April 3, 1956 J. F. CHAMBERLIN ET AL 2,740,638

COLLAPSIBLE CART FOR GOLF BAGS

Filed May 20, 1954 2 Sheets-Sheet 1

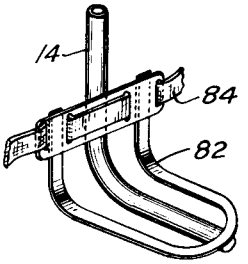


Fig. 10.

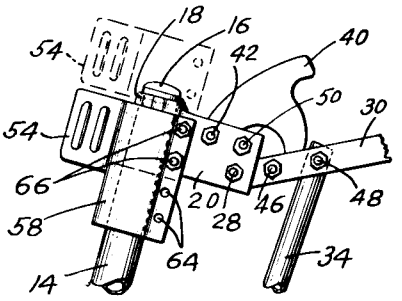


Fig. 4.

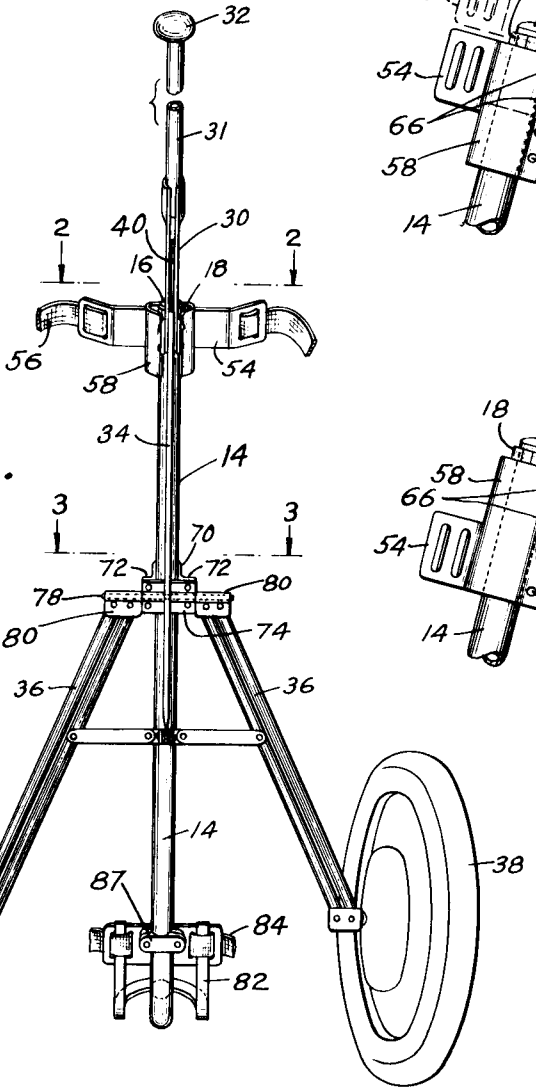


Fig. 1.

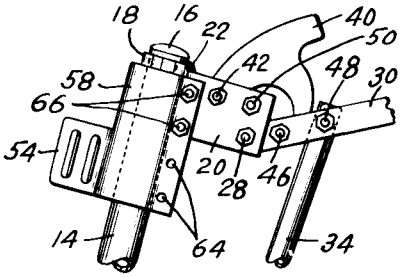


Fig. 5.

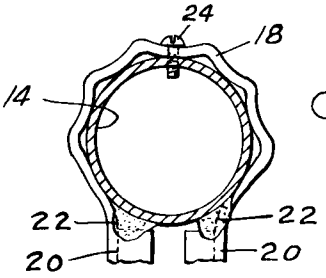


Fig. 7.

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COLLAPSIBLE CART FOR GOLF BAGS

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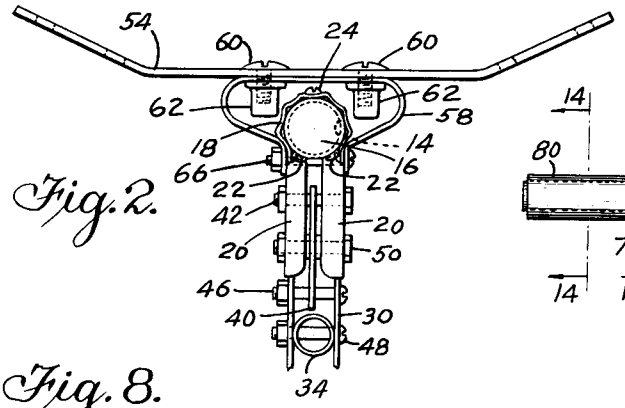


Fig. 2.

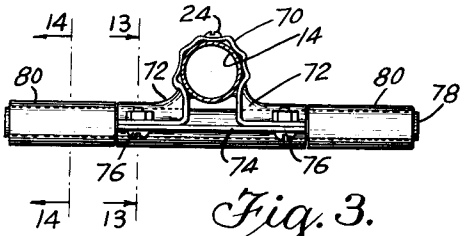


Fig. 3.

Fig. 8.

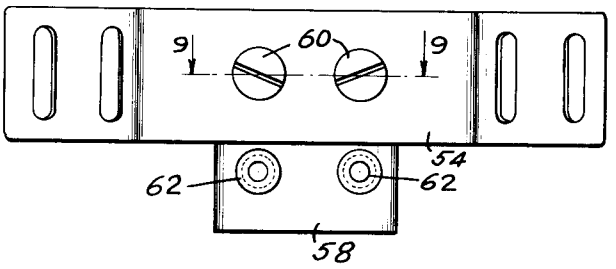
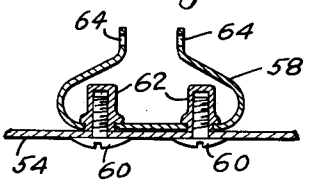


Fig. 9.



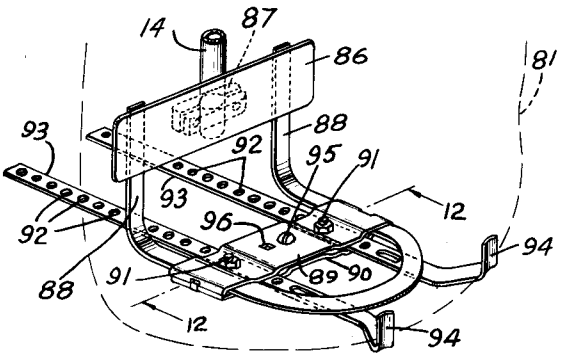


Fig. 11.

Fig. 6.

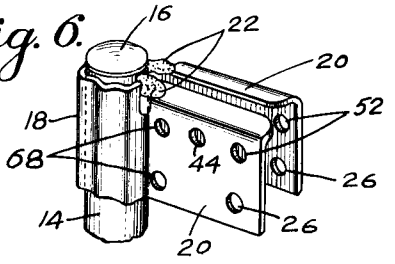
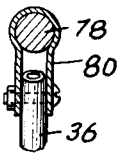


Fig. 14.



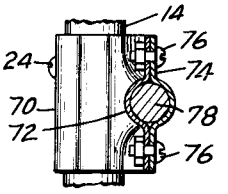


Fig. 13.

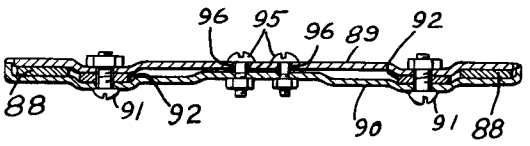


Fig. 12.

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COLLAPSIBLE CART FOR GOLF BAGS

Joseph F. Chamberlin and Robert A. Westphal, Chicago, Ill.; said Westphal assignor to said Chamberlin

Application May 20, 1954, Serial No. 431,190

1 Claim. (Cl. 280—42)

This invention relates to an improved collapsible cart for golf bags, and the present construtions comprises improvements over earlier patents granted to Joseph F. Chamberlin on January 27, 1953, entitled "Foldable Golf Cart" and "Collapsible Golf Cart," Nos. 2,626,814 and 2,626,815 respectively.

This invention also includes additional improvements over the structure shown and described in our joint application for patent on "Cart for Golf Bags," Serial No. 354,488, filed May 12, 1953.

One of the important objects of the present invention is to provide a golf bag carrying cart of the class described which will be more economical of manufacture, sturdier of construction, and which will incorporate fewer parts with additional improvements.

One of the important objects of this invention is the provision of a foldable or collapsible cart for golf bags and the like which can be readily collapsed into a relatively small space for storage, transportation or handling, and which can also be as readily extended or opened into golf bag carrying position with a minimum expenditure of time and trouble.

As disclosed in the earlier patents and previous application, one of the important features of the invention is to provide a golf bag carrying cart having an operating handle which is so constructed and so fastened to the main structure that the cart can be readily propelled over a golf course or the like with a golf bag or other load upon it and in such a manner that practically no weight will be upon the operator's hands or arms, while at the same time it will be relatively easy to guide along a desired path.

Another object of the invention is to provide a golf bag carrying cart, which, while being readily foldable into a small compass when not in use, will be composed of a minimum number of parts, and which will further be readily adjustable to accommodate itself to various heights or sizes of golf bags which may be carried thereon.

Still another and further important object of the invention is to provide a device of the class described which can be readily assembled from prefabricated parts and which, after being assembled, can be plated, coated or otherwise rust-proofed in its assembled condition, thereby eliminating the expense and trouble of individually plating and coating separate parts which must then be later assembled, and which accordingly are always subject to the possibility of non-fitting and also of being marred in the assembly operation. Partial assemblies can be thus plated.

The cart of this invention is provided with a foldable or collapsible handle, which, when raised, will extend the supporting wheels into operative position, and which when depressed, will fold the wheels. A gravity operated latch is provided for retaining the handle in upraised position.

Another improvement comprises an adjustable support for the bottom of a golf bag or other object which may be carried on the cart.

Other and further important objects of the invention will be apparent from the disclosures in the accompanying drawing and following specification.

The invention, in a preferred form, is illustrated in the drawings and hereinafter more fullly described.

In the drawings:

Figure 1 is a view taken from the handle side of the improved collapsibie cart for golf bags in this invention.

Figure 2 is a top plan view of the structure of Figure 1 taken on the line **2—2**, showing in more detail the main body element, the golf bag supporting bracket, the pivotal connection for the handle and the latch therefor.

Figure 3 is an enlarged horizontal section taken on line **3—3** of Figure 1, looking in the direction indicated by the arrows.

Figure 4 is an enlarged detail view of the handle, draw-bar and latch construction, showing also the adjustable bracket for accommodating various heights of golf bags.

Figure 5 is a view similar to Figure 4, illustrating the adjustable bracket in a lowermost position, as distinguished from the intermediate and high positions illustrated in Figure 4.

Figure 6 is a perspective view of the top end of the main tubular body member with the support for the latch and handle mounted thereon.

Figure 7 is an enlarged detail view of a portion of the structure of Figure 6.

Figure 8 is a front view of the top end of the body of the cart, showing the adjustable bag supporting bracket, and is taken looking from one end of Figure 2.

Figure 9 is a sectional view taken on the line **9—9** of Figure 8.

Figure 10 is a detail view of the lower bag supporting bracket.

Figure 11 is a perspective detail view of the lower end of the cart with a different type of bag supporting bracket mounted thereon, this type being adjustable.

Figure 12 is a sectional view taken on the line **12—12** of Figure 11.

Figure 13 is a sectional view taken on the line **13—13** of Figure 3.

Figure 14 is a sectional view taken on the line **14—14** of Figure 3.

As shown in the drawings:

The reference numeral **14** indicates generally the tubular main body member of the improved collapsible cart for golf bags of this invention.

This terminates at its upper end by a circular cap or closure element **16**.

Affixed to the upper end of the tube **14** is a bracket or clamp, having a corrugated medial portion **18** (Figure 6) and integral, parallel, similar extensions **20**. This fixture **18—20** is clamped into position about the upper end of the body or tube **14** and held in place by welding, brazing or soldering **22**. A pair of small bolts **24** are fitted into aligned openings in the element **18** and the tube **14** so as to temporarily hold the parts in position until welding or brazing is accomplished. These are then ordinarily simply allowed to remain in position.

The extensions **20** of the bracket element **18** are each provided with five aligned openings, and into the lowermost and outermost of these aligned openings **26**, is fitted a pin or bolt **28** which forms the pivot connection for the operating handle **30—31** of the cart. The portion **30** is formed of two parallel strips, and the outer end **31** is preferably tubular with a knob **32** on the end, all as best shown in Figure 1.

A link or draw-bar **34** is connected to the inner portion **30** of the handle, closely adjacent to its pivot point, and this draw-bar or link has its other end pivotally connected to the mechanism which collapses or extends the

supporting arms or legs **36** for the wheels **38**, and which mechanism is fully described and shown in the previously mentioned patents and application.

A manually controlled gravity operated latch **40** is pivotally mounted at **42** in aligned openings **44** in the plates **20**, and the outer end of this latch is adapted for locking engagement with a pin or bolt **46** fitted into the handle elements **30** at a point between their pivoted ends and the pivotal connection **48** for the link or drawbar **34**. Another bolt **50** passes through aligned openings **52** in the brackets **20** for better fastening purposes. It also keeps the sides of brackets **20** in position and parallel and acts as a stop for the handle to limit its upward movement.

A supporting plate for the upper end of the golf bag is provided at **54** (Figure 2) and this may be of any desired or convenient shape, and is ordinarily fitted with a bag retaining strap **56**.

This plate is connected to a U-shaped support **58** (Figure 9), the fastening being accomplished by bolts and hollow sockets **60** and **62** respectively.

This element **58** has its wing portions or ends provided with four openings **64** into which bolts **66** can be fitted, (Figures 4 and 5).

In its normal intermediate position, the bolts **66** pass through the two pairs of aligned upper openings in the element **58** and through the correspondingly aligned openings **68** in the brackets **20**. As best shown in Figure 4, the plate **54** with its attaching element **56** can be moved upwardly into a higher position, shown by the dotted lines, by fitting the bolts **66** into the two lower pairs of holes **64**. Conversely, the entire element **54—58** can be reversed and moved into the lowermost position shown in Figure 5. This allows of a ready adjustability to accommodate any length of golf bag. The bag holding plate **54** can also be moved downwardly with respect to the support **58** by shifting the position of the bolts **60** with respect to the threaded sockets **62**, as best shown in Figure 8. The bracket size and number of holes can be varied.

The mounting and support of the upper ends of the arms or legs **36** with respect to the body **14** has also been improved upon, this comprising a corrugated element **70** somewhat similar in cross section to the element **18**. This is fitted about the tube **14** in a desired position, and includes integral laterally extending wing portions **72** which are best shaped as shown in Figure 3 to provide a web structure for additional strength. This web structure is shown in more detail in Figure 13. The plate **74** is fastened by bolts **76** to the face of the bracket extensions **72**, and as both of these elements **72** and **74** are semi-circularly recessed, space is accordingly provided for the reception of a shaft or pin **78**. This shaft extends beyond the edges of the plates **72** and **74**, and it is welded to a U-shaped piece **80** on both sides. This constitutes an assembly and it is plated by itself and then assembled by placing a plate **74** over the pin **78** and bolting to the bracket **72** and **70**. **70** and **72** are welded to the tube **14** and plated together. The corrugations of the elements **18** and **70** provide spaces between themselves and the tube **14** so that acids used in the plating process after the parts are assembled will readily drain out and will not cause rusting or corrosion at a later date.

The lower end of the body or tube **14** is provided with a convenentional floor or base support **82** having a strap **84** as best shown in Figures 1 and 10. However, an adjustable feature for accommodating various sizes of golf bags can be installed, as best shown in Figures 11 and 12. This comprises essentially a supporting plate **86** fixed to the end of the tube **14** by clamps or the like **87**, and which has welded or otherwise fixed thereto a U-shaped element **88**.

Mounted on the U-shaped portions **88** are two plates **89** and **90** (Figure 12), shaped as shown and provided with openings into which bolts **91** are fitted.

These bolts are adapted to pass through any pair of a series of openings **92** in strap-like elements **93**, terminating in forward hook portions **94**. The plates **89** and **90** are additionally held together and in position by bolts **95** fitted into square holes **96** in the plate **89**.

This construction enables of an adjustment of the hook-like clamping elements to encompass and securely hold the lower end of a golf bag **81**, regardless of size.

It will be evident that herein is provided an improved collapsible cart for golf bags which is more economical of construction than those heretofore designed, and which additionally is adjustable to various heights and size of bags. The collapsible features are the same, with further improvements for making a more rugged construction, and the fittings are such that the entire device is not at all likely to get out of order.

By the addition of attachments, this can be used as a postman's cart and to carry an outboard motor for boats or the like. It can also be employed for work in gardens to transport various materials employed in that environment. Also, with little or no change, it may be used by salesmen to carry sample cases.

We are aware that many changes may be made and numerous details of construction varied throughout a wide range without departing from the principles of this invention, and I therefore do not purpose limiting the patent granted hereon otherwise than as necessitated by the prior art.

We claim as our invention:

A collapsible cart for golf bags comprising a body portion, a pair of supporting wheels pivotally mounted with respect to the body portion, a propelling handle pivotally mounted at the top end of the body, link and arm connections between the handle and wheels for bringing the wheels into parallel folded relationship with each other when the handle is lowered, an adjustable bracket and strap for the upper portion of a golf bag at the top end of the body, an adjustable bracket and support for the lower portion of the golf bag at the lower end of the body, said upper adjustable support including a clamping element adapted to encircle the body, extensions on the element for supporting the pivoted handle, means in the extensions for supporting the strap holding bracket in a plurality of positions, a latch for retaining the handle in raised operative position, said latch being pivoted on a supporting bolt mounted in the extensions, the support for the lower end of the golf bag including a cross-plate at the end of the body, a U-shaped bracket on the cross-plate and a pair of combination straps and hooks adjustably mounted on the U-shaped bracket.

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