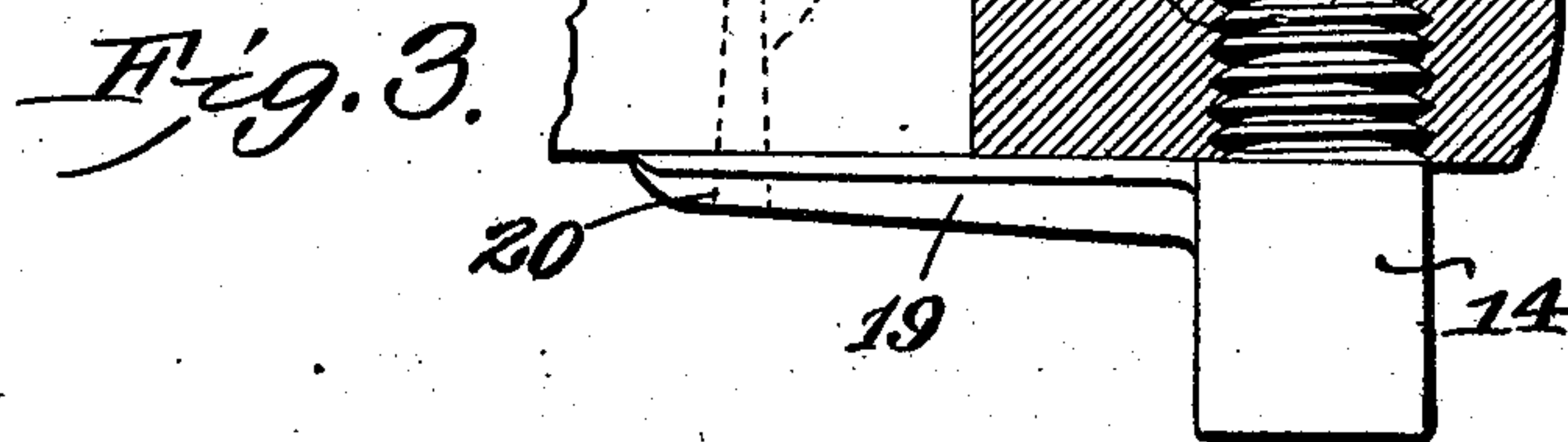
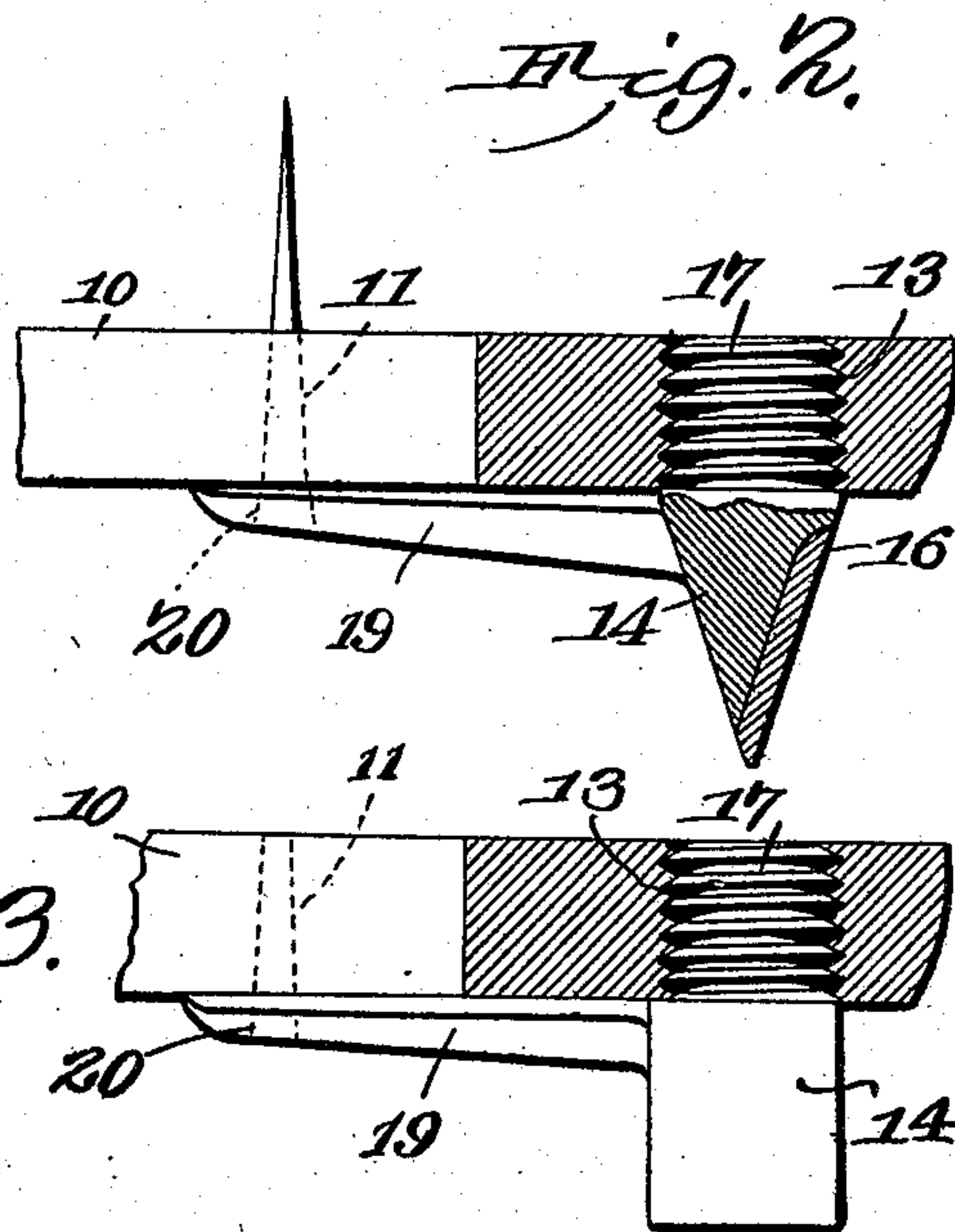
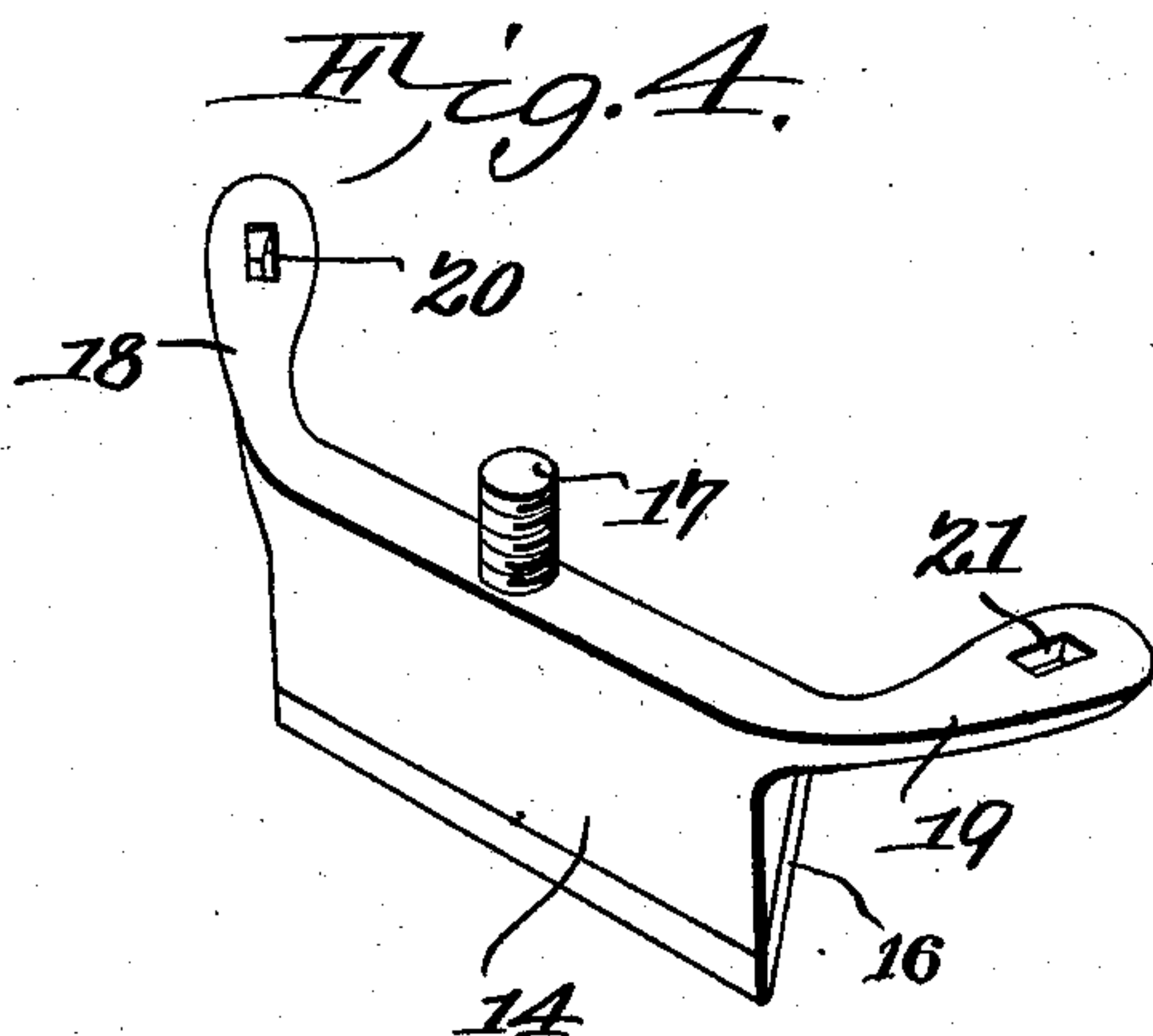
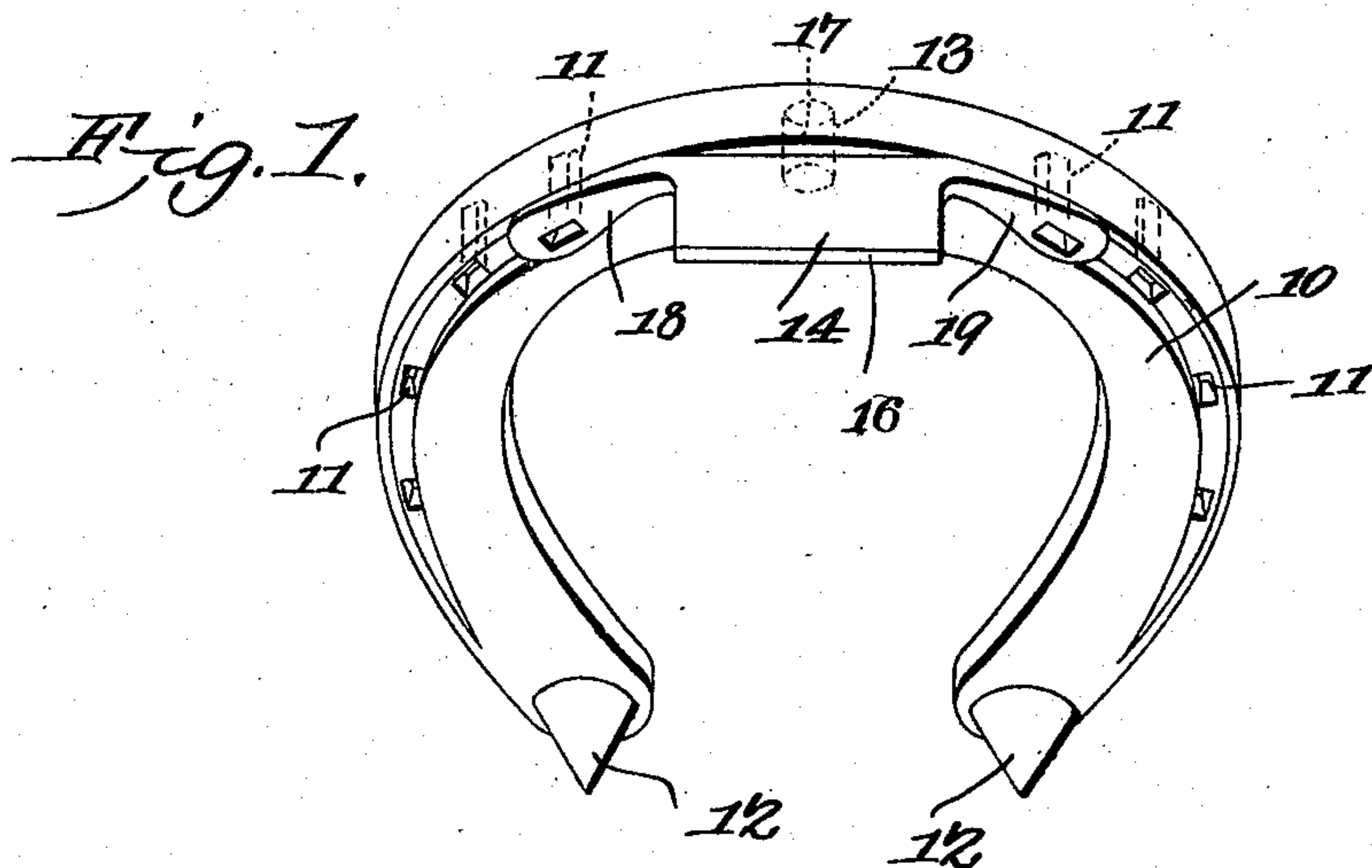


No. 858,677.

PATENTED JULY 2, 1907.

A. SODERLAND.
HORSESHOE TOE CALK.

APPLICATION FILED MAR. 22, 1906.



WITNESSES:

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UNITED STATES PATENT OFFICE.

ALFRED SODERLAND, OF CLEARFIELD, PENNSYLVANIA.

HORSESHOE TOE-CALK.

No. 858,677.

Specification of Letters Patent.

Patented July 2, 1907.

Application filed March 22, 1906. Serial No. 307,492.

To all whom it may concern:

Be it known that I, ALFRED SODERLAND, a citizen of the United States, residing at Clearfield, in the county of Clearfield and State of Pennsylvania, have invented a new and useful Horseshoe Toe - Calk, of which the following is a specification.

This invention relates to improvements in detachable horse shoe toe calks, and has for its object to improve the construction and increase the utility of devices of this character.

With this and other objects in view which will appear as the nature of the invention is better understood, the invention consists in certain novel features of construction as hereafter described and claimed.

In the accompanying drawings forming a part of this specification and in which corresponding parts are denoted by like designating characters, is illustrated the preferred form of the embodiment of the invention capable of carrying the same into practical operation.

In the drawings, Figure 1 is a perspective view from beneath, of a horse shoe with the improvement applied. Fig. 2 is a sectional detail enlarged, of the toe portion of a horse shoe, with the improved calk applied, the calk being of a sharp or winter form, Fig. 3 is a view similar to Fig. 2 showing the calk of the dull or summer form, Fig. 4 is a perspective view of the detachable calk removed from the shoe.

The improved device is attachable to any of the various forms and sizes of horse shoes, the only change required in the shoe being to dispense with the usual welded toe calk and form a threaded aperture in the toe portion of the shoe. For the purpose of illustration a conventional horse shoe is represented at 10, with the usual nail holes 11, and with heel calks 12 of any approved form. The threaded aperture in the toe portion of the shoe is indicated at 13.

The toe calk represented at 14 is of the usual shape, sharp for winter use as represented in Figs. 1, 2 and 4, or dull for summer use as represented in Fig. 3. When the sharp form of calk is employed, it will be constructed with the body portion of relatively soft iron and with a steel portion 16 welded upon the forward face, the iron portions wearing away faster than the steel portion and leaving the lower terminal of the latter constantly in position to receive the wear, and to impact with the pavement. The combination calk is thus self-sharpening, and consequently never becomes dull. The calk 14 is provided centrally with a threaded stud 17 for engaging the threaded aperture 13 in the toe portion of the shoe, the upper surfaces of the calk bearing against the lower surface of the shoe adjacent to the threaded aperture, and thus forming a shoulder to support the calk firmly in position.

Extending in opposite directions from the ends of the calk 14 are arms 18—19 having apertures 20—21 corresponding to and adapted to register with two of the nail holes 11 of the shoe, preferably the nail holes nearest to the calk upon each side of the center, as represented in Fig. 1. The arms 18 are reduced in size adjacent to the calk portions 14 so that they can be readily bent to adapt the apertures 20 to the nail holes of shoes of various sizes and forms, and thus enable the devices to be manufactured in quantities and then readily adapted to the shoe when they are to be applied. This is an important advantage, and adds materially to the value and efficiency of the device. Thus when the shoe is attached, two of the ordinary holding nails will be first driven through the aperture in the arms 18—19 and thence through the shoe into the hoof of the horse, these holding nails being thus utilized to assist in holding the calk in position, and not only preventing its rotation upon its stud 17, but also materially assisting in holding the calk in position independently of the stud, and thus relieving the stud to a large extent from strains.

The device is very simple in construction, can be quickly applied without removing the shoe from the hoof, and in event of breakage or wear, the calk can be very easily replaced without removing the shoe.

Another advantage of the construction is that the calks can be quickly changed from sharp to dull, or from dull to sharp, when required, as will be obvious.

Having thus described the invention, what is claimed as new is:—

A horse shoe calk provided with a marginal row of nail holes and having a threaded aperture formed in the toe of the shoe between two of said nail holes, a calk extending in a straight line across the toe of the shoe and consisting of an elongated body portion having tapering side walls and provided with an intermediate threaded stud for engagement with the threaded aperture in the shoe, the opposite longitudinal edges of the body portion at the base thereof being disposed parallel with each other, and pliable arms projecting laterally from the base of the body portion and curved to conform to the outer marginal edge of the shoe, the free ends of said arms being extended laterally to form a weakened portion at the juncture of the arms and base of said body portion thereby to enable the arms to be bent to fit shoes of different sizes, said arms being provided with apertures adapted to register with the nail-holes whereby the holding nails are utilized to assist in holding the calk in position on the shoe.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

ALFRED SODERLAND.

Witnesses:

AMERICUS H. WOODWARD,
GEORGE K. MCGILL.