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GOLF BALL RETRIEVING DEVICE

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Fig. 1

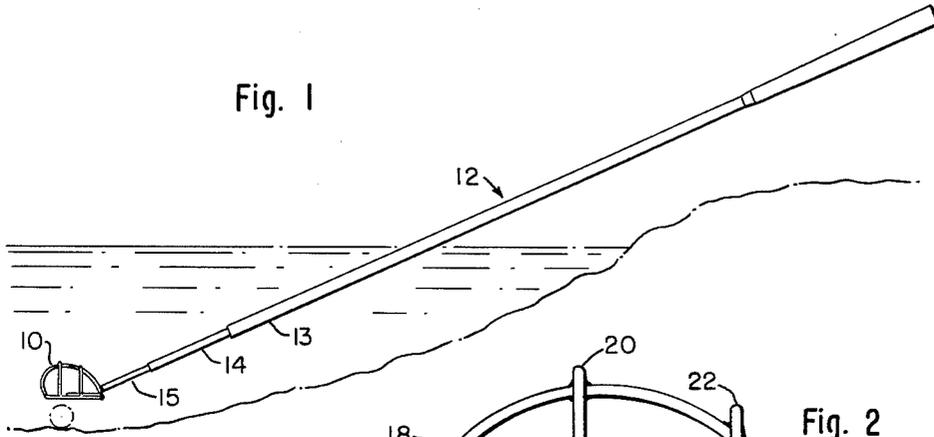


Fig. 2

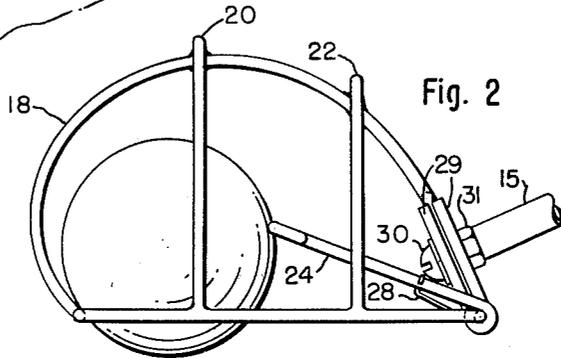


Fig. 3

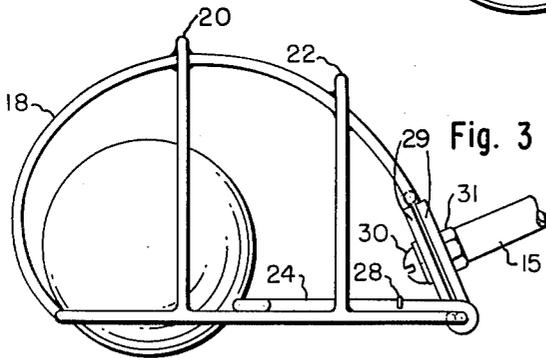
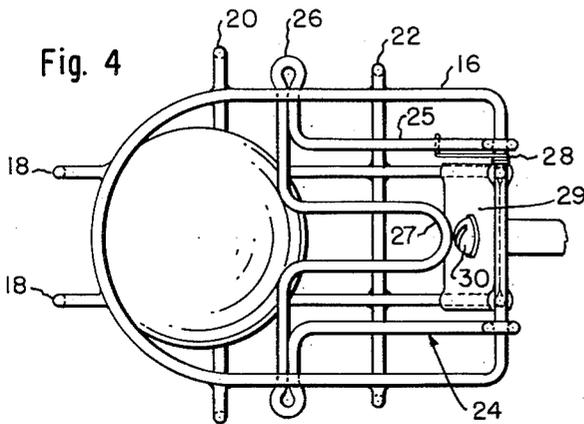


Fig. 4



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GOLF BALL RETRIEVING DEVICE

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6 Claims. (Cl. 294-19)

This invention relates to devices for retrieving golf balls and similar objects and in particular it provides an article which may be carried as an ordinary golf club in a golf bag and used to recover balls from difficultly accessible locations such as from water holes and underbrush.

The golf ball retriever of this invention consists in general of a receptacle having an opening at its bottom and a movable gate member partially closing the opening. The gate member is biased, as by its own weight or by a spring, to a position such that the opening is sufficiently restricted to prevent a golf ball from passing through it, and is movable inwardly upon contact with a ball to cause the passageway through the opening to be enlarged sufficiently to permit entry of the ball into the receptacle, but is restrained against outward movement. The gate member is constructed and mounted so as to move to an open position and then to close to restrict the opening as the ball enters the opening and before it is entirely within the receptacle. Thus, by simply lowering the receptacle over the ball, the gate is caused to open by the force of contact with the ball's surface and then close when the maximum diameter of the ball has passed from contact with the gate, and the ball is then entrapped within the receptacle.

In preferred embodiments of this invention the enlargement of the passageway through the opening as the gate moves inwardly upon contact with the ball is brought about in two ways. The receptacle is constructed such that its side portions extend laterally away from the edge of the opening so that as the gate moves inwardly the distance from the edge of the opening to the edge of the gate increases without being limited by sidewall portions in the vicinity of the opening. Enlargement of the opening upon inward motion of the gate is also brought about by mounting the gate to swing from a pivot so that a lateral component of motion is present as it moves inwardly.

The retriever of this invention is also provided with a handle in the form of a shaft by which it may be manipulated in the desired manner. Conveniently the shaft is formed of collapsible telescoping sections which may be extended to increase the range of its reaching ability.

This invention is described in detail below with reference to the presently preferred embodiment as shown in the accompanying drawings in which:

FIG. 1 is a side view of the retriever of this invention showing its manner of use in retrieving a golf ball from a water hole;

FIG. 2 is an enlarged view of the receptacle showing the gate partly open with the ball entering;

FIG. 3 is a side view showing the receptacle with the gate closed and entrapping the ball within; and

FIG. 4 is a bottom view showing the gate as it holds the ball within the receptacle.

In the illustrated embodiment the receptacle 10 is mounted at the end of a handle 12 which is formed of three telescoping sections 13, 14 and 15. The basket 10 is a cage-like construction formed of welded rods spaced and arranged so as to be able to retain a ball within its confines. The opening at the bottom of the basket is bounded by a generally D-shaped lower rim 16 having its rounded side at the forward end. From a side view the basket has a generally semi-circular shape with the rounded portion at the forward end forming sidewall portions extending laterally away from the rim 16. From the forward view the basket is generally circular or of any con-

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venient shape. The preferred construction is made up of longitudinal ribs 18 and transverse ribs 20 and 22 each welded at its ends to the rim 16 and the basket 10 is open at its bottom within the confines of the rim 16 and is provided with a gate 24 which is hinged to the back side of the bottom member 16 and extends forwardly sufficiently to restrict the opening through the bottom member to retain a golf ball within the basket. The gate 24 is conveniently formed of wire which is wrapped at its ends about the back side of the bottom member 16 and extends forwardly along each side portion and thence outwardly on each side to form a wing 26 which rests on the top surfaces of the side portion of the bottom member 16. The wings 26 limit the outward motion of the gate 24 to the closed position. The forward portion of the gate extends generally across the bottom of the basket but is preferably formed with a rearwardly extending bight 27 at the center which serves to guide the ball into the basket as it is lowered over the ball. A spring 28 engages the gate 24 at a side leg 25 and serves to hold it in closed position. This spring is preferably of low tension so as not to restrict the opening of the gate unduly, and may be eliminated entirely if desired, since the weight of the gate will serve the same purpose. The spring 28 does, however, hold the gate closed when the basket is turned upside down, as when the device is carried in a golf bag.

The shaft 12 is of conventional telescoping construction and is mounted to the basket 10 by means of a pair of plates 29 formed to clamp about the rear portions of the ribs 18. A screw 30, cooperating with a nut 31, holds the plates 29 together and also threads into the end of the inner telescoping rod 15 to hold the basket 10 and shaft 12 in assembled relation.

From the foregoing description it will be seen that this invention provides a golf ball retriever of simple construction which is light in weight and easily carried. The gate construction provides for extremely effective recovery since it is only necessary to lower the basket over the ball, as it lies on the ground, whereupon the contact with the ball pushes the gate inwardly until the edge passes the major diameter of the ball, and then falls back to enclose the ball in the basket. The ball is then located over the gate and serves to prevent an accidental opening. In this connection it will be noted that since the gate may swing inwardly, but not outwardly, it provides a positive containment of the ball and any possibility that the ball will become free accidentally is eliminated.

It is to be understood that the dimensions of the opening and the gate are somewhat critical in that the gate must first open sufficiently to permit entry of the ball and then close to restrict the opening before the ball is entirely within the basket. The design of a device meeting these requirements is well within the skill of the art, once the requirement is known and it is accordingly contemplated that modification of the embodiment described above will readily occur to those skilled in the art and familiar with this invention. Such modifications may be made without departing from the scope of this invention.

Having thus disclosed my invention I claim and desire to secure by Letters Patent:

1. A ball retrieving device comprising a receptacle for receiving a ball, having a bottom edge defining an opening at the lower side of said receptacle, a gate pivotally attached to said receptacle for movement inwardly and upwardly, stop means preventing said gate from swinging outwardly, said gate lying normally across said opening to form a bottom closure which is urged outwardly against said stop means by the weight of a ball within said receptacle, said gate and said bottom edge defining an entrance to said receptacle enlargeable by the inward movement of said gate upon contact with a ball, the length of said gate being such that inward motion thereof enlarges said

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entrance sufficiently to admit the ball and said gate returns to normal closure position entrapping the ball before the ball is entirely within said receptacle.

2. A ball retrieving device comprising a receptacle for receiving a ball, having a bottom edge defining an opening at the lower side of said receptacle, a gate pivotally attached to said receptacle for movement inwardly and upwardly, stop means preventing said gate from swinging outwardly, said gate lying normally across said opening to form a bottom closure which is urged outwardly against said stop means by the weight of a ball within said receptacle, wall portions opposite said gate extending laterally and upwardly from said bottom edge, said gate and said bottom edge defining an entrance to said receptacle enlargeable by the inward movement of said gate upon contact with a ball, whereby said ball may enter said receptacle and be at least partially received within the space defined by said laterally extending wall portions.

3. The device defined by claim 2 wherein the gate is a generally flat member pivotally attached to the bottom of the receptacle at one side having an edge traversing the bottom edge of the receptacle at the opposite side.

4. The device defined by claim 3 wherein the edge of the gate traversing the bottom edge of the receptacle is formed with a bight extending toward the pivoted side.

5. A ball retrieving device comprising a receptacle for receiving a ball, having a bottom edge defining an opening at the lower side of said receptacle, a gate pivotally attached to said receptacle for movement inwardly and upwardly, stop means preventing said gate from swinging outwardly, said gate lying normally across said opening to form a bottom closure which is urged outwardly against said stop means by the weight of a ball within said receptacle, wall portions opposite said gate extending laterally and upwardly from said bottom edge, said gate and

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said bottom edge defining an entrance to said receptacle enlargeable by the inward movement of said gate upon contact with a ball, the length of said gate being such that inward motion thereof enlarges said entrance sufficiently to admit the ball and said gate returns to normal closure position entrapping the ball at least partially within the space defined by said laterally extending wall portions before the ball is entirely within said receptacle.

6. A ball retrieving device comprising a receptacle for receiving a ball, having a bottom edge defining an opening at the lower side of said receptacle, a gate pivotally attached to said receptacle for movement inwardly lying normally at said opening and forming a bottom closure for entrapping a ball received by said receptacle, stop means preventing said gate from swinging outwardly, said gate and said bottom edge defining an entrance to said receptacle enlargeable by the inward movement of said gate upon contact with a ball, said gate being a generally flat member pivotally attached to the bottom of said receptacle at one side having an edge traversing the bottom edge of said receptacle at the opposite side, said traversing edge being formed with a bight extending toward said pivoted side.

References Cited in the file of this patent

UNITED STATES PATENTS

704,848	Minton	July 15, 1902
713,672	Oliver	Nov. 18, 1902
2,027,546	MacDonald	Jan. 14, 1936
2,549,257	Staunt	Apr. 17, 1951
2,810,252	Kelly	Oct. 22, 1957
2,814,520	Ruhland	Nov. 26, 1957

FOREIGN PATENTS

152,771	Germany	June 23, 1904
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