

Golf Bag

The present invention pertains to a golf bag, comprising a bottom part, a cylinder part with stabilizing longitudinal webs, a head part, a support device with a toggle lever mechanism or another mechanism and a clamping system for folding out and folding in support legs and with a pull-out grip as well as with a belt system, which combines in itself all components for stable standing, for rolling, for sloped support for carrying on the shoulder or on the back and for transport in the lying or upright position without additional actions on the part of the golfer.

Many different embodiments of golf bags with various advantages have been known. For example, golf bags have been known which are to be carried on the shoulder with a belt and tilt over easily or are labile on standing when put down on the ground. Attempts are made to overcome this shortcoming by means of stabilizing parts in the body of the golf bag, as a result of which the bags have a considerable weight.

A double belt system for golf bags, which makes it possible to pick up the golf bag like a backpack over the back, has also been known from EP 0461243 B1. However, the belt system is suitable only for carrying the golf bag and does not make it possible in itself either to roll the bag over the golf course or to put it down in a suitable position.

There are also golf bags that have a support device which is released by means of a lever mechanism at the head part. The support legs arranged outside on the golf bag must be folded out and folded in and transported on the shoulder each time there is a change in place. These golf bags cannot be rolled, either.

A support device has also been known from DE 43 27 289 C2 in which the support legs are folded

in automatically by taking up the belts and they are folded out again on relieving the belts during a change in place. The folding in and out of the support legs is triggered in this support device by a folding mechanism arranged on the bottom part of the golf bag. When the golf bag is put down, the folding mechanism is pressed onto the bottom of the bag, as a result of which the support legs fold out. When the golf bag is picked up, the folding mechanism is released from the bottom and the support legs are again in contact with the golf bag. This technique is delicate and leads to increased weight of the golf bag due to the necessary structure. With both of these support devices, the golf bags must be carried on the shoulder, which may be difficult especially for elderly golfers.

To eliminate this problem, various chassis or carts have been developed, on which the golf bags can be transported. These off-road vehicles are heavy and bulky. For transportation in the automobile, they require complicated packaging operations and a considerable amount of space beside the golf bag, e.g., in the trunk of an automobile.

A golf bag with an off-road chassis integrated with the golf bag and with a pull-out grip has also been known from WO 97/29809. The design requires much time for assembly and taking apart, considerable skill and has a heavy weight, which is again problematic during loading and unloading in and from an automobile.

The object of the present invention was therefore to develop a golf bag which combines in itself all the properties for stable standing, rolling, sloped support, carrying on the shoulder or on the back and for transportation in the lying or upright position as needed without additional actions on the part of the golfer, is easy to handle, can be transported in a compact form and eliminates the above-described drawbacks of the state of the art.

This object is accomplished with a golf bag having the characterizing features of claim 1. The

design of the golf bag according to claim 1, which is characterized essentially by a cylinder part, which is in turn detachably connected to a rollable bottom part, on the one hand, and to a head part, on the other hand, makes possible easy assembly and easy disassembly due to a screw connection. Due to the parts of the golf bag being screwed together, the golf bag becomes able to be repaired, which saves time in the case of the replacement of individual worn or defective parts of the golf bag and above all saves costs.

The dimensionally stable bottom part of the golf bag has off-road wheels and occasionally additionally a support foot, which guarantee the easy rolling of the golf bag in case of change of place and its putting down vertically in a stable manner entirely without additional actions together with the pull-out grip arranged at the head part of the golf bag. Furthermore, a support device arranged at the head part makes it possible to put down the golf bag in a sloped position, where the releasing of the support device by the belt system arranged on the cylinder part of the golf bag or by another release mechanism makes it possible to eliminate the need for additional actions for folding in the support legs. Thus, the golf bag according to the present invention makes it possible to put down the golf bag in a vertical position, to roll it in case of a change of place, to put it down in a sloped position, and to carry it on the shoulder or on the back or to transport it in a lying or upright position as needed, without the user having to perform any essential manual actions to release the individual components, which in turn guarantees the easy handling of the golf bag.

The bottom part of the golf bag according to the present invention in accordance with claim 2, which comprises a low-weight, wear-resistant and dimensionally stable one-piece container and leads to a low weight of the golf bag despite all the techniques available in the area of golf bags and despite the versatile use of the golf bag, should be pointed out in particular. The shaping of the bottom part with a base designed in a stepped manner to the longitudinal axis of the golf bag and with wheel cases integrated into the jacket surface creates the conditions for the wheels being essentially covered

and protected by the wheel cases and for the tiltability of the bottom part being guaranteed. Even though the wheels project beyond the jacket surface in the case of a jacket surface made in one piece cylindrically without wheel cases, the bottom part of the golf bag can thus be manufactured in an even more inexpensive design. The base of the bottom part may also be beveled in order to make it possible to arrange beside the wheels other support devices, even prior-art ones, with a tilting bottom and support legs, in which the support legs can be released by the tilting bottom.

Furthermore, the fixing points arranged on the inner base of the bottom part guarantee the fastening of lightweight longitudinal webs and their guiding within the cylinder part to connect the bottom part to the head part of the golf bag, and the mounting openings arranged on the jacket surface of the bottom part support the detachable screw connection of the bottom part to the cylinder part.

The arrangement of low-wear off-road wheels with low liability to malfunction according to claim 3 is of great advantage. If necessary, the wheels may be fastened to the bottom part by means of a continuous, non-co-rotating axle or floating axles such that their wheel axles extend next to the bottom part in the case of a cylindrical bottom part or are essentially covered and protected by the wheel cases in the case of integrated wheel cases. This offers the advantage that one cannot be caught by the wheels either during rolling or carrying on the shoulder or on the back because they are integrated within the jacket surface of the entire golf bag nearly seamlessly and form a flat unit with the golf bag. Moreover, the eccentric arrangement of the wheel axles relative to the base of the bottom part makes it possible to tilt the golf bag during rolling and to put it down vertically in a stable manner with a three-point bearing despite the tiltability with the base bent in a stepped manner along with the support foot made in one piece with the outer base. Besides the wheels, a beveled base makes possible the arrangement of other, even prior-art support devices with tilting bottom and support legs in which the support legs can be released by the tilting bottom, but this does not guarantee vertical stability.

Also advantageous is the cylinder part of the golf bag according to 4, which consists of a flexible material and can be detachably connected to the bottom part and the head part by mounting openings arranged on the open front sides by means of fastening elements such as screws and threaded sleeves, where the cylinder part covers the head part at the same time. The inner outfitting of the cylinder part with coaxial stabilizing strips and loops makes possible the loose guiding of longitudinal webs to stabilize the cylinder part and the distribution of the acting forces during transport of the filled golf bag by the belt among the longitudinal webs. The belt system arranged on the outer jacket surface, which is hung on rings arranged at selectably spaced locations on the cylinder part, on the one hand, and on a toggle lever mechanism arranged at the head part for a support device, on the other hand, makes it possible to carry the golf bag on the shoulder or on the back and to automatically fold in the opened support feet of the support device.

In addition, the longitudinal webs according to claim 5, which stabilize the cylinder part and consist of a light-weight hollow section, guarantee the lightweight connection of all components of the golf bag from the bottom part to the head part over the cylinder part. One of the longitudinal webs is reinforced by an additional inner tube in order to make allowance for the load requirements imposed by the weight of the golf bag, especially when filled. In addition, the reinforced longitudinal web makes it possible to hold and guide the pull-out grip.

Furthermore, the head part of the golf bag according to the present invention in accordance with claims 6 through 8 should be pointed out. The head part is a closed material band which is lightweight in itself and is equipped with a mounting surface on its outer jacket surface and with a bracket on the opposite side for the support legs, which are directed toward the bottom part axially to the longitudinal axis of the golf bag. The head part guarantees the connection to the cylinder part and to the bottom part via the stabilizing longitudinal webs, to the pull-out grip and to the support device. The mounting surface and the bracket on the head part make it possible, on the one hand,

to arrange the toggle lever mechanism or another mechanism and the clamping system of the support device and its handling as well as of the stabilizing webs. On the other hand, the mounting surface makes possible a stable connection to the reinforced longitudinal web from the bottom part to the head part and the arrangement and the handling of the pull-out grip with the double tube system. The mounting openings present in addition to this on the band material make it possible to cover the head part with the cylinder part and to detachably connect same to the head part by means of fastening elements such as screws or snap fasteners. The essential advantage of this head part design is its high level of functionality in conjunction with a low weight.

The webs arranged horizontally in the head part to stabilize the material band and to protect the clamping system, especially in the case of a load caused by the toggle lever mechanism of the support device, should be pointed out in particular. According to claim 6, these webs are arranged such that they horizontally form a triangular hollow space open on all sides. According to claim 7, this hollow space makes it possible to accommodate the clamping system of the support device and ensures its trouble-free function. In addition, the webs, including the clamping system, can be closed by a piece of material such that reaching into the clamping system with the hand or destruction of the clamping system due to the penetration of foreign objects is ruled out.

Additional webs arranged in the head part according to claim 8 at right angles to the stabilizing webs form compartments for the separate storage of the golf clubs in the golf bag and support the simple handling of the bag by easy removal or introduction of the golf clubs during the game. In addition, the screws used to mount them on the band material of the head part make it possible to accommodate snap fasteners for the detachable fastening of a closing hood after the end of the game.

The functionality of the golf bag according to the present invention is supported especially advantageously by the grip, which is a pull-out grip according to claim 9. This grip is arranged on

the mounting surface of the head part by means of a double tube system and guided on the reinforced longitudinal web such that the grip can be pulled out beyond the center of gravity of the golf clubs being stored in the golf bag during the rolling of the golf bag, as a result of which a considerable reduction in weight is guaranteed for the user. In addition, the double tube system prevents the grip from being pulled completely out of its mount and especially from being jammed during the pushing in of the grip. In addition, the grip holder sloped in relation to the longitudinal axis of the golf bag facilitates handling. The belt system according to claim 10 is also advantageous. The optional possibility of fastening to the rings on the cylinder part, which rings are arranged at different distances, on the one hand, and to the toggle lever mechanism of the support device, on the other hand, [makes it possible] to lift the golf bag with the belt system and the folded-out support feet of the support device can be folded in automatically at the same time, as a result of which undisturbed carrying of the golf bag on the shoulder or on the back is guaranteed without additional actions on the part of the player.

Finally, the simple lightweight design as well as the materials used and the nondestructively detachable connections between the individual components of the golf bag, as well as, the combination of the various possibilities of handling, such as rolling, supporting in a sloped position, standing up vertically and carrying on the back or on the shoulder and easy handling, make possible the easy and compact transport, which may also be versatile as needed, during a change in place as well as during storage and, due to the detachable connections, the repair of the golf bag.

The present invention will be described in greater detail below on the basis of an exemplary embodiment. In the drawings,

Figure 1 shows a side view of the complete golf bag according to the present invention standing upright,

- Figure 2 shows a top view of Figure 1,
- Figure 3 shows section A-A from Figure 2,
- Figure 4 shows a side view of the mounted golf bag frame without cover,
- Figure 5 shows a front view of Figure 4,
- Figure 6 shows a side view of Figure 4 in a sloped position with the support legs folded out,
- Figure 7 shows a side view of Figure [4?] in a sloped position with the grip pulled out and the support legs folded in,
- Figure 8 shows a top view of Figure 4,
- Figure 9 shows a side view of the head part of the golf bag without cover and the grip pushed in and the double tube system for holding same,
- Figure 10 shows a section B-B through Figure 9 with the front view of the double tube system,
- Figure 11 shows a side view of the bottom part of the golf bag with wheels and support foot, and
- Figure 12 shows a top view of Figure 11.

The complete golf bag according to the present invention is shown in greater detail in Figure 1

through Figure 3 and comprises in this exemplary embodiment a bottom part 1 with wheels 9 and support foot 10, a cylinder part 2 with stabilizing longitudinal webs 3 and 3' as well as a belt system 8, a head part 4 with a mounting surface 4', stabilizing webs 4" and 4'" and webs 4"" as well as a bracket 6' with a support device 5 and support legs 6 as well as a sloped pull-out grip 7. According to Figure 11 and Figure 12, the bottom part 1 is preferably an approximately trapezoidal one-piece injection-molded or deep-drawn part manufactured from plastic. The base 1' of the bottom part 1 has dimensions of about 200 mm in length and has a width of 190 mm on one broad side and about 70 mm on the opposite broad side and its vertical jacket surface 1" is made in one piece preferably on the narrow broad side at a level of 50 mm and at a level of 150 mm on the opposite broad side. A wheel case 1"', protruding into the bottom part 1, with the dimensions of, e.g., 120 mm in length, 140 mm in width and 40 mm in depth, is integrated in the oblique areas of the jacket surface 1" of the trapezoidal bottom part 1 which can be recognized in greater detail in Figure 12. A wheel axle 9' with a diameter of preferably 10 mm of a commercially available wheel 9 with a preferable external diameter of 120 mm passes through the jacket surface 1" of the bottom part 1 at each wheel case 1"' and is mounted there such that the wheel axles 9' do not cross the center of the base 1'. In the exemplary embodiment, the wheel axles 9' are additionally held in a continuous axle sleeve 9'', which does not co-rotate, in order to relieve the jacket surface in the wheel cases 1"'. The wheels 9, which preferably have a width of 30 mm, are provided, e.g., with a tread 9" consisting of hard rubber, which has a low degree of wear. The wheel axles 9' are arranged according to Figure 11 such that the treads 9" of the wheels 9 projects [sic - Tr.Ed.] beyond the base 1' and beyond the jacket surface 1" on the 190-mm broad side by preferably 15 mm each. Moreover, the wheels 9 are equipped with a ball bearing 18 and thread guard 19, which brings about the good ability of the wheels to run and protects the wheel axles from contamination. The base 1' has, e.g., a step of a height of preferably 10 mm extending vertically to the longitudinal axis of the golf bag in order to guarantee the tiltability of the golf bag and the necessary ground clearance of the bottom part 1. This step is compensated with a support foot 10 made in one piece with the outer base 1' for the good vertical stability of the

to the narrow outer surface of the metal band. A bracket 6' for the support feet 6 is screwed on on the opposite side on the broad side of the metal band. A web 4" consisting of a hollow section is screwed on centrally between the mounting surface 4' and the bracket 6' on both sides on the front side of the metal band, which front side is used as the opening of the golf bag, to stabilize the metal band and consequently the head part 4. According to Figure 9, two additional webs 4"" consisting of a hollow section are screwed to the lower edge of the mounting surface 4', on the one hand, and to the bracket 6' of the support legs 6, on the other hand, under and on both sides of the web 4". According to Figure 2, the webs 4"" form with the web 4" a hollow space open on all sides, in which the clamping system 5" of the support device 5, not shown in detail, extends. As is shown more specifically in Figure 2, the webs 4" and 4"" as well as the clamping system 5" are closed and covered with a piece of material 14 preferably consisting of leather, with two opposite edges of the piece of material 14 being wound around the webs 4"" and are detachably fastened by means of, e.g., a velcro strip. The webs 4"" screwed to the metal band of the head part 4 at right angles to the webs 4" and 4"" are likewise hollow sections to form compartments 16, on the one hand, and are screwed on with screws 15 to additionally stabilize the material band of the head part 4, on the other hand. For example, screws whose heads form the base part of a snap fastener were selected for this purpose in order to button to these, e.g., a cover hood, with which the golf bag with the golf clubs protruding from it can be closed after the end of the game. The support legs 6 are arranged movably on the bracket 6' and are connected to the toggle lever mechanism 5' arranged on the outer mounting surface via the clamping system 5". According to Figure 10, the free ends of the longitudinal webs 3 are screwed to the metal band of the head part 4, the longitudinal web 3' is made somewhat shorter because of limited space and is connected to the mounting surface 4'. Figure 8, Figure 9 and Figure 10 show the arrangement of the grip 7 with its double tube system in greater detail. According to Figure 10, the grip 7 is arranged on the inside of the mounting surface 4', and the two tubes 17 of the grip 7 are mounted movably in a sleeve 17' each, and the sleeves 17' are held in a sleeve 17" each between the webs 4"" and 4". A fixer 17"" each, with which the ends of the sleeves 17' are locked at

the longitudinal web 3', is arranged at the ends of the sleeves 17'. The ends of the tubes 17 are guided vertically movably at the longitudinal web 3' by a guide strap 17^{'''}. At its end protruding from the golf bag, the grip 7 is preferably sloped by about 20% in relation to the longitudinal axis of the golf bag in order to thus guarantee better handling. Figure 4 and Figure 5 show a completely mounted frame of the golf bag, without the cylinder 2, i.e., without cover, for the sake of greater clarity, with the support legs 6 folded in. Figure 6 shows the frame in a sloped position with the support legs 6 folded out and the grip 7 pushed in. Figure 7 shows the golf bag in the rolling position with the grip 7 pulled out and the support legs 6 folded in. Finally, the golf bag according to the present invention may also be equipped only with a support system 5 and without rollable bottom part 1 in a second variant or, in a third variant, with rollable bottom part 1 and without support system 5. The use of materials is, of course, also variable. Thus, the cylinder part may also consist of leather or nylon or another sturdy fabric.



Patent Claims

1. Golf bag, comprising a said bottom part (1), a said cylinder part (2) with said stabilizing longitudinal webs (3), a said head part (4), a said support device (5) with a said toggle lever mechanism (5') and a said clamping system (5'') for folding out and folding in said support legs (6) and with a said pull-out grip (7) as well as with a said belt system (8), characterized in that the golf bag comprises a said cylinder part (2) equipped with a said belt system (8), which is connected in a repeatedly detachable manner to a said rollable bottom part (1) which is tiltable in the direction of travel, on the one hand, and to a said head part (4) equipped with a said pull-out grip (7) and a said support device (5), on the other hand, by means of a plurality of said longitudinal webs (3) and (3'),
 - that the golf bag with the said grip (7) and with the said bottom part (1) equipped with said wheels (8) [sic - (9) - Tr.Ed.] and/or a said support foot (10) can be tilted, rolled and/or put down vertically with a three-point bearing,
 - that the golf bag with the said support device (5) arranged on the said head part (4) can be put down in a sloped user position by means of a said toggle lever mechanism (5') or another system with said support legs (6), and
 - that the golf bag can be carried over the shoulder or on the back and can be put down as desired by means of the said belt system (8), together with the said rollable bottom part (1) and the said support system (5) as well as the said support legs (6) that can be folded in in a stable manner by means of the belt mount or another release mechanism.



2. Golf bag in accordance with claim 1, **characterized in that** the said bottom part (1) is a light-weight, dimensionally stable, one-piece container with a said beveled or flat base (1') bent in a stepped pattern to the longitudinal axis of the golf bag and with a said jacket surface (1'') made in one piece vertically, which has the same height or a different height in the axial direction in relation to the said bottom part (1), wherein a said support foot (10) which is arranged detachably or is made in one piece compensates the vertical position of the golf bag in the case of a said base (1') bent in a stepped manner; that the said jacket surface (1'') has an essentially cylindrical shape or is equipped with two said wheel cases (1'''), which are made in one piece and are directed into the said bottom part (1), in which two wheel bearings are arranged opposite one another and a plurality of said mounting openings (11) are arranged along the respective contour of the open front side of the said jacket surface (1'') and at least three said fixing points (1''') are arranged on the said inner base (1').
3. Golf bag in accordance with claim 2, **characterized in that** the said wheels (9) with their said wheel axles (9') pass through the said vertical jacket surface (1'') opposite each other in parallel from the outside and the said wheel axles (9') do not cross the center of the said base (1'), wherein the said wheels (9) extend beyond the said bottom part (1) in the case of a said cylindrical jacket surface (1'') of the said bottom part (1) and are essentially covered and protected by the said wheel cases (1''') in the case of said wheel cases (1''') made in one piece; that the said treads (9'') of the said wheels (9) extend beyond the said base (1') toward the ground and beyond the said jacket surface (1'') in the direction of travel, wherein the said treads (9'') form a stable three-point bearing in case of a said stepped base (1') and with the said support foot (10) arranged on the said base (1') when the golf bag is standing vertically.
4. Golf bag in accordance with claim 1, **characterized in that** the said cylinder part (2) consists of a flexible and stable material and is equipped on both open front sides of the said jacket



surface (2') with a plurality of said mounting openings (2''), which are connected in a repeatedly detachable manner to the said jacket surface (1'') of the said bottom part (1), on the one hand, and to the said head part (4), on the other hand, by means of said fastening elements (12), wherein the said cylinder part (2) is wound around the said head part (4) from the outside to the inside before it is fastened to the said head part (4); that one or more said stabilizing strips (2''') consisting of a flexible material, which form said loops (2'''), are arranged coaxially and in a non-positive manner on the said inner jacket surface (2') of the said cylinder part (2); and that the said belt system (8), extending axially above the said longitudinal web (3'), and a said grip (8') are arranged on the said outer jacket surface (2') of the said cylinder part (2), and said rings (13) are arranged in the area of the said stabilizing strips (2''').

5. Golf bag in accordance with claim 1, characterized in that the said stabilizing longitudinal webs (3) and (3') consist of a lightweight hollow section and are detachably connected to the said fixing points (1''') of the said inner base (1') of the said bottom part (1), on the one hand, and to the said head part (4), on the other hand, wherein the said longitudinal webs (3) are guided by said loops (2''') of the said cylinder part (2), the said longitudinal web (3') is reinforced by an additional inner tube, and the ends of the said longitudinal webs (3) located opposite the said bottom part (1) are arranged detachably directly at the said head part (4) and the said longitudinal web (3') is arranged detachably at the said head part (4) via a said mounting surface (4').
6. Golf bag in accordance with claim 1, characterized in that the said head part (4) is a closed band material, on the outside of which the said mounting surface (4') and a said bracket (6') are arranged opposite each other and are directed axially to the said bottom part (1); that the open front surface of the said head part (4) is stabilized by a said web (4''); that two said additional webs (4''') are arranged at the said inner mounting surface (4'), on the one hand, and



at the said bracket (6'), on the other hand, under and at equally spaced locations next to the said web (4''), wherein all said webs (4'') and (4''') form a triangular hollow space open on all sides.

7. Golf bag in accordance with claim 6, characterized in that the said toggle lever mechanism (5') of the said support device (5), whose said clamping system (5'') extends in the triangular hollow space formed by the said stabilizing webs (4'') and (4''') and is connected to the said support legs (6) arranged at the outer jacket surface of the said head part (4) against the said mounting surface (4'), is arranged at the said outer mounting surface (4'), wherein the said movable clamping system (5'') is protected by the said webs (4'', 4''') and the said webs (4'') and (4''') and the said clamping system (5') are covered with a said flexible piece of material (14) and two opposite edges of the said piece of material (14) are detachably fastened under the said two webs (4''').
8. Golf bag in accordance with claim 6, characterized in that at least two said webs (4''') extending in parallel to one another, which are detachably connected to the said head part (4) by means of said screws (15) on both sides, are arranged at right angles to the said webs (4'') and (4'''), wherein the said webs (4''') form said compartments (16) for the golf clubs and the heads of the said screws (15) are base parts of snap fasteners.
9. Golf bag in accordance with claim 1, characterized in that the said pull-out grip (7) comprises a double tube system, in which two said tubes (17) are arranged in parallel in a grip part and are sloped to the longitudinal axis of the golf bag at the end of the grip, wherein the non-sloped tube ends are guided in a said sleeve (17') each at the said reinforced longitudinal web (3') and are held by said sleeves (17'') arranged vertically between the said webs (4'') and (4'''), a said fixer (17''') and a said guide strap (17'''), and that the said grip (7) can be pulled out beyond the center of gravity of the golf clubs being stored in the golf bag in the direction



of the longitudinal axis of the golf bag.

10. Golf bag in accordance with claim 1, characterized in that the said belt system (8) is alternately connected with one end to one of the said rings (13) of the said cylinder part (2) and with another end to the said toggle lever system (5') of the said support device (5) at the said head part (4), wherein the said folded-out support legs (6) are folded in by means of the said clamping system (5'') when the golf bag is lifted by the said belt system (8) and the golf bag can be carried, and wherein the acting forces are distributed between the said two longitudinal webs (3) during the lifting of the golf bag via the said loops (2''') of the said cylinder part (2).