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(54) SAFETY HANDLE FOR PILINGS

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(57) ABSTRACT

The invention provides a portable safety handle that temporarily attaches to wood pilings for use in the entering or exiting of docked boats. The safety handle is preferably constructed from plastic having a front surface for engaging a wood piling and back surface that is sized to prevent a persons hand from touching the wood directly and includes a handgrip for support of the person during boat entry and exit. The safety handle is temporarily secured to a wood piling by a pair of straps adapted to extend around a piling.

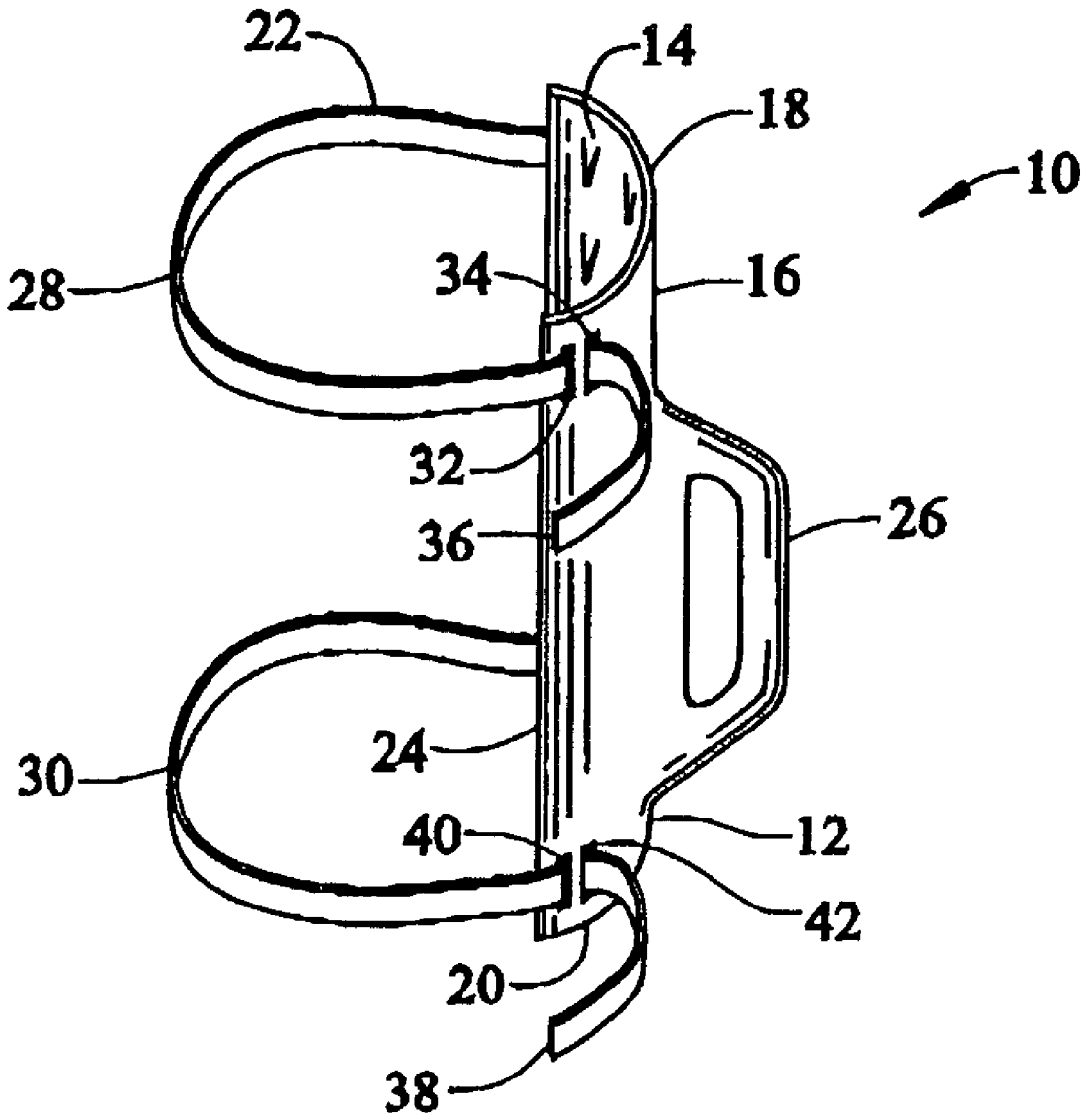


FIG. 1

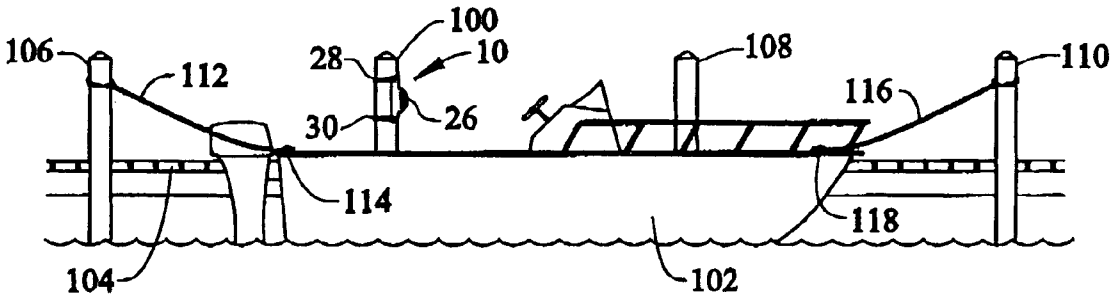
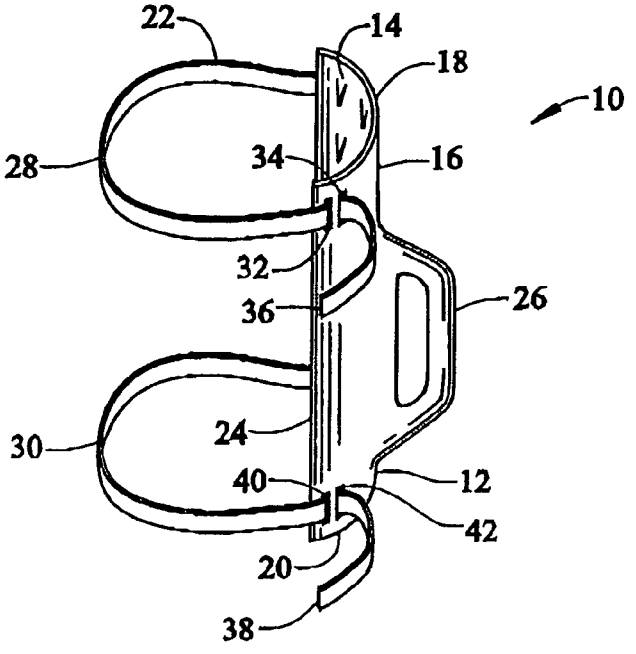

106
112
28
100
10
108
110
116
30
26
114
118
104
102

FIG. 2


22
14
18
10
28
34
16
32
26
36
30
24
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42
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38

FIG. 3

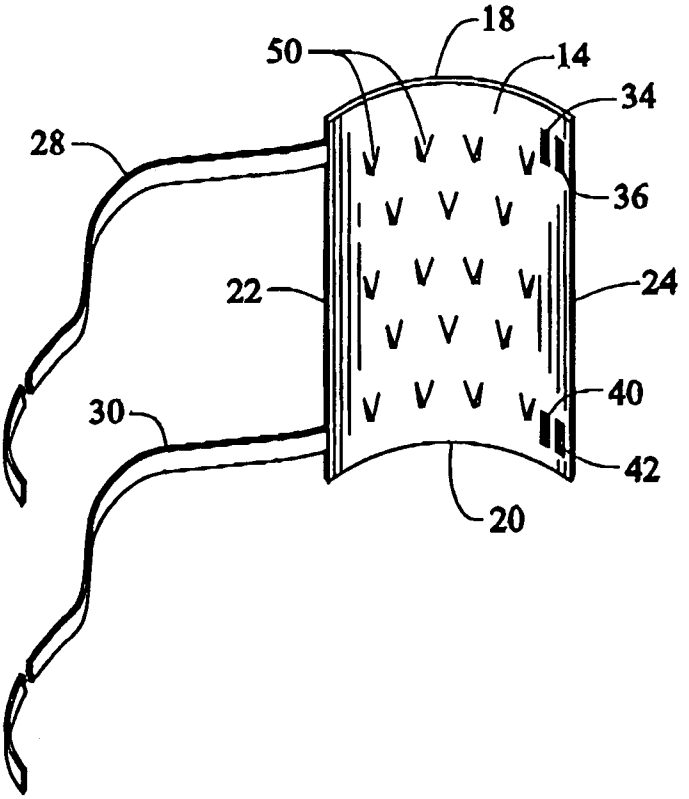
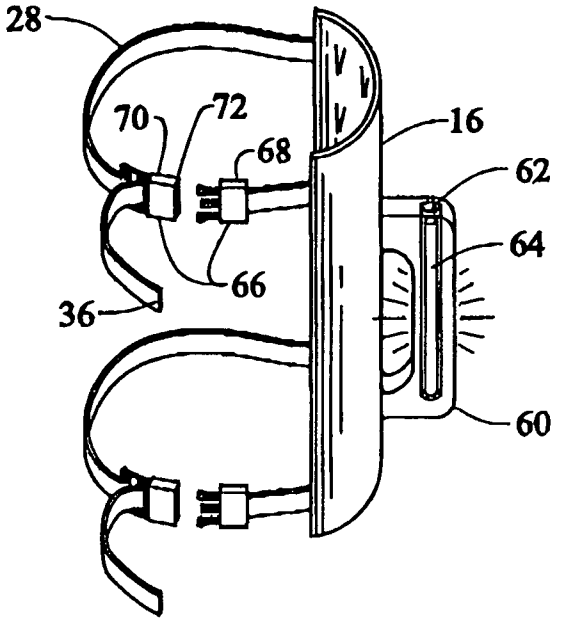


FIG. 4



SAFETY HANDLE FOR PILINGS

FIELD OF THE INVENTION

[0001] This invention relates generally to the field of boating and in particular to a safety handle for use by individuals during the entry and exiting of a boat.

BACKGROUND OF THE INVENTION

[0002] A majority of preventable boating injuries occur when an individual attempts to either enter or exit a boat. Due to tides, style of boats, operator positioning, and so forth, the entry and exiting of a boat is known to be a major source of injury. An individual who steps from a fixed dock is often surprised by boat movement. Boat movement may be caused from something a complicated a wave that bounces from a seawall, or as simple as the weight of an individual that is entering or exiting the boat. Unfortunately, any movement of a boat can result in injury should the individual be unprepared. Typically an individual employs the gunwale of a boat as the first step for entry and exit. The gunwale is the upper edge of a boat's side whose width is dependant upon the boat size. In any event, the gunwale surface is located above the boat deck and must be traversed during entry and exit. Knowledgeable boaters understand the liability they face should one of their passengers be injured on the boat so every attempt is made to stabilize the boat while passengers unfamiliar to the boat are boarding. Even if a passenger is very familiar with a boat, such as the boat owner or family member of the owner, carelessness can quickly ruin an otherwise most pleasurable boating experience.

[0003] Boating courses, such as that offered by the United States Power Squadrons, are used to teach the operator of a boat the proper docking techniques. In particular, the operator of a vessel is taught to position the entry location for the boat as close as possible to a piling wherein an individual can use the piling to grasp while boarding. Proper positioning of the boat to a piling will also will provide the passenger with a visual reference of a fixed object during the entry/exit procedure. Unfortunately, wood pilings are often a source of injury in and of themselves.

[0004] Wood pilings are designed for solely for support of a dock and will remain in place for as many years as possible. Eventually the weather causes the wood to fall into such disrepair that the piling must be replaced. Pilings are subjected to sun, rain, freezing, wood worms, barnacles, and other wood like destroying items. So as to obtain as long a life as possible, pilings are typically pressure treated.

[0005] Pressure-treated pilings are those pilings which have been commercially treated with a chemical wood preservative under pressure to assure penetration of the chemical into the wood. Chemical preservatives used by the industry to pressure treat wood vary in effectiveness and also in animal, human and environmental toxicity. Some preservatives are classified as "restricted-use pesticides" which only certified persons may purchase and/or use. The treated wood is not a restricted-use product, but precautions for handling and disposal are necessary.

[0006] Water repellent products, with or without a fungicide, may also be used to coat a piling since these products are not restricted by the Environmental Protection Agency (EPA). These chemicals may be brushed, dipped or sprayed on wood to protect the surface but are short-lived. In Florida, a warm moist climate and wet soils provide very favorable conditions for biological organisms to decompose wood. When left untreated, wood exposed to moisture (rain, condensation, high humidity, soil moisture, and sea water) in a warm environment is readily attacked and rapidly degraded by naturally occurring organisms. These organisms (fungi, bacteria, termites, carpenter ants and several beetles and borers) are ubiquitous and abundant in our soils and waterways.

[0007] When the piling is new, this oil based product can leave an oily residual on those who touch the piling, or should an individual pick-up a wood sliver, the wood treatment may lead to infection. Once the outer coating begins to dry out, typically after years of weather exposure, the dryness of the wood lends itself to more wood slivers wherein most people will only touch a piling if they absolutely must. This is typically when they are falling with the resulting hand injuries from the wood to be expected.

[0008] Attempts to address this problem have included the securement of handles to pilings but due to nearly infinite variety of boat placements due to the numerous boat designs, tidal changes and operator placement, fixed handles may provide assistance to only a few boaters. In addition, most marinas forbid anyone from attaching handles, satellite dishes, or any other item to a piling by use of nails and screws. Removal of items screwed into the wood results in exposure f the inner wood to the elements which results in a quicker drying of the wood, and of course a higher probably of an individual obtaining wood slivers.

[0009] Thus, what is needed in the art is a portable handgrip that prevents an individual from touching the wood of a piling while being strategically positioned to ensure that an individual will support themselves during the entry and exiting of a boat.

SUMMARY OF THE INVENTION

[0010] The present invention satisfies this need through provision of a handgrip that temporarily attaches to a wood piling. The handgrip is preferably constructed of a flexible plastic base member having a front surface with a series of wood engaging members. The base member is secured to a wood piling by a pair of straps secured to the base member and extend around the piling for positioning the base member in a fixed position. The wood engaging members help prevent the base member from sliding down the piling. On the back surface of the base member is a hand grip for use by the passengers for entry and exit to the boat. The handgrip may be formed integral to the base member or coupled thereto. The handgrip may also include a reflective material that allows the handgrip to glow at night or employ a chemical nightstick for night lumination.

[0011] An objective of the invention is to provide a handgrip that can be strategically positioned to provide safe entry or exiting of a boat.

[0012] Still another objective of the invention is to provide a handgrip that can be secured to a piling without damaging the wood.

[0013] Yet another objective of the invention is to provide a handgrip that is easy to install and remove.

[0014] Still another objective of the invention is to teach the use of a handgrip for entry and exiting of a boat.

[0015] Still another objective of the invention is to teach the use of a portable handgrip that include a means for illumination.

[0016] Other objectives and advantages of this invention will become apparent from the following description taken in conjunction with the accompanying drawings wherein are set forth, by way of illustration and example, certain embodiments of this invention. The drawings constitute a part of this specification and include exemplary embodiments of the present invention and illustrate various objects and features thereof.

BRIEF DESCRIPTION OF THE DRAWINGS

[0017] **FIG. 1** is a pictorial view of a boat tied to a dock with the safety handle of the instant invention attached to a piling;

[0018] **FIG. 2** is a perspective view of the safety handle with adjustable straps;

[0019] **FIG. 3** is a back view of **FIG. 2** depicting the wood engaging members; and

[0020] **FIG. 4** is a perspective view of the safety handle with quick release snap.

DETAILED DESCRIPTION OF THE INVENTION

[0021] Although the invention will be described in terms of specific embodiments, it will be readily apparent to those skilled in this art that various modifications, rearrangements and substitutions can be made without departing from the spirit of the invention. The scope of the invention is defined by the claims appended hereto.

[0022] Referring to the Figures, set forth is safety handle **10** for use and attachment to a piling **100**. The safety handle consists of a base member **12** constructed of a flexible sheet of material such as plastic, a laminate, or grooved wood. The sheet of material has a front surface **14**, a back surface **16**, a top edge **18**, a bottom edge **20**, a first edge **22**, and a second edge **24**. A hand grip **26** secured to the back surface **16** may be integrally formed with the base member or alternatively fastened to the base member by conventional fasteners. By attaching of the hand grip to the base member by conventional fasteners would allow the use of a teak hand grip to be secured to a plastic base member. Similarly, an articulating wood base member could have a plastic hand grip. In the basic embodiment a pair of straps **28** and **30** is connected to the first side edge **22** and are adapted to extend around a piling wherein each strap is of sufficient length so as to provide engagement with the second edge **24** of the base member. In a basic embodiment slot like holes **32** and **34** allow the distal end **36** of the strap **28** to be pulled through the slot like apertures **32** and **34**. Similarly, the distal end **38** of strap **30** is drawn through slot apertures **40** and **42** thereby securely holding the base member and hand grip against a piling.

[0023] As shown in **FIG. 1 a** boat **102** is shown placed along a dock **104** with pilings **100**, **106**, **108** and **110**. When a boat is docked there would be a stern line **112** extending from the piling **106** to the transom **114** of the boat **102** to prevent the boat from moving forward. Similarly, a line **116** would attach from piling **110** to the bow **118** of the boat **102** to prevent the boat from moving backwards. In this example, the safety handle **10** is secured to the piling **100** with straps **28** and **30** which wrap around the piling and once secured thereto hand grip **26** is available for passengers of the boat to enter and exit without physically touching the wood. As previously mentioned new wood pilings would maintain a residual of a chemical used to prevent early wood rotting from weather, parasites and so forth. Older pilings that are weathered are no less dangerous as they would be filled with splitters. Thus, the back surface **16** prevents an individuals hands from contacting the piling and the hand grip **26** provides the passengers and owner of the vessel a safe means of grasping the piling without fear of damage to the persons hands.

[0024] Referring now to **FIG. 3** shown is the front surface **14** of the base member with top edge **18**, bottom edge **20**, side edge **22**, and second side edge **24**. Straps **28** and **30** are shown in an untied position available for insertion through apertures **34**, **36** and **40**, **42** respectively. The front surface **14** of the base member includes wood engaging tabs **50** which may consist of large protrusions such as spikes for minute insertion into the wood piling, or small protrusions that provide surface friction similar to sandpaper. The preferred embodiment is to provide a texture that will not physical mar the piling yet provides a frictional engagement to inhibit movement of the base member once attached.

[0025] Referring now to **FIG. 4** the safety handle may include a hand grip **60** having photoluminescent paint which is capable of retaining light energy during the day and illuminating the handgrip position in darkness. Alternatively, a chamber **62** may be provided wherein a chemiluminescent chemical light stick **64** may be placed within the hand grip **60**. In this embodiment, the hand grip in this embodiment is made out of a clear or translucent plastic wherein the light stick illumination shines through the hand grip. Further, only the inner edge of the handgrip may allow light stick illumination wherein the base member is illuminated as if backlit. The use of chemiluminescent chemical is well known in the art as illustrated by U.S. Pat. No. 3,576,987; colored light sticks may also be used to provide an ambience to the handle such as those found in U.S. Pat. Nos. 3,816,326; 3,781,329; and 3,704,309.

[0026] The straps may include a quick release fastener **66** which consists of a male insert **68** and female counterpart **70** with release tabs **72** that would allow the installer to quickly attach or release the strap **28** around a piling. The adjustability of the strap remains wherein the proximal end **36** can be drawn through the quick release fastener depending on the piling size. Typical pilings for docks range from 7 inches at a minimum to upwards of 20 inch as a maximum. This strap would preferably be made from nylon or the like resilient material that maintains flexibility despite frequent changing of sizes to accommodate different size pilings. This would allow the boat owner to quickly release or attach the hand grip to any piling whether it would be for a short visit at a restaurant or an extended visit such as a live a board. While the use of a screw or nail fastener would be contemplated by this invention, must marinas are cognizance of the damage that a screw or nail will cause to a piling. For this reason, it is a preferred that attachment to the piling is by the use of straps.

[0027] As previously stated, the base member may be plastic or a wood base can be employed. The use of plastic provides longevity and is inexpensive to manufacture. However, the use of a wood, such as a teak, with tongue and groove type slats is well known in the art and would allow for the required ability of the base member to wrap around a piling of different sizes. A wood member would be more expensive to manufacture and maintain but provides an elegant hand grip that would befit expensive motor yachts.

[0028] In operation, the front surface of a flexible base member is strategically positioned along a length of a piling, the base member having a handgrip mounted or formed to a back surface of the base member.

[0029] A proximal end of an attachment strap is coupled to a first side edge of the base member having a length sufficient to encircle a piling wherein a distal end of the strap is fastened to a second side edge of the base member.

[0030] The strap is pulled taut to securely position the base member against said piling and the handgrip is then available for use in entry and exiting of a boat.

[0031] It is to be understood that while I have illustrated and described a certain form of my invention, it is not to be limited to the specific forms or arrangement of parts herein described and shown. It will be apparent to those skilled in the art that various changes may be made without departing from the scope of the invention and the invention is not to be considered limited to what is shown in the drawings and described in the specification.

1. A safety handle for attachment to a piling, said safety handle comprising:

a base member constructed of a flexible sheet of material, said base member further defined as having a front surface and a back surface bounded by a top edge and a bottom edge with a first and second side edge;

a handgrip secured to said back surface, said handgrip including a photoluminescent material for storing light energy whereby said handgrip will glow in darkness;

a pair of straps connected to said base member, each strap is adapted to extend around a piling;

whereby said base member is secured to a piling by use of said straps wherein said handgrip is available for use in entry and exiting of a boat.

2. The safety handle according to claim 1 including wood engaging members positioned along said front surface of said base member.

3. The safety handle according to claim 1 wherein said base member and said hand grip are plastic.

4. The safety handle according to claim 1 wherein said base member and said hand grip are wood.

5. The safety handle according to claim 1 wherein said base member and said handgrip are integrally formed.

6. The safety handle according to claim 1 wherein a proximal end of each said strap is attached to said first edge of said base member with a distal end of each said strap is available for insertion through a through a slot-like opening located on said second edge after said strap is encircled around a piling.

7. The safety handle according to claim 1 wherein said strap is of a length sufficient to encircle a piling between 6 inches and 20 inches.

8. (canceled)

9. (canceled)

10. The safety handle according to claim 1 wherein a proximal end of each said strap is attached to said first edge of said base member with a distal end of each said strap is available for coupling to a quick release fastener coupled to said second edge after said strap is encircled around a piling.

11. (canceled)

12. A safety handle for attachment to a piling, said safety handle comprising:

a base member constructed of a flexible sheet of material, said base member further defined as having a front surface and a back surface bounded by a top edge and a bottom edge with a first and second side edge;

a handgrip secured to said back surface, said handgrip including a receptacle sized to receive a chemiluminescent light stick whereby said handgrip will glow in darkness;

a pair of straps connected to said base member, each strap is adapted to extend around a piling;

whereby said base member is secured to a piling by use of said straps wherein said handgrip is available for use in entry and exiting of a boat.

13. The safety handle according to claim 12 including wood engaging members positioned along said front surface of said base member.

14. The safety handle according to claim 12 wherein said base member and said hand grip are plastic.

15. The safety handle according to claim 12 wherein said base member and said hand grip are wood.

16. The safety handle according to claim 12 wherein said base member and said handgrip are integrally formed.

17. The safety handle according to claim 12 wherein a proximal end of each said strap is attached to said first edge of said base member with a distal end of each said strap is available for insertion through a through a slot-like opening located on said second edge after said strap is encircled around a piling.

18. The safety handle according to claim 12 wherein said strap is of a length sufficient to encircle a piling between 6 inches and 20 inches.

19. The safety handle according to claim 12 wherein a proximal end of each said strap is attached to said first edge of said base member with a distal end of each said strap is available for coupling to a quick release fastener coupled to said second edge after said strap is encircled around a piling.

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