

June 2, 1970

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3,514,879

HEEL HAVING INTERCHANGEABLE SUPPORT PORTION

Filed Nov. 6, 1967

3 Sheets-Sheet 1

Fig. 1.

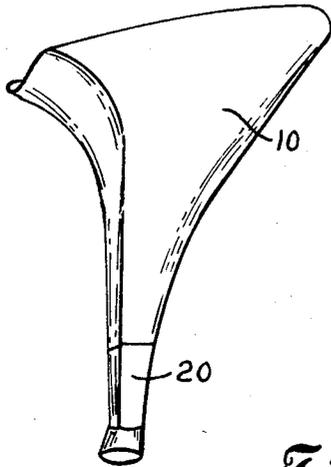


Fig. 2.

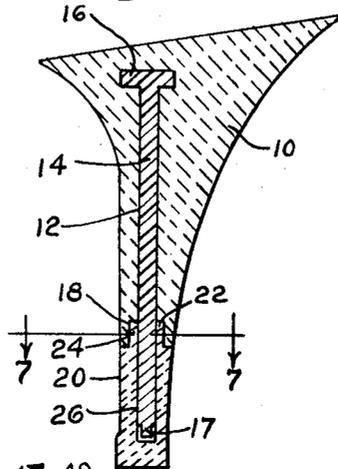


Fig. 3.

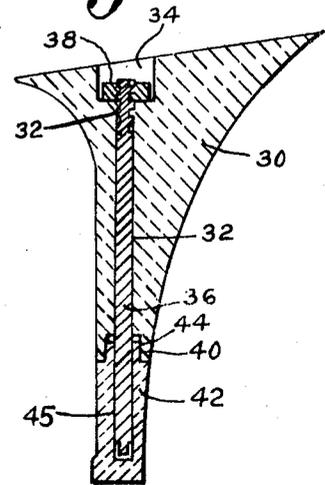


Fig. 5.

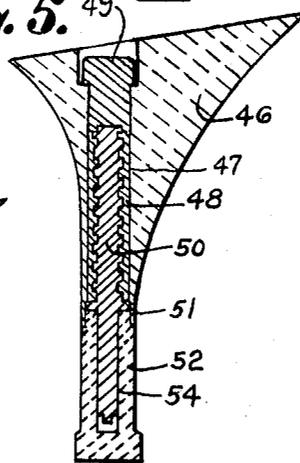


Fig. 6.

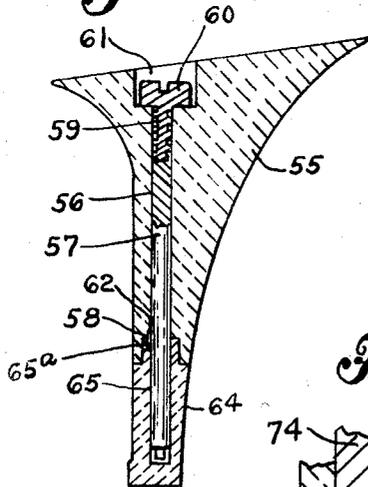


Fig. 4.

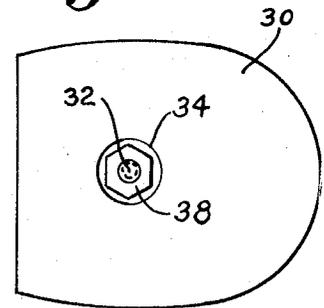


Fig. 8.

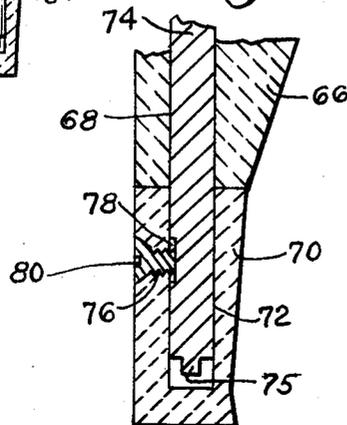
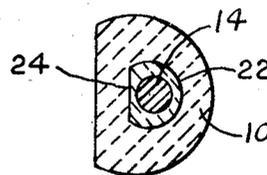


Fig. 7.



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Fig. 9.

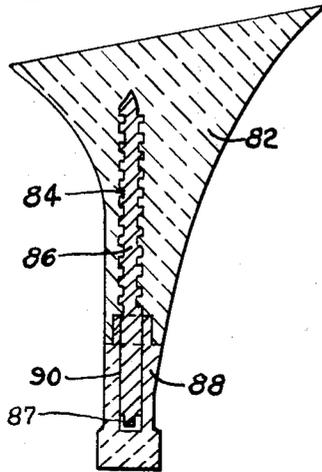


Fig. 10.

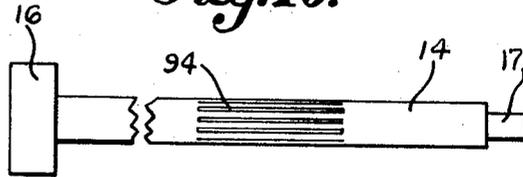
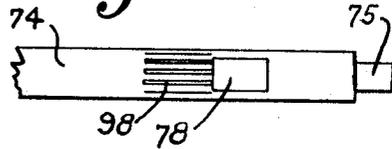


Fig. 11.



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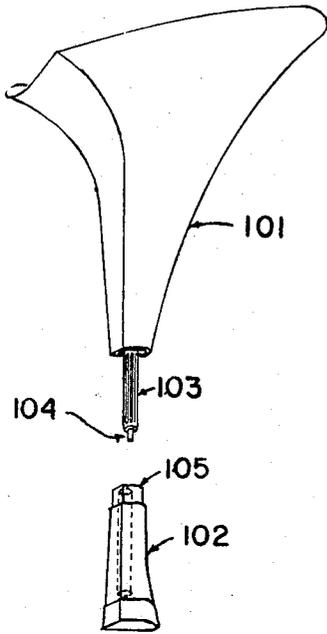


FIG. 12

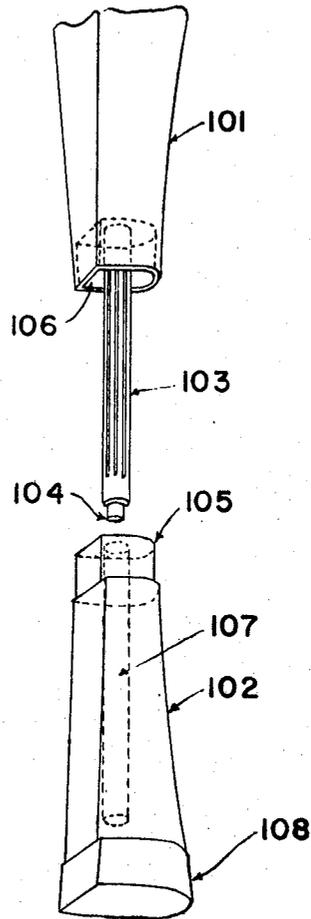


FIG. 13

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HEEL HAVING INTERCHANGEABLE SUPPORT PORTIONMichele Frattallone, 34-A, Prospect St.,
Lynn, Mass. 01902Continuation-in-part of application Ser. No. 427,300,
Jan. 22, 1965. This application Nov. 6, 1967, Ser.
No. 685,230

Int. Cl. A43b 21/36

U.S. Cl. 36-42

2 Claims

ABSTRACT OF THE DISCLOSURE

A heel for shoes resembling the conventional heel having a flaring upper section and narrower support section but characterized in that the support sections are detachable and interchangeable. The flaring upper section has a rigid metallic cylinder extending into a registering receiving tube in the support section. The tube projects into a registering recess in the upper section. The lower section includes the conventional "lift."

BACKGROUND OF INVENTION

This application is a continuation-in-part of my prior co-pending application Ser. No. 427,300, filed Jan. 22, 1965 and now abandoned.

The present invention relates to heels for shoes. In one very common variety of such a heel, there is an upper or flared portion and a somewhat narrower and straighter lower portion. The upper portion of such a heel normally conforms in size to the heel portion of the shoe upper and is attached by cement, nailing, or both. The lower or support portion, typically narrow in cross-section, terminates in a wearing surface known as the lift. In conventional heels of this design, the lower portion is normally reinforced with a rigid metal shaft. In some cases, the lift and reinforcing member are made as a single unit.

Replacement of the wearing portion or lift is often difficult for a cobbler to perform because of the small working surface. Hence, the general practice is to use the combination rigid member and lift. However, although replacement of such integral units is easier for the cobbler, it is nevertheless an operation which requires great skill to obtain proper alignment.

One object of the present invention is to provide a means for replacing a wearing surface or lift which can be readily accomplished without any tools by the user of the shoes.

A further object of this invention is to provide a means by which the shoe owner can readily change the entire appearance of the support portion of the heel of a shoe.

Other objects and advantages of this invention will be apparent from the description and claims which follow taken together with the appended drawings.

SUMMARY OF THE INVENTION

The invention comprises generally a heel for a shoe having the conventional configuration of a flaring upper section and a narrower support section. The flaring upper section has a rigid metallic generally cylindrical member extending into a registering receiving neck in the lower section. The neck itself projects into a registering recess in the upper section. The conventional wearing surface or lift is incorporated into the lower portion of the lower section. The neck and recess are preferably shaped so as to key into one another and prevent rotation. The cylindrical member can have an anchoring portion or head to hold it firmly near the top of the upper section of the heel.

The lower portion of a heel of this invention is characterized as being readily interchangeable by the user. In this manner not only may a new wearing surface or lift be provided for the heel, but also a lower portion with a different ornamental exterior may be substituted where desired. Thus, the user may be able to substitute a lower portion having a different color so as to blend or match with his other clothes. It should be noted that the appearance of the assembled upper and lower sections is unitary and that the assembled heel has the structural strength of the conventional unitary heel of this general design.

It is generally preferable to provide bores in the upper and lower sections for proper accommodation of the cylindrical rigid member and neck member. In general, it is preferred that the rigid member extend substantially to the area wherein the lift is incorporated. It should be further noted that lower sections of different height as well as different ornamental exterior can be substituted, thus providing a different shaped shoe, as for example, high, medium high, or medium heel shoe.

Although the principal application of this invention is to ladies' shoes, it is to be understood that the invention is equally applicable to shoes for men and children.

BRIEF DESCRIPTION OF DRAWINGS

FIG. 1 is a perspective view of one form of this invention.

FIG. 2 is a longitudinal sectional view of FIG. 1.

FIG. 3 is a longitudinal sectional view of a different form of this invention.

FIG. 4 is a top plan view of FIG. 3.

FIG. 5 is a longitudinal sectional view of another form of this invention.

FIG. 6 is a longitudinal sectional view of yet another form of this invention.

FIG. 7 is an enlarged sectional view along line 7-7 of FIG. 2.

FIG. 8 is an enlarged fragmentary sectional view of another form of this invention.

FIG. 9 is an enlarged longitudinal sectional view of another form of this invention.

FIG. 10 is an enlarged plan view of a connector pin as shown in FIG. 2.

FIG. 11 is an enlarged plan view of a connector pin as shown in FIG. 8.

FIG. 12 is a perspective view showing an embodiment of this invention with the bottom section disassembled from the top section.

FIG. 13 is an enlargement of a portion of FIG. 12.

SPECIFIC EXAMPLES OF INVENTION

As illustrated in said FIGS. 1 and 2, the heel has an upper section 10 having an elongated opening 12 into which a connector pin 14 extends having a head 16 and a reduced end 17. Section 10 has an enlarged opening 18 at the bottom extremity into which the upper end or neck 22 of lower section 20 removably enters. Section 20 preferably has one flat side 24 to prevent any possible rotation and has an elongated opening 26 in alignment with said openings 12 and 18. Connector pin 14 can be molded in upper section 10 and extended beyond. The body may be formed of plastic.

In FIG. 3 the heel has an upper section 30 having an elongated opening 32 therein, and which is enlarged at the top extremity as at 34. A connector pin 36 is exteriorly screw-threaded at the upper end portion and it extends into said opening 32. A retainer nut 38 screw-threadedly connects with the upper end of said pin 36. Section 30 has an enlarged lower opening 40 to receive an upper neck 44 of lower section 42. The latter has an

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elongated opening 45 therein to receive an end portion of said connector pin 36.

In FIG. 5, upper section 46 has an elongated opening 47 in which a tube 48, having an enlarged top 49, is inserted and that is preferably made of metal. It is interiorly threaded and screw-threadedly receives at the bottom an exteriorly threaded connecting pin 50. A flange 51 terminates said screw-threaded portion. Lower section 52 has an elongated opening 54 into which the lower part of pin 50 extends whereby said sections 46 and 52 are firmly connected.

In FIG. 6, upper section 55 is similar to that shown in FIG. 3, having an elongated opening 56 to receive a connector member or pin 57, having a projecting lug 58. Said member 57 has an upper hollow portion 59 that is interiorly screw-threaded and it receives a screw-threaded cap 60, the head of which freely enters an upper, enlarged opening 61 in said body. At the lower end of said body 55, a flat recess 62 is provided to receive said lug 58. The latter prevents rotation of said connector member 57. Lower section 64 has an elongated opening 65 into which said pin 57 enters, being retained therein by a press fit. Section 64 also has a recess 65a therein communicating with said recess 62 to receive said lug 58.

In FIG. 8 upper section 66 has an elongated opening 68 therein. Lower section 70 has an elongated opening 72 to receive a connector pin 74 that extends into it from said body opening 68 and which has a reduced end 75. Section 70 also has a lateral opening 76 extending from the outer side to and communicating with said opening 72. Said pin 74 has a flat recess 78 communicating with said opening 72. A lock screw 80 extends through said opening 76 and into said recess 78 to bear against and removably retain said connector pin 74 in said section 70 and against any possible rotative movement.

In FIG. 9, upper section 82 has an elongated, screw-threaded opening 84 therethrough. An elongated screw 86, having a reduced end 87, extends into said opening and screw-threadedly connects therein. Lower section 88 has an elongated opening 90 into which part of said screw 86 extends.

In FIG. 10 connector pin 14 is shown as having a knurled surface portion 94.

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In FIG. 11 connector pin 74 is shown having a knurled surface portion 98.

In FIGS. 12 and 13, the upper section 101 is shown detached from the lower section 102. The connector pin 103 with its reduced end 104 is held in section 101 as shown in FIG. 2. Lower section 102 has a tubular section or neck 105 which registers with annular recess 106 in the lower end of section 101. The lower part of pin 103 extends into bore 107 in lower section 102 to the area where the wearing member or lift 108 is incorporated.

I claim:

1. A heel resembling the shape of a conventional, unitary heel in its external appearance, comprising in detachable combination an upper section 101 adapted to be mounted on the heel portion of a shoe, and having an annular recess 106 in its bottom end and a lower section 102 which has an elongated recess 107, and a neck 105 which extends beyond lower section 102 and is registerable with recess 106; said lower section 102 including an integral lift portion 108 at its extremity, said upper section 101 containing firmly embedded elongated rigid member 103 which extends beyond said upper section 101 and is adapted to be detachably and firmly inserted into said recess 107; the height of said lower section 102 being substantially greater than the height of said lift portion 108.

2. The heel of claim 1 wherein said neck 105 and recess 106 both have a non-circular cross section, providing for a keyed position.

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