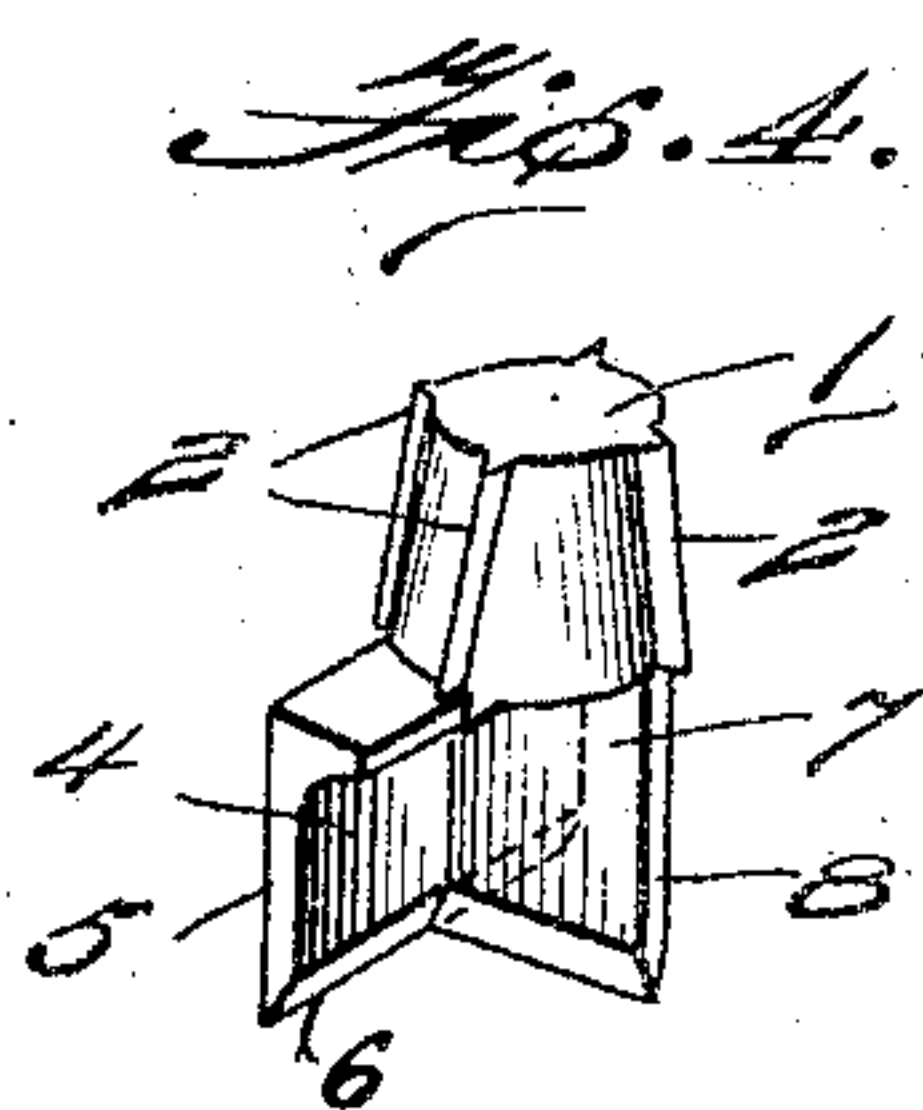
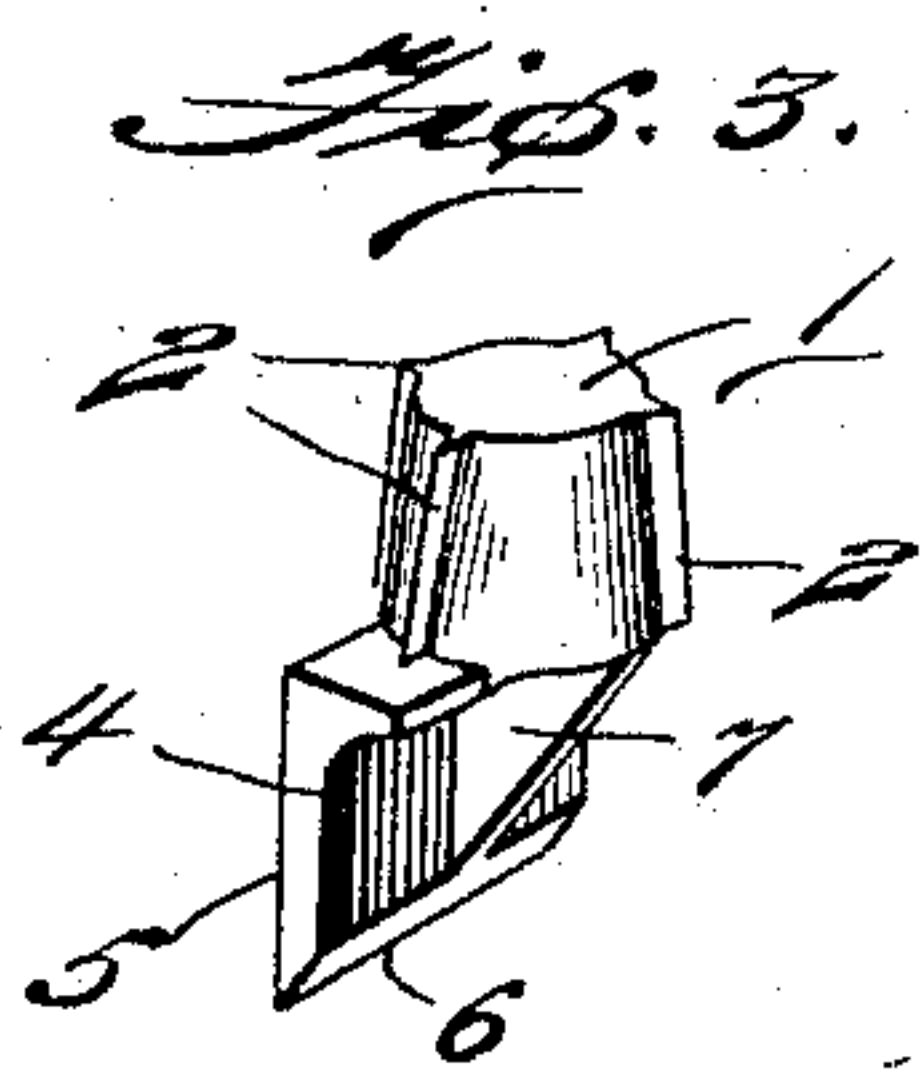
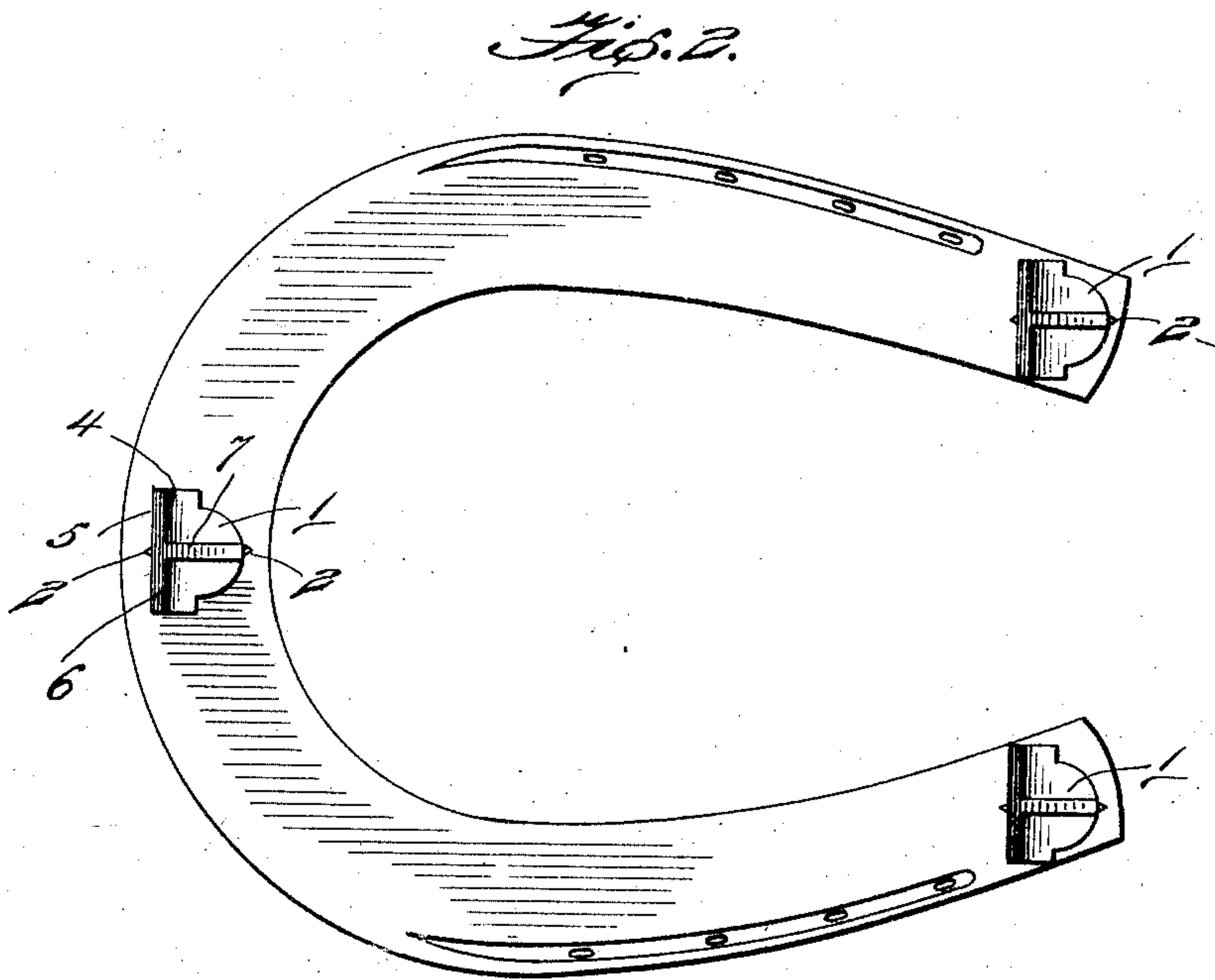
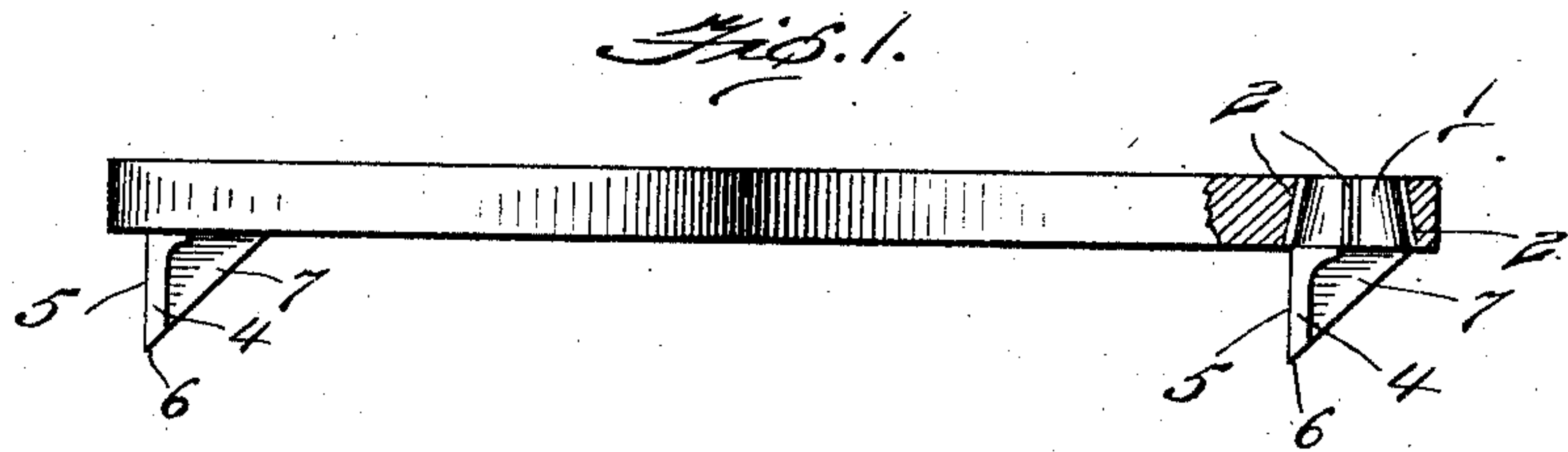


G. E. LINDBERG.
HORSESHOE CALK.
APPLICATION FILED JULY 23, 1908.

905,546.

Patented Dec. 1, 1908.



Witnesses
B. M. Offutt,
C. H. Griesbauer

Inventor
Geo. E. Lindberg
By *A. B. Wilson & Co.*
Attorneys

UNITED STATES PATENT OFFICE.

GEORGE E. LINDBERG, OF DULUTH, MINNESOTA.

HORSESHOE-CALK.

No. 905,546.

Specification of Letters Patent.

Patented Dec. 1, 1908.

Application filed July 23, 1908. Serial No. 445,012.

To all whom it may concern:

Be it known that I, GEORGE E. LINDBERG, a citizen of the United States, residing at Duluth, in the county of St. Louis 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 new and useful improvements in horseshoe calks, and has for its object to provide a calk which will provide a cutting edge until practically worn, and which will reduce the danger of a horse from slipping on icy or slippery roads and which will not become caught between the planks on a planked road, railroad crossing or the like.

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 claim.

In the accompanying drawings, Figure 1 is a side elevation of a horseshoe calk illustrating the application of the invention; Fig. 2 is a reverse plan view; Fig. 3 is a detail perspective view of one of the calks on an enlarged scale; and Fig. 4 is a similar view of a slightly modified form of the calk.

In the embodiment illustrated the calk comprises an approximately cylindrical shank 1 provided with one or more circumferentially spaced longitudinally extending tongues 2 provided with sharpened cutting edges. By making the calk of crucible steel it is not necessary to provide grooves in the shank receiving socket of the horseshoe as the shoe being made of a softer metal such as iron or soft steel, the tongues 2 will cut their way into the wall of said socket. It will thus be seen that after the shank of the calk has been inserted in position liability of the calk turning is entirely obviated, which is not true when the shank of the calk is screwed into position or set screws or the like are relied upon as a fastening means for the calk shank. The calk also comprises a thin metal spur 4 provided with a flat front face 5, the inner face of the spur being beveled to provide a sharpened cutting edge

6 at the lower end of the spur. The calk is also provided at its rear face with a central reinforcing rib or web 7 which extends from the lower end of the shank to the lower end of the spur, the outer edge of the web being beveled at a suitable inclination toward the rear face of the spur. By providing the calk with a central reinforcing rib such as I have shown and described, the spur may be made very thin without danger of its breaking or bending and the spur being of very thin metal a cutting surface will be provided to penetrate into the ground or other surface until the spur has been practically worn out.

In the various forms of calks now in use no reinforcing web being provided it is necessary to make the spur rather thick to provide the requisite strength and for this reason as soon as the cutting edge is worn, the spur must necessarily be sharpened or dispensed with as the spur is too thick to cut into the ground or other surface.

In the modified form of spur shown in Fig. 4 the reinforcing web is provided with a straight outer edge 8 which extends in a plane flush with the shank portion of the calk, or in other words, the web is of approximately rectangular oblong form. This form of calk is especially adapted for hilly and rough country, where the roads are irregular and much danger is experienced in the horse slipping side-wise. These reinforcing webs also prevent the spurs from entering between two planks on planked roads, which frequently results in tripping the animals, with severe injury in many instances.

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 as defined in the appended claim.

Having thus described and ascertained the nature of my invention, what I claim as new and desire to secure by Letters-Patent, is:—

A calk of the class described comprising an approximately cylindrical shank, and a flat spur located at the base near the front

side of the shank and extending transversely
of and beyond opposite sides thereof, the
back face of the spur being provided with a
central vertical approximately triangularly
5 shaped reinforcing web disposed with its
hypotenuse at the rear.

In testimony whereof I have hereunto set

my hand in presence of two subscribing wit-
nesses.

GEORGE E. LINDBERG.

Witnesses:

H. H. TALBOYS,
S. A. FESSMAN.