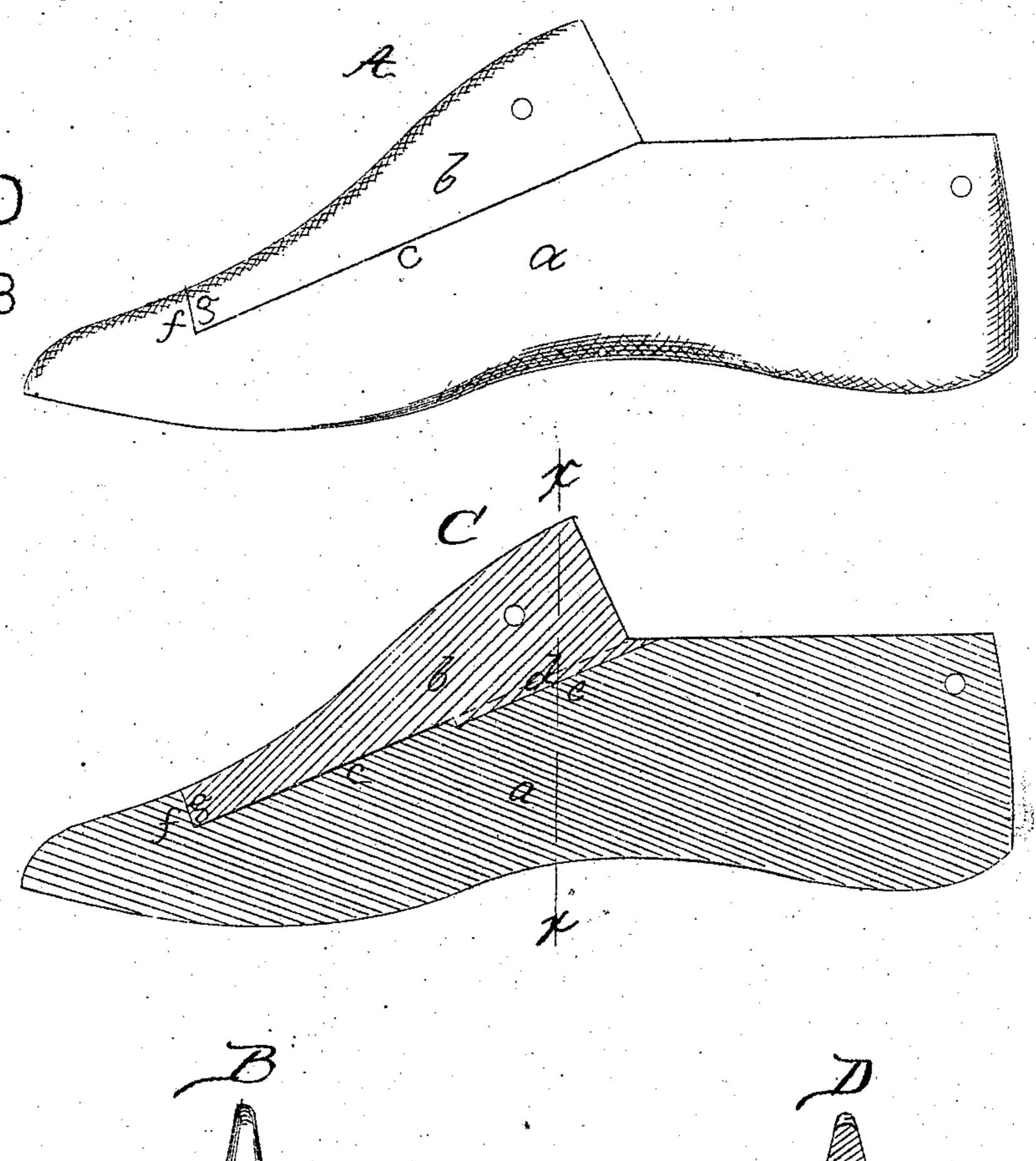
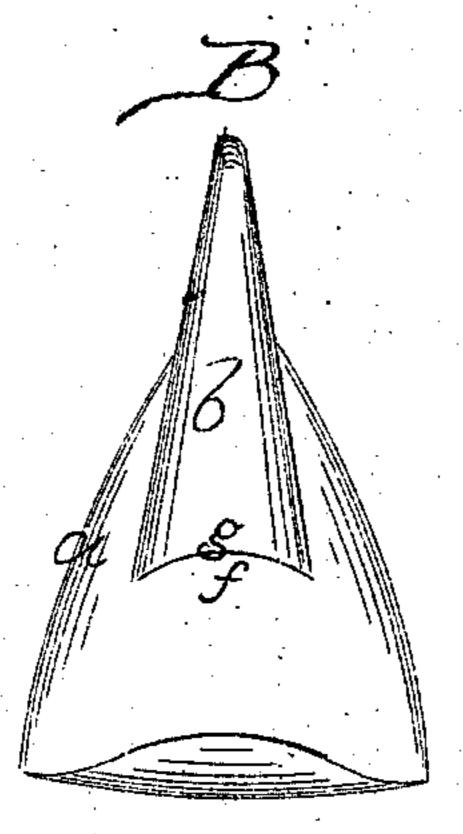
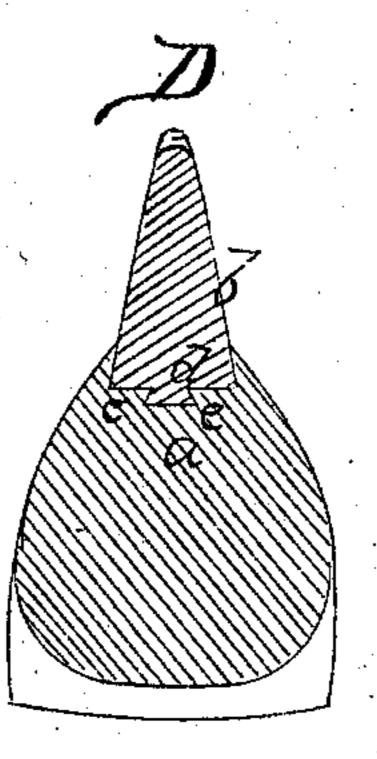
# Philip A. Newhall's Impt in Slide Block Lasts.

74580

PATENTED FEB 18 1868







6. Harren Brown. Aukarben P. A. Menhall, Crosby Halster Double attys

## Anited States Patent Pffice.

## PHILIP A. NEWHALL, OF LYNN, MASSACHUSETTS.

Letters Patent No. 74,580, dated February 18, 1868.

#### IMPROVEMENT IN SLIDE-BLOCK LASTS.

The Schedule referred to in these Vetters Patent and making part of the same.

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, Puilip A. Newhall, of Lynn, in the county of Essex, and State of Massachusetts, have invented an Improvement in Slide-Block Lasts; and I do hereby declare that the following, taken in connection with the drawings which accompany and form part of this specification, is a description of my invention sufficient to enable those skilled in the art to practise it.

In that class of boot-lasts known as "slide-block lasts," in which one block is used in common for a set or series of lasts, the block usually extends out to or nearly to the toe of the last, the upper and lower surfaces of the block meeting at an angle at the lower end of the block, this angular edge being flush with the upper surface of the last below the block.

In making boots upon these lasts, much difficulty is experienced in keeping the block in place, its tendency being to work back when the upper (in lasting) is drawn around the toe and over the inner sole, leaving the toe with a diminished fullness, and injuring the shape and fullness of the boot at the toe.

Various methods have been (prior to my invention) devised for securing these blocks in place, but, so far as I know, they are all impracticable, or are not efficient for holding the block securely in position.

The object of my invention is to so apply the slide-block to the last, or to so construct the block and last, that no direct end-pressure can come against the point of the block to force it from position, and my invention consists in constructing for a slide-block last, a block which not only has a tongue which fits and slides in a guide-groove in the upper surface of the last, but which is also constructed with an abutting face at its lower end or point, which face fits against and is stopped by a check or shoulder, made by cutting down into the top of the last just above the toe, the point of the block being covered or protected by the corresponding face on the last.

The drawings represent a last embodying my invention, A showing a side view of the same; B, an end view; C, a longitudinal central section; D, a cross-section, on the line x x.

a denotes the body or main portion of the last; b, the block, which, like ordinary slide-blocks, fits upon a flat face, c, made on the last, and has a tongue, d, (made dove-tailing in cross-section,) sliding in a corresponding groove, e, in the last. As usually constructed, the bottom face of the block b continues down to the toe of the last, as denoted by dotted lines at A and C, such construction involving the difficulties above set forth. Instead of such formation, I make the toe of the last full or solid, as seen at A, B, and C, and cut down into the top surface of the last above the toe, so as to make a square shoulder or face, f. Then I make the slide-block shorter, by the distance from the point on the toe at which the bottom face of the last would strike the outer surface of the last, back to the shoulder f, and give to its lower end, g, a thickness corresponding to the depth of such shoulder, the contour of the block, at the shoulder, of course merging into that of the adjacent part of the last, and each last of the set, to which the block b fits, being made with a shoulder or check, f, corresponding exactly with the end face of the block b.

It will readily be seen that, when a boot is lasted upon a last having a slide-block of this construction, no end-pressure can come upon the block when the toe part of the upper is drawn over the last, and hence all boots made upon any one last will have a perfectly uniform fullness at the toe, and no trouble is caused to the workman from any tendency of the block to slip back, this tendency being entirely obviated by the check in the last.

By this construction all other fastenings are dispensed with, the tongue and groove de, and the square point g, protected by the shoulder f, being a check against all improper movement of the block.

I claim, in combination with a slide-block, fitted by tongue and groove to slide upon the last, the square face or point g to abut against the shoulder f in the last, to be thereby protected from slipping back, substantially as set forth.

PHILIP A NEWHALL.

Witnesses:

J. B. CROSBY, FRANCIS GOULD.