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(54) **MOORING LINE HOLDER**

(57) A mooring line holder for holding a mooring line 4 at a dock in a raised position for ease of access to the mooring line from the deck of a yacht, cruiser or other watercraft, the mooring line holder comprising a foot 2 by which it is attached to the dock and an upright pole or post 1 rising from the foot and having a pair of support arms 5a, 5b extending laterally from the pole or post 1 at or near the upper end of the pole or post, each support arm 5a, 5b having a respective detent/ cradle 3a, 3b for said mooring line, the detents being spaced apart so that a loop of the mooring line may be held spread open between them, thereby enabling a boat hook or other lengthy tool to be used to reach between the detents and hook the open loop of mooring line.

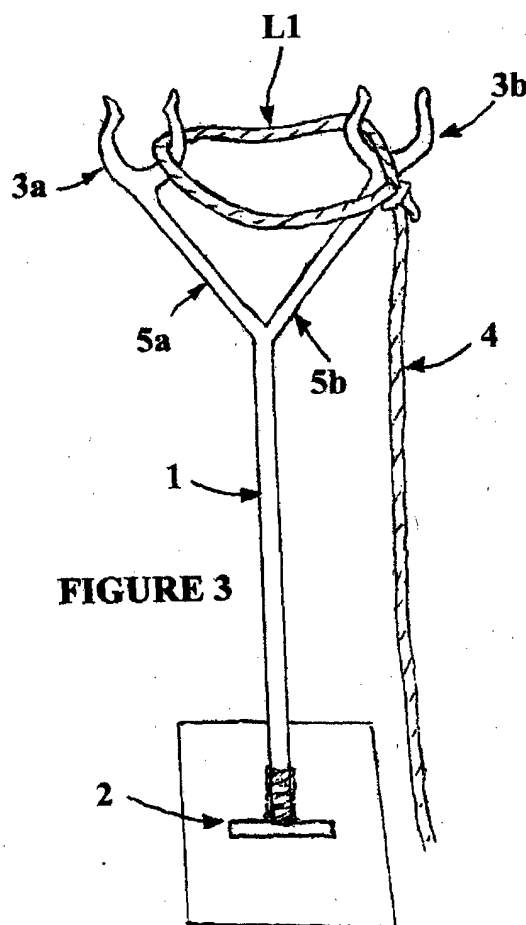


FIGURE 3

Description

Field of the Invention

[0001] The present invention concerns an improved support stand/holder for holding a mooring line at a dock, for example on a pontoon, in a raised position for ease of access to the mooring line from the deck of a yacht, cruiser or other watercraft.

Background to the Invention

[0002] Boating is an enduringly popular leisure activity but it does present a number of hazardous aspects to participants, not least when a boat is arriving into dock. Often the captain of a pleasure craft will need to send a crew member/ family member to jump from the vessel onto the pontoon/ dock to collect the first mooring rope to secure the boat to the dock. This manoeuvre is potentially very dangerous and many people have fallen when leaping to the dock, some have been crushed and such accidents have even resulted in fatalities. It is a general object of the present invention to address and substantially eliminate this danger by enabling the crew members to reliably collect the mooring rope from the boat deck, remaining on board the boat during docking.

[0003] The preferred solution to the general problem lies in preparation of the pontoon-tethered mooring line before departure by elevating the free end of the mooring line on top of an upstanding pole attached to the pontoon so that a crew member can collect the line on arrival without leaving the boat. A number of mooring line holders are marketed based on this principle but they are all tricky to use and not viable for a wide range of mooring situations. Example mooring line holders include the Plastimo™ pontoon mooring pole system and the Mr Mooring Line™ pontoon mooring line holder. Referring to Figure 1 hereinafter, they generally comprise an upstanding pole 1 approximately a metre tall with a flat foot plate 2 that is fastened by screwing or bolting to the pontoon and with a vertical row-lock hook 3 at the upper end to hold the slack loop or coil L1 of a mooring line 4 that is tethered at the other end to the pontoon.

Under gravity the coil or loop of mooring rope 4 naturally hangs down and clumps together in a slack bundle making the rope accessible to close-in hand-grabbing by a crew-man on the boat when the boat is in close enough to reach the rope at arm's length. Indeed, all such mooring line holders are marketed with instructions exclusively for collecting the mooring line by hand and are mostly for use actually on the dock/ pontoon. I have found that with such mooring line holders it is very difficult and often impossible to grab the rope remotely from a distance with a lengthy tool such as a long-poled boat hook. Commonly the coiled rope falls and hangs very close against the stand's pole itself making it even harder to try to collect it from a distance with a boat hook and the coil will often face in completely the wrong direction to be able to be

grabbed by a boat hook at all.

[0004] The existing mooring line holders thus only partially solve the docking problem by elevating the mooring line enough to be within hand-grabbing distance (arms' reach only, whether from the pontoon or from a boat) but they do not enable the mooring line to be readily collected remotely such as by boat hook and they are only viable for catching the rope from a boat in the rarer circumstances when the boat can be brought in close enough to the pontoon/ dock for arms' reach. That can delay or complicate docking in some cases and in other cases may be impractical for use, e.g. if the deck is too high, low or distant from the pontoon and rope for the mooring rope to be reached by arm from the boat's deck.

Summary of the Invention

[0005] According to a first aspect of the present invention there is provided a mooring line holder for holding a mooring line at a dock in a raised position for ease of access to the mooring line from a yacht, cruiser or other watercraft, the mooring line holder comprising a foot by which it is attached to the dock and an upright pole or post rising from the foot and characterised in that a pair of support arms extend laterally from the pole or post at or near the upper end of the pole or post, each support arm having a respective detent for said mooring line, the detents being spaced apart so that a loop of the mooring line may be held spread open between them, thereby enabling a boat hook or other lengthy tool to be used to reach between the detents and hook the open loop of mooring line.

[0006] The spaced apart/ splayed pair of support arms and spaced apart detents spread the rope loop open countering the clumping that occurs with the slack coiled rope in the prior art mooring line holders and thus enabling easy hooking from a substantial distance away. Furthermore, the readily visible void between the spaced apart pair of support arms and detents provides a simple visual and physical target for a long-poled boat hook to be aimed at from a substantial distance away enabling the user to remain safely on the deck of the boat notwithstanding that the dock/ pontoon may be beyond normal arm's reach. The aiming and hooking process is generally easy, swift and reliable compared to the prior art mooring line holders.

[0007] Each detent may comprise a pin or a lug but preferably each detent is an open-topped cradle or hook to receive said mooring line cradled therein and passing therethrough. Preferably each detent projects upwardly from the respective arm.

[0008] Preferably the pair of support arms are bifurcated from the upright pole or post. Preferably the support arms collectively define a V or U shape formation at the top of the upright pole or post. Preferably the V or U shape formation is plane parallel or co-planar with the pole or post. The detents are suitably each at the upper extremity of the respective arm and hence suitably at the upper

extremity of the V or U shape formation.

Brief Description of the Drawings

[0009]

Figure 1 [prior art] is a front elevation view of a conventional mooring line holder, showing the single support cradle at the top of the upright pole and the loop or coil of the mooring line hanging slack down against the pole.

A preferred embodiment of the present invention will now be more particularly described, by way of example only, with reference to the accompanying drawings, wherein:

Figure 2 is a front elevation view of the preferred embodiment of the mooring line holder of the present invention;

Figure 3 is a further front elevation view of the preferred embodiment of the mooring line holder of the present invention in use, showing a loop of mooring line held open between the spaced apart support arms in an open loop in a substantially vertical plane;

Figure 4 is a front elevation view of a variant of the mooring line holder of the present invention; and

Figure 5 is a plan view of the foot of the mooring line holder as viewed in the direction V-V in Figure 4.

Description of the Preferred Embodiment

[0010] In the illustrated embodiment of Figures 2 and 3 the mooring line holder 1 comprises an upstanding circular cylindrical tubular galvanized aluminium or steel pole 1 with a flat foot plate 2 that is fastened by screwing or bolting to the pontoon. The pole 1 suitably is of the order of 30mm in outside diameter, and approximately 1.1 metres tall. The foot plate 2 suitably couples to the pole 1 by a coil spring 2a that allows the pole 1 to be deflected if pulled hard or brushed against, so that the presence of the pole 1 on the pontoon is relatively unobtrusive and prevents any damage from knocks.

[0011] The pole 1 uniquely further has a pair of circular cylindrical tubular support arms 5a, 5b that extend laterally from the axis of the pole 1, bifurcating from the upper end of the circular cylindrical tubular steel pole 1 to define a V-shaped formation at the top of the pole 1. The upper extremity of each support arm 5a, 5b has a respective one of a pair of vertical row-lock hooks/ cradles 3a, 3b to serve as detents to hold a loop L1 of a mooring line 4 that is tethered at the other end to the pontoon. The pair of cradles 3a, 3b are spaced apart by the distance of separation of the upper ends of the support arms 5a, 5b from each other. The separation of the cradles 3a, 3b is suitably in excess of 100mm and preferably 200mm or

more. This holds the loop L1 of the mooring line 4 open wide and as the loop L1 and line 4 hangs down from the cradles 3 it presents a clear open loop in the vertical plane that is an easy visual and physical target for the hooked tip of a long-poled boat hook to be aimed at and lunged horizontally through to snag the loop L1 and line 4 and pull it back over to the boat hook user on the boat. The target for the boat hook is always between the two support arms 5a, 5b that are the pillars of the V formation.

[0012] From having a clear target, the process of grabbing hold of the mooring rope by boat hook from the boat saves considerably on time and therefore is much more efficient as well as being safer. Since there are no working or moving components involved, the device requires little to no maintenance year after year. It can be made using durable and weather resistant materials commonly used in a marine environment such as PVC plastic and galvanized aluminium and is cheap, easy and relatively low cost to manufacture

[0013] From trials the mooring line holder of the present invention worked every time. There were no incidents of failure to recover the rope or emergency attempts to grab the rope by disembarking onto the pontoon over an entire summer season. By contrast, prior trials of the conventional mooring line holder over a summer period resulted in a crew member routinely needing to disembark due to entanglement and running out of time during docking.

[0014] Referring to Figures 4 and 5, these show a modified version of the mooring line holder, which has a modular construction. The support arms 5a, 5b and uppermost extremity of the pole 1 are moulded or cast as one piece forming a head module 5 that is preferably of nylon, HDPE, ABS or other tough plastic polymer or of a metal or alloy such as steel or aluminium. The main length of the pole 1 is formed separately, suitably as a tubular steel or aluminium extrusion. The head module 5 couples onto the top of the main length of the pole 1. In the illustrated arrangement of Figure 5 the head module 5 has a collar part 5c that slips onto the top of the main length of the pole 1 and which may be threadedly secured in place. The main length of the pole 1 may comprise a single length of pole/ tube but may optionally comprise two or more lengths that suitably can be telescoped to lengthen or shorten the pole 1 if desired.

[0015] The cradles 3 of the mooring line holder in Figure 4 are straight-sided/ vertical-sided (not having an in-turned rim at the top) and thereby further facilitate retrieval of the looped end of the mooring line L1 from the holder. The basal/ lowermost end of the main length of the pole 1 has a coil spring 2a wrapped around it to allow deflection of the pole if knocked and it has a looped basal projection at its lowermost end that functions as the foot/ base plate 2 of the pole 1 and allows a screw, bolt or the like fastening means to be passed through it and thereby used to anchor the mooring line holder onto the dock/ pontoon.

Claims

1. A mooring line holder for holding a mooring line at a dock in a raised position for ease of access to the mooring line from a yacht, cruiser or other watercraft, the mooring line holder comprising a foot by which it is attached to the dock and an upright pole or post rising from the foot and **characterised in that** a pair of support arms extend laterally from the pole or post at or near the upper end of the pole or post, each support arm having a respective detent for said mooring line, the detents being spaced apart so that a loop of the mooring line may be held spread open between them, thereby enabling a boat hook or other lengthy tool to be used to reach between the detents and hook the open loop of mooring line. 5
2. A mooring line holder as claimed in claim 1, wherein each detent is an open-topped cradle or hook to receive said mooring line therein and passing there-through. 10
3. A mooring line holder as claimed in claim 1 or 2, wherein each detent projects upwardly from the respective arm. 15
4. A mooring line holder as claimed in claim 1, 2 or 3, wherein the pair of support arms are bifurcated from the upright pole or post. 20
5. A mooring line holder as claimed in claim 1, 2, 3 or 4, wherein the pair of support arms collectively define a V or U shape formation at the top of the upright pole or post. 25
6. A mooring line holder as claimed in claim 5, wherein the V or U shape formation is plane parallel or coplanar with the pole or post. 30
7. A mooring line holder as claimed in claim 6, wherein the detents are at the upper extremities of the V or U shape formation. 35
8. A mooring line holder as claimed in any preceding claim, wherein the detents are open-topped cradles that are substantially U-shaped, with vertical sides that do not converge at the open top of the cradle. 40
9. A mooring line holder as claimed in any preceding claim, wherein the mooring line holder has a modular construction, the support arms and uppermost extremity of the pole or post being moulded or cast as a head module and a main length of the pole or post being formed separately and assembled together with it. 45
10. A mooring line holder as claimed in claim 9, wherein the head module couples onto the top of the main 50

length of the pole by a collar.

11. A mooring line holder as claimed in any preceding claim, wherein the pole or post comprises two or more lengths that can be telescoped to lengthen or shorten the pole or post. 5
12. A mooring line holder as claimed in any preceding claim, wherein a basal/ lowermost end of the pole or post has a spring to allow deflection of the pole or post if knocked. 10
13. A mooring line holder as claimed in claim 12, wherein the spring is a coil spring wrapped around the basal/ lowermost end of the pole or post. 15
14. A mooring line holder as claimed in claim 13, wherein the spring has a looped basal projection at its lowermost end that functions as the foot/ base plate of the pole or post and allows a screw, bolt or the like fastening means to be passed through it and thereby used to anchor the mooring line holder onto the dock. 20

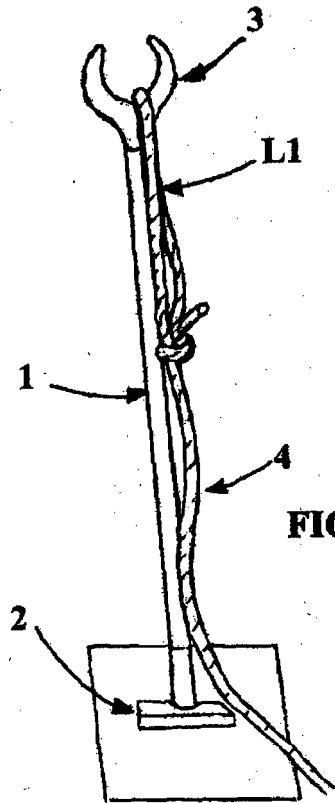


FIGURE 1

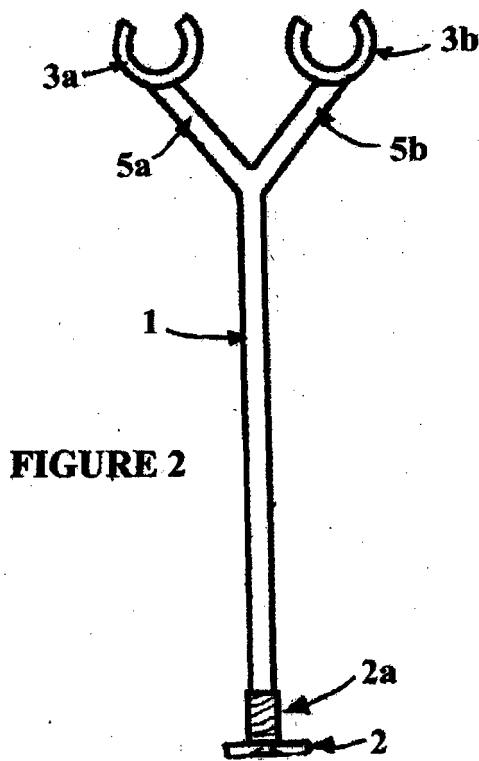


FIGURE 2

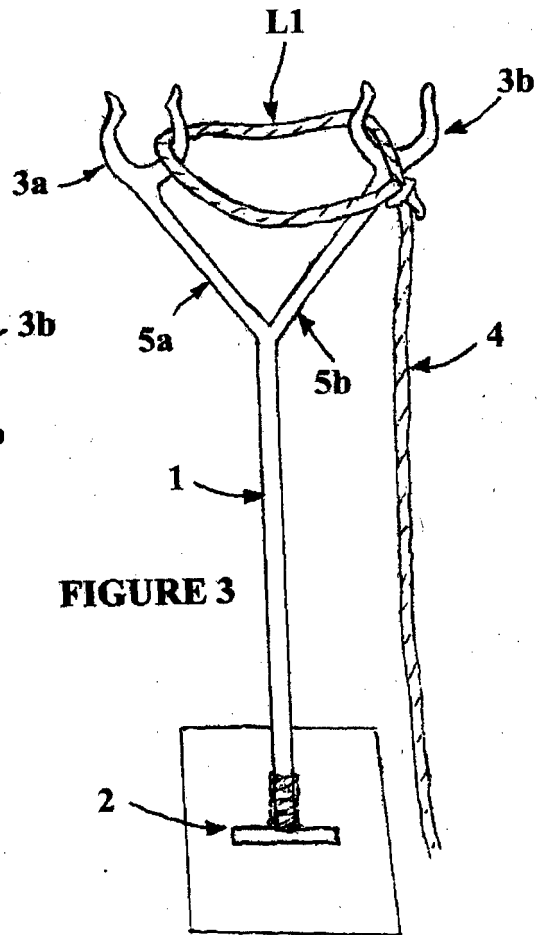
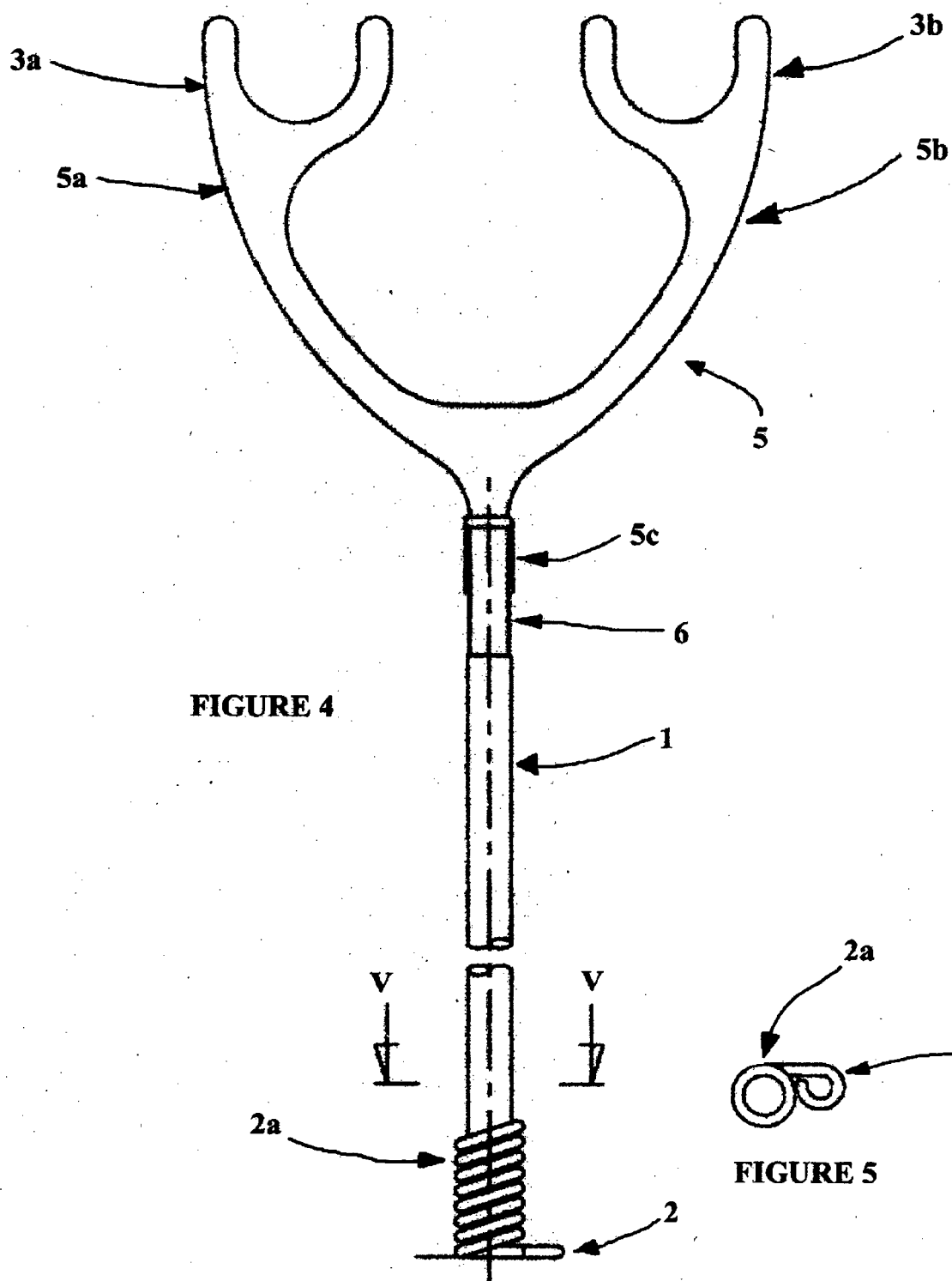


FIGURE 3





EUROPEAN SEARCH REPORT

 Application Number
 EP 19 25 0012

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The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 13 May 2020	Examiner Martínez, Felipe
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

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**ANNEX TO THE EUROPEAN SEARCH REPORT
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