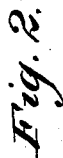


E. S. KINGSTON.
LAST FOR BOOTS AND SHOES.

Patented Feb. 27, 1883.



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UNITED STATES PATENT OFFICE.

EDWARD S. KINGSTON, OF LITTLE FALLS, NEW YORK.

LAST FOR BOOTS AND SHOES.

SPECIFICATION forming part of Letters Patent No. 273,108, dated February 27, 1883.

Application filed October 11, 1882. (No model.)

To all whom it may concern:

Be it known that I, EDWARD S. KINGSTON, of Little Falls, in the county of Herkimer and State of New York, have invented a new and Improved Last for Boots and Shoes, of which the following is a full, clear, and exact description.

The object of my invention is to furnish a last, of iron, of a form that can be readily manufactured, and which in use can readily be contracted for removal from the boot as a whole instead of in sections.

My invention consists in the combination and arrangement of parts, substantially as hereinafter more fully set forth and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 is a longitudinal section of a last of my improved construction. Fig. 2 is a cross-section of the same on the line *xx*, Fig. 1.

A is the main or bottom portion of the last, formed with a heel, *a*, and toe *b*. Between the toe and heel the body is hollowed out, and is formed with raised side rims, *c c*.

B is the block or top portion of the last, connected at its forward end to the main body A by a post, *d*, which is fixed upon the bottom and loosely connected to the block B. At its rear end the block B is formed with a slotted flange, *e*, which sets over a post, *f*, on the bottom A. Both the post *f* and flange *e* are formed with holes for receiving a cross-piece, *g*, by which the block B is held in a more or less elevated position, according to the form it is desired to give to the instep of the boot.

h is a spring fast at one end to the bottom A, and bearing at its other end upon the under side of the block B, so as to press the block upward.

i is a cavity or socket formed on the bottom A, and open at the under side of the last for receiving a filling of cork.

k is a similar cavity or socket near the heel of the last, which also serves to receive a filling of cork, and *l* is a cavity or socket at the mid-length of the last.

The bottom A is formed with a rib, *o*, extending longitudinally, for stiffening the casting, and the block B may also have a similar rib upon its under side.

The rim *c* serves as a guide for the upper-leather from the instep to the sole. The sole of the boot or shoe is to be attached to the sole of the last by means of nails or pegs driven into the cork filling of the hollow projections *i k l*.

By the adjustment of the top or block B the desired fullness may be given to the boot or shoe, and in this movement of the block it works upon the toe-post *d* as a center, and, if desired, the block may be hinged at the toe instead of being connected with the post in the manner shown.

The spring *h* is used in the operation of what is called "second lasting" on trimmers' or finishers' lasts, and it acts to prevent the instep-leather from falling down in the way of the workman's knife while trimming. In this work the top block, B, may, if desired, be dispensed with, and the spring will act in the same manner for raising the leather of the instep.

It will be seen that the last is made in two sections, which may be readily cast, and each will form its own core in the mold, thereby dispensing with the necessity of making a separate core for each last cast. In removing the last from the boot it will commence to contract as soon as the pulling begins. To facilitate the removal I use a hollow tube, (shown at *m* in Fig. 3,) which is to be applied, as shown in dotted lines in Fig. 1, to the projection *k*, and the last is then placed upon a shoe-maker's jack, and can be pulled out in the usual manner.

The last is cast in malleable iron, which is afterward tinned to give to it a smooth surface that will not rust.

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

1. The block or top piece, B, formed with the flange *e*, and combined with the main body A of the last, formed with the posts *d f*, substantially as shown and described.

2. The spring *h*, in combination with the last-body A and adjustable frame B, substantially as and for the purpose set forth.

EDWARD S. KINGSTON.

Witnesses:

WM. KINGSTON,
WATTS T. LOOMIS.