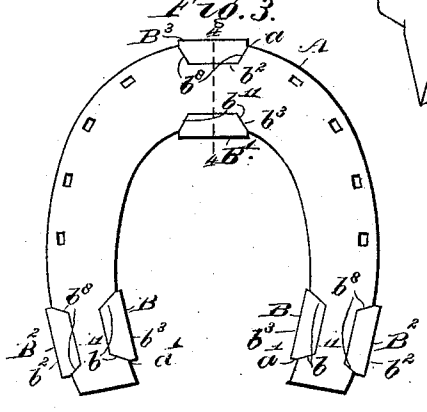


Fig. 3.



WITNESSES.

Kirkley Hyde.

Mystic E. Mauser.

INVENTOR

Patrick H. Guyton,

BY Albert M. Moore,

His ATTORNEY.

UNITED STATES PATENT OFFICE.

PATRICK H. GUYTON, OF LOWELL, MASSACHUSETTS.

HORSESHOE-CALK.

SPECIFICATION forming part of Letters Patent No. 505,898, dated October 3, 1893.

Application filed March 8, 1893. Serial No. 465,066. (No model.)

To all whom it may concern:

Be it known that I, PATRICK H. GUYTON, a citizen of the United States, residing at Lowell, in the county of Middlesex and Commonwealth of Massachusetts, have invented a certain new and useful Improvement in Horseshoes, of which the following is a specification.

My invention relates to horse shoes and consists in the devices hereinafter described and claimed, the object of said invention being to enable the calks to be readily attached to and detached from the body of the shoe and to protect the clamp-locking key.

In the accompanying drawings, Figure 1 is an isometric perspective view of an inverted horse-shoe to which are attached my improved calks; Fig. 2, a plan of such a shoe and calks inverted; Fig. 3, a plan or top view of the same; Fig. 4, a vertical section on the line 4—4 in Fig. 3, omitting the heel of the shoe; Fig. 5, an isometric perspective view of the parts of the toe-calk detached from the shoe and separated from each other; Fig. 6, a similar view of one of the heel-calks.

The body A of the shoe is of the usual form, except that at the toe a and at each heel a' both the outer and inner edges of the shoe are beveled from the upper face to the lower, as shown in Fig. 4, at a^2 a^4, to receive the inclined inner faces b b' of the jaws b^2 b^3 of the clamps B B′. The clamps B of the heel-calk B^2 are precisely like the clamp B′ of the toe-calk B^3, each clamp having a jaw b^2 provided with a straight tongue b^4 which enters and has a sliding fit in a corresponding recess b^5 in the other jaw b^3 of the same clamp. The tongue b^4 and the recessed part b^7 of the jaw b^3 each rests upon the bottom of the horseshoe and each has a groove b^6 b^9, in their upper surfaces which grooves, when said tongue is pushed into said recess as far as possible, are continuous with each other. The grooves b^6, b^9 are preferably of a dovetail shape in cross-section and the tongue b^4 is drawn into the recess by a key C of corresponding shape in cross-section and very slightly tapering from end to end, so that driving said key into said grooves causes the inclined surfaces b b' of the jaws to pinch the inclined surfaces a^2 a^4 of the shoe very firmly and to hold the clamps against the bottom of the shoe. The heel-calks B^2 differ from the toe-calk B^3 merely in their position on their respective clamps, the former B^2 being arranged parallel with the tongues b^4 of the clamps B and the latter at right angles to the tongues b^4 of the clamp B′. The edges formed by the meeting of the inclined surfaces of the jaws b^2 b^3 of the clamps B B′ with the ends of said jaws next the shoe may be beveled as shown at b^8 b^{11} and the inclined recess in the shoe may be shaped accordingly to facilitate the fitting of the parts.

The device above described enables the calks to be applied in a moment and as quickly removed and holds the calks much more firmly on the shoe than any other device known to me. The first cost of the calks and of the fitting of the shoe is very slight and the calks cannot be broken in such a manner as to prevent their being readily removed from the shoe, and the keys C being arranged at the top of the clamps are protected by the clamps and the bottom of the shoe in such a manner as to prevent their being so bent or spread at the ends as to prevent their removal from the clamps when desired, and to prevent their being broken by striking upon stones and uneven frozen ground when in use.

I claim as my invention—

1. A clamp, formed in two parts or jaws, one of which is provided with a calk, one of said jaws having a tongue and the other of said jaws having a recessed part to receive said tongue, a key passing through transverse slots, with which the upper surfaces of said tongue and recessed part are provided, to draw said jaws toward each other and to cause said jaws to grasp the inner and outer edges of a horseshoe and to protect said key between the bottom of said shoe and said tongue and recessed part, as and for the purpose specified.

2. The combination with a horseshoe, of a clamp, formed in two parts or jaws, one of which is provided with a calk, one of said jaws having a tongue and the other of said jaws having a recessed part to receive said tongue, a key passing through transverse slots, with which the upper surfaces of said tongue and recessed part are provided, to draw said jaws toward each other and to cause said jaws to grasp the inner and outer edges of said horseshoe and to protect said key between the bottom of said shoe and said tongue and recessed part, as and for the purpose specified.

3. The combination of a horseshoe, beveled at the top at its outer and inner edges, a clamp having a calk and having jaws provided with inclined inner faces to fit said beveled surfaces of said shoe, one of said jaws having a tongue and the other of said jaws having a recessed part to receive said tongue, and a key passing through transverse slots, with which said tongue and recessed part are provided, to draw said jaws toward each other and to cause said jaws to grasp said inner and outer edges of said shoe, as and for the purpose specified.

In witness whereof I have signed this specification, in the presence of two attesting witnesses, this 28th day of February, A. D. 1893.

PATRICK H. GUYTON.

Witnesses:
ALBERT M. MOORE,
MYRTIE C. MAUSUR.