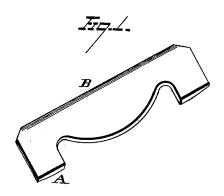
## S. PRIOR. TIPS FOR BOOTS AND SHOES.

No. 195,398.

Patented Sept. 18, 1877.

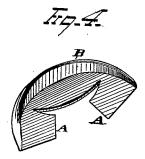


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WITNESSES Ed. J. Notturgham A.W.Bright

Samuel Prior. By Ha Seymown.

## UNITED STATES PATENT OFFICE.

SAMUEL PRIOR, OF TRENTON, NEW JERSEY.

## IMPROVEMENT IN TIPS FOR BOOTS AND SHOES

Specification forming part of Letters Patent No. 195,398, dated September 18, 1877; application filed April 10, 1877.

To all whom it may concern:

Be it known that I, SAMUEL PRIOR, of Trenton, in the county of Mercer and State of New Jersey, have invented certain new and useful Improvements in Shoe-Tips; 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to improvements in the manufacture of shoe-tips; and consists in making a tip according to the following steps and process, as is hereinafter set forth

and described.

First, leather board is subjected to a bath of sulphuric acid, then to a bath of soda and potash, and is finally washed in water. A blank of the suitable size is cut out from the leather-board thus treated, its end extremities skived, a round top edge formed thereon by a tool adapted to such purpose, and to render the surface thereof compressed and dense in fiber at the same time that the cross-section of the edge is preserved equal to that of the body of the tip. The blank is finally put in a crimping-machine and the tip delivered complete therefrom.

Referring to the drawing, Figure 1 represents, in perspective, a tip stamped out, skived, and having its top edge formed as described. Fig. 2 is a longitudinal, and Fig. 3 a cross-sectional, view of the same. Fig. 4 shows the

tip completed.

A suitable piece of flox-leather, or leatherboard, as it is called, is first introduced into a bath of sulphuric acid, and there allowed to remain for about fifteen minutes. It is then subjected to a second bath, consisting of soda and potash in solution, after which it is thoroughly cleansed in water.

This process serves to aid in making the tip, when formed, water-proof, and less under the influence of the weather, so that it will more readily shed water, and not be liable to absorb it or become saturated with it.

A blank of the desired size is then stamped

or cut out from the leather-board thus treated, the longitudinal ends skived, as shown at A, at either end of the blank. The round formation B on the top edge of the tip is then made by a suitable tool, so as to leave it very hard, compact, and of the same cross-section with the main portion of the tip.

During this process of rounding and hardening the top edge the tip is preferably clamped in a vise, and is delivered therefrom ready for the crimping-machine, which latter finally produces it of the required shape or conformation

to be applied in wear.

By this process of forming a tip the top edge is made round, and of the same degree of hardness as the body of the tip; while if, instead thereof, the top edge surface had been cut simply, the same would not present as finished an appearance and as dense a compactness as is the case under the foregoing process.

Forms of tips well known have round top edges made as an enlarged or ribbed gathering; but a bulky and disproportionate article is the result of such a construction, while others have a folded edge, or one of greater or less cross-measurement than the body of the tip: but

tip; but What I claim as new, and desire to secure

by Letters Patent, is-

The above described process of making shoe-tips, consisting of the following steps: subjecting the tip-blank to a bath of sulphuric acid, a second bath of potash and soda, then cleansing in water, skiving the blank extremities, as shown, forming the single compressed round top edge, and finally crimping the tip, the whole being done so as to preserve an equal cross measurement through all the different parts of the tip, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand this 6th day of April, 1877.

SAMUEL PRIOR.

Witnesses:

E. L. CAMPBELL, Thos. H. PRIOR.