

No. 694,776.

Patented Mar. 4, 1902.

B. MCKENZIE.  
HORSESHOE CALK.

(Application filed Sept. 20, 1901.)

(No Model.)

Fig. 1.

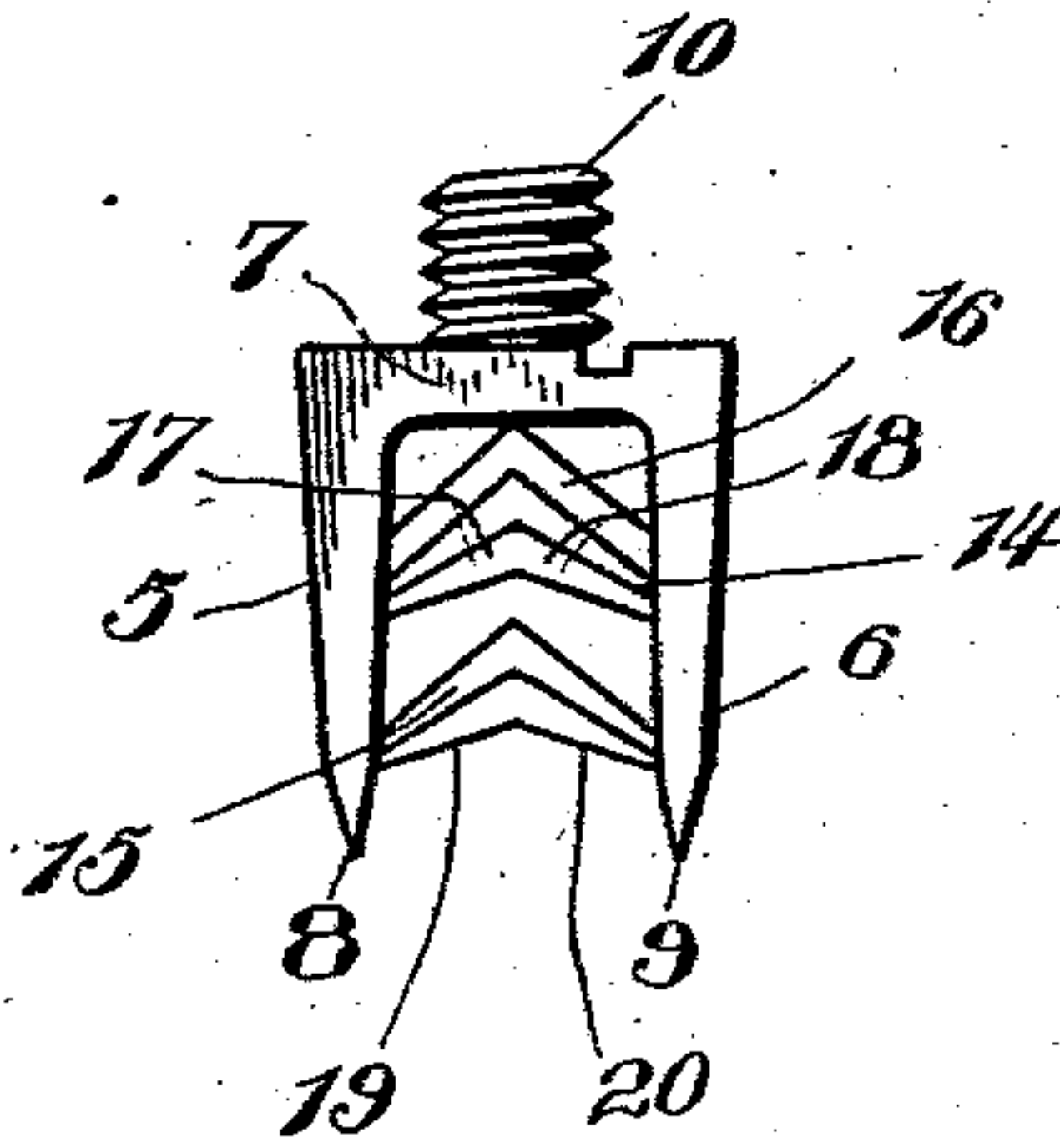


Fig. 2.

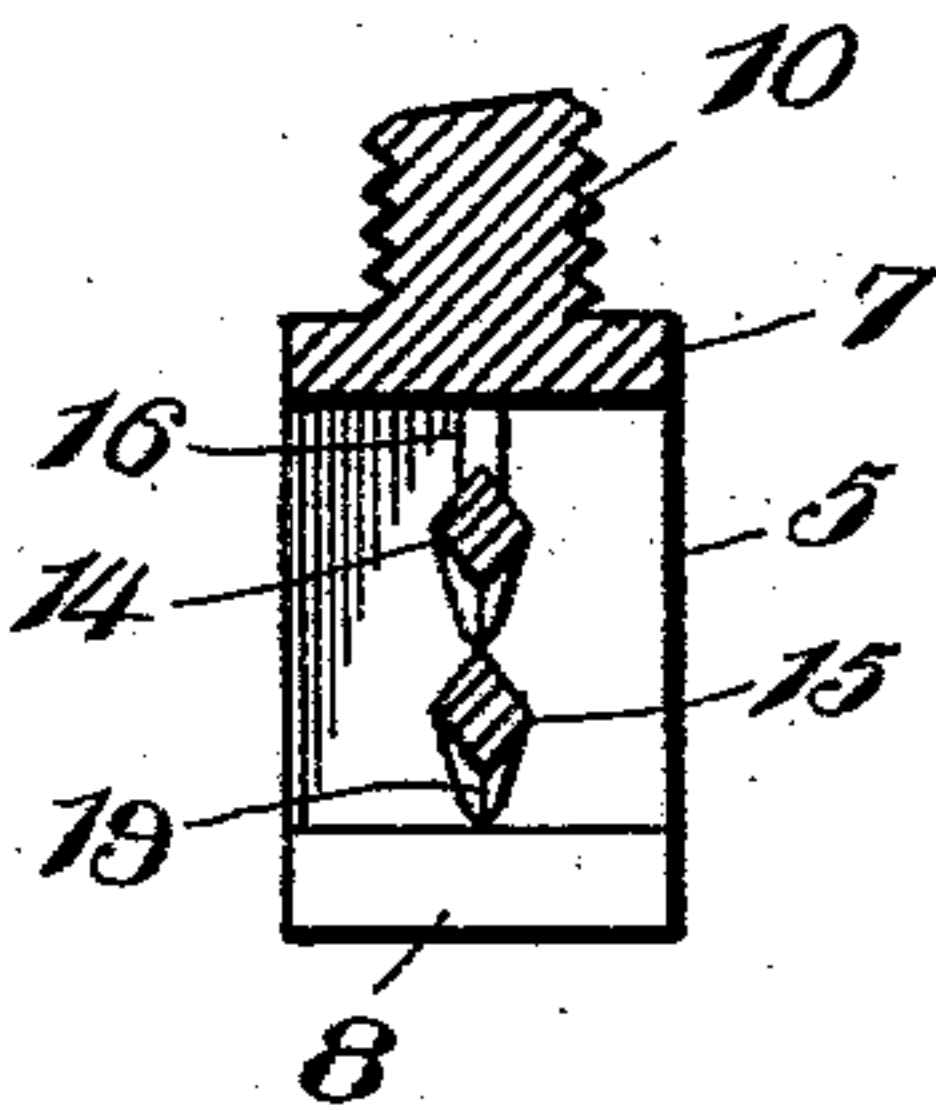
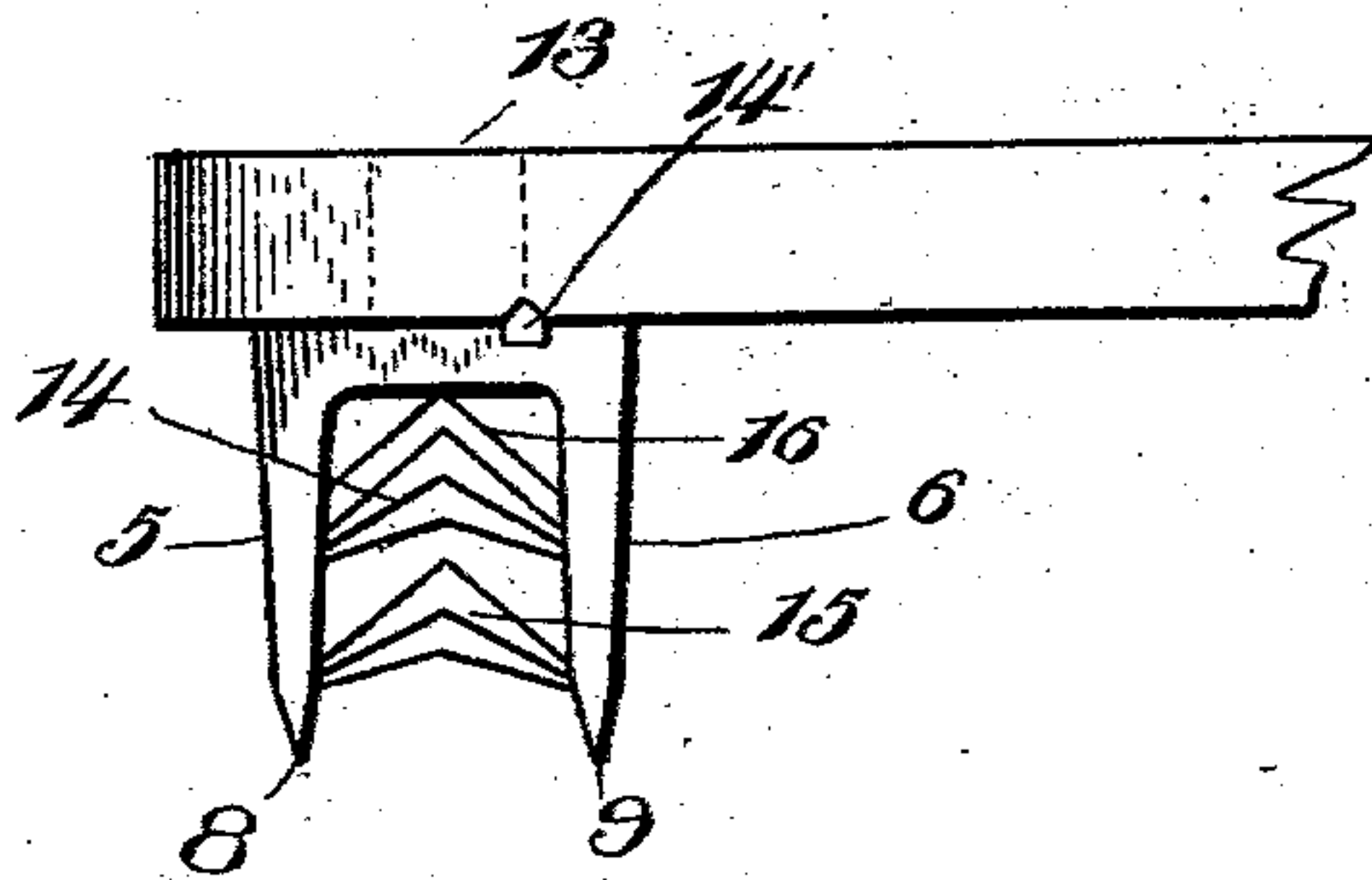


Fig. 3.



Witnesses

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# UNITED STATES PATENT OFFICE.

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## HORSESHOE-CALK.

SPECIFICATION forming part of Letters Patent No. 694,776, dated March 4, 1902.

Application filed September 20, 1901. Serial No. 75,673. (No model.)

*To all whom it may concern:*

Be it known that I, BURT MCKENZIE, a citizen of the United States, residing at Eaton Rapids, in the county of Eaton, State of Michigan, have invented certain new and useful Improvements in Horseshoe-Calks; and I do hereby 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 horseshoes in general, and more particularly to the calks thereof; and it has for its object to provide a calk that may be either permanent or removable and which will have such construction as to insure efficiency of the calk on slippery surfaces even after the points of the calk have been worn down and dulled.

Other objects and advantages of the invention will be understood from the following description.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a side elevation of a calk embodying the present invention and adapted for removable engagement with a horseshoe. Fig. 2 is a vertical section of a calk and showing the sectional shapes of the combined braces and auxiliary blades. Fig. 3 is an elevation showing a portion of a horseshoe with the calk in place.

Referring now to the drawings, it will be seen that the calk comprises the two legs 5 and 6, which are parallel and which are connected at their upper ends by the transverse web 7, the legs being tapered slightly from their upper ends in the direction of their lower ends and then tapered abruptly to their lower ends to form the sharp edges 8 and 9, which are adapted to cut into an icy surface and prevent slipping, as usual with calks. From the web 7 rises a stem 10, which is threaded for engagement with the threaded socket of a horseshoe (shown at 13) and which stem is held against reverse rotation by means of the key 14, which is engaged with the calk and the shoe in a direction at right angles to the axis of the stem.

Connecting the legs 5 and 6 of the calk are the braces 14 and 15. The upper brace 14 is substantially triangular in form with a reentrant base and having its apex against the web 7. In cross-section the brace is diamond-shaped or has the shape of a rhombus in its

lower portion, while from the upper edge or ridge of this lower portion extends upwardly a rib 16, which is the portion which touches the web 7. The reentrant base of the brace is formed by the upwardly-converging and intersecting sharp edges 17 and 18 of the lower portion of the rib.

The lower brace 15 is the same in shape as the upper brace, excepting that it has no rib corresponding to the rib 16, but has the lower sharpened edges 19 and 20, which converge and intersect.

With this construction it will be seen that when the calk is first in use the sharpened lower ends of the legs thereof will bite into ice and will prevent slipping of the animal wearing the calk and that when the legs are so far worn away that they are inefficient the lower blade formed by the brace will come into action until it is worn away, after which the upper blade will come into action. By the triangular formation of the braces or blades when the blade has become dulled the calk-legs will have worn away sufficiently to let the blade fall from place.

In practice modifications of the specific construction shown may be made and any suitable materials and proportions may be used for the various parts without departing from the spirit of the invention, it being understood that when the lower blade has fallen away the upper blade will be in position for action.

What is claimed is—

1. A calk for horseshoes having spaced legs and blades disposed between and connected to the legs, said blades being arranged one above the other with their cutting edges directed downwardly.

2. A calk for horseshoes having cutting-blades spaced apart and arranged one in a higher plane than the other, whereby they will come into play successively as the calk is worn away.

3. A calk for horseshoes comprising spaced legs having blades disposed between them and arranged one in a higher plane than the other, each blade having upwardly-converging cutting edges.

In testimony whereof I affix my signature in presence of two witnesses.

BURT MCKENZIE.

Witnesses:

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