Jan. 15, 1952

G. L. MALHERBE

2,582,551

SHOE HEEL STRUCTURE

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Fig. 1

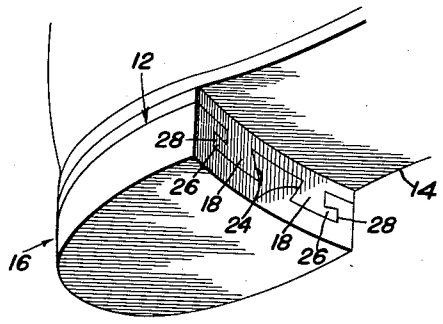


Fig. 2

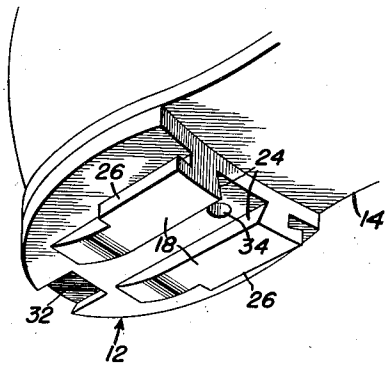


Fig. 4

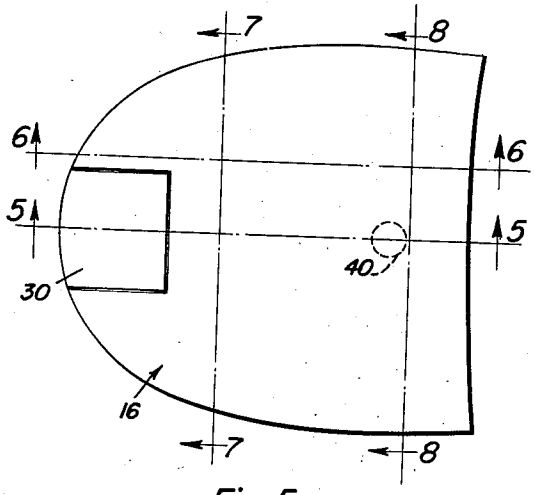


Fig. 3

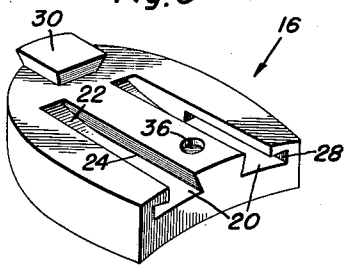


Fig. 7

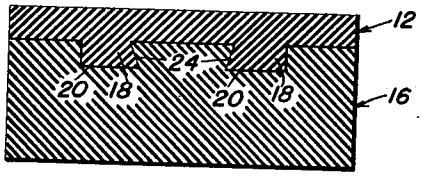


Fig. 5

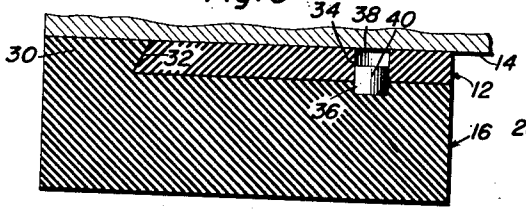


Fig. 8

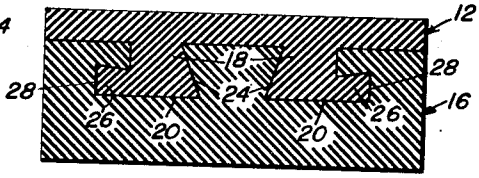
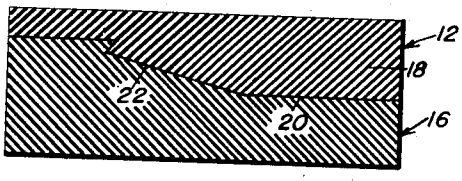


Fig. 6



Gerhardus L. Malherbe

INVENTOR.

BY Clarence A. O'Brien and Harvey B. Jacobson

Attorneys

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SHOE HEEL STRUCTURE

Gerhardus L. Malherbe, Suider-Paarl, Cape Province, Union of South Africa

Application September 5, 1950, Serial No. 183,129

1 Claim. (Cl. 36—36)

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This invention relates to new and useful improvements and structural refinements in shoe heels, and the principal object of the invention is to provide a shoe heel structure including a removable bottom or ground engaging member, so that this member may be quickly and easily replaced when worn out, or substituted by another bottom member of a different color, shape or thickness, as desired.

An important feature of the invention resides in the provision of means responsive to relative sliding movement of the bottom and top heel members for connecting the same together, while another feature lies in the provision of means for locking the two members against relative sliding movement so as to prevent accidental or unintentional separation thereof.

Some of the advantages of the invention reside in its simplicity of construction, in its efficient operation, in its adaptability for use with shoes of different sizes and types, and in its adaptability to economical manufacture.

With the above more important objects and features in view and such other objects and features as may become apparent as this specification proceeds, the invention consists essentially in the arrangement and construction of parts as illustrated in the accompanying drawings, in which:

Figure 1 is an under side plan view of the invention in its assembled position;

Figure 2 is an under side perspective view thereof with the bottom member removed;

Figure 3 is a top perspective view of the bottom member per se;

Figure 4 is top plan view of the heel;

Figure 5 is a sectional view, taken substantially in the plane of the line 5—5 in Figure 4;

Figure 6 is a sectional view, taken substantially in the plane of the line 6—6 in Figure 4;

Figure 7 is a sectional view, taken substantially in the plane of the line 7—7 in Figure 4; and

Figure 8 is a sectional view, taken substantially in the plane of the line 8—8 in Figure 4.

Like characters of reference are employed to designate like parts in the specification and throughout the several views.

Referring now to the accompanying drawings in detail, the invention consists of a shoe heel structure which embodies a top member 12 which is rigidly secured in any suitable manner to the bottom of a shoe 14, while a bottom, ground-engaging member 16 is separably connected to the top member 12 by means hereinafter described.

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These means involve the provision of a pair of transversely spaced, longitudinally extending keepers 18 on the lower surface of the top member 12, which keepers are slidably receivable in complemental, longitudinally extending channels 20 provided in the upper surface of the bottom member 16.

The channels 20 have open front ends while their rear end portions are upwardly curved, as indicated at 22, so that the keepers 18 may be inserted in the channels by simply sliding the bottom member 16 forwardly relative to the top member 12. To prevent the bottom member from falling downwardly from the top member, the keepers 18 and the channels 20 may have dovetailed inner edges indicated at 24, and in addition outturned flanges 26 may be provided on forward end portions of the keepers 18 for slidable reception in complemental grooves 28 in the sides of the channels 20.

In addition to the foregoing, a chamfered or dovetailed upstanding keeper block 30 is provided at the rear end of the bottom member 16 and is slidably receivable in a complemental, chamfered recess 32 provided in the top member 12, this block functioning as a positive stop for limiting the forward sliding movement of the bottom member relative to the top member so that the forward edges of the two members are in vertical alignment, as is best shown in Figure 1.

It will be apparent from the foregoing that when the bottom member 16 is slid forwardly on the top member 12 so that the keepers 18 are disposed in the channels 20 and the block 30 is disposed in the recess 32, separation of the two members will be impossible, except by sliding the bottom member rearwardly with respect to the top member. In order to prevent such separation from occurring accidentally or unintentionally, locking means are provided for preventing relative sliding of the two members, these locking means being gravity-responsive and being extremely simple in construction. The same simply involve the provision of a cylindrical socket 34 in the forward portion of the top member 12 and a similar socket 36 in the bottom member 16, these two sockets being registerable when the two members are connected together as shown in Figures 1 and 5, so that the sockets afford a vertical, cylindrical bore 38.

A gravity-responsive locking pin 40 is freely slidable in this bore, the length of this pin being no greater than the depth of the socket 34, but substantially greater than the depth of the socket 36.

When in operation, that is, when the bottom member **16** is to be applied to the top member **12**, the entire shoe is inverted and the locking pin **40** is placed in the socket **34** so that it is completely received therein. Thereupon, the bottom member **16** is slid forwardly on the top member so that the sockets **34**, **36** are in register, and the shoe is then returned to its upright position, thus permitting the pin **40** to gravitate into the socket **36** while the upper portion thereof still remains in the socket **34**, as shown in Figure 5. In this manner, the pin **40** will effectively lock the two members **12**, **16** against relative sliding movement and accidental separation thereof will be prevented. Needless to say, when it is desired to separate the member **16** from the member **12**, the entire shoe is again inverted so as to return the pin **40** into the socket **34**, after which the bottom member **16** may be slid rearwardly from the top member **12**.

It is believed that the advantages and use of the invention will be clearly understood from the foregoing disclosure, and accordingly further description thereof at this point is deemed unnecessary.

Having described the invention, what is claimed as new is:

A shoe heel comprising a top member for attachment to a shoe, said top member including a pair of spaced, parallel, longitudinally extending depending tongues, said tongues terminating in substantially rounded rear end portions, the inner longitudinal sides of the tongues being dovetailed, lateral flanges on the outer longitudinal sides of the tongues terminating at intermediate points on said tongues, said flanges including dovetailed upper surfaces, a tread member for mounting on the top member, said tread member having a pair of spaced, parallel longitudinal grooves in its upper portion for slidably receiving the tongues, said grooves conforming substantially to the shape of the tongues and the flanges thereon, and means for positively locking the tread member to the top member against longitudinal movement.

GERHARDUS L. MALHERBE.

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