

F. THUN.
LACING TIP.
APPLICATION FILED MAR. 6. 1909.

931,811.

Patented Aug. 24, 1909.

Fig. 1.

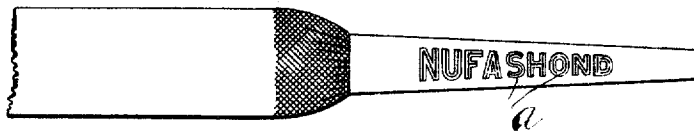


Fig. 2.

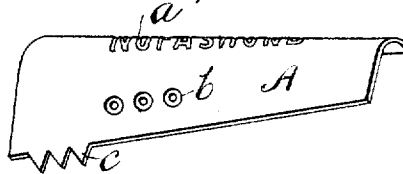


Fig. 3.

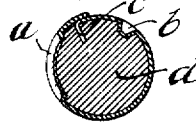


Fig. 5.

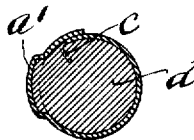


Fig. 4.

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LACING-TIP.

931,811.

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To all whom it may concern:

Be it known that I, FERDINAND THUN, a citizen of the United States, residing in Wyomissing, near Reading, in the county of Berks and State of Pennsylvania, have invented certain new and useful Improvements in Lacing-Tips, of which the following is a specification.

My invention relates to shoe and corset lacings and particularly to those provided with sheet-metal stiffeners forming covering-tips on the fabric. These sheet-metal tips are interrolled with the end portions of the lacing fabric so as to form either a straight or tapered covering, and are adapted to grip the inclosed fabric so as to permanently secure them thereto.

The object of my invention is to provide a fabric-covering stiffener having distinguishing lettering; and to adapt such lettering to serve as a gripping means for firmly securing the stiffener to the fabric, and provide a preliminary roll in the letter impressed portion of the blank, whereby the symmetrical formation of the finished tip will be facilitated and the stiffening effect of the metal covering increased.

The invention is fully described in connection with the accompanying drawing and is specifically pointed out in the claims.

Figure 1 shows a finished lacing tip embodying my invention. Fig. 2 shows the finished stiffening blank ready to be interrolled with an end portion of the lacing fabric to form the finished lacing tip. Fig. 3 is a cross-section on the line 3—3 of Fig. 1; and Figs. 4 and 5 are similar cross-sections indicating letter impressions of modified character.

The stiffening blank A for forming the lacing tip is stamped from suitable sheet-metal or equivalent material; the size of the blank as shown being adapted to properly inclose the interrolled end portion of the lacing fabric in tapering cylindrical form. By means of suitable dies provided in the stamping press, letter-impressions *a* are formed in the sheet-metal blank. These impressions, as indicated, consist of a series of letters arranged in a line extending lengthwise of the finished tip so as to form a distinguishing name; the successive letters being gradually reduced in height toward the smaller end of the finished tip as shown. The letter-impressing dies are so formed as to simultaneously impart to the letter-impressed portion

of the blank, as indicated in Fig. 2, a lateral curvature corresponding with the desired roll of the finished tip, thereby positively giving practically the finished form to such portion of the blank, independently of the subsequent rolling-up operation of the blank with the fabric, so as to greatly facilitate such operation and avoid distortion of the stamped impressions; while at the same time the strength and rigidity of the tip is greatly increased by the impressing and curving of the blank. The letter-impressions are adapted, as indicated, to serve the further purpose of gripping the fabric *d* so as to permanently secure thereto the interrolled covering-tip, the fabric being pressed into engagement therewith in the rolling-up operation. As shown the metal depressed by the letter-forming dies is cut so as to provide a more positive gripping action, while at the same time permitting the fabric to show through the metal covering and thereby accentuate the exposed lettering.

Additional gripping means, as punctures *b* or edge-teeth *c*, may be provided on the blank if desired, but such means are preferably not exposed in the finished tip as are the letter-impressions.

Instead of pressing the metal inward in forming the letter impressions, as shown in Fig. 3, the letter-metal may be pressed outward, as indicated in Fig. 4, the fabric *d* being pressed outward into such depressions to engage the same; or the metal may be cut away as indicated in Fig. 5, the fabric *d* being naturally pressed into engagement with the openings thus formed in the metal.

What I claim is:—

1. A tipping blank for lacings stamped from sheet-metal and formed with letter-impressions adapted to grip the interrolled lacing fabric.

2. A tipping blank for lacings stamped from sheet-metal and formed with letter-impressions, the letter-impressed portion of the blank being curved to conform with the roll of the applied tip.

3. A tapering-tip blank for lacings stamped from sheet-metal and formed with a series of letter-impressions of decreasing width and adapted to grip the interrolled lacing fabric.

4. A tapering-tip blank for lacings stamped from sheet-metal and formed with a series of letter-impressions of decreasing width, the letter-impressed portion of the

blank being curved to conform with the tapering roll of the applied tip.

5 5. A lacing having a covering-tip formed from a sheet-metal blank having letter impressions, said blank being interrolled with the lacing fabric and gripping the latter by means of said letter impressions.

10 6. A lacing having a tapered covering-tip formed from a sheet-metal blank provided with a series of letter impressions of decreasing width, said blank being interrolled with the lacing fabric and gripping the latter by means of said letter impressions.

15 7. A lacing having a tapered covering-tip formed from a sheet-metal blank having a series of letter impressions of decreasing

width, the letter-impressed portion of said blank being curved to conform with the tapering roll of the finished tip, and the blank interrolled with the lacing fabric.

20 8. A lacing having a covering-tip formed from a sheet-metal blank provided with letter-impressions and additional fabric-gripping means, said blank being interrolled with the lacing fabric so as to expose the letter- 25 impressions only.

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

FERDINAND THUN.

Witnesses:

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W. G. STEWART.