The invention relates to ground support anchors. This application is a continuation in part of my copending application, Serial No. 457,469, filed September 5, 1942, entitled Anchor for ground supports, now U. S. Patent 2,388,149, patented November 20, 1945.

Pursuant to the invention, posts, poles, trees and the like are simply and reliably anchored in the ground by sets of complementary members inserted in the ground adjacent the hole in which such post, pole, tree or the like is inserted and cooperating by the structural formation effected by the assembly of such complementary members to securely anchor the post, pole, tree or the like.

In the practice of the invention, fence posts, posts for traffic signs, posts for nets in the playing of tennis, badminton, volley ball, etc., or for clothes lines, street markers, golf signs, traffic post markers, or Christmas trees, flag poles, and the like are securely positioned in the earth or like material.

For simplification, such posts, poles and the like are hereinafter referred to, inclusive of the claims, as posts.

Pursuant to a preferred form of the invention, a pair of complementary members are provided with recesses whereby upon interfitting the members by means of such recesses and concomitantly embracing the concerned portion of this post whereby upon insertion, preferably forceful, of the members in such assembled relationship, the post is anchored in the ground against strains otherwise capable of dislodging the post.

Preferably, the complementary members are of duplicate construction and the recesses in the respective members are duplicately conjugate and upon reversing one member with respect to the other and engaging the members in their respective complementary recesses, a loop is formed at the central portion of the members, for embracing the post. For a given post having a definite diameter or perimeter, the recesses formed in the anchoring members for such post are located to provide such central loop of a diameter to make a tight, and if desired a pressure, fit with the circumference or outer perimeter of the post. Desirably, the members are formed of metal, and most preferably of resilient metal.

Further features and objects of the invention will be more fully understood from the following detailed description and the accompanying drawings, in which:

Fig. 1 is an elevational view, partly in section of the earth, showing a post anchored in the indicated ground by means of anchoring means pursuant to the invention.

Fig. 2 is a detail sectional elevation on line 2—2 of Fig. 1.

Fig. 3 is a plan view of two members constructed and assembled pursuant to the invention, as illustrated in Figs. 1 and 2, omitting the showing of the post and ground. In this embodiment of the invention, the complementary members are of relatively flexible or resilient material.

Fig. 4 is a diagrammatic view in plan of said embodiment of the invention, upon mutual assembly of the resilient members.

Fig. 5 is an exploded view of the two complementary members positioned preparatory for mutual assembly.

Fig. 6 is a perspective view of the complementary relatively flexible or resilient mating members at a stage of partial assembly.

Fig. 7 is a perspective view of the two complementary members indicated in the preceding figures.

Fig. 8 is a perspective view of two complementary relatively rigid members pursuant to the invention.

Referring specifically to Figs. 1 through 7, the post indicated at 10 is typical of any form of post, pole, tree, etc. The ground is indicated at 11 and the opening in the ground in which the bottom end of the post is inserted is designated 12. In the embodiment illustrated in Figs. 1 through 7, a pair of complementary elongated members is employed, one member being designated 13 and the other member 14. Application of the invention is effected by assembling the members 13, 14 in opposing relation to one another, referred to more fully hereinafter, whereby a loop designated generally 16 is formed centrally of the body portions of the members 13, 14, such loop embracing the lower portion of the pole 10, whereby the bottom end of the pole is placed in the ground opening 12 and the members 13, 14 driven under pressure into the earth adjacent the opening 12.

In the form of the invention as illustrated in Fig. 8, the members, desirably of metal, are of resilient or flexible, or yieldable character. In such form of the invention, the inner diameter of the loop 16 is dimensioned to make a close, and preferably a pressure, fit with the exterior circular face of the concerned portion of the pole 10 with which it is associated.

In such type of the invention the pair of members 13, 14, see Fig. 5, are preferably of duplicate...
construction, and as illustrated have duplicate recesses at their opposite longitudinal sides. Thus, the member 13 is provided with the recess, 12a extending from one of its longitudinal sides and a recess 12b extending from its opposite longitudinal side, such recesses 12a, 12b, being spaced from one another and from the opposite lateral ends 13c, 13d, whereby providing a central body portion 12c which forms one-half of the loop 15. Similarly, the complementary member 14 has a recess 14a extending from one of its longitudinal sides and the recess 14b extending from its opposite longitudinal side, said recesses being mutually spaced with respect to one another and respectively spaced from the opposite lateral ends 14c, 14d, of the member 14.

The assembly of this embodiment of the invention is had by first placing the members 13, 14 into their respective recesses, say, the recesses 12a, 14a, as indicated in Fig. 6 while moving their opposite end portions one above the other and then by a pivotal bodily movement of the members 13, 14 about the general pivot formed by the engagement of the defining edges of the recesses 12a, 14a, brining the defining edges of the recesses 12b, 14b into engagement. The assembly of the members thus gives rise to the wings 13f, 13g of the member 13, and similarly the wings 14f, 14g of the member 14. Fig. 4 illustrates in general plan the final assembly of the members 13, 14.

It will be noted that the illustrated recesses are each defined by an arcuate edge and a substantially rectilinear edge. The arcuate edge enables the elongated members to be interengaged by the manner of assembling them as indicated in Fig. 6, and the substantially rectilinear edges of mated recesses of the respective members attains fixed mutual abutment of the members, precluding relative displacement when inserted in the ground or the like.

As indicated above, the complementary members may be formed of resilient material and normally may have substantially rectilinear configuration as is indicated in Fig. 7.

Fig. 8 illustrates two complementary members 16, 17, of rigid material which are mutually assembled similarly as is illustrated in Fig. 6. In this embodiment of the invention, the total of the inner perimeters of the loop formed by the central body portions 16e, 17e, exceeds slightly the diameter or outer perimeter of the concerned portion of the pole desired to be anchored by the complementary members, the extent of excess of the total perimeter depending upon the degree of tightness of the desired fit. Pursuant to this embodiment of the invention, the members 16, 17, having recesses 16a, 16b, and 17a, 17b similarly as in the embodiment illustrated in Figs. 1 through 7, and after being mutually assembled and positioned at their complementary forming central loop 15 are forced about the concerned portion of the post, such as the staked post 10. The resiliency or yieldability of the members 13, 14 insures pressure engagement of the members with the surface of the post. Additionally, the wings 13f, 13g, and 14f, 14g, when the assembly is driven into the ground, take position in accordance with the resistance encountered by the wings due to the particular nature of the ground. The factor of resiliency of the material of the members imparts yieldability of the post or pole, or Christmas tree under conditions of wind, accompanied by the return of the post or pole or Christmas tree to normal position upon cessation of the wind.

Whereas, I have described and illustrated my invention by specific reference to preferred embodiments of the invention, it is understood that changes or modifications of the invention may be made within the purview of the appended claims.

1. An anchoring device to be driven into the ground for the support of a post, comprising the combination of complementary elongated members, each member having a recess extending from each of its longitudinal edges, each recess being disposed at a spacing from the respective opposite lateral ends and with respect to the central portion of the member, said complementary members being locked relative to one another by engagement of the body portions of the members within their respective recesses, there being a loop formed centrally of the body portions of the assembled members and their respective end portions extending in substantially cruciform relationship.

2. An anchoring device to be driven into the ground for the support of a post, comprising the combination of complementary elongated members of yieldable material, each member having a recess extending from each of its longitudinal edges, each recess being disposed at a spacing from the respective opposite lateral ends and with respect to the central portion of the member, said complementary members being locked relative to one another by engagement of the body portions of the members within their respective recesses, there being a loop formed centrally of the body portions of the assembled members and their respective end portions extending in substantially cruciform relationship.

3. An anchoring device to be driven into the ground for the support of a post, comprising the combination of complementary elongated members of resilient material, each member having a recess extending from each of its longitudinal edges, each recess being disposed at a spacing from the respective opposite lateral ends and with respect to the central portion of the member, said complementary members being locked relative to one another by engagement in opposite hand of the respective members at their respective said recesses.

4. An anchoring device pursuant to claim 1, wherein the recesses each have an arcuate defining edge.

5. An anchoring device pursuant to claim 1, wherein the recesses each have an arcuate defining edge and a rectilinear defining edge.

JOHN B. HYDE.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

<table>
<thead>
<tr>
<th>Number</th>
<th>Name</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>277,108</td>
<td>Gorila</td>
<td>May 15, 1883</td>
</tr>
<tr>
<td>287,923</td>
<td>Gorila</td>
<td>Nov. 6, 1883</td>
</tr>
<tr>
<td>2,255,581</td>
<td>Hyde</td>
<td>Sept. 15, 1942</td>
</tr>
<tr>
<td>2,389,149</td>
<td>Hyde</td>
<td>Nov. 20, 1945</td>
</tr>
</tbody>
</table>