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(54) **ANCHOR**

ANKER

ANCRE

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Description

[0001] The present invention relates to an anchor of the type which is composed of a first part having a fluke portion and a head plate portion, and a second part in the form of a shank which is movably positioned relative to the first part.

[0002] There are previously known anchors where the fluke portion and the head plate portion are welded together and where the shank is positioned movably relative to these welded portions of the anchor. When an anchor of this kind is to be stowed away, especially on board small vessels, such as pleasure crafts, this gives rise to considerable problems in terms of sheer space, in addition to the problems involved in manoeuvring this kind of anchor down through narrow hatches and finding a suitable place in which to stow it.

[0003] To use such anchors has therefore long been an unresolved problem. In addition, their weight has been such that the anchors are not always that easy to handle on board.

[0004] The object of the present invention is therefore to overcome the problems associated with this type of anchor, by providing an anchor as described in claims 1 and 3.

[0005] According to a further embodiment of the anchor, the fluke portion and the head plate portion are lockably, but detachably secured to one another, and the shank is detachable from the first part when the head plate portion is detached and removed from the fluke portion.

[0006] According to another embodiment of the anchor, the fluke portion is made having an indentation at a first point along a first longitudinal outer edge and is equipped at a second point along the second longitudinal outer edge of the fluke portion with a hole for engagement with a hitch pin, and that a third point is made having a contact edge. The said first point is level with the axis of rotation of the shank, the second point is a short distance below the axis of rotation of the shank, and the third point is a short distance above the axis of rotation of the shank. Moreover, the fluke portion is made having a recess which forms a bearing site for the shank pivot shaft.

[0007] According to yet another embodiment, the head plate portion is made having a longitudinal, elongate opening to allow the head plate portion to be passed into a lower area of the fluke portion, one end of this opening being designed for engagement with the indentation on the fluke portion, and the edge immediately adjacent to the other end of the opening being designed for contact with the contact edge of the fluke portion. Transverse to the opening at a central area thereof and on each side there is made a small, preferably bevelled recess to allow the shank to tilt relative to the first part of the anchor. The head plate portion will effectively prevent lateral movement of the shank pivot shaft relative to the fluke portion, whilst the bearing site in the fluke portion prevents axial movement of the shank pivot shaft and movement of the pivot shaft in the plane of the fluke portion.

[0008] In a special embodiment, where the anchor is intended to be a large anchor, the fluke portion consists of a first fluke part and a second fluke part, each which is capable of being secured in a respective area of the head plate portion. It is advantageous if each fluke portion consists of a claw and a support bracket detachably affixed to the claw. In a preferred embodiment the support bracket will rest against the side faces of the claw and a surface of the head plate portion made in the form of a locking plate. By allowing the shank to extend through an opening in the head plate portion, this forms a check piece for the fluke parts to prevent these from moving relative to the head plate portion.

[0009] The invention will now be described in more detail with reference to the appended drawings which illustrate exemplary embodiments that do not define the limits of the invention.

[0010] Figs. 1, 2 and 3 show three alternative anchor structures according to the invention.

[0011] Fig. 4 is an illustration of a locking pin, a so-called hitch pin, for use with the anchor according to the invention.

[0012] Figs. 5 and 6 show the steps for disassembling an anchor according to the invention.

[0013] Fig. 7 is a lateral view of the same steps on a reduced scale.

[0014] Fig. 8 is an illustration of an additional alternative anchor structure, according to the invention, intended as a large anchor.

[0015] Fig. 9 is a vertical view of the parts in Fig. 8 once assembled.

[0016] Fig. 10 is a perspective view of the parts in Fig. 8, once assembled.

[0017] Fig. 1 illustrates an anchor capable of being disassembled, wherein the first part of the anchor consists of a fluke portion 1 and a head plate portion 2. The fluke portion 1 and the head plate portion 2 are lockably, but detachably secured to one another. The second part of the anchor consists of a shank 3 which has a pivot shaft 4. Furthermore, the shank 3 is equipped with a hole 14 for securing an anchor line (not shown). The shank 3 is designed to be capable of being detached from the first part of the anchor when the head plate portion 2 is detached and removed from the fluke portion 1, as will be described in more detail below.

[0018] The fluke portion 1 is at a first point along a first longitudinal outer edge made having an indentation 8, and along the second longitudinal outer edge of the fluke portion at a second point it is equipped with a hole 9 for engagement with a locking pin, preferably a so-called hitch pin. At a third point along said second longitudinal outer edge of the fluke portion 1 there is formed a contact edge 10. As can be seen from Fig. 1, the said first point 8 is level with the axis of rotation 13 of the shank pivot shaft 4 when this pivot shaft is placed in a pivot

shaft accommodating opening 5 in the fluke portion 1. The second point 9 is at a short distance below the axis of rotation of the shank, i.e., just below the opening 5 in the fluke portion 1, as can be seen clearly from Fig. 1. The said third point 10 along the second longitudinal outer edge of the fluke portion 1 is at a short distance above the shank pivot shaft 13, i.e., at the upper edge of the opening 5. The opening or recess 5 in the fluke portion 1 will both provide a bearing site for the shank pivot shaft 4 and also allow the shank 3 to tilt about the axis 13, thereby being brought somewhat out of the plane of the fluke portion.

[0019] The head plate portion 2 is designed to have a longitudinal, elongate opening 6 so that the head plate portion can thus be passed into a lower area of the fluke portion 1. One end 11 of the opening 6 is designed for engagement with the indentation 8 on the fluke portion 1, and an edge 12 immediately adjacent to the other end of the opening 6 is designed for contact with the contact edge 10 on the fluke portion 1. Transverse to the opening 6 at a central area thereof and on each side there is made a small, preferably bevelled recess 7 in order to allow the shank to tilt relative to the first part of the anchor 1, 2, and especially relative to the head plate portion 2.

[0020] By making the bevels on the recess 7 at different angles on opposite side 3 of the head plate portion 2, it will be possible to change the angular deflection of the shank 3 relative to the head plate portion 2.

[0021] The head plate portion 2 will effectively prevent lateral movement of the shank pivot shaft 4 relative to the fluke portion 1 in that the head plate portion 2 defines the recess 5 on each side of the fluke portion 1. As will immediately be understood on inspection of the drawings, the bearing site 5 in the fluke portion will prevent axial movement of the shank pivot shaft 4 and movement of the pivot shaft out of the plane of the fluke portion. The functional members and sites shown and described in connection with Fig. 1 will also be found on Fig. 2 where the reference numerals 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 and 14 are given as 1', 2', 3', 4', 5', 6', 7', 8', 9', 10', 11', 12' and 14'. In a similar way the same members in Fig. 3 are indicated by means of 1", 1", 3", 4", 5", 6", 7", 8", 9", 10", 11", 12" and 14".

[0022] The anchor illustrated in Fig. 3, and in addition shown in Figs. 5-7, has at the lower end of the fluke portion 1 an oblong hole 15 designed for securing an extra anchor line in order to effect disengagement of the anchor more readily, as is known per se.

[0023] Fig. 4 shows a locking pin which is of a known type per se, e.g., a so-called hitch pin. This locking pin 16 is intended to be capable of engaging with the hole 9, respectively 9' and 9", on the fluke portion in such manner that it prevents the head plate portion from turning about the contact indentation 8 and thus becoming disengaged from the fluke portion. Disassembly of the anchor is shown in more detail in connection with Figs. 5-7, and where the anchor is of a type as shown, e.g., in Fig. 3. When the locking pin 16 is withdrawn from the hole 9 it is possible to tilt the head plate portion 2" about the contact indentation 8" thereby allowing the head plate portion to become disengaged from the fluke portion 1". When this part of the disassembly as shown in Fig. 6a has been completed, the shank 3" and its pivot shaft 4", as is further shown in Fig. 6b, will be capable of being detached from the fluke portion 1", in that the pivot shaft 4" on movement of the shank 3" will come to lie outside the plane of the fluke portion 1".

[0024] The fluke portion 1", the head plate portion 2", the shank 3" and the locking pin 16 can thus easily be stowed away on board a vessel and will take up minimum space in comparison with a traditional anchor of the type which has been taught and described and where the fluke portion and the head plate portion are welded together. The present invention not only permits simplified storage of such an anchor, but also facilitates the handling of the anchor on deck before it is lowered into the sea.

[0025] Fig. 7 shows the different disassembly steps on a reduced scale in full lateral view and as just shown and described in connection with Fig. 5, and Figs. 6a, 6b and 6c.

[0026] Although the present invention according to Figs. 1 to 3 has been shown in connection with three exemplary variants of the anchor capable of being disassembled, it will immediately be understood that the fluke portions, the head plate portions and the shanks are interchangeable, so that, e.g., the anchor shown in Fig. 1 may have a head plate portion 2' as shown in Fig. 2 and that, e.g., the anchor as shown in Fig. 3 may have a shank 3' as shown in Fig. 2. Of course, other possible interchanges are conceivable. Within the scope of the application it is, of course, possible to make the fluke portion, the head plate portion and the shank in ways other than those shown. The pure structural design of the fluke portion, the head plate portion and the shank should therefore not be seen as a limitation of the invention.

[0027] Figs. 8-10 show a typical large anchor structure as a modification of the structure according to Figs. 1-7.

[0028] Here, there is a fluke portion 16-19 consisting of a first fluke part 16, 18 and a second fluke part 17, 19, each of which is attachable to the head plate portion 20 in a respective area 20', 20" thereof. Each fluke part 16, 18; 17, 19 consists of a claw 16; 17 and a support bracket 18; 19 affixed to the claw so as to be detachable. The support bracket 18 is by means of its groove 18' capable of being passed into a groove 16' on the claw 16, so that the support bracket 18 thus rests against the side faces of the claw 16. The same applies to the support bracket 19 which by means of its groove 19' can be passed on to the claw 17 in the groove 17' so that the support bracket 19 thus rests against the side faces of the claw 17. The fluke part 16, 18 can thus be passed as one body into an area 20' of the head plate portion

20 via an oblong slot 21 therein, so that a groove 16" on the fluke part 16 is brought into engagement with said area 20'. Thus, the support bracket with an edge portion 18" will also rest against a surface of the head plate portion 20. Similarly, the fluke part 17, 19 can be passed into the head plate portion 20 and its area 20" via the slot 21', so that a slot 17" on the claw 17 engages with the area 20" of this head plate portion. When this is done, the edge portion 19" of the support bracket will simultaneously rest against the surface of the head plate portion 20, as can be seen clearly from Figs. 9 and 10. As will be understood, the fluke parts 16, 18 and 17, 19 in the position shown in Figs. 9 and 10 cannot be moved further towards the outer ends of the head plate portion 20, but it will also be understood that it is necessary to prevent the fluke parts 16, 18 and 17, 19 from moving towards each other, thereby running the risk of becoming disengaged from the head plate portion 20. The head plate portion 20 thus primarily serves as a locking plate for the fluke parts, but these fluke parts 16, 18 and 17, 19 first become fixed on the head plate portion 20 when the anchor shank 22 is passed through an expanded portion 21" of the opening in the head plate portion 20 where the said slots 21 and 21' constitute a part thereof. The shank will thus form a check piece for the fluke parts 16, 18 and 17, 19, so that their movement relative to the head plate portion 20 is prevented. The shank 22 has a pivot shaft 23 which will come to rest against an extruded portion 16"', 17"' on respective claws 16; 17. Furthermore, the shank 22 is provided with a hole 24 for securing an anchor line or anchor chain via, for instance, a shackle (not shown). As indicated by means of the arrow 25 in Fig. 10, the first part of the anchor, which consists basically of the fluke parts 16, 18 and 17, 19 and the head plate portion 20, will be tiltable relative to the shank 22. This is due to the opening 21" in the head plate portion 20 being made with bevels which permit the first part of the anchor and the second part thereof to tilt relative to one another.

[0029] Within the scope of the invention it will, of course, be possible to make modifications of the anchor solution as shown in Figs. 8-10. For instance, it is conceivable that the portion of the claw 16 and/or 17 which extends below the underside of the head plate portion 20 may be extended in order to accommodate a hole intended for securing an extra anchor line in order to help disengage the anchor more readily. Furthermore, it is, of course, also conceivable that the claws, support brackets, head plate portion and shanks may be made in alternative ways to those shown, without thereby departing from the invention.

[0030] Although in the present invention it is not considered necessary to equip, for instance, the shank with a locking piece in order to prevent this from moving substantially relative to the head plate portion in the axial direction of the shank, it is of course possible to provide, for instance, a locking bolt (not shown) which can be secured in a hole 26 on the shank 22 at a distance above the head plate 20 so as not to prevent the first part of the anchor and its second part from tilting relative to one another.

Claims

1. An anchor of the type which is composed of a first part having a fluke portion (1; 1'; 1") and a head plate portion (2, 2'; 2"), and a second part in the form of a shank (3; 3'; 3") which is movably positioned relative to the first part, the anchor being of a type that can be disassembled, the fluke portion (1; 1', 1") and the head plate portion (2; 2'; 2") in the first part being detachably secured to one another, the shank (3; 3'; 3") being detachable from the first part of the anchor, the fluke portion (1; 1'; 1") and the head plate portion (2; 2'; 2") being lockably, but detachably secured to one another, and the shank (3; 3'; 3") being detachable from the first part when the head plate portion is detached and removed from the fluke portion, wherein the fluke portion (1; 1'; 1") at a first point along a first longitudinal outer edge is made having an indentation (8; 8'; 8"), and along the second longitudinal edge of the fluke portion at a second point is provided with a hole (9; 9'; 9") for engagement with a locking pin (16), e.g., a hitch pin, and at a third point is provided with a contact edge (10; 10'; 10"), that said first point is level with the axis of rotation (13) of the shank (3; 3'; 3"), that said second point is a short distance below the axis of rotation of the shank, that said third point is a short distance above the axis of rotation of the shank, and that the fluke portion is made having a recess (5) which forms a bearing site for the shank pivot shaft (4; 4'; 4").

2. An anchor as disclosed in Claim 1, wherein the head plate portion (2; 2'; 2") is made having a longitudinal elongate opening (6; 6'; 6") to allow the head plate portion to be passed into a lower area of the fluke portion (1; 1'; 1"), one end (11; 11'; 11") of this opening being designed for engagement with the indentation (8; 8'; 8") on the fluke portion, and the edge (12; 12'; 12") immediately adjacent to the second end of the opening (6; 6'; 6") being designed for contact against the contact edge (10; 10'; 10") on the fluke portion, and that transverse to the opening at a central area thereof and on each side there is made a small, preferably bevelled recess (7; 7'; 7") in order to allow the shank (3; 3'; 3") to tilt relative to the first part of the anchor, and that the head plate portion effectively prevents lateral movement of the shank pivot shaft relative to the fluke portion, whilst the bearing site in the fluke portion prevents axial movement of the shank pivot shaft and movement of the pivot shaft in the plane of the fluke portion.

3. An anchor of the type which is composed of a first part having a fluke portion (16-19) and a head plate portion (20), and a second part in the form of a shank (22) which is movably positioned relative to the first part, the anchor being of a type that can be disassembled, the fluke portion (16-19) and the head plate portion (20) in the first part being detachably secured to one another, the shank (22) being detachable from the first part of the anchor, and the fluke portion (16-19) consisting of a first fluke part (16, 18) and a second fluke part (17, 19), each of which are attachable in respective areas (20'; 20") of the head plate portion (20), wherein each fluke part (16, 18; 17, 19) consists of a claw (16, 17) and a support bracket (18; 19) affixed in a detachable manner to the claw (16;17).

4. An anchor as disclosed in Claim 3, wherein the support bracket (18; 19) rests against the side faces of the claw and a surface of the head plate portion (20) made in the form of a locking plate.

5. An anchor as disclosed in Claims 3 or 4, wherein the shank (32) extends through an opening (21") in the head plate portion and forms a check piece for the fluke parts (16-19) in order to prevent movement thereof relative to the head plate portion.

Patentansprüche

1. Ein Anker derjenigen Art, bei welchem der Anker aus einem ersten Teil mit einem Flügelabschnitt (1; 1'; 1") und mit einem Kopfplattenabschnitt (2; 2'; 2") und einem zweiten Teil in der Form eines Schaftes (3; 3'; 3") zusammengesetzt ist, welcher relativ zum ersten Teil bewegbar positioniert ist, wobei der Anker zerlegbar ausgebildet ist, der Flügelabschnitt (1; 1'; 1") und der Kopfplattenabschnitt (2; 2'; 2") des ersten Teils abnehmbar aneinander befestigt sind, der Schaft (3; 3'; 3") vom ersten Teil des Ankers abnehmbar ist, der Flügelabschnitt (1; 1'; 1") und der Kopfplattenabschnitt (2; 2'; 2") verriegelbar, jedoch trennbar aneinander befestigt sind und wobei der Schaft (3; 3'; 3") von dem ersten Teil abnehmbar ist, wenn der Kopfplattenabschnitt entfernt und von dem Flügelteilabschnitt weggenommen worden ist, wobei der Flügelabschnitt (1; 1'; 1") an einem ersten Punkt längs einer ersten Längsaußenkante mit einem Einschnitt (8; 8'; 8") und längs der zweiten Längskante des Flügelabschnittes an einem zweiten Punkt mit einem Loch (9; 9'; 9") für den Eingriff mit einem Verriegelungszapfen (16), z.B. einem Hakenteil, und an einem dritten Punkt mit einer Anschlag- oder Kontaktkante (10; 10'; 10") ausgebildet ist, wobei der erste Punkt auf gleicher Höhe mit der Drehachse (13) des Schaftes (3; 3'; 3") liegt, der zweite Punkt in einem kurzen Abstand unterhalb der Drehachse des Schaftes angeordnet ist, der dritte Punkt in einem kurzen Abstand oberhalb der Drehachse des Schaftes angeordnet ist, und wobei der Flügelabschnitt mit einer Ausnehmung (5) ausgebildet ist, welche eine Lagerungsstelle für den Schwenkteil (4; 4'; 4") des Schaftes bildet.

2. Anker nach Anspruch 1, **dadurch gekennzeichnet, dass** der Kopfplattenabschnitt (2; 2'; 2") mit einer länglichen Öffnung (6; 6'; 6") ausgebildet ist, damit der Kopfplattenabschnitt in einen unteren Bereich des Flügelabschnitts (1; 1'; 1") gebracht werden kann, wobei das eine Ende (11; 11'; 11") dieser Öffnung so dimensioniert ist, dass ein Eingriff mit dem Einschnitt (8; 8'; 8") an dem Flügelabschnitt möglich ist, und der Kantenteil (12; 12'; 12") unmittelbar benachbart zum ersten Ende der Öffnung (6; 6'; 6") so ausgebildet ist, um eine Berührung mit der Kontaktkante (10; 10'; 10") am Flügelabschnitt zu ermöglichen, und dass transversal zur Öffnung an deren Zentralbereich und zu beiden Seiten ein kleiner, vorzugsweise ein sich verjüngender Rezess (7; 7'; 7") ausgebildet ist, um dem Schaft (3) zu ermöglichen, sich relativ zum ersten Teil des Ankers zu verschwenken und dass der Kopfplattenabschnitt eine seitliche Bewegung des Schwenkteils des Schaftes relativ zum Flügelabschnitt wirksam verhindert, während die Lagerungsstelle im Flügelabschnitt Axialbewegungen des Schwenkteils des Schaftes und Bewegungen des Schwenkteils des Schaftes in der Ebene des Flügelabschnitts verhindert.

3. Anker derjenigen Art, bei welcher der Anker aus einem ersten Teil mit einem Flügelabschnitt (16-19) und mit einen Kopfplattenabschnitt (20) und einen zweiten Teil in der Form eines Schaftes (22) zusammengesetzt ist, welcher relativ zum ersten Teil bewegbar positioniert ist, wobei der Anker zerlegbar ist, wobei der Flügelabschnitt (16-19) und der Kopfplattenabschnitt (20) in dem ersten Teil abnehmbar aneinander befestigt sind, der Schaft (22) von dem ersten Teil des Ankers abnehmbar ist und der Flügelabschnitt (16-19) aus einem ersten Teil (16, 18) und einem zweiten Teil (17, 19) gebildet ist, wobei jeder in entsprechenden Bereichen (20'; 20") des Kopfplattenteils (20) befestigbar ist, und wobei jeder Flügelteil (16, 18; 17, 19) aus einer Klaue (16, 17) und einem Stützteil (18; 19) gebildet ist, der an der Klaue (16, 17) befestigt ist.

4. Anker nach Anspruch 3, wobei der Stützteil (18; 19) an den Seitenflächen der Klaue anliegt und eine Oberfläche des Kopfplattenteils (20) in der Form einer Verriegelungsplatte ausgebildet ist.

5. Anker nach einem der Ansprüche 3 oder 4, wobei der Schaft (32) sich durch eine Öffnung (21") in dem

Kopfplattenteil hindurch erstreckt und ein Kontroll- oder Prüfstück für die Ankerteile (16-19) bildet, um Bewegungen dieses Teiles relativ zum Kopfplattenteil zu verhindern.

Revendications

1. Ancre du type composée d'une première partie comportant une partie formant patte (1; 1'; 1") et une partie formant plaque d'extrémité (2 ; 2' ; 2"), et d'une deuxième partie sous la forme d'une verge (3 ; 3' ; 3") qui est positionnée mobile par rapport à la première partie, l'ancre étant d'un type démontable, la partie formant patte (1 ; 1' ; 1") et la partie formant plaque d'extrémité (2 ; 2' ; 2") de la première partie étant fixées l'une à l'autre de manière amovible, la verge (3 ; 3' ; 3") pouvant être détachée de la première partie de l'ancre, la partie formant patte (1 ; 1' ; 1") et la partie formant plaque d'extrémité (2 ; 2' ; 2") étant fixées l'une à l'autre de façon verrouillable mais amovible, et la verge (3 ; 3' ; 3") étant détachable de la première partie lorsque la partie formant plaque d'extrémité est détachée et retirée de la partie formant patte, dans laquelle la partie formant patte (1 ; 1' ; 1") comprend, à un premier point le long d'un premier bord extérieur longitudinal, comprend une encoche (8 ; 8' ; 8"), et elle est pourvue, à un deuxième point le long du deuxième bord longitudinal, d'un trou (9 ; 9' ; 9") destiné à coopérer avec un axe de verrouillage (16), par exemple une cheville, et elle comprend à un troisième point, un bord de contact (10 ; 10' ; 10"), ledit premier point étant au même niveau que l'axe de rotation (13) de la verge (3 ; 3' ; 3"), ledit deuxième point étant à une courte distance au-dessous de l'axe de rotation de la verge, ledit troisième point étant à une courte distance au-dessus de l'axe de rotation de la verge, et la partie formant patte comprenant un évidement (5) formant un logement de palier pour le pivot (4 ; 4' ; 4") de la verge.

2. Ancre selon la revendication 1, dans laquelle la partie formant plaque d'extrémité (2 ; 2' ; 2") comprend une ouverture allongée longitudinale (6 ; 6' ; 6") destinée à permettre le passage de la partie formant plaque d'extrémité dans une zone inférieure de la partie formant patte (1 ; 1' ; 1"), une extrémité (11 ; 11' ; 11") de cette ouverture étant conçue pour coopérer avec l'encoche (8 ; 8' ; 8") située sur la partie formant patte, et le bord (12 ; 12' ; 12") immédiatement adjacent à la deuxième extrémité de l'ouverture (6 ; 6' ; 6") étant conçu pour réaliser un contact avec le bord de contact (10 ; 10' ; 10") situé sur la partie formant patte, et dans laquelle un petit évidement de préférence biseauté (7 ; 7' ; 7") est réalisé transversalement à l'ouverture au niveau d'une zone centrale et de chaque côté de celle-ci, afin de permettre à la verge (3 ; 3' ; 3") de s'incliner par rapport à la première partie de l'ancre, et la partie formant plaque d'extrémité empêche efficacement tout mouvement latéral du pivot de verge par rapport à la partie formant patte, tandis que le logement de palier dans la partie formant patte empêche tout mouvement axial du pivot de verge et tout mouvement du pivot dans le plan de la partie formant patte.

3. Ancre du type composée d'une première partie comportant une partie formant patte (16 à 19) et une partie formant plaque d'extrémité (20), ainsi que d'une deuxième partie sous la forme d'une verge (22) qui est positionnée mobile par rapport à la première partie, l'ancre étant d'un type démontable, la partie formant patte (16 à 19) et la partie formant plaque d'extrémité (20) de la première partie étant fixées l'une à l'autre de manière amovible, la verge (22) étant détachable de la première partie de l'ancre, et la partie formant patte (16 à 19) étant constituée d'une première partie de patte (16, 18) et d'une deuxième partie de patte (17, 19), chacune d'elles pouvant être fixée dans des zones respectives (20' ; 20") de la partie formant plaque d'extrémité (20), dans laquelle chaque partie de patte (16, 18 ; 17, 19) est constituée d'une griffe (16 ; 17) et d'une patte de support (18 ; 19) fixée de manière amovible à la grille (16 ; 17).

4. Ancre selon la revendication 3, dans laquelle la patte de support (18 ; 19) repose contre les faces latérales de la griffe et contre une surface de la partie formant plaque d'extrémité (20) réalisée sous la forme d'une plaque de verrouillage.

5. Ancre selon les revendications 3 ou 4, dans laquelle la verge (32) s'étend à travers une ouverture (21") dans la partie formant plaque d'extrémité et forme une pièce d'arrêt des parties de patte (16 à 19) afin d'empêcher leur mouvement par rapport à la partie formant plaque d'extrémité.

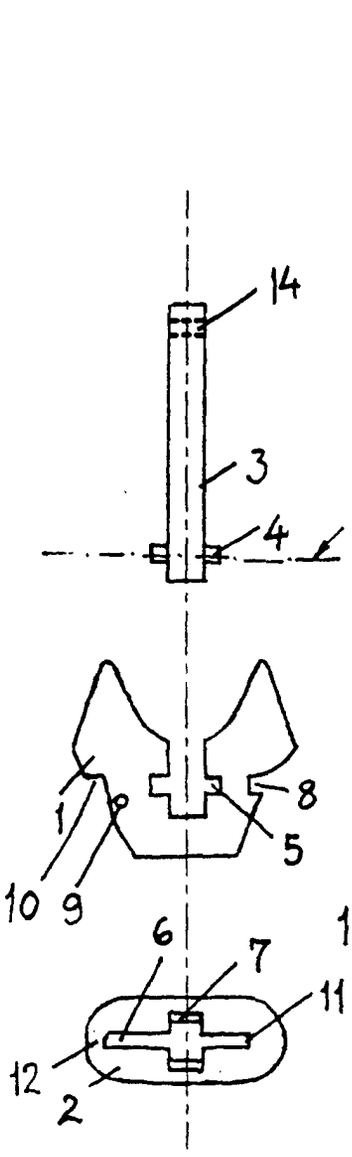

Fig. 1

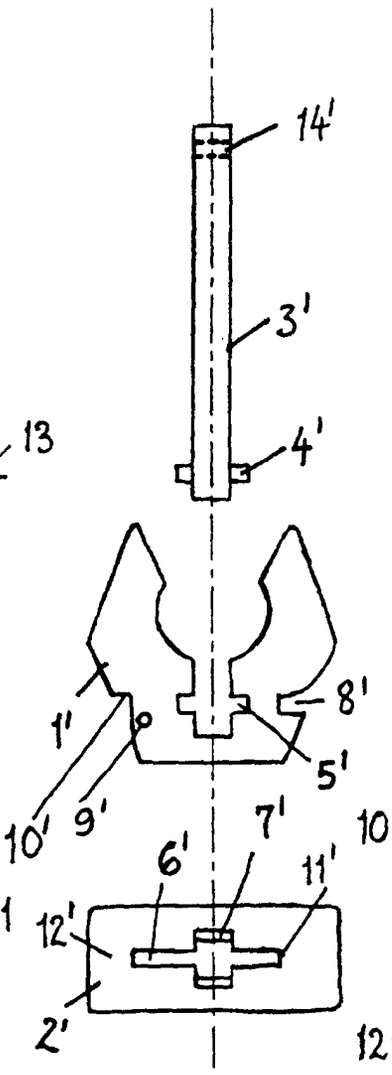

Fig. 2

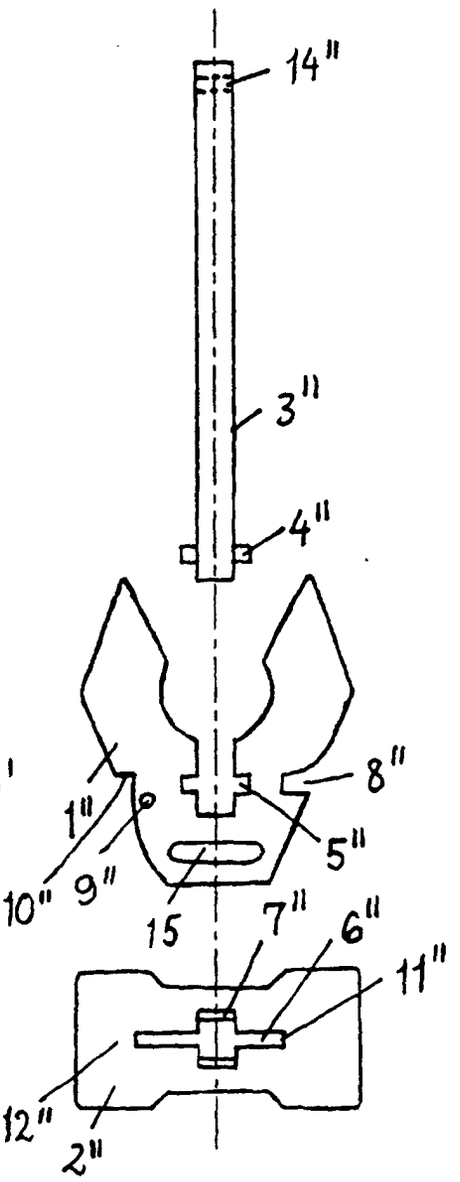

Fig. 3

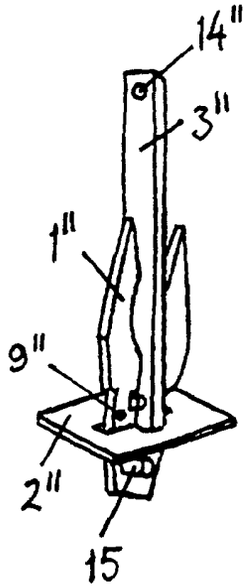

Fig. 6a

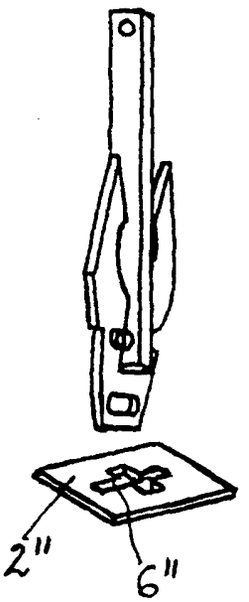

Fig. 6b

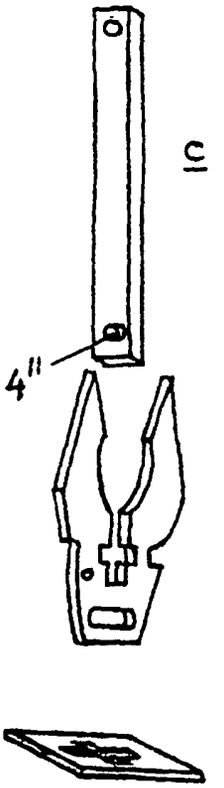

Fig. 6c

Fig. 4

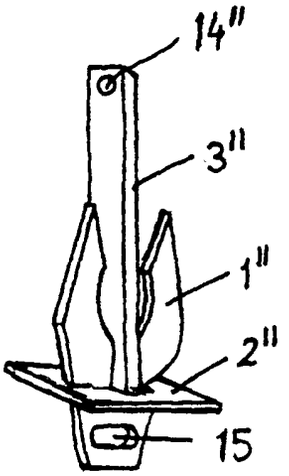

Fig. 5

FIG.7

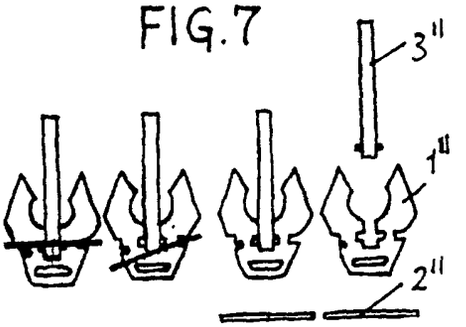

Fig. 7

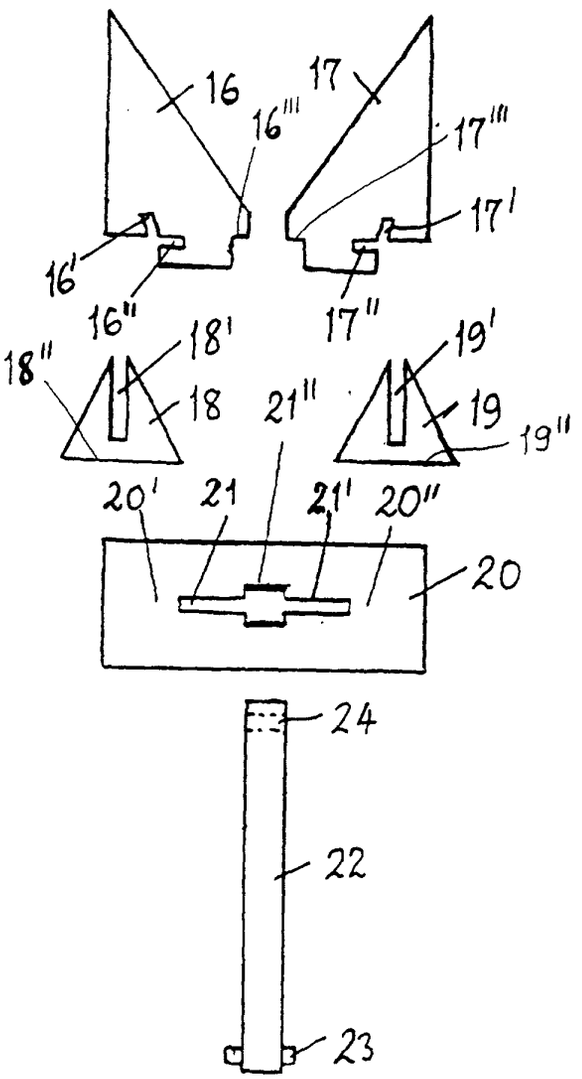

Fig. 8

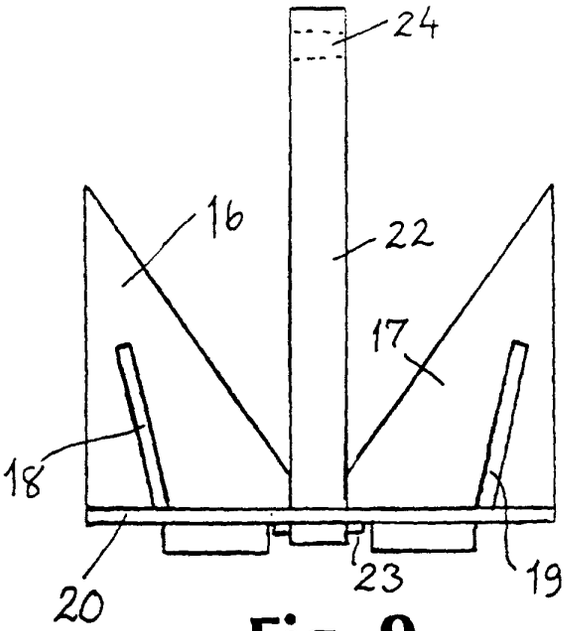

Fig. 9

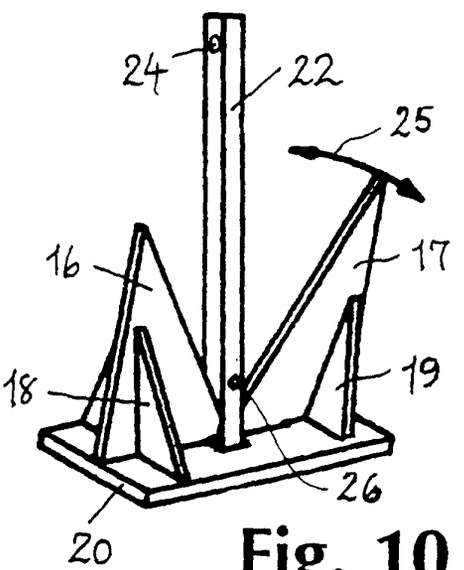

Fig. 10