Sept. 4, 1956 H. W. GARDINER 2,761,224

SHOE WITH HOLLOW WELT FOR DETACHABLE UPPER

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FIG. 1.

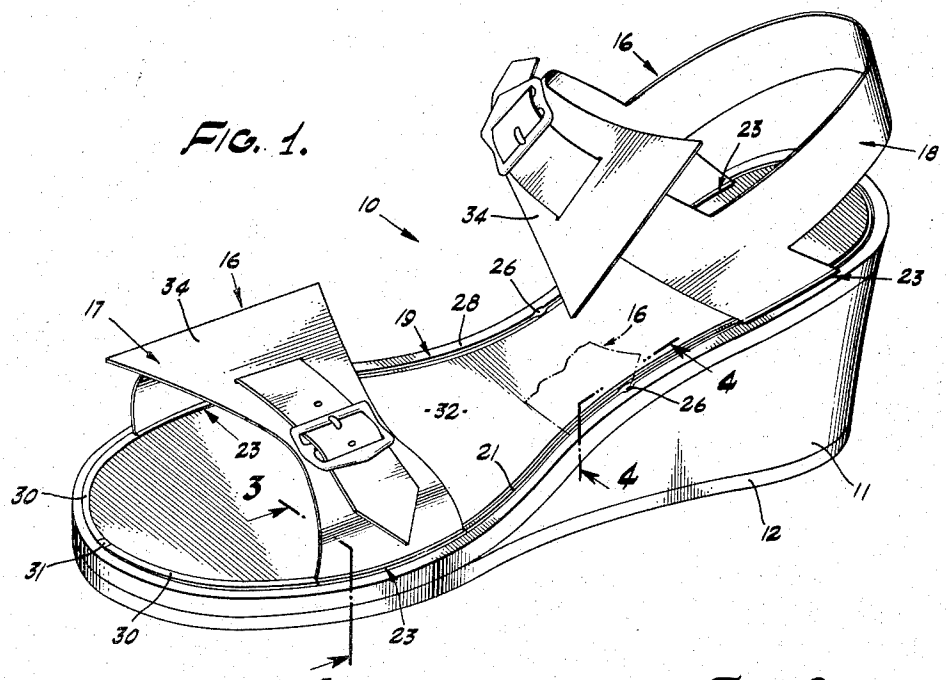
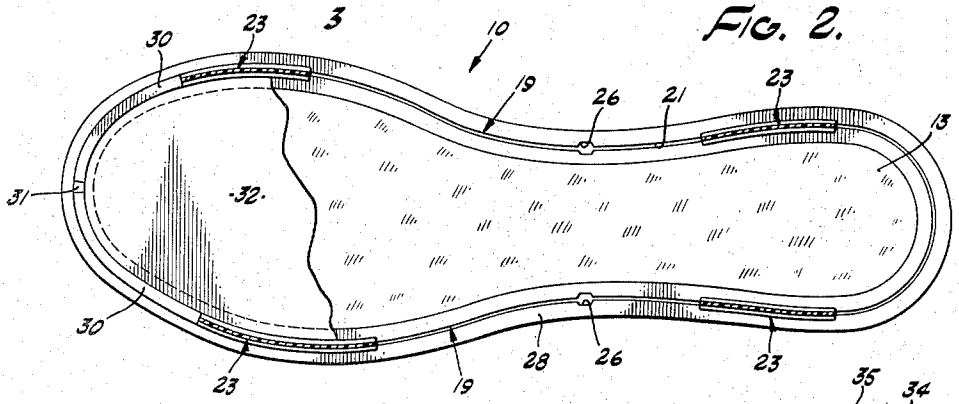


FIG. 2.



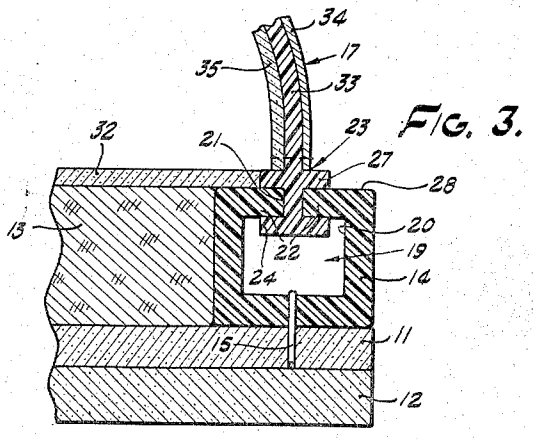


FIG. 3.

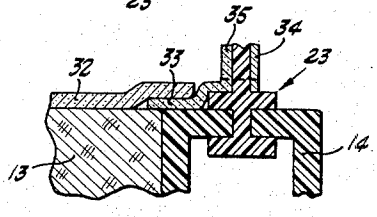


FIG. 3A.

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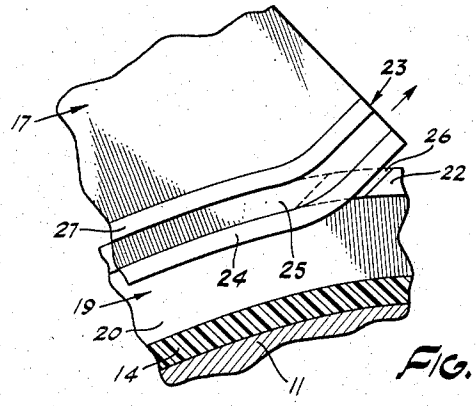


FIG. 4.

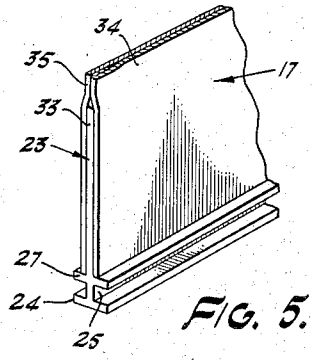


FIG. 5.

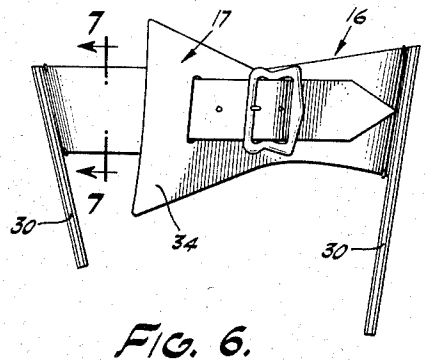


FIG. 6.

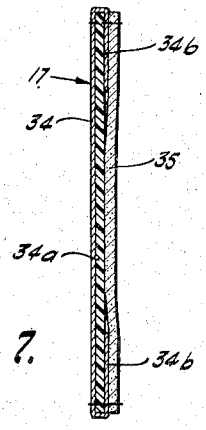


FIG. 7.

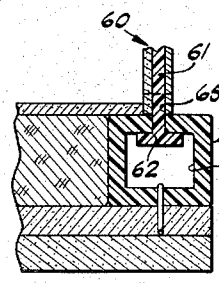


FIG. 9.

FIG. 8.

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SHOE WITH HOLLOW WELT FOR DETACHABLE UPPER

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Application August 4, 1952, Serial No. 302,515

3 Claims. (Cl. 36—11.5)

This invention relates to footwear and is particularly directed to improvements in shoes, sandals, slippers, etc., having detachable uppers. It has been proposed heretofore to provide shoes of various types and styles having uppers which can be detached from the sole or lower portion of the shoe in order that various styles and colors of uppers can be employed with a given sole or lower portion of the shoe. Such proposals have not met with commercial acceptance, however, because the connecting devices have been unreliable, difficult to operate and unattractive. Despite the disadvantages inherent in prior constructions, the general scheme of providing interchangeable uppers for shoes has considerable merit since it enables a single sole, base or platform to be used with a large variety of relatively inexpensive uppers, thereby enabling the wearer to use the shoes with garments of different colors and designs without requiring separate pairs of shoes to match each of the various garments.

A principal object of the present invention is to provide an improved form of connection between the upper and lower parts of the shoe, which connection is unobtrusive and does not detract from the appearance, is easy to operate, reliable in action and which is particularly adapted for economical manufacture on a quantity basis.

In accordance with my invention, I provide a hollow welt having a traverse track or channel which extends around the periphery of the lower portion of the shoe. This welt may be fastened in any conventional way to the insole, outsole or platform. The traverse track or channel includes an elongated cavity within the welt and a continuous narrow slot communicating with the cavity. A T member is secured to each end of the shoe upper and this T member is slidably mounted within the traverse track. An enlarged head on the T member is positioned within the cavity and a narrow shank projects upward through the continuous slot. At one or more locations on the welt the slot is widened to permit insertion and withdrawal of the T members. The various advantageous features of my invention will be more apparent from the following detailed description of a preferred embodiment of my invention.

In the drawings:

Figure 1 is a perspective view of a shoe construction embodying my invention.

Figure 2 is a plan view thereof, partly in section.

Figure 3 is a sectional detail taken substantially on the lines 3—3 as shown in Figure 1.

Figure 3A is a view similar to Figure 3 showing a modification.

Figure 4 is a sectional detail taken substantially on the lines 4—4 as shown in Figure 1.

Figure 5 is a perspective view showing a preferred form of connection fitting.

Figure 6 is a view of the toe encircling portion of the upper, detached from the lower portion of the shoe.

Figure 7 is a sectional view taken substantially on the lines 7—7 as shown on Figure 6.

Figure 8 shows a modified form of shoe or sandal embodying my invention.

Figure 9 is a sectional view similar to Figure 3 showing a modified form of connection device.

Referring to the drawings, the shoe generally designated 10 may be provided with a platform 11, an outsole 12, insole 13 and hollow welt 14. The hollow welt may be secured to the platform 11 by any convenient means such as, for example, by staples 15. The welt 14 is also attached to the insole 13 by any convenient means such as, for example, by adhesives.

The upper portion of the shoe, hereinafter sometimes called the upper 16, may comprise a single continuous member, or, as shown in the drawings may comprise two separate portions. The first of these, designated 17, encircles the toes of the wearer while the second, designated 18, encircles the ankle. Each of these units of the upper is provided with engagement means at its ends for cooperative engagement with the traverse track or channel 19 provided on the hollow welt 14.

As shown in Figure 3, the traverse track or channel 19 includes a central elongated cavity 20 within the welt 14, together with a narrow continuous slot 21 formed between the inwardly directed lips 22 on the welt. The channel engagement means at each end of the uppers 17 and 18 includes an element 23 having a head 24 in the shape of an inverted T, as at 62 in Figure 9. The shank 25 extends through the slot 21 and is joined integrally with the outwardly directed flanges forming the head 24. The width of the flange of the head 24 is greater than the width of the slot 21. The elements 23 are installed in position by inserting the heads thereof through the enlargements 26 provided in the channel 19, as indicated in phantom lines at the center of Figure 1. The width of these enlargements 26 is sufficiently great to permit endwise insertion of the heads 24 of the elements 23 into the channels 19 to the position shown in Figure 3. The material of the elements 23 is sufficiently resilient to permit the elements to bend somewhat as they are inserted or withdrawn through the enlargements 26. This bending of the elements 23 for this purpose is shown clearly in Figure 4. It may be desirable to provide each element 23 with a cover flange 27 which rides on the upper surface 28 of the welt 14. This cover flange assists in providing a firm connection between the upper and the welt 14. It will be observed that the fastener elements 23 have an H shape cross section with the flange 27 is employed. Extensions 30 of this H shape cross section may be provided which project forwardly from the fastener elements 23 to a position near the extreme forward end of the shoe. These extensions 30 may abut in end-to-end relation or may each engage the H shape center block 31 which is fixed in position within the channel 19 by adhesives or other means. The purpose of these extensions 30 is to prevent the fastening elements 23 of the unit 17 from sliding forward from their proper positions while the shoe is being worn. The extensions 30 may be connected integrally with the fastening elements 23 or, if desired, may comprise separate unconnected filler pieces. Additional filler pieces of this H shape cross section may be mounted in the traverse track 19, if desired, between the locations of the fastening elements 23 in order to exclude dust, dirt and foreign matter from the traverse track 19.

If desired, a lining member 32 may be mounted on the insole 13 and overlap a portion of the hollow welt 14. The edge of this lining member 32 may be contacted by the upper flange 27 of the fastening elements 23. As shown in Figure 3A, part of the material of the upper may, if desired, extend as a tab 33 under a portion of the lining member 32. This tab may be left free or may be cemented in place. Its purpose is to assist in pre-

venting shifting of the fastening elements **23** along the traverse track or channel **19**.

Each of the upper sections **17** and **18** may be provided with a decorative cover **34** which may be formed of any suitable material for example, leather or cloth. The inner portion **35** is formed of leather or plastic materials and this serves as a lining for the upper sections. The upwardly projecting portion **33** (Fig. 5) of the fastening elements **23** are permanently secured to the opposite ends of the lining **35** by stapling, stitching or by means of adhesive materials. If the decorative material 34 is formed of cloth it is desirable to employ a backing strip **34***a*, which is preferably formed of plastic material. The decorative cloth **34** is attached by the purchaser to the backing strip **34***a* in the manner shown clearly in Figure 7. The lateral edges **34***b* of the decorative cloth 34 encompass the edge of the plastic backing strip 34*a*. The lining **35** is then attached to the lateral edges 34*b* and to the central portion of the backing strip **34***a* by means of adhesive material. It will be understood that the lining **35** comprises a patterned base upon which decorative material can be attached by the purchaser, and that these patterned bases are equipped with the fastening elements **23** at the time of purchase. If the extensions **30** are formed integrally with the fastening element **23**, the length of these extensions will vary with the shoe size.

In the modified form of my invention shown in Figure 8, the base or platform **40** is provided with the hollow welt **41** similar to welt **14**. A number of tab fasteners **42** on the upper parts **43**, **44** and **45** engage the traverse track **46** in the welt **41**. The construction of the traverse track or chanel **46** and the construction of the attached tabs **42** is substantially the same as that previously described. Enlargements **47** are provided in the channel **46** for insertion and withdrawal of the various tabs **42**. H type filler strips may be employed, if desired, between the straps of the upper to prevent undesired movement of the upper parts relative to the welt **41**, and to prevent entrance of dirt or other foreign material into the channel **46**.

In the modification shown in Figure 9, the attachment tabs **60** are provided with an upright fin **61** and a pair of outwardly directed flanges form an enlarged head **62**. The head **62** is received within the cavity **63** within the welt **64**. The fin **61** extends through the continuous narrow slot **65**. This form of attachment tab is similar to that previously described with the exception that the flanges **27** are omitted.

Having fully described my invention, it is to be understood that I do not wish to be limited to the details herein set forth but my invention is of the full scope of the appended claims.

I claim:

1. A shoe having a detachable upper, comprising: a sole portion; a separate hollow welt disposed substantially continuously around the margin of said sole portion and having an upper surface substantially flush with the upper surface of said sole portion, said hollow welt having at said upper surface flange portions extending toward each other to provide a relatively wide channel and a continuous narrow slot, said channel opening only upwardly through said slot, said slot having a plurality of widened areas of limited extent along its length; and an upper shoe part having means at its opposed ends for attachment to said welt, said means for attachment including a shank narrower than said slot and having an enlarged end portion wider than said slot but insertable through a selected one of said widened areas so as to be slidably received within said channel and restrained from removal therefrom except through said widened areas.

2. The shoe defined by claim 1 in which said shank of said means for attachment of said upper shoe part to said welt has a flange extending laterally from each side thereof and spaced above said enlarged end portion of said shank a distance slightly greater than the thickness of said flange portions of said hollow welt so that said enlarged end portion is received within said channel with said flange portions of said welt being closely confined between said enlarged end portion and said laterally extending flanges of said shank.

3. The shoe defined by claim 1 in which said enlarged end portion of said shank at each end of said upper shoe part extends beyond the margin of said upper shoe part to limit the sliding movement of said upper shoe part with respect to said hollow welt.

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