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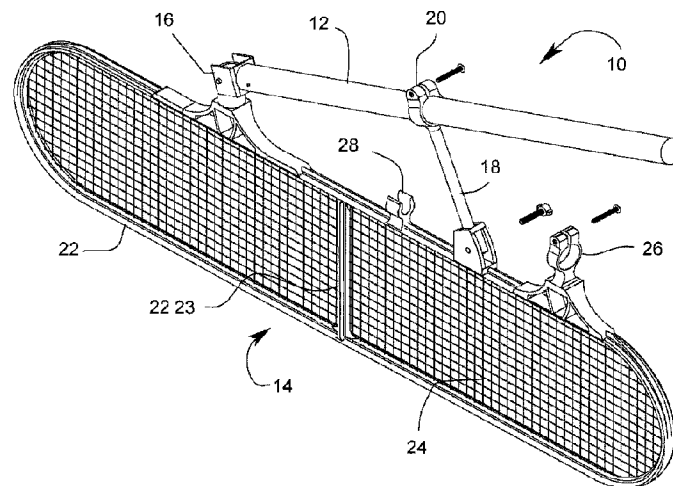
(72) Inventeur/Inventor:
FLEURY, LUC, CA

(73) Propriétaire/Owner:
FLEURY, LUC, CA

(74) Agent: NA

(54) Titre : APPAREIL A FILET D'ECUMAGE AMELIORE POUR PISCINES

(54) Title: IMPROVED POOL SKIMMING NET APPARATUS



(57) **Abrégé/Abstract:**

An improved pool skimming net apparatus has a net member including a frame and a net held by the frame. The frame has parallel elongated top and bottom frame portions, an elongated handle member pivotally attached to the top frame portion by an articulated joint member, an elongated retainer member pivotally attached to the top frame portion at a distance from the articulated joint member, a handle clamp member attached to a distal end of the retainer member and adapted to releasably hold a portion of the handle member, and a secondary handle clamp member fixedly attached to the top frame portion at a distance from the articulated joint member and adapted to releasably hold a portion of the handle member, such that when the handle member is held by the handle clamp member an acute angle is formed between the handle member and the top frame portion.

ABSTRACT

An improved pool skimming net apparatus has a net member including a frame and a net held by the frame. The frame has parallel elongated top and bottom frame portions, an elongated handle member pivotally attached to the top frame portion by an articulated joint member, an elongated retainer member pivotally attached to the top frame portion at a distance from the articulated joint member, a handle clamp member attached to a distal end of the retainer member and adapted to releasably hold a portion of the handle member, and a secondary handle clamp member fixedly attached to the top frame portion at a distance from the articulated joint member and adapted to releasably hold a portion of the handle member, such that when the handle member is held by the handle clamp member an acute angle is formed between the handle member and the top frame portion.

Improved pool skimming net apparatus

FIELD OF THE INVENTION

[001] The present invention relates generally to pool equipment but more particularly to a pool skimming net apparatus.

BACKGROUND OF THE INVENTION

[002] Using a skimming net to pick up debris on the water surface of a swimming pool is well known. There are two main types of swimming pools: in-ground and above ground. When skimming an in-ground pool, the net is placed slightly below ground level to reach the water surface and as such, the user holds the skimmer's handle downwardly. When skimming an above ground pool, the user obviously need to hold the handle differently depending on how high the pool is and how short the user is. Because of the two different orientations of the handle, the skimming net may not be adequate or optimized for both situations.

SUMMARY OF THE INVENTION

[003] In view of the foregoing disadvantages inherent in the known devices now present in the prior art, the present invention, which will be

described subsequently in greater detail, is to provide objects and advantages which are:

[004] To provide for an improved swimming pool skimming net which has an adjustable net that can be oriented into a variety of different angles in
5 relation to the handle.

[005] In order to do so, the invention has a handle member connected to a skimming net member by way of an articulated joint member.

[006] The articulated joint member is connected to a primary frame member interface. The primary frame member interface extends perpendicularly
10 from a circumferential frame member portion. The skimming net member consists in a frame member formed by the circumferential frame member portion, and at least one cross support member connected between a top portion and a bottom portion of the circumferential frame member portion. A net member is attached to and located within the frame
15 member's periphery. The handle member pivots from a substantially parallel configuration in relation to the frame member, to a substantially acute angle thereof. A retainer member sets any angle in between the parallel and set acute angle configurations, also providing a secondary attachment point between the frame member, and the handle member by
20 way of a retainer pivot point member extending integrally from the circumferential frame member portion. The primary frame member

interface is located approximately a third of the way onto the top portion of the circumferential frame member portion, and the retainer pivot point member is located approximately two thirds of the way onto the top portion of the circumferential frame member portion so as to provide a separating space between the primary frame member interface and the
5 retainer pivot point member both located on the circumferential frame member portion as well as a separating space on the handle member between the articulated joint member and a resiliently deformable friction clamp member, located at a distal end of the retainer member and
10 releasably connected onto the handle member by way of the resiliently deformable friction clamp member.

[007] The pool skimming net has the handle member is attached onto a handle clamp member which is fixedly connected to the circumferential frame member portion.

15[008] The retainer member is clipped onto the frame member by way of a retainer clip member.

[009] The handle member is preferably telescopic in configuration.

[0010] The handle member is disconnected from the retainer member and reconnected to the handle clamp member and change in configuration has the pool skimming net change from an in ground pool optimized configuration into an above ground pool optimized configuration.

5[0011] The cross support member being used for strengthening the frame member so as to reduce undue warping of a net member.

[0012] The separating space between the primary frame member interface and the retainer pivot point member providing leverage so as to reduce torsion stress onto the articulated joint member, as well as spreading
10 load caused by water friction onto two points on the handle member.

[0013] There has thus been outlined, rather broadly, the more important features of the invention in order that the detailed description thereof that follows may be better understood, and in order that the present contribution to the art may be better appreciated. There are additional
15 features of the invention that will be described hereinafter and which will form the subject matter of the claims appended hereto.

[0014] In this respect, before explaining at least one embodiment of the invention in detail, it is to be understood that the invention is not limited in its application to the details of construction and to the arrangements
20 of the components set forth in the following description or illustrated in

the drawings. The invention is capable of other embodiments and of being practiced and carried out in various ways. Also, it is to be understood that the phraseology and terminology employed herein are for the purpose of description and should not be regarded as limiting.

5[0015] As such, those skilled in the art will appreciate that the conception, upon which this disclosure is based, may readily be utilized as a basis for the designing of other structures, methods and systems for carrying out the several purposes of the present invention. It is important, therefore, that the claims be regarded as including such equivalent constructions
10 insofar as they do not depart from the spirit and scope of the present invention.

BRIEF DESCRIPTION OF THE DRAWINGS

[0016] **Fig. 1** Isometric view of the invention.

15[0017] **Figs. 2a-d** Isometric view of the invention as well as detail elements.

[0018] **Figs. 3a-c** Top front and side views of the invention.

[0019] **Fig. 4** Side elevation of the invention in use in an above ground pool.

[0020] **Fig. 5** Side elevation of the invention in use in an in-ground pool.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

[0021] An improved pool skimming net (10) has a handle member (12) connected to a skimming net member (14) by way of an articulated joint member (16).
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[0022] The handle member (12) pivots from a substantially parallel configuration in relation to the skimming net member (14) to an substantially acute angle thereof. In order to secure any given angle, a retainer member (18) provides a secondary attachment point between the skimming net member (14) and the handle member (12).
10

[0023] A secondary handle clamp member (20) located at the distal end of the retainer member (18) secures it to the handle member (12).

[0024] The skimming net member (14) consists in a frame member (22) and a net (24) as is known in the art of skimmers. The handle member (12) is preferably of a telescoping configuration as is known in the art. The articulated joint member (16) is also a configuration well known in the art and need not be further discussed. Optionally, the handle member (12)
15

can be attached onto a handle clamp member (26) fixedly attached to the frame (22). Also optionally, the retainer member (18) can be clipped onto the frame (22) by way of a retainer clip member (28).

[0025] The frame member (22) further includes at least one cross support member (23) connected between the top and bottom frame member (22) in order to strengthen it.

[0026] In use, the skimming net (10) can switch from one configuration for an above ground pool (30), as shown in fig. 4, to another configuration for an in ground pool (32), as shown in fig. 5, simply by disconnecting the handle member (12) from the retainer member (18) and connecting it to the handle clamp member (26).

[0027] As to a further discussion of the manner of usage and operation of the present invention, the same should be apparent from the above description. Accordingly, no further discussion relating to the manner of usage and operation will be provided.

[0028] With respect to the above description then, it is to be realized that the optimum dimensional relationships for the parts of the invention, to include variations in size, materials, shape, form, function and manner of operation, assembly and use, are deemed readily apparent and obvious to one skilled in the art, and all equivalent relationships to those

illustrated in the drawings and described in the specification are intended to be encompassed by the present invention.

[0029] Therefore, 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
5 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.

CLAIMS

1. A pool skimming net having a handle member connected to a skimming net member by way of an articulated joint member; said articulated joint member being connected to a primary frame member interface; said primary frame member interface extending perpendicularly from a circumferential frame member portion; said skimming net member consisting in a frame member formed by said circumferential frame member portion, and at least one cross support member connected between a top portion and a bottom portion of said circumferential frame member portion; a net member is attached to and located within said frame member's periphery; said handle member pivoting from a parallel configuration in relation to said frame member, to an acute angle thereof; a retainer member for setting any angle in between said parallel and set acute angle configurations, also providing a secondary attachment point between said frame member, and said handle member by way of a retainer pivot point member extending integrally from said circumferential frame member portion; said primary frame member interface being located onto the top portion of said circumferential frame member portion, and said retainer pivot point member also located onto the top portion of said circumferential frame member portion so as to provide a separating space between said primary frame member interface and said retainer pivot point member both located on said circumferential frame member portion as well as a separating space on said handle member between said

articulated joint member and a resiliently deformable friction clamp member, located at a distal end of said retainer member and releasably connected onto said handle member by way of said resiliently deformable friction clamp member.

2. The pool skimming net of claim 1 wherein said handle member is attached onto a handle clamp member which is fixedly connected to said circumferential frame member portion.

3. The pool skimming net of claim 1 wherein said retainer member is clipped onto said frame member by way of a retainer clip member.

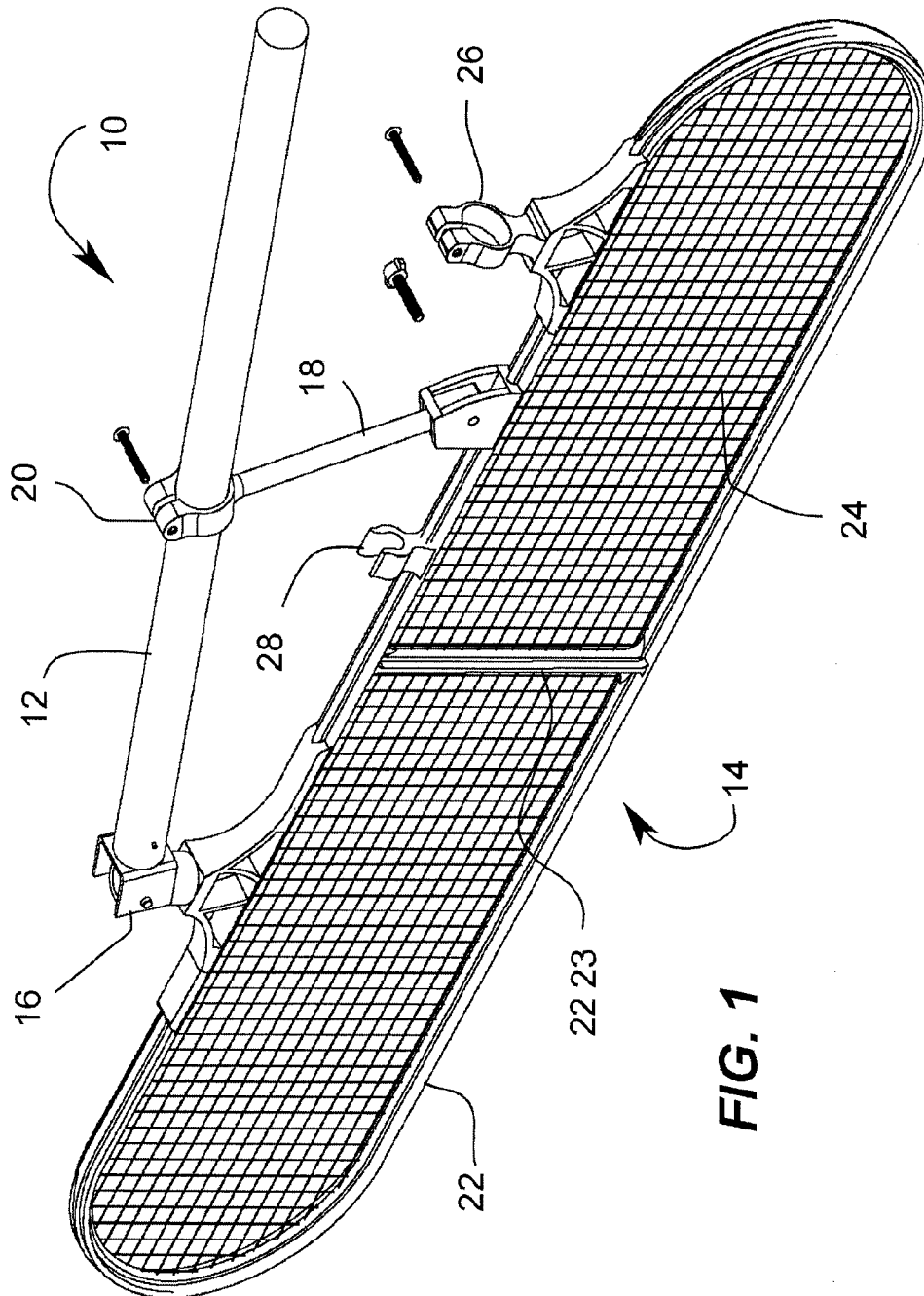
4. The pool skimming net of claim 1 wherein said handle member is telescopic.

5. The pool skimming net of claim 1 wherein when said handle member is disconnected from said retainer member and reconnected to said handle clamp member and change in configuration has the pool skimming net change from an in ground pool optimized configuration into an above ground pool optimized configuration.

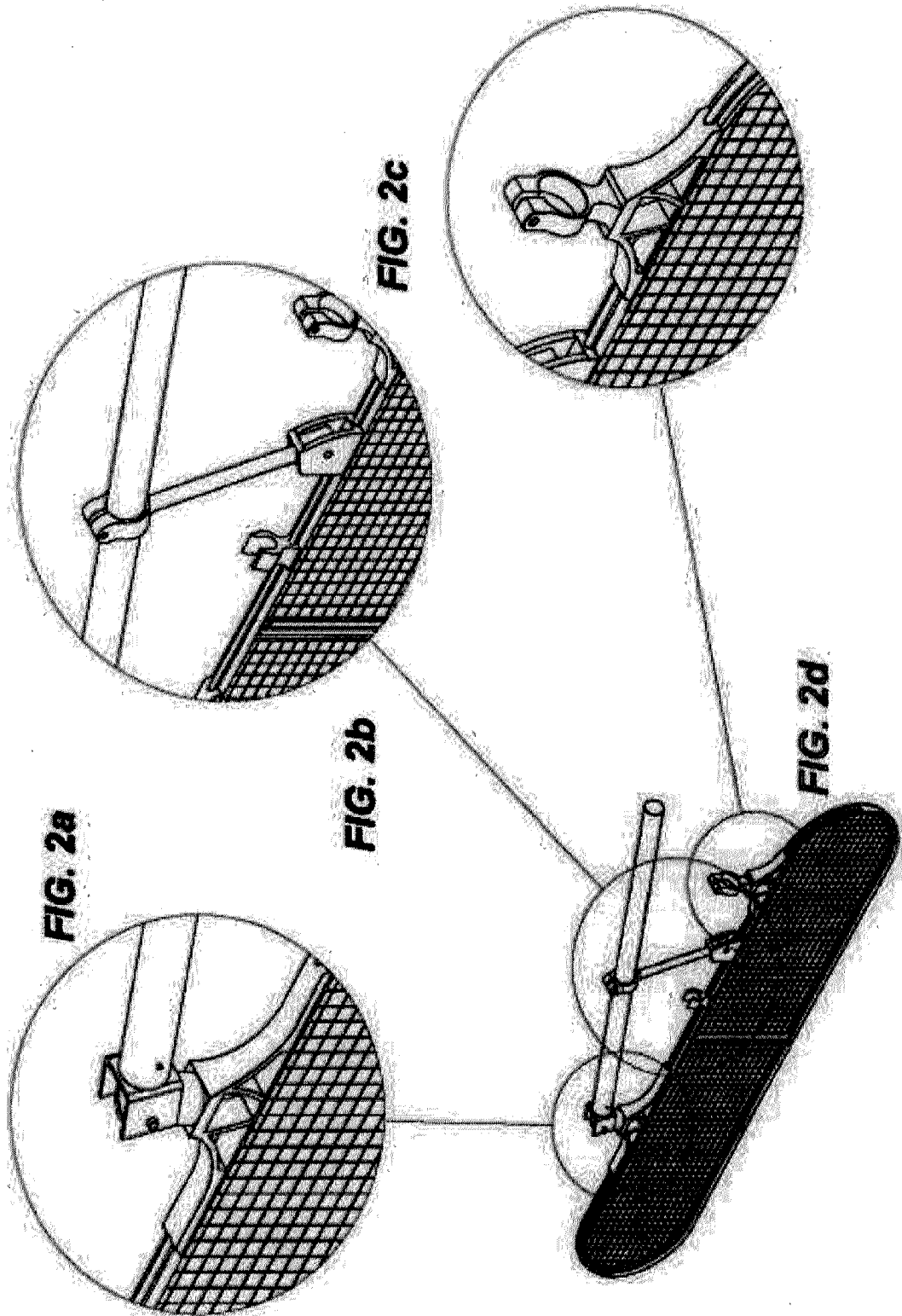
6. The pool skimming net of claim 1 wherein said cross support member being used for strengthening said frame member so as to reduce undue warping of said net member.

7. The pool skimming net of claim 1 wherein said separating space between said primary frame member interface and said retainer pivot point member providing leverage so as to reduce torsion stress onto said articulated joint member, as well as spreading load caused by water friction onto two points on said handle member.

REPLACEMENT SHEET



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FIG. 3a



FIG. 3c



FIG. 3b

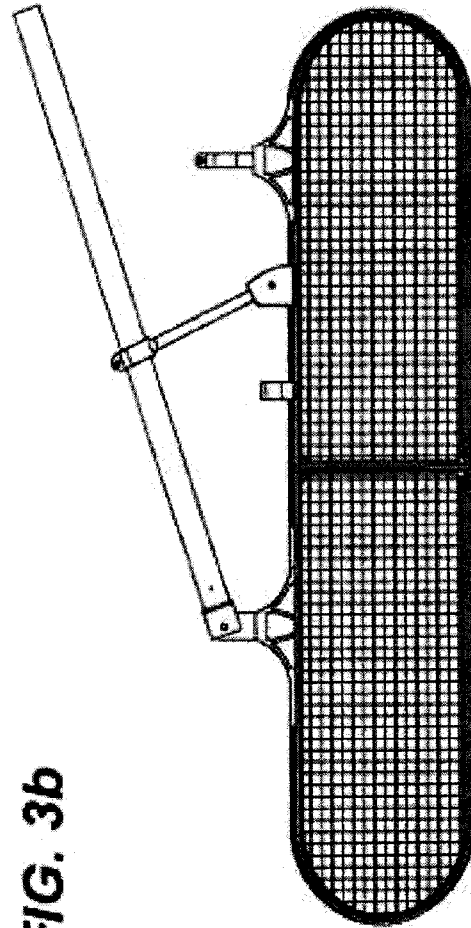
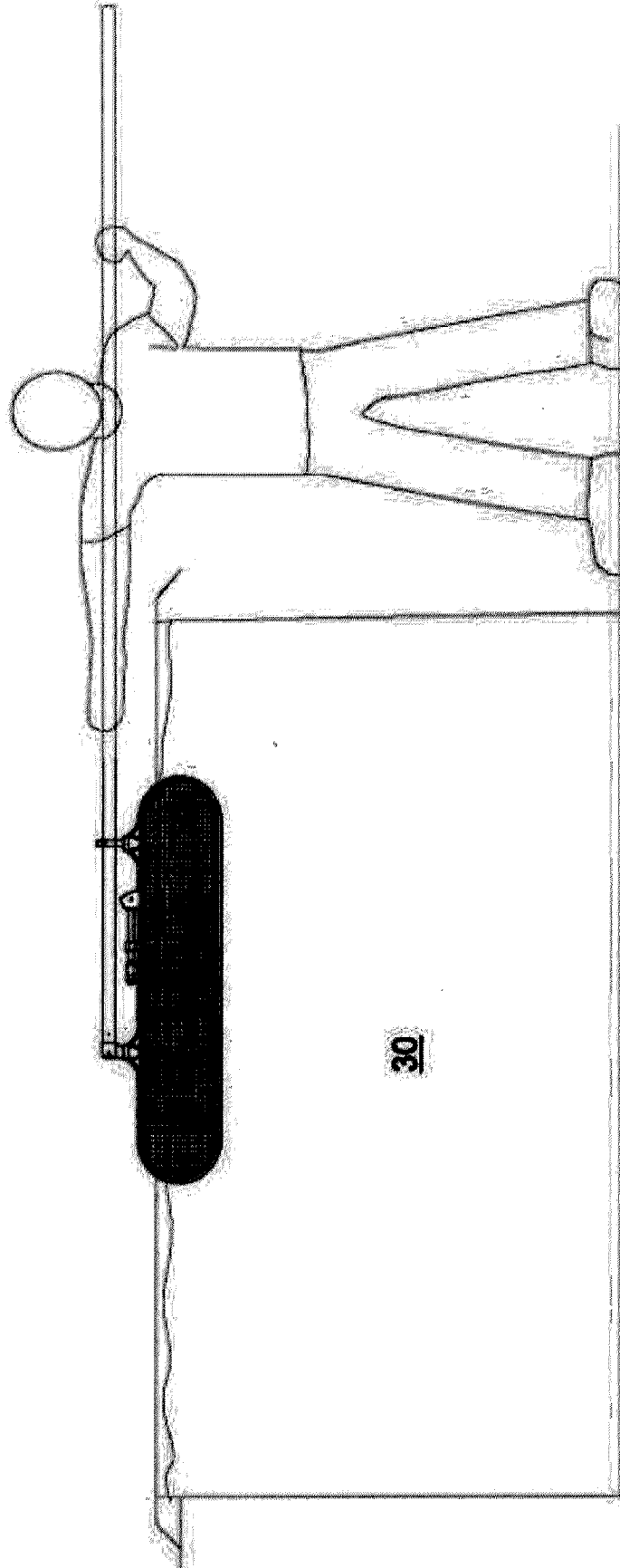


FIG. 4



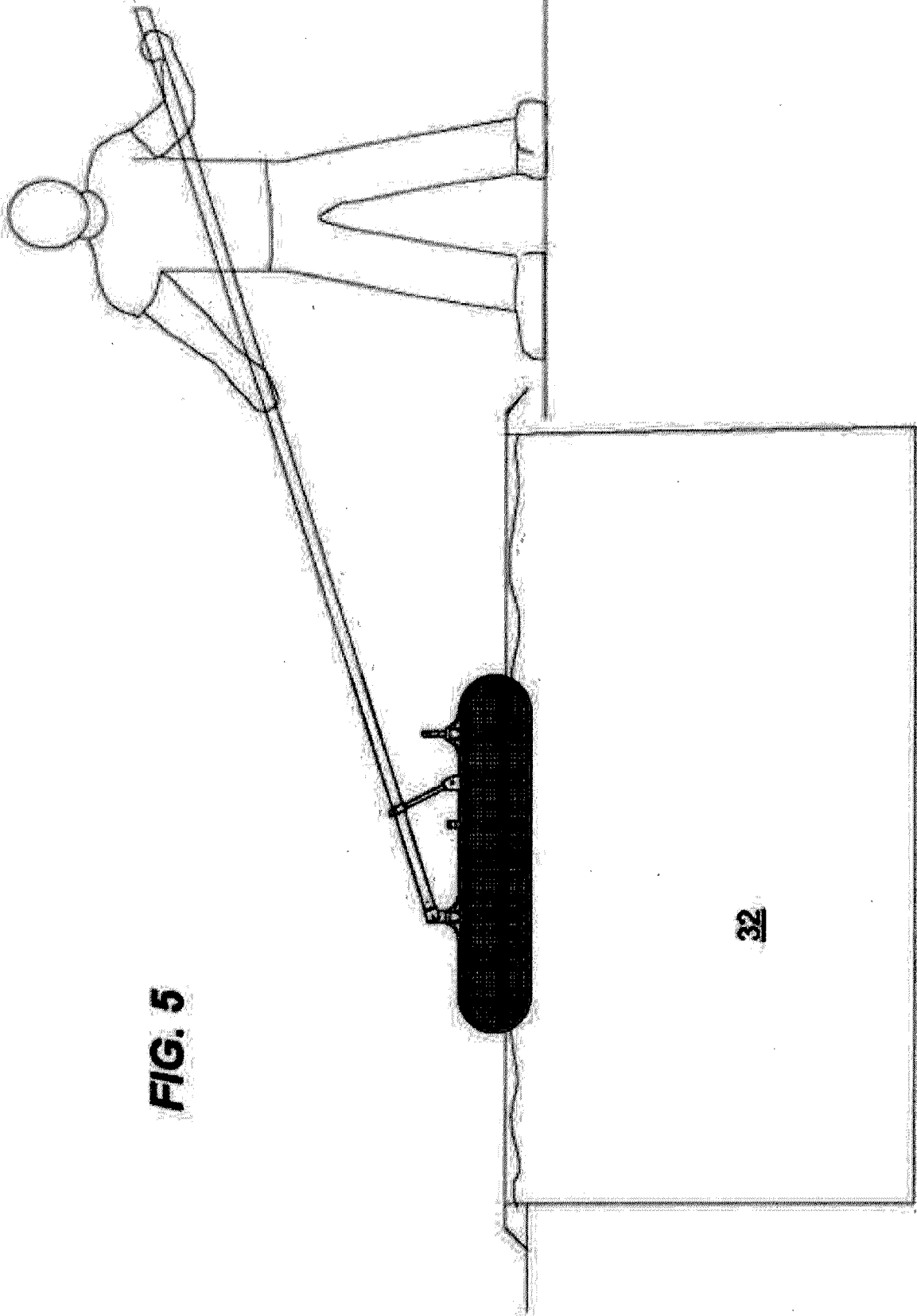


FIG. 5

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