Oct. 27, 1942. F. R. MERRITT 2,299,840

WEDGE HEEL

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Fig1

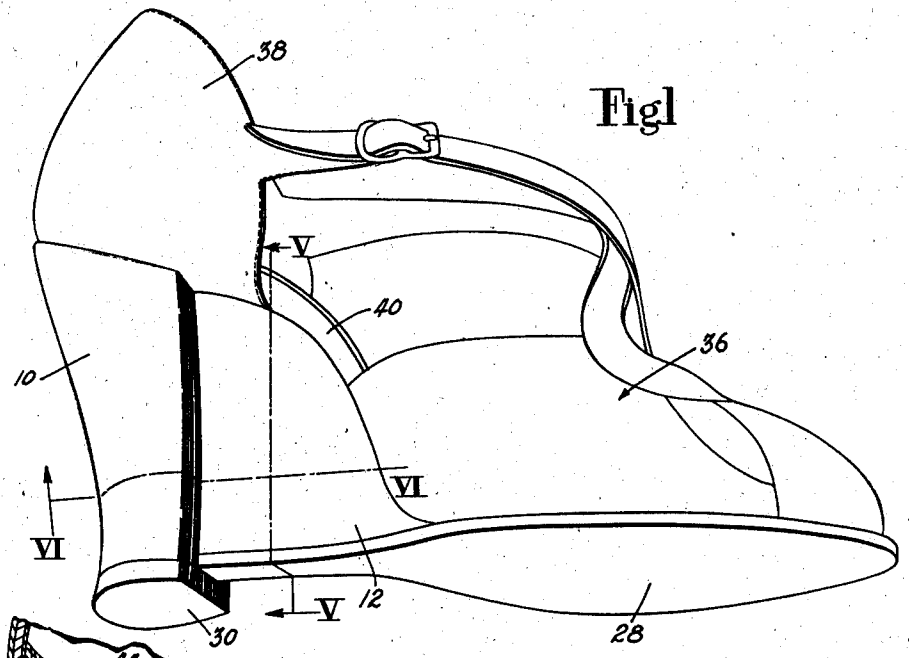


Fig2

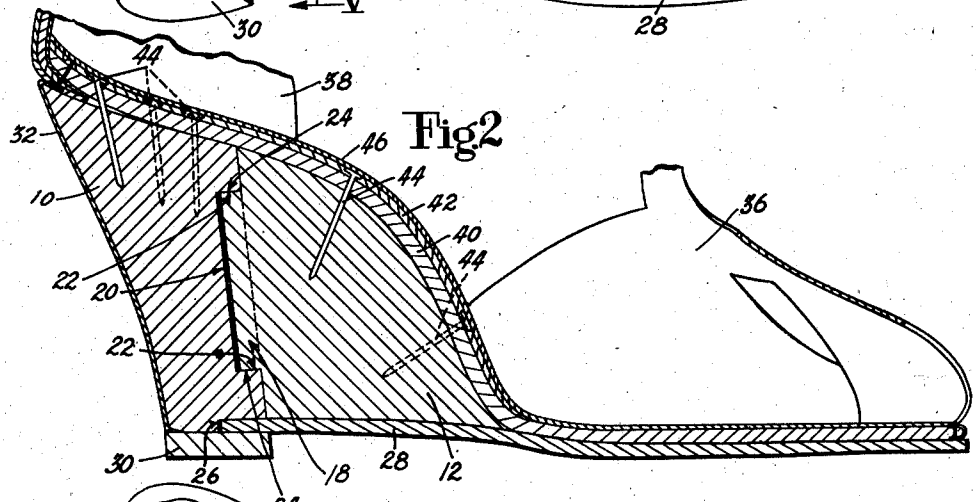


Fig3

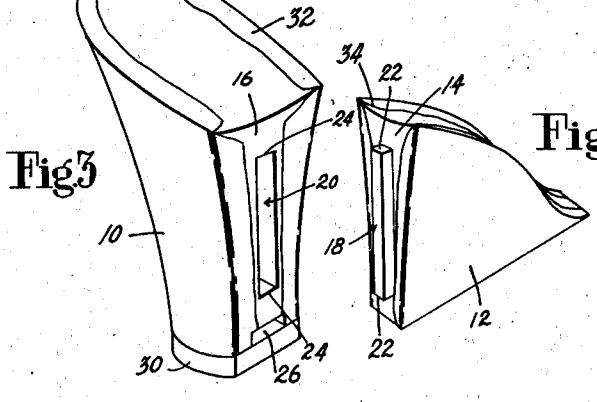


Fig4

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WEDGE HEEL

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Fig.5

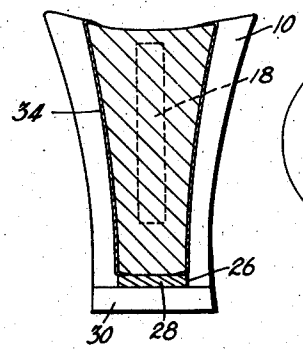


Fig.6

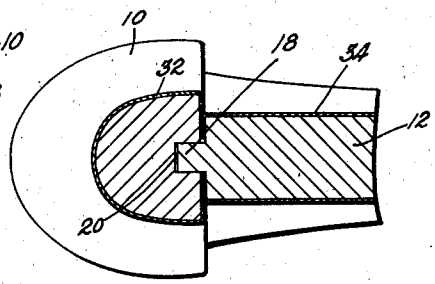


Fig.8

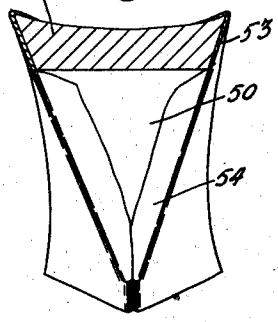


Fig.7

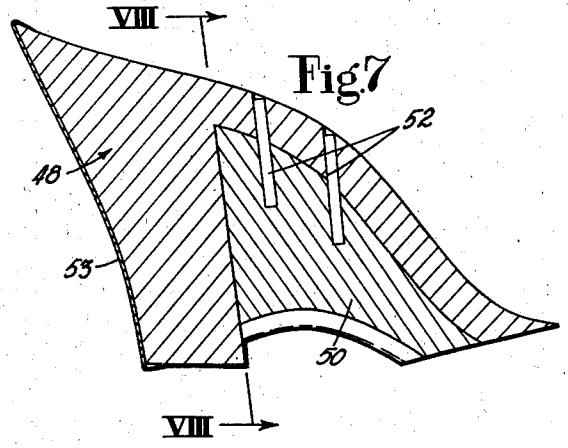


Fig.9

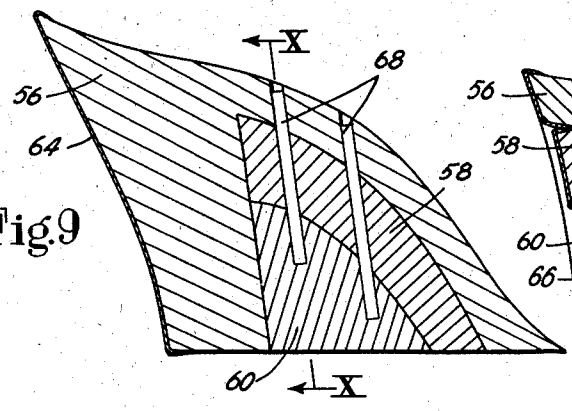
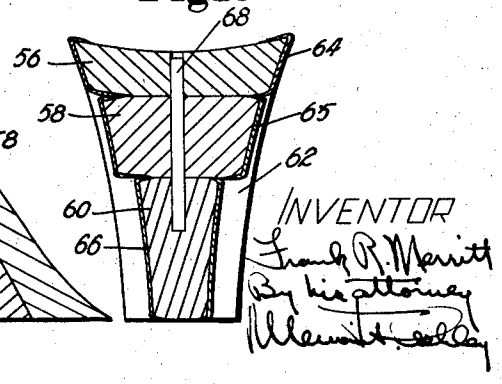


Fig.10



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UNITED STATES PATENT OFFICE

2,299,840

WEDGE HEEL

Frank R. Merritt, Haverhill, Mass., assignor to United Shoe Machinery Corporation, Flemington, N. J., a corporation of New Jersey

Application January 22, 1941, Serial No. 375,387

10 Claims. (Cl. 12—142)

This invention relates to improvements in heels of the type known as "wedge heels." The invention relates also to improvements in shoes having wedge heels and to an improved method of making such heels.

A so-called "wedge heel" has a wedge-like forward extension for underlying and supporting the shank portion of a shoe bottom. Such heels are usually made of a single piece of wood and, in some instances, the lower portion of the shank extension has been cut away more or less to provide clearance between that part of the heel and the ground, and the sides of the shank extension have been recessed or reduced in width to produce decorative offset effects for imparting character and refinement to the heel structure and improving the general appearance of the shoe. These results have been obtained by cutting or gouging operations which add substantially to the cost of manufacture of the heel. Furthermore, it is usually desirable to cover such heels with leather, fabric or the like and, because of the irregularities of surface contour produced by the cutting and gouging operations, the covering of such heels has been a slow and difficult procedure as well as an expensive one. In some instances, decorative effects have been produced by covering the gouged out or recessed portions with one material and the rest of the structure with a different material or by painting various portions of the heel structure with lacquers of contrasting colors. These operations have been difficult to perform on a one-piece heel structure and their expense has been such as to limit the application of heels finished in this manner to high-grade shoes.

Objects of the present invention are to overcome such difficulties of manufacture as those above referred to and to provide improvements in the construction of wedge heels rendering them more attractive and stylish in appearance.

With these objects in view, my invention consists in the features of the wedge heel construction hereinafter described and claimed.

Considered in another aspect, my invention provides an improved method of making wedge heel units which comprises forming a heel portion having a breast face, forming a separate wedge portion having a rear face narrower than the breast face of the heel portion, applying separate coverings to the heel portion and the wedge portion with marginal portions of said coverings overlying the breast and rear faces respectively, assembling the portions together with the heel portion extending laterally beyond the wedge portion on opposite sides of the latter, and securing the covered heel and wedge portions together for attachment as a unit to a shoe.

The above and other features of the invention will be further explained in the following detailed description and defined in the claims.

In the drawings,

Fig. 1 is a perspective view of a shoe in which one form of my improved heel structure is embodied;

Fig. 2 is a longitudinal sectional view of the shoe shown in Fig. 1;

Figs. 3 and 4 are perspective views of the heel and wedge portions of my improved heel structure;

Fig. 5 is a sectional view on the line V—V of Fig. 1;

Fig. 6 is a sectional view taken substantially along the line VI—VI of Fig. 1;

Fig. 7 is a view in longitudinal section of a wedge heel structure embodying a modified form of my invention;

Fig. 8 is a sectional view taken along the line VIII—VIII of Fig. 7;

Fig. 9 is a longitudinal sectional view of a wedge heel embodying another form of my invention; and

Fig. 10 is a sectional view along the line X—X of Fig. 9.

My improved wedge heel structure as disclosed in Figs. 1 to 6, inclusive, comprises a heel portion 10 and a wedge portion 12. The wedge portion 12 is constructed and arranged to seat against the heel portion 10 and it is so shaped that its rear face 14 is narrower than the breast face 16 of the heel portion. These parts are arranged with the heel portion extending laterally beyond the wedge portion on opposite sides of the latter whereby, when the heel is attached to a shoe, a decorative set back or panel effect is produced at the wedge portion of the heel. A tongue 18, formed on the rear face of the wedge portion 12, is shaped to cooperate with a groove 20 but in the breast face of the heel portion 10 to secure the heel and wedge portions together in assembled relation. The end faces 22 of the tongue 18 cooperate with the shoulders 24 which define the ends of the groove 20 to prevent relative displacement of the heel and wedge portions in directions lengthwise of the tongue. It will be understood that cement, nails or other suitable means may be used instead of the tongue and groove construction above disclosed for holding the parts together. As shown, a slot 26 is

cut in the toplift-receiving face of the heel portion to receive the end of an outsole **28**, and a toplift **30** is secured to the lower face of the heel portion by any suitable means, such as nails or cement. The heel and wedge portions may be coated with lacquer or, preferably and as shown, separate coverings **32** and **34** of leather, fabric or other suitable material may be applied to the parts before they are assembled. As indicated in the drawings, marginal portions of the coverings **32** and **34** are clamped between the breast face **16** of the heel portion and the rear face **14** of the wedge portion, this clamping action operating to assist in holding the coverings in place upon the heel and wedge portions. Such coverings may be of different colors to enhance the decorative effect of the heel. This heel structure is shown in Figs. 1 and 2 as embodied in a shoe having a two-part upper comprising a vamp **36** and a quarter **38** secured in overlasted relation to an insole **40** by suitable means. A fibre heel and shank reinforcing piece **42** is provided to present a firm anchorage for the nails **44** which are used to attach the heel structure permanently to the shoe and to hold the component parts of said structure together in assembled relation thereon. It will be understood that while the heel structure is preferably assembled to form a unit prior to its attachment to the shoe it may be assembled at the time of attachment to the shoe. In the latter case, the attaching nails are relied upon exclusively to hold the component parts of the heel structure together. In accordance with the usual practice, a full-length sock lining **46** is provided to cover the heads of the nails **44**. An outsole **28** is attached to the bottom of the shoe by any suitable means, the rear portion of the outsole extending into the slot **26** in the heel portion.

Figs. 7 and 8 show an alternative form of my improved wedge heel structure. Referring to Fig. 7, the heel portion **48** has a forwardly and downwardly inclined extension which is constructed and arranged to underlie the shank portion of the shoe. The wedge portion **50** is shaped to fit together with the heel portion and is substantially V-shaped in cross section. It will be understood that, by virtue of the shape of the wedge portion, the breast face of the heel portion is more or less exposed on opposite sides of the wedge portion, thus adding to the appearance of the heel structure. As shown in Figs. 7 and 8, the lower face of the wedge portion is cut away to provide clearance between the wedge portion and the ground. Dowels **52**, or other suitable means, may be used to hold the heel and wedge portions together in assembled relation for attachment as a unit to a shoe or, as set forth above, the heel-attaching means may be relied upon to hold the heel and wedge portions permanently together in proper relation to each other upon the shoe. Separate coverings **53** and **54** may be applied to the parts **48** and **50** respectively before they are assembled together to add to the appearance of the heel, or the parts may be finished in any other suitable manner.

Figs. 9 and 10 show still another form of wedge heel structure embodying features of my invention. This structure comprises a heel portion **56** having a forwardly and downwardly sloping extension adapted to underlie the shank portion of the shoe and a wedge portion comprising upper and lower parts **58** and **60** constructed and arranged to fit together with each other and to fit together with the heel portion with the wedge parts positioned substantially centrally widthwise of the heel portion. The upper wedge part **58** is narrower than the breast face **62** of the heel portion and the lower wedge part **60** is narrower than the upper wedge part **58**. This construction and arrangement of parts produces a "stepped" formation at each side of the wedge portion of the heel structure without involving expensive gouging operations. As set forth above, separate coverings **64**, **65** and **66** of leather or other suitable material may be applied to the parts **56**, **58** and **60** respectively before the parts are assembled. Such coverings may be made of different materials or the parts may be finished in different colors to enhance the decorative effect of the heel structure. Dowels **68** or other suitable means may be provided to hold the parts together in assembled relation for attachment as a unit to a shoe or the parts may be assembled upon attachment to the shoe, in which case the heel-attaching means will be relied upon exclusively to hold the portions together.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent of the United States is:

1. A wedge heel structure comprising a heel portion having a breast face, a wedge portion having a rear face shaped to seat against said breast face, said rear face being substantially narrower than said breast face throughout its entire height, separate coverings upon said heel and wedge portions, the marginal portions of said coverings overlying said breast and rear faces respectively, and means for securing said portions together for attachment as a unit to a shoe, the opposed faces of said heel and wedge portions cooperating to assist in holding said coverings in position.

2. A wedge heel structure comprising a heel portion having a breast face, a wedge portion having a rear face substantially narrower than said breast face and shaped to seat against the latter, separate coverings upon said heel and wedge portions, marginal portions of said coverings extending over said breast and rear faces respectively, and means for securing said portions together with the heel portion extending laterally beyond the wedge portion on opposite sides thereof for attachment as a unit to a shoe, the heel and wedge portions cooperating to exert a clamping action upon said marginal portions.

3. A wedge heel structure comprising a heel portion, and a wedge portion disposed in assembled relation to said heel portion, each of said portions having a separate covering upon it, one of said portions having a tongue extending heightwise thereof and the other of said portions having a groove into which said tongue extends to hold said portions together for attachment as a unit to a shoe.

4. A wedge heel structure comprising a heel portion, and a wedge portion disposed in assembled relation to said heel portion, each of said portions having a separate covering upon it, one of said portions having a tongue extending heightwise thereof, the other of said portions having a groove into which said tongue extends to hold said portions together for attachment as a unit to a shoe, said tongue having end faces cooperating with shoulders defining the ends of said groove to prevent relative displacement of said heel portion and said wedge portion in directions lengthwise of said tongue.

5. In a shoe, a wedge heel structure compris-

ing a heel portion having a breast face, a wedge portion having a rear face substantially narrower than said breast face and shaped to seat against the latter, separate coverings upon said heel and wedge portions, marginal portions of said coverings overlying the breast and rear faces of said heel and wedge portions respectively, and attaching means for securing said portions together in assembled relation upon the shoe with said coverings clamped between the opposing faces of said portions.

6. A wedge heel structure comprising a heel portion having a breast face, a wedge portion comprising a plurality of parts, the rear faces of said parts being narrower than said breast face and shaped to seat against the latter and said wedge parts being positioned substantially centrally widthwise of said heel portion, and means for securing said heel portion and said wedge parts together for attachment as a unit to a shoe.

7. A wedge heel structure comprising a heel portion having a forwardly and downwardly inclined extension constructed and arranged to underlie the shank portion of a shoe, and a wedge portion comprising upper and lower parts, said upper part being narrower than said extension and wider than said lower part, and means for securing said heel portion and said wedge parts together with the wedge parts positioned substantially centrally widthwise of the heel portion for attachment as a unit to a shoe.

8. A wedge heel structure comprising a heel portion and a wedge portion, said wedge portion being substantially V-shaped in cross section, and means for securing said portions together with the heel portion extending laterally beyond the wedge portion on both sides thereof for attachment as a unit to a shoe.

9. In a shoe, a wedge heel structure comprising a heel portion and a wedge portion disposed in assembled relation to said heel portion, one of said portions having a tongue extending heightwise thereof and the other of said portions having a groove into which said tongue extends, and heel attaching means constructed and arranged to cooperate with said tongue and groove to fasten said heel and wedge portions permanently together and to secure said heel structure upon the shoe.

10. That improvement in methods of making wedge heel units which comprises forming a heel portion having a breast face, forming a separate wedge portion having a rear face narrower than said breast face, applying separate coverings to said heel portion and said wedge portion with marginal portions of said coverings overlying said breast and rear faces respectively, assembling said portions with said heel portion projecting laterally beyond said wedge portion at both sides of the latter, and securing the covered heel and wedge portions together for attachment as a unit to a shoe.

FRANK R. MERRITT.