

[54] **FOOT AND ANKLE CAST ENCLOSURE**

[76] Inventor: **Marguerite E. Novotney**, 1626 W. Oregon, Lapeer, Mich. 48446

[22] Filed: **June 7, 1971**

[21] Appl. No.: **150,418**

[52] U.S. Cl. **128/82, 36/50, 128/DIG. 15**

[51] Int. Cl. **A61f 13/00**

[58] Field of Search 128/82, 83.5, DIG. 15;
36/54, 50, 4, 9, 51, 7.1 R, 7.3

[56] **References Cited**

UNITED STATES PATENTS

3,337,770	8/1967	Saraceni et al.	36/7.1 R
2,334,133	11/1943	Shields	36/50
2,278,626	4/1942	Vasko	128/83.5 UX
1,184,013	5/1916	Pierce	36/54
1,980,486	11/1934	King et al.	128/83.5
3,327,410	6/1967	Park et al.	36/50 X

OTHER PUBLICATIONS

"A Walking-Plaster Appliance," D. G. Wright, The Lancet, Nov. 11, 1950, pages 519, 520.

Primary Examiner—Richard A. Gaudet

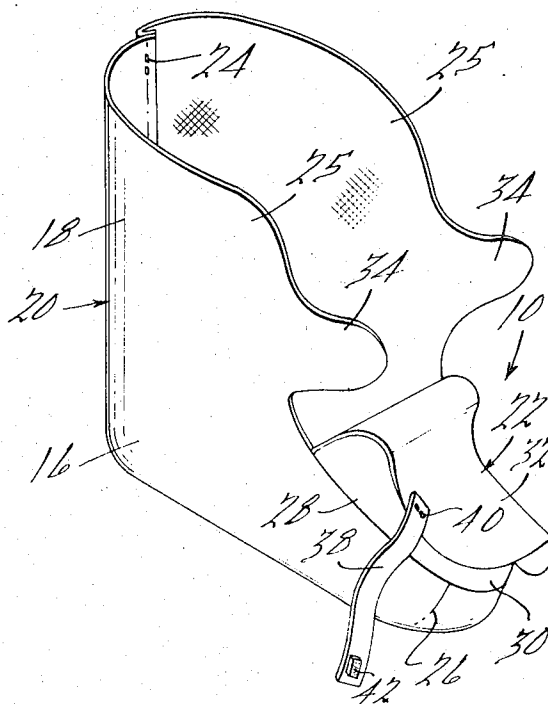
Assistant Examiner—J. Yasko

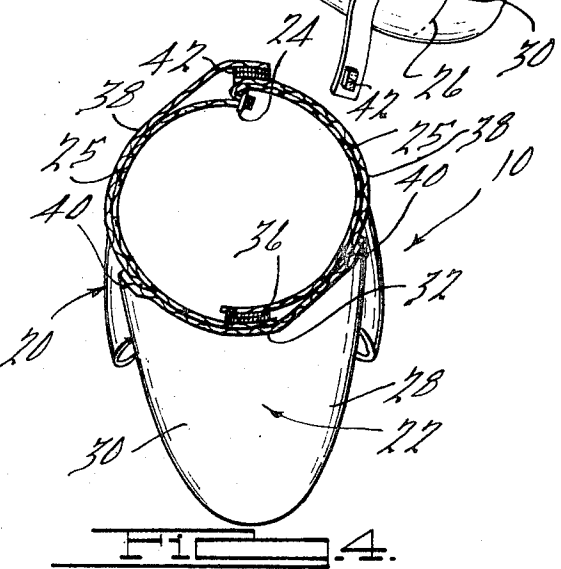
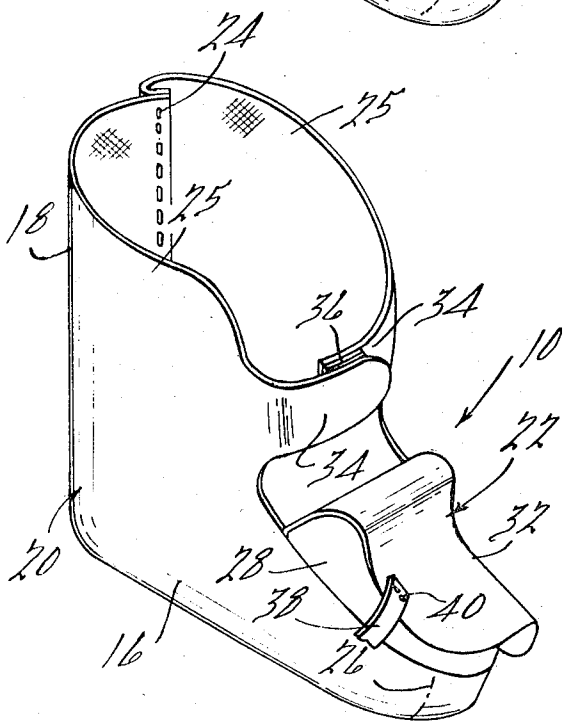
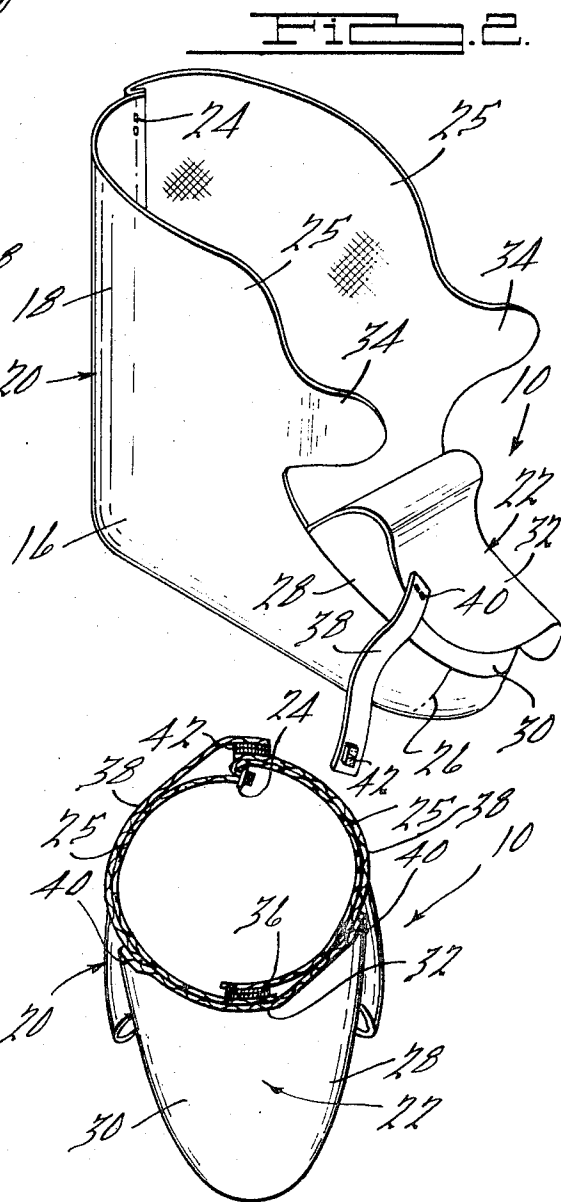
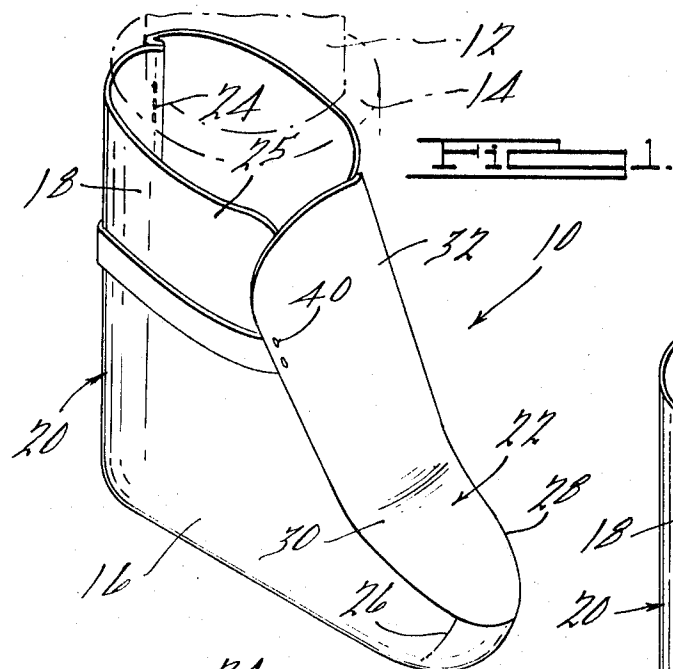
Attorney—Harness, Dickey & Pierce

[57] **ABSTRACT**

A removable protective enclosure for an ankle cast or the like, the enclosure comprising a boot-like portion adapted to removably receive a person's foot and being sufficiently large to accommodate and permit effortless insertion and removal of the foot when the same has been fitted with a foot or ankle cast, the boot-like portion being adapted to substantially enclose the foot and cast fitted thereon and including an upwardly extending ankle enclosing portion cooperating with the boot-like portion to protect the person's foot and ankle cast thereon from foreign material, moisture, inclement weather conditions and the like.

2 Claims, 4 Drawing Figures





INVENTOR
 Marguerite E. Novotney
 BY *[Signature]*
 Carner, Dickey & Paine
 ATTORNEYS.

FOOT AND ANKLE CAST ENCLOSURE

SUMMARY OF THE INVENTION

The present invention is directed toward a novel protective enclosure for ankle and foot casts which is adapted to be conveniently placed upon and removed from a person's foot which has been fitted with a foot or ankle cast, whereby to protect the cast itself, as well as any portion of the person's foot not covered thereby, from being soiled or otherwise adversely affected by foreign material, moisture, and inclement weather conditions. The ankle cast enclosure of the present invention will be seen to be of an extremely simple, yet effective, design so that it may be manufactured and assembled economically and use a minimum amount of readily available materials.

It is accordingly a general object of the present invention to provide a new and improved ankle and foot cast enclosure.

It is a more particular object of the present invention to provide a new and improved ankle or foot cast enclosure which is fabricated of flexible weather resistant fabric-like material which will function to protect both a person's foot and ankle or foot cast fitted thereon from the adverse affects of moisture, dirt, inclement weather, etc.

It is a further object of the present invention to provide an ankle or foot cast enclosure, as above described, having fastening means adapted to positively secure the enclosure upon a person's foot, yet may be easily adjusted to accommodate different size feet and ankle casts.

It is still another object of the present invention to provide a new and improved ankle and foot cast boot or enclosure which may be manufactured and assembled in an extremely economical manner and which is adapted to be fabricated of readily available materials.

Other objects and advantages of the present invention will become apparent from the following detailed description taken in conjunction with the accompanying drawing.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is an elevated perspective view of the ankle and foot cast enclosure embodying the principals of the present invention;

FIG. 2 is an elevated perspective view similar to FIG. 1 and illustrates the enclosure in an open or access position preparatory to a person inserting his cast-fitted foot thereinto;

FIG. 3 is an elevated perspective view similar to FIG. 2 and illustrates the boot or enclosure tongue element in its normal operative position, and

FIG. 4 is a top elevational view of the ankle and foot cast enclosure of the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Referring now in detail to the drawing, a foot and ankle cast enclosure or boot, in accordance with a preferred embodiment of the present invention, is generally designated by the numeral 10 and is shown in operative association with a schematic representation of a person's ankle 12 which has been fitted with an ankle or foot cast 14, for example, fabricated of plaster of paris and applied, for instance, as a result of injury to the foot or ankle 12. The enclosure 10 is shown as gen-

erally comprising a lower boot-like portion 16 and an upwardly extending ankle enclosing portion 18, the portions 16, 18 being cooperable to substantially enclose the person's foot or ankle cast 14, as well as that portion of his foot which is not covered by cast 14 in order to protect the cast 14 and foot and ankle 12 from being soiled, injured, or otherwise adversely affected by moisture, dirt, or inclement weather conditions, as will be appreciated by those skilled in the art. It will be noted that enclosure 10 is designed to be sufficiently large so as to accommodate different size ankle and/or foot casts so as to provide for universality of use and permit convenient insertion and removal of a person's cast-fitted foot and/or ankle, as will be apparent.

The enclosure 10 is intended to be fabricated of a flexible or pliable fabric-like material which is preferably treated so as to be weather resistant, i.e., moisture proof. Additionally, the material from which the enclosure 10 is fabricated may be constructed so as to have thermal insulating characteristics when used in extremely cold or warm climates. Preferably, the enclosure 10 is fabricated of a lined or unlined flexible plastic or vinyl material which is readily available, is pleasant in appearance and has satisfactory moisture resistant characteristics. It will be appreciated, of course, that various alternative materials could be used without departing from the scope or fair meaning of the present invention.

The enclosure 10 is preferably, although not necessarily, of a two-piece construction and comprises an enlarged body member 20 and a tongue member 22, both of which members may be fabricated of the above described flexible, moisture proof, fabric-like material. The body member 20 may be formed to the "boot-like" configuration disclosed herein by providing an elongated generally vertically disposed rear seam 24 defining a pair of laterally spaced side sections 25. Additionally, the forward end of the body member 20 may be provided with one or more lower forward seams 26 and a generally "U" shaped upper forward seam 28, the latter of which functions to operatively secure the body member 20 to the forward portion 30 of the tongue member 22. As illustrated, the tongue member 22 comprises an upwardly extending tongue-like element 32 which is formed integrally of the portion 30 and is adapted to overlie the front or forward portion foot and ankle of the person's foot wearing the enclosure 10, as best seen in FIG. 3.

In accordance with the present invention, the side sections 25 are provided with a pair or set of securing straps 34 which are of a generally elongated forwardly extending shape and are adapted to be wrapped around each other at a position generally overlying the forward side or front of the enclosure 12 and thereby function in a capacity of maintaining the side sections 25 in an embracing relationship to the sides of the cast 14 and thus detachably securing the enclosure 10 on the associated person's foot. Suitable fastening means, such as conventional buckles, snaps, laces or the like may be and preferably are provided on the outer terminal ends of the straps 34 for securing the same in place. Preferably, however, such securing means is in the form of an adjustable fastener sold and distributed under the trade name "Velcro" which consists of complementary loop and hook pile elements on the respective straps 34, as is indicated at 36 in FIG. 4.

The tongue element 32 is similarly provided with a pair of elongated strap members, generally designated 38, which are secured at the respective ends thereof to the opposite lateral edges of the tongue element 32 by seams 40. The straps 38 are designed so as to be of sufficient length to wrap around the entire cast 14 and enclosure 10 thereon and be engageable with one another at the rearward side thereof, as is best illustrated in FIGS. 3 and 4. Suitable fastening means, preferably in the form of Velcro fasteners 42, are provided on the terminal ends of the straps 38 for securing the same in the respective operative positions illustrated herein.

It may be noted that while particular reference has been made herein to the various component parts of the enclosure 10 being secured by sewing, it will be readily apparent to those skilled in the art that various alternative means may be employed for securing these members together, such as by suitable adhesives, by heat sealing, etc.

In operation of the enclosure 10, the straps 34 are initially disengaged from one another, as are the straps 38 so that the tongue element 32 may be folded forwardly and the side sections 28 may be laterally separated, whereby to permit insertion of a person's foot having the ankle or foot cast 14 fitted thereon. After foot and ankle have been properly placed within the enclosure 10, the side sections 25 are folded around the forward side of the cast 14 and the straps 34 are properly secured to one another by the fastening means 36. Thereafter, the tongue element 32 may be folded upwardly from the position shown in FIG. 2 to the position shown in FIG. 3, and the straps 38 may then be wrapped around the rearward side of the enclosure 10 and be properly secured together, thus operatively securing the element 32 in place and completing the mounting or "putting on" the enclosure 10. It will be appreciated, of course, that the above described procedure is merely reversed to effect removal of the enclosure 10.

It will be seen from the foregoing description that the present invention provides a novel foot and ankle cast enclosure which may be easily placed upon and taken off from a person's cast-fitted foot or ankle with a minimum amount of time and effort. The enclosure 10 of the present invention will be seen to provide an effective barrier against dirt, moisture and the like coming into contact with both a person's foot and cast thereon, thus, positively preventing soiling of the person's foot and cast and insuring against any discomfort due to inclement weather conditions. Additionally, it will be appreciated that the enclosure 10 may be economically manufactured of readily available materials and may be

worn by person's having various size and style foot and/or ankle casts, thus providing for universality of application.

While it will be apparent that the preferred embodiment illustrated herein is well calculated to fulfill the objects above stated, it will be appreciated that the present invention is susceptible to modification, variation and change without departing from the scope of the invention.

I claim:

1. A removable protective enclosure for an ankle cast or the like,

said enclosure being fabricated of a pliable fabric-like moisture resistant material and comprising a boot-like portion including a front section and a pair of side sections adapted to removably receive a person's foot and being sufficiently large to enclose and accommodate effortless insertion and removal of the foot when the same has been fitted with a foot or ankle cast,

a tongue-like element projecting upwardly from said front section,

an ankle enclosing portion extending upwardly from said side sections cooperable therewith to protect the person's foot and ankle cast thereon from foreign material, moisture, inclement weather conditions and the like, and

a first pair of straps for securing said 10 side sections to the person's foot, and a second set of straps for securing said front section in generally overlying relation with respect to said side sections, including securing means for releasably securing said sets of straps in operative securing relationship with one another.

2. The invention as set forth in claim 1 wherein said enclosure is of a two-piece construction, which includes Velcro fastener elements for adjustably securing the respective pairs of straps together, which includes a generally U-shaped seam operatively connecting the lower forward end of said tongue element to said front section, wherein said first pair of straps are secured to the laterally outer sides of said tongue element and are adapted to extend therefrom to a position centrally of the rear end of the enclosure, and wherein said second pair of straps extend laterally inwardly from the opposite sides of said ankle portion and are adapted to be secured to one another at a position centrally of the front end of the enclosure interiorly of said tongue element.

* * * * *