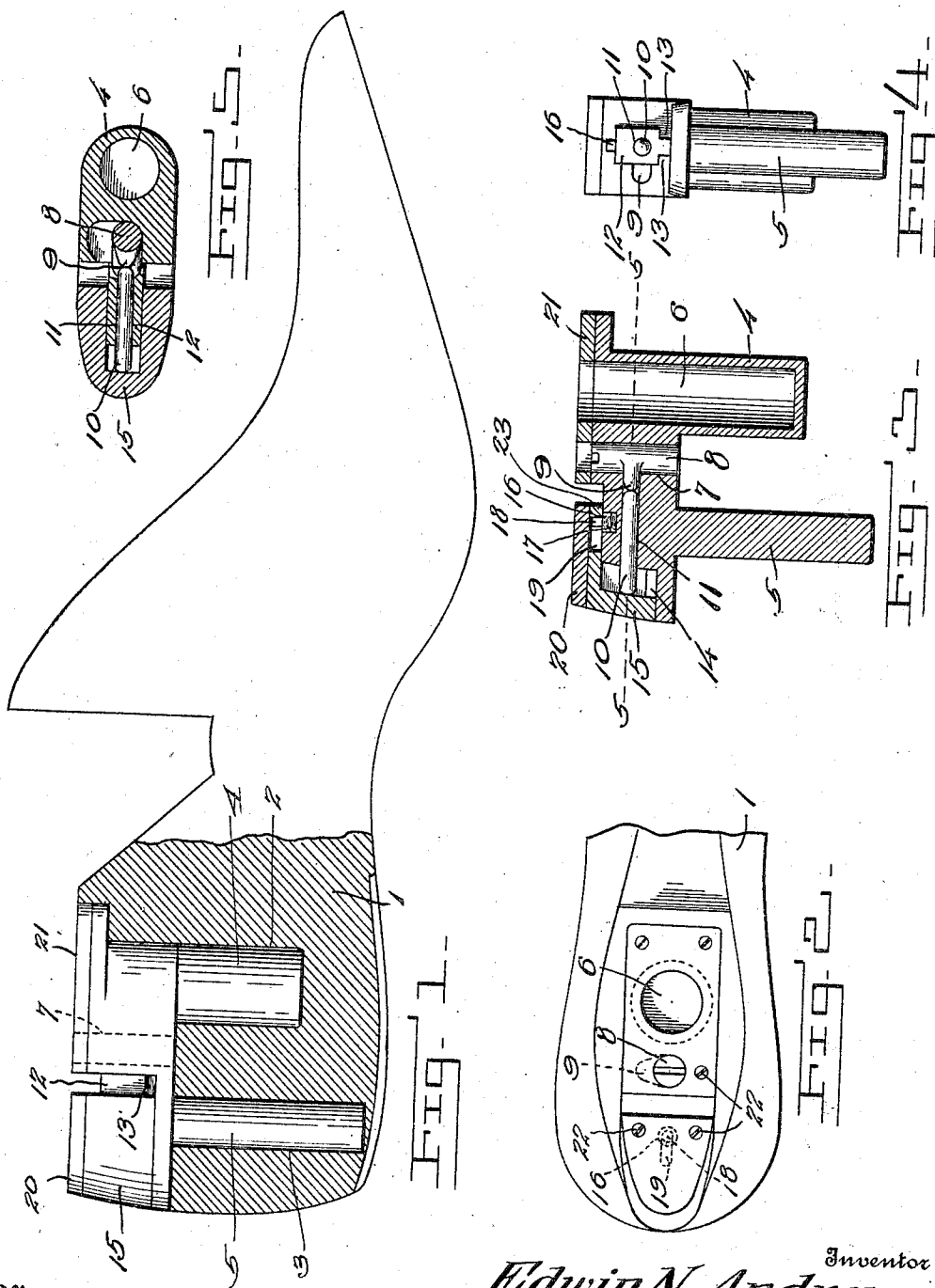


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HEEL EXPANSION SHOE LAST.
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1,237,991.

Patented Aug. 21, 1917.



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EDWIN N. ANDREWS, OF PONTIAC, ILLINOIS.

HEEL-EXPANSION SHOE-LAST.

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To all whom it may concern:

Be it known that I, EDWIN N. ANDREWS, a citizen of the United States, and a resident of Pontiac, in the county of Livingston and State of Illinois, have invented a new and useful Heel-Expansion Shoe-Last, of which the following is a specification.

The object of my invention is to provide a novel device adapted to take the strain from the top of the lasting line of the shoe upper which is to be lasted, whereby to cause the shoe to more readily retain its natural shape when worn. It is further my object to provide a single device so constructed as to perform the operations which heretofore have required the employment of two separate lasts. It is further my object to provide a novel combination and arrangement of parts as more fully hereinafter described.

I attain the objects of my invention by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a view partly in section and partly in elevation showing the device assembled; Fig. 2 is a top plan of the invention; Fig. 3 is a vertical section; Fig. 4 is a detail of the invention partially assembled; and Fig. 5 is a horizontal section on line 5—5 of Fig. 3.

Referring to the accompanying drawings illustrative of the invention, 1 designates the heel portion of a wooden last having a tubular portion 2 in which the tubular member 4 is seated. I also provide a tubular portion 3 in which stem 5 is seated. Members 4 and 5 are integral. 6 designates the spindle hole. 7 designates an opening in which is mounted a suitable member 8 having a limited rotary movement, and being provided with an arm 9 adapted to engage the end of a slidably mounted push pin 10 having a limited range of movement in orificed portion 11 of member 12. 13 designates the slotted portions of member 12, as shown in Fig. 4. 14 designates the guide portion on which is adjustably mounted heel expansion block 15, above which is mounted rear plate 20 which is engaged by stop latch 18, the head 16 of which is supported by spring 17. An opening 19 beneath plate 20 permits of the limited movement of heel expansion

block 15. Of corresponding thickness with member 20 is a front plate 21, as illustrated. Suitable screws 22 secure plates 20 and 21 to the elements upon which they are mounted. To block 15 is secured plate 20 which has a depending flange 23.

In operation the shoe is first applied to the last with member 8 in position to point arm 9 laterally relative to the last, thus allowing push pin 10 and heel expansion block 15 to seat in their contracted position. There is no strain at the top of the lasting line when expansion block 15 is in this retracted position. The shoe is sewed, the last taken out and the shoe turned. The last is then replaced in the shoe, the heel seat is completed, and then heel expansion block 15 is forced to its expanded position by rotating eccentric 8 and its arm 9 into position longitudinally aligned with the last. All slack and stretch of the shoe upper is taken out by reason of moving member 15 to this expanded position, the object being to cause the shoe to more readily retain its natural shape when worn. Heretofore it has been necessary to use two separate lasts, one last being a half size larger than the other.

What I claim is:

1. A last having a heel expansion block the block including a plate having a depending flange, an integrally formed stem and tubular member rigidly mounted in the heel portion of the last and having a stop latch projecting upward to engage the depending flanged portion of the expansion block plate to limit its expanding movement, and means for moving the expansion block from retracted to expanded position.

2. In a last, the combination with a stem and tubular element engaging in the heel of the last, of a longitudinally slidable member mounted to engage a heel expansion block, a heel expansion block having a flanged plate portion, a stop latch projecting upwardly to engage the aforesaid flange, and a rotatable member having an arm engaging the inner end of the longitudinally slidable member and adapted to move that member from retracted to extended position to operate the expansion block.

EDWIN N. ANDREWS.