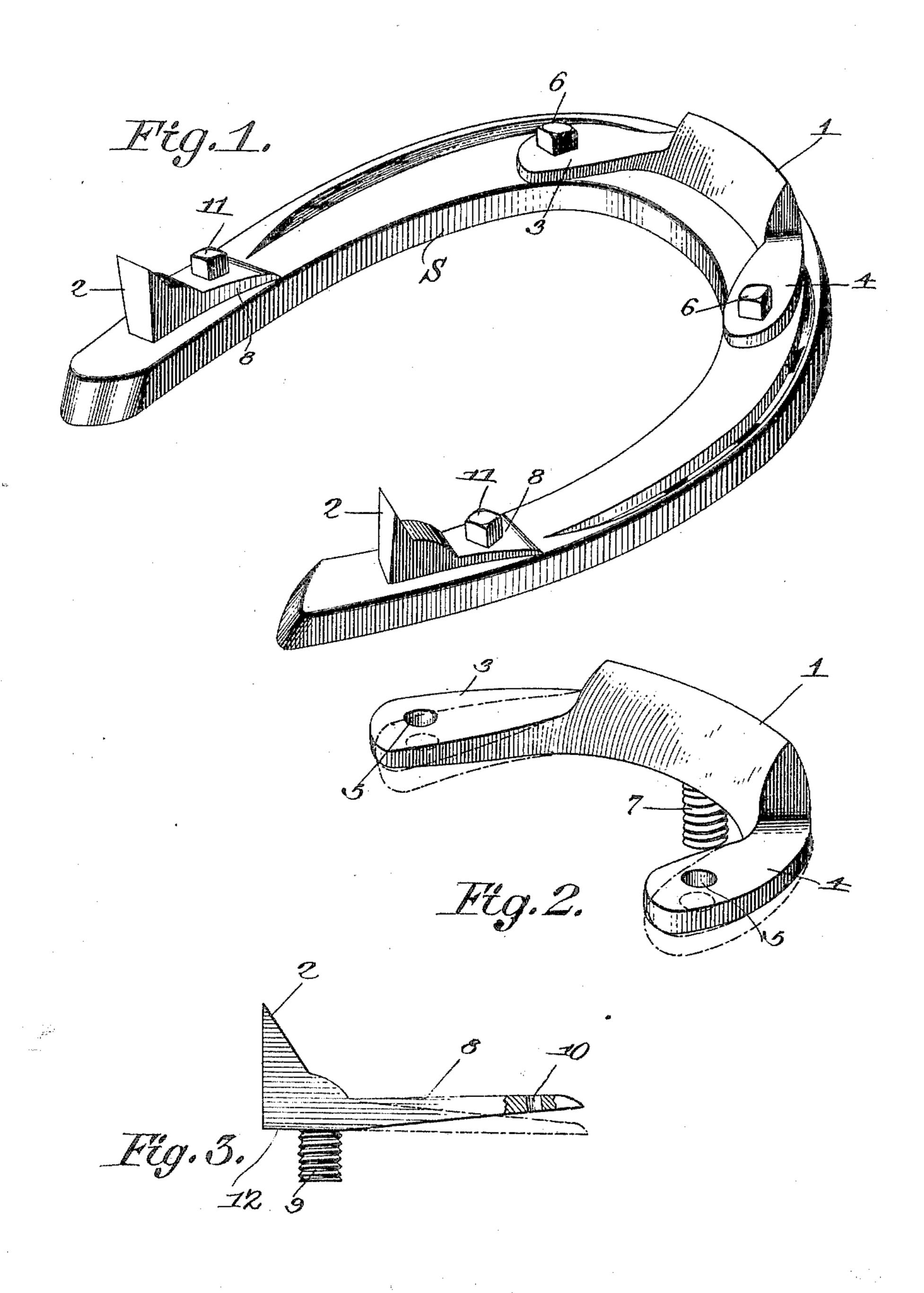
W. F. BUDENBACH. HORSESHOE CALK.

APPLICATION FILED JUNE 15, 1905.



Witnesses: Eddledd R.U. Wedt William F. Budenbach, nventor, by Casho-teo.

Attorneys

UNITED STATES PATENT OFFICE.

WILLIAM F. BUDENBACH, OF SCRANTON, PENNSYLVANIA.

HORSESHOE-CALK.

No. 817,155.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, William F. Buden-Bach, a citizen of the United States, residing at Scranton, in the county of Lackawanna and State of Pennsylvania, have invented a new and useful Horseshoe-Calk, of which the following is a specification.

This invention relates to horseshoe-calks.

The object of the invention is to improve
the manner of assembling the calk with the
shoe whereby all danger of the calk working
loose or becoming detached will be positively
precluded.

With the above and other objects in view, as will appear as the nature of the invention is better understood, the same consists in the novel construction and combination of parts of a horseshoe-calk, as will be hereinafter

fully described and claimed.

In the accompanying drawings, forming a part of this specification, and in which like characters of reference indicate correspond-

ing parts, Figure 1 is a view in perspective of a horseshoe equipped with the calk of the present invention. Fig. 2 is a perspective detail view of the toe-calk. Fig. 3 is a side

elevation of one of the heel-calks.

Referring to the drawings, S designates the horseshoe, which may be of the usual or any preferred construction, and therefore needs no detailed description. Combined with the shoe are three calks—a toe-calk 1 and two heel-calks 2. A feature common to both of the calks is that the securing shank or member is obliquely disposed relatively to the attaching-stud, whereby when flexed to cause it to lie flat with the face of the shoe it will exert a constant lifting pressure upon the securing-bolt and operate positively to prevent the latter from working loose, so that when the calk is once positioned all danger of accidental separation is positively prevented.

The toe-calk 1 is provided with two curved shanks 3 and 4, which, as shown in Fig. 3, are normally disposed obliquely to the under face of the calk and are provided with perforations 5 to receive bolts 6 to secure the calk in position. Intermediate of its ends the calk is provided with a threaded stud 7, that engages a suitable threaded orifice in the shoe and serves to effect the initial attaching of the calk thereto, the bolts 6 serving to lock the calk in place in the manner described.

Each of the heel-calks 2 is provided with a shank 8, that is obliquely disposed relatively 55 to the threaded attaching-stud 9, and near one terminal with an orifice 10, through which passes a securing-bolt 11.

As usual, the calks are approximately triangular in cross-section, so as to present a 60 sharp lip to bite into the ice or snow, thereby

to prevent slippage.

By having the shanks of the calks disposed obliquely to the studs it will be seen that when the securing-bolts are seated there 65 will be a strain applied to the stud, which will cause it to lock itself firmly in the threaded orifice in the shoe, and by reason of the upward pressure exerted upon the under side of the bolt-head by the shank the former is posi- 7° tively locked against any liability of working loose. To accentuate the stability of the connection between the calk and the shoe, each calk is provided with a bearing-face 12, that is disposed at right angles to the attach- 75 ing-stud 9 and contacts with the shoe, and thereby affords a firm union between the parts.

Having thus described the invention, what

is claimed is—
1. A calk embodying a threaded attachingstud and a securing-shank obliquely disposed
relatively to the stud.

2. A calk embodying a threaded attachingstud, and a securing-shank obliquely disposed relatively to the stud and provided with a bolt-receiving orifice.

3. A toe-calk embodying a threaded attaching-stud, and a pair of securing-shanks curved to conform to the shoe and being 90

obliquely disposed to the stud.

4. A calk embodying a threaded attachingstud and a securing-shank, that face of the shank which will be the under one in use having a portion of its length disposed obliquely 95 to the stud and the remaining portion at right angles thereto.

In testimony that I claim the foregoing as my own I have hereto affixed my signature

in the presence of two witnesses.

WILLIAM F. BUDENBACH.

Witnesses:

JACOB F. EMIG, J. H. JOCHUM, Jr.