

W. DUCHEMIN.
Turned Shoes.

No. 140,258.

Patented June 24, 1873.

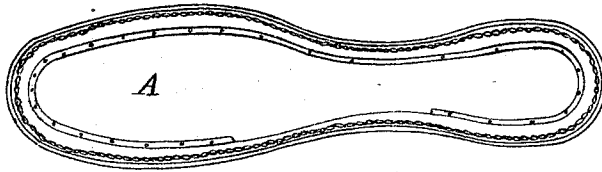


Fig. 1.



Fig. 3

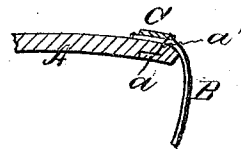


Fig. 2

WITNESSES.

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WILLIAM DUCHEMIN, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO WILLIAM DUCHEMIN, TRUSTEE, OF SAME PLACE.

IMPROVEMENT IN TURNED SHOES.

Specification forming part of Letters Patent No. **140,258**, dated June 24, 1873; application filed May 10, 1873.

To all whom it may concern:

Be it known that I, WILLIAM DUCHEMIN, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Turned Shoes, of which the following is a full, clear, and exact description thereof, reference being had to the annexed drawing forming part of this specification, in which—

Figure 1 represents a plan view of the upper side of the sole, the shoe having been turned inside outwards, showing my improvement in part. Fig. 2 illustrates a transverse section of a portion of the same, exhibiting the channel of and mode of sewing sole to the upper and welt of shoe. Fig. 3 is a similar view of the ordinary shoe in its properly-turned position.

Corresponding parts in the figures are designated by like letters of reference.

This invention consists in channeling the soles of turned shoes from the grain or outside, the overlapping lip or piece thus formed being made to occupy a position between the outer edge of the sole and its center; and in sewing the sole, upper, and welt together at an angle, say about forty-five degrees, substantially as hereinafter more fully set forth.

To enable others to make and use my invention I will proceed to describe it.

The sole A of the shoe is channeled from the grain or outside, so as to cause the overlapping lip *a* thus formed to rest between the outer edge and the center of the sole. The upper or flesh side of this sole is chamfered upon its extreme edge. It is now placed in position on the last, and the upper B fastened thereto by a series of tacks, or other suitable means, as shown in Fig. 1, in such a manner that the shoe, as far as thus completed, can be removed therefrom for sewing. Remove the same and adjust the said sole and upper in the desired manner to the machine, the band or welt being placed in position during the process of sewing by a mechanical device attached to the sewing-machine for that purpose; and the arm upon which the shoe rests while being operated upon is so shaped that the shoe is sewed angularly outward about forty-five degrees, as seen at *a'*, Fig. 2. These devices, being subject matter

for a separate and distinct patent, will not be further described here. When the shoe is sewed it is removed from the machine and turned, the channel cemented, and then finished in the usual manner.

This channel is distinguished from, and possesses advantages over, the ordinary one, shown in Fig. 3, in that it is cut on the grain or outside in a manner to leave a lip, with its overlapping edge or surface directed towards the center of the sole, by means of which the arm above mentioned as holding the shoe is guided during the process of sewing, the edge of the sole allowed to possess the required thickness, to overcome the premature wearing out of the same, and the seam of the sewing removed, or isolated from the outer edge or surface of the sole, rendering the shoe more durable, &c.; but, on the contrary, the old way consists in cutting away the outer edge of the sole where the most wear comes, and the channel, by reason of the depth required for the sewing, cuts deep into the sole, thus reducing its strength where it is most needed.

The continuous welt or band C, directly over and at the extreme edge of the upper, has two distinct functions; it strengthens and keeps the sole in shape, and, in consequence of its being located over the upper, the said upper is secured to the sole in the same manner as in inner-sole shoes—that is, between the continuous welt C and sole A—said welt performing all the functions of an inner-sole, thus making a turned shoe with all the advantages of an inner-sole, minus the cost, and without the stiffness of that class of shoes.

By sewing the shoe angularly about forty-five degrees the holes of the thread are thrown out of a perpendicular line, by which, as the sole wears away, it, the latter, continues to maintain its compactness, whereby the sole is strengthened until completely worn out.

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

1. A turned shoe, having its sole channeled on the lower or grain side, the overlapping surface of its lip being directed towards the center of the sole, substantially as and for the purpose set forth.

2. The mode of sewing turned shoes, consisting in uniting the sole, upper, and welt together by stitches, passing through angularly to the surface of the sole, substantially as and for the purpose set forth.

3. As a new article of manufacture, a turned shoe having its sole channeled on the lower or grain side and sewed angularly, and composed of the sole A, upper B, and welt C,

substantially as and for the purpose specified.

In testimony whereof I have hereunto signed my name this 9th day of May, 1873, in presence of two subscribing witnesses.

WILLM. DUCHEMIN.

Witnesses :

J. P. BERTHRONG,
J. W. MISTER.