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3,237,899

ADJUSTABLE UMBRELLA HOLDER

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FIG. 1

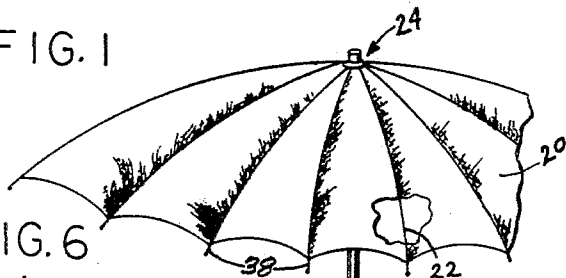


FIG. 6

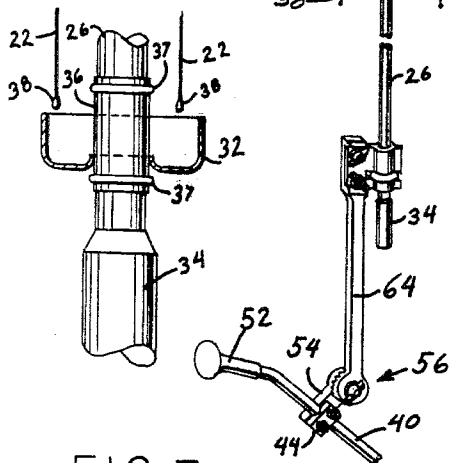


FIG. 5

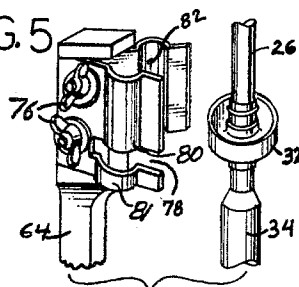


FIG. 3

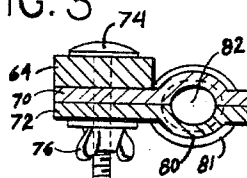


FIG. 2

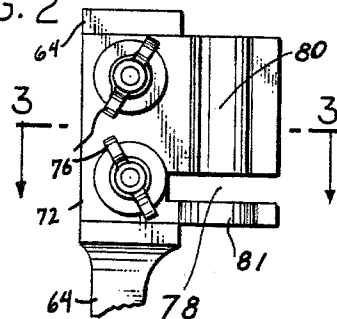


FIG. 7

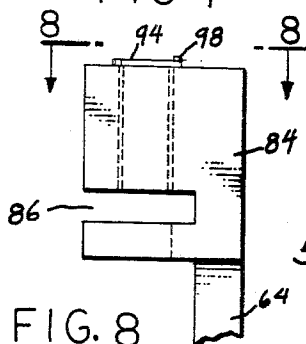


FIG. 4

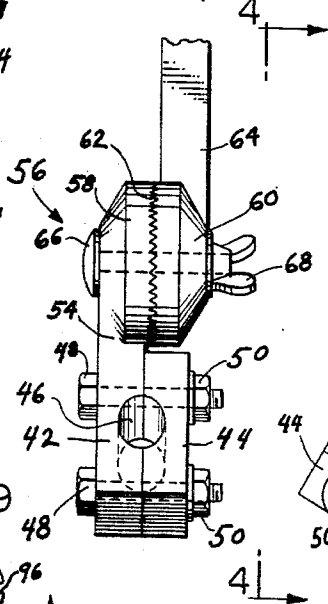


FIG. 8

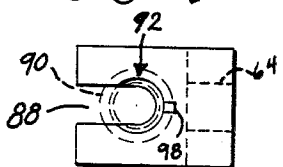


FIG. 10

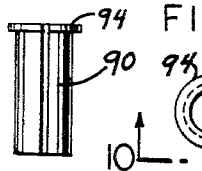
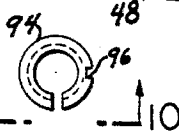


FIG. 9



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This application is a continuation-in-part of my co-pending application, Ser. No. 285,465 filed June 4, 1963, now abandoned.

My invention relates to a golf cart umbrella holder and primarily to an umbrella holder engaging means with the type of golf cart, which golf cart comprises a wheeled or mobile golf bag and a handle or shaft, which shaft in normal use lies substantially in a horizontal plane.

The umbrella used in my invention is conventional and usually comprises a cloth canopy or cover that is fastened to cloth supporting ribs hinged to and radiating from the upper end portion of the center rod or umbrella shaft, opening and closing stays hinged at their lower end portions to and radiate from (when open) a sliding sleeve on said umbrella shaft and hinged at their upper end portions to said cloth supporting ribs. Further, the said sleeve provides in combination with the umbrella shaft means to lock the umbrella in open or in closed position. The next part of the conventional umbrella and the part which is particularly important in connection with my invention, is a cup-like member mounted for sliding movement on a sleeve on the umbrella shaft and with the cup opening directed upwardly toward the umbrella canopy so that when the umbrella is closed and the outer end portions of the cloth supporting ribs lie adjacent the lower portion of the umbrella rod, the said cup-like member may be slidably moved relatively to the umbrella shaft and will encompass such rib ends and function as a sleeve rib-end engaging means. Such cup-like members are normally used in umbrella construction to lock the umbrella in closed position and to cover and prevent accidental contact with foreign objects of the ends of the cloth supporting ribs when the umbrella is closed.

Thus, it is an object of my invention to utilize means present in conventional umbrellas and functionally cooperate therewith, the engaging means of my golf cart umbrella holder.

An object of my invention is to eliminate the need of the golfer's carrying an umbrella when the golfer is also pushing or pulling such a golf cart.

An important object of my invention is to permit a golfer using such a mobile golf cart and while playing in the rain or hot sun, to utilize the golf cart as an umbrella carrier and without need of any support by the golfer of the umbrella, thus, leaving his hands free for golfing activities.

A further object of my invention is to provide a quick and convenient means of adjustment of the position of an umbrella, so that the umbrella may be positioned over the golfer's head when the golf cart is either standing still or being pulled or pushed by the golfer.

A further object of my invention is to provide a quick and convenient manner of assembling and disassembling parts of my device so that the same may be readily stored in a knocked-down position and thus provide for minimum storage space.

Other objects and advantages will be apparent from the following description, appended claims, and annexed drawings.

Referring to the drawings wherein like reference characters designate like parts throughout the several views:

FIGURE 1 is a view showing generally my device disposed between an umbrella (a portion of the umbrella being broken away) and a golf cart wherein a fragment of the golf cart is illustrated;

FIG. 2 is a view on an enlarged scale over FIG. 1, with portions broken away, showing a device of my invention detached from the umbrella and from the golf cart handle;

FIG. 3 is a sectional view taken substantially on broken line 3-3 of FIG. 2;

FIG. 4 is an elevational view and with parts broken away taken substantially on broken line 4-4 of FIG. 2;

FIG. 5 is an exploded perspective view utilized to depict the manner of attaching the center shaft or rod of an umbrella to the umbrella holding portion of my device;

FIG. 6 is a fragmentary view showing the shaft of an umbrella, the end portions of some of the umbrella ribs (two being shown) when the umbrella is in closed position, and a section of the slidably mounted cup-like member for encompassing the end portions of the umbrella ribs and which functions as a sleeve rib-end engaging means in my invention;

FIG. 7 is a fragmentary elevational view of the upper end portion of a modified form of my invention for engaging an umbrella;

FIG. 8 is a plan view taken substantially on broken line 8-8 of FIG. 7;

FIG. 9 is a plan view of the sleeve member used in connection with FIGS. 7 and 8; and

FIG. 10 is a view in elevation taken substantially on broken line 10-10 of FIG. 9.

Referring now to the drawings and first to the conventional umbrella shown, such umbrella comprises the cloth canopy or cover 20, that is fastened to the cloth supporting ribs 22 and which ribs 22 are hinged generally at 24 to the top end portion of the umbrella rod or center shaft 26. The ribs 22 radiate from the umbrella center rod or shaft 26 and when the umbrella is up, the cloth or canopy has a taut upper convex surface and an inner concave surface. The ribs 22 are pivotally connected with the usual opening and closing stays (not shown) and the said stays have their inner portions pivotally secured to a sleeve (not shown) which is mounted for sliding movement on the umbrella shaft 26. The said stays radiate from the sleeve and the outer ends of the stays connect with ribs 22 intermediate the length of the ribs 22. Thus, in the usual fashion, the umbrella is raised or lowered by raising the sleeve upwardly to raise and downwardly to lower the umbrella. Usual catch means (not shown) are provided so that the umbrella may be held and locked in either open or closed position. In view of the fact that the parts (not shown) are conventional and are not functionally related to my invention in any novel way, the showing is eliminated in the interest of brevity. Another conventional feature of an umbrella is the cup-like member 32 (see FIG. 6) which is slidable on a sleeve 36 secured on the umbrella shaft 26 and is generally a relatively tight fit so that the cup-like member 32 tends to maintain a selected position on sleeve 36. Movement of the cup-like member 32 is limited by stop rings 37 of sleeve 36. In normal fashion the end portions 38 of the ribs 22 are held adjacent the shaft 26 and then by movement of the cup-like member 32 toward such rib end portions, the rib end portions 38 are encompassed by the cup-like member 32 and are thus covered and may not be contacted by external objects. The cup-like member 32 is hereinafter termed sleeve rib-end securing means 32 to more accurately associate with said member its function in my invention.

Now referring to the part of my invention for engaging my holder to a rod, such as the rod or handle 40 (see FIG. 1) of a golf cart (broken away), the clamp means is composed of two jaws 42 and 44. These jaws 42 and 44 are provided with recesses to jointly form the opening 46 which will encompass therein the rod or handle 40. The said two jaw portions 42 and 44 may be urged to-

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wards each other and thus clamp the jaws on the handle 40 of the golf cart as by bolts 48 and nuts 50, which bolts 48 pass through spaced apart aligned openings in the jaws 42 and 44. Preferably one of the jaws 42, 44 is removable by loosening of nuts 50 so that the rod 40 of the golf bag handle can be interposed at any desired location and without removal of the handle 52 disposed on the rod 40. A portion 54 is connected with one of the jaws 42 and the said portion 54 functions as a bar extending, when in use, generally in a vertical direction and such portion 54 will hereinafter be termed bar 54.

The bar 54 is connected with a second clamp generally numbered 56. This second clamp 56 comprises two jaw portions 58 and 60 having interfitting toothed or serrated matching faces 62 provided to maintain any desired angular position between the bar 54 and a rod 64 which rod 64 when in use extends generally in a vertical direction and the rod 64 has its lower end secured to the jaw 60 as by being integral therewith. Means for holding the jaws 58 and 60 together or loosening them for adjustment may comprise bolt 66 and wing nut 68, the bolt 66 passing through openings in the jaws 58 and 60.

Thus, the clamp means comprising the jaws 58 and 60 provides for a pivotal connection between the upper end of the bar 54 and the lower end of the rod 64. This pivotal connection provides for the quick and convenient manner of adjustment of the position of the umbrella, so that the umbrella will be over the head of the golfer when the golf cart is either standing still or being pushed or pulled by the golfer.

Also, by means of the toothed portions 62 of the jaws 58 and 60, any angular position between the bar 54 and the rod 64 may be selected and maintained.

While I provided for extensibility of the rod 64 in my said co-pending application (rods 19 and 22 therein), I have shown herein a rod 64 of a selected unadjustable length as I find that my present construction is practical and that if any adjustment is necessary, this may be accomplished by sliding the first clamp comprising jaws 42 and 44 up and down the handle 40 of the golf cart and sufficient adjustment thus obtains for practical purposes.

The top end portion of the rod 64 is provided with means for securing said rod 64 to an umbrella and particularly for connecting with the shaft 26 of an umbrella and also engaging the sleeve rib-end securing means 32 of the umbrella. This member 32 commonly has a diameter of about an inch and a half to two inches, a height of about one-half to three-quarters of an inch, travels on a sleeve on the center rod 26 of an umbrella and has a cup-like opening to encompass or surround and thus connect with the rib-end portions 38 of the umbrella ribs when the umbrella is in closed position. It is one of the objects of my invention to provide means for connecting the rod 64 at its upper end portion with the center shaft 26 of the umbrella and with the said sleeve rib-end securing means 32.

Such connecting means shown in FIGS. 1, 2, 3, and 5 comprises two jaws 70 and 72 which are connected by bolts 74 and wing nuts 76 to rod 64. Each of the jaws 70 and 72 is provided with a lateral or transverse slot which are paired to provide the lateral slot 78 for receiving therein the sleeve rib-end securing means 32 when the clamping means at the upper end portion of the rod 64 and the umbrella shaft 26 and the said sleeve rib-end securing means 32 are moved relatively toward each other as will be best apparent from viewing FIG. 5 of the drawings.

Each of the jaws 70 and 72 have outwardly curving portions 80 and 81, the portion 80 being above the lateral slot 78 and the curved portion 81 being below said slot. Also, the outward curved portions 80 form a diameter, to snugly fit over the shaft 26, or sleeve 36 thereon, of the umbrella while the outward curved portions 81 provide, preferably, a somewhat larger diameter, to accom-

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modate or engage, when necessary, also with portions of the handle 34 of the umbrella. The bolts 74 pass through openings in the rod 64, through openings in the jaws 70 and 72, and then wing nuts 76 are mounted on the threads of said bolts 74. Thus, upon loosening of the wing nuts 76 (or removing the same if desired) a vertically extending slot or entrance way indicated by 82, is provided as depicted in FIG. 5 of the drawings. Thus, with the jaws 70 and 72 in such open position, there may be relative movement between the rod 64 and jaws connected therewith and the umbrella shaft 26 and parts connected therewith so that the rib-end engaging means 32 may be moved relatively into the lateral slot 78 and at the same time the umbrella shaft and parts connected therewith will move into the vertical slot 82. When the parts are moved to a rest position, then the wing nuts 76 may be tightened so that the jaws will engage the umbrella. Particularly the upper portions of the jaws 70 and 72 will engage with the umbrella center shaft 26, the sleeve rib-end securing means 32 will be in the lateral slot 78 and the lower portions of the jaws 70 and 72 will encompass the portion of the shaft 26 adjacent the handle 34 of the umbrella or portions of said handle 34. The umbrella shaft 26 and parts connected therewith can be readily removed from the upper holder by loosening of the wing nuts 76 to the desired amount.

The umbrella shaft 26 and the sleeve rib-end engaging means 32 cannot move laterally away from engagement with the jaws 70 and 72 because of the tightening of wing nuts 76 and even if the wing nuts 76 are not tightened to the extent of having the upper portions of the jaws 70 and 72 engaging the umbrella shaft 26, there will be very little movement in view of the fact that the rib-end securing means 32 has limited travel relative to the shaft 26 as it is mounted on the usual ring rib sleeve 36 on said shaft 26 and the ribs 37 of said sleeve.

In any event, there is certainty in the securance of the clamping means at the upper end of rod 64 and with the umbrella in view of the utilization of clamp type means which utilize therein the sleeve rib-end securing means 32 conventional found on umbrellas.

Now referring to the alternate construction of FIGS. 7 to 10 of the drawings, the chief difference is the use of a single piece member secured to the top portion of the rod 64 and the elimination of separable and removable jaws 70 and 72 of the previous figures along with their associated parts. In such FIGS. 7 to 10, inclusive, a single member 84 is employed and there is employed in connection therewith a lateral slot 86 which has the counterpart and function of the lateral slot 78 of the previous figures. Also, there is provided as will best appear in FIG. 8, a vertical slot 88 which is the equivalent of the vertical slot 82 of the previous figures. The size of the lateral slot 86 is such that it will readily receive therein the sleeve rib-end securing means 32 and the vertical slot 88 is of a size to receive the umbrella shaft 26 when the umbrella shaft 26 and parts associated therewith are moved relatively laterally toward the head 84 and associated vertical and lateral grooves therein. The relative sizes of the slot 88 to the umbrella shaft 26 should be such as to provide a reasonably snug fit when the relative motion has become the greatest. After the umbrella shaft 26 is thus positioned, a split sleeve member 90 of suitable pliable material is opened up at the split and moved around the umbrella shaft 26 and at a position above the head member 84. Then as the split sleeve member 90 is moved relatively downwardly sliding on the umbrella shaft 26 and entering into the vertical slot 88, the said sleeve 90 snugly interfits in the cylindrical wall portion 29 in the head 84 and the sleeve moves downwardly substantially to the full height of the upper portion of head member 84. The sleeve member 90 is provided with a headed rim 94 and the said sleeve 90

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is moved downwardly until the said head 94 engages with the top surface of head 84. The head 94 is provided with a notched portion 96 and said notched portion is moved in alignment and rotation is prevented by a pin 98 carried by the upper surface of the head 84.

When the construction of FIGS. 7 to 10 is employed, I eliminate the need of the movable jaws of the previous figures and at the same time I employ the sleeve member 90 to prevent relative lateral movement of the head 84 and the umbrella shaft 26 and parts carried with it.

In a general way, both of my constructions provide means for connecting with the shaft or handle of a mobile or wheeled golf cart and may provide first, a bar which in normal use extends generally in a vertical direction and the same is illustrated by the bar 54 in FIGS. 1 to 6, inclusive, and by incorporation in the alternate construction of FIGS. 7 to 10 inclusive. Next, the said structures illustrated provide for clamping such bar at the lower end portion to a cart handle such as the handle 40 and by means of jaws such as jaws 42 and 44. Next, at the upper end of bar 54 there is a second clamp means which in turn is clamped to the rod 64 which rod in use generally extends in a vertical direction. Also, there is a pivotal connection between the rod 64 and the bar 54.

Also, at the upper end of the rod 64 there are means to provide a slot extending generally in a vertical plane and a cross slot. The vertical slot receives therein the umbrella center shaft 26 and the sleeve rib-end securing means 32 extends into the cross slot 86 or 78 and then the umbrella shaft 26 and parts associated therewith are prevented from moving laterally either by the jaws 70 and 72 of the construction of FIGS. 1 to 6 or by the split sleeve 90 of FIGS. 7 to 10.

Obviously changes may be made in the forms, dimensions and arrangements of the parts of my invention without departing from the principle thereof, the above setting forth only preferred forms of embodiment of my invention.

I claim:

1. In a golf cart umbrella support for an umbrella having sleeve rib-end securing means mounted on the center rod of the umbrella and which golf cart has a handle-shaft normally used in substantially a horizontal plane; a bar extending, when in use, generally in a vertical direction; clamp means detachably connecting the lower end of said bar with a cart handle; a rod extending, when in use, generally in a vertical direction disposed between said bar and an umbrella; clamp means pivotally connecting between the upper end of said bar and the lower end of said rod; and means for securing the upper end of said rod with an umbrella comprising a laterally slotted connector for receiving in the slot thereof the sleeve rib-end securing means of an umbrella.

2. In a golf cart umbrella support for an umbrella having sleeve rib-end securing means mounted on the center rod of the umbrella and which golf cart has a handle-shaft normally used in substantially a horizontal plane; a bar extending, when in use, generally in a vertical direction; clamp means detachably connecting the lower end of said bar with a cart handle; a rod extending, when in use, generally in a vertical direction disposed between said bar and an umbrella; clamp means pivotally connecting between the upper end of said bar and the lower end of said rod; means for securing the upper end of said rod with an umbrella comprising a laterally slotted connector for receiving in the slot thereof the sleeve rib-end securing means of an umbrella; and longitudinally

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movable sleeve means for locking and unlocking said sleeve rib-end securing means to said slotted connector.

3. In a golf cart umbrella support for an umbrella having sleeve rib-end securing means mounted on the center rod of the umbrella and which golf cart has a handle-shaft normally used in substantially a horizontal plane; a bar extending, when in use, generally in a vertical direction; clamp means detachably connecting the lower end of said bar with a cart handle; a rod extending, when in use, generally in a vertical direction disposed between said bar and an umbrella; clamp means pivotally connecting between the upper end of said bar and the lower end of said rod; and means for securing the upper end of said rod with an umbrella comprising a laterally slotted connector for receiving in the slot thereof the sleeve rib-end securing means of an umbrella, said laterally slotted connector comprising jaw members movable toward and away from each other with mated slots.

4. In a support for an umbrella having a center rod and a sleeve rib-end securing means mounted on said center rod, the combination of a rod extending, when in use, generally in a vertical direction; umbrella connecting means carried by the upper end portion of said rod defining substantially vertical and horizontal slots for receiving therein by relative lateral movement the umbrella center rod and the sleeve rib-end securing means; and means carried by said umbrella connecting means for retaining and releasing said rod and said sleeve rib-end securing means in said slot.

5. The combination of claim 4 wherein said umbrella connecting means for retaining said rod and said sleeve rib-end securing means comprises laterally spaced apart jaws, each having a lateral opening therein, and said jaws movable away from each other to provide substantially vertical and horizontal entrance openings for relatively moving the umbrella center rod and the sleeve rib-end securing means in place, and said jaws movable toward each other to engage the umbrella center rod.

6. The combination of claim 4 wherein said umbrella connecting means for retaining said rod and said sleeve rib-end securing means comprises substantially vertical and horizontal slots for relatively moving the umbrella center rod and sleeve rib-end securing means in place in said slot; and longitudinally movable sleeve means mounted on said rod and movable into and out of locking position of the rod relative to said vertical slot.

7. The combination of claim 6 wherein said longitudinally movable sleeve means is provided with a longitudinally extending slot and is further provided with locking means combining with the slot forming means to prevent rotation of said sleeve.

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CLAUDE A. LE ROY, *Primary Examiner.*