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F. H. WOLFHARD ET AL

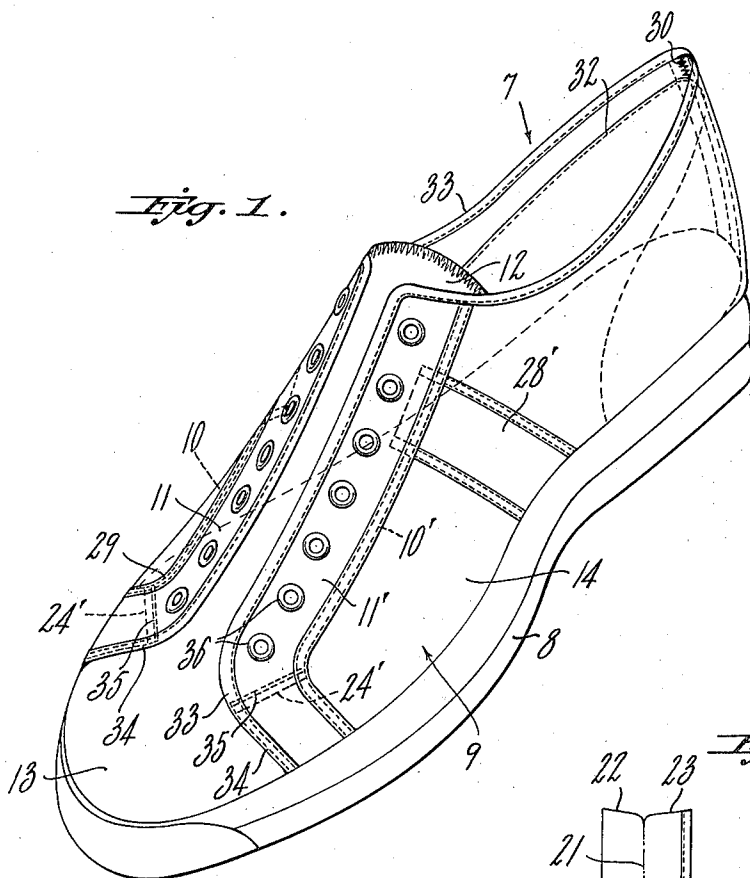
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SHOE

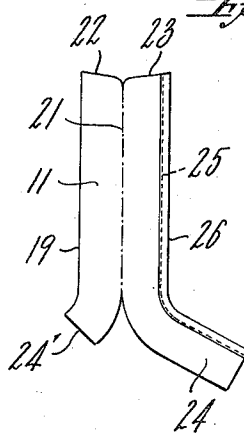
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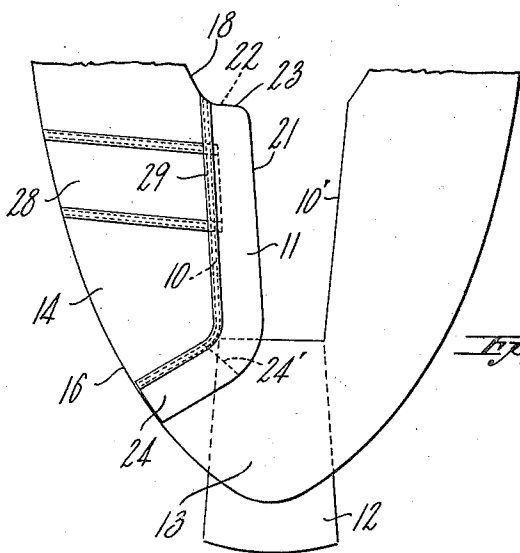
*Fig. 1.*



*Fig. 3.*



*Fig. 5.*



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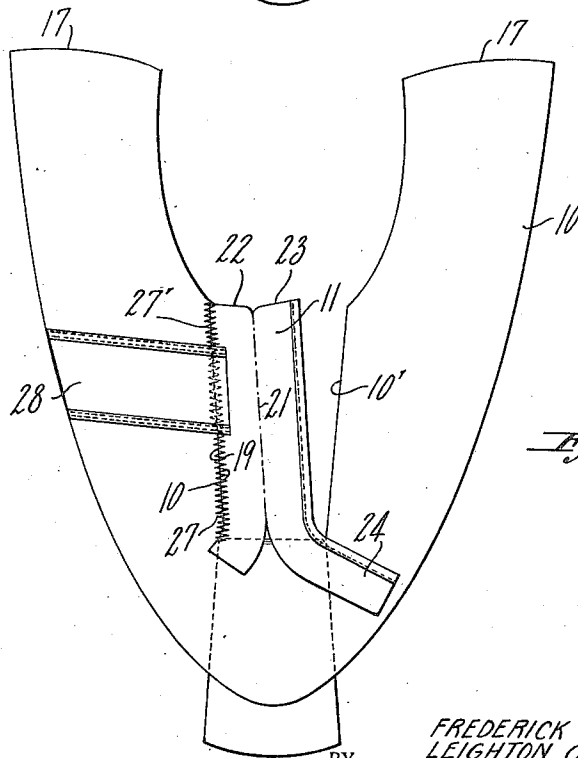
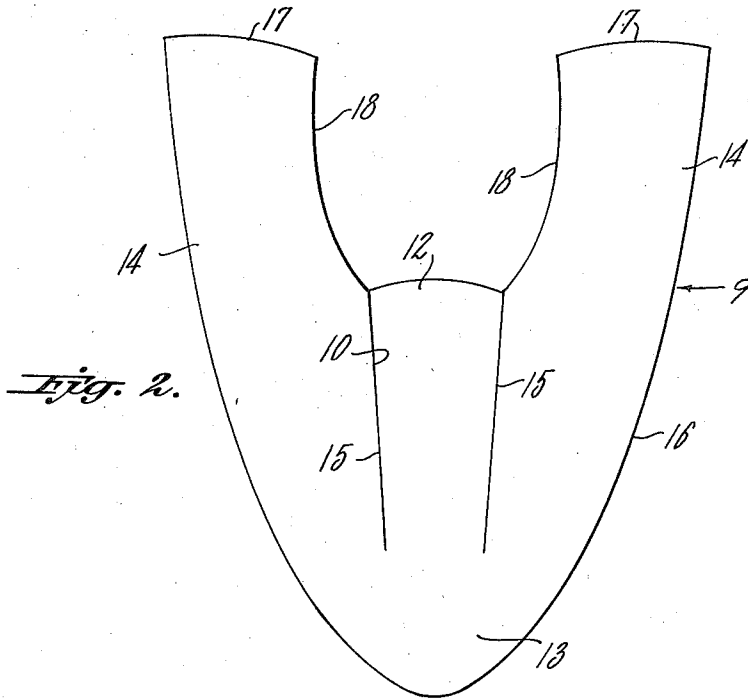
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## UNITED STATES PATENT OFFICE

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SHOE

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5 Claims. (Cl. 36-45)

This invention relates to an improved shoe and particularly to the upper having an integrally cut vamp, tongue, and quarter which is united along the instep edge to eyelet stays so as to provide a smooth interior surface and an overlap between the quarter and the tongue.

It has been the practice heretofore, particularly in the type of shoe construction commonly known as the lace-to-toe shoe, to make the tongue and vamp in one piece and unite the vamp to the forepart of the quarter with a lap seam. This construction produces a ridge at the toe of the shoe and is apt to chafe the toe of the wearer. In accordance with the present invention the vamp, tongue and quarter are cut from a single piece of material to form an integral vamp, tongue and quarter piece, which is united along the instep ledges of the quarter to the eyelet stays so that the eyelet stays extend beyond such edges and form an overlap for the tongue, and provide a smooth interior surface adjacent to the foot of the wearer.

Referring to the drawings:

Fig. 1 is a front isometric view of a shoe embodying this invention;

Fig. 2 is a plan view of the integrally cut vamp, tongue and quarter piece embodied in the shoe upper shown in Fig. 1;

Fig. 3 is a plan inside view of the right eyelet stay, as shown at the left in Fig. 1;

Fig. 4 is a plan outside view of the quarter showing one edge of the eyelet stay united to the instep edge of the one piece vamp, tongue and quarter; and

Fig. 5 is a plan view of a portion of the one piece vamp, tongue and quarter showing both edges of the eyelet stay united thereto after it has been folded along the dot and dash lines shown in Fig. 4.

This invention is illustrated herein in reference to the shoe construction commonly known as the lace-to-toe shoe which is provided with a low canvas upper 7 secured to the sole 8 in the usual manner as shown in Fig. 1. The shoe upper 7 comprises an integrally cut, or one piece vamp, tongue and quarter 9 which is united along its instep edges 10 and 10' to eyelet stays 11 and 11' which overlap the tongue 12. Referring to Fig. 2 the vamp is indicated generally by the numeral 13, the tongue by the numeral 12 and the quarter by the numeral 14. The one piece vamp, tongue and quarter 9 is cut along the lines 15 to form the tongue 12, and around the periphery of the piece to form the sole at-

taching edges 16, back seam edges 17, and ankle opening edges 18.

The eyelet stays 11 and 11' are formed in pairs as rights and lefts. From a description of the right eyelet stay 11 and the method of uniting same to the quarter 14, the construction and method of uniting the left eyelet stay 11' will be understood and the latter will not be described in detail herein. The right eyelet stay 11, in the shape in which it is cut out, is illustrated in Fig. 3, and is adapted to form the stay shown at the left as viewed in Fig. 1. The eyelet stay 11 is cut so as to form an edge 19 adapted to match with the instep edge 10 of the quarter as shown in Fig. 4. The stay is adapted to be folded along the dot and dash line 21 and when so folded, the upper edges 22 and 23 of the stay are adapted to match with one another so as to conform to the curvature of the ankle opening edge 18 in the quarter 14 (Fig. 5), and the long fork 24 of the stay is adapted to fold over the short fork 24' and extend over the outside surface of the upper along the area between the vamp 13 and quarter 14. After the stay 11 is cut out and before it is folded, the edge 25 opposite the edge 19 is bound with a piece of binding 26, which is preferably stitched thereon.

As shown in Fig. 4, the edges 19 and 10 of the stay and quarter, respectively, are matched and secured together by over-seam or cross stitches 27 to form a smooth butt seam joint 27'. The corresponding edge of the opposite eyelet stay 11' is united to the opposite instep edge 10' of the quarter, and the side reinforcing strips 28 and 28' are then applied, preferably by stitching the strips to the outside surface of the quarter 14.

In the next step of constructing the shoe upper, the eyelet stay 11 is folded along the dot and dash line 21 so that the binding 26 will overlap the instep edge 10 on the outside surface of the shoe upper as shown in Fig. 5. The distance between the dot and dash line 21 and the edge 19 of the eyelet stay 11 is less than the distance between the dot and dash line 21 and the edge 25. The difference between such distances being such that the edge 25 extends over the butt seam 27'. The edge 25, or binding 26 of the stay 11, is then sewn to the quarter 14 along the stitched line 29 from the ankle opening 18 to a point adjacent to the sole attaching edge 16. The stay 11' (Fig. 1) is then folded and sewed to the quarter 14 in the same manner.

The back seam edges 17 of the quarter are then

united in the usual manner to form the back seam 30. The usual back counter stiffener 32 may then be incorporated. An edge binding 33 is then applied around the ankle opening 18 of the quarter 14 and then along the folded edges 21, and the extended forks 24 of the eyelet stays 11 and 11' to the end thereof. The outer edges of the lower ends of the stays 11 and 11' are then stitched along the binding 33 to the vamp 13, as indicated by the stitches 34. The union between the stays and the quarter is reinforced by lines of stitches 35 extending across the stays below the eyelets 36. The eyelets 36 are then inserted in the stays 11 and 11' in the usual manner and this operation concludes the construction of the shoe upper 7, which is then attached to the shoe sole 8 in the usual manner.

While only one form of invention has been described herein, it will be understood that changes in the details described may be made without departing from the spirit of the invention and the scope of the appended claims.

Having thus described our invention, what we claim and desire to protect by Letters Patent is:

1. In a shoe, an upper comprising an integrally cut vamp, tongue and quarter, said quarter being cut so as to form two edges adapted to extend upwardly on each side of the instep of the foot and having separately cut eyelet stays having inside and outside plies, said inside plies being united to the instep edges of said quarter by butt seams and extending to the points where said instep edges meet the union between the tongue and vamp, said outside plies of said stays overlapping the butt seams and extending from said points to the sole engaging edges of said quarter and being stitched to the outside surface of the adjoining margins of said quarter and vamp, and said stays extending beyond the instep edges so as to provide a lap for said tongue.

2. In a shoe, an upper comprising an integrally cut vamp, tongue and quarter, said quarter being cut so as to form two edges adapted to extend upwardly on each side of the instep of the foot and having separately cut eyelet stays united to and extending beyond the instep edges of the quarter so as to provide an overlap for the tongue, said stays being formed of at least an inner and an outer layer of material, said inner layer having an edge matching with the instep edge of said quarter and united thereto by a butt seam, said outer layer having an edge extending over said butt seam on the outer surface of said quarter and united thereto.

3. In a shoe, an upper comprising an integrally

cut vamp, tongue and quarter, said quarter being cut so as to form two edges adapted to extend upwardly on each side of the instep of the foot and having separately cut eyelet stays united to and extending inwardly beyond the instep edges of the quarter so as to provide an overlap for the tongue, each of said stays being formed in one piece from an integral piece of material folded about a longitudinal line to form an inner and an outer layer and so that the longitudinal edge of the inner layer lies on the side of the longitudinal edge of the outer layer adjacent to the longitudinal fold, said edge of the inner layer being cut to match with the instep edge of said quarter and united thereto by a butt seam, and said longitudinal edge of the outer layer being extended over said butt seam on the outer surface of said quarter and stitched thereto.

4. In a shoe, an upper comprising an integrally cut vamp, tongue and quarter, said quarter being cut so as to form two edges adapted to extend upwardly on each side of the instep of the foot and having separately cut eyelet stays united to and extending beyond the instep edges of the quarter so as to provide an overlap for the tongue, said stays being formed of at least an inner and an outer layer of material, said inner layer having an edge matching with the instep edge of said quarter and united thereto by a butt seam, said outer layer having a bound edge extending over said butt seam on the outer surface of said quarter and united thereto, and a binding extending around the edge of the ankle opening in said quarter and the unattached edges of said stays.

5. In a shoe, an upper comprising an integrally cut vamp, tongue and quarter, said quarter being cut so as to form two edges adapted to extend upwardly on each side of the instep of the foot and having separately cut eyelet stays united to and extending beyond the instep edges of the quarter so as to provide an overlap for the tongue, said stays being formed of at least an inner and an outer layer of material, said inner layer extending from the upper end of said stay and terminating adjacent to the union between the vamp, tongue and quarter and having an edge matching with the instep edge of said quarter and united thereto by a butt seam, said outer layer extending from the upper end of said stay to the sole engaging edge of said quarter and having an edge extending over said butt seam on the outer surface of said quarter and united thereto.

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