Aug. 12, 1941. G. McD. JOHNS 2,252,379

GUY ANCHOR

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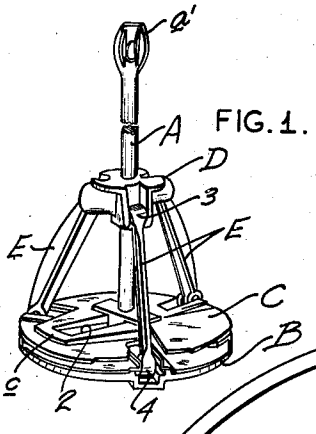


FIG. 1.

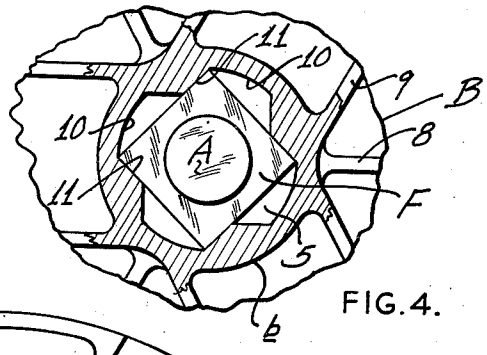


FIG. 4.

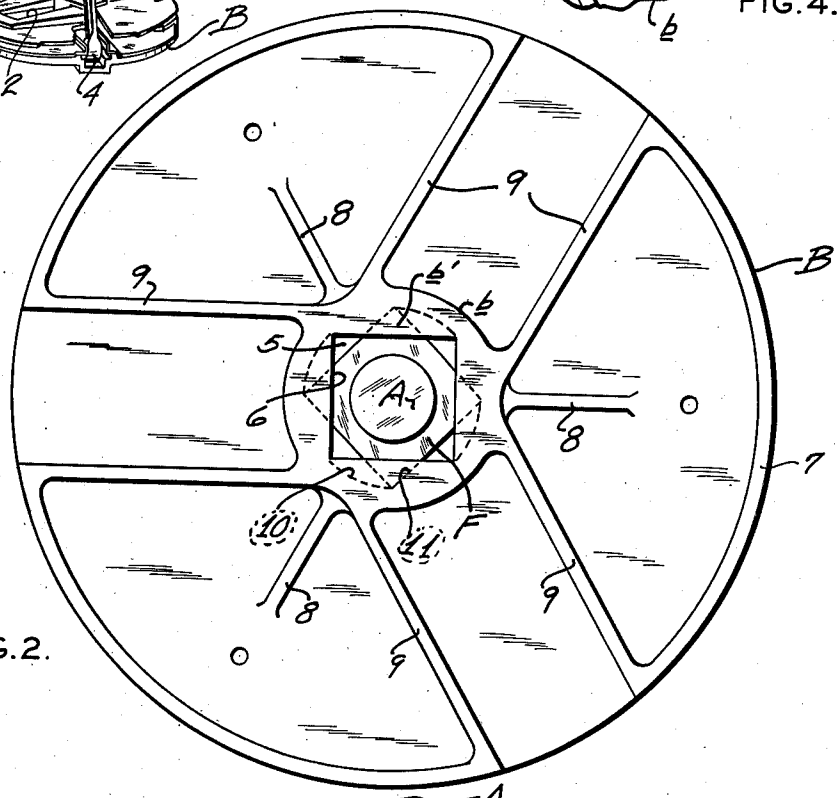


FIG. 2.

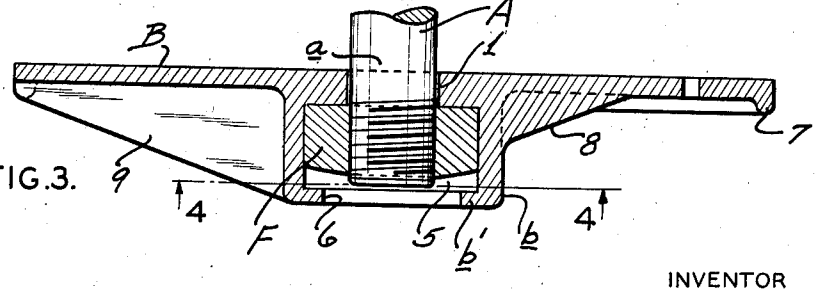


FIG. 3.

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2,252,379

GUY ANCHOR

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Application September 23, 1939, Serial No. 296,228

3 Claims. (Cl. 189—92)

This invention relates to a certain new and useful improvement in land or so-called guy-anchors and has for its object the provision of an anchor of the type stated so uniquely constructed that the base-plate and flukes of the anchor are securely retained from riding up, that is to say against movement longitudinally of, the anchor-rod, while the rod is readily shiftable relatively to the base-plate and supported flukes for ready recovery or salvaging on, for instance, an abandonment of the anchor.

And with the above and other objects in view, my invention resides in the novel features of form, construction, arrangement, and combination of parts presently described and pointed out in the claims.

In the accompanying drawing,

Figure 1 is a reduced perspective view of a guy-anchor embodying my invention, with its several flukes in closed position;

Figure 2 is an inverted plan view of the base-plate of the anchor;

Figure 3 is a diametrical sectional view of the anchor base-plate, illustrating also the lower end-portion of the anchor-rod and its securing-nut; and

Figure 4 is an enlarged detail sectional view of the anchor, taken approximately on the line 4—4, Figure 3.

Referring now more in detail and by reference characters to the drawing, which illustrates a preferred embodiment of my invention, the anchor generally is of the type illustrated and described in Letters Patent No. 1,994,520, of March 19, 1935, and so far as is essential here, may be briefly described as including a shank in the form of a suitably elongated post or rod A, a base-plate B preferably of disk form provided centrally with an opening 1 for freely accommodating the post or rod A, a plurality of segmental plates or flukes C in superposed circumferentially staggered arrangement on the plate B and each having a projecting tongue *c* lengthwise slotted, as at 2, for embracingly fitting about the rod A, a spider D freely slidable on the rod A over the several flukes C, and links E each pivotally at one end, as at 3, connected to the spider D and at its other end, as at 4, to a respective fluke C.

Formed preferably integrally on the under or outer face of the base-plate A and disposed concentrically with respect to the opening 1, is an annular wall *b* providing a chamber or pocket 5 having an end wall *b'* formed with a rectangular opening, as at 6, for accommodating a correspondingly contoured and sized nut F and the threading of the nut F upon the lower threaded end-portion *a* of the rod A.

The rod A and nut F being so engaged, it will be understood that, as and when the spider D is shifted downwardly, or toward the flukes C, on the rod A, the several flukes C will be expandingly opened or shifted radially outwardly with respect to the base-plate B for ground engagement, the several flukes C being retracted to normal approximately registering closed relation, as shown in Figure 1, as and when the spider D is again shifted upwardly, or away from the flukes C, on the rod A.

Formed on the under face, and annularly about the periphery, of the base-plate B, is a marginal strengthening bead 7, and also formed on the under face of the plate B, is a plurality of re-enforcing webs or ribs 8, 9, the latter joining the bead 7 and wall *b*, as shown. Thus the anchor is rigidly braced to meet the demands of heavy duty anchorage, where long life under the most severe conditions is also an important factor.

On its inner periphery, the wall *b* is suitably formed or constructed with a circumferential series of arcuate faces 10 separated or spaced by intervening oblique faces 11, the degree of curvature of the respective faces 10 being such as to permit rotatory movement of the nut F within the chamber 5 and the several faces 11 having cooperatively such obliquity or angularity as to engage respective corners of the particular nut F and thereby limit such movement of the nut relatively to the rod A, as best seen in Figure 4. The faces 10, 11, provide, as it may be said, a peripheral or circumferential groove in the housing wall *b*, as shown in Figure 2, the nut F, when turned out of registration with the end-wall aperture 6 and disposed in said groove, is housed intermediate said end-wall *b'* and the under face of the plate B. Thus the plate B and supported flukes C are securely held from movement longitudinally of the rod A during placement of the anchor. Yet the rod A may be freely threaded through the so held nut F, and hence the nut-retaining housing provided by the walls *b*, *b'*, enables facile salvaging of the rod A and eliminates rod hazard, should it become necessary that the particular anchor be abandoned.

The anchor may be readily manufactured, is conveniently operable and durable in use, and efficient in the performance of its intended functions.

It should be understood that changes and modifications in the form, construction, arrange-

ment, and combination of the several parts of the anchor may be made and substituted for those herein shown and described without departing from the nature and principle of my invention.

Having thus described my invention, what I claim and desire to secure by Letters Patent is—

1. A guy-anchor comprising, in combination, a base-plate having an opening, a rod disposed endwise through said opening, and means for retaining the plate on, and against movement longitudinally of, the rod, said means including a nut-member having a plurality of corners and of greater perimetral dimension than said opening for threaded engagement with the rod, a first wall projecting laterally from the outer face of said plate and disposed about said opening, and a rigid second wall spaced by said first wall from, and disposed substantially in parallel relation to, the base-plate and with said first wall providing a nut-housing, said second wall having an aperture for permitting insertion of the nut into said housing, said first wall being grooved on its inner face for engagement by respective corners of the nut for limiting rotatory movement in the housing of the nut with respect to the plate and said second wall, when the nut is in the rotated position in the housing, underlying the several respective corners of the nut.

2. A guy-anchor comprising, in combination, a base-plate having an opening, a rod disposed endwise through said opening, and means for retaining the plate on, and against movement longitudinally of, the rod, said means including a cornered nut-member of greater perimetral dimension than said opening for threaded engagement with the rod, and a housing having a rigid end-wall spaced from the base-plate and having an aperture of approximately the same size and shape as the nut for permitting insertion of the nut into said housing and a side-wall having upon its inner periphery a circumferential series of arcuate faces and intervening obliquely angular faces engageable by the respective corners of the nut for limiting rotatory movement of the nut within the housing with respect to the plate, the nut when in the limited rotated position within the housing being out of marginal registration with said end-wall aperture.

3. A guy-anchor comprising, in combination, a base-plate having an opening, a rod disposed endwise through said opening, a rectangular nut threaded on the rod and of greater dimensions than said opening, and means including a nut housing on the plate having an end-wall and a side-wall, the latter being grooved on its inner periphery for limiting rotatory movement of the nut with respect to the plate while permitting rotatory movement of the rod relatively to the nut and plate and said end-wall being spaced from the base-plate and having an aperture in axial registration with the base-plate opening and of the same shape and of substantially the same size as said nut for permitting insertion of the nut into said housing, said end-wall, when the nut is in rotated position in the housing, underlying the respective corner-portions of the nut.

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