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GUY ANCHOR.
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1,283,246. Patented Oct. 29, 1918.

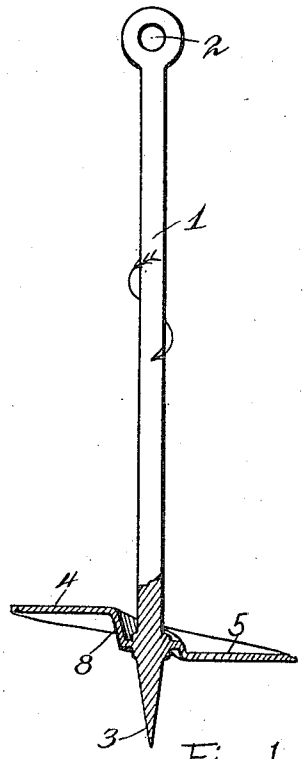


Fig. 1

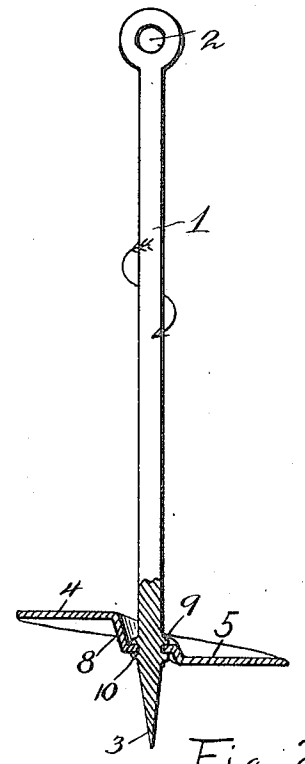


Fig. 2

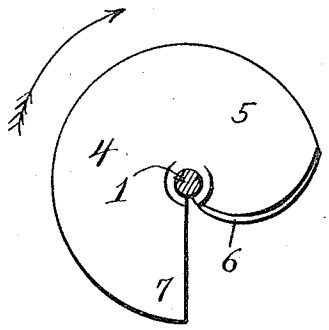


Fig. 3.

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GUY-ANCHOR.

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To all whom it may concern:

Be it known that I, PHILIP MERCER MALONEY, a citizen of the United States, residing at Blue Bell, in the county of Montgomery and State of Pennsylvania, have invented certain new and useful Improvements in Guy-Anchors, of which the following is a specification.

This invention relates to guy anchors.

One object of the invention is to provide an article of this character that shall be simple in construction and efficient and durable in use, and one in which danger of disarrangement or breakage of the parts will be practically eliminated.

A further object is to provide an implement of the character specified in which the edge of the earth-cutting member of the bit shall be so disposed with relation to the axis of the shank or rod, that in the event an obstruction is encountered that presents such resistance as to preclude lateral thrust, as in the event of contact with a stone or rock, or severance, as when the bit contacts with a root or other wood-like obstacle, the cutting edge will operate as a lever to force the lower end of the anchor laterally out of contact with the obstructive element, and thus prevent injury or possible breakage of the tool.

With the above and other objects in view, as will appear as the nature of the invention is better understood, the same consists in the novel construction and arrangement of parts of a guy anchor, as will be hereinafter fully described and claimed.

In the accompanying drawings forming a part of this specification, and in which like numerals of reference indicate corresponding parts—

Figure 1 is a view in elevation, partly in section of one form of the invention.

Fig. 2 is a similar view of a modified embodiment.

Fig. 3 is a top plan view of the implement.

In carrying the invention into effect, two methods may be employed for assembling the bit or cutter with the shank or rod, that shown in Fig. 1 being accomplished by welding the bit to the shank, and that shown in Fig. 2 being attained by providing the bit with a square hole through which the shank is passed and is then upset on each side of the bit.

Referring to the drawings and to Fig. 1 thereof, 1 designates the shank or stock, which may be of any preferred contour in cross-section, and is provided at its upper end with an eye 2 and at its lower end with a tapered or cone-shaped centering pivot 3. The bit, designated generally 4, is in effect a mutilated helix, in which the lower or cutting member 5 is formed with an involute edge 6 extending to or approximately to the shank, while the edge of the lifting member 7 is disposed radial to the shank and on a straight line. The bit is held rigidly assembled with the stock by welding in any preferred manner, the bit member 7 being down-struck to provide a shoulder 8 that will cause the wall of the opening provided to receive the bit to lie at right angles to the stock, thus to secure the best results in assembling the parts.

In the embodiment of the invention shown in Fig. 2, the shank and bit are of the same construction as that above described, except that the shank is provided with a pair of spaced flanges 9 and 10, between which the bit is clamped by upsetting one or the other of the flanges. The opening in the bit is preferably square, to secure the most effective assemblage with the stock, and, as in the construction shown in Fig. 1, the bit is provided with a shoulder 8 for the purpose described.

It will be seen that by the provision of the involute curved cutting edge 6, when the tool is in use, and an obstruction is encountered if it is not of a nature to be severed or dislodged, the edge will act as a lever to force the tool to one side and out of the path of the obstacle, thereby not only preventing injury to the implement, but also rendering unnecessary the removal of the tool and the starting of another hole.

What is claimed is:

A guy anchor, comprising a shank having its lower end tapered and its upper end provided with an attaching element, and a relatively wide helical bit rigidly secured to the shank near and above the tapered end thereof, said helical bit having a uniform width throughout its entire length to provide the maximum holding power and having its lower leading end sharpened and formed on an involute curve which extends from the shank to the outer edge of the bit

to cut an obstruction or shift the anchor to avoid the same, the upper and lower edges formed on approximately parallel planes and the center being upset from said planes and parallel therewith, the ends of the helical bit being free from overlapping and laterally spaced to afford a vertical passage whereby a long vertical obstruction may be positioned in advance of and in contact with the involute end near or at the inner end thereof.

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."