A pedicure protection system is provided that is comprised of an insert worn directly on the foot and a shoe that can be worn with the insert or substituted with other shoes. The insert consists of a base (11) and a cover (10) connected by a hinge (12). The cover curves above the toenails to create a cavity. A separator (18) protrudes from the base between the big toe and second toe and helps maintain the cavity when the cover is closed. The base includes toe straps (15) (16), and a band (20) that lies across the instep stabilizing the insert on the foot and keeping the cover closed. The shoe FIG. 10 opens fully, allowing the user to place their foot on the sole from above or the side and the top closes around the foot.
WEARABLE PEDICURE PROTECTION DEVICE

FIELD OF INVENTION

[0001] This present invention relates to footwear and more particularly to a reusable pedicure protection system, that when worn by the user, prevents damage to painted or treated toenails. One component of the invention that is the insert, can be worn interchangeably in various styles of shoes with the necessary space and shape or the invention can be worn in its entirety, meaning the insert and accompanying shoe.

BACKGROUND OF THE INVENTION

[0002] People frequent manicure and pedicure salons as part of their beauty regimen, often having their nails painted as part of the treatment. After the application of nail polish, some time is typically spent under the nail dryer to ensure that the polish dries. For a pedicure, this reduces the likelihood of smudging or damage due to contact with shoes or other objects. During the warmer months, a person can opt to shorten the time spent at the salon under a dryer by donning open-toed footwear after having their toenails painted or treated. This would allow the polish to air dry. During times of less favorable weather, for example rainy days or colder months of the year in which wearing closed toe and/or warmer footwear is a necessity, persons usually exercise one of the following options: (1) sitting under a nail dryer until the polish is dry, the result of which is wasted time (2) braving cold weather by wearing open-toed shoes, which can generally be uncomfortable (3) wearing closed toe footwear which can possibly smudge the polish and prove costly as frequent touch-ups are needed to fix the affected areas and (4) having their toes wrapped in a 'saran' wrap before putting feet into shoes, which still poses a risk of smudging. For this application the term pedicure refers to any treatment or painting of the toenails.

[0003] Other devices have been proposed to address the challenge of wearing closed toe shoes without smudging painted or treated toenails. Some examples include U.S. Pat. No. 7,296,367 B2 to Kipnes; U.S. Pat. No. 7,134,225 B2 to Ashton; U.S. Pat. No. 7,421,807 B2 to Condie; U.S. Pat. No. 7,681,332 B2 to Allen and U.S. Pat. No. 5,946,823 to Yates. They are all variants of a design concept for a shoe with a removable toe covering which in theory never touches the user’s toes. This structure has certain disadvantages such as:

[0004] (1) Toenail protection comes only with wearing these shoes. The user must therefore commit to buying a pair of these shoes, which can be costly, especially if they need to buy multiple pairs to create more wardrobe options. For example, in the case of U.S. Pat. No. 7,421,807 B2 to Condie, although the structure can be applied to different styles of shoes, the user must buy the pair of shoes

[0005] (2) The style of the shoe may not be suitable for the environment or the weather. The design of U.S. Pat. No. 7,681,332 B2 to Allen would not be appropriate for winter weather as it does not facilitate the wearing of socks and a substantial part of the foot is exposed. This applies also to U.S. Pat. No. 5,946,823 to Yates in which over half of the user’s foot is exposed

[0006] (3) The shoe design may not appeal to a person’s aesthetic taste

SUMMARY—OBJECTS AND ADVANTAGES

[0007] In light of the limitations and disadvantages mentioned in the previous patents:

[0008] (a) It is an object of the present invention to provide a device that protects the user’s toe from touching other surfaces thus protecting damaged or treated toes.

[0009] (b) It is an object of the present invention to provide a pedicure protection system that allows the user to wear shoes shortly after a pedicure without damage to painted or treated toe nails.

[0010] (c) It is an object of the present invention to provide a pedicure protection system that is worn directly on the foot and enables the user to walk about comfortably.

[0011] (d) It is an object of the present invention to provide a pedicure protection system comprised of an insert, which gives the user the flexibility to wear a variety of weather appropriate footwear or no footwear.

[0012] (e) It is an object of the present invention to provide a pedicure protection system that limits movement of the toes thereby preventing contact with a surface when the user is in motion.

[0013] (f) It is an object of the present invention to provide a pedicure protection system that can be easily cleaned.

[0014] (g) It is an object of the present invention to provide a pedicure protection system that can be made in a variety of sizes and out of material that is durable yet comfortable on the skin.

[0015] (h) It is an object of the present invention to provide affordable shoes that can be worn in conjunction with the insert if the shoes currently owned by the user do not have the required space to accommodate the insert.

[0016] (i) It is an object of the present invention to provide a pedicure protection system that is a fraction of the cost of the prior art and more economical for the consumer.

These and other advantages of one or more aspects will become apparent from a consideration of the ensuing description and accompanying drawings.

[0017] In accordance with the present embodiment, the pedicure protection device is composed of an insert that is worn directly on the foot, and a shoe with a toe cavity made to accommodate the insert. The insert is composed of two pieces that may be connected by a hinge. The cover is designed to open and close at the hinge without touching the toenail. Straps that run across the big toe, the second toe and over the instep, anchor the foot to the base and allow the user to walk comfortably. The shape of the cover above the toenails creates a cavity separating the toes from the cover. A protruding separator extends upwards between the big toe and the second toe to support the cover against downward pressures. This helps to maintain the space cavity between the toenail and the cover. The strap across the instep also serves to keep the cover closed. The material used to make the cover and base will be thin due to the limited space in a shoe, but sturdy so that it maintains its shape. As this device is not a part of or attached to a shoe, the user can optionally wear as a shoe insert, or walk around comfortably wearing it without shoes. It can be worn either with regular shoes with the necessary space in the toe cavity, or with the shoes referred to as part of the invention in the beginning of this paragraph.
BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 shows a perspective view of the embodiment when open as made for the right foot
FIG. 2 shows a horizontal view if the embodiment when closed as made for the right foot
FIG. 3 shows a top view of the embodiment when open as worn on the right foot
FIG. 4 shows a top view of the embodiment when closed as worn on the right foot
FIG. 5 shows a horizontal view of the embodiment when worn by a user inside of a shoe
FIG. 6 shows a horizontal of an alternative version if the device with pivotal points on the left and right side of the foot
FIG. 7 shows a top view of an alternative version of the device with the pivotal point on the side of the foot
FIG. 8 shows a top view of an alternative version of the device with another means of keeping the cover closed
FIG. 9 shows a sectional view of the shoe in the closed position
FIG. 10 shows a cross sectional view of the shoe in the open position.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

Described herein is a foot device designed to protect injured, painted or treated toenails from damage or from general contact with other objects. The device is comprised of an insert that can be worn with any type of footwear in which there is available space. Such footwear includes, but is not limited to rain boots, winter boots and sneakers as well as the shoes described herein. FIG. 6, FIG. 7 and FIG. 8 illustrate how different characteristics can be combined to create alternative embodiments of the device. It is also comprised of shoes, which open fully as seen in FIG. 10 unlike most regular footwear.

The embodiment, as illustrated in FIG. 1 is composed of two parts, a cover 10 and a base 11 joined by a pivotal device, which in this embodiment is a hinge 12. In other variations, the cover and base may be joined pivotally in other places; for example on either side of the foot as illustrated in FIG. 6 or on one side of the foot as in FIG. 7. In yet another embodiment, the cover and base may be completely detachable from each other and connected to each other a variety of ways, including but not limited to a matching tongue and groove design along the edges to secure said base to said cover. In this embodiment, each piece spans at most half the length of the foot starting from the toes (the forefront). However, the lengths can also be either shorter or longer with the base extending the entire length of the foot and the cover encasing the top of the foot.

In the cover 10, the area above the toenails is molded in a shape that creates a cavity, FIG. 5, 13, between the nail and the inside surface of the protector when the user is still or in motion. In this embodiment the edge of the cover near the instep is curved 9, however the cover may have other shapes.

In this embodiment, the base 11 has a flat tru flat shape with an edge designed to provide support for the toe and limit forward motion of the foot relative to the device. In other variations of the device, the base may have indentations or recess channels for the toes and/or ball of the foot. In yet another variation, there may be a longer base with an arch support. Attached to the base are two pairs of toe straps 15 and 16. These toe straps are two pieces fastened to each other by an adhesive material 17. In other variations of the device, there may be a strap for only one toe, or straps for a plurality of toes, which can also be structured as a continuous band instead of two pieces fastened together as illustrated in FIG. 6, FIG. 7, and FIG. 8.

A toe separator 18 is located between the big toe and the second toe. The height of the separator may exceed that of each of the user’s toes. In other variations, toe separators can be placed between some or all of the toes or there may be no separators at all. These variations are illustrated in FIG. 6, FIG. 7 and FIG. 8.

In this embodiment, on the left and right edges of the base are two holes 19 through which, passes an elastic band 20, which may be a continuous elastic piece. The elastic band helps to keep the cover closed if the user prefers to have it in this position. The band can be made of material other than elastic and also adjustable. In an alternative embodiment, there may be no elastic band, and the cover may be kept closed through a system of attachments between the cover and base including but not limited to Velcro as shown in FIG. 8. Male and female snaps or matching tongue and groove along the edges. For this embodiment on either side of the cover is a cutout enclosed by two anchoring flaps 14. The band 20 can be placed under the flaps as shown in FIG. 4 to reduce sliding. Other means of anchoring can also be used.

The shoe as seen in FIG. 9 and FIG. 10 is designed with a toe cavity that accommodates the insert. It is structured such that unlike most shoes, the top part fully opens as seen in the embodiment presented in FIG. 10 to allow the foot with attached insert to enter the shoe directly from above or from the side without forward sliding of the foot as in conventional shoes. The top 28 is connected to the bottom by a closure such as a zipper. In other variations, other closure alternatives to zippers can be used, such as Velcro. In this embodiment, the zipper runs along the side of the shoe and around the front 26. In another variation, the zippers may run along either side of the shoe and when opened the top may be connected to the sole at a connective point near the toe. In yet another variation, the top of the shoe may be fully detachable from the rest of the shoe and can be reattached. The shoe will have an outer sole 29, made of a durable and flexible material such as rubber, plastic or other, allowing the shoe to be worn on...
outdoor surfaces, and a soft inner sole 27 made of soft comfortable material. The shoe will be made of a soft durable material that is semi rigid to maintain the shape of the shoe while retaining comfort and flexibility for example neoprene and constructed in varying styles including, but not limited to a low cut shoe that ends just below the ankle as shown in this embodiment or higher cut like a boot. The shoe fits securely on the foot, allowing the user to walk or move comfortably at any pace.

Operation

[0036] In use, this pedicure protection system is provided in pairs, to be worn on the left and right foot. The insert and shoe for each foot is the same except that one side is adapted to fit the right foot, and the other the left foot. Although the following description and illustrations are directed primarily to the right pedicure protection system, it should be understood that the discussion is equally relevant to the left pedicure protection system. The purpose of this embodiment is a protection device, which can be placed on the foot before, during or after the application of nail polish or toe treatment, is a separate entity from a shoe, and can subsequently be worn in a variety of shoes to protect a pedicure smudging or undoing any toe treatment.

[0037] During the pedicure process, the user wears the embodiment as illustrated in FIG. 3. The user slides their foot under the elastic 20 found on the lower end of the base. This elastic stabilizes the embodiment on the user’s foot. The big toe and second are positioned on either side of the separator 18. The adjustable straps 15, 16 are closed around the toes. The adhesive material 17 allows the user to adjust the tightness of the straps. The flat shape of the base, allows for the use of tissue or other materials to separate the toes.

[0038] After nail polish is applied, the user may decide to place their feet under the nail dryer while wearing the embodiment. The hinge 12 or other type of attachment pivotally allows the cover to bend back far enough so that the foot can fit under a dryer unencumbered. The heat resistant plastic allows the user to sit under the dryer without the embodiment getting too hot and burning the skin. When the user decides to put their shoes on, they protect their pedicure by wearing the embodiment as shown in FIG. 4 and then place their foot in their shoe. In the closed position, the cover 10 is secured closed by anchoring the elastic 20 under the anchoring flaps 14.

[0039] FIG. 5 illustrates how the embodiment would be worn in a shoe. Thus the design of this embodiment provides the user with a pedicure protection device that can be worn interchangeably with any shoes and at any point during the treatment.

We claim:

1. Footwear for use during or after a pedicure comprising:
   a) a base and a cover forming a cavity to accommodate a foot;
   b) an anchoring attachment to secure individual toes to said base;
   c) a spacer to maintain separation of the toes;
   d) said cover contains two cutouts located on opposite sides for securing anchoring flaps;
   e) said base contains two holes located on opposite sides for the attachment of an anchoring strap to secure said base to said cover; and
   f) an anchoring attachment to secure said footwear to the foot.

2. The footwear according to claim 1, whereby said cover is pivotally connected to said base by a hinge joint that allows the cover to open fully allowing unencumbered placement of the foot under a dryer.

3. The footwear according to claim 1, whereby the said cover is connected to said base with a matching tongue and groove design along the edges to secure said base to said cover and permit easy attachment and detachment.

4. The footwear according to claim 1, whereby said footwear is used as an insert for shoes and bends and flex to allow comfortable walking and protection of the toes from contact with other surfaces allowing for drying of toenails without smudging or healing of injured toes and having an interchangeability with various shoes at any point during treatment.

5. The footwear according to claim 1, whereby said footwear is used as a standalone device attached to the foot to permit the user to walk comfortably while the toenails are drying and without smudging.

6. The footwear according to claim 1, whereby said base further comprising:
   a) a band attached on two sides of said base through said holes to anchor securely the base and the cover to the foot;
   b) a separator placed between the big toe and adjacent second toe to maintain separation and to provide a structural support for said cover when closed and secured over said base;
   c) toe straps to anchor the toes to said base;
   d) a hinge joint between said base and said cover allowing said cover to open and close fully to permit complete accessibility of the toes for pedicure procedure; and
   e) an edge providing support for the toes and limit forward motion of the foot relative to the device.

7. The footwear according to claim 1, whereby said cover forms a cavity when closed with said base.

8. The footwear according to claim 1, whereby said base further comprising:
   a) a plurality of separators to maintain the separation of the toes; and
   b) a plurality of toe straps to anchor the toes.

9. The footwear according to claim 1, whereby said footwear further comprising:
   a) rigidity to maintain its shape and thin enough to be inserted into shoes;
   b) flexibility so the user can comfortably engage in walking activity;
   c) heat resistance to withstand the use of a dryer for drying the toenails without any skin discomfort; and a contoured curvature of said cover to conform to the curvature of the foot instep.

10. The footwear according to claim 1, whereby the said footwear has a variable length encompassing only the forefoot or any point up to the entire length of the foot.

11. The footwear according to claim 1, whereby said footwear has a layer of cushioning on the inside surfaces to facilitate a comfortable walking stride.

12. The footwear according-to claim 1, whereby said footwear is provided in pairs to accommodate both the left and right foot.

13. Footwear for use during or after a pedicure comprising:
   a) a base and a cover forming a cavity to accommodate a foot;
b) an anchoring attachment to secure individual toes to said base;
c) a spacer to maintain separation of the toes;
d) said cover contains two cutouts located on opposite sides for securing anchoring flaps;
e) said base contains two holes located on opposite sides for the attachment of an anchoring strap to secure said base to said cover; and
f) an anchoring attachment to secure said footwear to the foot.
g) said cover is pivotally connected to said base and said cover fully opens allowing the unencumbered placement of the foot under a dryer.

14. A shoe that can be worn with the insert comprising:
a) an outer sole made of flexible material;
b) an inner soft sole; c) a body made of a soft semi-rigid material for maintaining the shape and allowing for flexibility and comfort; and
d) a detachable top part that is attached to said body or said sole secured with a closure device.

15. The shoe according to claim 14, whereby said closure device is a zipper or adhesive type of material.

16. The shoe according to claim 14, whereby said top part fully opens to allow placement of the foot with attached said insert inside said shoe directly from above or from the side without forward sliding of the foot as in conventional shoes.

17. The shoe according to claim 14, whereby said top part and said closure device causes said shoe to fully secure the foot and said insert to facilitate and maintain various walking strides and speeds.

18. The shoe according to claim 14, whereby said top part is fully removable to expose the foot and said insert.

19. The shoe according to claim 14, whereby said top part is re-attachable to said shoe to secure the foot and said insert.

20. The shoe according to claim 14, whereby said top part is fully removable to expose the foot and said insert and allow the top cover of said insert to be fully opened.