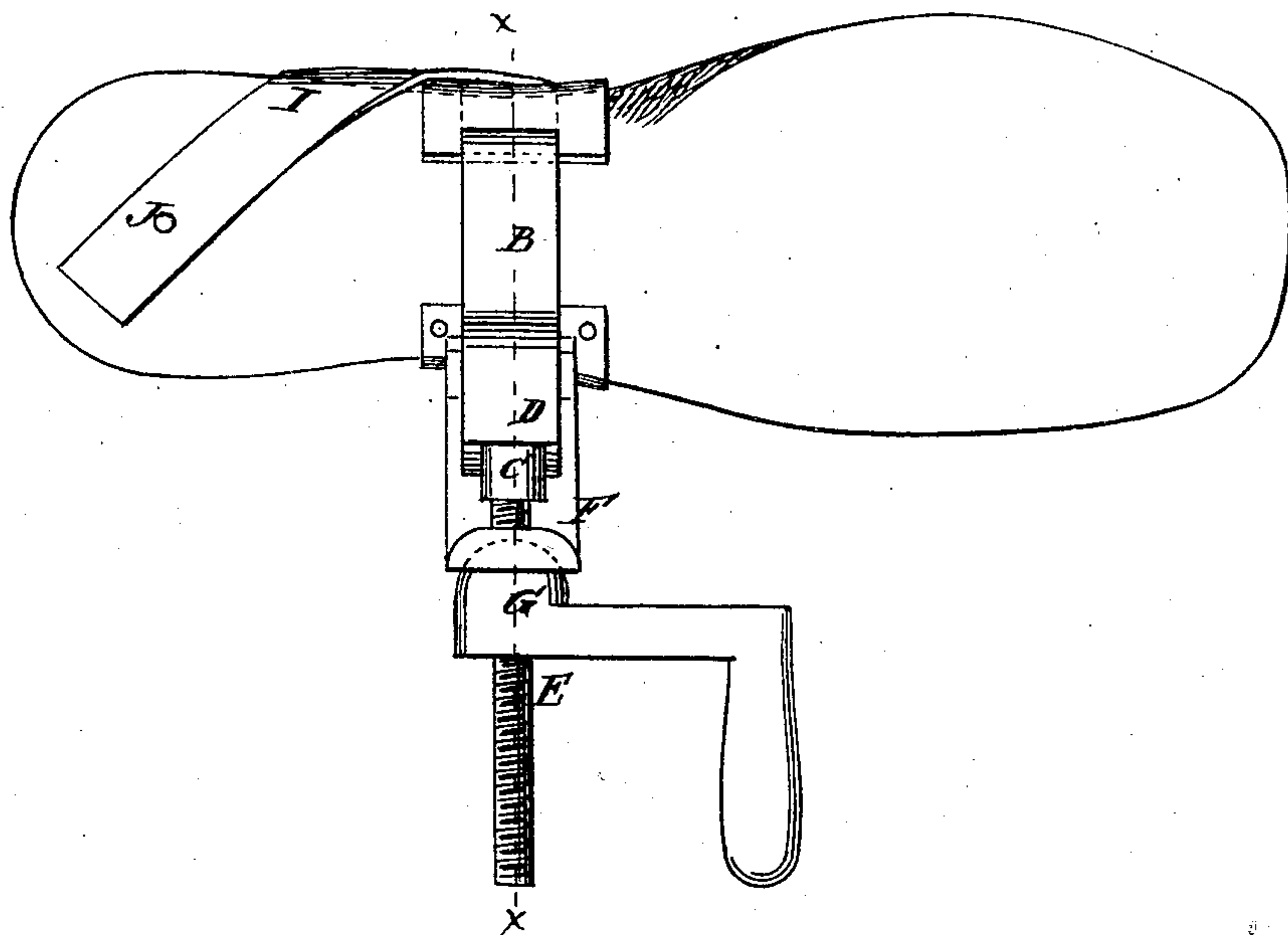


W. H. HANNA.  
Shank-Lasters.

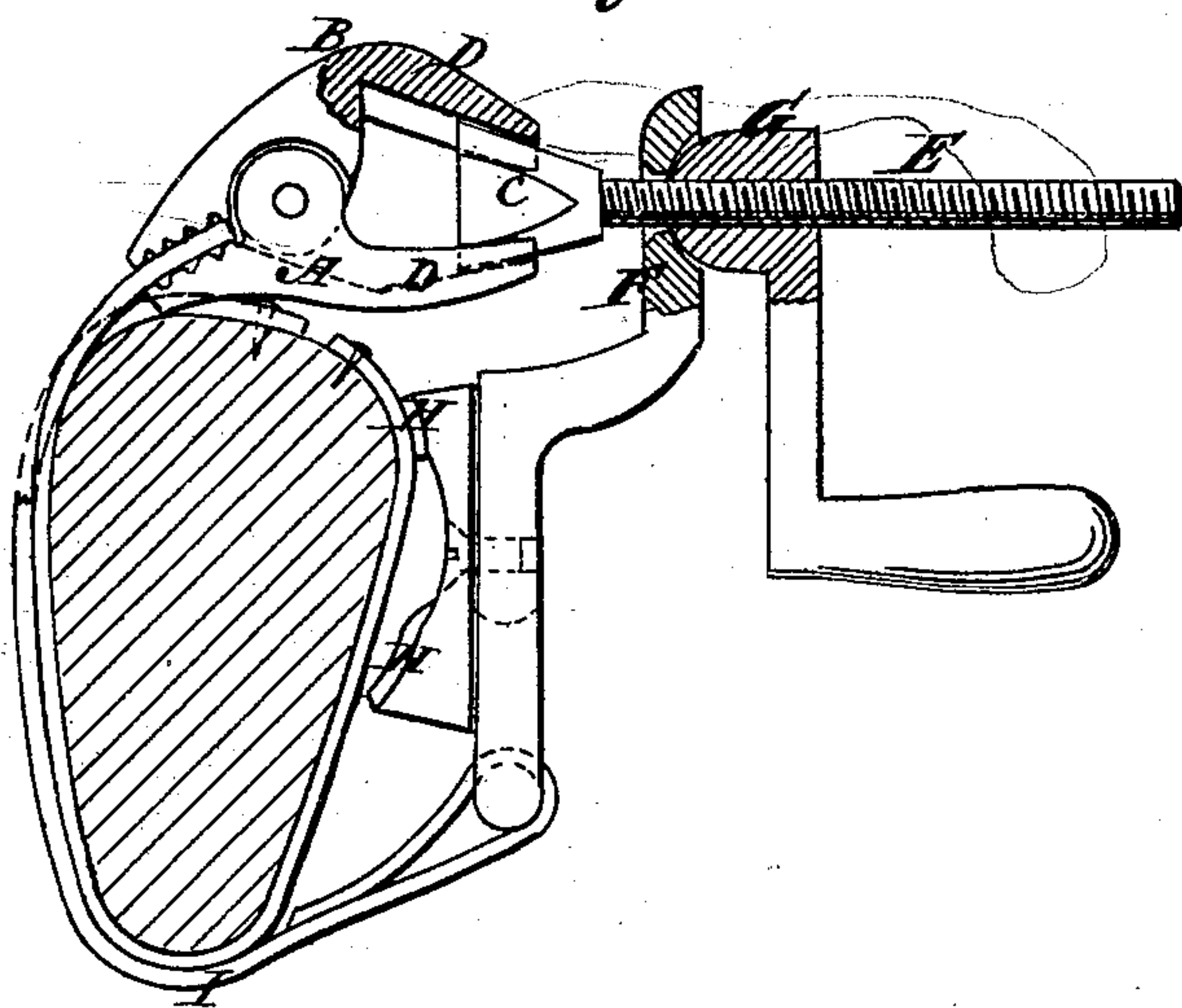
No. 144,903.

Patented Nov. 25, 1873.

*Fig. 1.*



*Fig. 2.*



Witnesses:

*E. Wolff*  
*Belgum*

Inventor:

*W. H. Hanna*

Per

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# UNITED STATES PATENT OFFICE.

WILLIAM HAMILTON HANNA, OF CHICO, CALIFORNIA.

## IMPROVEMENT IN SHANK-LASTERS.

Specification forming part of Letters Patent No. **144,903**, dated November 25, 1873; application filed October 4, 1873.

*To all whom it may concern:*

Be it known that I, W. H. HANNA, of Chico, in the county of Butte and State of California, have invented a new and Improved Shank-Laster, of which the following is a specification:

My invention consists of a pair of nipper-jaws, a screw-threaded shank, nut-bearing piece, and a strap, all so combined and arranged that the bearing-piece being placed against the side of the last, the jaws engaged with the edge of the upper, and the strap wound partly round the shank and fastened at the center of the heel, or thereabout, the shank of the upper can be stretched up very powerfully to the last by turning the nut, which has a crank for the purpose, and the jaws can be shifted along the upper, and from side to side readily to stretch the upper in all parts without disconnecting the strap from the last.

Figure 1 is a plan view of my improved shank-laster and a last to which it is applied. Fig. 2 is a cross-section of Fig. 1 on the line *x x*.

Similar letters of reference indicate corresponding parts.

A and B represent the nipper-jaws. C is a wedge, fitted between the arms D of the jaws, so as to force the jaws together when pulled in the direction for pulling the jaws to stretch the upper. E is a screw-threaded rod, projecting from the wedge, and passing through the rest F, also through the screw-threaded

crank-nut, G, which has an oval face fitted in a concave socket in the rest to allow the nipper-jaws to shift laterally. The rest F is provided with bearing-pieces H to rest against the side of the last, and at the lower end a strap, I, is attached, which goes around the last and up on the other side to the center of the heel, where it is secured by a single tack, J. This strap being arranged and secured in this way allows the nipper-jaws and rest to be shifted forward and backward along the last to any extent required for stretching the upper at different places, and it also allows of shifting them from side to side of the last without being disconnected by turning on the center J, thus affording ample facility of adjusting the tool in any way required.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The nipper-jaws A B, wedge C, screw-rod E, cranked nut G, rest F, and strap I, combined and arranged substantially as specified.

2. The strap I, in combination with the rest F H and suitable gripping and stretching devices, supported by said rest, all as shown and described, whereby said parts are adapted to be applied to a last, and to operate as specified.

WILLIAM HAMILTON HANNA.

Witnesses:

A. HALLET,  
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