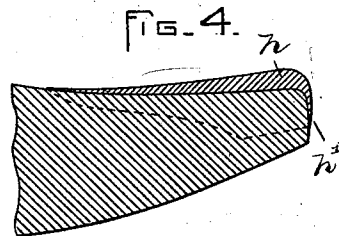
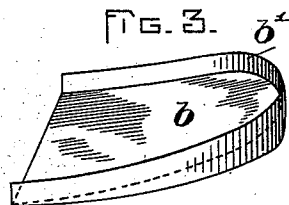
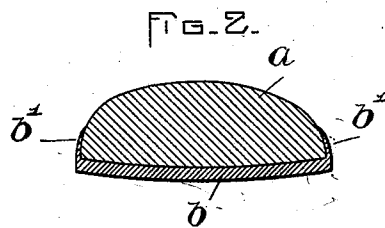
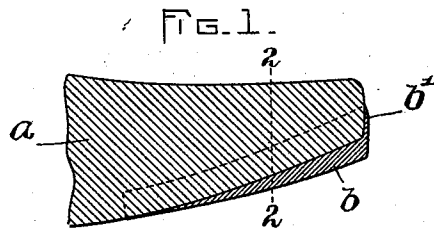


(No Model.)

H. F. BLAKE.
LAST TOE THICKENER.

No. 540,897.

Patented June 11, 1895.



WITNESSES:

A. D. Hanson
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UNITED STATES PATENT OFFICE.

HAROLD F. BLAKE, OF HAVERHILL, MASSACHUSETTS, ASSIGNOR TO ELMER S. HARRIS, OF SAME PLACE.

LAST TOE-THICKENER.

SPECIFICATION forming part of Letters Patent No. 540,897, dated June 11, 1895.

Application filed November 25, 1893. Serial No. 491,961. (No model.)

To all whom it may concern:

Be it known that I, HAROLD F. BLAKE, of Haverhill, in the county of Essex and State of Massachusetts, have invented certain new and useful Improvements in Methods of Lasting Shoes, of which the following is a specification.

This invention relates to a new and improved toe thickener for lasts and consists in the novel features of construction and relative arrangement of parts hereinafter fully described in the specification, clearly illustrated in the drawings, and particularly pointed out in the claim.

Reference is to be had to the accompanying sheet of drawings, forming a part of this specification, in which like characters indicate like parts wherever they occur.

Figure 1 shows a longitudinal section of a portion of the last having my improved thickener applied to the bottom of the toe portion of the last. Fig. 2 represents a cross-section on line 2 2 of Fig. 1. Fig. 3 shows a perspective view of the thickener detached. Fig. 4 is a longitudinal section of a last, showing the thickener applied to the top of the toe part of the last.

In lasting a boot or shoe, the toe has to be lasted over strongly before the sides of the uppers are lasted, so that the finished shoe will be smooth and regular, and the great strain to which a patent leather tip or vamp is subjected in the lasting process often causes cracking of the same after it has been on the last for a considerable space of time. As is well known, it is customary in boot and shoe manufacture to leave a boot or shoe on a last after it has been lasted, for a considerable time, say for a day or more, so as to allow it to become permanently set. Experience teaches that it is not in the first lasting of the shoe that the patent leather tip cracks, but the cracking usually occurs after the shoe has been on the last a while. It may be due to the giving way of the composition applied to the leather of the tip after continued strain, or to atmospheric changes. I have discovered, however, that if a less thickness of last is in the toe of the shoe while the shoe sets than is present when the shoe is lasted, the tip will not crack.

My invention may be said to consist in means for primarily lasting the upper and

forming the toe of the shoe over a last of standard size excepting at the toe, which is abnormally thickened, and re-lasting on a last of the same size having a toe portion of normal thickness, and allowing the toe to set over the reduced thickness of last.

Referring first to Figs. 1, 2, and 3, the letter *a* designates the last proper, and *b* designates a thickener adapted to be applied to the bottom of the toe portion of the last and retained thereon by means of a thin flange *b'* formed on the thickener and engaging the sides of the last with sufficient pressure to prevent the thickener from falling off. This thickener may be made of leather, wood, metal or any other suitable material, and is tapered so as to avoid a shoulder between it and the last.

Fig. 4 shows a thickener *h* adapted to be applied on top of the toe of the last, being formed with a flange *h'* to retain it in place on the last. In employing either construction, the thickener is applied to the last and to the toe lasted over the thickened last. Then the last is taken out of the shoe, the thickener is removed, the last reinserted, and the toe left on the reduced last to become permanently set.

By my invention, cracking of patent leather tips in the course of the making of boots and shoes is obviated.

Having thus explained the nature of my invention and described a way of constructing and using the same, though without attempting to set forth all of the forms in which it may be made or all of the modes of its use, what I claim, and desire to secure by Letters Patent, is—

A last toe-thickener comprising in its construction a cap provided with flanges at one end and both sides, the top of said cap being wedge-shaped in longitudinal section with the edge part thereof at the open end of said cap, substantially as and for the purpose set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 15th day of November, A. D. 1893.

HAROLD F. BLAKE.

Witnesses:

C. F. BROWN,
F. PARKER DAVIS.