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ARTICLES THAT ARE USEFUL FOR TREATING FEET

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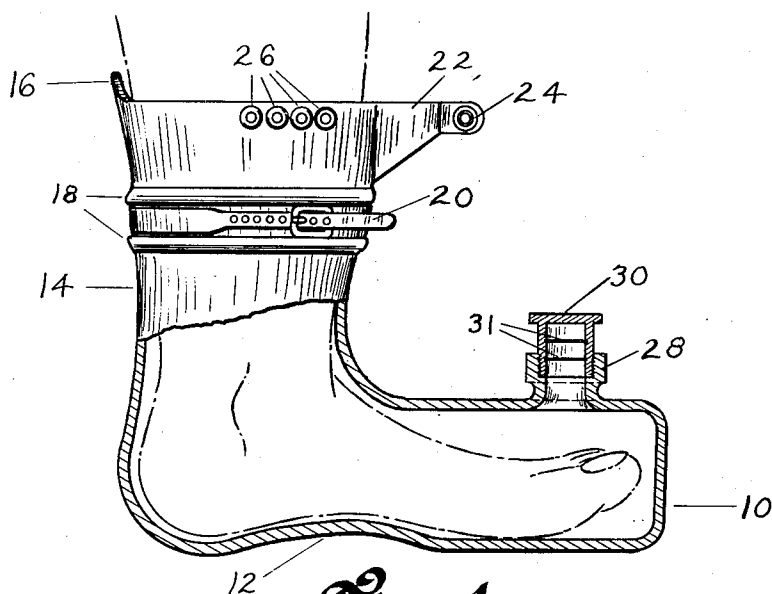


Fig. 1

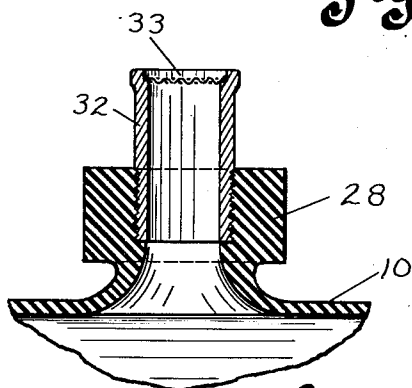


Fig. 2

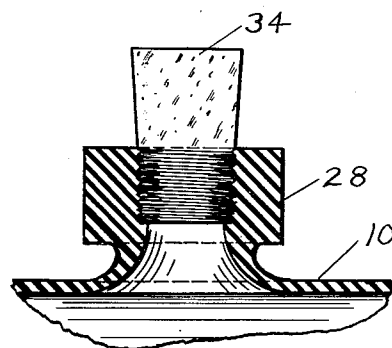


Fig. 3

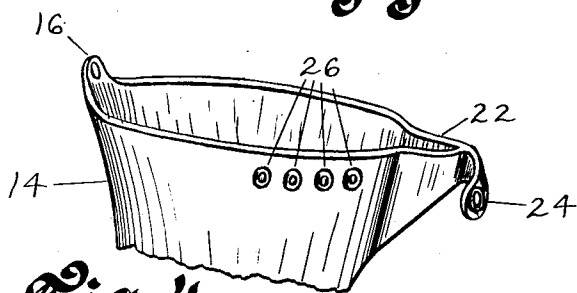


Fig. 4

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ARTICLE THAT IS USEFUL FOR
TREATING FEET

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2 Claims. (Cl. 128-260)

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This invention relates to improvements in articles that are useful for treating feet. More particularly this invention relates to an improved boot that can be used in the treatment of sore or tired feet.

It is therefore an object of the present invention to provide an improved boot that can be used in treating sore or tired feet.

In the treatment of sore or tired feet, it is oftentimes desirable to soak or bathe the feet in medicated or other solutions, the bathing or soaking of the feet acting to soften the skin of the feet and to ease the aches and pains in the feet. It is quite customary to use tubs or basins to confine the solutions and to receive the feet, but the use of such tubs or basins is not free from objections. For example, the tubs or basins force the user to accept immobility during the time the feet are being treated. In addition, the tubs or basins permit drafts of air to strike those portions of the feet or legs which, while not intended to be immersed in the solution, become wet during the bathing or soaking; and those drafts on those portions of the feet or legs can cause colds. Moreover, tubs or basins are not always readily available, particularly where the person desiring treatment is away from home or is in a rooming house or hotel. For these and other reasons the use of tubs or basins in the treatment of feet is objectionable. The present invention obviates these objections by providing a boot which confines the solution around the user's foot, and thus permits the user to walk about and to be free of drafts while the foot is being treated. It is therefore an object of the present invention to provide a boot which confines quantities of solution around the user's foot.

Where basins or tubs are used to treat feet, the volume of solution required is quite large and thus the quantity of medicine or other solute can be quite high. Where the cost of the medicine or other solute is sizable, the excess quantities of medicine or other solute required with the tubs or basins needlessly increases the cost of treatment of the feet. The present invention minimizes the amount of medicine or other solute by confining the solution around the foot. It is therefore an object of the present invention to provide a boot which closely confines the solution around the user's foot and thus reduces the quantity of medicine or other solute required for the treatment of the user's foot.

Prior methods of treating the feet by immersing them in solutions held in tubs or basins required the person to be immobile during the

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treatment. The present invention obviates such immobility by making the boot of stout enough material to make it possible for the wearer to walk around. Moreover the boot has a closure at the top thereof which confines the solution against escape, thus enabling the user to move about freely. It is therefore an object of the present invention to provide a boot which is of stout material and which has a closure at the top thereof.

Articles which are intended to receive medicines must be capable of being cleaned and being rendered completely sanitary. To facilitate such cleaning and sanitizing, the boot of the present invention is provided with an opening adjacent the front thereof, which opening is closed by a removable cover. When the boot is to be cleaned and sanitized, the cover can be removed, water or other solvent can be passed through the interior of the boot, and then air can be passed into or through the boot to dry the solvent and sweep out any residual odors. In this way, the boot can be kept thoroughly clean. It is therefore an object of the present invention to provide a boot with an opening adjacent the front thereof and a removable cover for said opening.

The opening adjacent the front of the boot serves an additional purpose, in that it permits the medicine or other solute to be introduced directly into the solvent within the boot. Where medicine or other solute has to be poured into the top of the boot, the medicine or other solute may stick or otherwise adhere to the inner surface of the boot, and thus be brought into contact, in its undiluted form, with the leg of the user. Depending on the nature and strength of the medicine or other solute, a rash or other surface effect may appear on the skin of the user's leg. All of this is avoided where the medicine or other solute is introduced through the opening adjacent the front of the boot since the medicine or other solute will immediately strike the solvent within the boot and be dissolved. It is therefore an object of the present invention to provide a boot with an opening adjacent the front thereof to facilitate introduction of medicine or other solute.

Other and further objects and advantages of the present invention should become apparent from an examination of the drawing and accompanying description.

In the drawing and accompanying description a preferred embodiment of the present invention is shown and described but it is to be understood that the drawing and accompanying description

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are for the purposes of illustration only and do not limit the invention and that the invention will be defined by the appended claims.

In the drawing, Fig. 1 is a partially sectioned, side elevational view of a boot that is made in accordance with the principles and teachings of the present invention,

Fig. 2 is an enlarged, cross sectional view of a modified form of removable cover for the opening adjacent the front of the boot in Fig. 1,

Fig. 3 is an enlarged, cross sectional view of another modified form of removable cover for the opening adjacent the front of the boot in Fig. 1, and

Fig. 4 is a perspective view of the top of the boot shown in Fig. 1.

Referring to the drawing in detail, the numeral 10 denotes the foot-encasing portion of a boot which is made in accordance with the principles and teachings of the present invention. That boot is preferably made of a stout material which is stiff enough to retain its form but is pliable enough to be worn without discomfort. One such material is rubber, another is artificial rubber, and still another is the group of relatively stiff "plastic" materials used for confining liquids. The foot-encasing portion 10 of the boot is preferably made appreciably larger than the foot of the user; and it is preferably made without seams through which liquids can pass. The front portion of the foot-encasing portion 10 is high enough so the toes of the user will not under ordinary circumstances touch the under surface of the top of the foot-encasing portion 10. This arrangement provides free movement of the toes and front portion of the user's feet without any necessity of contact with the interior of the boot. The bottom of the foot-encasing portion 10 of the boot has a curved section 12 which rises upwardly and fits under the arch of the user's foot, thus tending to give support to the user's arch.

The boot has a leg-encasing portion 14 which is disposed forwardly of the rear edge of the foot-encasing portion; and the portion 14 fits the leg rather closely. Such an arrangement enables the foot itself to remain out of contact with the front, sides and rear of the foot-encasing portion 10, and yet avoids shifting of the foot-encasing portion 10 relative to the user's foot. Consequently, stubbing of the toes and chafing of the feet are both avoided. The leg-encasing portion 14 will tend to fit rather closely around the user's leg; and in doing so, it centers the foot-encasing portion 10 relative to the user's foot and enables liquids, confined within the foot-encasing portion 10, to contact the front, sides, rear, and top of the user's foot.

The leg-encasing portion 14 is provided with a perforated projection 16 at the top rear thereof; and the perforation in this projection facilitates hanging of the boot when it is not in use, and it also facilitates hanging of the boot when it is used as a syringe for distributing fluid under pressure. For the latter purpose, a suitable tube, not shown, can be connected to the opening, defined by interiorly threaded projection 28, at the front of the boot, and can be used to conduct and direct fluid that flows from the opening.

The leg-encasing portion 14 is provided with two rings 18, which rings are preferably formed integrally with the boot. The rings 18 are spaced apart a distance sufficient to accommodate a narrow, adjustable strap 20. This strap has a

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buckle, and it has openings in the free end thereof which receive the tongue of the buckle. The rings 18 confine the strap 20 against shifting upwardly and downwardly, and the strap 20 can be pulled tight to maintain a liquid-tight connection between the leg-encasing portions 14 and the user's leg. If the strap 20 is misplaced or lost, a short length of twine, a shoe string, or other fastener could be substituted for the strap 20; and in each instance the rings 18 will maintain the fastener in position against vertical displacement.

The leg-encasing portion 14 of the boot is provided with a V-shaped pouring fold 22 at the forward upper edge thereof. This V-shaped pouring fold can be used for the introduction of solvent or solute into the boot, and it can also be used for pouring the contents out of the boot. When the pouring fold 22 is to be used, it is extended forwardly as shown in Figs. 1 and 4; and in such position the fold 22 forms a natural opening into which the solute and solvent can easily be introduced. When the fold 22 is not to be used, the two edges of the fold are first pressed together, and then they are folded against that side of the leg-encasing portion 14 which carries the male snap fasteners 26. These snap fasteners receive and tightly hold the female snap fastener 24 which is supported on an extension of the V-shaped pouring fold 22. The four male snap fasteners 26 are aligned but are spaced slightly apart so securement of the female snap fastener 24 to one of the male snap fasteners 26 can provide the desired adjustment of the opening at the top of the boot.

It will be noted that the plurality of male snap fasteners 26 make it possible to attain a close fit between the top of the leg-encasing portion 14 and the user's leg, and that the strap 20 makes it possible to attain a close fit between the intermediate section of the leg-encasing portion 14 and the user's leg. This enables the boot to provide firm securement of the leg-encasing portion 14 to the user's leg at two spaced joints, thus holding the user's foot centered in the foot-encasing portion 10 while avoiding chafing of the leg or foot.

Adjacent the front of the foot-encasing portion 10 of the boot, an interiorly threaded projection 28 is provided. This projection surrounds an opening which communicates directly with the foot-encasing portion 10 of the boot. The interior threads of the projection 28 can selectively receive removable cover 30, removable cover 32, or removable cover 34. The removable cover 30 is hollow, and it has rings 31 on the interior thereof, which rings can be used as measuring rings to indicate the volume of medicine or solute to be introduced into the solvent within the boot. Medicine or other solute can be poured into the cover 30 and then poured into the boot. The cover 30 is provided with external threads, and those threads make it possible to releasably secure the removable cover 30 to the projection 28. When so secured, the removable cover 30 will serve to confine liquid contents within the boot.

The removable cover 32 is hollow and has a screen 33 as the top thereof. The threads on the exterior of cover 32 facilitate its securement to projection 28. The screen 33 permits the boot to be worn while the user is swimming or wading; and this can be helpful if it is desirable for the user to treat his foot with salt or fresh water while on his vacation. The screen 33 will permit water to pass freely into and out of the boot and

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will thus avoid the unnatural buoyancy a sealed boot would give to the user's foot. When equipped with the cover 32, the boot of the present invention can be used by swimmers and waders whose feet are not sore or tired but who are fearful of sting rays, nettles, snakes, saw grass, or sea weed.

The closure 34 is in the form of an imperforate plug; and it can be threaded for threading into projection 28, or it can be forced into the threads of that projection. One material of which the cover 34 can readily be made is cork; an ordinary cork stopper being usable for the purpose. Such a cover, like cover 30, is removable to permit insertion of the medicine or other solute into the boot and is replaceable to confine the resulting solution around the foot.

It will be noted that while the space around the user's foot is ample to permit free and unrestricted movement of the foot, the actual volume of solution within the foot-encasing portion 10 of the boot is quite small. This of course, is highly desirable because it reduces to the very minimum the amount of medicine or other solute which must be added to the solvent. With this arrangement, the foot is in direct and immediate contact with the solution, the solution is continually held in contact with the foot even though the user moves about, and the amount of medicine or solute required is small. In these respects the boot is far superior to articles which hold a quantity of liquid adjacent the user's foot but do not permit direct contact between the user's foot and the liquid.

Any medicine, solute, or solvent can be introduced into the boot through the pouring fold 22 or through the threaded projection 28. The solvent, solute, and medicine are preferably introduced into the boot through the threaded projection 28 since such introduction permits the medicine or solute to pass directly into the solvent and thus be quickly diluted. If the medicine or solute had to be introduced through the leg-encasing portion 14, some of the undiluted medicine or solute might adhere to the interior of such portion and thus be brought into direct contact with the skin of the user's leg.

The threaded projection 28 at the front of the boot permits water or other solvents to be passed continuously through the boot for flushing the foot. If the passage of quantities of fresh water past the user's foot were deemed desirable, the user could remove the cover for projection 28, and introduce water through pouring fold 22, either by a hose or by a pitcher. In addition, the opening at the front of the boot permits the passage of water or other solvents through the boot to clean and sanitize it, and further permits the introduction of air into the boot for purposes of

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drying same or removing any residual odors caused by the medicine or solute.

Many different kinds of medicines or solutes could be used. For example, soaps of various kinds could be used, mild acids could be used, and various salts could be used. In each instance the boot will confine solvent, solute and medicine in intimate contact with the user's foot.

In addition, the boot is usable in instances where the foot is bandaged or is treated with salves or other medicines. In such instances the cover 30 does not keep liquids in, but instead keeps dirt and contamination out. The cover 32 is also usable in such instances to permit ready influx and efflux of air into and out of the boot.

The boot is quite versatile since it permits the user to walk around while receiving beneficial treatment for his foot, and it can also be used in swimming or wading to protect the foot of the user from unpleasant contact with vegetable or animal matter. In addition the boot can be used equally well to apply medicaments or to protect medicaments already applied.

Whereas a preferred embodiment of the present invention has been shown and described in the drawing and accompanying description it should be apparent to those skilled in the art that various changes may be made in the form of the invention without affecting the scope thereof, where such changes fall within the purview of the appended claims.

What I claim is:

1. A boot that has a liquid-tight, foot-encasing portion, a leg-encasing portion, an opening adjacent the front of said boot, and a removable cover for said opening, said cover being a cup.

2. A boot that has a foot-encasing portion, a leg-encasing portion, an opening adjacent the front of said boot, said opening communicating directly with said foot portion, a removable cover for said opening, said cover being a cup with measuring rings therein.

EDWARD BIRKLE.

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