



US 20060059712A1

(19) **United States**

(12) **Patent Application Publication**

Asham

(10) **Pub. No.: US 2006/0059712 A1**

(43) **Pub. Date: Mar. 23, 2006**

(54) **HYGIENIC SANDAL**

(52) **U.S. Cl. 36/11.5**

(76) **Inventor: Arnold Asham, Winnipeg (CA)**

Correspondence Address:
ADE & COMPANY INC.
P.O. BOX 28006 1795 HENDERSON
HIGHWAY
WINNIPEG, MB R2G1P0 (CA)

(57) **ABSTRACT**

(21) **Appl. No.: 11/200,231**

(22) **Filed: Aug. 10, 2005**

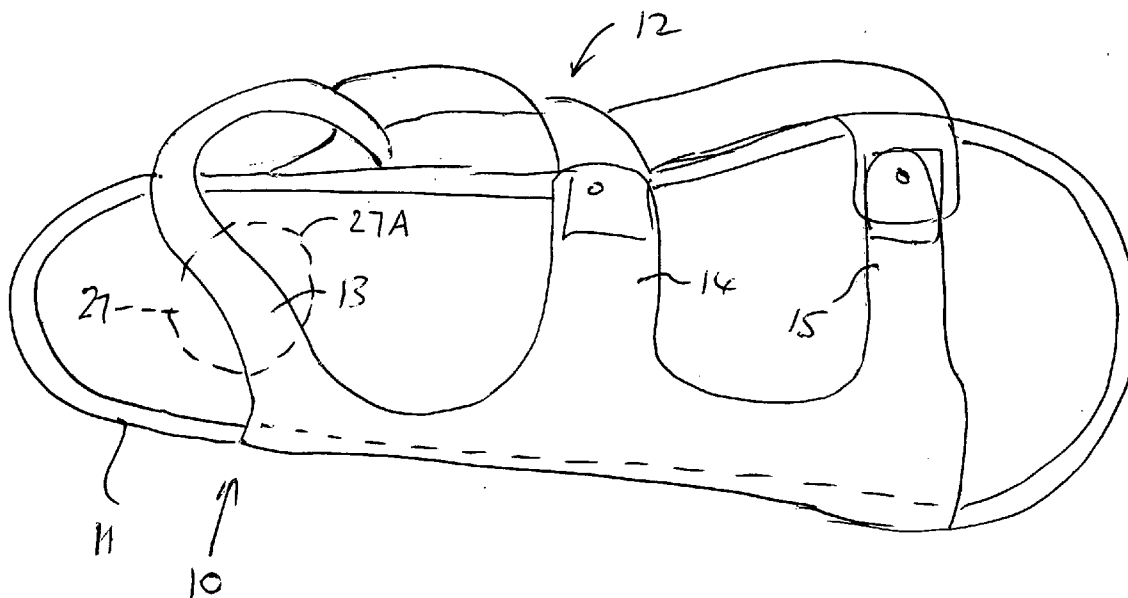
Related U.S. Application Data

(60) **Provisional application No. 60/601,113, filed on Aug. 13, 2004.**

Publication Classification

(51) **Int. Cl.**
A43B 3/12 (2006.01)

A sandal is formed of a main shoe sole with one or more straps for engaging over the foot of the wearer and has an upstanding edge rim defining a shallow receptacle in the upper surface of the main shoe sole. An inner sole portion of flat foam is shaped to match the receptacle as an insert therein and has sufficient stiffness to remain flat in the receptacle without attachment of the inner sole portion to the main sole portion. A flexible fabric sock is wrapped around the inner sole portion so as to cover the upper surface thereof and to wrap around a peripheral edge thereof with an opening in the sock on the underside of the inner sole portion allowing the sock to be removed from the inner sole portion for washing and for replacement after washing.



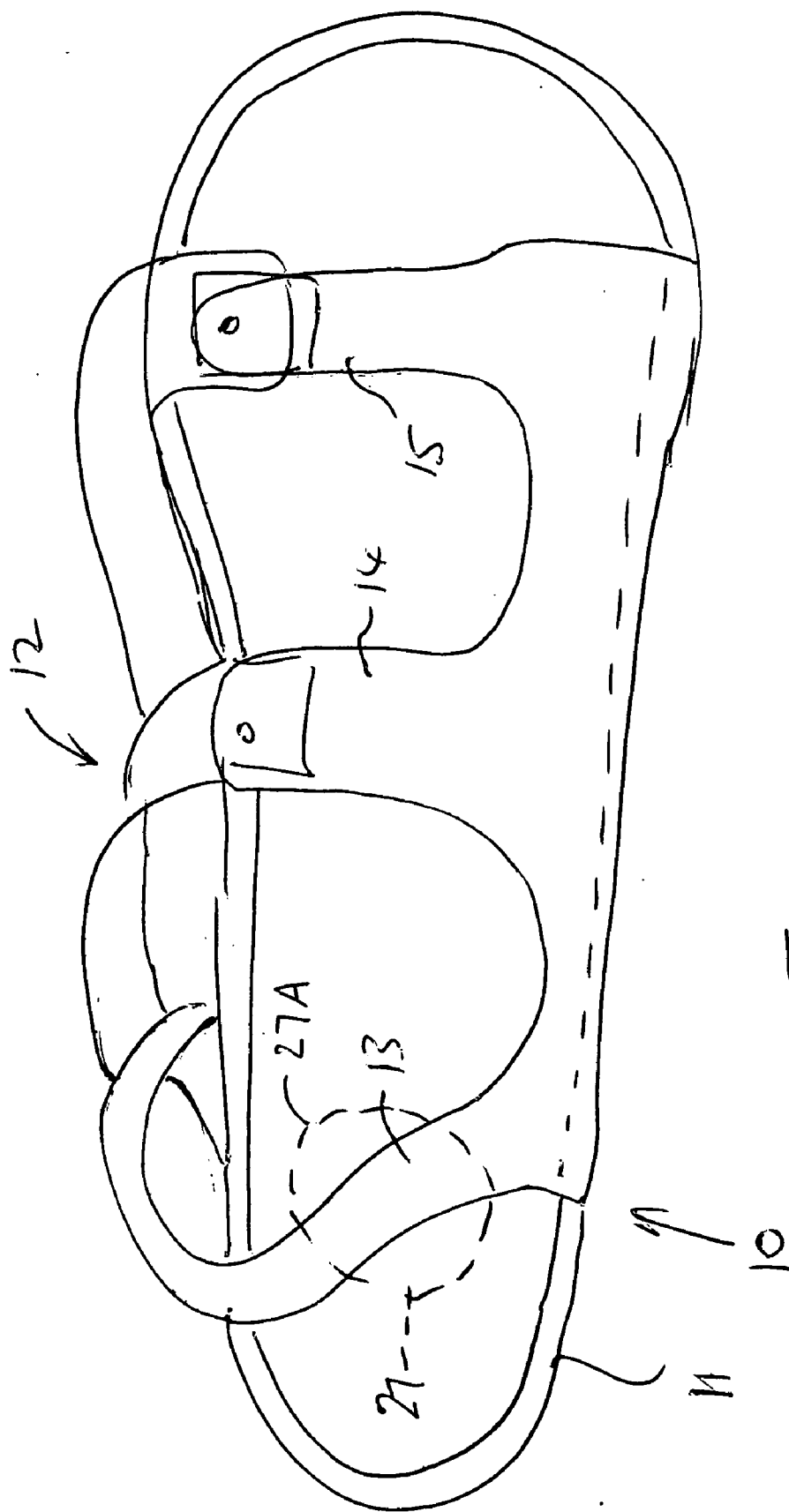
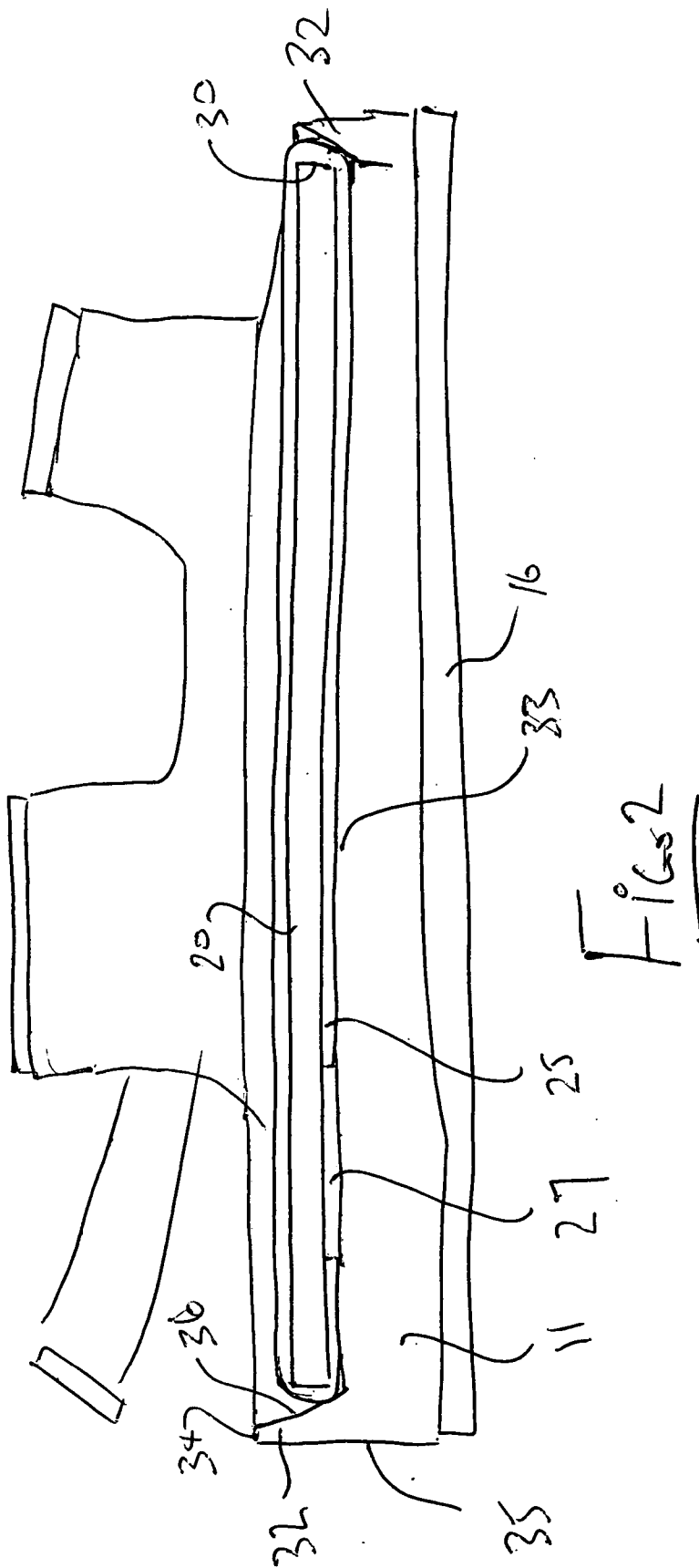
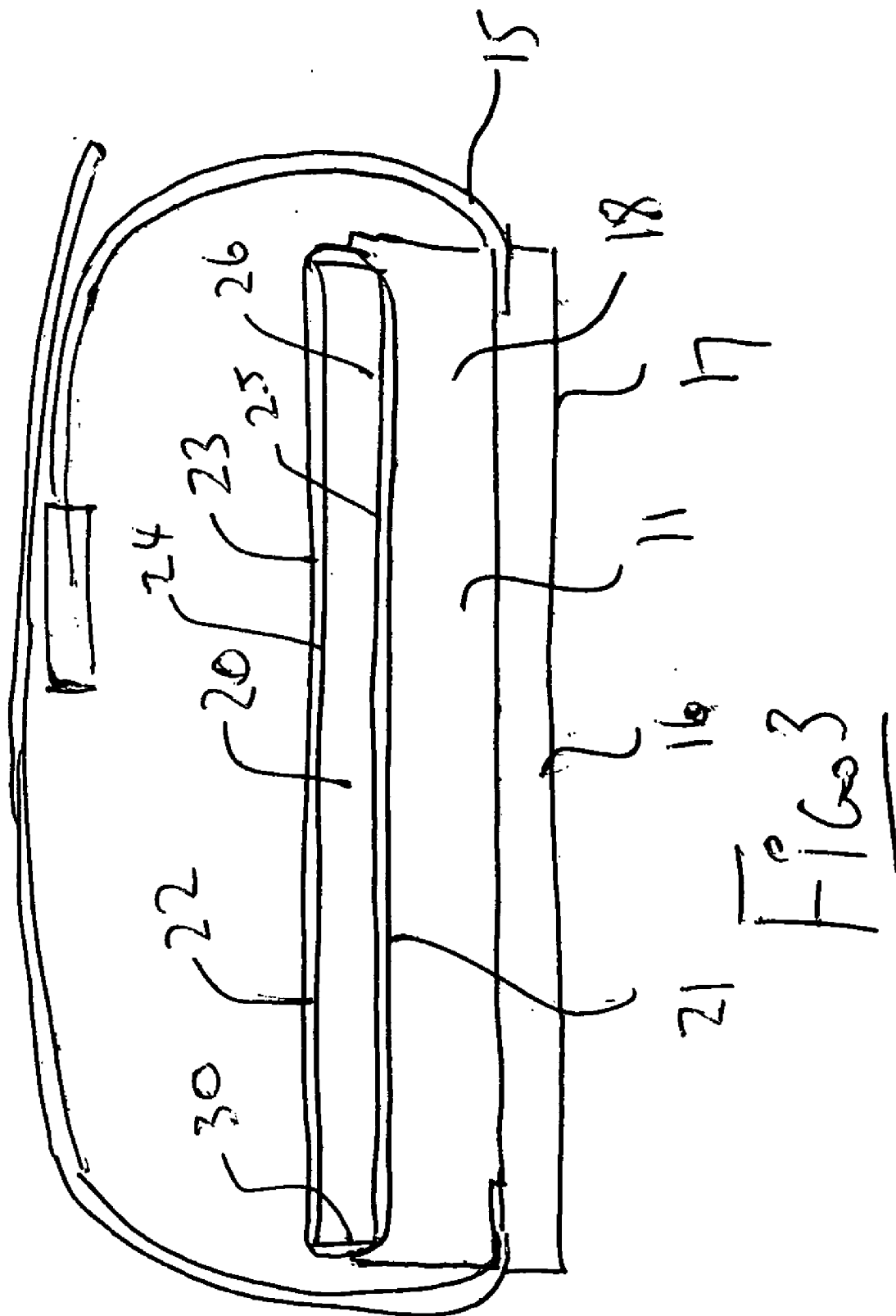


FIG. 1





HYGIENIC SANDAL

[0001] This application claims the benefit under 35USC119 of the filing date of Provisional Application Ser. No. 60/601113 filed Aug. 13, 2004.

[0002] This invention relates to a sandal construction which includes a washable sock for improved hygiene.

BACKGROUND OF THE INVENTION

[0003] Maintaining footwear hygienic and odour free is an ongoing problem for many persons which has led to the development of many powders and shoe inserts which absorb moisture to maintain the footwear dry and to reduce or prevent the growth of bacteria which often produce odour. This is a common requirement in athletic footwear and many constructions are being provided.

[0004] In regard to sandals, despite the fact that the foot is usually open to the atmosphere, extended wear of sandals can lead to collection of moisture and bacteria on the construction of the sandal which leads to the growth of odour forming bacteria. This has remained an ongoing problem despite the fact that the open construction of the sandal should avoid such problems due to the ability of the structure to dry in the open air.

[0005] This is particularly prevalent when the wearer is not wearing socks which can be of course readily removed and washed.

[0006] One particular advantage of sandals type footwear is that the foot is open so that socks are often undesirable.

[0007] One construction of footwear is shown in U.S. Pat. No. 6,430,845 (NODA) issued Aug. 13, 2002 which relates to an indoor slipper primarily designed for Japanese cultural use which includes an inner slipper section and an outer slipper section where one wraps over the other. This does not however relate to sandals so it provides no solution to the ongoing hygienic problem with sandals.

SUMMARY OF THE INVENTION

[0008] It is one object of the invention to provide an improved sandal which may alleviate the hygiene problems prevalent with such footwear.

[0009] According to one aspect of the invention there is provided a sandal comprising:

[0010] a main shoe sole shaped to receive the foot of a wearer thereon and having an upper surface and a ground engaging bottom surface;

[0011] a shoe upper formed of one or more straps for engaging over the foot of the wearer, the or each of the straps being attached to the main shoe sole to hold the main shoe sole in place on the foot, leaving open areas between the straps for exposure of the foot of the wearer;

[0012] the main shoe sole having an upstanding edge rim defining a shallow receptacle in the upper surface of the main shoe sole;

[0013] an inner sole portion having an upper surface and a lower surface and a peripheral edge which shaped to match the receptacle as an insert therein and to underlie the foot of the wearer so that the foot contacts primarily the upper surface of the inner sole portion;

[0014] the inner sole portion being formed of a flat layer which has sufficient stiffness to remain flat in the receptacle without attachment of the inner sole portion to the main sole portion;

[0015] and a flexible fabric sock wrapped around the inner sole portion so as to cover the upper surface thereof and to wrap around a peripheral edge thereof with an opening in the sock on the underside of the inner sole portion allowing the sock to be removed from the inner sole portion for washing and for replacement after washing.

[0016] Preferably the inner sole is resilient such as formed of a foamed material.

[0017] Preferably the inner sole portion is of constant thickness so that it can be readily formed by cutting from a sheet of the foamed material.

[0018] Preferably the opening in the sock is elastic so that it is tightened when released to lie wholly on the underside of the inner sole portion.

[0019] Preferably the edge rim extends continuously around the main shoe sole, although it may be restricted to certain areas of the periphery merely to hold the inner sole portion in place against sliding side to side for forward to back.

[0020] Preferably the edge rim has at least parts thereof which are higher than the upper surface of the inner sole portion so as to properly hold the inner sole portion in place within the receptacle.

BRIEF DESCRIPTION OF THE DRAWINGS

[0021] One embodiment of the invention will now be described in conjunction with the accompanying drawings in which:

[0022] **FIG. 1** is a top plan view of a sandal according to present invention.

[0023] **FIG. 2** is a longitudinal cross sectional view of the sandal of **FIG. 1**.

[0024] **FIG. 3** is a transverse cross sectional view of the sandal of **FIG. 1**.

[0025] In the drawings like characters of reference indicate corresponding parts in the different figures.

DETAILED DESCRIPTION

[0026] In the figures it is shown a sandal construction generally indicated at **10** including a main shoe sole **11** which carries an upper **12** in the following party of straps **13**, **14** and **15** which are attached to the main shoe sole and extend over the sole for attachment to the foot of the wearer.

[0027] In example shown there are three straps including a heel strap and two straps to extend over the arch and the toe area of the foot respectively however it would be appreciated that this design of sandal can be used in the present invention which may include only a single strap over the toe area or may include more than the single strap as required by the wearer.

[0028] The main shoe sole **11** includes a sole plate **16** with a bottom surface **17** for engaging the ground. The main sole includes the upper section **18** attached to the sole plate **16** so

that the straps can be located between the sole plate and the main body 18 by suitable adhesives or other fastening which hold the strap in place.

[0029] An innersole portion 20 is located on the top surface 21 of the main shoe sole. The inner sole portion is formed by a flat sheet of a foamed material so as to provide a constant thickness across its length and width and to provide some resilience under the foot of the wearer. Around the flat resilient sheet forming the inner sole portion is wrapped a sock 22 of a washable fabric. Thus the sock 22 provides an upper layer 23 on the top surface 24 of the inner sole portion and a bottom layer 25 below the bottom surface 26 of the inner sole portion. The bottom layer 25 has a hole or opening 27 located wholly underneath the inner sole portion 20 and dimensioned so that it is contained on the underside of the inner sole portion. An elastic band 27A is provided around the hole or opening 27 either by the provision of an additional elastic element or simply by the elastic nature of the fabric itself which allows the opening 27 to be stretched to extract the sock from over the exterior of the inner sole portion.

[0030] The inner sole portion 20 is shaped to define a peripheral edge 30 which matches substantially the shape of the outer sole 11. The outer sole 11 as best shown in FIG. 2 is formed with a peripheral rib 32 which surrounds a receptacle 33 which is recessed from a top edge 34 of the rib 32. The receptacle 33 is a flat bottom surface defining an upper surface of the main shoe sole. The rib 32 is shaped so that it coincides with the outside surface 35 of the main body 18 and on the inside is chambered or inclined as indicated at 36 so that the width of the rib increase slightly towards the base of the receptacle 33. The peripheral edge 30 of the inner sole portion 20 is shaped to fit against the incline surface 36 so that it is prevented from moving side to side or forward to back within the receptacle. The selection of the foam forming the inner sole portion is such that it is relatively stiff so it cannot buckle or crease under forward and backward or side to side forces from the foot of the wearer. Thus the tendencies for the inner sole portion to remain flat and it cannot slide over the main sole due to the raised rib around the full periphery of the sole and it cannot buckle due to its own stiffness. However otherwise it remains unattached to the main sole and this can be readily removed simply by lifting the inner sole portion out of the receptacle 33 so that the washable sock can be readily removed and readily replaced by a clean sock.

[0031] The use of the washable sock over the inner sole portion allows the sock to be washed regularly to remove any collections of bacteria or moisture. Thus the inner sole can be kept free from odour forming bacteria without the necessity of the wearer covering the whole of the foot with a the sock since the sock is instead carried on the inner sole portion.

[0032] Since various modifications can be made in my invention as herein above described, and many apparently widely different embodiments of same made within the spirit and scope of the claims without department from such spirit and scope, it is intended that all matter contained in the accompanying specification shall be interpreted as illustrative only and not in a limiting sense.

1. A sandal comprising:

a main shoe sole shaped to receive the foot of a wearer thereon and having an upper surface and a ground engaging bottom surface;

a shoe upper formed of one or more straps for engaging over the foot of the wearer, the or each of the straps being attached to the main shoe sole to hold the main shoe sole in place on the foot, leaving open areas between the straps for exposure of the foot of the wearer;

the main shoe sole having an upstanding edge rim defining a shallow receptacle in the upper surface of the main shoe sole;

an inner sole portion having an upper surface and a lower surface and a peripheral edge which shaped to match the receptacle as an insert therein and to underlie the foot of the wearer so that the foot contacts primarily the upper surface of the inner sole portion;

the inner sole portion being formed of a flat layer which has sufficient stiffness to remain flat in the receptacle without attachment of the inner sole portion to the main sole portion;

and a flexible fabric sock wrapped around the inner sole portion so as to cover the upper surface thereof and to wrap around a peripheral edge thereof with an opening in the sock on the underside of the inner sole portion allowing the sock to be removed from the inner sole portion for washing and for replacement after washing.

2. The sandal according to claim 1 wherein the inner sole is resilient.

3. The sandal according to claim 1 wherein the inner sole portion is formed of a foamed material.

4. The sandal according to claim 1 wherein the inner sole portion is of constant thickness.

5. The sandal according to claim 1 wherein the opening in the sock is elastic so that it is tightened when released to lie wholly on the underside of the inner sole portion.

6. The sandal according to claim 1 wherein the edge rim extends continuously around the main shoe sole.

7. The sandal according to claim 1 wherein the edge rim has at least parts thereof which are higher than the upper surface of the inner sole portion.

* * * * *