June 6, 1950 L. E. KUTCHER 2,510,236

FOOTWEAR HAVING REPLACEABLE UPPERS

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Fig. 1.

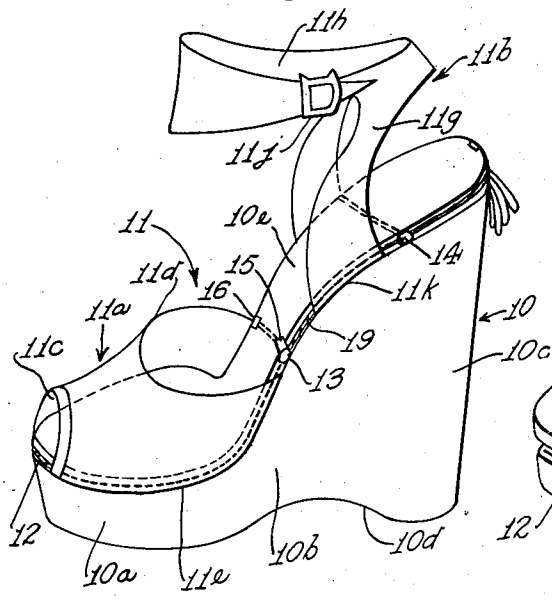


Fig. 2.

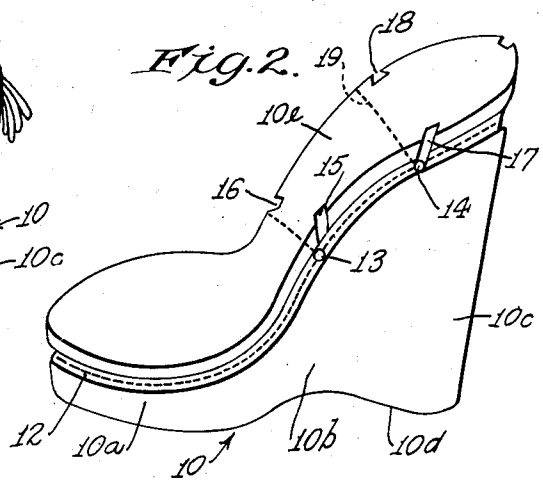


Fig. 3.

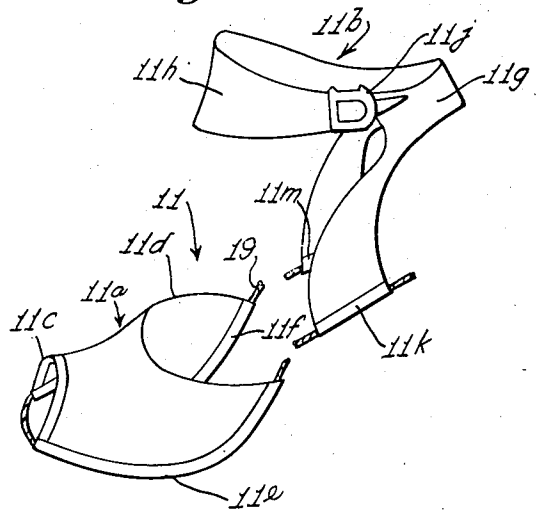
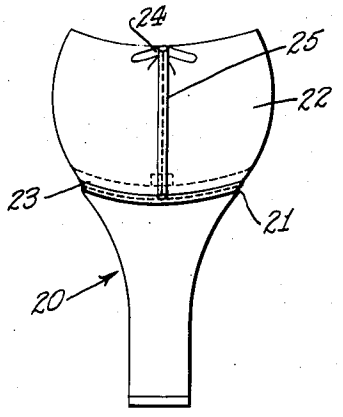


Fig. 4.



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Fig. 5.

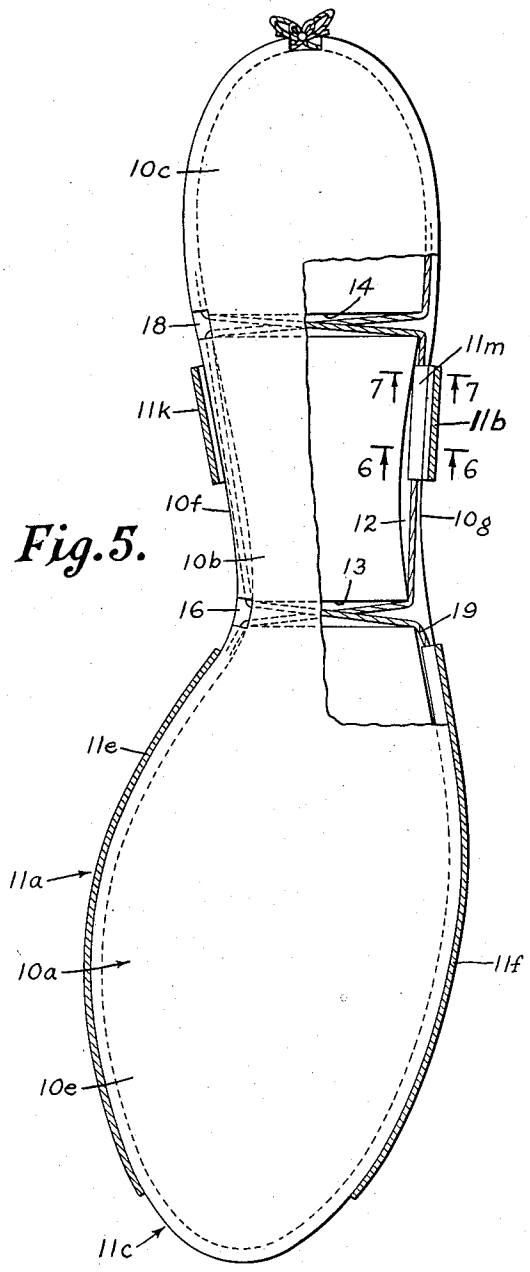


Fig. 7.

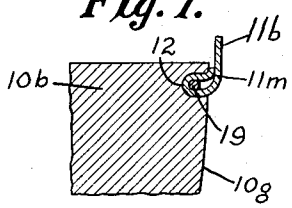
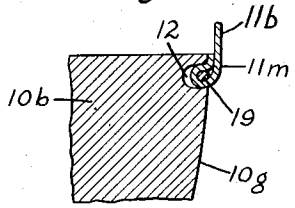


Fig. 6.



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2,510,236

FOOTWEAR HAVING REPLACEABLE UPPERS

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2 Claims. (Cl. 36—11.5)

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This invention relates to footwear, and it relates particularly to improvements in shoes, clogs, sandals and the like of a type having separable uppers and soles.

It has been suggested heretofore that shoes of various designs or styles can be constructed with detachable uppers. Such expedients as slide fasteners, preformed clamping wires and the like have been suggested for detachably connecting the uppers to the lowers, but little, if any, success has been attained with these arrangements. The disadvantage of these prior expedients is that they do not provide a secure and unobtrusive connection between the upper and sole.

Slide fasteners are visible, of course, and they cannot be applied in such a way as to assure an attractive and smooth connection between the upper and the sole.

Attempts to use cords and wires for securing the uppers to the lowers have not been successful, in practice, for the reason that they do not effect a tight and secure connection at the concave peripheral portions of the sole, for example, around the shank of the sole. Such cords or wires tend to follow the shortest path and, as a result, pull away from the concavities, thereby either releasing the upper or producing an undesirable gap between the upper and the sole.

Preformed or preshaped wire retainers are not very satisfactory, for such retainers must be very stiff to be effective and, as a result, considerable difficulty is encountered in applying the uppers to, or releasing them from, the soles.

Despite the disadvantages of the prior constructions, the idea of providing separate uppers and soles has merit for the reason that it makes possible the provision of a great variety of uppers for use interchangeably on a single sole, thereby permitting the shoes to be used with different color or designs of garments without requiring completely different shoes for the various garments.

An object of the present invention, therefore, is to provide shoes having interchangeable uppers that may be secured to, or detached from, the sole with ease and which can be fixed securely to the sole in an unobtrusive or attractive manner.

Another object of the invention is to provide footwear having interchangeable uppers that may be attached by means of an easily manipulated flexible member, and which can be secured firmly to the sole even at the concave peripheral portions of the sole.

Other objects of the invention will become apparent from the following description of typical

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examples of footwear embodying the present invention.

In accordance with the invention, I have provided footwear such as, for example, shoes, clogs, sandals, slippers and the like with detachable uppers and soles in which the uppers have loops or open end hems formed in their peripheries for receiving a cord or other similar flexible member that is adapted to be drawn into a groove or grooves in the periphery of the sole to secure the upper to the sole. A particular feature of such footwear is the provision of transverse openings or passages through the sole for receiving the cord to anchor the upper securely to the sole and to draw the edges of the upper into concavely curved peripheral portions of the sole, the upper conforming to the contour of the outer curved edge portion of the sole even though the edges of the upper follow substantially a straight line in the concave edges of the sole.

The uppers may consist of the usual toe covering portion and a strap or counter portion for securing the shoe to the foot. The several portions of the upper may be formed as a unit or may be completely separate. They may be made of leather, fabric, or any other type of material used in the manufacture of shoes and they may be supplied in different colors or in different designs in order to harmonize with different ensembles.

The soles may be formed of wood, cork, or plastic materials as is common in clogs and sandals or they may be of conventional construction including a leather tread portion, the usual rigid shank portion, and a leather or composition heel.

For a better understanding of the present invention, reference may be had to the accompanying drawings in which:

Figure 1 is a perspective view of a typical clog embodying the present invention;

Figure 2 is a perspective view of the lower of such a clog;

Figure 3 is a perspective view of the upper of the clog;

Figure 4 is a rear view of a typical shoe having a counter portion secured thereto.

Figure 5 is a plan view of the sole of the clog with the upper shown in section in a plane parallel to the surface of the clog and with part of the sole broken away to disclose details thereof;

Figure 6 is a view in section taken on line 6—6 of Figure 5; and

Figure 7 is a view in section taken on line 7—7 of Figure 5.

The forms of the invention chosen for purposes of invention are illustrative, only, of the invention and are susceptible to considerable modification in style and design.

The clog illustrated includes a sole 10 which, as shown particularly in Figure 2, may be formed of wood, cork or plastic material and has a tread portion 10*a*, a thick shank portion 10*b*, and a heel portion 10*c*. Inasmuch as the sole is formed of solid material, the heel portion 10*c* is not cut away from the shank portion 10*b*; and the shank portion 10*b*, therefore, is of substantial thickness or height between the undersurface 10*d* and the foot-supporting surface 10*e*.

As best shown in Figure 5, the foot-supporting surface 10*e* is shaped to conform generally to the conventional outline of the human foot and, therefore, is transversely narrower at the shank portion 10*b* than it is at the tread and heel portions 10*a* and 10*c*, respectively. The shank portion 10*b* therefore has generally concavely curved side edges 10*f* and 10*g*.

The upper 11, as best shown in Figures 1 and 3, may include a toe covering portion 11*a* and an ankle strap portion 11*b*. The toe covering portion 11*a* may be formed of a shaped piece of fabric or other material providing an open toe portion 11*c*, a curved upper edge 11*d* fitting over the instep, and lower edge portions 11*e* and 11*f* which conform generally to the shape of the tread portion 10*a*.

The strap portion 11*b* includes an arcuate piece of fabric or other material 11*g* which extends upwardly from the sides of the heel portion 10*c*, rearwardly behind the heel and may be provided with a strap portion 11*h* adapted to extend across the front of the ankle and be secured by means of a buckle 11*j* carried by the strap portion 11*g*. The lower edges 11*k* and 11*m* are shaped to conform generally to the periphery of the sole 10 at a zone near the forward edge of the heel portion 10*c*.

A groove 12 of substantial depth is formed around the periphery of the sole 10 adjacent the foot-supporting surface 10*e*. Also, at opposite ends of the shank portion 10*b* and communicating with the groove 12 on opposite sides thereof are transverse passages 13 and 14 which are used for securing the upper to the sole. If desired, notches 15, 16, 17, and 18 may extend upwardly from the groove 12 at opposite ends of the passages 13 and 14 for a purpose to be described.

The upper 11 is secured to the sole 10 by means of a cord or other flexible element 19 which is threaded through the edges 11*e* and 11*f* of the toe covering portion 11*a*, these edges being formed as loops or hems. The cord 19 is drawn tightly into the groove 12 adjacent the tread portion 10*a* of the sole 10 and the ends of the cord are then passed in opposite directions through the passage 13. In this way, the edges 11*e* and 11*f* of the toe covering portion 11*a* are drawn tightly into the groove 12 around the tread portion 10*a* of the sole and substantially in a straight line in the concave edges 10*f* and 10*g* on opposite sides of the shank 10*b*. The opposite ends of the cords are then threaded through the loop-like edges 11*k* and 11*m* of the strap portion and are passed through the passage 14 in opposite directions, drawn tightly and brought around into the groove in the back of the heel portion 10*c* where they may be tied or otherwise secured. In this way, the edges 11*e*, 11*f*, 11*k* and 11*m* are drawn down into the groove 12 and firmly anchored in position so that the upper will not separate from

the sole. As shown in Figures 5, 6 and 7, the portions of the cord 19 at the edges 10*f* and 10*g* of the shank do not extend to the bottom of the groove 12 except at the points of intersection of the groove 12 and the apertures 13 and 14 because the cord cannot follow a concave curve. However, because the apertures 13 and 14 are at the ends of the shallow arcs at the edges 10*f* and 10*g* of the shank, the cord is disposed wholly within the groove 12 at the opposite sides of the shank so that the hem edges 11*k* and 11*m* are drawn into and firmly held in the groove 12. An especially strong connection is made because of the fact that the cords are crossed and drawn through the passages 13 and 14, thereby leaving only relatively short portions of the cord unsupported. Because of the relatively short unsupported lengths of the portions of the cord 19 between the apertures 13 and 14, the edges 11*k* and 11*m* of the upper are retained strongly against inadvertent detachment even though the hem edges 11*k* and 11*m* may not be completely in engagement with the bottom of the groove 12, as best shown in Figs. 5 and 6. If necessary to a stronger connection, other passages may be provided in the sole so as to anchor the upper more firmly. For example, it may be found desirable to provide other passages adjacent the outer ends of the tread and heel portions of the upper.

If desired, the strap portion 11*b* can be omitted in a sandal type of shoe and in this case, the cord itself may serve as the means for securing the shoe to the foot. The cord, instead of being used for securing the strap portion 11*b* to the foot, may be drawn upwardly from the opposite ends of the openings 13 or 14 through the notches or grooves 15 and 16 or 17 and 18, respectively, and then tied around the ankle in any attractive arrangement. In order to relieve the tension which might be created around the ankle of the wearer, it will be understood that the cord may be knotted at the end of the aperture 13 or the aperture 14 to hold it tightly around the tread portion of the sole thereby leaving the ends of the cord free to be tied around the ankle.

Also, instead of using a strap type of upper, a heel covering or counter portion as illustrated in Figure 4 may be provided either united with or separate from the toe covering portion 11*a*. Figure 4 is a rear view of the shoe having a sole 20 like that described above or of more conventional construction including a high heel, if desired, and having the groove 21 extending around its periphery. The upper may include a heel covering or counter portion 22 of conventional appearance having a looped or hemmed edge 23 in which the cord 24 is disposed. A loop or passage 25 is also formed in the back of the counter 20 through which the cord 24 may be passed and tied. Preferably, the cord 24 is either crossed or tied before its opposite ends are passed into the loop 25, thereby securing the edge 23 more firmly to the sole.

It will be understood that the design of the shoe is susceptible to considerable modification and conventional or widely varying novelty designs may be provided in the upper as well as the sole. Therefore, it will be understood that the above described forms of the invention are illustrative and should not be considered as limiting the scope of the following claims.

I claim:

1. A shoe comprising a sole having a tread portion, a shank portion and a heel portion, said

tread and heel portions having generally convexly curved side edges and said shank portion having opposite concavely curved side edges merging into said convexly curved edges, a groove in and extending around the edge of said tread portion, and along said opposite concavely curved side edges, a first passage extending transversely through said shank portion and communicating with the groove in said opposite side edges at about the junction of said shank portion with said tread portion, a second passage extending transversely through the said shank portion and communicating with the groove in said side edges of said shank portion at about the junction of said shank portion with said heel portion, an upper having a toe-covering portion, hems forming loops in the lateral edges of said toe-covering portion, a flexible member securing said upper to said sole extending through said loops and along said groove in said tread portion, in opposite directions through said first passage, then along the portions of the groove in said side edges, and then in opposite directions through said second passage, notches in said side edges communicating with said groove at the ends of said second passage and extending upwardly to the top of said sole, said flexible member being tied and tensioned to follow a substantially straight path along the groove in each concavely curved side edge of said shank portion and to draw said loops into said groove in said tread portion to conform the edges of the upper to said tread portion, said flexible member being receivable in said notches and passing upwardly therethrough to be tied around the ankle of the wearer to secure the sole and upper to the foot.

2. A shoe having a replaceable upper comprising a sole having a tread portion, a shank portion, a heel portion and a foot-engaging surface, said shank portion having concavely curved opposite edges and said tread and heel portions having convexly curved edges merging into the edges of said shank portion, transverse passages extending through said sole from side to side substantially at the junctions of said concavely and convexly curved edges, a groove in and extending around the edge of said sole adjacent to said foot-engaging surface and extending between and intersecting the ends of said passages at opposite edges of said sole, a first shaped piece of material forming a toe-covering portion, loops in the lateral edges of said piece, a second shaped piece of material for securing the heel portion to a foot, loops in the lateral edges of said second piece, and a flexible cord securing said first and second pieces of material to said hole, said cord lying in said groove in said tread portion and passing through the loops in said toe-covering portion, in opposite directions through the passage at the end of said shank portion adjacent to said tread portion, through the loops on said second piece of material, then in opposite directions through the passage at the end of said shank portion adjacent to said heel portion, and having its ends fastened together to draw the loops of the toe-covering portion into said groove around the tread portion and attach the toe-covering portion to said sole, the cord following a substantially straight path in the groove along each edge of said shank portion between said passages to retain the loops of said second piece in the groove in said opposite edges of said sole between the ends of said passages.

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