

No. 789,990.

PATENTED MAY 16, 1905.

G. H. MILLER.
FOLDING EARTH ANCHOR.
APPLICATION FILED MAY 23, 1903.

Fig. 1

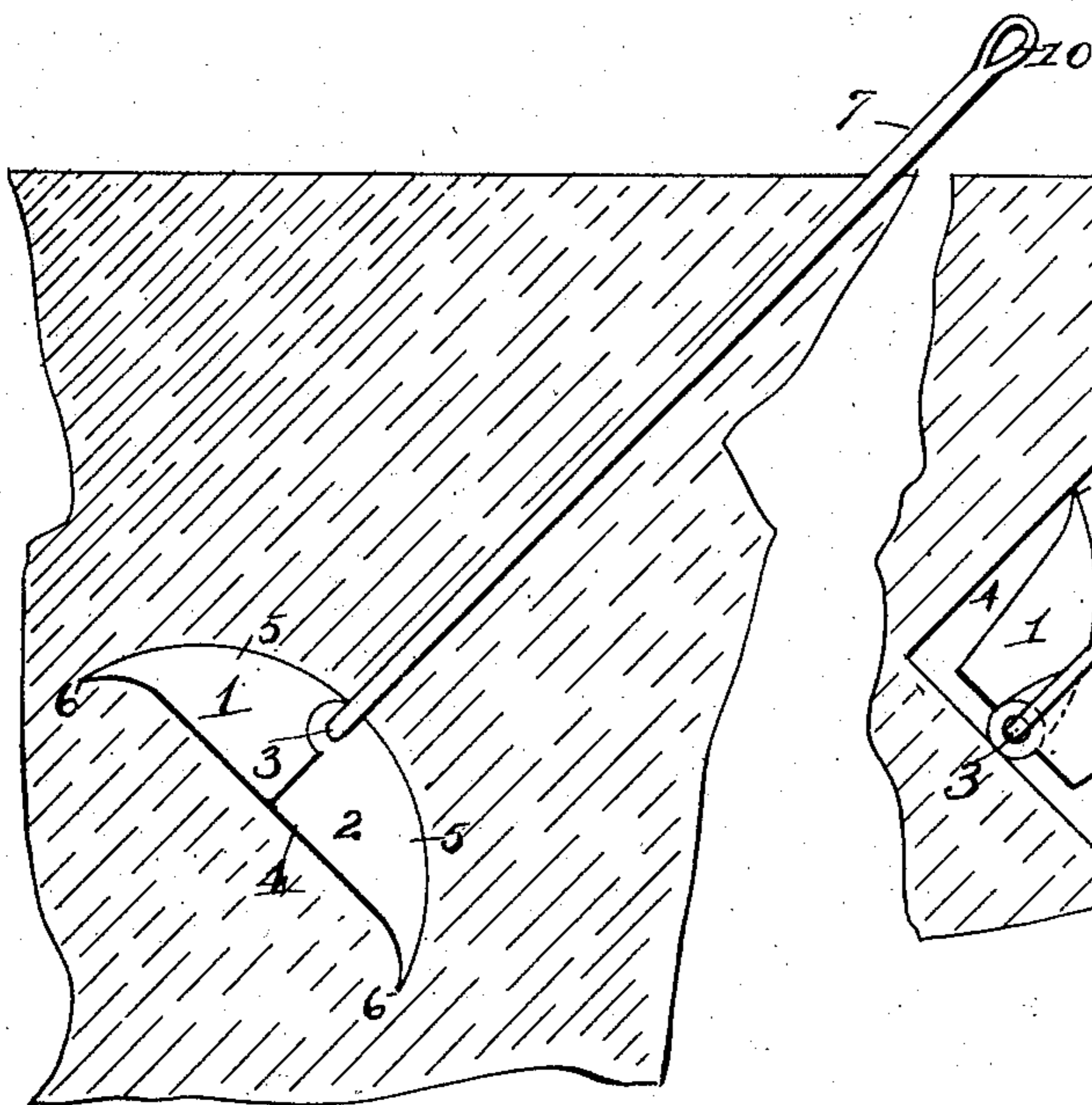


Fig. 2

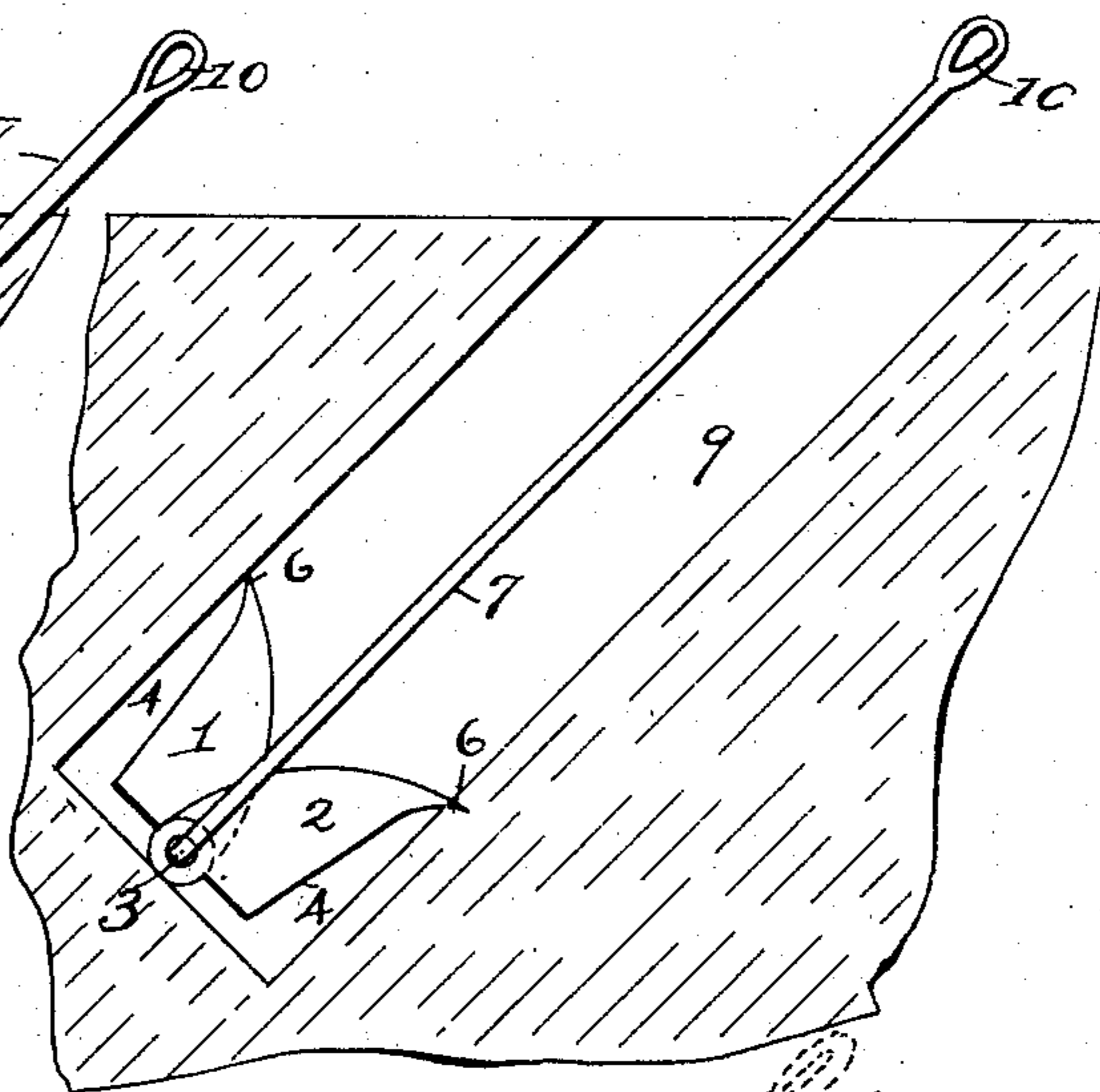
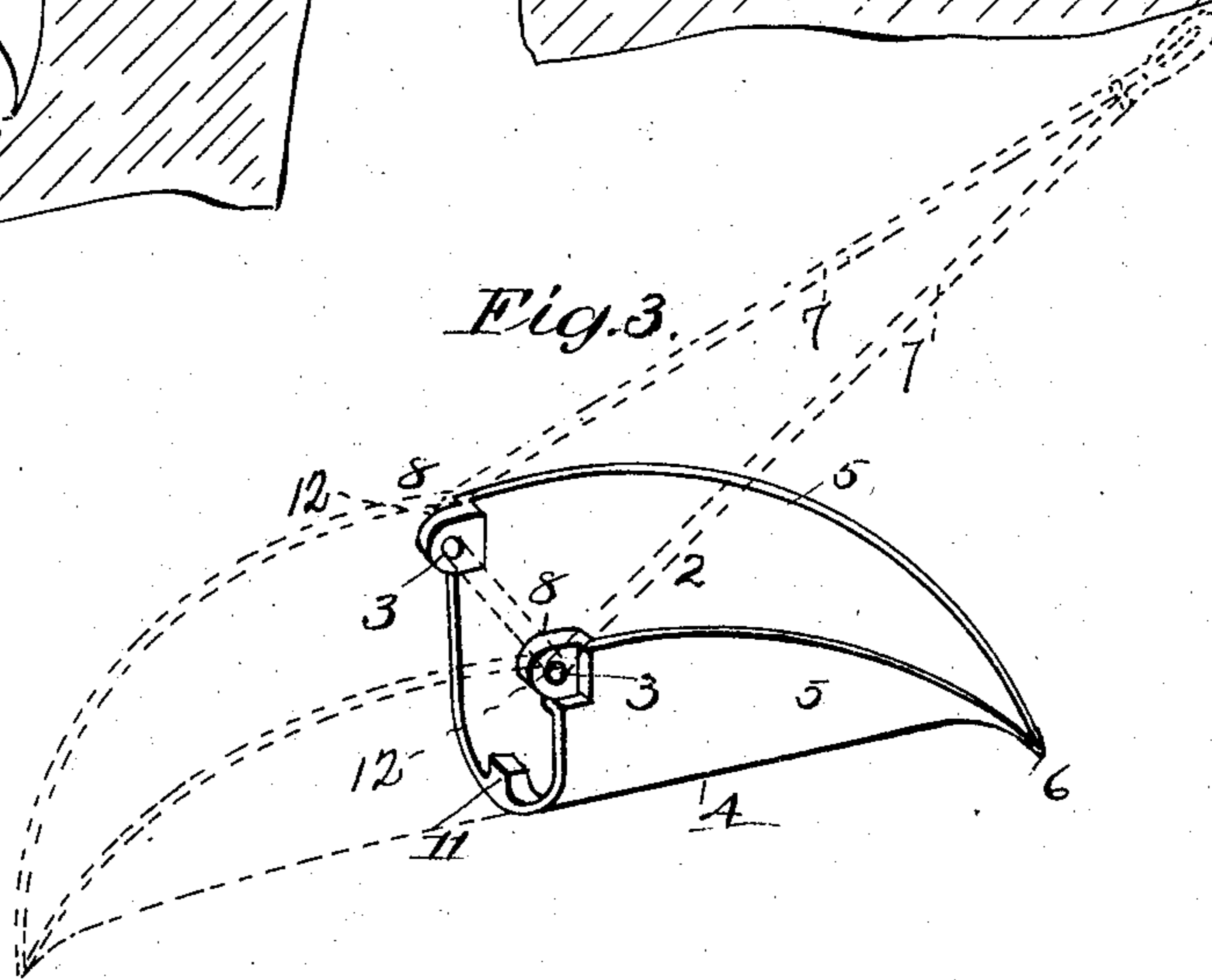


Fig. 3



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UNITED STATES PATENT OFFICE.

GEORGE H. MILLER, OF NORWALK, OHIO.

FOLDING EARTH-ANCHOR.

SPECIFICATION forming part of Letters Patent No. 789,990, dated May 16, 1905.

Application filed May 23, 1903. Serial No. 158,448.

To all whom it may concern:

Be it known that I, GEORGE H. MILLER, a citizen of the United States, and a resident of Norwalk, county of Huron, State of Ohio, have
5 invented certain new and useful Improvements in Folding Earth-Anchors, of which I hereby declare the following to be a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make
10 and use the same.

The objects of my invention are to provide a simple and efficient form of anchor of such a character that it can be inserted into a hole of moderate size dug or bored into the earth
15 and which will expand and obtain a firm hold thereon as soon as a tensile strain is brought to bear on it.

The invention is adapted to use with all forms of posts or telegraph or other poles which
20 require firm anchorage; and it consists in the scoop-shaped divisions pivoted together and capable of folding to reduce the anchor in size for insertion into the hole.

My invention further consists in the construction of the gripping extremities and in the construction and arrangement of parts, as hereinafter described, shown in the accompanying drawings, and specifically pointed out
25 in the claims.

In the accompanying drawings, Figure 1 is a side view of the device embedded in the ground as it would be when in use, showing the straining rod and loop extending out of the ground. Fig. 2 is a similar view of the
35 device, showing the sections folded together and inserted into the hole in the ground before the earth has been tamped about them; and Fig. 3 is a perspective view of one of the anchor-sections.

In the views, 1 and 2 are the sections which when turned down upon their pivotal points 3 form together a scoop-shaped anchor having practically a continuous straight bottom 4, elevated sides 5, and downwardly-turned
45 outer extremities 6. The pivotal points 3 are well up on the sides to give purchase to the straining-rod 7, which is there attached to the sections. In the figures the straining means is shown as a metal rod parted so that one
50 branch will enter the pivotal points 3 in one

of each scoop portion, and the other branch will form the pivots for the other side of each scoop portion. The pivotal points of the scoop portions are formed by means of perforated ears 12, through which the inwardly-turned
55 extremities of the branches of the rod 7 pass. These extremities may be united if desired. The exact manner of forming the straining-rod is not important, since there are many ways in which it can be formed. 60

The anchor is made of metal, and thickened lugs 8 increase the strength of the pivotal parts. Also thickened abutting edges or lugs 11 on the edges serve to prevent the sections
65 from telescoping. 65

In use, the hole 9 being first bored in the ground at the required angle of the straining-rope attached to the pole or post, the sections are folded together and the anchor is inserted in the hole to the depth required. Earth is
70 then tamped into the hole solidly over the anchor, and the rod 7 is left projecting from the ground, with the eye 10 exposed for attachment to the rope which holds the pole erect. As soon as the strain is brought to bear upon
75 the anchor the outwardly-extending points 6 engage the earth on either side of the hole and force the sections to spread apart until they assume the position shown in Fig. 1, when the anchor becomes immovable in the
80 earth. 80

It will readily be seen that the folding anchor as just described can be also used as a unit by standing it up on either end in the hole and bringing the strain to bear upon the
85 tension-rod, when the highest point engaging the side of the hole will turn the anchor at right angles to the hole exactly as shown and described in my application for Letters Patent for earth-anchor, Serial No. 118,694, for
90 which I have received a final allowance from the Patent Office. The only object in dividing this centrally, so as to make two sections pivoted together upon the straining-point, is that by turning both of the sections up-
95 ward and bringing both points to bear simultaneously on either side of the hole I obtain a double purchase and there is less danger of the anchor slipping in the hole.

Having described my invention, what I 100

claim as new, and desire to secure by Letters Patent, is—

1. A scoop-shaped anchor, comprising, in combination, a straight bottom portion, raised sides, and downwardly-turned outer extremities, the said anchor being centrally and vertically divided into equal sections, pivots in the raised sides of the several sections whereby the sections are attached together, and a straining means secured to said sections at their pivotal points of connection, substantially as described.

2. In a post-anchor, the combination of two anchor-blades, each having two projecting ears near its inner end, and having a pointed and outwardly-curved outer end with a pivot-pin passing through said ears, and a draw-bar secured to said pivot-pin, substantially as and for the purpose specified.

3. In a post-anchor, the combination of two anchor-blades, each having two ears, and a pointed and outwardly-curved end, with a draw-bar having the following integral parts, to wit, a transverse part which passes through ears and serves as a pivot-pin; two converging parts integrally connected with the ends of said transverse portion, which converging portions are secured together, and an outwardly-extending portion, substantially as and for the purpose set forth.

4. In a post-anchor, the combination of two longitudinally-curved anchor-blades having pointed outer ends, and pivoting-ears, projecting from their sides near their inner ends, a pivot-pin passing through said ears, and a forked draw-bar connected with the outer ends of said pivot-pin, substantially as and for the purpose specified.

5. In a post-anchor, the combination of two trough-shaped blades pivoted together, and a forked straining-rod carrying the pivot-pin therefor, substantially as described.

6. In a post-anchor, the combination of two sheet-metal trough-shaped blades, and a forked straining-rod extending outside of said blades and having an integral portion passing through them to form a pivot-pin, substantially as described.

7. In a post-anchor, the combination of two transversely-curved anchor-blades, pivoting-ears near their inner ends, a pivot-pin passing through said ears, and a forked draw-bar connected with the outer ends of said pivot-pin, substantially as described.

In testimony whereof I hereunto set my hand this 22d day of May, A. D. 1903.

GEORGE H. MILLER.

Witnesses:

WM. M. MONROE,

GEO. S. COLE.