PATENT SPECIFICATION

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PROVISIONAL SPECIFICATION

An Independent Sole Support for Removable Clog Members

I, LEE YAT KAI, of Chinese Nationality, of 76a, Tong Shin Terrace, Kuala Lumpur, Malaya, do hereby declare the nature of this invention to be as follows:—

This invention relates to clogs and the object of the invention is to provide a clog of improved construction whereby its life can be considerably prolonged.

Clogs are normally made of wood, soft or medium hard timber being used for this purpose, and their life when subjected to considerable wear and tear is comparatively short, generally about 30 days only. It is the general practice to discard clogs once their sole is worn out, no attempt being made to repair the sole or heel portion thereof as is the practice with leather or rubber soled footwear.

According to the invention the improved clog comprises a sole which may be formed of aluminium, rubber compound or other plastic material or metal and is provided on its under surface with means for detachably securing thereto renewable sole and heel blocks, of any suitable material.

Also, according to the invention means are provided on the sole for securing thereto a strap or straps for holding the clog on the foot of the wearer.

According to one preferred form of construction the improved clog consists of a sole, the shape of which conforms to the shape of the average foot, and which is provided on its under surface with dove-tailed tongues on the sole and heel portions thereof, on which renewable sole and heel blocks, provided with correspondingly shaped dove-tailed grooves, are adapted to be fitted.

The tongues may be formed on the sole and the grooves on the blocks or *vice versa*, either method being suitable for the purpose of the invention. In the sides of the front portion of the sole slots are provided in which can engage the ends of a strap which extends across the instep of the foot of the wearer so as to retain the clog in position on the foot when in use.

The ends of the strap are made wider than the slots so as to be retained in position against the under surface of said slots, and the said slots are provided at one end with an enlarged sloping opening in order to allow the enlarged ends of the strap to be passed therethrough, the ends of the strap then being retained in position by the narrower portion of the slot.

When the heel and sole blocks become worn so as to render them unfit for further use they are readily detached from their respective tongues and replaced by new sole and heel blocks. The co-operating dove-tailed tongues and grooves on the sole, and heel and sole blocks are formed so that the blocks are a push fit on the sole and will remain thereon without the necessity for securing by means of screws or nails.

The tongues and grooves on the sole and the sole and heel blocks may extend either transversely or longitudinally of the sole. The invention is not restricted to the provision of tongues and grooves of dove-tail shape, any other shape of locking tongue and groove being suitable.

The front portion of the sole which is less subject to wear may be of greater thickness than the remainder, forming a continuous surface with the sole block, when secured in position, or forming a "step" of less depth than the said sole block.

In another form of construction of the clog according to the invention the dove-tailed tongues and grooves on the sole and the sole and heel blocks are replaced by sockets on the front and heel portions of the sole and corresponding bosses provided on the replaceable sole and heel blocks. Alternatively, the bosses may

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be formed on the sole and the sockets be provided on the replaceable sole and heel blocks.

In an alternative form of the invention the sole of the clog is formed of metal and comprises a substantially flat portion having a downwardly extending peripheral flange which serves to retain in contact with the said metal sole a wooden clog of normal type. Thus in this form, instead of attaching separate sole and heel blocks to the sole, a complete clog is attached thereto. The flange is inwardly directed around its periphery and a slot is provided, conveniently at the heel portion of the flange, so as to enable a certain degree of resilience to be imparted thereto and in this way allow an ordinary wooden clog to be sprung into place. At the front part of the metal sole, portions of the flange may be cut away at either side so as to provide a clearance for a clog strap.

Dated this 8th day of January, 1947.
HERON ROGERS & CO.,
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London, E.C.4.

COMPLETE SPECIFICATION

An Independent Sole Support for Removable Clog Members

I, LEE YAT KAI, of Chinese Nationality, of 76a, Tong Shin Terrace, Kuala Lumpur, Malaya, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

This invention relates to clogs and the object of the invention is to provide a clog of improved construction whereby its life can be considerably prolonged.

Clogs are normally made of wood, soft or medium hard timber being used for this purpose, and their life when subjected to considerable wear and tear is comparatively short, generally about 30 days only. It is the general practice to discard clogs once the sole is worn out, no attempt being made to repair the sole or heel portion thereof as is the practice with leather or rubber soled footwear.

It has been proposed hitherto to secure renewable sole and heel blocks on to the under surface of a sole support by means of straight or dove-tailed sockets formed on the sole support, the sole and heel blocks being slid on to or plugged into said sockets and being secured against movement relative thereto not solely by friction but also by means of nails or screws transfixing said blocks and said sole support.

It has also been proposed to secure a combined sole and heel block on to a sole support by means of co-operating dove-tailed member, the combined sole and heel member being secured solely by the frictional engagement with the sole support.

According to the invention an improved clog is provided wherein a sole support formed of rubber compound or other plastic material, aluminium or other metal, is provided on its under surface with means for applying thereto separate sole and heel blocks to renew the wearing surface of said clog, said blocks being retained in the applied condition on said means by frictional engagement only therewith, and means being provided on said sole support for detachably securing thereto a strap or straps for holding the clog on the foot of the wearer.

Reference will now be made to the accompanying drawings which illustrate several forms of construction according to the invention and in which:—

Fig. 1 is a side elevation of a first form of construction of a sole support for a clog according to the invention,

Fig. 2 is an inverted plan of Fig. 1,

Fig. 3 is a section on the line III—III of Fig. 2,

Fig. 4 is a side elevation of a second form of construction according to the invention,

Fig. 5 is an inverted plan of Fig. 4,

Fig. 6 is a section on the line VI—VI of Fig. 5,

Fig. 7 is a section on the line VII—VII of Fig. 5,

Figs. 8, 9 and 10 show in side elevation, inverted plan, and section respectively modified forms of construction of the heel portion of the clog supports shown in Figs. 4, 5 and 6,

Fig. 11 is a side elevation of a third form of construction according to the invention,

Fig. 12 is an inverted plan of Fig. 11,

Fig. 13 is a section on the line XIII—XIII of Fig. 12,

Fig. 14 is a section on the line XIV—XIV of Fig. 12,

Figs. 15 and 16 show in side elevation

and inverted plan respectively a fourth form of construction according to the invention,

Figs. 17 and 18 show in plan and side elevation respectively a strap for use in securing to the foot of the wearer a clog constructed according to the invention,

Fig. 19 is a section on the line XIX—XIX of Fig. 17,

Figs. 20*a*, 20*b* and 20*c* show details of three forms of seam for a strap,

Fig. 21 shows a wedge for securing a strap to a sole support.

Figs. 1, 2 and 3 show a form of construction in which a sole support 1 is provided with a longitudinal reinforcing flange 6, whilst two inclined flanges 7 and 8 extend transversely across the sole support so as to constitute a dove-tail shaped recess into which can be inserted correspondingly shaped replaceable wooden sole members 9. The heel portion is formed with an annular flange 10 into which fits a replaceable cylindrical heel block 11 of wood. Longitudinal reinforcing ribs 12 and 13 are provided to support the transverse flanges 7 and 8.

Slots 14 are provided for retaining a strap for securing the clog to the foot of the wearer.

In the form of construction according to Figs. 4 to 7 the sole support 1 has a crescent shaped toe portion 15 of substantial thickness, which is formed integral with a longitudinal tongue of dove-tail section of slightly less thickness than the toe portion 14, a replaceable wooden sole member 17 formed with a corresponding dove-tail slot being adapted to be fitted on the said tongue 16. The heel portion has an arcuate peripheral flange 18 and a dove-tail shaped tongue 19 on to which is fitted a replaceable wooden heel block 20 formed with dove-tail section slot. Slots 14 are provided for fastening straps to the sole support 1.

Figs. 8, 9 and 10 show a modified form of the construction just described in which the dove-tail shaped tongue 19 on the heel portion of the sole support 1 extends transversely instead of longitudinally thereto.

The form of construction shown in Figs. 11 to 14 is similar to that shown in Figs. 5 to 10 but in this case both the sole and the heel portions of the sole support 1 are provided with downwardly extending annular flanges 21 into which the replaceable sole and the heel blocks 22 are adapted to be fitted.

In the form of construction according to Figs. 15 and 16, the front portion of the sole support 21 has a transverse dove-tailed recess 23 into which a replaceable sole block 24 can be inserted whilst the heel portion is provided with a downwardly extending tongue 25 of dove-tail section into which a heel block 26 formed with a dove-tail recess is adapted to be fitted.

Figs. 17 to 20*c* show the forms of construction of a strap suitable for use with the clogs according to the invention. The strap consists of a flat piece of leather, fabric or other material 31 of the shape shown in Fig. 21. The two shorter sides 32 are each formed with a marginal seam 33 of greater thickness than the remainder of the strap. The said seams 33 may be of various shapes in cross-section, as shown in Figs. 18 to 20*c*.

In use, the strap 31 is fitted on the clog by inserting the seams on the sides of the strap in the widened ends 14*a* of the slots 14, the seam when inserted lying against the under surface of the slot.

In the form of construction shown in Figs. 15 and 16 the slot 14 for the strap is formed in a wedge 34, Fig. 21, which is forced between the sole block 24 and the sole support 1 at either side of the latter. The wedge 34 not only serves to hold the strap but increase the frictional engagement of the block 24 in the recess 23.

Whilst the replaceable sole and heel blocks employed with the various forms of construction of the sole support according to the invention are preferably made of wood, this material usually being the cheapest and most readily available, it will be understood that the invention is not so limited as the said blocks may be made from a wide variety of materials such as rubber, synthetic plastic material, metal or the like.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:—

1. A clog wherein a sole support formed of rubber compound or other plastic material, aluminium or other metal, is provided on its under surface with means for applying thereto separate sole and heel blocks to renew the wearing surface of said clog, said blocks being retained in the applied condition on said means by frictional engagement only therewith, and means being provided on said sole support for detachably securing thereto a strap or straps for holding the clog on the foot of the wearer.

2. A clog according to claim 1 wherein the undersurface of said sole support is formed with inclined transverse flanges on the sole and heel portions thereof forming dove-tail shaped recesses into

and inverted plan respectively a fourth form of construction according to the invention,

Figs. 17 and 18 show in plan and side elevation respectively a strap for use in securing to the foot of the wearer a clog constructed according to the invention,

Fig. 19 is a section on the line XIX—XIX of Fig. 17,

Figs. 20*a*, 20*b* and 20*c* show details of three forms of seam for a strap,

Fig. 21 shows a wedge for securing a strap to a sole support.

Figs. 1, 2 and 3 show a form of construction in which a sole support 1 is provided with a longitudinal reinforcing flange 6, whilst two inclined flanges 7 and 8 extend transversely across the sole support so as to constitute a dove-tail shaped recess into which can be inserted correspondingly shaped replaceable wooden sole members 9. The heel portion is formed with an annular flange 10 into which fits a replaceable cylindrical heel block 11 of wood. Longitudinal reinforcing ribs 12 and 13 are provided to support the transverse flanges 7 and 8.

Slots 14 are provided for retaining a strap for securing the clog to the foot of the wearer.

In the form of construction according to Figs. 4 to 7 the sole support 1 has a crescent shaped toe portion 15 of substantial thickness, which is formed integral with a longitudinal tongue of dove-tail section of slightly less thickness than the toe portion 14, a replaceable wooden sole member 17 formed with a corresponding dove-tail slot being adapted to be fitted on the said tongue 16. The heel portion has an arcuate peripheral flange 18 and a dove-tail shaped tongue 19 on to which is fitted a replaceable wooden heel block 20 formed with dove-tail section slot. Slots 14 are provided for fastening straps to the sole support 1.

Figs. 8, 9 and 10 show a modified form of the construction just described in which the dove-tail shaped tongue 19 on the heel portion of the sole support 1 extends transversely instead of longitudinally thereto.

The form of construction shown in Figs. 11 to 14 is similar to that shown in Figs. 5 to 10 but in this case both the sole and the heel portions of the sole support 1 are provided with downwardly extending annular flanges 21 into which the replaceable sole and the heel blocks 22 are adapted to be fitted.

In the form of construction according to Figs. 15 and 16, the front portion of the sole support 21 has a transverse dove-tailed recess 23 into which a replaceable sole block 24 can be inserted whilst the heel portion is provided with a downwardly extending tongue 25 of dove-tail section into which a heel block 26 formed with a dove-tail recess is adapted to be fitted.

Figs. 17 to 20*c* show the forms of construction of a strap suitable for use with the clogs according to the invention. The strap consists of a flat piece of leather, fabric or other material 31 of the shape shown in Fig. 21. The two shorter sides 32 are each formed with a marginal seam 33 of greater thickness than the remainder of the strap. The said seams 33 may be of various shapes in cross-section, as shown in Figs. 18 to 20*c*.

In use, the strap 31 is fitted on the clog by inserting the seams on the sides of the strap in the widened ends 14*a* of the slots 14, the seam when inserted lying against the under surface of the slot.

In the form of construction shown in Figs. 15 and 16 the slot 14 for the strap is formed in a wedge 34, Fig. 21, which is forced between the sole block 24 and the sole support 1 at either side of the latter. The wedge 34 not only serves to hold the strap but increase the frictional engagement of the block 24 in the recess 23.

Whilst the replaceable sole and heel blocks employed with the various forms of construction of the sole support according to the invention are preferably made of wood, this material usually being the cheapest and most readily available, it will be understood that the invention is not so limited as the said blocks may be made from a wide variety of materials such as rubber, synthetic plastic material, metal or the like.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:—

1. A clog wherein a sole support formed of rubber compound or other plastic material, aluminium or other metal, is provided on its under surface with means for applying thereto separate sole and heel blocks to renew the wearing surface of said clog, said blocks being retained in the applied condition on said means by frictional engagement only therewith, and means being provided on said sole support for detachably securing thereto a strap or straps for holding the clog on the foot of the wearer.

2. A clog according to claim 1 wherein the undersurface of said sole support is formed with inclined transverse flanges on the sole and heel portions thereof forming dove-tail shaped recesses into

which correspondingly shaped renewable sole and heel blocks are adapted to be fitted.

3. A clog according to claim 2 wherein the recess for the heel block extends longitudinally of the sole support.

4. A clog according to claim 1 wherein the under surface of the sole support is provided at the front and heel portions thereof with downwardly extending annular flanges into which renewable sole and heel blocks are adapted to be fitted.

5. A clog according to claim 2 wherein the heel recess for a renewable heel block is formed by a downwardly extending annular flange on the heel portion of the said sole support.

6. A clog according to claim 2 wherein the dove-tail shaped recess for a sole block extends longitudinally of said sole support.

7. A clog according to claim 1 wherein the under surface of said sole support is formed with inclined longitudinal flanges on the sole and heel portions thereof forming dove-tail shaped recesses into which correspondingly shaped renewable sole and heel blocks are adapted to be fitted.

8. A clog according to claim 1 wherein the under surface of said sole support is formed with downwardly projecting tongues of dove-tail section on the sole and heel portions of said support, either or both of said tongues extending longitudinally or transversely of said sole support and being adapted for engagement in correspondingly shaped recesses in renewable sole and heel blocks.

9. A clog according to any of claims 1 to 8 wherein a longitudinal reinforcing rib or ribs is or are provided on the under side of said sole support.

10. A clog according to any of claims 1 to 9 wherein the front portion of said sole support is of greater thickness than the remainder thereof.

11. A clog according to any of claims 1 to 10 wherein slots are provided on either side of said sole support for securing the ends of a foot strap thereto.

12. A clog according to claim 1 and 11 wherein said foot strap is formed at opposite sides with a thickened seam adapted to engage in the under side of said slots and secure said strap to said sole support, the ends of said slots being widened to permit introduction of said strap therein.

13. A sole support for a clog, constructed and arranged as described herein with reference to any of Figs. 1 to 16 of the accompanying drawings.

14. Renewable sole and heel blocks, adapted to be fitted on to a sole support according to claim 13, constructed and arranged as described herein with reference to any of Figs. 4, 10, 13, 15 of the accompanying drawings.

15. A clog constructed and arranged as described herein with reference to any of Figs. 1 to 21 of the accompanying drawings.

Dated this 8th day of January, 1948.

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