This invention relates generally to the class of wheeled vehicles and pertains particularly to a wheel supported golf club carrier or bag.

The primary object of the present invention is to provide a wheel supported golf club carrier or bag of novel design wherein the supporting wheels thereof, by means of which the transportation of the bag over the golf course is facilitated, may be readily swung upwardly into folded position at the sides of the bag when the latter is to be left standing for any length of time as, for example, when it is left in the club house.

Another object of the invention is to provide a wheel supported golf club carrier in which a novel means is provided for attaching the supporting wheels to the carrier whereby to provide a substantial and steady support which will avoid the possibility of the carrier becoming up-set while travelling over rough terrain.

Still another object of the invention is to provide a device of the character stated wherein the supporting wheels are of novel design or construction which prevents them from becoming stuck or mired in soft ground or in sand traps or other sandy locations and which also prevents them from picking up sand or earth.

Still another object of the invention is to provide in a device of the character stated, a foldable bottom brace designed for use when standing the carrier while the player is using a club, the said brace being foldable against the side of the lower portion of the carrier so that it may be temporarily secured out of the way when the carrier is not in use.

Another object of the invention is to provide a carrier of the character stated which is of relatively simple construction but which is strong and durable and also relatively light in weight whereby it may be easily and quickly transported from place to place without tiring the player or other persons having charge of the carrier.

The invention will be best understood from consideration of the following detailed description taken in connection with the accompanying drawings, it being understood, however, that the invention is not to be considered as limited by the specific illustration or description but that such illustration and description constitute a preferred embodiment of the invention.

In the drawings:

Fig. 1 illustrates the device of the present invention, in side elevation, the handle being broken away and the supporting wheel nearest the observer having been removed.

Fig. 2 is a view in elevation of the rear portion of the wheeled carrier showing, in dotted outline, the supporting wheels in raised position.

Fig. 3 is a sectional view taken substantially on the line 3—3 of Fig. 1.

Fig. 4 is a sectional view taken substantially on the line 4—4 of Fig. 1.

Fig. 5 is a horizontal section taken substantially on the line 5—5 of Fig. 4.

Fig. 6 is a horizontal section taken on the line 6—6 of Fig. 1 to show the wheel plate securing means, the structure below such means being omitted.

Fig. 7 is a detailed view partly in section and partly in elevation showing the carrier supporting brace or foot in operative position together with the means for securing the same.

Fig. 8 is a detailed view showing in cross-section a portion of the tire unit of a wheel.

Referring now more particularly to the drawings it will be readily seen upon reference to Figures 1 and 2 that the carrier of the present invention comprises a vertical or upright receptacle R which comprises a lower box like portion indicated generally by the numeral 10 and an upper bag simulating portion which is indicated generally by the numeral 11. The lower box like portion or base of the receptacle is preferably formed of a suitable rigid or semirigid material such as sheet metal or the like and comprises a bottom or floor 12 having the upright side walls 13 and the front and rear walls 14 and 15 respectively. This lower part of the receptacle is of materially greater length than width, the width being approximately 4 inches and the length approximately 10 inches and the depth is also about 10 inches.

Each of the four corners of the base portion of the receptacle has secured therein a frame rod 16 which extends upwardly and is inclined slightly toward the rear of the carrier as shown in Fig. 1 and these corner rods are connected at their upper ends by the rim 17. At each side of the carrier there is also located an oblique brace or strut 18, shown in Fig. 1, which connects the top part of a front rod 19 with the lower part of the rod directly to the rear thereof.

The frame at the top of the receptacle has secured thereto at each side the rearwardly extending plates 19 which are apertured to receive a bolt shaft 20. The bolt shaft supports a handle which is indicated generally by the numeral 21 and which comprises an outer end portion 22 which is grasped in the hand and the divergent inner end portions 23 between which the plates 19 are disposed. These inner end portions 23
have the bolt shaft 20 extended therethrough and, as shown in Fig. 3, this shaft has a head upon one end which bears against the adjacent portion 23 while upon its other end it receives the wing nut 24. Between the ends of the handle and the plate 19 suitable washers 25 may be placed. These washers are of metal and as is shown there are two between each plate 19 and the adjacent portion 23 of the handle. One of these is welded or otherwise secured to the plate while the other one is similarly secured to the adjacent portion of the handle and the opposite faces of the washers may be roughened so that when the wing nut is tightened the handle will be securely held against swinging on the shaft 20 but when it is loosened the handle may be raised or lowered and fixed in any desired position.

To the front side of the receptacle there is secured a carrying strap 26, one end of which may be attached to the rim 17 and the other end to the front wall of the bottom portion 10 of the receptacle. Between the rim 17 and the lower part of the receptacle the frame formed by the rods 16 and braces 18 is covered with a suitable fabric covering 27, of the character commonly used for golf bags and at the rear side of the receptacle this fabric body may be provided with suitable pockets 28 for golf balls, tees or other articles. Upon the forward side the bag has secured thereto a handle 29 to facilitate picking up the carrier. In addition to providing means for picking up and carrying the carrier, the handle 29 and the strap 26 serve to make the upper portion of the carrier look more like the conventional golf bag.

The rigid bottom part 10 of the carrier has secured horizontally across each side wall 13, a bar or strap 30 adjacent the bottom wall 12, and a second strap 31 parallel with the lower strap 30 and intermediate the top and bottom of the portion 10 as is most clearly shown in Fig. 1. These straps or bars 30—31 have their ends turned at right angles to form the laterally extending ears 32.

Upon each side of the lower portion 10 of the receptacle there are located two axle balls 33 each of which, as is shown in Fig. 5, is more or less U-shaped in design and has a central straight portion 34 and spaced parallel end portions 35 each of which terminates in the inwardly turned finger 36 which extends through an aperture in hinge ear 32.

As is shown in Fig. 5 the intermediate portion of each axle plate ball is relatively short as compared to the over-all width of the ball or in other words as compared to the length of the body 10 therefore the intermediate portions of the balls between the straight center portions 34 and the terminal portions 35, are oblique to the length of each terminal portion and these terminal portions are disposed upon the outer sides of the hinge ears 32 so that when the ball is oscillated upwardly or downwardly it will straddle the bar to which it is attached.

As is shown in Fig. 1 the two axle plate supporting balls 33 are located one above the other and disposed between and connecting the straight portions 34 of each pair of balls is an axle plate 37 which has its top and bottom edges rolled to form the sleeves 38 and 39 respectively through which the adjacent straight portion of a ball extends.

The lower sleeve 38 of each axle plate is centrally cut away as indicated at 40, for the purpose about to be described.

Secured to the center of each axle plate 37 is a short laterally extending axle 41 upon which is mounted a wheel indicated generally by the numeral 42 and hereinafter described in detail.

To the central part of the bar 31 adjacent each axle, there is secured a hinge ear 43 and to this ear there is pivotally attached one end of a two part brace arm which is indicated generally by the numeral 44. This brace arm is preferably formed of channel material and it comprises a short portion 45 and a long portion 46, these portions are pivotally connected together by a suitable pivot pin 47. The short portion of the brace arm is of less width than the other portion so that it may be disposed within the channel of the longer portion when the arm is broken and folded for the raising of the adjacent wheel from the ground in the manner hereinafter set forth. This short portion is attached at its other end to the bracket or ear 43 as shown in Fig. 4. Also as is shown in this figure, the inner end of the longer portion 46 of the brace arm is extended in the back or web therefor extended to form a stop finger 48 which engages against the back or web portion of the shorter portion 45 to maintain the two portions in aligned relation. At its end the web of the longer portion 46 of the brace arm is extended and turned or rolled back to form the hinge sleeve 49 and this is extended through the opening 41 of the adjacent axle plate and pivotally encloses or encloses the straight central part 34 of the lower ball 33.

Attached at one end to each axle plate 37 is a contractile spring 43, the other end of which is secured as at 50 to the adjacent side of the lower portion 10 of the carrier receptacle. When the axle plate is swung outwardsly to vertical position as shown in Figures 2 and 4 this spring is under tension but due to the fact that the pivot centers of the brace arm are in alignment lengthwise of the arm, it maintains the rigid straight condition against the pull of the spring. However if a downward pressure is applied to the center of the arm to cause it to break downwardsly the spring will react to swing the axle plate upwardly, oscillating the two balls 33 as will be well understood.

The wheel 42 carried by each axle 41 comprises a suitable hub 51 which is maintained rotatably in position upon the axle and spokes 52 connect the ends of the hub with a rim 53 which, as shown in Fig. 8, is of double channel form to receive a pair of pneumatic tires 54. These tires lie in closely adjacent relation but in order to prevent sand or earth working between them there is placed in the channel formed between the two tires, the solid tire 55 which closes the space between the pneumatic tires so that the three tires are in effect made into a single unit to provide a broad tread area.

As shown in Fig. 2 the wheels 42 are designed to be swung upwardly into an operative position against the side of the lower part of the receptacle and in order to maintain them in this operative position where they are a substantial distance above the bottom of the receptacle so that the latter may rest directly upon the ground or the floor, the following securing mechanism is employed at each of the lower part of the receptacle. There are two of these securing mechanisms each of which engages two axle plates when the latter are raised therefore a description of one will apply to both and the
same reference characters will be employed for the two devices. Each of the securing mechanisms by which a pair of axle plates is held in raised position, comprises a substantially U-shaped bar 56 which is preferably formed of flat material such as strap iron and each of these bars extends across an end wall of the lower portion 10 of the receptacle as shown in Fig. 6. The bar 56 has a long intermediate or central portion and the short angularly extending end portion 57 each of which extends along and parallel with a side wall 13. Each end wall 14 and 15 has secured thereto a laterally extending guide plate 58 which is provided with a suitable vertical slot, not shown, to receive the laterally turned end 57 of the bar 56 which is adjacent thereto. Upon each side wall 13 adjacent each of the angularly extending ends 57 of the bars 56, are the two horizontally spaced guides 59 each of which has a slot or opening 60 therethrough to receive the adjacent portion 57.

Each of the turned portions 57 of the bars 56, carries a keeper member 61 which has a head provided with a beveled face 52 which is directed toward but spaced from the adjacent side wall 13 as is shown in Fig. 2. The bars 56 may be reciprocated in plates by grasping the bars 56 and moving them toward or away from the adjacent end wall of the portion 10 of the receptacle as will be readily apparent upon consideration of Fig. 6 of the drawings and when the bars 56 are separated or moved outwardly away from the adjacent end walls until the ends of the keeps 61 are in engagement with and the keepers are stopped by the plate 58, the axle plates 37 may be disposed between a pair of adjacent guides 59 as indicated in dotted outline in Fig. 6. By then moving the bars 56 back toward their adjacent end walls the keepers will be extended so that the beveled faces 52 will slide across the adjacent edges of the axle plate and thus secure the latter, together with the wheels and axles, in the raised position shown in Fig. 2.

Each of the turned portions 57 of the bars 56, has a notch 62 cut in its lower edge as shown in Fig. 1, to receive the bottom edge of the slot in the space 58 through which this portion of the securing mechanism passes, when the bar 56 is pulled out to disengage the latches from the axle plate prior to the turning of the central portion of the bar 56 to permit the axe plate to be raised into place to be secured.

In order that the receptacle may be left in a standing position convenient to the removal of golf clubs therewith, without raising the supporting wheels from the ground and causing the receptacle to rest upon the bottom of the portion 10, there is provided a brace or foot in the form of a plate 64 which is pivotally attached to the forward wall 14 of the lower part 10 of the receptacle as shown in Figures 1 and 7. As is shown this foot plate is maintained in position by disposing a bar 65 across the bottom of the wall 14 and providing the forwardly extending hinge ears 66 between which is mounted a shaft 67. One transverse edge of the foot plate 64 is turned or rolled to form a hinge sleeve 68 through which a pin 70, Fig. 7 may be pivotally attached by a pin 75 which is supported between suitable ears 76 attached to the wall 14 adjacent the upper part thereof.  

The forward edge of the foot plate 64 is also rolled to form a hinge sleeve 68 which carries a bar 70 and the central portion of this sleeve is suitably cut away, not shown, but in the manner illustrated in Fig. 1 in connection with the lower part of the axle plate 37, so that the bar 70 may be exposed intermediate its ends to be pivotally coupled with one of the two hingedly coupled portions of a brace arm 71. The two portions of this brace arm, which are formed of channel material, are indicated by the numbers 72 and 73 and as shown in Fig. 7 the portion 72 is pivotally attached at one end of the bar 70 while its other end is pivotally coupled by a hinge pin 74, with an end of the portion 73 and the free upper end of the portion 71 is pivotally attached by a pin 75 which is supported between suitable ears 76 attached to the wall 14 adjacent the upper part thereof.  

The forward end of the longer portion 72 of the brace arm is extended as indicated at 72a to engage the adjacent under side of the shorter portion 73 when the arm is straightened out so as to maintain the two portions in alined relation and thus hold the foot plate 64 in a forward and upward extending position. Thus it will be seen that when the receptacle is oscillated forwardly the foot plate will engage the ground and maintain the receptacle with the upper portion substantially in vertical position or in forwardly extending position where the user may most conveniently remove the golf clubs as desired.

In the use of the present device it will be readily apparent that the golfer or caddy when going around the course will grasp the handle 22 and push or pull the receptacle so as to run the same over the ground on the supporting wheels. As previously stated if it is desired to lift the entire device from the ground this may be done by means of the handle 29 or the device may be carried by putting the shoulder strap 26 over the shoulder in the customary manner of carrying a golf bag. When it becomes necessary to stop the receptacle so that the player may select a club and make a play, the receptacle may be oscillated forwardly so as to bring the foot plate 64 onto the ground, in which position it will be arranged conveniently for the removal of clubs.

When the carrier is to be stored away the foot plate 64 may be folded up against the front wall of the lower part of the receptacle and the wheels may be also folded upwardly, position to permit the axe plate to be raised into place to be secured.

What is claimed is:

1. A carrier of the character stated, comprising a vertically disposed relatively long receptacle consisting of a lower box-like portion having rigid side walls and a rigid bottom and relatively long fabric upper portion simulating a golf bag, said upper portion being disposed longitudinally at an angle with respect to the height of the lower portion, a pair of supporting wheels disposed one upon each of two opposite sides of the lower portion of the receptacle, a pair of superposed arms pivotally coupled to each of said sides and to the adjacent wheels to swing vertically on horizontal and parallel axes to effect raising and lowering of the wheels between positions closely adjacent to the receptacle sides and outwardly and downwardly therefrom,
while maintaining the wheels always with their turning axes perpendicular to the receptacle sides, and means for securing the wheels in raised and lowered positions.

2. A carrier of the character described comprising a relatively long vertically disposed receptacle, a plate member disposed upon each of two sides of the receptacle adjacent the lower part thereof and in a vertical plane parallel with the adjacent side, means coupling each plate with the adjacent side of the receptacle for maintaining a horizontal axle whereby the plate will be moved upwardly and inwardly to a position adjacent the sides of the receptacle and downwardly and outwardly away from the receptacle and maintained always parallel with the said adjacent side, a wheel rotates coupled to the outer side of each plate to turn on an axis extending perpendicular to the plate, means for securing each of said plates in the outwardly disposed position wherein said wheels are positioned to support the receptacle from the ground, and means for maintaining the plates and wheels in raised position at the sides of the receptacle when said securing means is released.

3. A golf club carrier of the character stated comprising a relatively long vertically disposed receptacle open at its top, a pair of vertically spaced laterally extending balls pivotally attached to each of two opposite sides of the receptacle at the lower part thereof to oscillate on axes extending horizontally from the front to the rear of the receptacle, a plate member carried and connecting outer extremities of each pair of balls and disposed vertically whereby said balls are extended outwardly from the receptacle, a wheel axle carried by each plate, a wheel supported upon each axle, means for securing said balls in extended position whereby said wheels are disposed for contact with the ground and the receptacle is supported above the ground, and means for securing said plates adjacent to the sides of the receptacle when said first securing means is released and the balls have been swung upwardly and inwardly whereby the lower part of the receptacle may be displaced directly upon the ground.

4. A carrier structure as set forth in claim 3 wherein the said first mentioned means comprises a foldable brace arm operatively coupled between each axle plate and the adjacent side of the receptacle, and said second mentioned securing means comprises latching element slidably supported upon the sides of the receptacle for operative engagement over adjacent sides of the axle plates when the latter are disposed in close parallel relation with the adjacent sides of the receptacle.

5. A structure as set forth in claim 3, a contractile spring connected between each axle plate and the adjacent side of the receptacle, said spring being maintained under tension when the first mentioned securing means is operative to maintain the balls in extended position and functioning to draw the axle plate upwardly to a position to be engaged by the second mentioned securing means, when the first mentioned securing means is released.

6. A structure as set forth in claim 3 in which the second mentioned securing means comprises a bar member extending transversely of the front and rear walls of the receptacle, means supporting each bar member for movement toward and away from the adjacent wall, each bar member having a portion of each end angularly turned to extend across the adjacent side of the receptacle, and a keeper member carried by each angularly turned end of each bar and adapted to be shifted across an edge of an axle plate upwardly and inwardly to the adjacent side of the receptacle into inoperative position against the adjacent side of the receptacle.

7. In a carrier structure as set forth in claim 3, a ground engaging foot plate pivotally attached to the lower part of the front of the receptacle to be engaged operatively to the receptacle upon an axis extending transversely thereof, and a hinged brace arm operatively coupled between said plate and the receptacle for maintaining the plate in a forwardly and upwardly inclined position for contact with the ground when the receptacle is oscillated upwardly upon its supporting wheels.

8. A carrier, comprising a body, a pair of arms disposed upon each of two opposite sides of the body and arranged in spaced relation one above the other, the arms of each pair being pivotally attached to and oscillate on horizontal parallel axes, a pair of supporting wheels, a short axle for and supporting each wheel, a pivotal connection between each axle and the outer ends of a pair of arms by which the outer ends of the arms have turning movement relative to the adjacent axe on horizontal axes paralleling the axes of oscillation for their inner ends, said pairs of arms when oscillated downwardly moving the wheels outwardly and downwardly to a ground engaging position and when oscillated upwardly moving the wheels upwardly and inwardly whereby the arms are extended outwardly adjacent to the sides of the body, the wheels being at all times maintained with their axes substantially perpendicular to the adjacent sides of the body.

9. A carrier as set forth in claim 8, including a contractile spring connected with the outer ends of each pair of arms and with the adjacent side of the body above the inner ends of the arms and normally urging swinging of the arms upwardly and inwardly, and a jointed brace arm operatively coupled between the outer ends of each pair of arms and the adjacent side of the body and functioning when extended to maintain the adjacent pair of arms in outwardly extended position against the tension of the adjacent spring.

10. A carrier of the character stated comprising a relatively long receptacle designed to be used in upright position and having its upper end open, a pair of balls pivotally attached to each side of the receptacle adjacent the other end to oscillate on spaced parallel axes toward and away from the plane of the adjacent side of the receptacle, a plate carried by and connecting the outer extremities of each pair of balls, said plates being disposed vertically when the attached pair of balls is oscillated outwardly away from the said plate, a wheel axle carried by each plate, a wheel supported upon each axle, means for securing said balls in position when the balls are oscillated outwardly to position the wheels for contact with the ground and to maintain the receptacle supported above the ground, and means maintaining said plates in position when the said securing means is released and the balls are oscillated outwardly away from the said plate whereby the wheels will be retracted in operative position above the bottom of the receptacle.

11. A carrier of the character stated, compris-
ing a relatively long receptacle designed to be disposed vertically when in use and having its upper end open, a pair of superpose substantially U-shaped balls pivotally connected to each of two opposite sides of the receptacle adjacent the inner end to oscillate on spaced parallel axes towards the receptacle and into inoperative position and away from the receptacle and into operative position, a flat plate member pivotally connected at opposite edges between the outer extremities of each pair of balls whereby the plate will be shifted upon oscillation of the balls to operative and inoperative positions therewith and be maintained at all times in a vertical plane, a wheel axle carried by each plate, a wheel supported upon each axle, bracing means for securing said balls and plate against movement when the balls are oscillated to operative position, said wheels being in position to support the receptacle above the ground when the balls are in operative position, the wheels being raised above the bottom of the receptacle when the balls are in inoperative position, and spring means forming an operative connection between the outer extremities of the balls and the adjacent receptacle and normally functioning to cause upward oscillation of the balls to inoperative position.

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