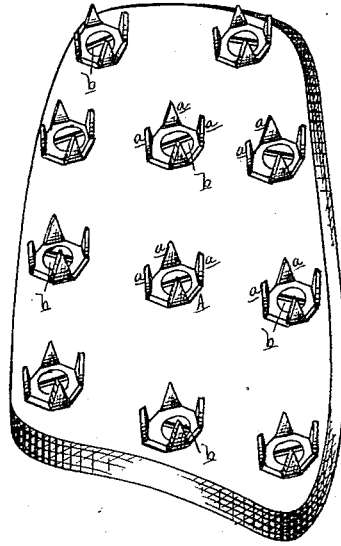


R. D. GUILFORD.  
Raftsmen's Boot-Calks.

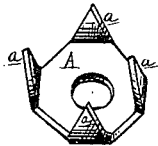
No. 167,239.

Patented Aug. 31, 1875.

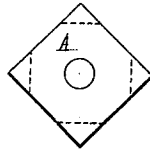
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



Attest:  
Edward Paethel  
Att. in & c.

Inventor:  
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Per Atty  
Phil S. Sprague

# UNITED STATES PATENT OFFICE.

RUFUS D. GUILFORD, OF ST. CHARLES, MICHIGAN.

## IMPROVEMENT IN RAFTSMEN'S BOOT-CALKS.

Specification forming part of Letters Patent No. **167,239**, dated August 31, 1875; application filed January 15, 1875.

*To all whom it may concern:*

Be it known that I, RUFUS D. GUILFORD, of St. Charles, in the county of Saginaw and State of Michigan, have invented a new and Improved Boot and Shoe Calk; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, forming a part of this specification.

My improved calk is formed from rectangular pieces of sheet-steel, struck up in suitable dies, whereby its corners are bent or turned down to form spurs. The said rectangular pieces are cut from steel plates by any suitable machine. Each piece is then struck up in a machine specially adapted for the work, and the corners bent or turned down upon the dotted lines shown in Figure 3, a central screw-hole being punched out at the same time. The corners so bent or turned down form the spurs

*a*, and the calk A is complete, as shown in Fig. 2, and ready to be secured to a boot or shoe sole by means of a screw, *b*, as shown in Fig. 1.

Calks thus formed are produced at less cost than those heretofore employed, and they are likewise more efficient in practical use.

I do not claim a calk having spurs and adapted to be secured to a boot or shoe sole by means of a screw; but

I claim—

As a new article of manufacture, the calk A, formed of a rectangular plate of sheet-steel, having its corners bent down to form the spurs *a*, and perforated to receive a screw, *b*, as shown and described.

RUFUS D. GUILFORD.

Witnesses:

H. F. EBERTS,  
H. S. SPRAGUE.