

J. O. KVENVOLD.
HORSESHOE CALK.
APPLICATION FILED MAY 5, 1908.

930,296.

Patented Aug. 3, 1909.

Fig. 1.

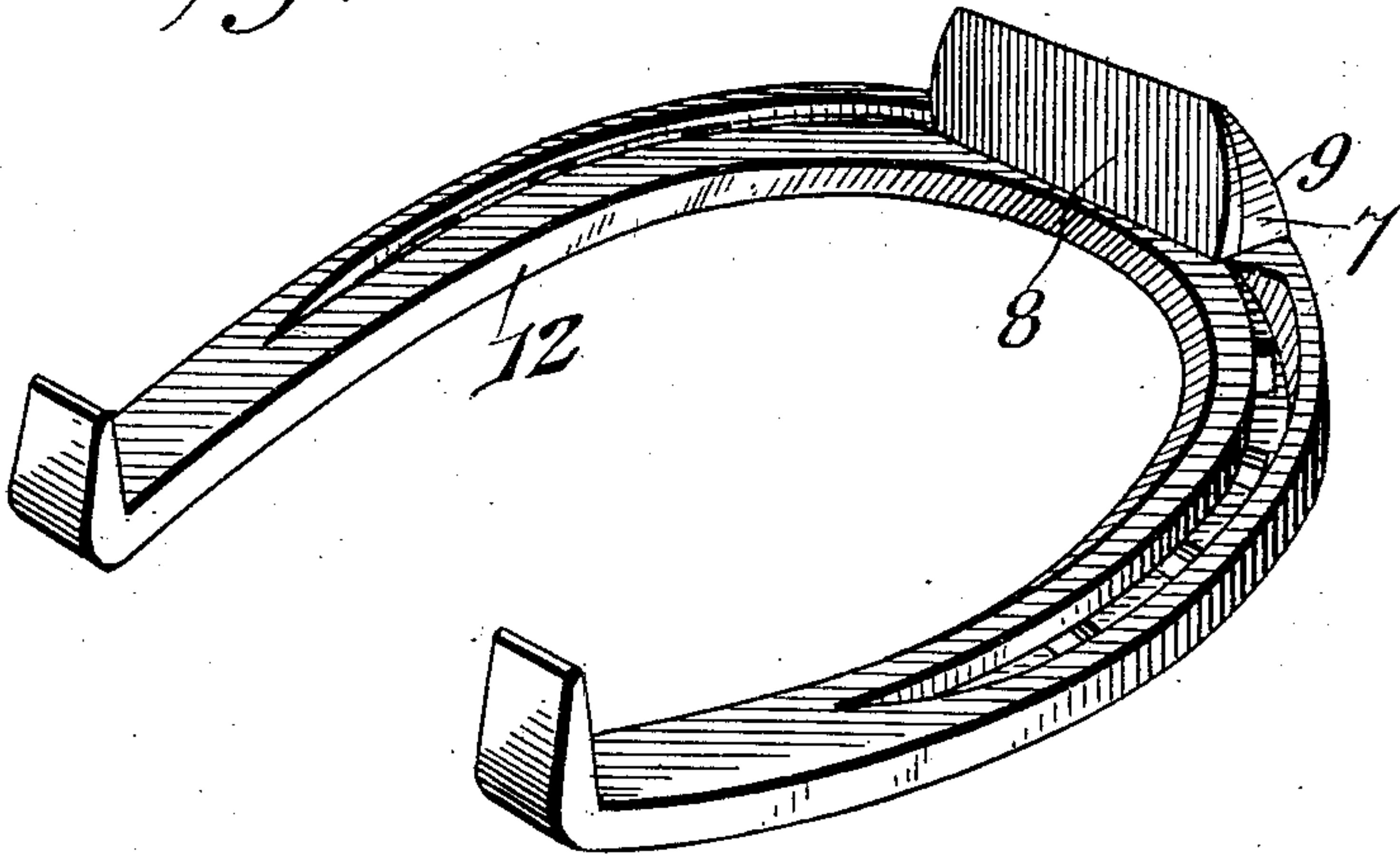


Fig. 2.

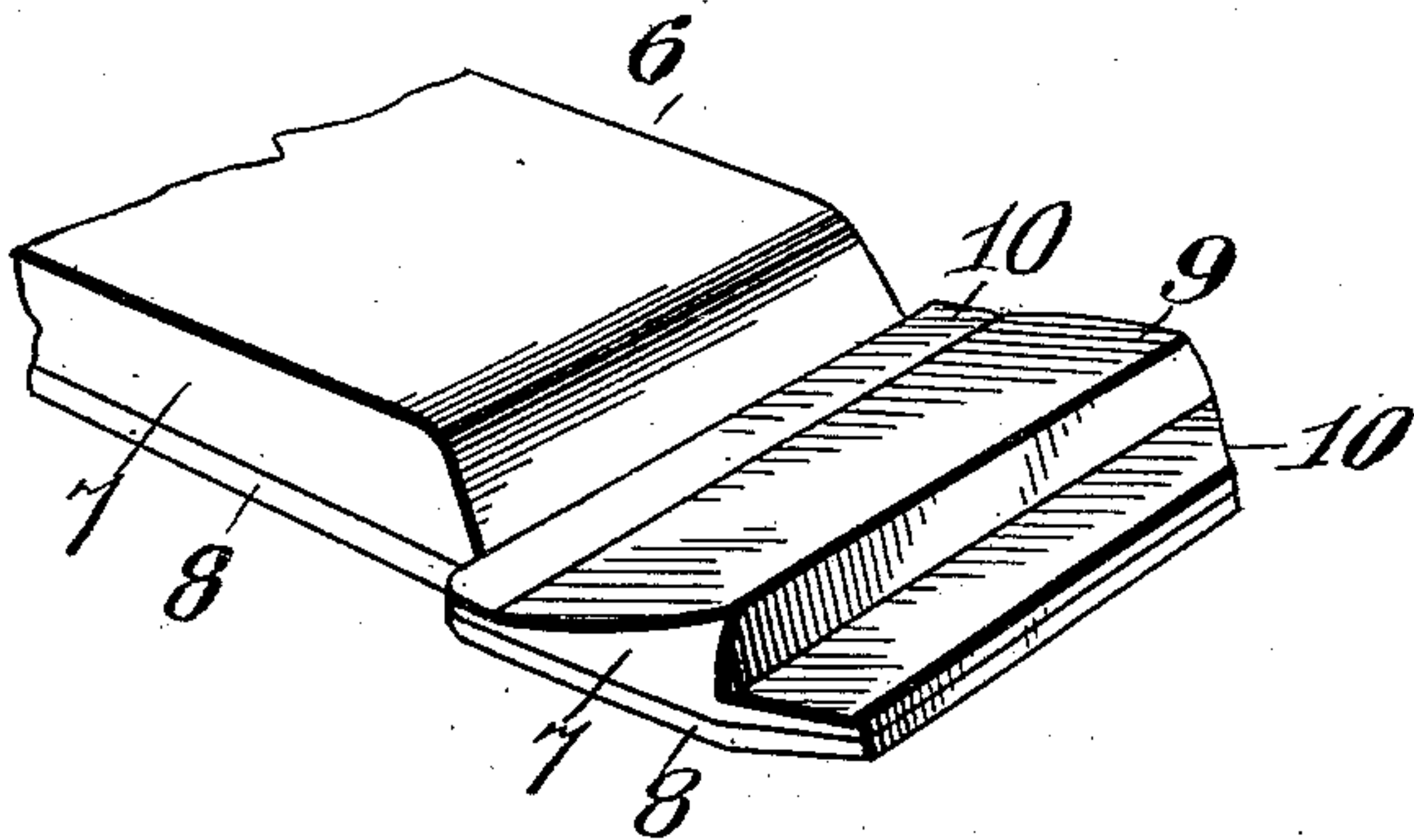


Fig. 3.

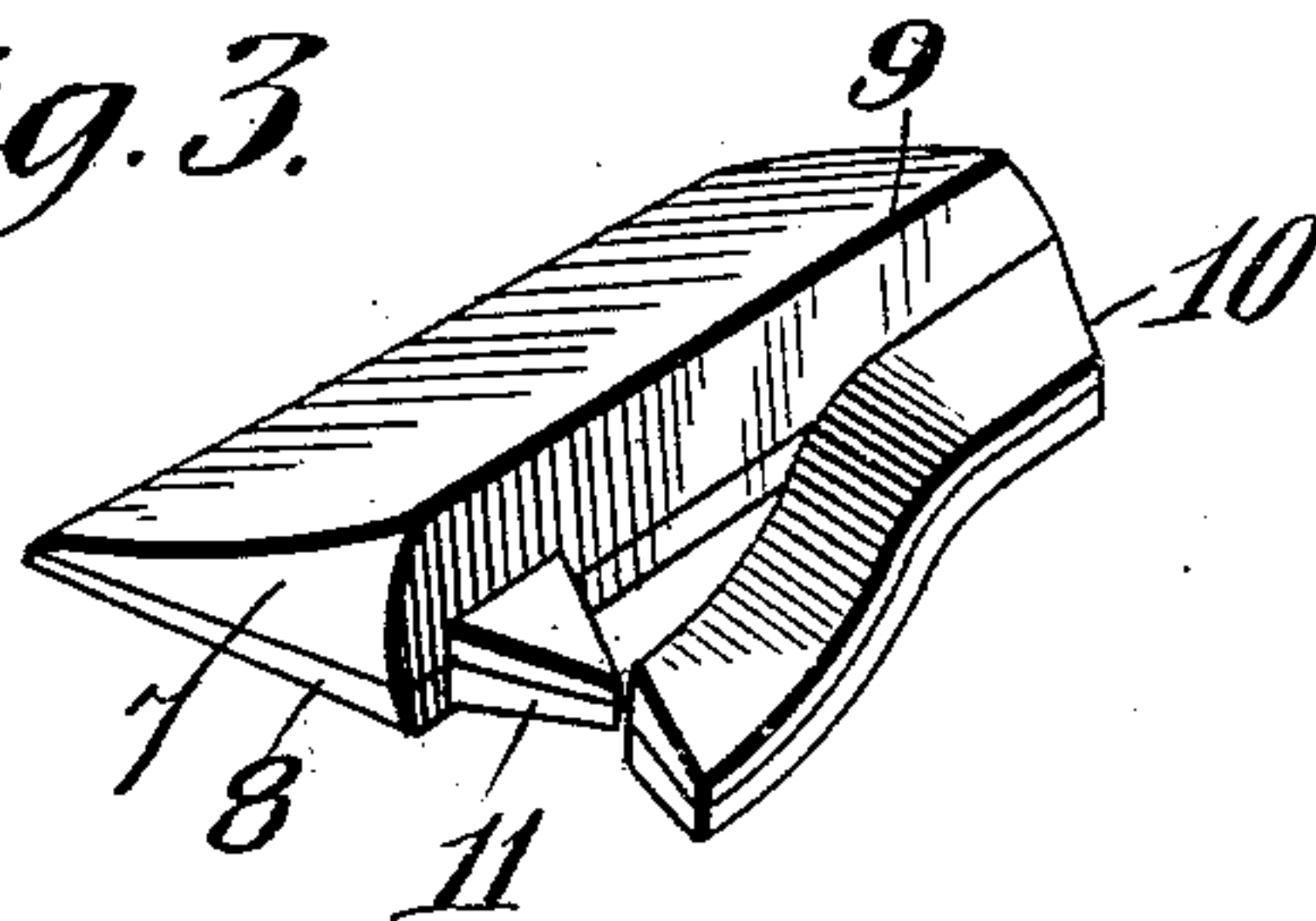


Fig. 4.

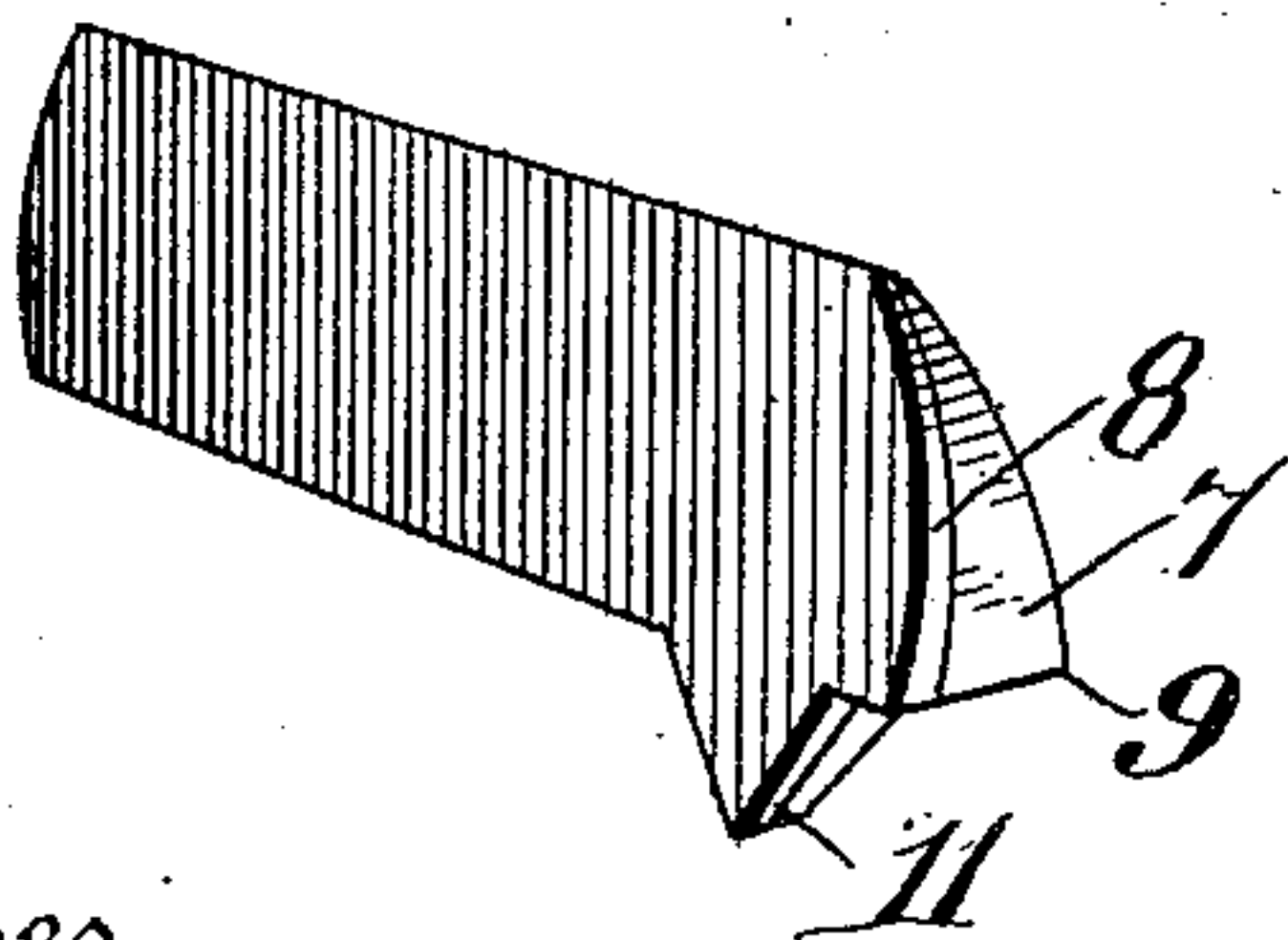
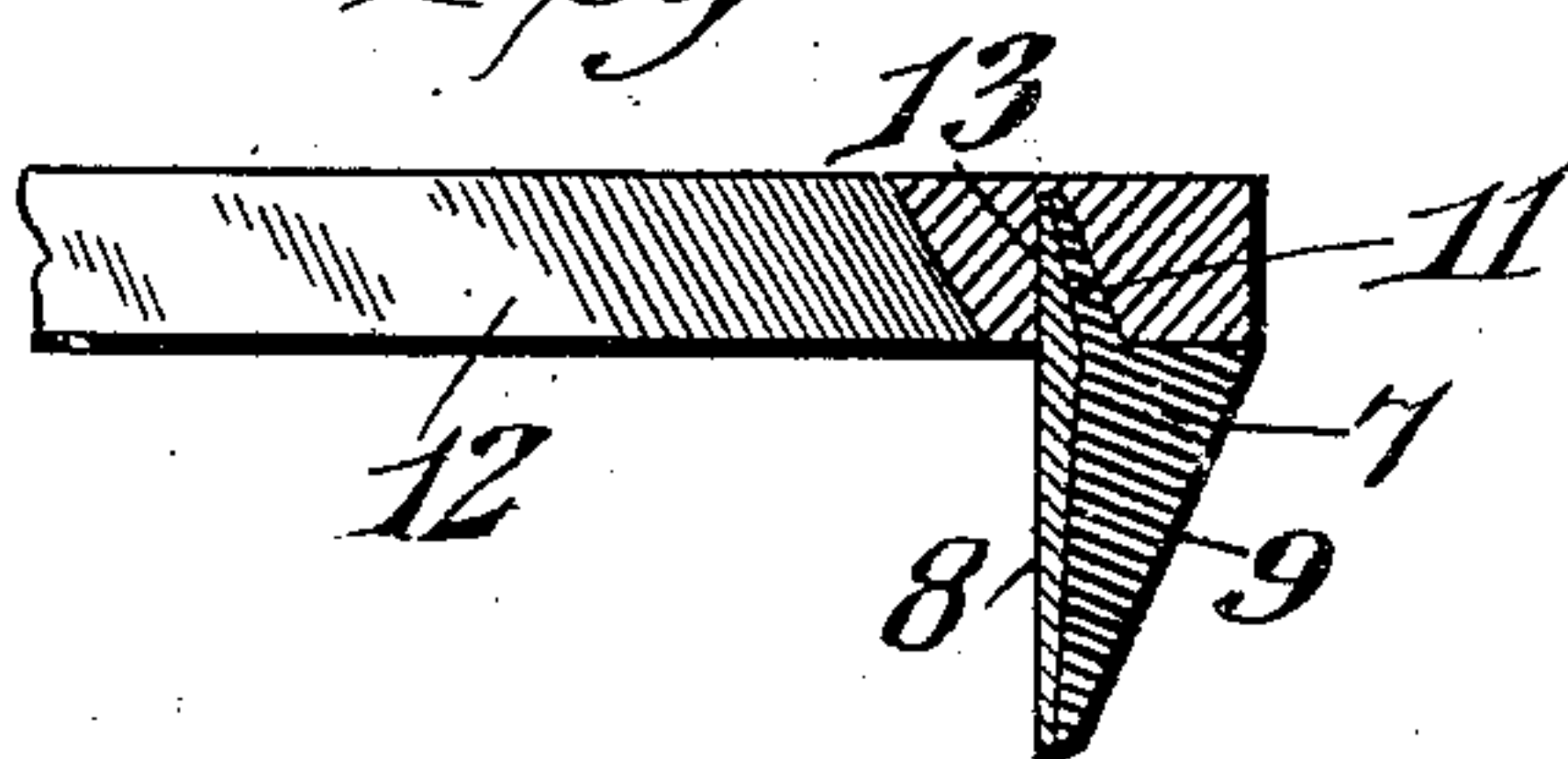


Fig. 5.



Witnesses
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UNITED STATES PATENT OFFICE.

JACOB O. KVENVOLD, OF HARTLAND, MINNESOTA.

HORSESHOE-CALK.

No. 930,296.

Specification of Letters Patent.

Patented Aug. 3, 1909.

Application filed May 5, 1908. Serial No. 431,043.

To all whom it may concern:

Be it known that I, JACOB O. KVENVOLD, a citizen of the United States, residing at Hartland, in the county of Freeborn and State of Minnesota, have invented a new and useful Horseshoe-Calk, of which the following is a specification.

The present invention relates to horse shoe calks, and the primary object is to produce a calk, which is simple and cheap in construction, will remain sharp until it is entirely worn out, and when applied to the shoe, gives a better purchase, and has better holding qualities to prevent slipping than those now generally known to the art.

An embodiment of the invention is illustrated in the accompanying drawings, wherein:—

Figure 1 is a perspective view of a horse shoe, showing a toe calk constructed in accordance with the present invention. Fig. 2 is a perspective view of a portion of a bar from which the calks are manufactured and illustrating one of the blanks formed thereon. Fig. 3 is a perspective view of one of the blanks just prior to its completion. Fig. 4 is a detail perspective view of the completed calk. Fig. 5 is a detail sectional view through the shoe, illustrated in Fig. 1, and showing the calk applied.

Similar reference numerals designate corresponding parts in all the figures of the drawings.

In carrying out this invention, a bar 6 is produced, one side 7 of which is formed of iron, the opposite side being formed of a strip of steel welded thereto. In practice, the iron is preferably about three-eighths of an inch in thickness, while the steel back or strip is substantially one-eighth of an inch in thickness. The bar 6 thus produced, consequently has an iron face and an opposite steel face. After the parts are welded, the bar is placed under a trip hammer or other suitable forming device, and the blanks are formed therefrom.

In the production of the blank, as will be evident by reference to Fig. 2, the iron portion 7 is formed into the tapered body 9 of the blank, the bar being thereby spread, and

a web 10 is produced that projects from the base and includes the steel strip. The outer face of this steel strip, however, remains flat, and in the same plane with the remainder of the bar. The blank thereby produced is then cut from the bar or remaining blanks, and the web 10 cut therefrom, leaving a spur 11 at one end, the outer or steel face of the spur still remaining in the same plane as the steel face of the calk. Said calk is then complete, and it is applied to a shoe, as 12, by inserting the spur 11 into a socket 13 in said shoe, the calk being welded to the shoe.

The employment of the steel as an inner or rear facing for the calk is important, and has decided advantages over the type in which a steel center is employed. With a steel center calk, the iron faces slant both sides, and there is not the purchase secured as in the present structure, in which the steel face is substantially perpendicular to the shoe. For the same reason, there is not as much liability of the shoe to slip, and this angular arrangement is secured by the peculiar relation of the spur and steel portion of the calk. Furthermore this structure, while it is very durable, and will withstand rough usage, will also remain sharp until it is worn out, as the iron backing will wear faster than the steel, thus leaving the sharp edge of the latter exposed at all times.

From the foregoing, it is thought that the construction, operation and many advantages of the herein described invention will be apparent to those skilled in the art without further description, and it will be understood that various changes in the size, shape, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is:—

A horseshoe calk comprising a relatively thin metal piece forming the back of the calk, and a second metal piece forming the front thereof and welded to the first piece, said second piece being thicker at its base and tapering to the bottom edge of the first piece

to form a reinforce for the latter and providing a wide base for welding the calk to the shoe, said second piece being of softer metal than the first whereby the front of the calk
5 wears away faster than the back to leave a comparatively sharp edge at the bottom of the calk.

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

JACOB O. KVENVOLD.

Witnesses:

NORMAN E. PETERSON,
INGA SLETTE.