19	Europäisches Patentamt European Patent Office Office européen des brevets	(1) Publication number: 0 343 417 A1					
12	EUROPEAN PATENT APPLICATION						
21	Application number: 89108206.7	(5) Int. Cl.4: B63C 11/02					
2	2) Date of filing: 06.05.89						
8 8 8	Priority: 24.05.88 IT 2129688 U Date of publication of application: 29.11.89 Bulletin 89/48 Designated Contracting States: CH DE ES FR IT LI	 ⁽⁷¹⁾ Applicant: Brambilla, Luigi 13, Via F. Ozanam I-20049 Concorezzo (MI)(IT) ⁽⁷²⁾ Inventor: Brambilla, Luigi 13, Via F. Ozanam I-20049 Concorezzo (MI)(IT) ⁽⁷⁴⁾ Representative: Ferraiolo, Ruggero et al Via Napo Torriani, 10 I-20124 Milano(IT) 					

Main Improvements in a structure for holding a line for a diver.

(F) Improvements in a structure for holding a line for a diver comprising: a main part having two opposite spaced shoulders (2, 3) whereupon a line may be wound, said shoulders being connected by two transversal segments (4) having projecting ends (5) working as retaining means for the line coils; a hole (6) wherein a first line length may be engaged; a barshaped anchor element (7) having an elongated portion ending with an engagement means (8) for a second line length which follows the line length wound upon said shoulders (2, 3).

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Improvements in a structure for holding a line for a diver

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This present invention is concerned with improvements in a structure for holding a line for a diver.

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Such structure shall be referred to as -coiler-.

It is known that a diver uses an object whereupon he can wind a line as he dives for fishing or other purposes; the main drawback for the known coilers is that the line is not safely secured thereto as the outer coils of the wound line may slacken, twine and cause the line length between, for instance, the diver and a buoy to increase.

The coiler according to this present invention obviates said drawback.

This coiler as claimed comprises: two opposite spaced shoulders whereupon the line may be wound, said shoulders being connected by two transversal segments having projecting ends to work as retaining means for the line coils; a hole wherein a first line length may be engaged; a rodshaped anchor element having an extended portion ending with an engagement means, said anchor element being provided for winding up and engaging a second line length.

The advantage with a coiler according to this present invention is that it holds a wound up line safely and offers a low resistance as it is drawn on the water surface. In fact, this coiler is preferably made of floating material, but anyway it can float once the line which is wound thereup is a hollow plastic tube.

One way of carrying out the invention is described in detail herebelow with reference to the drawings which illustrate only one specific embodiment and in which:

Fig. 1 is a perspective view of a first coiler, Fig. 2 is a perspective view of a second coiler and

Fig. 3 is a perspective view of a third coiler.

Figure 1 shows a coiler 1 made by plastic injection molding comprising two opposite parallel spaced shoulders 2, 3 connected by two transversal segments 4 having their ends 5 projecting from said two shoulders 2, 3 and bent inwards to laterally retain the coils of the wound up line. In the shoulder 3 there is a hole 6. An anchor element 7 protrudes from shoulder 2; said anchor element is parallel with the two segments 4 and is in the form of a small rod ending with a hook 8; said anchor element 7 cooperates with the hole 6 in securing the line to the coiler 1 in the sense that a first line length is passed through this hole 6, then an intermediate line length is wound upon the two shoulders 2, 3 and finally a second line length is wound upon the elongated length of the anchor element 7

and passed in the hook 8. In such a way the line is well fastened to the coiler 1.

Figure 2 shows a coiler 9 in the form of a small cork board 10 having two opposite round shoulders 11 and two lateral retaining wooden elements 12 with projecting ends inwards thickened. The cork board 10 has a hole 13 adjacent to a shoulder and a metal anchor element 14 fixed to the opposite shoulder; said anchor element comprises an elongated portion 15 and a beak 16. This beak has a 10 narrow aperture so that the line shall be forced therein in order to engage with the anchor element 14. The line shall be wound upon and secured to the coiler 9 in similar way as described with reference to figure 1. For instance, a buoy or floating 15 ball may be fastened at the upper end of the first line length whose lower end is engaged with hole 13, an intermediate line length is wound upon the coiler and a second line length has an end secured to the anchor element 14 and the other end at-20 tached to a lead down in the water.

Figure 3 shows a coiler 20 very similar with the one described with reference to Figure 1. The difference between the two coilers resides in that the latter has a hole 26 and a rodshaped anchor element 23 both placed on the same transversal segment 22. Said transversal segment 22 comprises a first projecting end forming said anchor element 23 having an elongated portion 25 ending with a hook 24 and a second projecting end having a hole 26.

It may be realized that the coiler may be of any suitable material like plastic, wood, cork, light alloy.

Claims

1. Improvements in a structure for holding a line for a diver comprising a main part (10) having two opposite spaced shoulders (2, 3) between two opposite spaced transversal segments (4), upon which shoulders a line may be wound, characterized in that there is a hole (6, 13, 26) in the structure working as engagement means for a first line length associated with a barshaped anchor element (7, 14, 23) ending with an engagement means (8, 16, 24) for a second line length.

2. Improvements according to claim 1 characterized in that said anchor element (7) is an elongated element ending with a hook (8) wherein a line length may be engaged.

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3. Improvements according to claim 1 characterized in that said anchor element (14) is an elongated element ending with a beak (16) wherein a line length may be engaged.

4. Improvements according to anyone of claims
1 to 3 characterized in that said anchor element (7, 14) protrudes from one of said two shoulders (2, 3; 11).

5. Improvements according to claims 1, 2, 3 characterized in that said anchor element (23) is along the extension of one of said two transversal segments (22).

6. Improvements according to claim 1 characterized in that said hole (6, 13, 26) is opposite said anchor element (7, 14, 23).

7. Improvements according to claims 1 and 6 characterized in that said hole (6, 13) is in one of said shoulder (2, 3; 11).

8. Improvements according to claims 1 and 6 characterized in that said hole (26) is on an extension of one of said transversal segments (22).

9. Improvements according to anyone of claims 1 to 5 characterized in that said two transversal segments (4, 12, 22) have their ends (5) protruding from said two shoulders (2, 3; 11, 21) and bent inwards for retaining the line coils.

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EUROPEAN SEARCH REPORT

Application Number

EP 89 10 8206

	DOCUMENTS CONSID	ERED TO BE RELEV	VANT	
Category	Citation of document with ind of relevant pass	ication, where appropriate, ages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.4)
A	GB-A-2 103 549 (G. * Page 1, lines 79-8	CURTIS) 5; figure 7 *	1	B 63 C 11/02
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A	US-A-4 278 212 (WES * Column 2, lines 54 lines 1-20; figures	LEY) -68; column 3, 1,2 *	1	
A	GB-A-2 125 370 (AUB * Page 2, lines 50-7	REY) 5; figure 3 * .	1	
A	FR-A-2 385 422 (DE * Page 3, lines 21-3 	ROSNAY) 2; figure 1 *	1	
				TECHNICAL FIELDS SEARCHED (Int. Cl.4)
			*	B 63 C B 65 H A 63 H A 45 F
	The present search report has been drawn up for all claims			
TH	Place of search E HAGUE	Date of completion of the se 23-08-1989	arch VIS	Examiner ENTIN, M.
X:pa Y:pa do A:te O:no P:in	CATEGORY OF CITED DOCUMEN rticularly relevant if taken alone rticularly relevant if combined with anot cument of the same category chnological background on-written disclosure termediate document	TS T : theory of E : earlier p after the her D : documen L : documen & : member documen	r principle underlying the atent document, but pub filing date at cited in the application t cited for other reasons of the same patent fami at	e invention lished on, or n ly, corresponding

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