E. O. TEAGUE.

SHOE.

APPLICATION FILED MAR. 25, 1914.

1,138,425. Patented May 4, 1915.

Fig. 10.

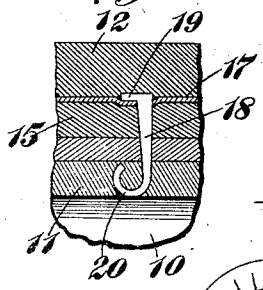


Fig. 1.

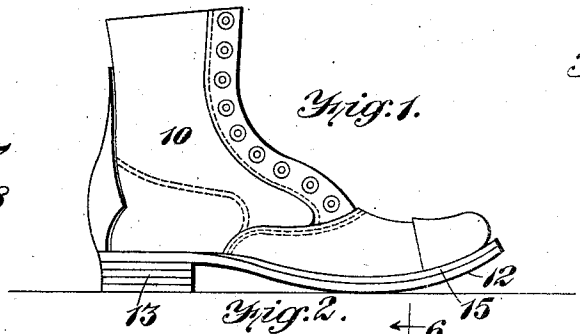


Fig. 5.

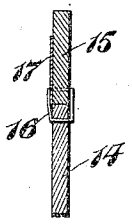


Fig. 2.

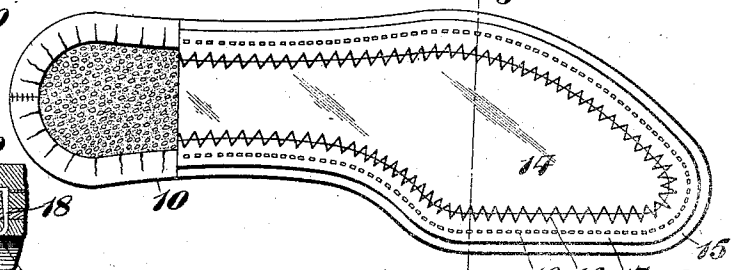


Fig. 9.

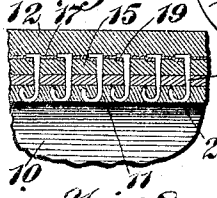


Fig. 3.

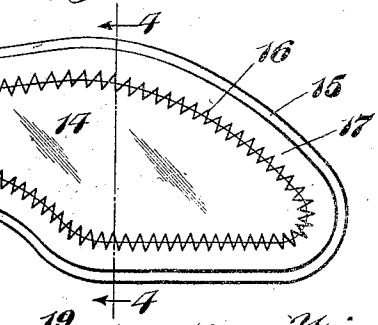


Fig. 4.

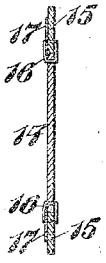


Fig. 8.

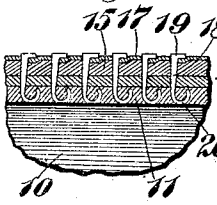


Fig. 7.

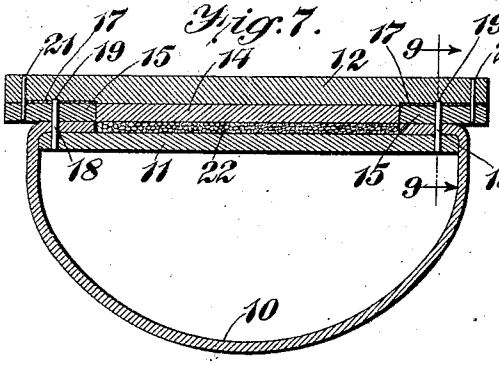
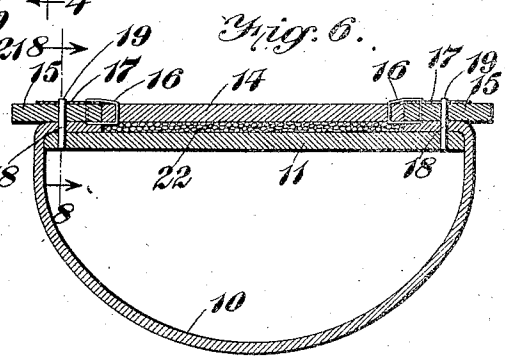


Fig. 6.



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by John A. Brumm Jr.
His Attorney.

UNITED STATES PATENT OFFICE.

EDWARD O. TEAGUE, OF WINCHESTER, MASSACHUSETTS, ASSIGNOR OF ONE-HALF TO GEORGE A. DOBYNE, OF ST. LOUIS, MISSOURI.

SHOE.

1,138,425. Specification of Letters Patent. Patented May 4, 1915.

Application filed March 25, 1914. Serial No. 827,128.

To all whom it may concern:

Be it known that I, EDWARD O. TEAGUE, a citizen of the United States, and residing at Winchester, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Shoes, of which the following is a specification.

This invention relates to shoes, and more particularly to shoes of the McKay type.

The McKay shoe has the outsole attached to the lasted upper and insole, while the latter is supported on a horn, so that the seam of fasteners (whether McKay stitched or nailed) passes through the outsole, upper and insole. Sometimes, a slipsole or middle sole, is placed between the lasted upper and outsole, and the fasteners, in that case, pass through the outsole, slipsole, upper and insole, while, a line of stitching is run around the edge of the shoe through the outsole and slipsole. This gives a shoe the appearance of a Goodyear welt shoe. Many attempts have been made to attach the welt to the lasted upper of a McKay shoe by a seam passing through the welt, upper and insole, but without success, for the reason that it is exceedingly difficult, and, as a matter of fact, practically impossible to properly position the welt on such an upper with the required accuracy.

The materials used for welting, and for slipsoles or middle soles, is comparatively thin, that is, 3/32 to 1/8 of an inch thick. Such welting or middle sole is laid with the flesh side out, so that the grain side will be uppermost and visible when the shoe is on the foot of the wearer. If it is, therefore, attempted to attach such welting by a seam of metallic fasteners, and, if the heads of the fasteners are countersunk in the flesh side, the strength of the seam will be insufficient, as the heads of the metallic fasteners will pull through the welting, or middle sole. This is especially true if the poorer grades of leather are used for welting or middle soles.

One of the objects of this invention, therefore, is to construct a shoe of the McKay lasted type in which the welt will be positioned accurately on the lasted upper, and attached thereto in such a manner as to result in a shoe having a neat appearance as well as tight seams.

Another object is to provide a metallic fastener seam for attaching the sole, and means for reinforcing the seam, whereby pulling through of the fastener heads is prevented.

Further objects will appear from the detail description taken in connection with the accompanying drawing, in which:

Figure 1 is a side elevation of a shoe, Fig. 2 is an enlarged bottom view of the shoe before the outsole is laid, Fig. 3 is a bottom view of the middle sole, Fig. 4 is a section on the line 4—4, Fig. 3, Fig. 5 is an enlarged detail of Fig. 4, Fig. 6 is a section on the line 6—6, Fig. 2, Fig. 7 is a similar section showing the outsole attached, Fig. 8 is a section on the line 8—8, Fig. 6, Fig. 9 is a section on the line 9—9, Fig. 7, and, Fig. 10 is an enlarged detail of Fig. 9.

Referring to the accompanying drawing, 10 designates the upper, 11 the insole, 12 the outsole, and 13 the heel of a shoe. The upper is lasted over the insole in accordance with the usual McKay method. A center piece 14, died out to the contour of the outsole, but smaller, has attached to its edge a welt 15, the center piece being of substantially the same thickness as the welt. This welt is preferably attached to the center piece by a line of chain stitching 16, so that the welt conforms to the contour of the center piece, and, therefore, the outsole, and lies in the plane of the templet, that is, with both of its surfaces flush with the surfaces of the templet, whereby the center piece and welt will form, in effect, a single composite but flexible sole structure. The outer face or flesh side of the welt has laid thereon, and preferably cemented thereto, a strip of canvas or other textile material 17, this strip being preferably laid in position before the welt is stitched to the center piece.

The middle sole, so formed, is now laid on the lasted upper and insole of the shoe, with the reinforced side out, and temporarily secured in position in the usual way, by a few temporary nails. It will, therefore, be seen that the center piece 14 performs the function of a templet, or positioning means, for positioning and locating the welt on the shoe. The composite middle sole is now secured to the lasted upper and insole by a seam of fasteners passing through the welt, upper and insole. This may be done in any suitable manner, as with a McKay stitcher, or with a McKay nailer. In the specific

embodiment shown, the seam is formed with the metallic fasteners shown in United States Patent #1,072,213, Sept. 2, 1913. Such a fastener is shown enlarged in Fig. 10, and comprises a shank 18, a laterally extending head 19, and a point 20. The fastener is driven into the shoe from without, so that the laterally extending head 19 will lie along the welt, and so that the clenched point 20 will be turned back into the insole, with the head and clenched point extending in the same direction along the seam, as shown in Fig. 8. This general form of metallic fastener seam is also shown in United States Patent No. 1,072,211, Sept. 2, 1913. It will, however, be noted that the strip 17 is interposed between the head of the fastener and the welt. After the middle sole has been secured in position, the outsole 12 is laid and secured by a line of stitches 21 passing through the outsole and the welt.

The space between the insole and the center piece 14 may be filled with a suitable filling 22, although this space will ordinarily be very small, in view of the fact that the center piece is in the plane of the welt. Although the middle sole is only shown as extending to or slightly beyond the heel of the shoe, as is usual in McKay and welt practice, the middle sole may, however, extend the full length of the shoe. The center piece may be made of any cheap material, such as tar paper.

The built-up middle sole or slipsole thus comprises a center piece forming a templet for accurately positioning and locating the welt on the shoe and with respect to the shoe. The welt is attached to the edge of the center piece and is arranged in the plane thereof. This center piece holds the welt flat and to a contour following the outline of the insole, while the welt is attached, whereby the attached welt, as positioned on the shoe, will have a uniform and neat appearance. The shoe, as completed, therefore, will have the appearance of a welt shoe, in which the welt is attached uniformly and accurately to the upper and to the outsole. By arranging the welt in the plane of the templet, and by attaching the welt to its templet by the cross-stitching, the connection between the two is loose and flexible, thereby permitting independent movement of the parts, resulting not only in a flexible sole, but in one which will not squeak. By placing the fabric strip 17 along the outer face or flesh of the welt, this strip will form a washer between the head of the nail and the welt, whereby greater resistance is offered to the head pulling through the welt. This strip, therefore, increases the holding qualities of the welt, and increases the strength of the flesh side, so as to be equal to or greater than that of the grain side. This holding quality is further increased by cementing the strip to the welt. In referring to Fig. 10, it will be noted that the head 19 of the fastener is not completely countersunk, as this would decrease the holding power of the welt, but the fastener is simply driven in an amount sufficient to obtain the proper tight seam between the parts. There is no objection to the head projecting a slight distance, as this head will sink into the outsole when the outsole is attached, as shown in Fig. 10. It will be seen, however, that the head carries the fabric with it slightly into the welt, but this fabric forms a protecting washer of greater strength than the welt in itself. This method of reinforcing the seam, together with the structure of the fastener having a laterally extending head and a clenching point, results in a seam having great strength and durability. It is obvious that this method of reinforcing may be used in other constructions than in the specific welt seam described, but may be used in other places in shoes; thus, it may be used in forming the seam for attaching the usual slipsole or middle sole, to the shoe.

It is obvious that various changes may be made in the details of construction without departing from the spirit of this invention, and it is, therefore, to be understood that this invention is not to be limited to the specific construction described and shown.

Having thus described the invention, what is claimed is:

1. A shoe having an upper, a middle sole comprising a center piece or templet and a welt flexibly attached to the edge of the center piece or templet, a metallic fastener seam attaching the welt to the upper, and an outsole attached to the welt.

2. A shoe having an upper, an insole, a middle sole comprising a center piece or templet and a welt flexibly attached to the edge of the center piece or templet, a seam attaching the welt to the upper comprising metallic fasteners clenched on the insole in a direction along the seam, and an outsole attached to the welt.

3. A shoe having an upper, an insole, a middle sole comprising a center piece or templet and a welt flexibly attached to the edge of the center piece or templet, a seam attaching the welt to the upper comprising metallic fasteners having laterally extending heads and clenched on the insole, the heads and points extending in a direction along the seam, and an outsole attached to the welt.

4. A shoe having an upper, a middle sole having a strip on the outer face thereof, a metallic fastener seam attaching said middle sole to the upper and passing through said strip, and an outsole attached to said middle sole.

5. A shoe having an upper, a sole, a metallic fastener seam attaching said sole to

the shoe, and means on one face of said sole adapted to reinforce the seam.

6. A shoe having an upper, a sole, a metallic fastener seam attaching said sole to the shoe, and means between the fastener heads and said sole adapted to reinforce the seam.

7. A shoe having an upper, a sole, a metallic fastener seam attaching said sole to the shoe, and a strip on one face of said sole adapted to reinforce the seam.

8. A shoe having an upper, a sole, a metallic fastener seam attaching said sole to the shoe, and a textile strip on one face of said sole adapted to reinforce the seam.

9. A shoe having an upper, a sole, a metallic fastener seam attaching said sole to the shoe, and a textile strip cemented on one face of said sole adapted to reinforce the seam.

10. A shoe having an upper, a middle sole comprising a center piece or templet and a welt attached to the edge of the center piece or templet, a metallic fastener seam attaching the welt to the upper, means between the fastener heads and said welt adapted to reinforce the seam, and an outsole attached to said welt.

11. A shoe having an upper, a welt on the upper, a metallic fastener seam attaching said welt to said upper, means between the fastener heads and said welt adapted to reinforce said seam, and an outsole attached to said welt.

12. A shoe having an upper, a welt on the upper, a metallic fastener seam attaching the welt to the upper, means on the outer face of said welt adapted to reinforce said seam, and an outsole attached to said welt.

13. A shoe having an upper and an insole, a welt, a metallic fastener seam passing through said welt, upper and insole, means on the outer face of said welt adapted to reinforce said seam, and an outsole attached to said welt.

14. A shoe having an upper and an insole, a welt, a metallic fastener seam passing through said welt and said insole, means on the outer face of said welt and under the fastener heads adapted to reinforce said seam, and an outsole attached to said welt.

15. A shoe having an upper and an insole, a welt, a metallic fastener seam passing through said welt, upper and insole, a textile strip on the outer face of said welt and under the fastener heads adapted to reinforce said seam, and an outsole attached to said welt.

In testimony whereof I affix my signature in the presence of these two witnesses.

EDWARD O. TEAGUE.

Witnesses:
MARY A. KELLEY,
JAMES F. KENNEDY.