Aug. 19, 1941. O. B. FETTERMAN 2,253,172

TABLE

Filed Jan. 11, 1941 2 Sheets-Sheet 1

Fig. 1

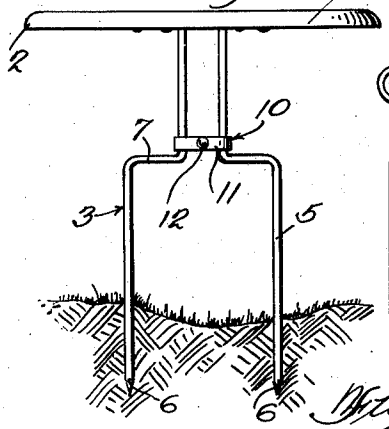


Fig. 3

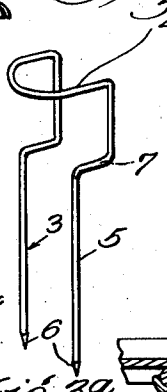


Fig. 4

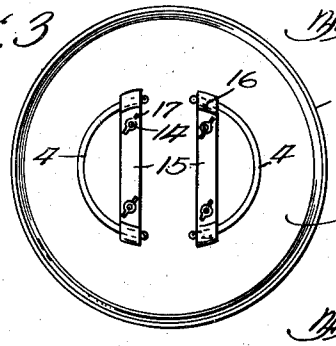


Fig. 5

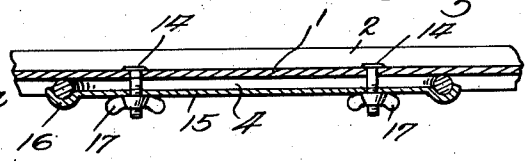


Fig. 3a



Fig. 2

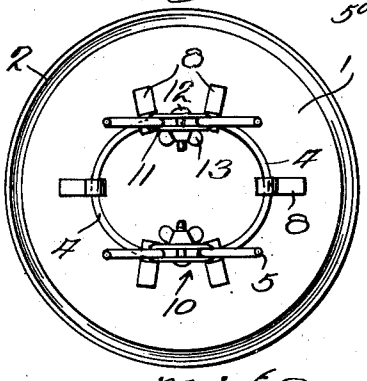


Fig. 6

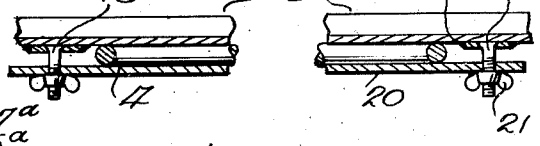


Fig. 7

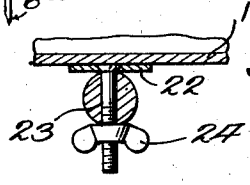


Fig. 8

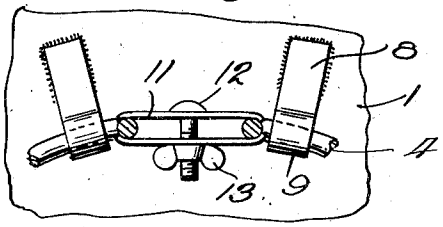
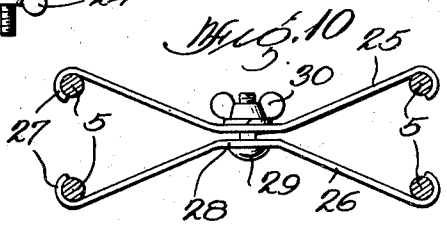


Fig. 10



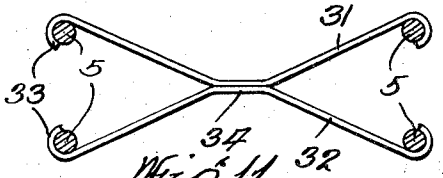
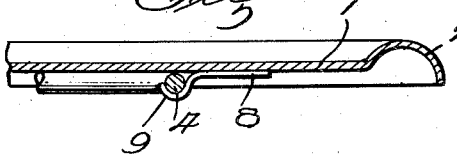


Fig. 11

Fig. 9



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Aug. 19, 1941. O. B. FETTERMAN 2,253,172

TABLE

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Fig. 12

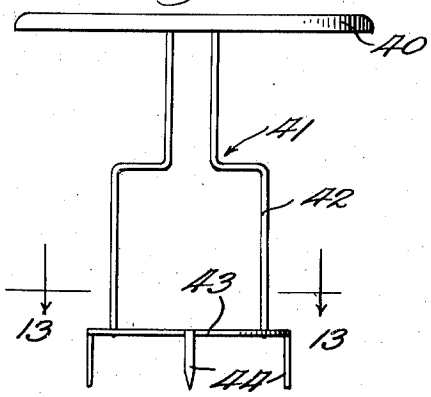


Fig. 13

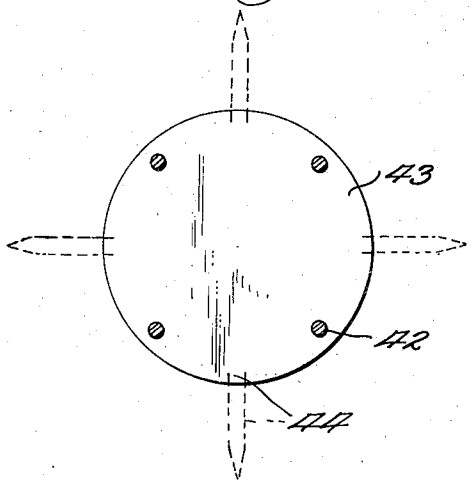


Fig. 14

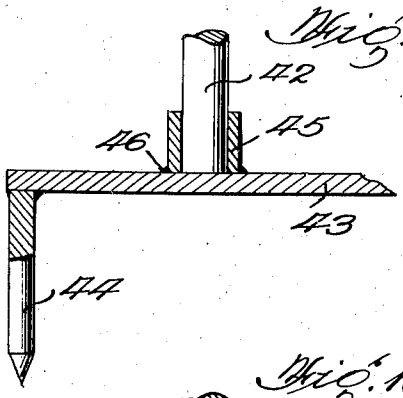


Fig. 17

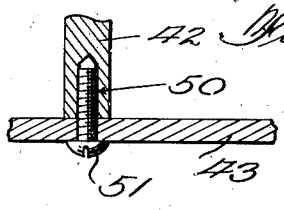


Fig. 15

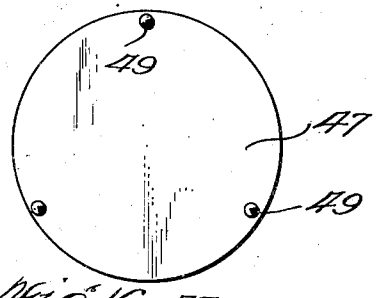


Fig. 16

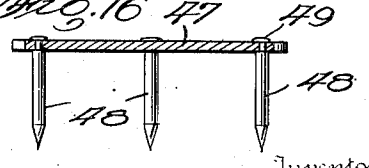


Fig. 18

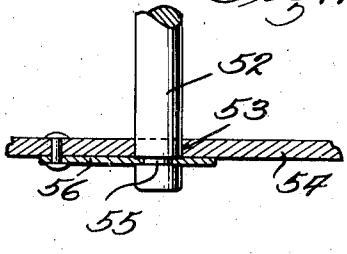
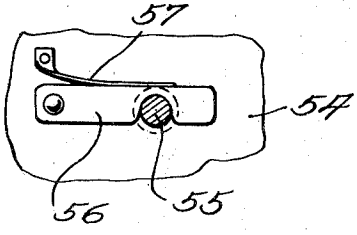


Fig. 19



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Patented Aug. 19, 1941 2,253,172

UNITED STATES PATENT OFFICE

2,253,172

TABLE

Oscar B. Fetterman, Washington, D. C.

Application January 11, 1941, Serial No. 374,114

5 Claims. (Cl. 311—109)

The present invention relates to furniture and has reference more particularly to a garden or beach table.

The primary object of the present invention resides in the provision of a table wherein the legs are provided means for penetrating the ground, whereby to anchor the table against casual displacement.

Another important object is to provide a table, wherein an improved leg structure is employed, the latter including offset shoulder portions, constituting handles or foot engaging portions for facilitating the insertion of the anchoring means into the ground and also permitting the table to be readily and easily disengaged from its anchored position whenever it may be desired.

A still further object resides in the provision of a table, wherein the parts are so constructed and arranged as to enable the table to be readily and easily assembled or disassembled without the use of any special tool.

A further object is to provide a table wherein the anchoring means associated with the supporting legs may be so thrust into the ground as to insure the top of the table being disposed on a level plane, irrespective of the level of the ground where the table is placed.

A still further object is to provide a table of the above mentioned character which will at all times be positive and efficient in carrying out the purposes for which it is designed and due to its simplicity may be manufactured at a very low cost.

Other objects and advantages will become apparent from the following description when taken in connection with the accompanying drawings.

In the drawings:

Figure 1 is a side elevation of the preferred form of my improved table, showing the legs thrust into the ground.

Figure 2 is a bottom plan view.

Figure 3 is a detail perspective view of one type of supporting member, forming a salient part of this invention.

Figure 3A is a view similar to Figure 3 showing another form of supporting member, this type having foot engaging shoulders.

Figure 4 is a bottom plan view of the table top showing a modified form of the securing means for fastening the top to the supporting members.

Figure 5 is a fragmentary section through the table top, illustrating in detail, the manner of attaching the top to the supporting member.

Figure 6 is a view similar to Figure 5 showing a further modification of the top securing means.

Figure 7 is a fragmentary sectional view showing a still further modification of the top securing means.

Figures 8 and 9 show fragmentary detailed views of securing means illustrated in Figures 1 and 2.

Figures 10 and 11 disclose plan views of two different types of leg bracing means.

Figure 12 is a side view of another form of table embodying a modification of the table anchoring means.

Figure 13 is a transverse section taken on the line 13—13 of Figure 12 looking in the direction of the arrows, the ground penetrating stakes being shown in dotted lines before being bent to an operative position.

Figure 14 is an enlarged fragmentary detail showing a modification of means for securing each leg on the anchoring base member.

Figure 15 is a plan view of a modification of the anchoring base and its ground penetrating stakes.

Figure 16 is a side view thereof, the base being shown in section.

Figure 17 is a detail view showing a further modification of securing the lower end of each leg to the anchoring base, and

Figures 18 and 19 show a further modification of the leg securing means.

With reference more particularly to Figure 1, of the drawings, the table comprises a table top 1, which may consist of sheet metal of appropriate thickness and stiffness. While the exact shape of the top is not essential, for the sake of illustration, it is shown as circular. The periphery of the top is bent or rolled around to provide an inturned flange 2. This flange forms a bead around the edge of the table top and aids in preventing articles placed on the top from falling off in the well known manner.

The top 1 is detachably supported on a pair of supporting members designated generally by the numeral 3. One of such supporting members is shown in detail in Figure 3 and is formed from a single strand of thick wire or a thin metal rod, of such length that it may be bent to form an inverted U-shaped member.

This inverted U-shaped member has its crown portion 4 bent outwardly and disposed substantially at right angles to the leg portions 5 for a purpose hereinafter more fully described. The lower extremities of these legs are pointed as indicated at 6 for easy penetration into the ground or sand to anchor the table, as will also be hereinafter more fully described.

The intermediate portions of each leg 5 is bent, to form a laterally disposed shoulder 7. These shoulders are also disposed in an outward direction and by forming the shoulders in this manner, the lower portions of the legs will be disposed in a plane parallel to the plane of the upper portions of the legs as clearly illustrated in Figures 1 and 3 of the drawings. The shoulders 7 provide a means for facilitating the insertion of the pointed lower ends of the legs into the ground when anchoring the table.

In Figure 3a there is shown a modification of the table top supporting member, wherein the same differs from the supporting member shown in Figure 3, only in the location of the offset shoulders. In this form, the shoulders 7a are located nearer to the pointed lower ends 6a of the legs 5a so as to provide foot engaging portions for more easily pushing the legs into the ground.

Various means may be employed for securing the table top to the outwardly disposed crown portions of the inverted U-shaped supporting members. In Figures 2, 8 and 9 I have shown spring clips 8 spot-welded at spaced intervals to the underside of the table top 1. The free ends of these clips are hook-shaped as indicated at 9 to engage around the adjacent portions of the respective crown portions 4 when the latter are disposed against the underside of the top 1.

The bracing means that extends between the adjacent legs of the pair of supporting members 3 is indicated at 10, and comprises a pair of plates or strips 11 arranged on opposite sides of the legs 5 and secured together in clamping relation by bolts and wing nuts 12 and 13. In this manner the inverted U-shaped members are secured together to provide a sturdy and rigid supporting structure for the top.

In Figures 4 and 5 there is shown a modification of the table top securing means wherein flat headed bolts 14 extend through openings provided therefor in the table top, these bolts being arranged in pairs. A steel bar or strap 15 extends across each of the crown portions 4 that are disposed against the underside of the top and the outer end portions of these bars are hook-shaped as idicated at 16 to receive and engage the adjacent portions of the crown portions. The bars 15 are formed with openings to receive the threaded ends of the bolts 14 and wing nuts 17 are threaded onto the bolts and engage the bottom faces of the bars 15 to detachably clamp the top 1 on the outwardly disposed crown portions 4 of the supporting members.

In Figure 6, another modification of top securing means is shown. In this particular form the bolts 18 have their heads spot-welded to the under side of the top 1 as at 19 and the threaded ends of the bolts extend through suitable openings formed in the clamping bar 20, the latter extending across the arms of each crown portion and wing nuts 21 are threaded on the lower ends of the bolts 18.

In Figure 7, the bolt 22 has its head spot-welded to the under side of the top 1 and in this form, the crown portion of the supporting member is formed with a through opening 23, through which the bolt passes. A wing-nut 24 is threaded on the lower end of the bolt 22 and binds against the bottom face of the apertured crown portion to secure the top rigidly, yet detachably on the supporting members 3.

As a further modification of securing the top on the supporting members, suitable channel members may be arranged on the underside of the table top to slidably receive the offset crown portions of the inverted U-shaped supporting members.

In Figure 10 I have illustrated a modification of the leg bracing means, wherein a pair of spring steel strips 25 and 26 have hooks 27 formed at their outer ends to engage around the legs 5, these spring strips converging toward their central portions as at 28. The central portions 28 are provided with registering openings to accommodate the securing bolt 29 and a wing-nut 30 is threaded on this bolt, to hold the parts in assembled relation.

In Figure 11, the spring strips 31 and 32 have leg embracing hooks 33 at their outer ends and the central portions 34 of these spring strips are welded together.

A table of the character as above described may be used in a garden or on a beach and when the parts are assembled as shown in Figure 1, the shoulders 7 may be grasped and the points 6 of the legs thrust into the ground or sand to the desired height. If necessary, the shoulders 7 may act as impact receiving portions when a hammer is used to drive the legs into the ground when the latter is hard. When the type of supporting members, such as is shown in Figure 3a, is used, the person merely presses his foot on the offset shoulder 7a to thrust the legs into the ground. Further, one pair of ground penetrating legs may extend further into the ground than the other pair, in order to dispose the top 1 in a true horizontal plane, where the ground is uneven.

When the table is thus anchored, there will be no chance of the table being upset or otherwise casually displaced, which could happen if the legs were not thrust into the ground or sand.

If also desired, the table top 1 may be provided with a central opening to accommodate the staff of an umbrella such as is commonly used on beaches and garden lawns. Also, to add to the ornamentality of the table, the same may be colored to suit any desired taste and also, the top may carry suitable advertising indicia on its upper face.

With reference now to Sheet 2 of the drawings, I have shown a modification of the table anchoring means. In Figure 12, the table top supporting means illustrated is the same as that shown in Sheet 1, with the exception that the lower ends of the legs are not pointed. In this form, the table top is designated by the numeral 40, the supporting members by the numeral 41 and the legs of the latter by the numeral 42.

A metal base plate 43 of circular design is formed at its periphery with bendable ground penetrating stakes, 44. The lower ends of the legs 42 may be secured to the base plate 43 in a suitable manner.

One form of leg securing means is shown in Figure 14, wherein the base plate is formed with socket 45, spot-welded, as at 46 on the upper face of the base plate. The vertical legs 42 have their lower ends receivable in the respective sockets.

In Figures 15 and 16, a modification of the base plate and ground penetrating stakes is shown, wherein the anchor plate 47 carries the stakes 48, the upper ends of these stakes passing through openings in the base plate and the upper ends of the stakes 48 are upset or otherwise formed with heads 49.

Another way of securing the base 43 to the lower end of the supporting legs 42 is shown in

Figure 17, wherein the lower end of each leg is formed with a threaded socket 50 to receive the screw 51 that extends up through the base plate 43, with the head of the screw engaging the bottom face of the base plate.

A still further modification of the leg securing means is shown in Figures 18 and 19. In this form, the leg 52 has its lower end disposed through an opening 53 in the base plate 54, with said lower end portion of the leg being formed with a reduced portion 55. A pivoted latch 56 carried by the bottom face of the base plate 54 cooperates with the reduced portion 55 of the leg as shown and a spring 57 normally maintains the latch 56 in operative engagement with the reduced portion 55 of the leg.

The table shown in Figure 12 is adapted to be anchored to the ground against casual displacement by forcing the stakes into the ground or sand with the base plate resting on the surface of the ground.

While I have shown the supporting members for the table top as being formed of wire, it is to be understood that piping, channel iron, wood or metal stamping may be equally as well employed.

While I have shown the preferred embodiment of my invention, it is to be understood that various changes in the size, shape and arrangement of parts may be resorted to without departing from the spirit of the invention and the scope of the appended claims.

Having thus described the invention, what is claimed is:

1. In a support for a table top, leg members, each of said leg members comprising an inverted U-shaped member, the crown portion thereof being disposed laterally and adapted to underly the table top and be secured thereto, means operatively associated with the lower ends of the legs of each inverted U-shaped member for insertion into the ground, and means carried by the intermediate portions of the legs for driving the first mentioned means into the ground.

2. In a support for a table top, a pair of inverted U-shaped members each having the crown portion thereof disposed laterally and secured to the under side of the top, the lower ends of the legs of the inverted U-shaped members being pointed, the intermediate portion of each leg being formed with an offset shoulder for facilitating the insertion of the pointed lower ends of the legs into the ground.

3. In a support for a table top, a pair of leg members, each formed of a piece of wire bent into substantially an inverted U-shaped structure, the crown portion of each wire member being bent outwardly and disposed horizontally against the underside of the table top and secured thereto, means operatively associated with the lower ends of the legs of each inverted U-shaped member for insertion into the ground, the intermediate portion of each leg of each of the inverted U-shaped members being bent to form a horizontally extending shoulder to facilitate the insertion of the aforesaid means into the ground.

4. In a support for a table top, a pair of leg members, each formed of a piece of wire bent into substantially an inverted U-shaped structure, the crown portion of each wire member being bent outwardly and disposed horizontally against the underside of the table top and secured thereto, the lower ends of the legs being pointed, the intermediate portion of each leg of each of the inverted U-shaped members being formed with an offset shoulder for facilitating the insertion of the pointed lower ends of the legs into the ground to anchor the table against casual displacement.

5. A supporting structure for a table top, comprising a pair of inverted U-shaped members, each having the crown portion thereof disposed laterally and secured to the underside of the table top, the intermediate portion of each leg member being formed with an offset shoulder whereby the lower portions of the legs are disposed in a plane parallel to the plane of the upper portions of the legs, a ground engaging base plate, ground penetrating elements extending downwardly from siad base plate to anchor the same to the ground, the lower ends of the legs being secured to said base plate.

OSCAR B. FETTERMAN.