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⑴ Applicant: **Iaccarino, Angelo, Via dei Mille, 16, I-80121 Napoli (IT)**

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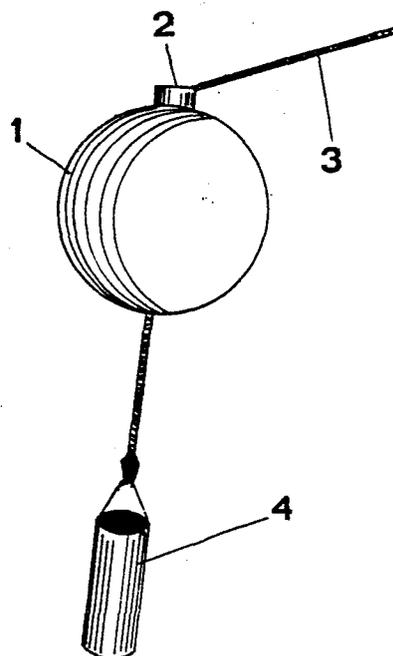
⑵ Inventor: **Iaccarino, Angelo, Via dei Mille, 16, I-80121 Napoli (IT)**

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⑶ Representative: **Mascioli, Alessandro, Prof.Dr., c/o A.N.D.I. Associazione Nazionale degli Inventori Via Lima, 35, I-00198 Roma (IT)**

⑸ **Floating device for raising the anchor of small boats.**

⑹ Device for raising the anchor of small boats which uses the traction of the motor since it consists of a float 1 crossed with a tube so as to act as a pulley, inside of which slides the line 3, raising the weight of the anchor 4, until it makes contact with the float 1 itself, which partially sinks to show that the anchor is being recovered, with the boat stopped or at low speeds.



**EP 0 137 886 A1**

Floating device for raising the anchor of small boats

The invention concerns a device for raising the anchor of small boats using a float to function as a pulley inside which the line moves.

5 It is well known that boats and small craft in general use as anchor a weight which is sufficient to prevent movement of the boat. In fact, traditional anchors, when cast among shoals and bottom irregularities, very often becomes caught and can no longer be recovered, w  
10 while weights are much more practical, in terms of the certain recoverability as well.

However, said weithts cannot be raised from the bottom with windlasses of any type since these are not used in  
15 small craft. Therefore, raising the anchor requires not insignificant physical effort since it must be done manually.

The aim of this invention is the rapid and simple  
20 raising of the anchor, with an economic, non cumbersome device.

This aim is achieved with the device according to the invention consisting of a float of any shape equipped with a preferably cylindrical cavity with a hole through

which the anchor line runs to be attached to the stern of the craft in such a way that when the boat starts, its motor pulls the line while the float, held by the water flow, remains in place, making the line slide through the cavity and so raising the anchor.

Another characteristic of the invention consists of the fact that said float has a flotation power slightly greater than the weight of the anchor, for example on the order of a kilogram, so that when the anchor has been raised and has reached the bottom of the float, it partially sinks under the effect of the pull of the motor and the weight of the anchor itself, showing the user that it has been completely raised.

Under these conditions then a rigid arm is formed consisting of the taught line and the line - float combination which under the combined effect of the raising power from the pull of the boat and the flotation power of the float, comes out of the water to be trailed by the craft itself.

At this point the anchor is raised, and the craft need only be stopped or slowed down to complete the recovery of the line - float - anchor combination.

The invention is shown in some exemplificative and non-limiting forms in the attached figures which show:

- Fig. 1, a variant with an approximately cylindrical float;
- fig. 2, a float consisting of two cones joined at the large ends;
- 5 - fig. 3, a cone-shaped float with the large end up, joined to an upper cylindrical portion;
- fig. 4, a spherical float.

The figures show in detail the float 1, of any size and  
10 shape, crossed by tubular opening 2 where the line 3 is inserted, connected at its bottom end to the weight or anchor 4, and connected at the other end to the stern of the craft. It is obvious that the functionality of the invention consists of the fact that the float 1  
15 acts as a pulley through which the line 3 runs, pulled by the craft rather than the user.

Furthermore, once the craft stops, the anchor should start to fall toward the bottom just by its own weight,  
20 in the reverse operation to that described above, however this does not occur because the position of the line 3 at 90 with respect to the anchor 4 gives rise to strong friction at the edge of the tubular opening 2 and because of the presence of a negative static pull  
25 from the weight of the raised line; the pull of the man in the craft adds to the latter to recover the combination.

Of course, while the principle of the finding remains the same, the realization forms and the details of construction may be varied widely with respect to that described and illustrated here, without going beyond  
. 5 the bounds of the present invention.

Claims

1. Device for raising the anchors of small craft consisting of a float 1 equipped with a tubular cavity 2, through which the line 3 of the anchor 4 passes, to be attached to the stern of the craft so that said float 1 acts as pulley for sliding the line 3, pulled by the moving craft.  
5
  
- 10 2. Device for anchor raising according to claim 1 characterized by the fact that said float 1 has a flotation power slightly greater than the weight of the anchor 4 so that it partially sinks when said anchor 4 has reached the bottom of said  
15 float, indicating that the anchor has been raised.
  
3. Device for anchor raising according to claim 1 characterized by the fact that the taught line 3 and the line 3 - float 1 combination form a  
20 rigid arm which, under the combined effect the raising power provided by the pull of the craft and the flotation power of the float 1, causes the line 3 - float 1 combination to come out of the water, for manual recovery.  
25
  
4. Device for anchor raising according to claim 1 characterized by the fact that the anchor 4, once the craft stops, does not fall again to the bottom

because the line 3 is held by the tubular cavity of the float 1 at 90° with respect to the anchor 4, leading to strong friction on the upper edge of said cavity.

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5. Device for anchor raising according to claim 1 characterized by the presence of cylindrical float.

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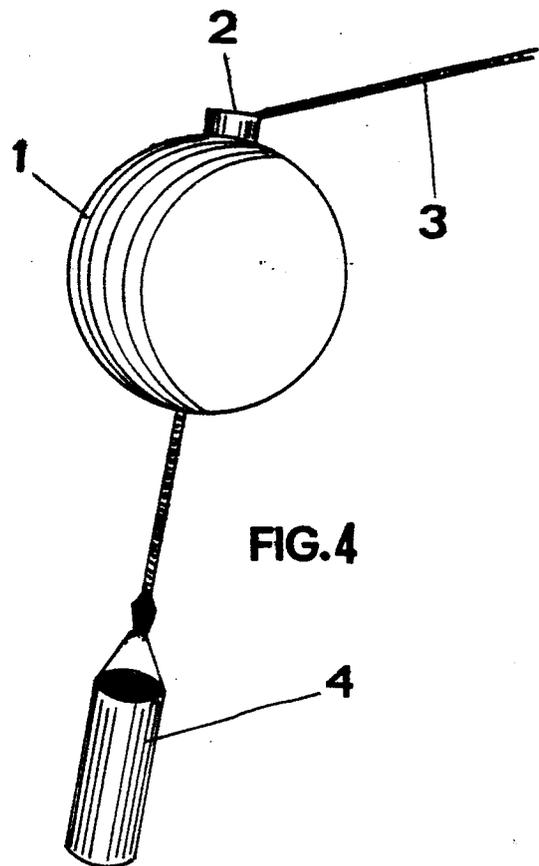
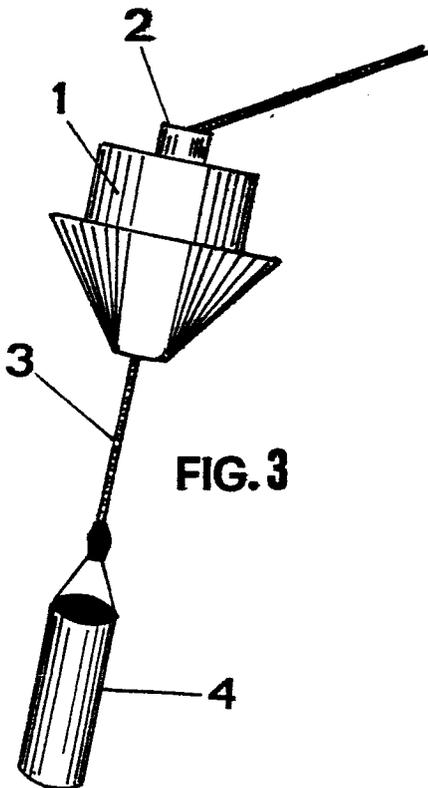
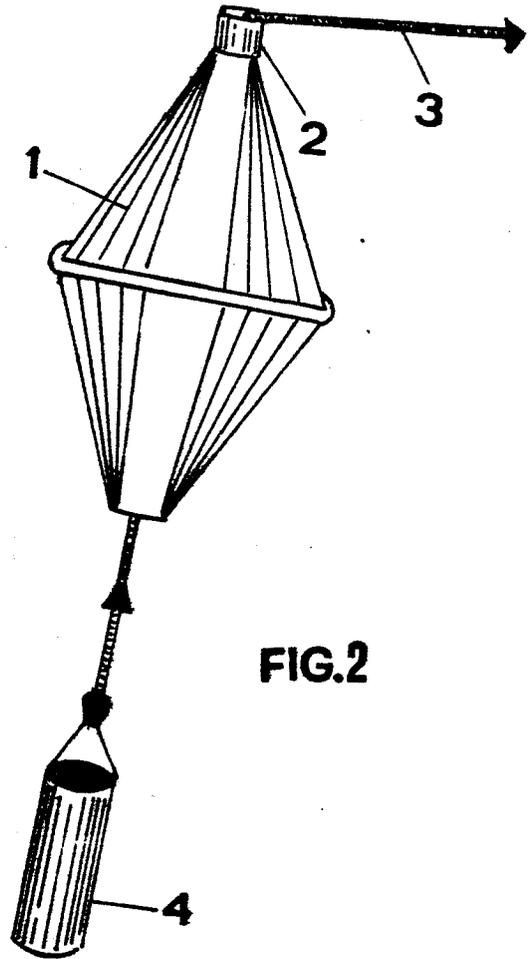
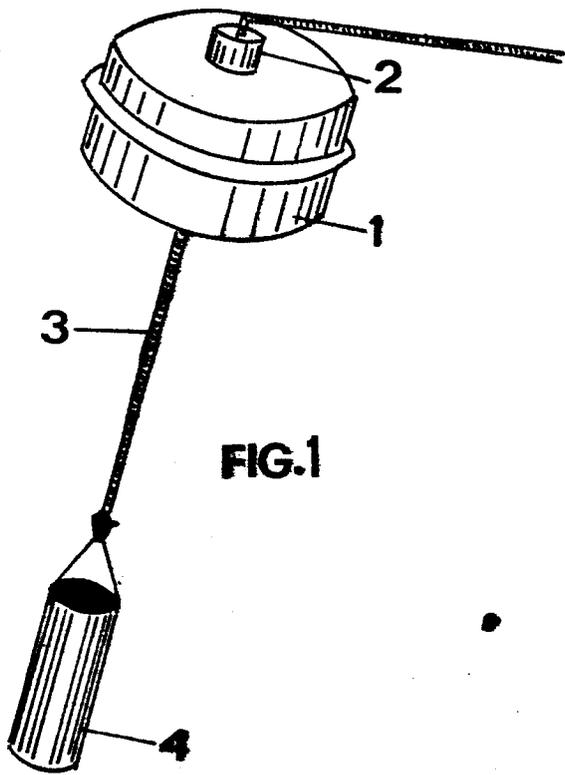
6. Device for anchor raising according to claim 1 characterized by the presence of a spherical float.

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7. Device for anchor raising according to claim 1 characterized by the presence of a float consisting of two cones joined at their large ends.

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8. Device for anchor raising according to claim 1 characterized by the presence of a float consisting of a cone with the large end up, connected to an upper cylindrical part.





DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.4)
X	US-A-3 922 990 (MENARD) * Whole document *	1-5	B 63 B 22/02 B 63 B 21/22
A	--- US-A-4 161 922 (FOGG) * Figures 1,2,4 *	6	
E	--- EP-A-0 112 301 (IBBA) * Whole document *	1-5,7	
A	--- US-A-3 547 067 (JONKMAN) * Figures 1,2 * -----	8	
			TECHNICAL FIELDS SEARCHED (Int. Cl.4)
			B 63 B B 63 C
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 26-11-1984	Examiner DE SCHEPPER H.P.H.
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