(No Model.)

J. F. O'NEILL.

LASTING NIPPERS.

No. 473,015. Patented Apr. 19, 1892.

FIG. 1.

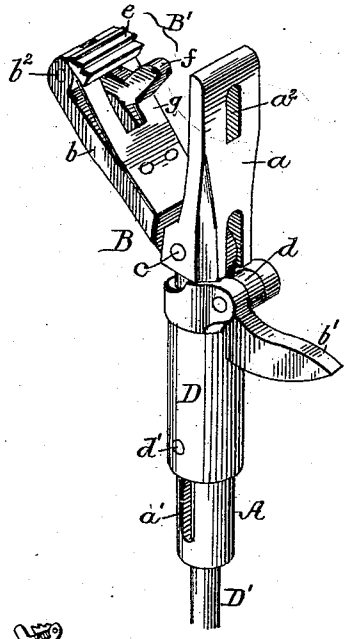


FIG. 3.

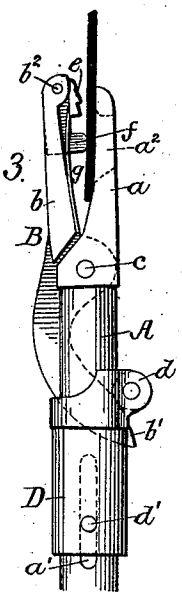


FIG. 2.

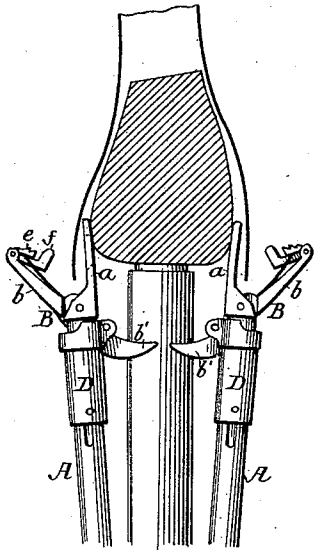


FIG. 4.

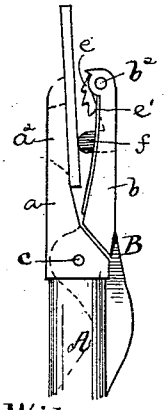


FIG. 6.

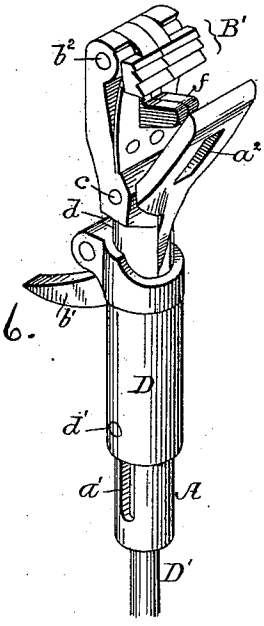
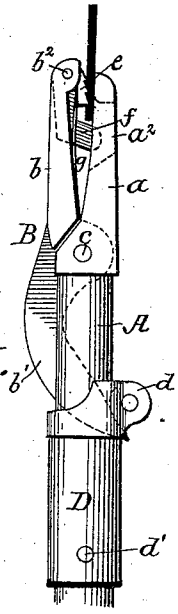


FIG. 5.



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UNITED STATES PATENT OFFICE.

JAMES F. O'NEILL, OF HORNELLSVILLE, NEW YORK, ASSIGNOR TO THE WHIFFEN-LAKE LASTING MACHINE COMPANY, OF SAME PLACE.

LASTING-NIPPERS.

SPECIFICATION forming part of Letters Patent No. 473,015, dated April 19, 1892.

Application filed October 28, 1890. Renewed September 15, 1891. Serial No. 405,761. (No model.)

To all whom it may concern:

Be it known that I, JAMES F. O'NEILL, a citizen of the United States, and a resident of Hornellsville, Steuben county, New York, have invented certain Improvements in Lasting-Nippers, of which the following is a specification.

My invention relates to certain improvements in the lasting-nippers set forth in the application for patent filed by David Lake October 31, 1889, renewal filed August 21, 1890, Serial No. 362,570, the object of my invention being to so construct the nippers that the upper will be seized by the gripping-jaws the moment it is released from the slipping jaws, as fully described hereinafter.

Figure 1 is a perspective view of my improved nippers. Fig. 2 is a view showing the jaws open and the upper within the jaws. Figs. 3, 4, and 5 are views illustrating the operation of my improved nippers. Fig. 6 is a view showing a jaw provided with two supplementary jaws.

It will be understood that in forcing an upper onto a last great care must be exercised in manipulating the nippers so that the several sets of nippers will pull upon their respective portions of the upper to such an extent as to bring these portions of the upper to their respective final positions and at the same time prevent the tearing of leather. Consequently in machines heretofore constructed each nipper has had to be adjusted upon the upper prior to lasting. Hence the time expended in this adjustment of each nipper was often as long if not longer than it would take a skilled laster to last a shoe by hand.

The lasting-nippers which I will now proceed to describe are so constructed as to overcome the objections noted.

A is a hollow spindle having a fixed jaw *a*, and pivoted to this spindle at *c* is a lever B, having at one end a jaw *b* and at the opposite end an arm *b'*, so formed as to be acted upon by a roller or stud *d* on a sleeve D on the tubular spindle A. This sleeve is operated by a vertically-movable rod D', adapted to the tubular spindle A, the sleeve being connected to said rod by a pin *d'*, which passes through slots *a'* in the tubular spindle. Hence on the vertical movement of either the rod D' or the tubular spindle A the jaw *b* will be moved toward or from the jaw *a*.

It will be understood that in carrying out my invention the above-described special construction of operating devices need not be adhered to.

In the present instance the jaw *a* has a smooth face, and the opposite jaw *b* carries a supplementary jaw B', pivoted at b^2 in the present instance. This supplemental jaw has a serrated or roughened gripping-face *e* and a smooth slipping face *f*, preferably rounded, as shown in the drawings. The supplemental jaw B' is pivoted to the jaw *b* in the present instance at its upper end, so that it can swing on the said jaw. A spring *g* on the jaw *b* rests against the rear of the supplemental jaw B', tending to force the jaw forward, so that the first portion of the supplemental jaw to come in contact with an upper would be the smooth face *f*, as shown in Fig. 3, and when power is applied the supplemental jaw assumes the position shown in Fig. 4, the portion *e'*, striking against the jaw *b*, as shown in said figure, limiting the movement of the supplemental jaw. When the edge of the upper passes the smooth portion of the supplemental jaw, the spring forces the roughened face *e* against the upper, which at once impinges upon the upper and holds it without slipping, so that any continued pull upon the nippers would draw the upper tightly over the last. The pivot-point of the supplemental jaw is above the acting face of the roughened portion. Consequently when tension is applied to the upper or downward pressure is applied to the nippers, the jaws will grip the upper more firmly, the teeth of the jaw being so cut that they will be thrown back clear of the upper when the upper is between the smooth face of the jaw and the opposite jaw. By simply moving the sleeve D upward or the tubular spindle downward the jaws of the nippers will be readily opened, so as to free the upper. In order to allow the projecting smooth portion *f* to have free play, in the present instance an orifice a^2 is made in the jaw *a* to permit said projection *f* to pass into or through the jaw.

In Fig. 6 I have shown the supplemental jaw carried by the fixed jaw *a*, while in the other figures the jaw is carried by movable

jaws *b*, and in Fig. 6 I have shown two supplemental jaws situated side by side, hung in the present instance to a single pivot-pin, but otherwise independent, each having an independent spring and an independent movement, this style of jaw being especially useful at the heel portion of the upper or at the short curves at the instep, where it would be impossible to place the jaws having a single supplementary jaw, as the construction would have to be too delicate in order to secure the object attained by me.

I claim as my invention—

1. The combination, in lasting-nippers, of the main jaws with a supplementary jaw carried by one of the main jaws, said supplementary jaw having an outer roughened or toothed portion for gripping the upper, and an inner plain projection extending beyond the toothed or roughened portion and serving to hold the latter out of action until the plain bearing has passed beyond the upper, substantially as described.

2. The combination, in lasting-nippers, of the two main jaws, one of which is smooth, a supplementary jaw pivoted to the opposite main jaw, said supplementary jaw having an outer roughened or toothed portion, and an inner plain bearing portion projecting forward beyond the toothed or roughened portion, with a spring bearing upon the supplementary jaw to force it outward, the plain main jaw having an orifice into which the smooth portion of the supplementary jaw can project when the roughened jaw is in action, substantially as described.

3. The combination of the main jaws, one of said main jaws being smooth, with two supplementary jaws situated side by side and pivoted on the same line to the other main jaw, the said supplementary jaws having smooth bearing-faces and roughened faces, with independent springs for acting on each of said jaws, thus allowing each supplementary jaw to have independent action, 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.

JAMES F. O'NEILL.

Witnesses:
DAVID LAKE,
LEON LAKE.