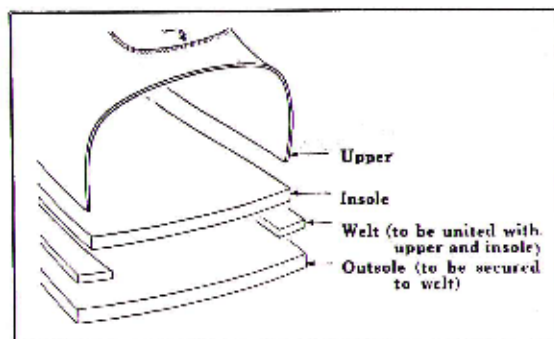


In the footwear included in Group I, attachment of the outsole to the upper and insole is "indirect" through the medium of a welt or middlesole previously united to the upper and insole by any one of a number of methods.



Component parts of a shoe having the outsole attached by an "indirect" method

Shoes included in Group I are

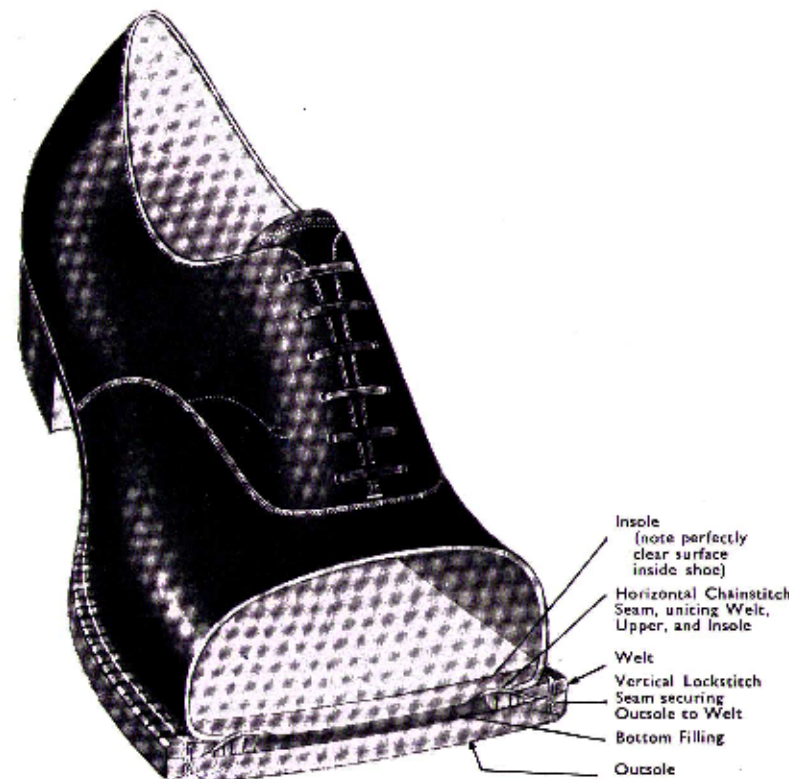
GOODYEAR WELTED

SILHOUWELT

LOCKSTITCH THROUGH-SEWN WELT

FAIRSTITCHED

MOCCASIN



INCORPORATING the same principle of construction as that used in a hand-sewn shoe, this is one of the most widely used of all shoe-making methods.

The insole has an upstanding rib on its underside, formed by turning back the "lips" of two shallow channels cut parallel and close to the outer edge.

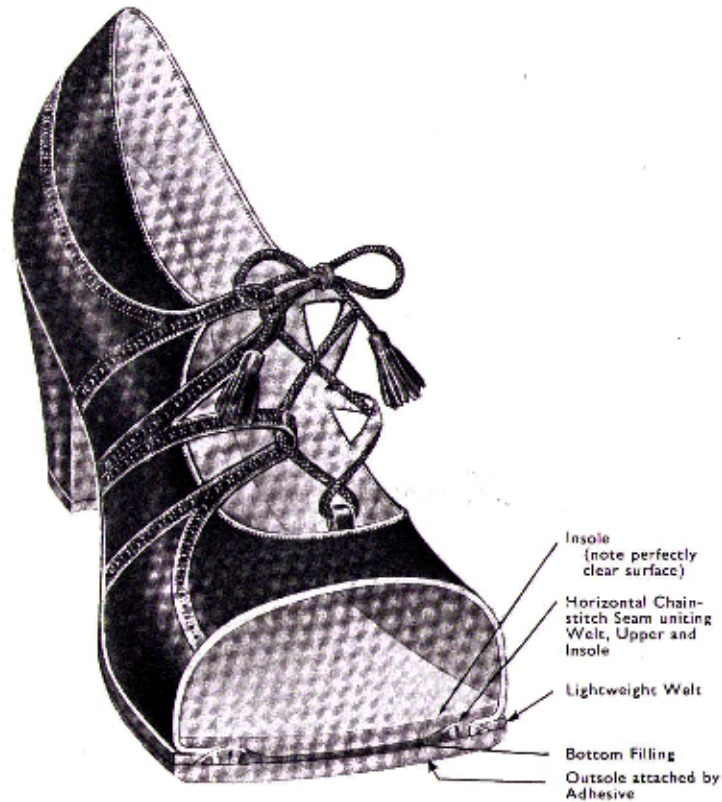
The upper is temporarily secured to this rib at the lasting operation by fine wire staples, driven horizontally.

Welt and upper are then sewn to the rib with a horizontal chainstitch seam.

The outsole is subsequently secured to the welt by a vertical lockstitch seam.

As neither staples nor stitches penetrate the inner surface of the insole a full-length sock is not fitted.

SILHOUWELT

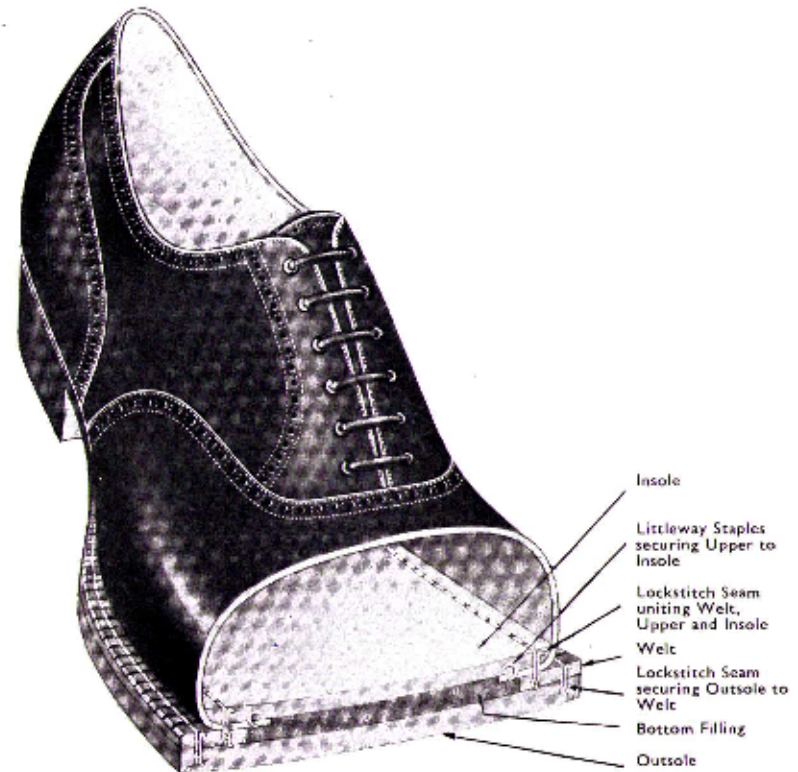


IN this method of construction the foundation is similar to that employed in the Goodyear Welted method, but the outsole is secured to the welt by means of cement instead of by stitching.

Elimination of the row of stitching around the welt, for securing the outsole, enables a welt to be used which is much narrower and lighter in substance than a Goodyear welt so that the finished edge of the shoe is appreciably lighter in appearance than that of a similar shoe completed by the regular Goodyear process.

It is a method of construction confined to the lighter styles of welted footwear.

LOCKSTITCH THROUGH-SEWN WELT

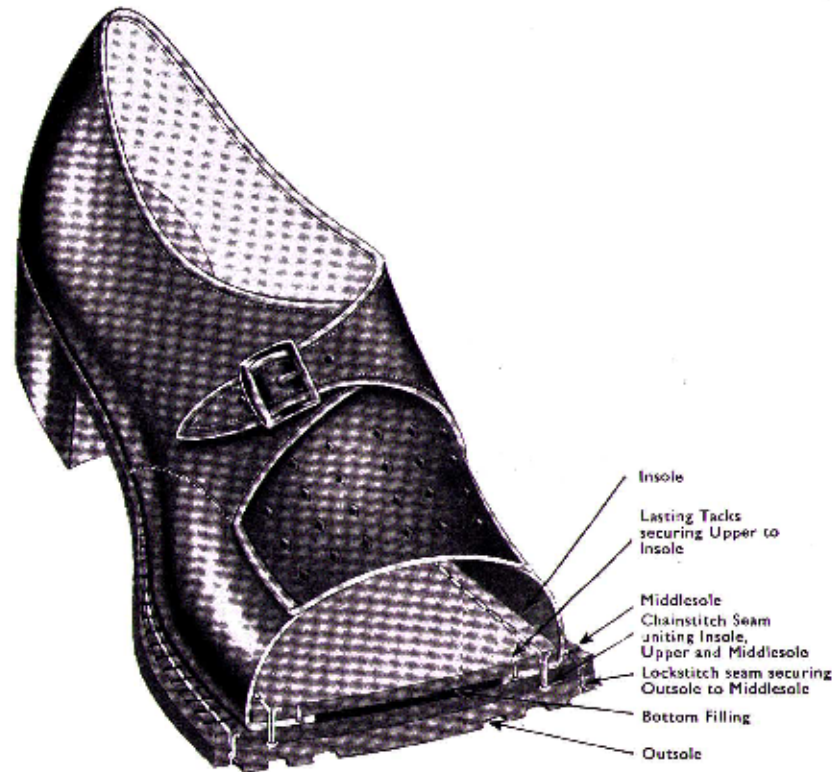


THIS is a simplified and economical form of welted construction in which Littleway lasting staples are used for securing the sides of the upper to the insole, and a vertical lockstitch seam is used for uniting welt, upper and insole. This seam, which penetrates the insole, distinguishes the Lockstitch Through-sewn Welt from other methods of welted construction.

A second vertical lockstitch seam is used to secure the outsole to the welt.

Although the points of the Littleway staples do not penetrate the inner surface of the insole, and the stitches seen inside the shoe are not waxed, it is usual for a full-length sock to be fitted.

FAIRSTITCHED



IN a Fairstitched shoe, the upper is either tack lasted or Littleway lasted to the insole.

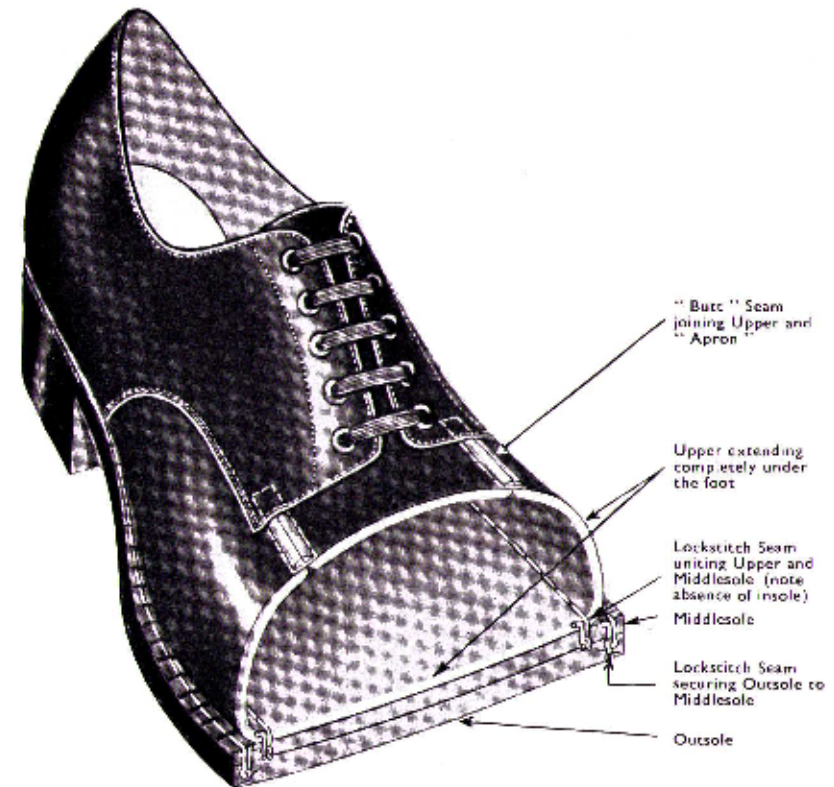
A leather middlesole, or "runner" is secured to the insole by a chainstitch seam which also unites the upper with these two components.

The middlesole or "runner" is cut to provide an extended edge around the forepart to which the outsole is secured by a vertical lockstitch seam known in this type of construction as "fairstitching."

A full-length sock is a necessity due to the penetration of the insole by the chainstitching.

There are many variations of the method, the chainstitch seam, for instance, frequently being sewn through outsole and middlesole.

MOCCASIN



THE distinguishing feature of a moccasin is that the vamp extends completely under the foot of the wearer, the edges being joined on top of the shoe, with a butted seam, to a characteristic "U"-shaped "apron."

As a method of construction it is found, in its simplest form, in slippers without any outsole, while it is also used in sports footwear of the more expensive type where flexibility and waterproofness are essential.

In the example illustrated lockstitch seams have been used for uniting a middlesole to the upper and also for securing the outsole to the margin of the middlesole.

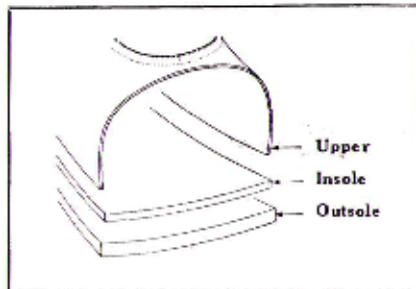
Shoes having an "apron front" are not necessarily made by the moccasin method.

GROUP II

DIRECT SOLE ATTACHMENTS

In the footwear included in Group II the outsole is attached "directly" to the upper and insole.

Attachment may be by thread, adhesive, or by metallic fastenings such as rivets.



Component parts of a shoe having the sole attached by a "direct" method

Shoes included in Group II are—

MACHINE SEWN

(both tack lasted and Littleway lasted)

LITTLEWAY LOCKSTITCH

CEMENTED

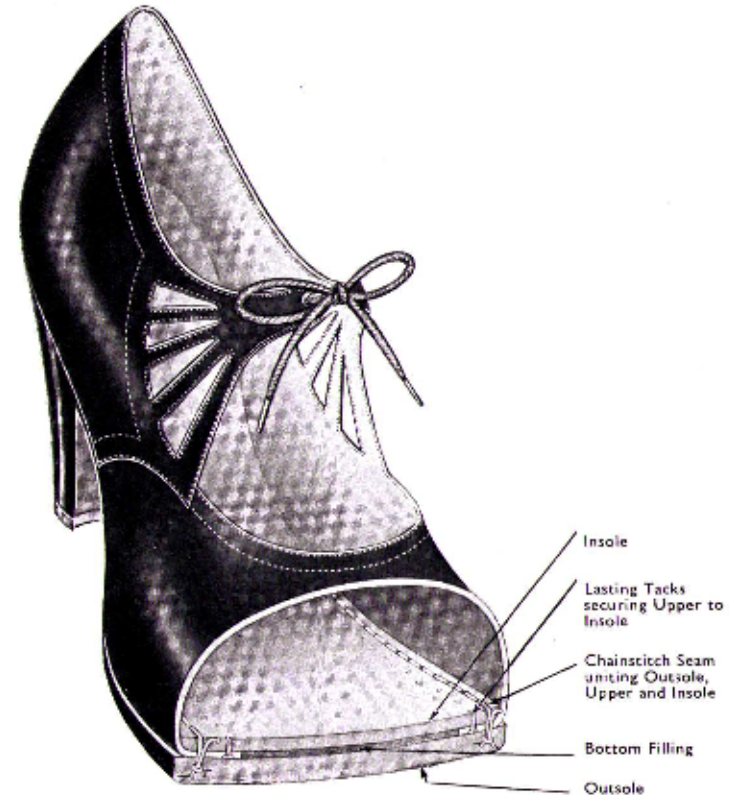
CEMENTED

WITH RAND STITCHED EXTENDED EDGE

RIVETTED

RIVETTED, SCREWED AND STITCHED

MACHINE SEWN (M/S) TACK LASTED



THIS method of construction is used mainly in the making of women's medium-grade footwear.

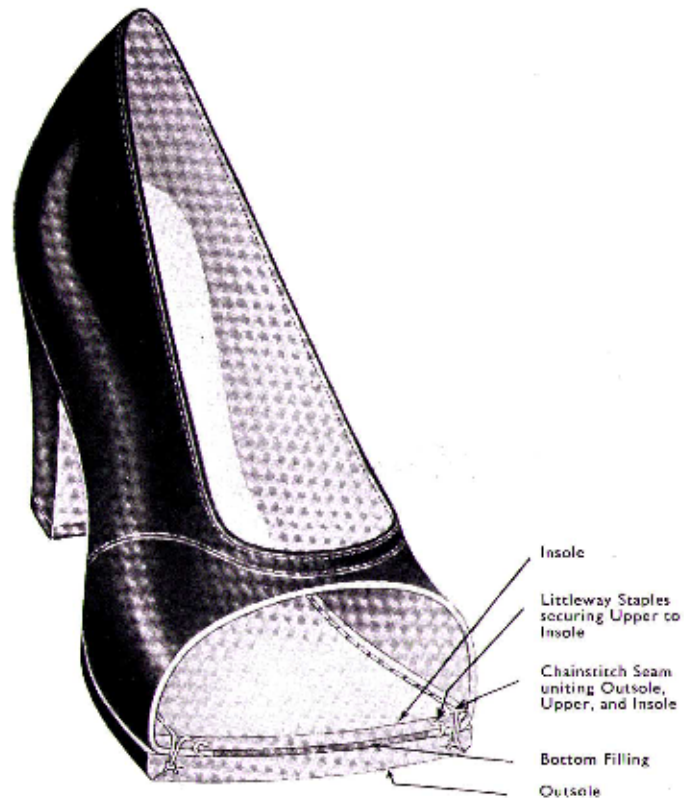
The upper is secured to the insole by the lasting tacks clinched on the inner surface of the insole, after which outsole, upper and insole are united by a chainstitch seam.

The stitches of this seam penetrate the insole and are usually waxed, necessitating the fitting of a full-length sock.

* * *

Shoes made by this method are also known as Blake, or McKay sewn, these titles perpetuating the names of the inventor and developer, respectively, of the first commercially successful chainstitch sole-sewing machine (circa 1860).

MACHINE SEWN LITTLEWAY LASTED

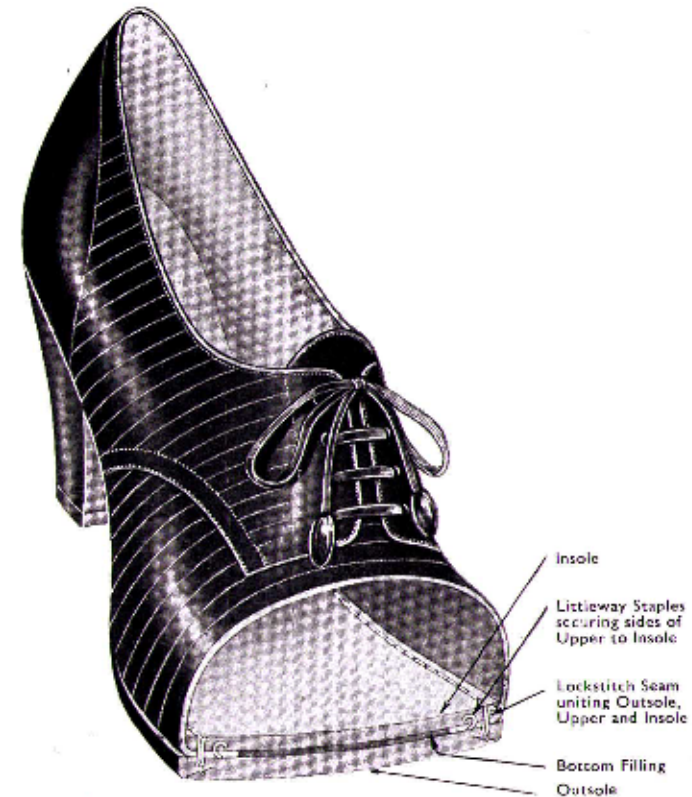


A CONSTRUCTIONAL method similar to the one described on the preceding page, but Littleway lasting staples are used instead of tacks to secure the upper to the insole around forepart and waist.

The curved formation of these staples anchors them firmly into the thickness of the insole without penetration of its inner surface and there is no possibility of their points coming into contact with the foot of the wearer.

Outsole, upper and insole are united by a vertical chainstitch seam and as the stitches penetrating the insole are usually waxed, a full-length sock is a necessity.

LITTLEWAY LOCKSTITCH

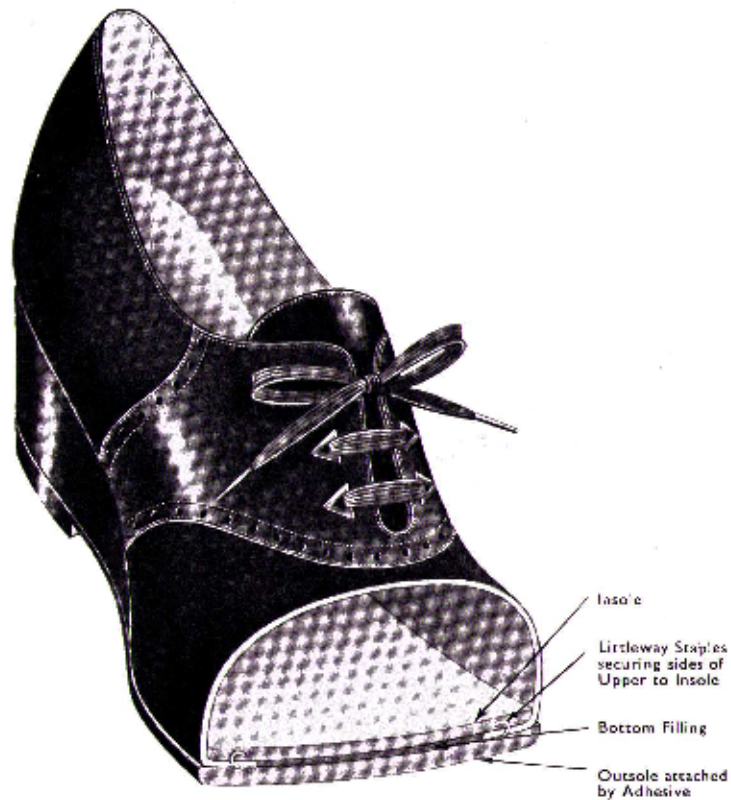


THIS method of shoe construction, employs the Littleway staple method of securing the sides of the upper to the insole, and a lockstitch seam for uniting outsole to upper and insole.

This type of seam is much more flexible than the chainstitch seam used in a Machine Sewn shoe, and although the thread which is visible on the surface of the insole is not waxed, a sock is usually fitted.

The Littleway Lockstitch method was introduced primarily for the making of high-grade shoes for women but it is now widely used also in the manufacture of children's footwear and lightweight shoes for men.

CEMENTED

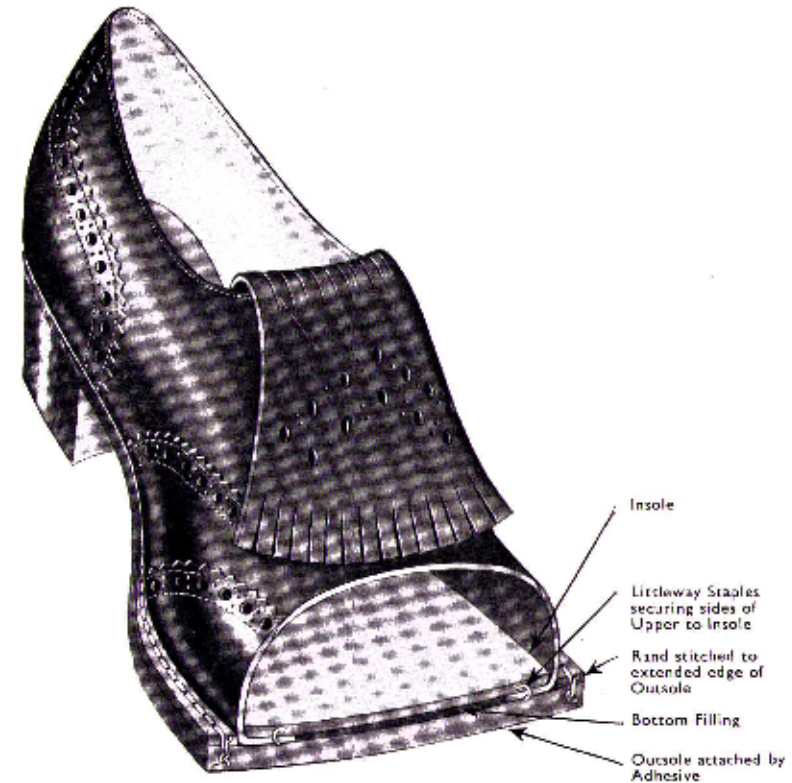


IN shoes made by the Cemented process, attachment of the sole depends entirely on adhesion, the adhesive usually being of the "cellulose-cement" type. With suitable leathers and thorough roughing of the margins of both sole and upper, the strength of the bond is limited only by the strength of the fibres of the leather.

Any modern method can be used for lasting Cemented shoes, and on the lighter types, cement lasting of the forepart is being used to an increasing extent with Littleway lasted waists, and tack lasted heel seats.

Children's shoes, lightweight footwear for men, and a large proportion of all the women's shoes produced are made by this process.

CEMENTED WITH RAND STITCHED, EXTENDED EDGE



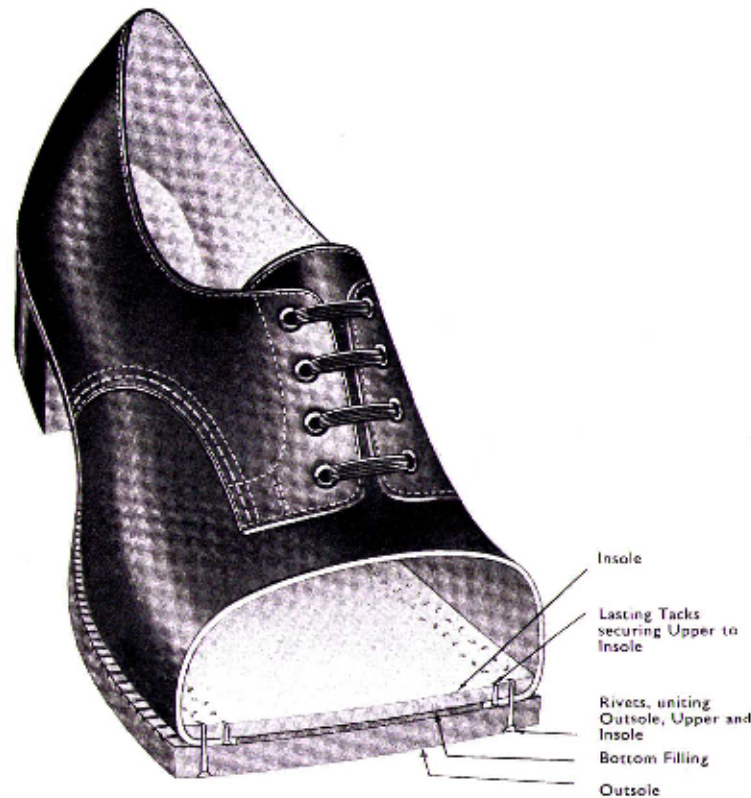
THIS is a variation of the Cemented method, but it gives a normal Cemented shoe a heavier appearance.

The sole, instead of being trimmed close to the leather, as is usual, has an extended edge around forepart and waist to which a rand, in either leather or coloured plastic, is stitched.

This stitching, usually having a bold white or coloured top thread, gives the shoe the appearance of being welted, for which it may easily be mistaken, particularly as no stitches are seen inside on the insole.

In some shoes the decorative stitching is done directly on the extended edge of the sole without the addition of the rand.

RIVETTED

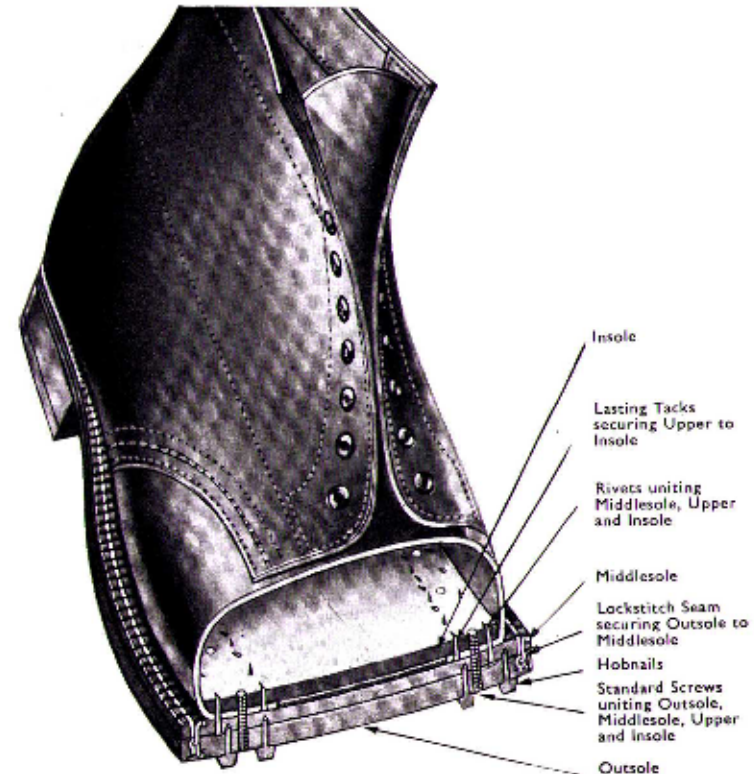


A SIMPLE form of construction having the upper tacked to the insole, and using rivets for uniting outsole, upper and insole.

The rivets may be iron or brass and the points of these, together with those of the lasting tacks, are all clinched on the inner surface of the insole necessitating the use of a full-length sock.

To-day, its use is largely confined to the making of football boots and the cheaper grades of boys' footwear, but a certain amount of historic interest will always be associated with it, being the one used in the production of the first machine-made footwear (circa 1810).

RIVETTED, SCREWED and STITCHED



THIS form of construction, widely used in making army boots and other heavy footwear, incorporates three distinct methods of attachment.

RIVETTING is used, after the uppers have been tack-lasted, to unite middlesole, upper and insole as described under "Rivettted."

STITCHING is used to secure the outsole to the extended edge of the middlesole.

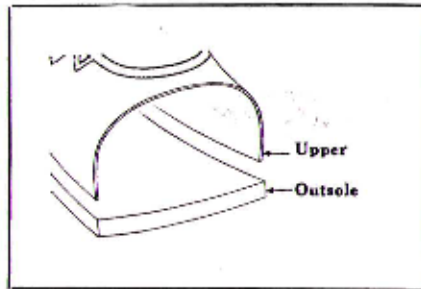
SCREWING is used, finally, to unite the whole of the bottoming material—outsole, middlesole and insole.

It is a form of construction admitting several variations, many boots being made "Screwed and Stitched" or alternatively either the screwing or stitching may be omitted.

Boots of this type almost always have their outsoles heavily reinforced by either cutlan nails or hob nails and frequently are fitted also with toe and heel plates.

GROUP III SINGLE SOLE CONSTRUCTION

In the footwear included in Group III the distinguishing feature is not the method of attachment of the outsole, as in Groups I and II, but the fact that the shoe is fundamentally of the single sole type not requiring an insole as an essential component.



Component parts of a shoe of single sole construction

Shoes included in Group III are—

TURNSHOE

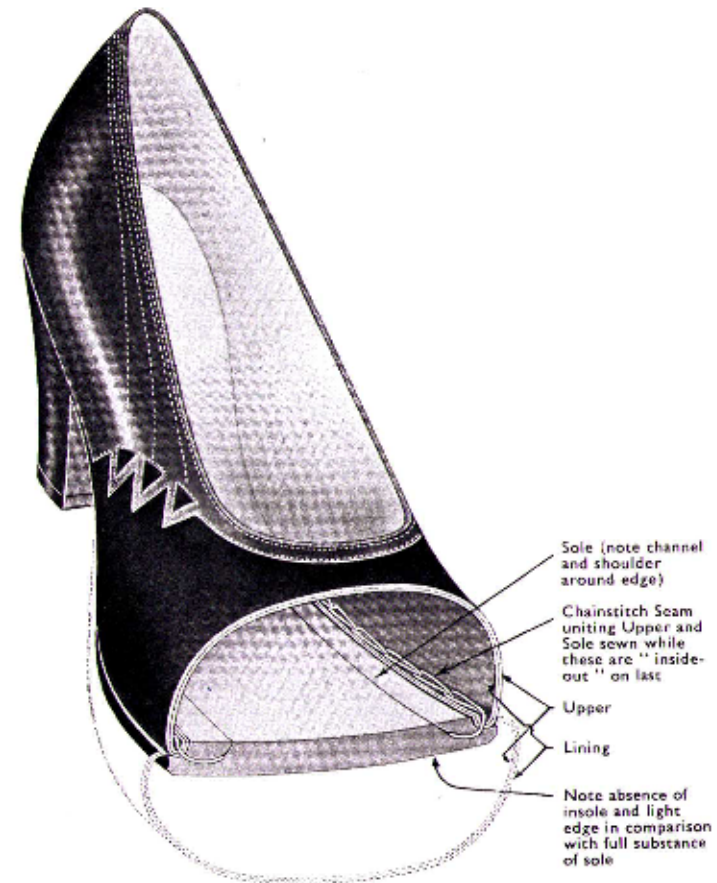
VELDTSCHOEN

SLIP-LASTED

DEL-MAC

DEL-WELT

TURNSHOE (SLIPPER TURNSHOE)



THE unique feature of this method of construction is that upper and sole are "inside-out" on the last while the upper is being lasted. The tacks used for lasting are not driven completely "home" and are pulled out after upper and sole have been united by the chainstitch seam.

The shoe is then slipped off the last, turned "right-side-out" and a last re-inserted to re-shape the shoe.

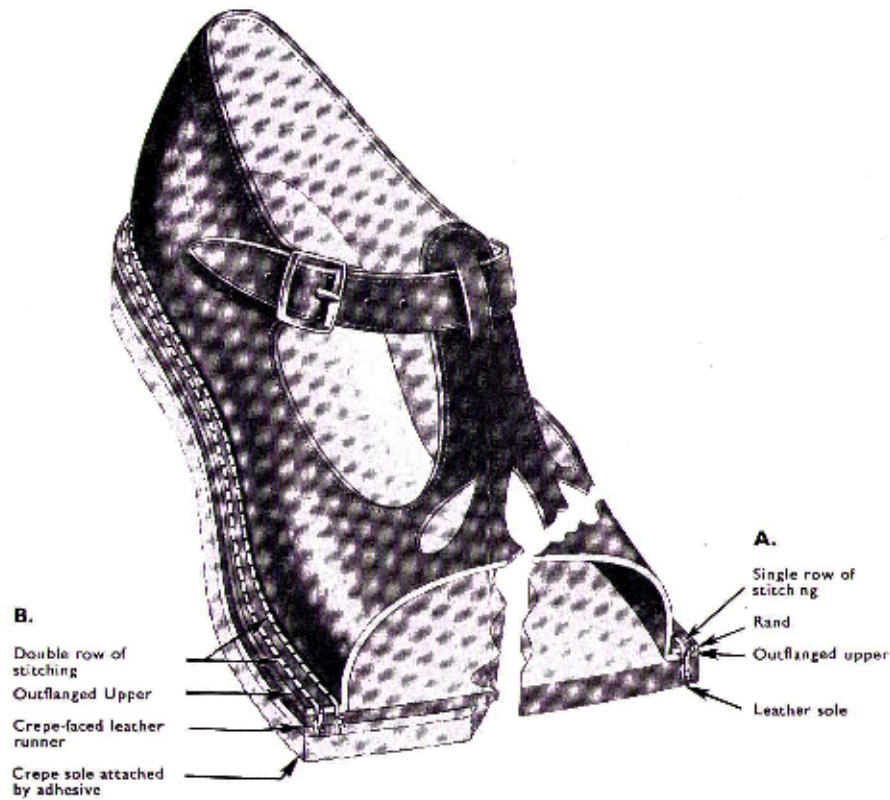
Turnshoes are exceptionally flexible and the sole shows a very light edge. A full-length sock is a necessity.

* * *

Slipper Turnshoes are made by a variation of this method, being sewn "inside-out", but a last is not used until after "turning".

VELDTSCHOEN

SLIP-LASTED

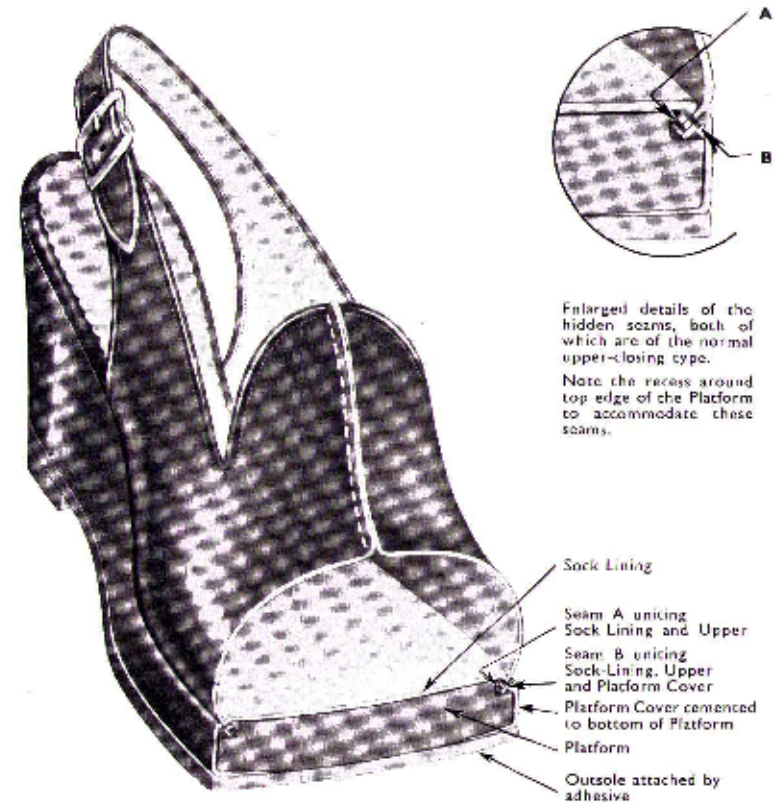


THE characteristic feature of a Veldtschoen is that the upper is turned outwards instead of being "lasted-in" under the shoe as is usual.

Large quantities of children's crepe-soled sandals are made by this method, some having sole and upper united by a single row of stitching in conjunction with a rand, A, while others have a double row of stitching without the rand, B.

There are, however, many modifications of the method, particularly in the making of slippers and "Ward" shoes.

It is also used in Shooting boots having double uppers, the inner layer being completed as a Goodyear Welted and the outer layer, for increased waterproofness, by the Veldtschoen method.



CONFINED almost exclusively to sling-back, open toe, platform footwear, this is one of the newest methods of construction.

A sock-lining, which takes the place of a normal insole, is sewn to the upper with an ordinary upper-closing seam and the platform cover sewn in with a second seam running parallel with the first.

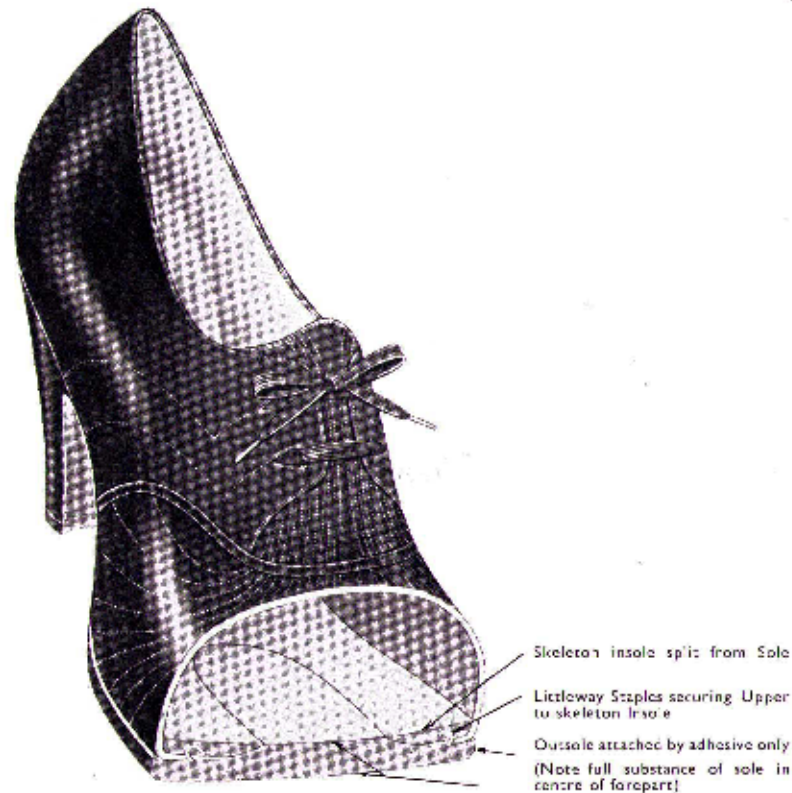
With this extra "closing" completed, the last is forced into place to give the upper its shape.

Platform and wedge are next fitted and the platform cover lasted and cemented in position, followed finally by the sole which is secured by the Cemented process.

* * *

This method of construction is also known in the shoe industry as "Californian" and "Force-lasted."

DEL-MAC CEMENTED



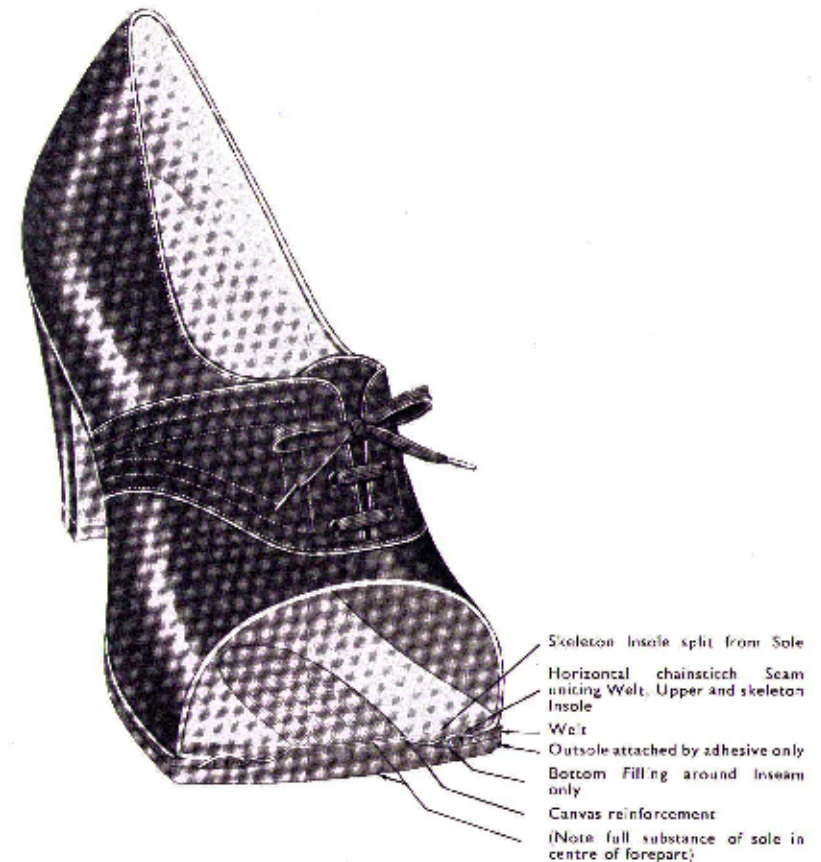
DEL-MAC construction is distinguished by its "skeleton" insole, split from the actual sole to be used on the shoe, in such a way that the full substance of the leather is left in the centre of the forepart of the sole.

This unique insole provides the foundation to which the upper is lasted and to which the sole is subsequently attached by any one of the modern "direct" methods—usually lockstitching or cementing.

When insole and sole are re-united in the finished shoe they blend together again perfectly giving the shoe all the flexibility associated with single sole footwear.

Whichever method of construction is used a full-length sock is fitted.

DEL-WELT CEMENTED



IN the Del-Welt shoe, the same unique feature which distinguishes Del-Mac construction (single substance of material only, in the centre of the forepart of the sole) is seen here also, but attachment of the sole is by one of the "indirect methods."

The necessary foundation for the lasting and the welt sewing is provided by a skeleton insole split from the actual sole to be used on the shoe, as previously described, but suitably channelled for welt sewing and reinforced with a layer of canvas as seen in the illustration.

After the welt is sewn in, the sole is secured to the welt, either by stitching, as in a Goodyear Welted, or by cement, as in a Silhouwelt, and a full-length sock is usually fitted.