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MANUFACTURE OF TURN SHOES

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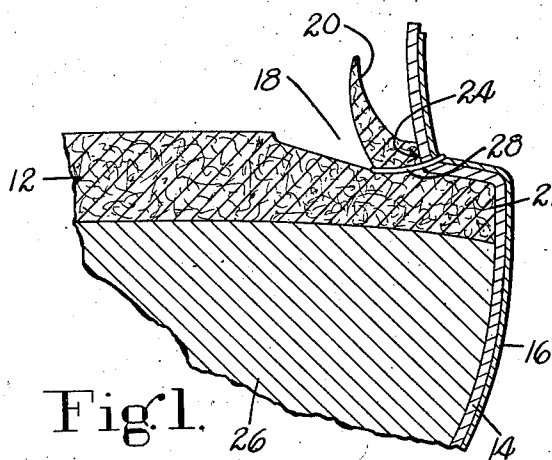


Fig. 1.

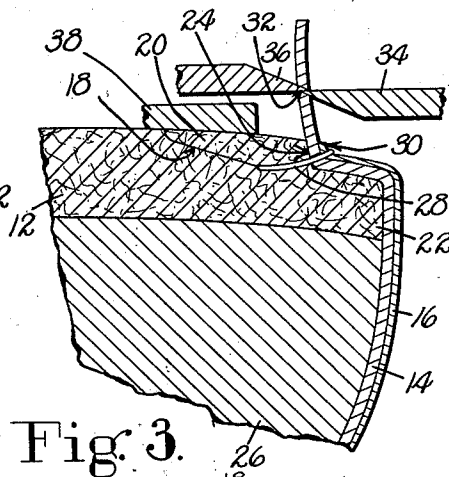


Fig. 3.

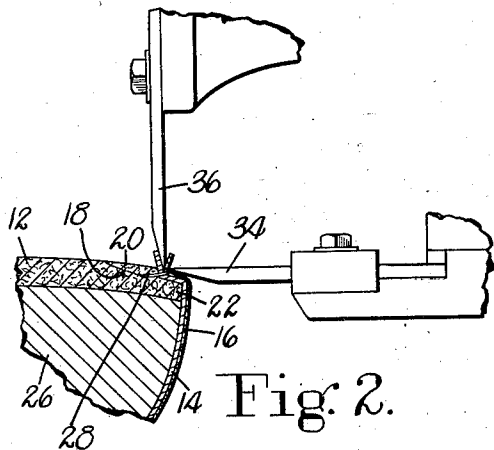


Fig. 2.

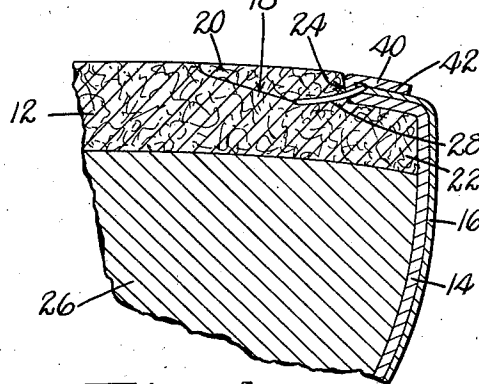


Fig. 4.

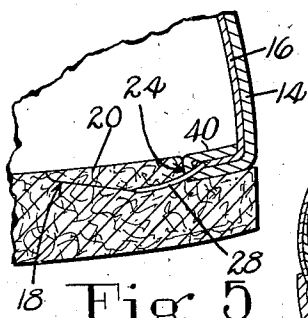
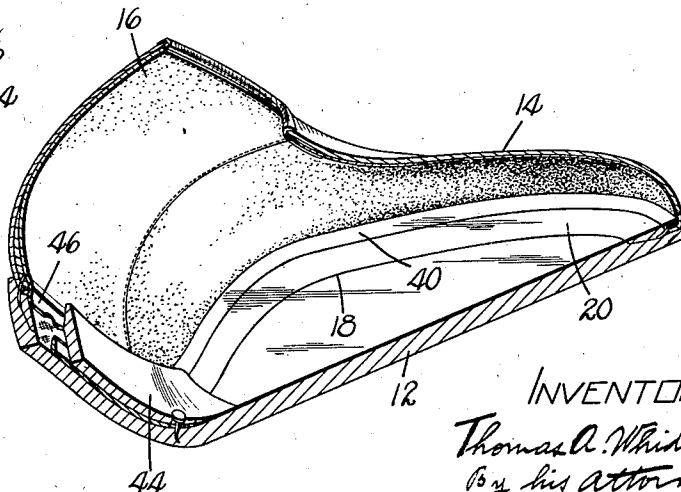


Fig. 5.

Fig. 6.



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MANUFACTURE OF TURN SHOES

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9 Claims. (Cl. 12—142)

This invention relates to improvements in the manufacture of turn shoes.

A turn shoe as ordinarily constructed comprises an upper and a single sole having upon its inner or flesh side an outer marginal shoulder and feather and an inner stitch-receiving channel. The upper materials comprising the upper leather and a lining are lasted inside out and their overlapped margins overlies the feather and are secured by stitches against the shoulder, the stitches extending through the between-substance into the inner channel where they are covered and concealed by the channel lip. The overlapped margins of the upper materials frequently extend a substantial distance beyond the shoulder of the sole and these upper margins, together with the outer portions of the upper attaching stitches, are exposed to view all the way around the inside of the shoe bottom in the forepart of the shoe and they present an unsightly and unfinished appearance. Moreover, these edge portions of the upper materials are more or less rough and uneven and are very liable to cause discomfort to the wearer of the shoe.

One object of the present invention is to avoid the undesirable conditions above referred to and to provide a turn shoe the inside of which will present a neat, finished appearance along the outer side of the sewing rib without any roughness or unevenness such as would be unsightly or might be uncomfortable to the wearer of the shoe.

With this object in view, the invention provides an improved method of making turn shoes which consists in lasting an upper wrong-side out over a sole having the usual feather and marginal shoulder, stitching the upper to the shoulder, and turning outwardly that portion of the upper margin which extends beyond the line of stitching and securing it by cement in its outwardly turned position so as to cover the stitching and the intumed portion of the upper and thus to impart a distinctive finished appearance to the outer marginal portion of the inside of the shoe bottom. As herein illustrated, the lining is trimmed close to the line of stitching and the margin of the upper, before being laid in place, is trimmed to provide just sufficient width of material to constitute a narrow covering or finishing strip for the intumed margin of the lining, the arrangement is such that the exposed surface of this covering strip is the grain surface of the upper leather and thus the strip provides a distinctive finish to the inside of the shoe. Moreover, in the operation of fitting the sole, the

height of the shoulder is made such that after the margin of the upper leather has been turned outwardly and laid in place its upper or grain surface, as herein illustrated, will be flush with the upper or inner surface of the sole so as to cause no discomfort to the wearer of the shoe. Preferably and as exemplified herein the covering or finishing strip is permanently secured in place by means of cement.

It is to be recognized that, considered in another aspect, invention is to be recognized as residing also in a turn shoe embodying the features of construction hereinafter described and claimed.

The invention will be explained with reference to the accompanying drawing, in which

Fig. 1 is a fragmentary cross-sectional view of a turn shoe in the process of manufacture, as it appears before the upper materials have been trimmed and before the shoe has been turned;

Fig. 2 is a view similar to Fig. 1 but on a smaller scale and illustrating the operation of trimming the overlapped margin of the lining;

Fig. 3 is a fragmentary cross-sectional view of the shoe, illustrating the operation of trimming the upper leather;

Fig. 4 is a view similar to Fig. 3 but showing the shoe as it appears after the trimmed upper leather has been turned outwardly and laid upon the overlapped margin of the lining but before the shoe has been turned;

Fig. 5 is a fragmentary sectional view of the shoe as it appears after it has been turned; and

Fig. 6 is a sectional perspective view of the interior of the completed shoe.

The turn shoe illustrated in the drawing comprises a sole 12 and an upper comprising the usual upper leather 14 and lining 16. The sole 12 is provided with the usual inside stitch-receiving channel 18 and channel lip 20 and with the usual feather 22 and outer shoulder 24. The upper materials, having been assembled wrong-side out upon a last 26, are worked over the last in the customary way and thereafter permanently secured to the sole by a thread seam 28 which may be a hand-sewed seam or one made by a turn sewing machine of a well-known type, the stitches being laid in the channel 18 and their inner portions being covered by the channel lip 20. Both the upper leather 14 and the lining 16 are stitched to the sole around the forepart while along the shank and around the heel (if the shoe is to be of the sewed seat type) the upper leather only is stitched to the sole while the lining is left unattached.

In accordance with the present invention, as herein illustrated, after the upper has been worked over the last as above described and before the shoe is turned, the lining 16 is trimmed close to the line of stitches or seam 28 about the forepart of the shoe, as indicated at 30 in Fig. 3, and the upper leather 14 is trimmed at a substantial distance from the line of stitching, as indicated at 32 in Fig. 3, so as to provide just enough width of material extending upwardly beyond the stitching to cover the outer portions of the stitches when turned outwardly and downwardly into the plane of the channeled surface of the sole and to extend outwardly to the extreme edge of the shoe bottom. The trimming of the lining may advantageously be accomplished by means of a trimming machine of the general type of the machine disclosed in United States Letters Patent No. 429,065, granted May 27, 1890, upon an application of Shaadt and Clark. Such a machine, as shown in Fig. 2, comprises a reciprocating shear blade 34 and a cooperating stationary shear blade 36, the arrangement of the blades being somewhat modified however from that shown in said patent to enable them to trim the lining without also trimming the upper leather. As illustrated in Fig. 3, the trimming of the upper leather may be accomplished by the same machine in which, however, the stationary shear blade 36 is arranged as shown in the Letters Patent referred to, and a gage 38 is employed for gaging the location of the trimming cut. After the upper leather 14 has been trimmed as above described its trimmed margin is turned outwardly and pressed downwardly against the seamed margin of the lining, as shown in Figs. 4 and 5, thereby providing a narrow covering or finishing strip or welt 40 of upper leather which extends all around the inside of the forepart of the shoe between the shoulder 24 and the lining of the upper. Preferably, and as indicated in Fig. 4, the narrow finishing strip 40 is secured in place by means of cement 42. In the operation of fitting the sole the depth of the shoulder 24 is made such that when the finished strip 40 is laid in place as just described its upper surface will be flush or substantially flush with the inner or upper surface of the sole. Moreover it is to be noted that the upper surface of the narrow strip 40 of upper leather has its grain surface uppermost so that a distinctive finished appearance is imparted to the marginal portion of the inside of the shoe bottom.

While it is preferred to trim the upper lining close to the seam 28 it is not essential to do so and it should be understood that it is within the scope of the invention to trim both the lining and the upper leather along the same line so that both will extend outwardly to the inner surface of the sides of the shoe after being turned and laid in place.

Along the shank and in the heel portion of the shoe the seamed portions of the upper materials are covered by the usual turn shank piece 44 which, in accordance with the usual practice, is inserted inside the shoe after the shoe has been turned. Preferably, in the shank and heel portion of the shoe, the upper leather is trimmed as in the forepart although the lining is not trimmed at all in this locality but is turned inwardly over the inner surface of the sole as at 46 and may be secured in place by means of cement if desired before the turn shank piece is inserted. After the shoe has been turned and the turn shank piece has been secured in position the

entire inside of the shoe bottom, rearwardly of the break line, will be covered by the turn shank piece. Forwardly of the break line the inner surface of the sole will be smooth between the portions of the shoulder 24 at opposite sides of the shoe while the narrow portion of the shoe bottom outside the shoulder will be covered by the finishing strip 40, the latter being flush with the inner surface of the sole, as already pointed out and presenting to view a finished grain leather surface which adds character and attractiveness to the appearance of the inside of the shoe. Thus, the inside of the forepart of the shoe will present a smooth surface to the foot and will have a distinctive finished appearance which will contrast favorably with the rough unfinished appearance of the corresponding marginal portion of the inside of the shoe bottom in turn shoes as customarily constructed.

The invention having been described, what is claimed as new and desired to be secured by Letters Patent of the United States is:

1. That improvement in methods of making turn shoes which consists in lasting an upper and an upper lining wrong-side out over a sole having the usual feather and marginal shoulder, stitching the upper and the lining to said shoulder, trimming the lining close to the line of stitching while leaving the upper extending upwardly beyond the stitching, and turning outwardly said upwardly extending portion of the upper to cover the stitching and the trimmed portion of the lining.

2. That improvement in methods of making turn shoes which consists in lasting an upper wrong-side out over a sole having the usual feather and marginal shoulder, stitching the upper to said shoulder, and turning outwardly that portion of the upper margin which extends beyond the line of stitching and securing it by means of cement in its outwardly turned position to cover the stitching and the inturned portion of the upper.

3. That improvement in methods of making turn shoes which consists in lasting an upper and a lining wrong-side out over a sole having the usual feather and marginal shoulder, stitching the overlapped margins of the upper and lining to said shoulder, trimming the margin of the lining close to the line of stitching, and turning the margin of the upper outwardly beyond the line of stitching to cover the latter and the inturned margin of the lining.

4. That improvement in methods of making shoes which consists in lasting an upper and a lining wrong-side out over a sole having the usual feather and marginal shoulder, stitching the upper and the lining to said shoulder, trimming the lining close to the line of stitching, trimming the upper to provide only sufficient material for covering the inturned portion of the lining, and turning the trimmed margin of the upper outwardly and downwardly to cover the stitching and the inturned portion of the lining.

5. That improvement in methods of making shoes which consists in lasting an upper and a lining wrong-side out over a sole having the usual feather and marginal shoulder, stitching the upper and the lining to said shoulder, trimming the lining close to the line of stitching, trimming the upper to provide a strip of material of just sufficient width for covering the inturned portion of the lining, and turning said strip outwardly and downwardly and cementing it to the inturned

portion of the lining to cover the latter and conceal the stitching.

5 6. A turn shoe comprising a sole having the usual feather and marginal shoulder, and an upper and a lining each having inturned marginal portions overlying the feather and stitched to the shoulder, the marginal portion of the upper extending upwardly and outwardly beyond the line of stitching and covering the latter and being
10 disposed in direct contact with the inturned marginal portion of the lining.

15 7. A turn shoe comprising a sole having the usual feather and marginal shoulder, and an upper and a lining each having inturned marginal portions overlying the feather and stitched to the shoulder, the marginal portion of the lining being trimmed close to the line of stitching and the
20 marginal portion of the upper extending upwardly and outwardly beyond the line of stitching to cover the latter and the trimmed edge of the lining.

8. A turn shoe comprising a sole having the

usual feather and marginal shoulder, and an upper and a lining each having inturned marginal portions overlying the feather and stitched to the shoulder, the marginal portion of the lining being
5 trimmed close to the line of stitching and the marginal portion of the upper being turned outwardly beyond the line of stitching and being cemented to the inturned margin of the lining, thereby permanently covering said portion of the
10 lining and concealing the stitching.

9. A turn shoe comprising a sole having the usual feather and a marginal shoulder extending from the feather to the inner surface of the sole, and an upper having in the forepart of the shoe
15 an inturned marginal portion overlying the feather and secured by stitches against said shoulder and having also an outturned marginal portion covering and concealing the attaching
20 stitches, said outturned portion lying flush with the inner face of the sole and flat against said inturned portion and being secured by cement to the latter.

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