

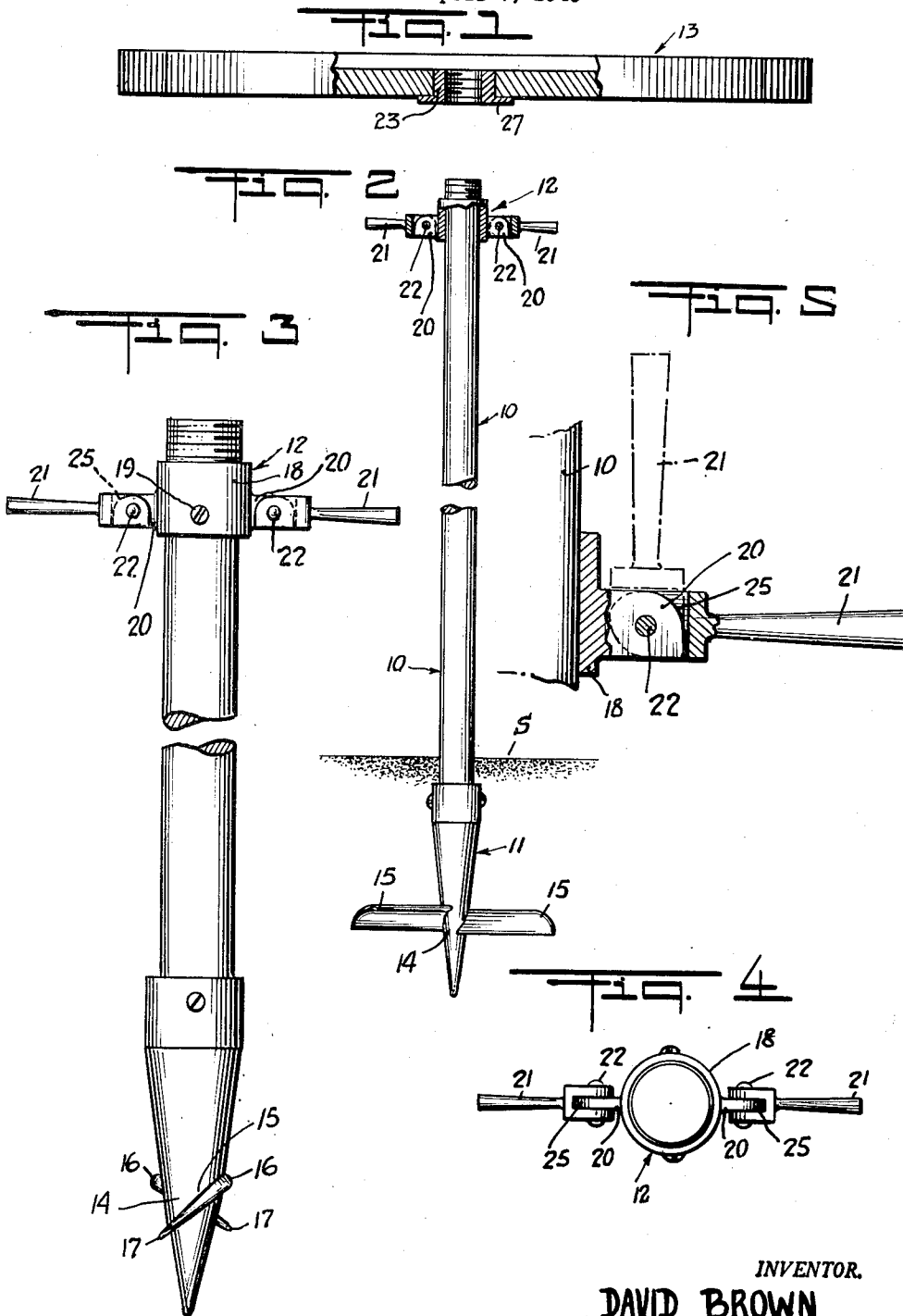
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SAND ANCHORING DEVICE

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SAND-ANCHORING DEVICE

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1 Claim. (Cl. 248-156)

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My invention relates to devices for anchoring articles firmly to the ground, and more particularly for anchoring a beach table or umbrella into the sand.

A beach table, beach umbrella, or similar article is normally mounted upon an ordinary pole having a pointed lower end which is pushed into the sand and thus provided with lateral support upon the vertical surfaces thereof by means of pressure of the sand or earth. This means of anchoring is undesirable, however, when a firm support is desired, since an umbrella is easily blown over by wind, and a table easily shaken when given such insufficient support.

It is an object of this invention, therefore, to provide an anchoring means for beach tables, beach umbrellas or the like which will furnish a firm and unyielding support therefor.

Another object of this invention is the provision of an anchoring means for beach tables, beach umbrellas or similar articles, which can be easily inserted into the sand or loose earth.

A further object of this invention is the provision of an anchoring device which will furnish support for a pole on a horizontal plane as well as on a vertical plane.

These and other objects of the invention will be apparent from the following description taken in connection with the accompanying drawings, in which:

Figure 1 is a side elevation of a table adapted to be attached to the improved anchoring means, the center portion of said table being shown in vertical section.

Figure 2 is a side elevation of a pole having the improved anchoring device attached to the bottom thereof, and a collapsible handle section attached to the top thereof, said handle section being shown partly in vertical section, the pole being broken away at the middle for convenience of illustration.

Figure 3 is an enlarged view, similar to Figure 2, with the handle section shown in its entirety, the anchoring section being shown turned 90° from its position in Figure 2.

Figure 4 is a top plan view of the handle section shown disconnected from the pole, the handle members being shown in extended position.

Figure 5 is an enlarged view of one of the handle members, shown partly in vertical section, the broken line position of said handle member indicating said member in its retracted position.

In general, the embodiment of my invention illustrated in the drawings consists of a supporting pole 10, the lower end of which is attached

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to an anchoring device 11, while the upper end is attached to a handle section 12. Said handle section is adapted to receive and securably hold a beach table 13, or other article.

The metal anchoring device 11, consists of a hollow, cone-shaped body section which tapers to a point at the bottom end thereof. The diameter of the upper end of said anchoring device 11, is of sufficient dimension to enable the lower end of pole 10 to be inserted into the hollow recess of said anchoring device. The pole 10 is preferably shaped to come to a point at its bottom end, and thus to extend into the bottom of the body section of anchoring device 11, said pole 10 being releasably fixed to anchoring device 11 as by screws or other suitable means.

Projecting from and adjacent the lower or pointed end 14 of the body section of anchoring device 11, two like lateral wing members 15 are provided, said wing members being set in opposed relation to each other and extending from opposite sides of said anchoring device. As shown in Figure 3, these wing members are of maximum thickness at their upper edges 16, and decrease in thickness to sharp bottom edges, 17. The anchoring device 11 is so constructed that the bottom point thereof may be pressed into the ground or sand until the lower sharp edges 17 of the wings 15 engage the earth or sand. Upon clockwise turning or rotating of said pole 10 in unison with anchoring device 11, said lower edges 17 of the wings 15 bite or dig into the earth or sand, and upon continued rotation, dig vertically downward, forming a vertical spiral track into the earth. Figure 2 shows the anchoring device 11 in its final inserted position beneath a layer of sand S.

For convenience, the device is described with reference to its vertical position of Figs. 2 and 3, and Fig. 2 is designated as a lateral view and Fig. 3 is designated as a transverse view.

The circumferentially spaced wings 15 are symmetrical relative to respective median planes which are inclined oppositely and equally relative to a reference plane which extends through the vertical axis of anchoring device 11. The bottom sharp edges 17 are substantially horizontal and in respective different horizontal planes, as shown in Fig. 3.

It will be readily apparent that when anchoring device 11 it is rotated to a relatively deep position in the sand or earth, a greatly increased supporting means is provided for pole 10, and its attached members. For this purpose, the wings 15 are suitably dimensioned, the length of said

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wings being substantially greater than the width thereof, as shown in Fig. 2. Thus the usual lateral support is provided by the pressure of the sand or earth against the sides of pole 10 and the attached anchoring device 11, and in addition further vertical support is afforded through the pressure exerted by the weight of the sand or earth upon the surfaces of the extending wings 15. It would therefore be difficult to displace pole 10 from its upright position, by a horizontal thrust upon the sides of said pole or its supporting members.

As was previously stated, pole 10 is provided at the top end thereof with a handle section 12. Said handle section comprises a cylindrical member 18, said member being fixed to the top end of said pole 10 by a pair of screws 19. Two ears or lugs 20, are located in opposed relation to each other on either side of said cylindrical member 18. A handle 21 is pivotally attached to each of said ears or lugs by means of a double-headed pin 22. Each handle is bifurcated at one end, as shown in Figure 4, each lug 20 fitting between the arms of the respective bifurcated end. As shown in Figure 5, the free outer vertical edge 25 of each lug 20 curves outwardly and downwardly, so that the bottom edge thereof is longer than the top edge. Therefore, when handles 21 are brought to their extended position, the bottom edge of lug 20 engages said handles and acts as a stop to their further downward rotation. Downward pressure may thus be effectively exerted on said handles.

The upper end of cylindrical section 18 is provided with a thread on the outer periphery thereof. Handle section 12 is thus adapted to receive and hold table member 13 or other articles, as will be presently described.

Table member 13 is provided with a centrally disposed hole. Fitting snugly within said hole, is ring member 23, said ring member having a flange 27 at the bottom thereof. Said flange may be attached to the bottom surface of table member 13 by screws, glue, or similar means. The inner peripheral surface of ring member 23 is provided with a thread, thus enabling table member 13 to be removably secured to handle section 12.

When pole 10 is to be placed in its supporting position as, for example, inserted in the sand at the beach, handles 21 are pivoted downward to their extended position. When handles 21 are leaned upon, the pointed end 14 of anchoring device 11 will be forced downward into the sand until the lower edges 17 of the wings 15 contact the sand. When handles 21 are turned in a clockwise direction, the downward pressure on said handles being continued, wings 15 will bite into the sand and begin their downward spiral. Rotation of pole 10 is continued until the entire anchoring device 11 and a portion of said pole are buried beneath the sand. When a desired depth has been reached, table 13 can be easily attached to handle section 12 by means of the threading thereon.

Although the preferred embodiment illustrated

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in the drawings shows the pole and anchoring device adapted to receive and support a table, it is to be understood that the invention is not intended to be limited to such a combination.

The anchoring means may be used to support a beach umbrella, signboard or other object, and, if desired, handle section 12 may be internally threaded to more conveniently be attached to such objects. Thus it is clear that numerous additions, omissions, and substitutions may be made in my invention without departing from its spirit and scope.

I claim:

A device for inserting and supporting a table, umbrella, or like implement in the ground, comprising a pole, an anchoring member fixed to the bottom end of said pole, and a handle assembly fixed to the top end of said pole, said handle assembly comprising a ring encompassing said pole and adapted to be attached to said implement, a pair of ears projecting laterally from opposite sides of said ring, and a pair of handles having respective bifurcated ends pivotally connected to a respective ear, each of said handles being adapted to be pivoted between a retracted position in which said handle is parallel to said pole to an extended position in which said handle is perpendicular to said pole, the outer end of each ear being downwardly and outwardly arcuated and being positioned to engage the bifurcated end of the respective handle member and prevent said handle member from being moved below its extended position, said anchoring member comprising a downwardly tapered body which has a pair of external lateral wings fixed thereto between the top and bottom of said body, the top of said body being fixed to said pole with the longitudinal axes of said pole and said body being on common line, the bottom end of said body being pointed, said wings being spaced circumferentially from each other, said wings being in respective planes which are inclined oppositely to a plane in which the longitudinal axis of said body is located, said wings being downwardly tapered and having sharp bottom edges.

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