Sept. 8, 1964 M. KISH, JR 3,147,786

GOLF BAG CONSTRUCTION

Filed Dec. 18, 1961 2 Sheets-Sheet 1

FIG. 1.

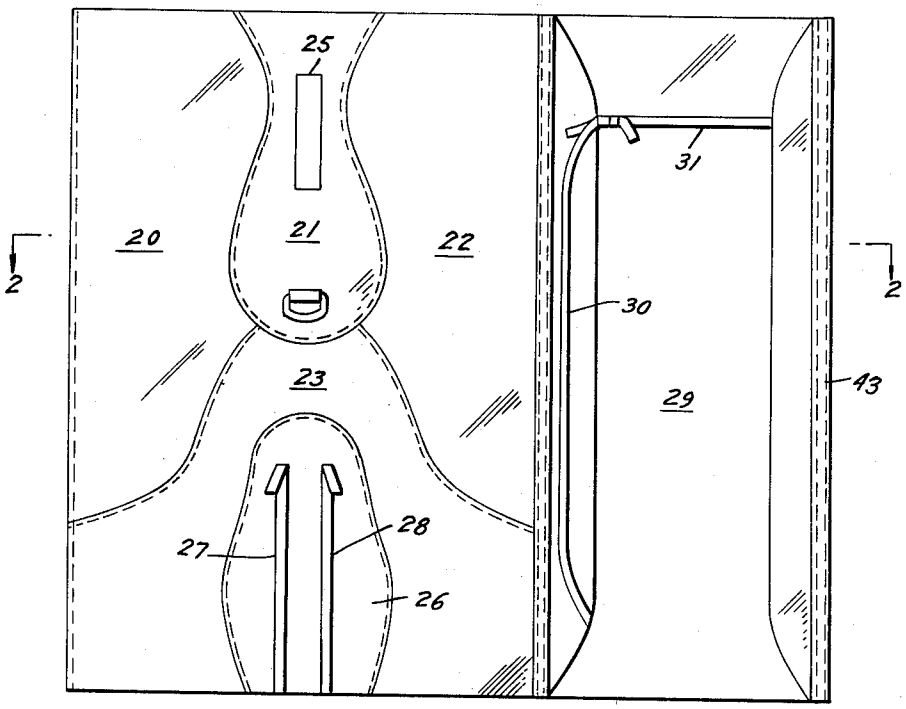


FIG. 6.

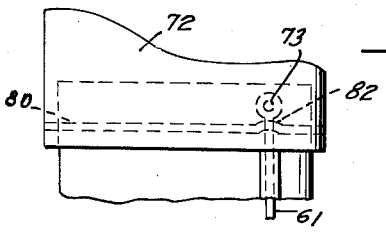


FIG. 8.

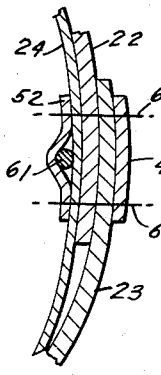


FIG. 7.

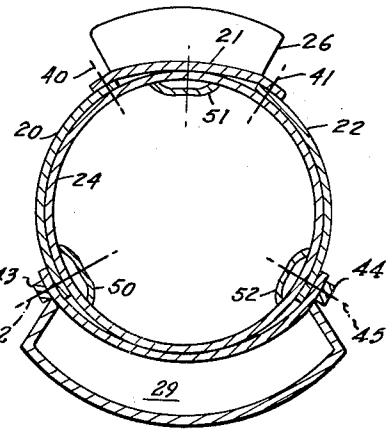


FIG. 5.

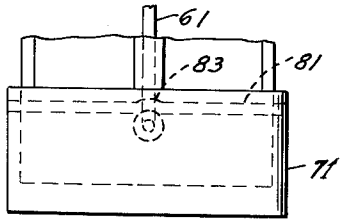
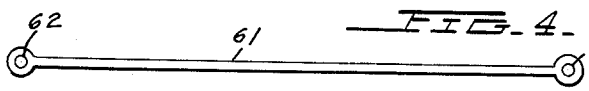


FIG. 4.



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Filed Dec. 18, 1961

2 Sheets-Sheet 2

FIG. 7.

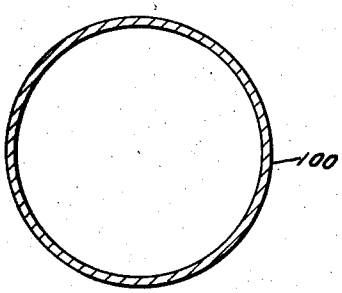


FIG. 8.

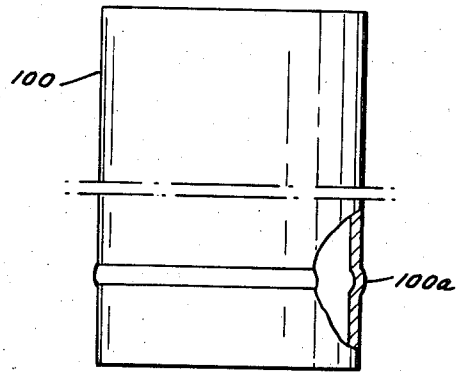


FIG. 10.

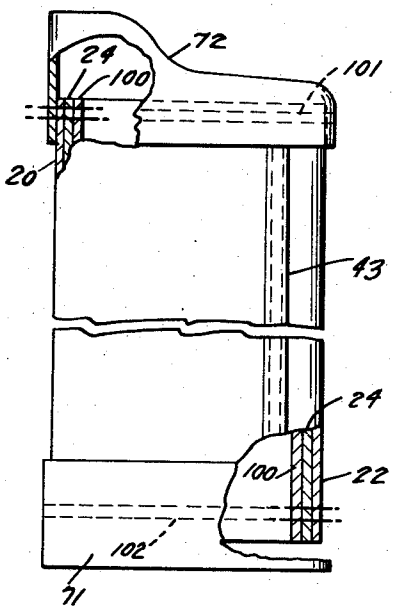
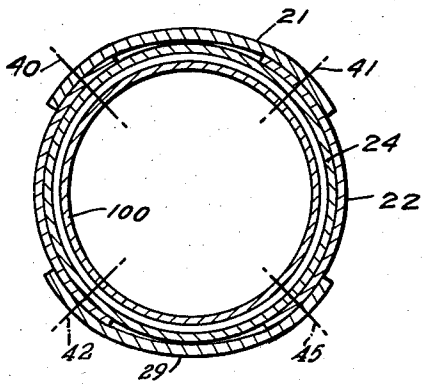


FIG. 9.



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GOLF BAG CONSTRUCTION

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Filed Dec. 18, 1961, Ser. No. 160,172
2 Claims. (Cl. 150—1.5)

My invention relates to a novel golf bag construction, and more specifically relates to a novel golf bag construction wherein a rigid tube is placed in the interior of the bag to impart torsional and longitudinal rigidity to the bag assembly.

The art of manufacturing golf bags is thoroughly developed, and has been generally unchanged for the past thirty-five or more years. Generally, the method comprises the formation of the tubular bag assembly of relatively flexible leather or cloth material, and, to impart both torsional and longitudinal stability to the tube, longitudinally extending wire stays are connected around the periphery of the tube. For example, in a typical construction, three or four such stays will be placed in the tube.

This arrangement of wire stays for imparting rigidity to the bag leads to many problems which have not been solved throughout the long history of this industry.

One of the consequences of this construction is that, since the wire stays are relatively thin and are widely spaced, the inner portions of the golf bag tube can be collapsed inwardly, either because of sagging of the material or because of the presence of objects such as clothing in the various pockets on the outer surface of the bag. This ability of the tube to collapse inwardly leads to several problems.

The first is that it reduces the available volume within the bag. The next is that it permits continuous flexing of the material of the bag which accelerates the wear of this material, and causes cracking of the material surface, and the like. Finally, permitting such flexing will obviously place mechanical strain on the various elements of the bag.

The next problem which the stays have caused is, again, due to their relatively wide spacing. Namely, the stays do not prevent torsion of the golf bag about its longitudinal axis. That is to say, one can hold the bottom of the tube rigidly, and can apply torsion to the top of the tube so that the top of the tube can rotate as much as 60°. This torsion could be applied accidentally or while in storage, whereby, again, the materials forming the tube are subjected to great stresses and strains.

A further disadvantage in the use of the stays involves the manner in which they must be fastened to the caps at the ends of the tube. That is to say, the standard practice is to provide the stays with eyelets at either end and to thereafter pass rivets between the caps at either end of the tube and these eyelets. It ras been found that the major source of failure of a golf bag is in the pulling out of these rivets.

Moreover, the stays introduce many problems in the finishing of the bag, whereby the stays are placed in position prior to assembly of the caps which cap off each end of the bag, and prior to the sewing of these caps to the main tube body. Accordingly, during the sewing operation, great care must be taken to skip over the stay position, or the needle will be broken. This causes delays in manufacturing operation and causes skipped stitches which are unsightly in the finished golf bag.

The principle of the present invention is to replace the customarily used strays by a novel relatively rigid tube which slides into the bag cylinder, and is thereafter sewn in position during the sewing of the end caps of the golf bag.

A rigid tube of this type could, for example, be formed of fibre base which has a rigidity considerably greater than the leather or cloth components of the main golf bag cylinder body. By "relatively rigid," I refer to the rigidity of the tube with respect to the rigidity of the remaining portions of the bag.

When the tube is used in accordance with the invention, it will become immediately apparent that the sides of the tube can no longer be crushed inwardly. Moreover, the bag cannot be placed into torsion, since the bag is formed integrally with the tube by the operation in which the end caps are sewn to the tube. For each of these reasons, the permissible flexing of the bag cylinder body is greatly decreased, whereby the lifetime of these materials is increased.

The use of the novel tube further permits simplification in manufacturing techniques. That is, the tube can now be sewn to the bag cylinder at the same time as the end caps. During this sewing operation, it is no longer necessary to protect the sewing needle from possible breakage by striking a stay, nor is it necessary to skip stitches which previously have resulted in an unsightly appearance in a finished bag.

Accordingly, a primary object of this invention is to provide a golf bag of improved rigidity.

Another object of this invention is to provide a golf bag whose sides will not be crushed inwardly when the bag pockets are filled with clothing, and the like.

A further object of this invention is to provide a novel golf bag construction which permits of easier manufacturing techniques.

Another object of this invention is to provide a novel golf bag construction which permits longer life for the main golf bag covering material.

A further object of this invention is to provide a novel stiffener means for golf bags which need not be connected to the main bag cylinder by rivets, and will be a negligible source of failure of the bag, as contrasted to previously used riveted stay wires.

These and other objects of my invention will become apparent from the following description when taken in connection with the drawings, in which:

FIGURE 1 illustrates a golf bag cylinder prior to its being sewn as a cylinder.

FIGURE 2 illustrates the flat arrangement of FIGURE 1 after being wound in a cylinder and sewn together along with the provisions for receiving prior art type stays.

FIGURE 3 is an enlarged cross-sectional view of one of the stay-receiving portions of FIGURE 2.

FIGURE 4 shows the prior art type of stay used for imparting longitudinal rigidity to the bag.

FIGURE 5 illustrates the bottom end cup having been secured to the cylinder of FIGURE 2, and illustrates the manner in which the stay of FIGURE 4 is riveted to the bottom end cup.

FIGURE 6 illustrates the upper end cup secured to the cylinder of FIGURE 2, and sews the stay being riveted thereto.

FIGURE 7 shows a top view of the novel relatively high rigidity cylinder which replaces the stays of FIGURES 2 through 6 in accordance with the invention.

FIGURE 8 is a side view of the tube of FIGURE 7.

FIGURE 9 is a top cross-sectional view similar to FIGURE 2 which illustrates the manner in which the tube of FIGURES 7 and 8 is assembled within the cylinder.

FIGURE 10 is a side plan view partially in cross-section to illustrate the manner in which the cylinder of FIGURE 9 including the rigid tube is secured to the upper and lower end caps of the bag assembly.

Referring first to FIGURE 1, I have illustrated therein the first stage in the manufacture of a golf bag wherein

various panels are arranged on a flat table, and are sewn together. By way of example, individual leather panels **20**, **21**, **22** and **23** are all placed in the locations shown with respect to one another, and are thereafter sewn together along with a lining material **24** shown in FIGURE 2 which is coextensive with the flat work of FIGURE 1, and is beneath the flat work of FIGURE 1. These panels are sewn to one another, preferably by a double line of stitching, schematically illustrated in FIGURE 1 as the single stitched dotted lines at the junctions of each of the panels.

The panel **21** can, for example, have a pre-formed handle **25** therein, while panel **23** can have a pocket **26** pre-sewn thereto which has appropriate zipper closures **27** and **28** in the usual manner.

A still further panel **29**, which is actually a large pocket section having zipper closures **30** and **31**, is similarly sewn to the flat assembly of elements by stitching, as shown by the dotted lines.

The stitching lines for securing panels **20** and **21** are schematically illustrated in FIGURE 2 by the line **40**, while the stitching line for securing panels **21** and **22** is shown by stitching line **41**. It will be apparent that all of the stitch lines of FIGURE 1 will pass through the inner liner fabric **24**.

In order to form the tube, the right-hand end of pocket **29** is sewn to the left-hand end of panels **20** and **23**, as schematically illustrated by the dotted lines, and as is shown in FIGURE 2 for the stitch line **42**.

It will be noted that the stitch line **42** in FIGURE 2 further includes an elongated reinforcing strip **43**, while a similar reinforcing strip **44** is placed in the stitch lines **45** which secure the left-hand end of pocket **29** to the remaining section.

Interior of the bag, and extending longitudinally of the bag, strips **50**, **51** and **52** are sewn at their either edges to the main bag cylinder. By way of example, the double stitch line, schematically illustrated as stitch line **45**, can secure both sides of strip **50** to define a longitudinallly extending pocket for receiving a stay.

In a similar manner, strip **51** is sewn by stitch lines, schematically illustrated as stitch line **53**, to define a second elongated extending pocket. The strip **52** is formed in a manner identical to that for strip **50**.

These strips, as above noted, define pockets for receiving wire stays in the prior art type of manufacture.

The assembly of a typical strip is best seen in FIGURE 3 for the case of strip **52** which is a fabric strip which is sewn to the cylinder along the two stitch lines **60** and **61***a* which secure bag portions **23**, **22**, **24** and **29** together. The actual double stitch line is seen to form a pocket between strip **52** and liner **24**.

This pocket then receives an elongated stay **61**, best seen in FIGURE 4, as having eyelets **62** and **63** at its opposite ends. The stay **61** extends along the complete length of the cylindrical tube. During manufacture, these stays are placed in their positions after the formation of the cylinder of FIGURE 2. Thereafter, a bottom end cap **70** is placed over the lower end of the cylinder of FIGURE 2, as shown in FIGURE 5, and the eyelet such as eyelet **62** is riveted as by rivet **71** to the lower cap **70** where this rivet passes through the main cylinder of FIGURE 2, the eyelet, and the cap **70**. It will be noted that such rivets are provided for each of the three stays which are contained in strips **50**, **52** and **53** of FIGURE 2.

In a similar manner, the upper cap **72** is placed in position with the upper end of the cylinder of FIGURE 2, and the eyelet **62** of stay **61** is riveted to the upper cap by rivets such as rivets **73**, it being noted that three stays contained in the three strips of FIGURE 2 will be riveted to top cap **72**.

These three stays will then provide the major rigidity for the golf bag body. Thereafter, the upper cap **72** and lower cap **70** are sewn to the main bag cylinder along the stitch lines **80** and **81**. The upper and lower caps are hollow at this stage of manufacture so that the assembly can be appropriately located with respect to a stitching machine for the securing operation. During this operation, great care must be taken while sewing stitch lines **80** and **81** to prevent the needle from striking the steel stays, such as stay **61**. To this end, a skip must be made by the operator, shown as skipped portions **82** and **83** respectively for stitch lines **80** and **81**, whereby an unsightly appearance results. Moreover, since care must be taken by the operator to avoid these stays, the time for assembly is increased.

The principle of the present invention is to replace stays such as stays **61** of FIGURES 3 through 6 by a simple, relatively rigid tube which is carried internally of the golf bag cylinder. I have illustrated a typical tube **100** in FIGURE 7 which has a diameter slightly less than the inner diameter of the tube of FIGURE 2. If desired, the tube could be shaped to conform to any desired shaping for the main golf bag tube.

The height of the tube **100** in FIGURE 8 is preferably equal to the height of the assembled panels of FIGURE 1. The assembly, when using the novel invention, differs from FIGURE 2 in only apparently minor respects, although major functional differences result.

Thus, very few changes need be made in manufacturing procedures. More specifically, and in the assembly of FIGURE 9, the main difference from the assembly of FIGURE 2 is that the strips **50**, **52** and **53** are eliminated, and the cylinder is initially assembled without these elements. Thereafter, the tube **100** is slid into the main cylinder body, as indicated in FIGURE 9.

The bag is then finished, as shown in FIGURE 10, wherein the upper cap **72** and lower cap **71** are placed in position with respect to the assembled cylinder of FIGURE 9, and stitch lines **101** and **102** placed around the peripheries of cap **72** and **71** respectively secure the inner support tube **100** of FIGURE 9, the cylinder of FIGURE 9 which is the main body of the bag, and the caps in one simple operation.

It will be observed that in this operation, a straight, forward sewing procedure which results in an even stitch is made with no particular care being taken to avoid stays, or the like. Thus, the assembly requires considerably less time than the assembly utilizing the stay device, and has a better appearance.

The resulting bag structure which can thereafter be finished in the usual manner is an exceptionally rigid structure which is highly resistant to longitudinal and torsional strains. Thus, the relatively expensive fabric of the main cylinder body formed of the various panels of FIGURE 1 is free of excessive flexing, so that its lifetime is increased.

More important than this, however, is that the main source of the failure of golf bags which was the riveted connection between the stays and the body of the bag has been removed. When using such a rigid tube, a very strongly sewn connection is created which is not subjected to unusual stress and will last the life of the bag.

In forming bags of this construction, excellent results have been obtained when the tube **100** has been formed of a fibre base material where a typical tube had a wall thickness of ⅛ inch, had an outside diameter of nine inches, and had a length of 36 inches. Obviously, the exact dimensions of the tube will depend upon the size of the bag to be used, while the wall thickness of the tube will depend upon the nature of the material and the tube strength required. Generally, however, the tube will have a rigidity substantially greater than the rigidity of the various panel portions of FIGURE 1 which form the outer body of the bag.

As a further embodiment of the invention, the tube **100** of FIGURE 8 can have a plurality of circumferential ribs axially displaced from one another. One such rib is shown as rib **100***a*, it being understood that three or four or any desired number of such ribs could be applied to

the tube to increase its rigidity. In forming a tube with the ribs, a sheet of appropriate material first has the rib formed therein, and the sheet is thereafter rolled to its tube shape and secured as a tube as by stapling or the like.

Although I have described preferred embodiments of my novel invention, many variations and modifications will now be obvious to those skilled in the art, and I prefer therefore to be limited not by the specific disclosure herein but only by the appended claims.

I claim:

1. In a golf bag; said golf bag comprising a cylinder formed of a plurality of sewn panels and having substantial flexibility, a top cap for finishing the top of said cylinder and a bottom cap for finishing the bottom of said cylinder; a reinforcing means for imparting longitudinal and torsional rigidity to said cylinder; said reinforcing means comprising a tube of material having a relatively high rigidity with respect to said cylinder; said tube being contained within and secured to said cylinder; said tube being substantially coextensive with said cylinder; said tube being secured to the upper end of said cylinder and said top cap by a common continuous stitched line; said tube being secured to the lower end of said cylinder and said bottom cap by a common continuous stitched line.

2. In a golf bag; said golf bag comprising a cylinder formed of a plurality of sewn panels and having substantial flexibility, a top cap for finishing the top of said cylinder and a bottom cap for finishing the bottom of said cylinder; a reinorcing means for imparting longitudinal and torsional rigidity to said cylinder; said reinforcing means comprising a tube of material having a relatively high rigidity with respect to said cylinder; said tube being contained within and secured to said cylinder; said tube being substantially coextensive with said cylinder; said tube being secured to the upper end of said cylinder and said top cap by a common continuous stitched line; said tube being secured to the lower end of said cylinder and said bottom cap by a common continuous stitched line; said tube having a wall thickness of the order of the thickness of the wall of said cylinder; said tube having a plurality of circumferential ribs axially displaced from one another.

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