April 24, 1956 W. H. WHEELER 2,743,146

UMBRELLA TABLE AND UMBRELLA ENGAGING MEANS THEREFOR

Filed Oct. 9, 1952

Fig. 1.

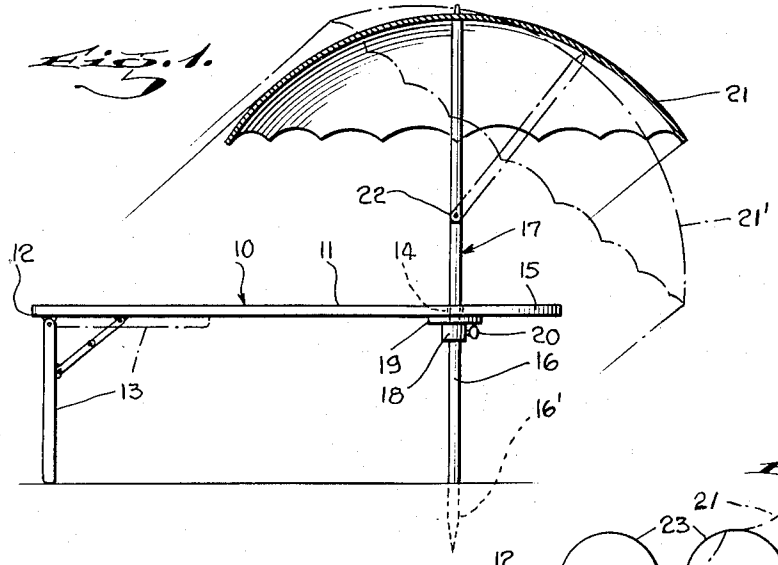


Fig. 2.

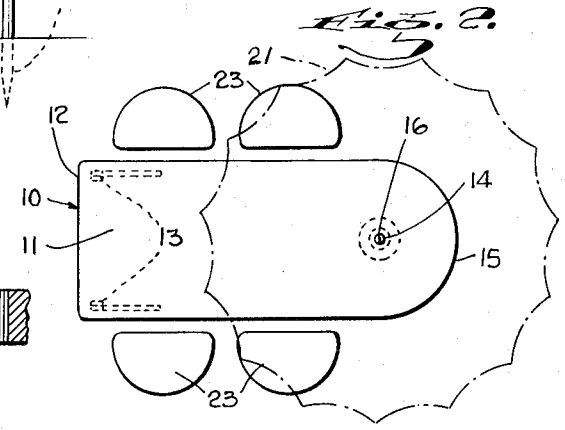


Fig. 3.

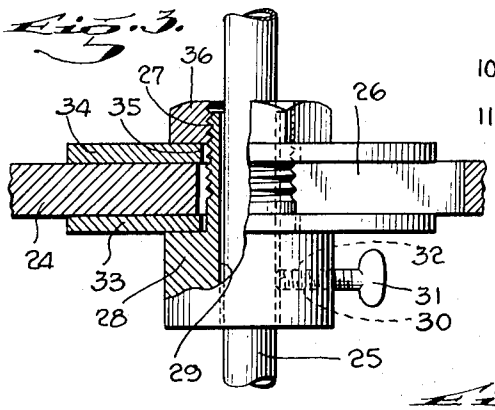


Fig. 4.

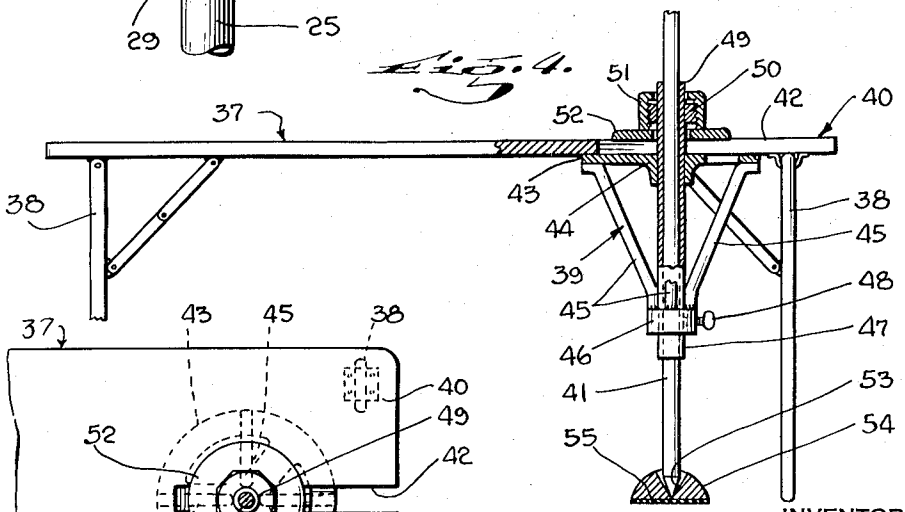


Fig. 5.

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UMBRELLA TABLES AND UMBRELLA ENGAGING MEANS THEREFOR

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6 Claims. (Cl. 311—17)

This invention relates to umbrella tables adapted for use with umbrellas on beaches, lawns, terraces and in other places to provide shaded environments. More particularly, the invention relates to tables of the character described, wherein an elongated table top is provided within one end portion thereof with means for receiving an umbrella pole in a manner to form of the remainder of said table an unobstructed table surface of substantially greater length than width.

It has been customary in the past to support umbrellas of the type adapted to provide shade on beaches, lawns, terraces and the like by means of tables of various types and kinds, having a central well or supporting means for receiving an umbrella pole. Tables of this type are generally quite heavy, particularly in the base construction thereof, in order to provide adequate support for an umbrella and the usable area or surface thereof is greatly restricted by reason of the central well or umbrella supporting means. In addition, the umbrella pole is a constant barrier and annoyance to persons sitting in diametrically opposed positions around the table.

An object of my invention is to provide a new and improved umbrella table wherein the umbrella engaging means is offset with respect to an elongated usable table surface whereby a number of people can be seated around an unobstructed table surface sufficiently large to permit comfortable eating, card playing and the like. A further object of the invention is to provide an umbrella table having an elongated unobstructed table surface which can be readily oriented circumferentially with respect to an umbrella engaged thereby to facilitate maximum utilization of the shade produced by said umbrella, a still further object of the invention being to provide means for adjustably supporting the umbrella and table in assembled position.

These and other objects of my invention will be apparent from a consideration of the following description together with the accompanying drawing in which certain embodiments of my invention are illustrated, in which the various parts thereof are identified by suitable reference characters in each of the views and in which:

Fig. 1 is a side elevation of one form of umbrella table made according to my invention, indicating in full and dotted lines, respectively, the vertical and tilted positions of a conventional umbrella associated therewith and showing one form of umbrella pole and table engaging means.

Fig. 2 is a plan view of the table as shown in Fig. 1 indicating the relative position of chairs arranged for use with said table.

Fig. 3 is an enlarged view partially in section, of a portion of a table and umbrella pole of the type shown in Figs. 1 and 2, indicating a modified form of engagement between the table and umbrella pole.

Fig. 4 is a view similar to Fig. 1 showing a modified form of table and a further modified form of umbrella pole and table engaging means with part of the structure broken away and in section, and

Fig. 5 is a partial plan view of the table and supporting means as shown in Fig. 4.

In Figs. 1 and 2 of the drawing I have shown at **10** one form of umbrella table in accordance with the present invention, as comprising an elongated table top **11** having means at one end **12** thereof as indicated by the folding legs **13** for supporting said end of the table in an elevated position, and an aperture or cut-out portion **14** centrally of the other end **15** of the table for receiving the pole **16** of a conventional umbrella **17**. For purpose of illustration the umbrella pole has been shown at **16'** as piercing or penetrating a supporting surface in the manner customary in the erection of beach umbrellas and the like. It is to be understood, however, that the construction as shown in Figs. 1 and 2 is adaptable for use in any instance where an umbrella is supported in the vertical position either by penetration of the pole into the ground or by engagement with a supporting base, conventional type of umbrella table, or the like.

Orientation of the end **15** of the table top vertically with respect to the umbrella pole **16** is provided by means of a sleeve or bushing **18** slidably engaging the pole **16** and preferably having an enlarged bearing plate **19** for contacting the under surface of the table top. Means as indicated by the clamp screw **20** is provided for securing the bushing **18** to the umbrella pole in any desired vertical position of adjustment. It should be noted in this connection that the bushing **18** and plate **19** can constitute a separate unitary member independent of both the table and pole or, if desired, can be secured to the table and movable therewith. It will further be noted that the table **10** having the aperture or cut-out **14** therein can constitute a separate and complete article of manufacture as, for example, if it is desired to utilize the table **10** in conjunction with an umbrella table of the conventional type above mentioned.

Any conventional type of umbrella can be employed in my new umbrella table and in particular it should be noted that the umbrella or canopy **21** may be mounted on a rigid pole or can be mounted on a sectional pole having an adjustable pivot as indicated at **22** to permit the swinging of the canopy into different angular positions as indicated, for example, by the dot and dash line showing **21'** in Fig. 1 of the drawing. The tiltable umbrella would have the advantage of providing a greater effective area for blocking out the slanting rays of the sun, as will be noted in Fig. 1 of the drawing, but with either type of umbrella it will be apparent that the elongated table construction permits maximum utilization of the shadow cast by the umbrella.

In Fig. 2 of the drawing four chairs **23** have been diagrammatically indicated in a typical relationship with the elongated table in order to give a clear indication of the extent to which my table provides an unobstructed usable surface. In this connection it will be noted that as the position of the sun changes to alter the direction of the shadow cast by the umbrella the table **10** can be swung about the umbrella pole **16** so that the elongated portion of the table extends from the umbrella pole in a direction substantially opposed to the position of the sun.

In Fig. 3 of the drawing I have shown a portion of a table top **24** and an umbrella pole **25** generally corresponding with the table top **11** and umbrella pole **16** as shown in Figs. 1 and 2 of the drawing. In place of the aperture **14** in the table top as shown in Figs. 1 and 2, however, I have indicated an elongated slot **26** which is of a width sufficient to receive the threaded shank **27** of a bushing **28** having a cylindrical passage **29** therethrough adapted to closely engage the umbrella pole **25**. The bushing **28** is provided with a transverse threaded aperture **30** receiving a threaded screw-clamp **31**, the inner

end 32 of which is adapted to directly engage the umbrella pole 25 in securing the bushing 28 in different positions of adjustment on the umbrella pole.

At 33 I have indicated a circumferential bearing plate arranged on the bushing 28 and adapted to engage the lower surface of the table top 24. The bearing plate 33 can be integral with the bushing 28, or if desired, can comprise a separate washer-like part fitting around the threaded shank 27 of the bushing. A second bearing plate 34 having an aperture 35 therein for freely engaging the threaded shank 27 is adapted to engage the upper surface of the table top 24, and an internally threaded clamp nut 36 engaging the threaded shank 27 provides means for drawing together the bushing 28 and the bearing plates 33 and 34 to provide a rigid support between the umbrella pole 25 and the table top 24.

The clamping engagement thus provided between the table top 24 and umbrella pole 25 permits the umbrella pole to be utilized effectively as a supporting leg for the table, and imparts to the assemblage greater rigidity than is provided by the loose bearing engagement between the table top 11 and bushing 18 as shown in Figs. 1 and 2 of the drawing. At the same time, it will be apparent that the effective area of the table top 24 can be readily altered by merely loosening the clamp nut 36 and sliding the table top 24 to advance the bushing shank 27 to a different position in the elongated groove or aperture 26 in the table top. Loosening the clamp nut 36 will also permit free rotation of the table top 24 about the bearing shank 27 and umbrella pole 25 supported therein. In this way, the table can be reoriented with respect to the umbrella and the shadow cast thereby without the necessity of moving the umbrella pole 25 or any supplemental support which may be provided therefor.

In Figs. 4 and 5 of the drawing I have shown a further modification of my invention wherein an elongated table 37 having conventional legs 38, preferably of the foldable type, for supporting the same is provided with an adjustable umbrella supporting unit 39 adjacent one end 40 of the table for maintaining vertical alignment of an umbrella pole 41 passing through a slot 42 in the end 40 of said table top. The supporting unit 39 has been shown as comprising an enlarged bearing member 43 for engaging the under surface of the table top at the end 40 thereof and having a central hub portion 44. A plurality of angularly disposed brace members 45 extend from the periphery of the bearing 43 to a second hub or bushing 46 vertically spaced from the hub 44. The hubs 44 and 46 are provided with vertical bores which receive an elongated tube 47 which is adapted to closely, but slidably, engage the umbrella pole 41. Means is provided as indicated by the clamp screw 48 for clamping the tube 47 in a fixed position with respect to the bushing or hub 46.

The upper end 49 of the tube 47 extends above the upper surface of the table top 40 and has fixedly secured thereto an externally threaded sleeve 50 adapted to be engaged by internal threads of a clamp nut 51. Clamp nut 51 in turn engages a bearing plate or washer 52 which contacts the upper surface of the table top and as the clamp nut 51 is tightened on the threaded sleeve 50, the bearing member 43 and the bearing member or washer 52 are brought into close engagement with the opposed surfaces of the table top to rigidly mount the umbrella supporting unit 39 thereon.

The umbrella supporting unit 39 when assembled as above described provides an elongated vertical guide for the umbrella pole 41 which rigidly supports the umbrella pole in a vertical position, but it will be noted that since the umbrella pole is slidable in the tube 47, reorientation of the table can be effected by merely raising the table and pivoting it around the umbrella pole, the primary support for the weight of the umbrella being borne by the umbrella pole 41. The lower end of the umbrella pole 41 may rest directly upon the ground or other surface supporting the table, but is preferably arranged in

a socket 53 of a separate foot member 54 which may be of suitable heavy material, such as concrete, cast iron or the like and which is preferably provided with a lower surface 55 of rubber or other suitable anti-skid material. The foot member 54 is not essential, but is desirable both to prevent damage to the table supporting surface by the umbrella pole and also to provide a supplemental support for maintaining the vertical alignment of the umbrella pole.

In Figs. 4 and 5 of the drawing the groove 42 for receiving the umbrella pole and supports therefor has been shown as extending through the end 40 of the table. In this way the umbrella pole may be supported in different positions longitudinally of the table, the clamping engagement provided by the bearing member 43 and washer 52 imparting rigidly to the split end 40 of the table. By merely loosening the clamp nut 51 it will be noted that the umbrella supporting unit 39 can be slid outwardly of the table through the end 40 thereof to permit detachment of the table and supporting unit for purposes of storage and the like. It will be understood, however, that the supporting unit 39 can be employed equally well with a table having only a circular aperture, such as the aperture 14 as shown in Figs. 1 and 2, or the elongated aperture, such as the aperture or slot 26 shown in Fig. 3 of the drawing.

It will also be noted that the supporting unit 39 can be modified by fashioning the hub 44 thereof similar to the bushing 28 as shown in Fig. 3 and providing in the hub 44 and bushing 46, central bores adapted to closely engage the umbrella pole 41. In this event, the tube 47 and the clamping means 48 can be dispensed with and the clamping engagement between the modified hub 44 and the clamp nut 51 would correspond identically with the clamping engagement between the bushing 28 and clamp nut 36 as shown in Fig. 3 of the drawing.

It will be noted that the various adaptations of my umbrella table do not require special umbrellas or umbrella poles, but can be used with conventional devices which are readily available. It will also be understood that the tables can be constructed from wood, metal, plastics, or combinations thereof to produce articles for different types of use. When portability is a factor, as for example with tables intended for beach use, it is within the scope of my invention to provide suitable jointed or hinged means intermediate the ends of the table top to permit the collapsing or folding of the table top into a portable unit of relatively small dimensions. More elaborate tables made in accordance with my invention can, if desired, be provided with means for adjusting the length of one or more of the legs thereof in order to facilitate adjusting the table for firm and level support on irregular ground and the like.

While I have indicated wing-bolts as the adjustable clamp devices 20, 31 and 48 for engaging respectively the poles 16 and 25 and the tube 47, it is to be understood that these are merely illustrative and that I can employ any conventional means for preventing relative movement of telescopically arranged parts. Similarly the clamp nuts 36 and 51 are merely illustrative, and any conventional clamping means can be employed in supporting the bearing members in firm engagement with opposed surfaces of the table top.

As previously mentioned the table 10 as shown in Figs. 1 and 2 can constitute a complete article for manufacture and sale, as for example, when it is intended to utilize the table in conjunction with a conventional umbrella table. Similarly the table 37 as shown in Figs. 4 and 5 can constitute a complete article for manufacture and sale, as for example, when it is intended to utilize the table in conjunction with an umbrella which is independently supported in the vertical position. In such instances the table can be freely moved with respect to the fixed umbrella pole in providing the rotary adjustment or orientation herein contemplated. The cut out portion of the

table end 40 can be in the form of a circular aperture as shown in Figs. 1 and 2, an elongated aperture as shown in Fig. 3, or a slot extending through the table end as shown in Figs. 4 and 5. When the slot extends through the table end it will be understood that the table, with legs extended, can be positioned under an umbrella having independent means for vertical support by merely aligning the slot 42 with the umbrella pole and moving the table longitudinally until the umbrella pole is in the desired position within said slot.

Various changes and modifications in the table structures herein disclosed will occur to those skilled in the art, and to the extent that such changes and modifications are embraced by the appended claims, it is to be understood that they constitute part of my invention.

I claim:

1. An umbrella table comprising an elongated table top having means at one end thereof for supporting said end in an elevated position, said table top having an aperture in the other end portion thereof to receive an umbrella pole at a point substantially equidistant from said last named end and from the two long sides of said table top, the length of said table top from said first named end to said aperture being greater than the width of said table top, the second named end of said table top having means for supporting the same in elevated position, and said aperture extending to said end of the table top facilitating the positioning of said table with respect to an umbrella having independent means for vertical support.

2. An umbrella table comprising an elongated table top having means at one end thereof for supporting said end in an elevated position, said table top having an aperture in the other end portion thereof to receive an umbrella pole at a point substantially equidistant from said last named end and from the two long sides of said table top, the length of said table top from said first named end to said aperture being greater than the width of said table top, an umbrella supporting unit passing through said aperture in the table top, adjustable means on said unit for rigidly clamping the same to said table top, the aperture receiving said umbrella supporting unit extending to said second named end of the table and facilitating movement of said umbrella supporting unit into different positions longitudinally of the table as well as attachment and detachment of said unit with respect to said table top.

3. An umbrella table comprising an elongated table top having means at one end thereof for supporting said end in an elevated position, said table top having an aperture in the other end portion thereof to receive an umbrella pole at a point substantially equidistant from said last named end and from the two long sides of said table top, the length of said table top from said first named end to said aperture being greater than the width of said table top, an umbrella supporting unit passing through said aperture in the table top, said unit including a guide member engaging the lower surface of said table top and extending a substantial distance below said surface to engage widely spaced intervals along an umbrella pole in supporting the same against tilting movement with respect to said table.

4. An umbrella table comprising an elongated table top having means at one end thereof for supporting said end in an elevated position, said table top having an aperture in the other end portion thereof to receive an umbrella pole at a point substantially equidistant from said last named end and from the two long sides of said table top, the length of said table top from said first named end to said aperture being greater than the width of said table top, an umbrella supporting unit passing through said aperture in the table top, adjustable means on said unit

for rigidly clamping the same to said table top, said unit including an elongated tube extending above the upper surface of said table top and extending to a considerable distance below the lower surface thereof, said tube being rigidly braced with respect to said table top and having an inner bore adapted to closely but slidably engage an umbrella pole, and the end of said table adjacent said umbrella supporting unit having means for supporting the same in elevated position.

5. An umbrella table providing increased utilization of elongated shadows cast by standing shade umbrellas, said umbrella table comprising an elongated table top having foldable legs at one end thereof for supporting said end in an elevated position, said table top having an aperture in the other end portion thereof to receive an umbrella pole at a point substantially equidistant from said last named end and from the two long sides of said table top, the length of said table top from said first named end to said aperture being greater than the width of said table top to thereby provide shaded seating for at least four persons around a table portion which is unobstructed by an umbrella pole extending through said aperture, and the undersurface of said table top, adjacent said aperture, providing bearing engagement with table support means circumferentially of an umbrella pole extending through said aperture, whereby alignment of said table with the elongated shadow cast by an umbrella can be effected by raising the first named end of the table and swinging the table about the umbrella pole as a pivot.

6. An umbrella table providing increased utilization of elongated shadows cast by standing shade umbrellas, said umbrella table comprising an elongated table top having foldable legs at one end thereof for supporting said end in an elevated position, said table top having an aperture in the other end portion thereof to receive an umbrella pole at a point substantially equidistant from said last named end and from the two long sides of said table top, the length of said table top from said first named end to said aperture being greater than the width of said table top to thereby provide shaded seating for at least four persons around a table portion which is unobstructed by an umbrella pole extending through said aperture, the undersurface of said table top, adjacent said aperture, providing bearing engagement with table support means circumferentially of an umbrella pole extending through said aperture, whereby alignment of said table with the elongated shadow cast by an umbrella can be effected by raising the first named end of the table and swinging the table about the umbrella pole as a pivot, and the second named end of said table top having a semicircular contour facilitating orientation of said end of the table top in superimposed relation to a conventional round umbrella table, when such conventional table is employed as the table support means circumferentially of an umbrella pole.

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