

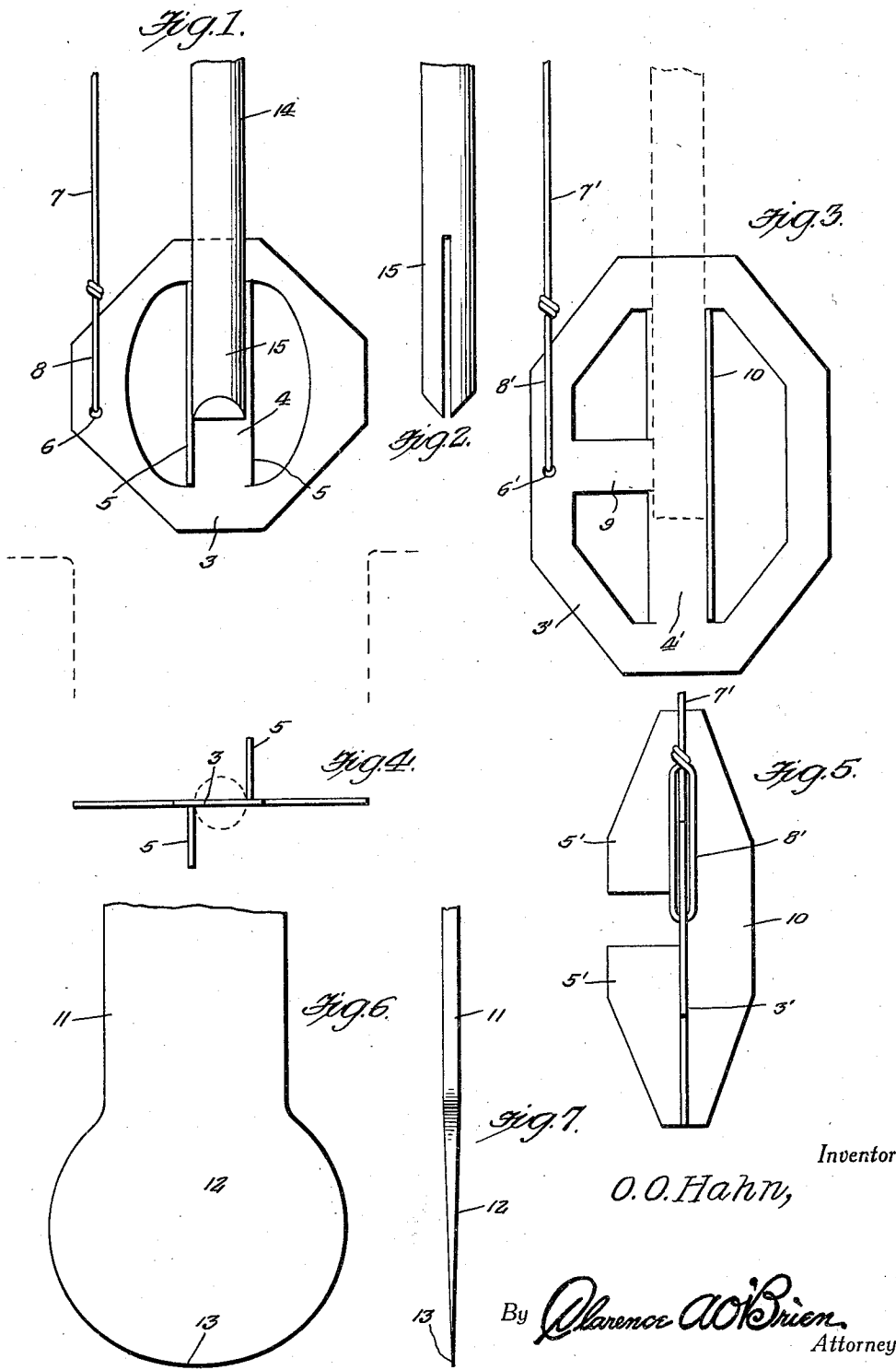
Feb. 25, 1930.

O. O. HAHN

1,748,878

LAND ANCHOR

Filed Feb. 16, 1929



Inventor

O. O. Hahn,

By *Clarence A. Brien*
Attorney

UNITED STATES PATENT OFFICE

OTTO O. HAHN, OF DIXON, SOUTH DAKOTA

LAND ANCHOR

Application filed February 16, 1929. Serial No. 340,619.

The present invention relates to new and useful improvements in means for bracing upright structures, particularly fences, telegraph and telephone poles, towers and the like.

The invention includes a novel anchor element provided with means for retaining the same embedded within the earth. The principal object of the invention is to provide an anchoring element for brace members which will efficiently withstand a tremendous stress.

Another object of importance is to provide a brace of this character which will not only be efficient in use, but because of its brief construction is capable of being manufactured at a very low cost.

These and other objects of the invention will become more apparent to the reader after considering the invention as described and claimed hereinafter.

In the drawings:

Figure 1 is a side elevation of the improved anchor element engaged by a suitable tool in the proper position for immediate insertion within a bore made in the earth.

Figure 2 is a side elevation of the engaging end of the tool for inserting the anchoring element into the earth.

Figure 3 is a side elevation of a slightly modified form of the anchoring element.

Figure 4 is a top plan view of the anchoring element shown in Figure 1.

Figure 5 is a side edge elevation of the modified form of the invention.

Figure 6 is a side elevation of the cutting end of a bore forming tool.

Figure 7 is a side edge elevation of the bore forming tool at the lower end portion thereof.

Referring to the drawings, wherein like numerals designate like parts, a plate 3 of polygonal shape is struck out at opposite sides of its intermediate portion 4 to provide fins disposed at right angles with respect to the plate 3 and in opposite directions.

The plate 3 is formed with an opening 6 adjacent its edge and substantially opposite the intermediate portion of one of the fins 5—5.

A guy element 7 is provided with a loop 8,

at its lower end, the loop being disposed through the opening 6 in the manner shown.

In Figure 3 of the drawings, there is shown a slightly modified form of the invention, wherein the plate 3' although of polygonal shape is preferably elongated, substantially in the manner shown. The plate 3' is struck out at opposite sides of the intermediate and longitudinally extending portions 4' to provide a pair of right angularly disposed fins 5'—5', and a connector 9 connecting the intermediate portion 4' to the edge portion of the plate 3'. The plate is thus provided also with a relatively elongated fin 10, disposed in the opposite direction respective to the fins 5'—5'. An opening 6' is formed in the edge portion of the plate 3' on the longitudinal axis of the connector 9 for receiving the loop 8' of a guy element 7'.

As is shown in Figures 6 and 7, a tool is provided for forming a bore in the earth, to receive the novel anchoring element. This tool comprises a shank 11 of suitable length, and an enlarged substantially circular head 12 on the lower end of the shank provided with a cutting edge 13.

In Figures 1 and 2, a tool is shown for inserting the anchoring element into the bore formed by the tool described above. This inserting tool consists in construction of a rod 14 of sufficient length. The rod is bifurcated at its lower end to provide a pair of legs 15—15, between which the anchoring elements may be engaged prior to the forcing of the same downwardly within the bore formed in the earth.

As is shown in Fig. 1, the plate 3 is inserted into the ground bore in the position whereby after the tool 14 has been removed, a pull on the strand 7 will twist the plate so that the fins 5—5, are disposed at right angles to the direction of the earth bore, and by sufficiently pulling on the strand 7, the fins will bite into the earth and provide a positive anchor.

It may also be desirable to first pour water into the bore so that after the plate has been swung by a pull on the strand 7, the fins 5—5 will bank against the soft earth within the bore, thus compressing the earth immediately

above the fins to increase the efficiency of the anchor.

Obviously, changes may be made in the specific shape, size, and materials in the manufacture of this brace without departing
5 from the spirit or scope of the appended claim.

Having described the invention, what is claimed as new is:

10 An anchor of the character described comprising a plate having an opening therein, a guy member secured to said plate, through said opening, said plate having its intermediate portion struck out to provide a pair of
15 oppositely disposed fins spaced in such a manner as to provide a guide for a driving tool.

In testimony whereof I affix my signature.

OTTO O. HAHN.

20

25

30

35

40

45

50

55

60

65