

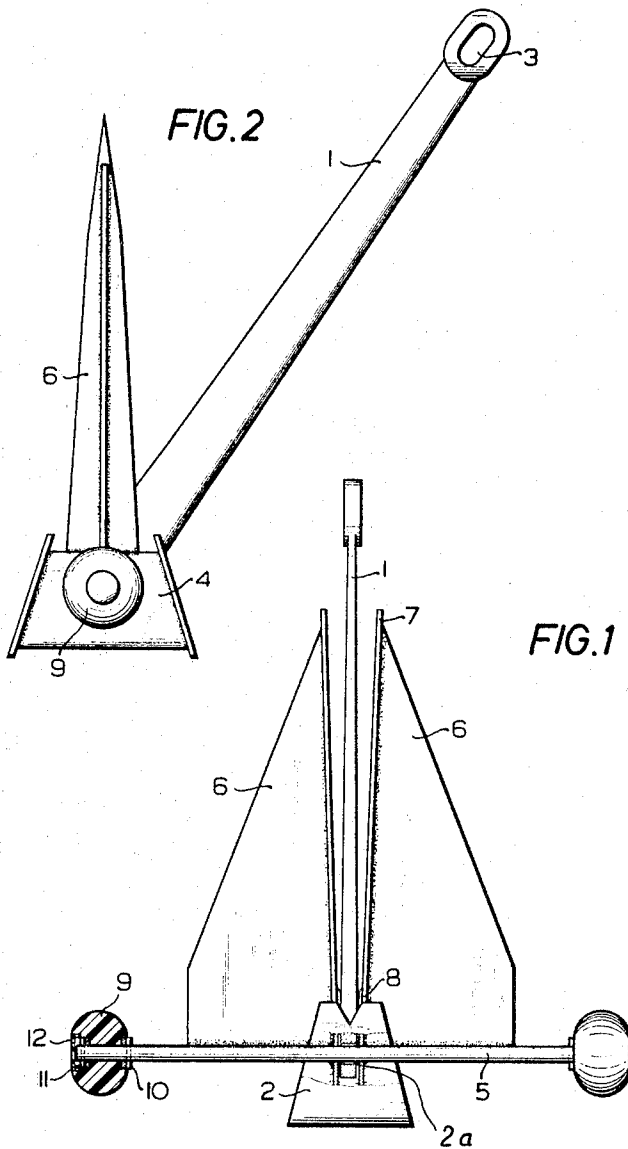
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3 Claims. (Cl. 114-208)

The present invention relates to an anchor, and, more specifically, to a plate anchor with a shank one end of which has tiltably journaled thereon an anchor-head comprising two fluke members which are arranged as an image to each other on opposite sides of said shank and symmetrically thereto when said shank occupies its central position.

Light anchors of the above-mentioned type have the distinct drawback that they do not properly dig into the ground even if the latter is normally favorable for plate anchors, but are pulled through the anchoring ground with the vertically extending fluke members in a position turned by 90° to the desired position.

It is, therefore, an object of the present invention to provide a plate anchor which will overcome the above-mentioned drawback.

It is another object of this invention to provide a plate anchor of the above-mentioned general type which will always assume its proper anchoring position with the fluke members on the anchoring ground and substantially parallel thereto.

It is still another object of this invention to provide a plate anchor as set forth above, in which a horizontal or slightly upwardly directed pull on the anchor by means of the anchor chain will definitely cause the anchor to dig into the anchoring ground.

These and other objects and advantages of the invention will appear more clearly from the following specification in connection with the accompanying drawings, in which:

FIGURE 1 is a top view, partially in section, of a plate anchor according to the present invention in its neutral position; and

FIGURE 2 is a side view of the anchor of FIGURE 1 with the anchor-head in moved-out position.

The plate anchor according to the present invention is characterized primarily in that at the lower outer corners of the fluke members there are provided rotatable crowned or spherical enlargements which will prevent the anchor-head from digging into the anchoring ground in an incorrect position of the anchor. Preferably, the said ground or spherical enlargements are arranged at the ends of a shaft which forms a pivot for the anchor shank.

More specifically, the said ground or spherical enlargements are designed as rotatable balls so that the anchor can easily roll over the anchoring ground until the free tips of the fluke members pierce the anchoring ground and thus dig themselves into the ground in the desired manner.

Referring now to the drawing in detail, the anchor illustrated therein comprises an anchor shank 1 and an anchor-head 2 pivotally connected to said shank 1, as will presently appear. The free end of anchor shank 1 has an eye 3 for receiving a shackle or the like.

The anchor-head comprises four plates 4 welded together so as to form a structure resembling a truncated cone. Two oppositely located plates 4 are provided with a bore 2a through which extends a shaft or stock 5

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welded or otherwise firmly connected to the last-mentioned two plates 4. That portion of shaft or stock 5 which is located between the last-mentioned two plates 4 has tiltably journaled thereon the lower end of anchor shank 1. As will be seen from FIG. 1, those two plates 4 through which shaft 5 does not extend, in other words which fluke shaft 5, may act as abutments limiting the maximum tiltability of anchor shank 1 relative to anchor-head 2 to approximately 35°.

As will furthermore be seen from the drawing, two approximately triangular-shaped plate or fluke members 6 are connected to shaft 5, for instance by welding. Those edges of fluke member 6 which face anchor shank 1 extend nearly parallel to each other or diverge slightly in upward direction and may be provided with transverse narrow plates or strips 7, for instance welded thereto, so that said fluke members will have a T-shaped profile. If desired, plates or strips 7 may have welded thereon spacer members 8 for centering anchor shank 1 between said two fluke members 6.

In order to prevent the anchor according to the present invention from piercing into the anchoring ground in a position turned by 90° with regard to the proper and desired anchoring position. The free ends of shaft or stock 5 are provided with rotatable crowns, preferably balls 9 with flattened side surfaces which may preferably consist of synthetic material such as Polyamid.

Shaft 5 may be provided with rings or flanges 10 for engagement with that surface of balls 9 which faces anchor-head 2. The opposite sides, i.e. the outwardly directed sides of balls 9 are secured in their position by means of cotter-pins 11, split rings or the like. Saps 12, which may be of synthetic material such as Polyamid are inserted into corresponding side openings in balls 9 and are cemented thereto so that a smooth surface of balls 9 will be assured. It will be appreciated that balls 9 will at relatively low friction be able to rotate on shaft 5.

It is, of course, to be understood that the present invention is, by no means, limited to the particular construction shown in the drawing, but also comprises any modifications within the scope of the appended claims. Thus, instead of balls 9, also other enlargements may be provided on shaft 5 which do not have to be rotatable. Furthermore, if so desired, the balls or enlargements 9 may be mounted directly on or adjacent to the lower outer edges of flank members 6. It is also to be understood that the diameter of balls 9 is considerably greater than that of shaft 5, e.g. five times that of shaft 5.

What I claim is:

1. A plate anchor which comprises: an anchor shank having one end portion provided with means adapted to receive a chain, an anchor head, stock means extending through the other end portion of said shank and through said head and pivotally connecting said shank and said stock means to each other to permit a tilting movement of said shank and said head relative to each other, said head including two fluke members arranged on opposite sides of and substantially symmetrically with regard to the tilting plane of said shank, each of said fluke members including a plate of an approximately triangular formation and in proper anchoring position of said anchor having its major surface approximately parallel to the anchoring ground, and substantially round members respectively rotatably mounted at the ends of said stock means and having a diameter representing a multiple of the diameter of said stock means and being

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adapted when said flukes are in nearly upright position on the anchoring ground to support said anchor on the anchoring ground and to guide the same thereon into the proper anchoring position of said fluke members.

2. An anchor according to claim 1, in which said 5 round members are approximately ball-shaped.

3. An anchor according to claim 2, in which said ball-shaped round members have those sides thereof which face away from the respective adjacent fluke member closed by cap means.

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