GOLF BAG AND GOLF CART ASSEMBLY

Inventors: David Michael Mackay, Sydney (AU); Jon Pryer, Sydney (AU)

Appl. No.: 13/810,046

PCT Filed: Jul. 14, 2011

PCT No.: PCT/AU2011/000889

§ 371 (c)(1), (2), (4) Date: Mar. 22, 2013

Foreign Application Priority Data
Jul. 14, 2010 (AU) 2010903145

Publication Classification

Int. Cl. A63B 55/08 (2006.01)

U.S. Cl. CPC A63B 55/08 (2013.01)

USPC 280/655

ABSTRACT

A cart assembly for coupling to a golf bag, the cart assembly being moveable between a collapsed state and a deployed state and a coupling arrangement for coupling a golf bag to cart assembly, the coupling arrangement including one or more supporting collars corresponding in shape to a portion of the golf bag, the supporting collar attached to a coupling member wherein the coupling member is adapted to couple to a corresponding coupling portion located on the cart assembly.
FIGURE 5
GOLF BAG AND GOLF CART ASSEMBLY

[0001] The present invention relates to a golf bag assembly and/or a golf cart assembly. In particular, the present invention relates to a golf bag assembly and golf cart assembly that are able to cooperate to provide a golf bag/cart arrangement that is compact.

BACKGROUND

[0002] Golf carts, also known as golf buggies or golf trolleys, are popular with the majority of golfers that do not wish to carry their golf bags containing their golf clubs whilst playing a round of golf or who do not wish to use a motorised golf buggy. A golf bag may be simply strapped to a cart, which typically has two or more wheels, and the golfer proceeds to pull the cart along in front or behind them making transporting the bag of golf clubs around a golf course significantly easier than directly carrying them the distance which can involve travelling for around 5 to 9 kms.

[0003] There are many styles of golf cart that are in common usage today, many of which collapse to a certain extent so as to reduce their size for transportation to and from the golf course. However, the majority of golf carts do no collapse to a sufficient extent to allow multiple golf bags and carts to be stowed in a typically sized boot of a vehicle. Nor do such golf carts reduce sufficiently in size to enable them to be stowed as luggage on a plane with relative ease.

[0004] Numerous attempts have been made to reduce the size of golf carts to make them more suitable for travel. One attempt included directly coupling wheels onto the sides of a golf bag which significantly reduced the overall size of the combined cart and bag arrangement. However, such an arrangement does not provide sufficient width between the wheels when pulling the golf bag to provide a stable platform where such a golf bag often topples over when negotiating undulating terrain as is often found on a golf course.

[0005] Accordingly, there is a need for a golf cart assembly or a golf bag and cart assembly that is sufficiently compact for travelling requirements and which still provides sufficient stability when in use on a golf course.

SUMMARY

[0006] According to one aspect, the present invention provides a cart assembly for coupling to a golf bag, the cart assembly being moveable between a collapsed state and a deployed state, the cart assembly including:

[0007] a main body portion including one or more coupling elements for coupling the
[0008] main body portion to a golf bag;
[0009] a handle member including a handle at one end and a connection point at the other end for coupling the handle member to the main body portion wherein the handle member is able to pivot about the connection point which moves the cart assembly from the collapsed state, where the handle member is located adjacent the main body portion, and the deployed state, where the handle member extends away from the main body portion; and,
[0010] two wheel supporting members each including a wheel coupling point at one end for cooperating with a wheel, and a connecting arrangement at the other end for coupling the wheel supporting members to the main body portion, wherein each wheel supporting member is able to pivot about the connecting arrangement coupled to the main body portion which moves the cart assembly from the collapsed state, when each wheel support member is located adjacent to the main body portion, and the deployed state, where each wheel support member extends away from the main body portion.

[0011] In one form, the main body portion is elongate and is located along the length of a side of the golf bag when coupled thereto.

[0012] In one form, the main body portion includes at least two coupling elements for coupling the main body portion to a golf bag.

[0013] In one form, the connecting arrangements of the two wheel supporting members are coupled to the main body portion at a point that is located in a middle region of the golf bag when coupled thereto. In one form, the connecting arrangements of the two supporting members are coupled to the main body portion adjacent one another.

[0014] In one form, the two wheel supporting members extend in a substantially perpendicular manner relative to the main body portion when in the deployed state. In one form, the angle between the two wheel supporting members extending out from the connecting arrangements when in the deployed state is less than about 180 degrees and greater than about 50 degrees. In a further form, the angle between the two wheel supporting members extending out from the connecting arrangement when in the deployed state is between about 70 degrees and about 95 degrees. In yet a further form, the angle between the two wheel supporting members extending out from the connecting arrangement when in the deployed state is about 85 degrees.

[0015] In one form, the cart assembly further includes a lateral restriction member coupled between the two wheel supporting members wherein the lateral restriction member inhibits the two wheel supporting members from moving away from each other when in the deployed state. In one form, the lateral restriction member is flexible thereby permitting the wheel supporting members to move towards each other when moving into the collapsed state.

[0016] In one form, the cart assembly further includes two support rails wherein one support rail is coupled to the handle portion and one of the wheel supporting members and the other support rail is coupled to the handle portion and the other wheel supporting member. In one form, movement of the handle portion from the collapsed state to the deployed state provides the support rails move the wheel supporting members from the collapsed state to the deployed state. In one form, the support rails are coupled to the handle member at a point that is a distance along the length of the handle member from the connection point. In one form, the distance along the length of the handle member from the connection point is less than 20 cm. In one form, the two support rails are coupled to the handle portion via a ball joint, wherein the ball joint allows the support rail to pivot in all planes relative to the handle member whilst the handle member is moving between the collapsed state and the deployed state.

[0017] In one form, the length of the handle member is adjustable.

[0018] In one form, the cart assembly further includes a third wheel support member coupled to the lower end of the main body portion wherein the third wheel support member provides a wheel coupling point for locating a third wheel at a base region below the golf bag when coupled thereto. In one form, the third wheel support member is able to move relative to the main body portion between a deployed position,
wherein the third wheel support member extends beyond the main body portion, and a retracted position, wherein the third wheel support member is adjacent the main body portion.

[0019] In one form the cart assembly further includes a motor assembly coupled to at least the wheels located at the end of the wheel support members wherein the motor assembly is capable of rotating the wheels. In one form the motor assembly is operated via a controller wherein the controller is located on the handle portion of the cart assembly, or the motor assembly is operated via remote control.

[0020] In one form the wheel coupling points include an axle portion extending therefrom, the axle portion being capable of cooperating with and being retained within a corresponding orifice located at the hub of a wheel.

[0021] In one form the cart assembly is directly coupled to the golf bag. In one form the main body portion of the cart assembly includes one or more coupling elements which correspond to one or more coupling arrangements located on the golf bag. In an alternative form the cart assembly is integral with the construction of the golf bag.

[0022] According to another aspect the present invention provides a coupling arrangement for coupling a golf bag to an item, the coupling arrangement including one or more coupling elements corresponding to shape to a portion of the golf bag, the supporting collar attached to a coupling member wherein the coupling member is adapted to couple to a corresponding coupling portion located on the item.

[0023] In one form the item is a golf cart assembly. In another form the item is a cart assembly as herein described.

[0024] In one form the portion of the golf bag is located in the neck region and/or the base region of the golf bag. In another form the supporting collar is located within the construction of the golf bag.

[0025] In one form the coupling member includes a female receiving portion with an internal thread which corresponds to a thread around a male coupling member located on the item.

BRIEF DESCRIPTION OF THE FIGURES

[0026] In order to enable a clearer understanding of the present invention, one or more preferred embodiments will hereinafter be described with reference to the attached drawings, and in those drawings:

[0027] FIG. 1 is a perspective view of a cart assembly in the collapsed state in accordance with an embodiment of the present invention, the cart assembly coupled to a golf bag shown in dashed lines;

[0028] FIG. 2 is a perspective view of the cart assembly depicted in FIG. 1 moving from the collapsed state to the deployed state;

[0029] FIG. 3 is a perspective view of the cart assembly depicted in FIG. 1 and FIG. 2 moving further from the collapsed state to the deployed state;

[0030] FIG. 4 is a perspective view of the cart assembly depicted in FIGS. 1 to 3 in the deployed state with one wheel attached to one of the wheel supporting members and one wheel removed.

[0031] FIG. 5 is a perspective view of the cart assembly depicted in FIGS. 1 to 4 in the deployed state;

[0032] FIG. 6 is a front elevation view of a golf bag (shown in dashed lines) including a coupling arrangement for coupling a cart assembly to a golf bag in accordance with an embodiment of the invention;

[0033] FIG. 7 is a perspective view of the parts associated with a coupling arrangement;

[0034] FIG. 8 is a perspective view of a cart assembly in accordance with a further embodiment of the present invention;

[0035] FIG. 9 is a perspective view of a cart assembly in accordance with a further embodiment of the present invention including a third wheel; and,

[0036] FIG. 10 is an exploded view of a cart assembly in accordance with yet a further embodiment of the present invention.

DETAILED DESCRIPTION OF EMBODIMENTS

[0037] In certain embodiments, the present invention provides a cart assembly for coupling or permanently attaching to a golf bag wherein the cart assembly is able to move between a collapsed state and a deployed state. In the deployed state, the cart is in a position to enable a user to push or drag the cart along the ground to facilitate carrying the attached golf bag. In the collapsed state, the cart assembly, even when attached to the golf bag, is in a sufficiently compact state to easily enable the bag and cart to be carried or transported together. This provides that the golf bag and cart assembly may be carried as one for transporting to and from the golf course, or as luggage stowed on a plane if desired without the need for decoupling the cart assembly from the golf bag.

[0038] In addition, the cart assembly of the present invention may be used in conjunction with existing golf bags that are already on the market. In one form, existing golf bags may be altered to include a coupling arrangement as hereinbefore described with the associated supporting collar being incorporated within the golf bag construction or alternatively located on the outside surface of the golf bag.

[0039] In accordance with various embodiments, the cart assembly according to the present invention is very easy to assemble and may be operated by one hand by simply releasing the handle member from the collapsed state by a thumb operated catch, and raising the handle member into the deployed state. Similarly, the cart assembly is easy to move again into the collapsed state, by releasing a retaining catch and dropping the handle member into the collapsed state.

[0040] In one embodiment, the wheels are separate from the cart assembly and may be fitted once the cart assembly is in the deployed state. This provides that the wheel size may still be of sufficient diameter so as not to compromise the ride quality of the cart assembly when in the deployed state.

[0041] Referring now to FIGS. 1 to 5 there is shown an embodiment of the present invention wherein a cart assembly 10 is coupled to a golf bag 11 (shown in dashed lines) in various states of movement between the cart assembly 10 being in a collapsed state shown in FIG. 1, through to the cart assembly 10 in a deployed state as depicted in FIG. 5.

[0042] The cart assembly 10 includes an elongate main body portion 15 which is coupled to and is positioned to run along the length of a golf bag 11. Two turnbuckles 39, 42, are located at the neck and base portions of the golf bag 11 respectively. Each turnbuckle 39, 42 including a female receiving portion with a thread on the interior of the receiving portion which corresponds to a thread located on a male coupling portion 37, 41 located at the top end and bottom end of the main body portion 15 of the cart assembly 10. The male coupling portions 37, 41 are inserted and secured into the
receiving portions of the turnbuckles 39, 42 thereby attaching the main body portion 15 of the cart assembly 15 to the golf bag 11.

[0043] The cart assembly 10 includes a handle member 17 with a handle 18 at one end which extends away from the main body portion 15 when in the deployed state (shown in FIG. 5) where the handle member 17 extends in the general direction of elongation of the main body portion 15 to provide a handle position that allows the cart to be pushed or pulled easily by a person. The handle member 17 is coupled to the top end of the main body portion 15 at a connection point 19 which consists of a bolt or pin arrangement passing through both the handle member 17 and the main body portion 15 to enable the handle member 17 to pivot about the connection point 19. The connection point 19 enables the handle portion 17 to pivot about the main body portion 15 from the collapsed state, shown in FIG. 1 when the handle member is folded down and located on top of and adjacent the length of the main body portion 15, through various states of movement shown in FIGS. 2 and 3 to the deployed state shown in FIG. 5. The connection point 19 provides the handle portion 17 can move from the collapsed state to the deployed state with approximately 180 degrees in motion. Once moved into the deployed state, a spring loaded flange 35 locks the handle member 17 in the deployed state whereby the flange member 35 must be depressed and overcome the biasing force of the spring if it is desired to move the cart assembly 10 back to the collapsed state.

[0044] The main body portion 15 also includes a secondary handle member 21 which is located at the top end of the main body portion 13 spaced away from the general line of the main body portion in the opposite direction to the golf bag 11. The secondary handle member 21 allows a person to carry the golf bag 11 and cart assembly 10 in one hand when the cart assembly is in the collapsed state.

[0045] In addition, connection point 19 is also located on this spaced away region of the secondary handle member 21 which provides that when the handle member 17 is in the deployed state, the handle member 17 is also spaced away from the golf bag itself (as shown in FIGS. 4 & 5) which provides that the golf clubs being carried in the golf bag 11 do not come into contact with the handle member 17 when the cart is being dragged or pushed in the deployed state. Indeed, in the embodiment figures the handle member 17, once fully rotated around connection point 19, rests against the top portion of the secondary handle member 21 when in the deployed state.

[0046] Coupled mid-way down the elongate main body portion 15 at approximately a mid-point along the length of the golf bag 11, two wheel support members 20 are coupled to the main body portion 15 by means of two connecting arrangements 25 (one of which is hidden in FIGS. 1 to 5). The connecting arrangements 25 consists of a bolt or pin passing through the wheel supporting members 20 and the main body portion 15 providing that the wheel supporting members 20 are then able to pivot about the connecting arrangements 25 allowing the wheel supporting members to move from a collapsed state shown in FIG. 1 through to a deployed state as shown in FIG. 5. The connecting arrangements 25 are located adjacent one another along the length of the main body portion 15 and in this embodiment are located and coupled to opposite sides of the main body portion 15.

[0047] In the deployed state shown in FIG. 5, the wheel supporting members 20 extend in a substantially perpendicular direction relative to the main body portion 15 of the cart assembly 10. In addition, the wheel supporting members 20 extend away from one another moving from a collapsed state where each wheel supporting member 20 lies flat against and adjacent the main body portion 15, as shown in FIG. 1, to the deployed state, as shown in FIG. 5, wherein the angle α between the two wheel support members 20 is approximately 80 to 90 degrees. The wheel supporting members 20 include axle portions 28 which are adapted to receive wheels 47 when in the deployed state.

[0048] The wheels 47 may be separated from the axle portions 28 such that the wheel supporting members 20 may be moved into the collapsed state as shown in FIG. 1.

[0049] In order to restrict the wheel supporting members 20 moving in a lateral direction away from one another once in the deployed state shown in FIG. 5, a lateral restricting member 30 made of a flexible elongate material is coupled to and connects the two wheel support members 20. The lateral restricting member 30 is flexible and therefore is able to fold or bend with the movement of the wheel supporting members 20 when the cart assembly is moving between the collapsed and deployed states. The lateral restricting member 30 provides significant structural support to the wheel supporting members 20 when in the deployed state as it prevents the wheel support members 20 from splaying out to the sides and moving further away from each other in a lateral direction due to the weight of the golf bag 11 being supported by the cart assembly 10.

[0050] In order to provide further support to the wheel supporting members 20 when in the deployed state, two support rails 22 are connected from the wheel supporting members 20 at a point 43 adjacent the wheel coupling point or axle portions 28. The other ends of the support rails 22 are coupled to the handle member 17. The support rails 22 are coupled to the handle member 17 at connection point 31 which in this embodiment is in the form of a ball joint fixed to the bottom end of the handle member adjacent the connection point 19 connecting the handle member 17 to the main body portion 15. The connection point 31 is approximately 10 to 20 cm along the length of the handle member 17 from the connection point 19.

[0051] The support rails 22 provide additional support to the structure of the cart assembly 10 when in the deployed state, and also provide that movement of the handle member 17 from the collapsed state shown in FIG. 1 through to the deployed state shown in FIG. 5 also moves the wheel supporting members 20 from the collapsed state shown in FIG. 1 through to the deployed state FIG. 5. This provides that the cart assembly 10 may be moved from the collapsed state through to the deployed state in one motion which provides that a user need only one hand to move the cart assembly between collapsed and deployed states and similarly between deployed and collapsed states.

[0052] In order to provide for the various directions which the support rails 22 move from in relation to the handle member 17 when moving from the collapsed state to the deployed state, the support rails 22 are connected via a ball joint which is fixed relative to the handle member 17 and which allows the support rails 22 to move in three possible translations (x, y, z) during the range of motion from the collapsed state to the deployed state. The connection point 43 at the other end of the support rails 22 connecting the support rails 22 to the wheel supporting members 20 enables the ends of the support rails 22 to rotate with respect to the wheel
supporting member 20 to allow for the motion of the wheel supporting members 20 as they move from the collapsed to the deployed state. The ends of the support rails 22 are angled and extend in a perpendicular manner away from the wheel supporting members 20 for a short distance before an angle of about 80 to 90 degrees which leads into the elongate body of the support rails 22.

[0053] Referring specifically to FIG. 1 there is shown the cart assembly 10 in the collapsed state where the wheels 47 have been removed from the axle portions 28. In such a collapsed state, the handle portion 17, wheel support members 20, support rails 22 and lateral restricting member 30 are all located adjacent and along the length of the main body portion 15. Such a collapsed state which is enabled by the movement allowed to the support rails by the ball joints 31 and the flexible lateral restricting member 30 provides that the collapsed state is significantly compact whereby the golf cart assembly 10 can rest unobtrusively along the line of the golf bag 11. This provides that the cart assembly 10 in the collapsed state does not protrude significantly from the golf bag 11 such that the cart assembly is practically integral thereto.

[0054] From the collapsed state depicted in FIG. 1, the cart assembly may be moved to the deployed state shown in FIG. 5 by releasing a spring loaded catch operated by lever 46 which allows the handle member 17 to move in an upwards direction pivoting around connection point 19 located on the main body portion 15 of the golf cart assembly 10. As can be seen from FIG. 2, as the handle portion 17 is raised to a perpendicular orientation relative to the main body portion 15, the rail support members 22 begin to move the wheel supporting members 20 away from the main body portion 15.

[0055] Turning to FIG. 3, the further movement of the handle member 17 around connection point 19 provides the rail support members 22 further move the wheel supporting members 20 until the deployed state is achieved in FIGS. 4 and 5 where the handle member 17 is in an orientation in line with the elongate direction of the main body portion extending away from one end from connection point 19. The supporting rails 22 have now fully extended the wheel supporting members 20 such that they are extending in a substantially perpendicular fashion away from the length of the golf bag 11.

[0056] Once the deployed state has been attained, the two wheels may be fitted over the axle portions 28 of the wheel supporting members 20 and the golf bag cart assembly is ready for operation. As the axle portions 28 of the wheels are located on the cart assembly 10, the wheels may be easily clipped together when the cart assembly is in the collapsed state and placed within a compartment on the golf bag or alternatively attached to the golf bag via a clip or like means. The axle portions 28 are covered by the handle 18 when the cart assembly is in the collapsed state shown in FIG. 1. The handle 18 is shaped to cover the axle portions 28 and is also shaped to curve around and follow the curve of the base of the golf bag 11 when the cart assembly is in the collapsed state. When in the deployed state, the shape of the handle 18 (in the form of a D) provides a nice ergonomic shape that is easily gripped by a user for operation of the cart 10 and golf bag 20 arrangement.

[0057] Turning to FIG. 6 there is shown a front elevation view of a golf bag depicting a coupling arrangement in accordance with another embodiment of the present invention. The coupling arrangement includes a supporting collar 53, 54 which corresponds in shape to a neck portion or a base portion of the golf bag 11 which is typically curved in nature.

[0058] FIG. 7 provides a perspective view of a supporting collar member as well as a locating plate and female receiving portion. In this embodiment, the supporting collar 53, 54 is arranged such that it is integral with the construction of the golf bag 11 and located within the outside layer of the golf bag 11. The supporting collar 53, 54 provides additional structural support to the golf bag 11 at either the neck region or the base region of the golf bag 11, particularly when the golf bag 11 is coupled to a cart assembly 10 as depicted in FIGS. 1 to 5. In an alternative embodiment, the collar portion may be located on the cart assembly itself and support the outside of the golf bag.

[0059] The supporting collar 53, 54 may be constructed of any suitable material such as plastic or metal that has sufficient structural integrity to provide support. A locating plate is connected to the supporting collar 53, 54 and/or to the golf bag 11 via a rivet which includes the female receiving portion 56 with a screw thread around the interior of the receiving portion for cooperating with a corresponding male connecting portion included in a cart assembly 10 as depicted in FIGS. 1 to 5. The rivet includes a flange on the opposite end to the female receiving portion which abuts the circumference of the opening in the supporting collar 53, 54. A further flange at the tip of the rivet retains the locating plate 39 onto the rivet onto the outside of the bag construction which then provides a locating surface with the opening 56 presenting for coupling with the male connecting portion of the cart assembly 10.

[0060] The supporting collar 53 composed with very deliberate grooves to produce a shape that not only follows the curve of the bag but also delivers significant strength for its weight.

[0061] However, the coupling may be equally the reverse wherein the turnbuckles 39, 42 include male coupling elements which correspond with female receiving portions located on the cart assembly 10.

[0062] FIG. 8 shows an alternative embodiment of the present invention wherein instead of directly coupling the cart assembly 10 to the golf bag 11, the cart assembly 10 is attached using tethers 70 and 72 which are wrapped around the neck and base portions of the golf bag (not shown) respectively. In order to facilitate the positioning of the golf bag onto the cart assembly 10, the cart assembly is fitted with brackets 60 at the upper and lower end of the cart assembly 10 (at points where coupling members were located in embodiments describe above) which are curved in shape and provide a cradle within which to place the golf bag when either in the deployed or collapsed state. The brackets 60 correspond with tethers 70 and 72 which wrap around the neck portion and base portion of the golf bag securing the golf bag to the cart assembly 10.

[0063] The base bracket 60 also includes bracket support flanges 62 which abut the base of the golf bag when the golf bag is strapped to the cart assembly 10. The bracket support flanges 62 carry the weight of the golf bag and ensure the golf bag does not slip down through the tethers 70 and 72 whilst the bag is being carried by the cart assembly 10. The bracket support flanges 62 can be attached to the brackets 60 via pin arrangement 61 which allows the bracket support flanges to pivot relative to the bracket 60 to accommodate different sized bases of golf bags.

[0064] The embodiment shown in FIG. 8 allows the cart assembly 10 to be fitted to most types of existing golf bags. In
addition, the brackets 60 are connected to the cart assembly 10 via male coupling screw threads located on the cart assembly 10 which are also able to connect to a coupling arrangement for coupling a cart assembly to a golf bag as herein described.

[0065] A further embodiment of the present application is shown in FIG. 9 which depicts a cart assembly 10 in combination with a golf bag 11 and further including a third wheel 80 assembly which extends beyond the base of the main body portion 15 of the cart assembly 10. The third wheel 80 is supported on a third wheel axle 81, or third wheel coupling point, which in turn is supported by a third wheel support member 82. The third wheel support member 82 is connected to the base of the main body portion 15 via a third wheel connection point 83 which consists of a pin passing through the third wheel support member 82 and the main body portion 15. The third wheel connection point 83 allows the third wheel support member 82 to pivot relative to the main body portion 15 allowing the third wheel support member to move from a deployed state where the third wheel support member 82 extends away from, and in general alignment with the elongate main body portion 15, to a retracted state where the third wheel support member 82 rests in a compact arrangement adjacent the main body portion 15.

[0066] A mechanism for moving the third wheel support member 82 from the retracted and deployed states consists of an actuator line 87 attached to the third wheel support member 82 which may be pushed or pulled via movement of an actuator 90 which is connected to the actuator line 87 via actuator line fastener 91. In this way, the cart assembly 10 may be moved from the collapsed state to the deployed state as described above, and once in the deployed state, the actuator 90 may be moved to operate the actuator line which in turn moves the third wheel support member 82 from the retracted state to the deployed state. The third wheel 80 may then be placed onto the third wheel axle 81 in order to provide a cart assembly 10 in a three wheel arrangement.

[0067] Typically the third wheel 80 may be smaller than the back wheels 47. In addition, as a three wheel arrangement is often pushed rather than pulled, the three wheel option can include an adjustable handle member 18 which provides that the height of the handle 18 can be adjusted relative to the handle portion 17. The handle 18 is also sized to accommodate two hands which facilitates a more chiropractically friendly symmetrical body form when in use.

[0068] The use of the third wheel 80 also provides that a braking mechanism for a back wheel can be included in the construction with the cart assembly such that the three wheel embodiment may be placed on a slope without the cart moving without the control of the person using the cart assembly. In a further embodiment, the three wheel arrangement of the cart assembly 10 may also be fitted with a motor which drives at least the two back wheels 47 of the assembly. In one form, electric motors and batteries would sit entirely within the hub of each of the back wheels 47. By having the weight of the electric motors and batteries sitting within the wheels there, is no need to reinforce the cart assembly frame to cater for the additional weight.

[0069] The control for such an electric motor would sit either in the handle 18 of the assembly 10 or alternatively be remote controlled. The controls could also incorporate a display screen and can be removed for security and/or charging when not in use.

[0070] FIG. 10 shows an exploded view of a further embodiment of the two wheel version of the cart assembly 10. In particular, FIG. 10 shows the construction of the wheel 47 in accordance with a further embodiment which allows the wheel to be inserted directly onto the axle portions 28 and clicked into place to be secured when the cart assembly 10 is in the deployed configuration. When moving the cart assembly 10 into the collapsed state the wheel 47 may be simply removed by applying pressure to the release button 109 which disengages the spring 107 from the corresponding indented portion 111 located on the axle portion 28. The wheel assembly includes a wheel hub 100 which is surrounded by a rubber tyre 101. The interior of the wheel hub consists of an inner bearing 102 next to a header spacer 103 within an outer bearing following by an outer spacer 105, an inner washer 106, a spring 107, an outer washer 108, the release button 109 which is then all enclosed within the cover 110.

[0071] The construction of the wheel 47 provides for an easy mechanism for someone to merely push onto the release button 109 to disengage the wheel from the axle portion 28 of the cart assembly 10 which provides that moving the cart assembly 10 can be quickly moved to the collapsed state and stowed for storage. The wheel assembly 47 also provides that it is quick to move the cart assembly to the deployed state and attach the wheels 47 as they essentially click onto the axel portions 28 are then retained until the release button 109 is again pushed.

[0072] It is also envisaged that whilst being smaller the third wheel 80 shown in FIG. 9 can also be of a similar construction as described above in reference to FIG. 10.

[0073] Throughout this specification and the claims which follow, unless the context requires otherwise, the word “comprise”, and variations such as “comprises” or “comprising”, will be understood to imply the inclusion of a stated integer or step or group of integers or steps but not the exclusion of any other integer or step or group of integers or steps.

[0074] The reference in this specification to any prior publication (or information derived from it), or to any matter which is known, is not, and should not be taken as, an acknowledgement or admission or any form of suggestion that prior publication (or information derived from it) or known matter forms part of the common general knowledge in the field of endeavour to which this specification relates.

[0075] Finally, it is to be understood that the inventive concept in any of its aspects can be incorporated in many different constructions so that the generality of the preceding description is not to be superseded by the particularity of the attached drawings. Various alterations, modifications and/or additions may be incorporated into the various constructions and arrangements of parts without departing from the spirit or ambit of the invention.

1. A cart assembly for coupling to a golf bag, the cart assembly being moveable between a collapsed state and a deployed state, the cart assembly including:
   a main body portion including one or more coupling elements for coupling the main body portion to a golf bag;
   a handle member including a handle at one end and a connection point at the other end for coupling the handle member to the main body portion wherein the handle member is able to pivot about the connection point which moves the cart assembly from the collapsed state, where the handle member is located adjacent the main
body portion, and the deployed state, where the handle member extends away from the main body portion; and, two wheel supporting members each including a wheel coupling point at one end for cooperating with a wheel, and a connecting arrangement at the other end for coupling the wheel supporting members to the main body portion, wherein each wheel supporting member is able to pivot about the connecting arrangement coupled to the main body portion which moves the cart assembly from the collapsed state, when each wheel support member is located adjacent to the main body portion, and the deployed state, where each wheel support member extends away from the main body portion.

2. A cart assembly according to claim 1 wherein the main body portion is elongate and is located along the length of a side of the golf bag when coupled thereto.

3. A cart assembly according to claim 1 wherein the main body portion includes at least two coupling elements for coupling the main body portion to a golf bag.

4. A cart assembly according to claim 1 wherein the connecting arrangements of the two wheel supporting members are coupled to the main body portion at a point that is located in a middle region of the golf bag when coupled thereto.

5. A cart assembly according to claim 1 the connecting arrangements of the two supporting members are coupled to the main body portion adjacent one another.

6. A cart assembly according to claim 1 wherein the two wheel supporting members extend in a substantially perpendicular manner relative to the main body portion when in the deployed state.

7. A cart assembly according to claim 1 wherein the angle between the two wheel supporting members extending out from the connecting arrangement when in the deployed state is less than about 180 degrees and greater than about 30 degrees.

8. A cart assembly according to claim 7 wherein the angle between the two wheel supporting members extending out from the connecting arrangement when in the deployed state is between about 70 degrees and about 95 degrees.

9. A cart assembly according to claim 7 wherein the angle between the two wheel supporting members extending out from the connecting arrangement when in the deployed state is about 85 degrees.

10. A cart assembly according to claim 1 wherein the cart assembly further includes a lateral restriction member coupled between the two wheel supporting members wherein the lateral restriction member inhibits the two wheel supporting members from moving away from each other when in the deployed state.

11. A cart assembly according to claim 9 wherein the lateral restriction member is flexible thereby permitting the wheel supporting members to move towards each other when moving into the collapsed state.

12. A cart assembly according to claim 1 wherein the cart assembly further includes two support rails wherein one support rail is coupled to the handle portion and one of the wheel supporting members and the other support rail is coupled to the handle portion and the other wheel supporting member.

13. A cart assembly according to claim 12 wherein movement of the handle portion from the collapsed state to the deployed state provides the support rails move the wheel supporting members from the collapsed state to the deployed state.

14. A cart assembly according to claim 12 wherein the support rails are coupled to the handle member at a point that is a distance along the length of the handle member from the connection point.

15. A cart assembly according to claim 14 wherein the distance along the length of the handle member from the connection point is less than 20 cm.

16. A cart assembly according to claim 12 wherein the two support rails are coupled to the handle portion via a ball joint, wherein the ball joint allows the support rail to pivot in all planes relative to the handle member whilst the handle member is moving between the collapsed state and the deployed state.

17. A cart assembly according to claim 1 wherein the length of the handle member is adjustable.

18. A cart assembly according to claim 1 wherein the cart assembly further includes a third wheel support member coupled to the lower end of the main body portion wherein the third wheel support member provides a wheel coupling point for locating a third wheel at a base region below the golf bag when coupled thereto.

19. A cart assembly according to claim 18 wherein the third wheel support member is able to move relative to the main body portion between a deployed position wherein the third wheel support member extends beyond the main body portion and a retracted position wherein the third wheel support member is adjacent the main body portion.

20. A cart assembly according to claim 18 wherein the cart assembly further includes a motor assembly coupled to at least the wheels located at the end of the wheel support members wherein the motor assembly is capable of rotating the wheels.

21. A cart assembly according to claim 20 wherein the motor assembly is operated via a controller wherein the controller is located on the handle portion of the cart assembly, or the motor assembly is operated via remote control.

22. A cart assembly according to claim 1 wherein the wheel coupling points include an axel portion extending therefrom, the axel portion being capable of cooperating with and being retained within a corresponding orifice located at the hub of a wheel.

23. A cart assembly according to claim 1 wherein the cart assembly is directly coupled to the golf bag.

24. A cart assembly according to claim 1 wherein the main body portion of the cart assembly includes one or more coupling elements which corresponds to one or more coupling arrangements located on the golf bag.

25. A cart assembly according to claim 1 wherein the cart assembly is integral with the construction of the golf bag.

26. A coupling arrangement for coupling a golf bag to an item, the coupling arrangement including one or more supporting collars corresponding in shape to a portion of the golf bag, the supporting collar attached to a coupling member wherein the coupling member is adapted to couple to a corresponding coupling portion located on the item.

27. A coupling arrangement according to claim 26 wherein the item is a golf cart assembly

28. A coupling arrangement according to claim 26 wherein the item is a cart assembly according to claim 1.

29. A coupling arrangement according to claim 26 wherein the portion of the golf bag is located in the neck region and/or the base region of the golf bag.
30. A coupling arrangement according to claim 26 wherein the supporting collar is located within the construction of the golf bag.

31. A coupling arrangement according to claim 26 wherein the coupling member includes a female receiving portion with an internal thread which corresponds to a thread around a male coupling member located on the item.

* * * * *