

[54] TOE GUARD FOR WALKING CAST, SHORT
LEG CAST & LONG LEG CAST

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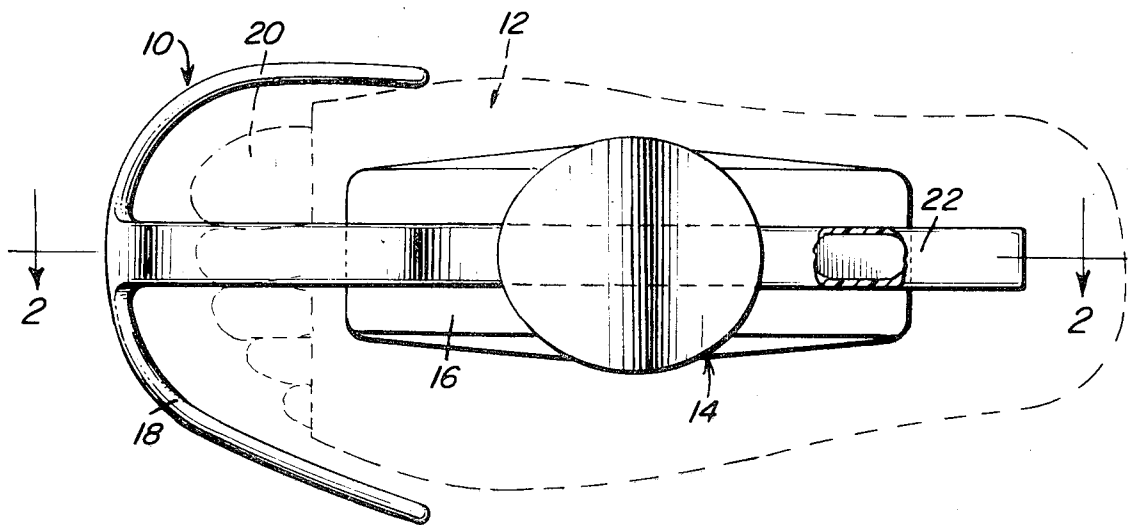
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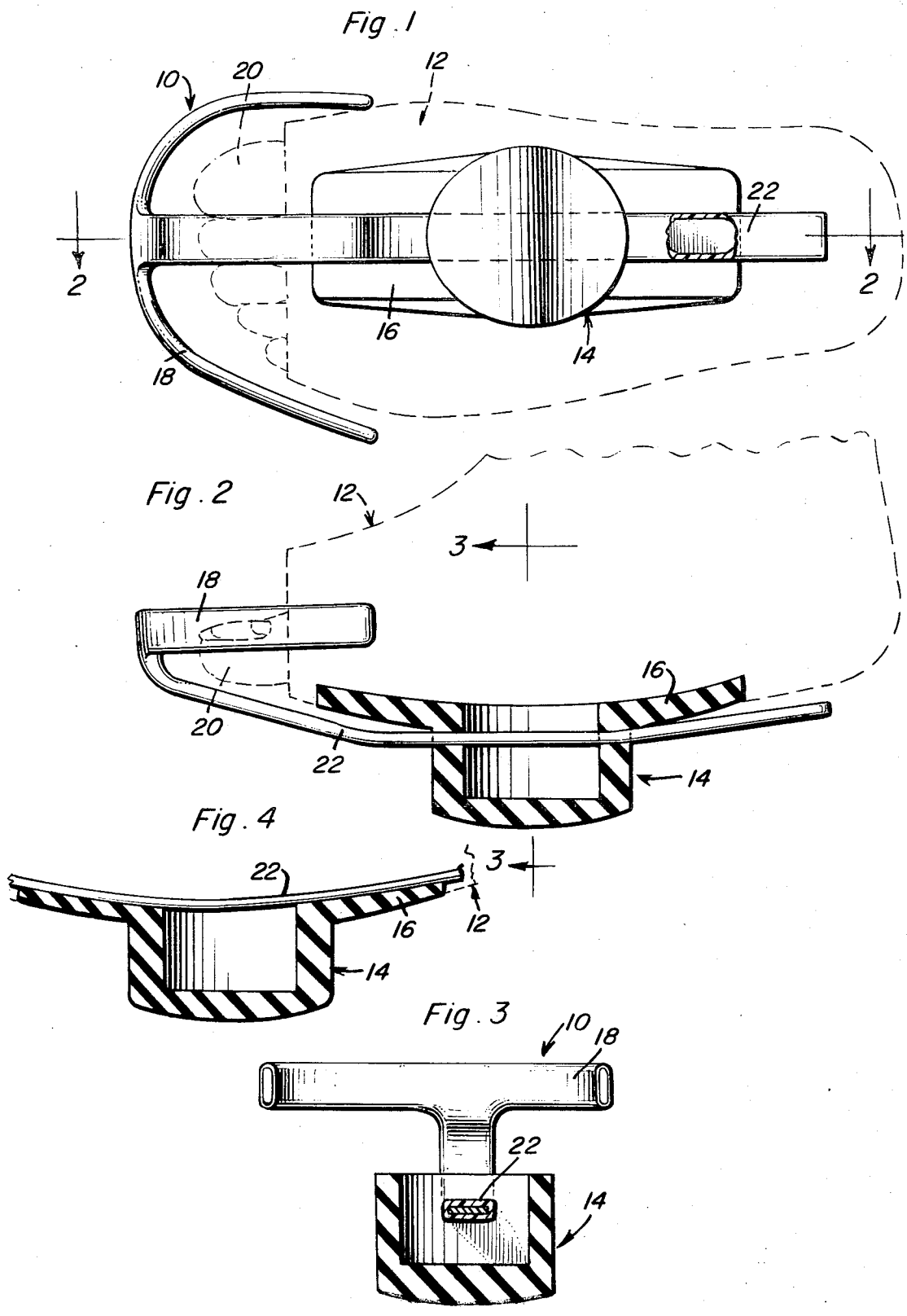
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[57] ABSTRACT

The toe guard incorporates an elongated mounting stem adjustably engageable with the walking tip of a foot cast. The forward end of the stem is rigidly affixed to the central portion of a rearwardly directed arcuate protective bar which encircles the toes and forward portion of the cast in generally spaced overlying relation to the stem itself.

4 Claims, 4 Drawing Figures





TOE GUARD FOR WALKING CAST, SHORT LEG CAST & LONG LEG CAST

The present invention generally relates to foot casts, and is more specifically directed to a unique toe guard mountable on the cast in a manner so as to project forwardly thereof and provide a protective enclosure for the normally exposed toe area of the foot.

It is a primary object of the invention to provide a structurally simple yet highly effective protective device for use in conjunction with a foot cast in order to provide a protective guard for the toes while at the same time maintaining the desired exposure thereof.

Another significant object of the instant invention is to provide a toe guard which mounts on the rubber walking tip with the mounting thereof being such so as to enable a positional adjustment of the guard for the accommodation of variations in the cast or foot size.

Basically, the guard includes an arcuate protective bar which horizontally encircles the toe area and a mounting stem rigid with the central portion of the protective bar. The stem extends rearwardly from the central portion of the protective bar into spaced underlying relation thereto for engagement with the cast for a mounting of the guard.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

FIG. 1 is a bottom plan view of the guard mounted on the walking tip;

FIG. 2 is an enlarged cross-sectional view taken substantially on a plane passing along line 2—2 in FIG. 1, the walking tip being shown in section and the guard being shown in elevation;

FIG. 3 is a cross-sectional detail taken substantially on a plane passing along line 3—3 in FIG. 2; and

FIG. 4 is a sectional detail illustrating a variation in the orientation of the guard mounting stem relative to the walking tip.

Referring now more specifically to the drawings, reference numeral 10 is used to generally designate the toe guard comprising the instant invention. The foot cast with which the guard 10 is to be associated has been designated by reference numeral 12 with the walking tip indicated by reference numeral 14. This tip 14, as is conventional, includes an enlarged elongated head portion 16 which is embedded within and locks the tip 14 to the lower portion of the cast 12.

The toe guard 10 includes an arcuate protective bar 18 designed so as to encircle and lie closely adjacent both the exposed toes 20 and the forward end of the cast 12. In order to do so, it will be noted that the bar 18 includes a relatively straight side portion which generally parallels the inner portion of the foot and a slightly outwardly flaring second side which generally parallels the outer portion of the foot.

An elongated mounting stem 22 has the forward end thereof rigidly affixed to the central portion of the protective bar 18, this forward portion of the stem 22 being upwardly turned so as to lie generally in the plane of the protective bar 18 at the point of engagement therewith.

The stem 22, along the length thereof, slopes downwardly and rearwardly relative to the forward end

thereof so as to underlie the toe area in spaced relation thereto and generally follow the slight curvature of the bottom of the cast 12. With reference to FIGS. 2 and 3 in particular, the stem 22 can be frictionally engaged through the walking tip 14 below the cast-embedded head portion 16 thereof with the frictional engagement of the stem 22 through the tip 14 being such so as to substantially rigidly position the stem 22, and hence the toe guard 10, while at the same time allowing for a slight longitudinal adjustment thereof through a physical manipulation of the guard. The general curvature of the stem 22 which positions the protective bar 18 in overlying spaced relation thereto will tend to preclude any accidental longitudinal shifting of the guard 10 should the protective bar come in contact with an obstacle in that force applied to the bar 18 will not provide such a direct load on the stem as to cause a shifting thereof through the tip. Thus, the protective enclosing of the toes 20 will be maintained notwithstanding the fact that the stem 22, and particularly the central portion thereof which may be straight, is adjustable through the tip 14.

FIG. 4 illustrates a slight variation in that the stem 22 has been mounted in overlying relation to the cast-embedded head portion 16 of the walking tip 14. If so desired, the head portion 16 can include a central depression or recess for the accommodation of the stem 22. In this form, the adjustment of the guard 10 will normally be effected prior to a complete hardening of the cast 12 in that the stem 22 will conceivably be locked into position by the cast plaster.

As indicated in FIGS. 1 and 3, the toe guard 10 will preferably be formed of a rigid or slightly resilient metal coated with a suitable protective plastic or other elastomeric material.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly all suitable modifications and equivalents may be resorted to, falling within the scope of the invention.

We claim:

1. In a walking cast, a cast body, a depending walking tip and a toe guard, said tip including an enlarged head portion embedded within the body with the tip projecting therebelow, said guard including an elongated stem positioned along the lower portion of the cast and engaged with the walking tip, said stem including a forward end portion forward of said cast, said guard further including an arcuate generally horizontal protective bar, said bar having the central portion thereof rigidly affixed to the forward end of said stem with the bar projecting rearwardly from the forward end of said stem in spaced overlying relation to said stem and in partially encircling relation to the forward end of said cast to provide a protective enclosure therefor.

2. The cast of claim 1 wherein said toe guard stem projects through and is frictionally engaged by the walking tip below the head portion thereof.

3. The cast of claim 1 wherein said stem is positioned in engaging overlying relation to said walking tip head portion and embedded within the body of the cast.

4. The cast of claim 1 wherein said stem, and hence said guard, is longitudinally adjustable relative to the length of the cast.

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