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GOLF APPARATUS.

APPLICATION FILED OCT. 25, 1919.

1,407,109. Patented Feb. 21, 1922.

2 SHEETS—SHEET 1.

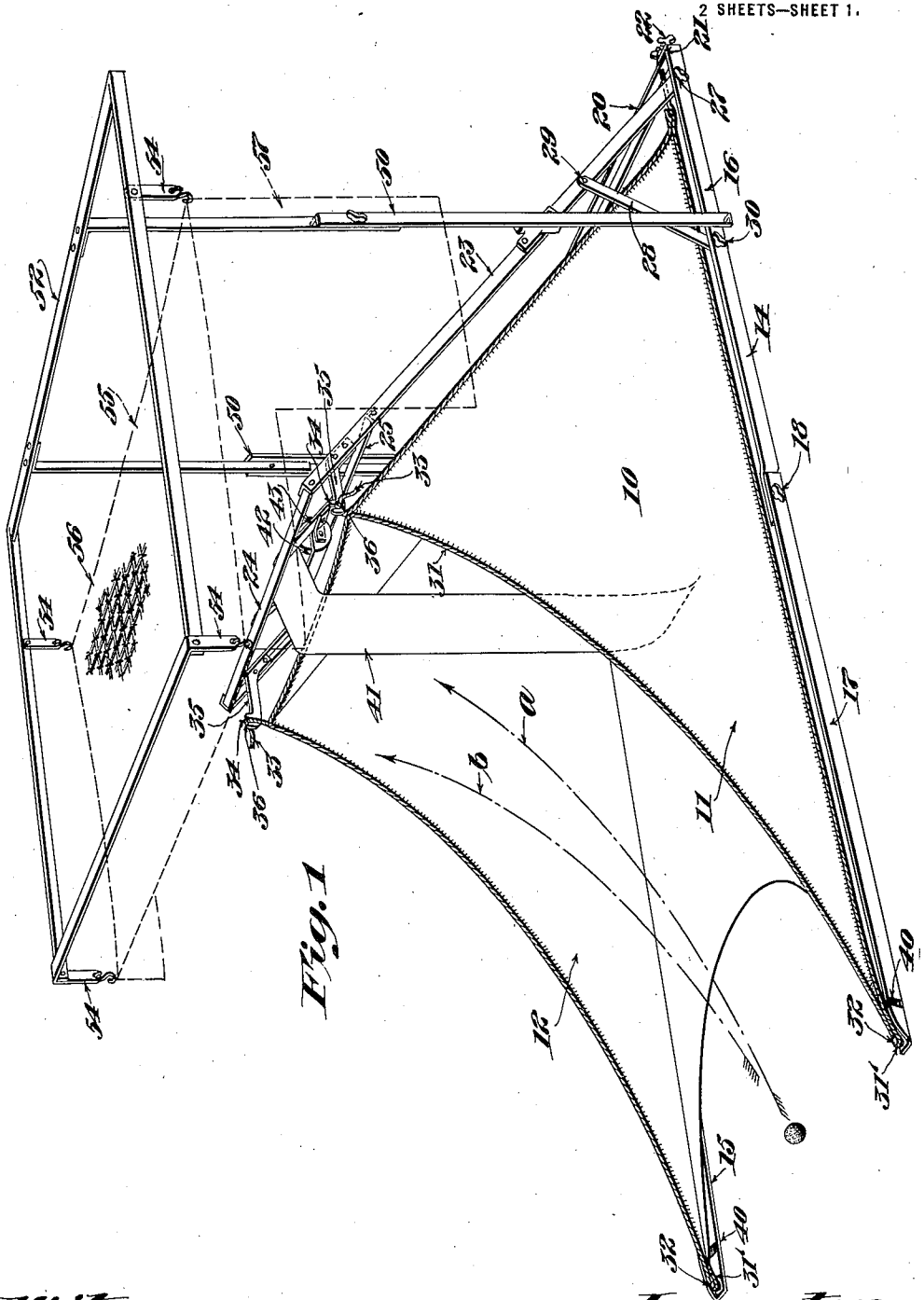


Fig. 1.

Witness

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2 SHEETS—SHEET 2.

Fig. 2

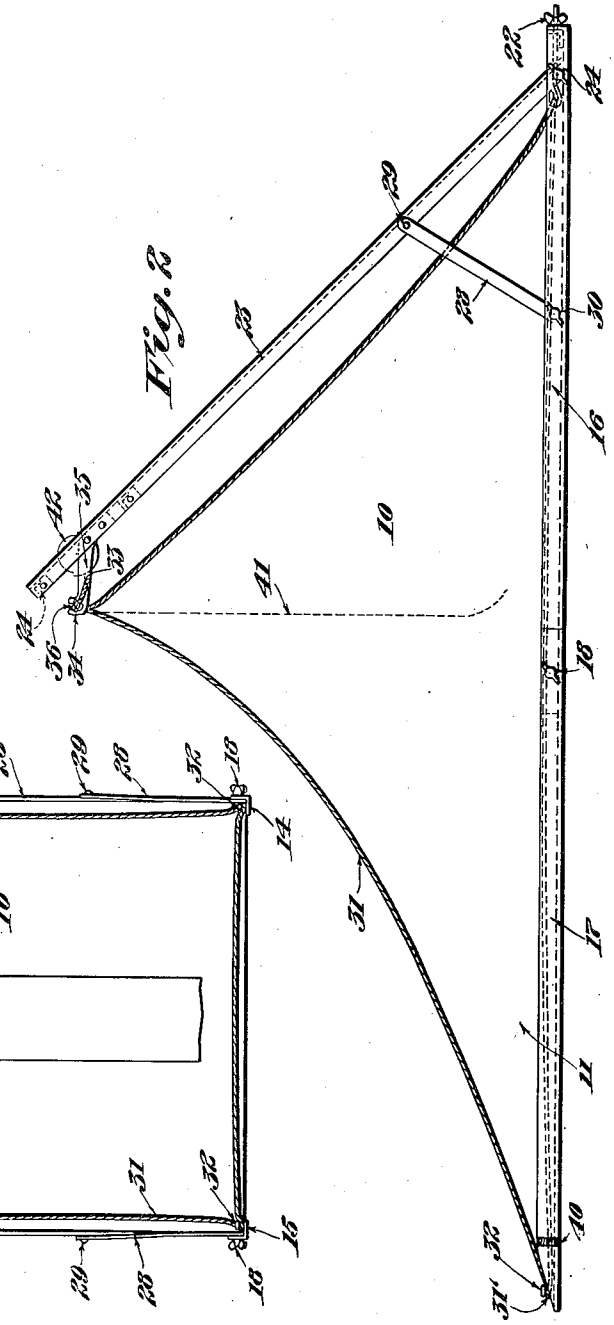
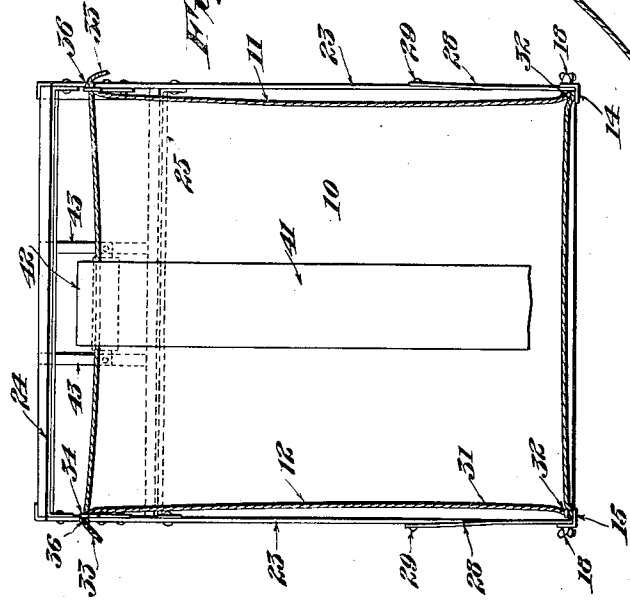


Fig. 3



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UNITED STATES PATENT OFFICE.

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GOLF APPARATUS.

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To all whom it may concern:

Be it known that I, ERASTUS E. WINKLEY, a citizen of the United States, residing at Lynn, in the county of Essex and State of Massachusetts, have invented certain new and useful Improvements in Golf Apparatus; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The present invention relates to apparatus employed in connection with a game of golf and more particularly to apparatus of this character intended to facilitate the practice of golf either in or out of doors.

One object of the present invention is to provide a golf cage or receptacle intended to receive a driven golf ball which is relatively compact in its construction and at the same time capable of withstanding the impact of a golf ball travelling at high speed without causing any substantial rebound of the ball.

With this object in view, one feature of the invention contemplates the provision of a flexible receiving bag open at the front end and having one or more wings, the upper edges of which slope rearwardly and upwardly in substantially the line of flight of the club head after hitting the ball.

A further object of the invention is to provide a golf cage or receptacle which may be readily collapsed and packed into a small compass when not in use and which is capable of being set up for operation upon either a hard floor or soft turf without requiring attachment to its support.

With these objects in view, the several features of the invention consist in certain novel features of construction, combinations and arrangements of parts hereinafter described and claimed, the advantages of which will be obvious to those skilled in the art from the following description:

In the accompanying drawings illustrating the preferred form of the invention, Figure 1 represents a perspective view of the improved golf cage with the overhead canopy connected thereto: Fig. 2 is a side elevation of the cage with the overhead canopy removed, and Fig. 3 is a front elevation of the cage shown in Fig. 2.

The illustrated embodiment of the invention shown in the drawings comprises essentially a flexible bag or receptacle of suitable form which is held in distended position by a skeleton frame work. The bag is held away from the frame work in such a manner that it will always yield no matter what portion of it a ball may strike against. The bag is provided with forwardly extending wings which tend to catch a ball which might diverge before entering the main opening of the bag and these wings are provided with upper edges which slope rearwardly and upwardly to the top of the bag adjacent the opening. In the embodiment of the invention shown in the drawings, the upper edge of each wing is developed upon a curve which approximates the correct path which the club head should follow after hitting the ball. This path is indicated at "*a*" in dot and dash lines in Fig. 1. of the drawings. It is common, especially among beginners, to pull the club head away from the correct path of movement after hitting the ball into the path shown at "*b*" in Fig. 1. In this case, the club head will impact at the end of the stroke against the nearer wing, indicating to the player that the swing of the club was incorrect.

This feature of construction, whereby a guide is provided for indicating the proper path of movement of the club head, is of great importance as it indicates that the swing is wrong even though it may appear that the club head has hit the ball squarely. It is impossible, in many cases, to determine whether or not the ball has been hit correctly by noting the point at which the ball strikes against the cage, due to the fact that the flight of the ball must necessarily be arrested in a comparatively short distance and generally before it has started the turning movement due to the twist imparted by the pulling away of the club head on the wrong arc. It is, of course, obvious that one of the wings, more particularly the wing which is adjacent the player, might be dispensed with and a cord or other indication be employed as a guide for noting whether

or not the swing of the club is correctly made.

In the embodiment of the invention shown in the drawings, the open front bag is held in position by a pair of horizontal struts extending throughout the length of the bag and inclined struts extending upwardly and forwardly from the rear ends of the horizontal struts to support the upper end of the bag. These struts are connected to one another and to the bag in such a manner that the bag may be readily detached and the supporting frame collapsed whenever desired.

As shown in the drawings, a fabric bag is indicated at 10 and is closed upon all sides except the front. The bag is provided with forwardly extending parallel wings 11 and 12, the upper edges of which as indicated in Figs. 1 and 2 slope rearwardly and upwardly from the front to the top of the bag. These upper edges of the wings 11 and 12 are preferably curved to conform to the correct path of movement of the club head after hitting a ball when positioned as shown in Fig. 1. If the correct path as shown at "*a*" is followed, the club head will travel substantially midway between the two wings, whereas if the club head is pulled away to develop a turning movement of the ball, it will follow the path indicated at "*b*" and eventually strike the wing 12. The supporting frame for the bag comprises horizontal struts 14 and 15 each of which consist of two short lengths of angle iron 16 and 17 detachably connected together by a bolt and nut indicated at 18, or other suitable form of securing means. The rear ends of the horizontal struts are connected by a cross member 20 consisting of an angle iron which is rigidly connected to the inturned ends 21 of the angle irons 16 through bolts indicated at 22. Extending upwardly and forwardly from the rear ends of the horizontal struts 14 are diagonal supporting members 23 connected at their upper ends by parallel transverse members 24 and 25. These diagonal members are also detachably connected to the horizontal struts through bolts indicated at 27 and are held in inclined position by short bracing members 28 pivoted to the diagonal members at 29 and detachably secured to the horizontal struts 14 by bolts indicated at 30. As will be evident, this supporting frame may be readily collapsed by disengaging the bolts and swinging the diagonal portion of the frame into the plane of the horizontal portion and at the same time disengaging the two sections 16 and 17 of the horizontal struts. The flexible bag is connected to the supporting frame in such a manner as to maintain it distended, but without affording a solid backing for any point of the bag which will cause a ball to violently rebound. To this end, the edges of the bag are provided with a reinforcing cord 31 which may be provided with loops 31′ at the forward corners for attachment to securing pins 32 mounted in the front ends of the section 17. The upper ends of the bag are provided with short lengths of cord indicated at 33 which engage in notches 34 formed in arms 35 projecting forwardly from the upper ends of the diagonal members 23. These short lengths of cord are knotted at 35 to retain them in position within the notches 34 and hold the bag distended. The lower rear ends of the bag may be connected with some suitable form of tensioning mechanism as a threaded bolt and wing nut to stretch the bag and hold the sides tightly. The bag is made of fabric sufficiently heavy to withstand the impact of the hardest driven ball and, owing to the fact that it is at all points spaced away from the supporting frame, will stop the ball and cause it to drop to the bottom of the bag without substantial rebound.

It will be observed that the ball is normally positioned preparatory to play just ahead or within a line connecting the two forward tips of the wings 11 and 12 and in this position the bag will receive and catch the ball independently of the direction which it may take after being hit and at the same time there is ample movement for a full stroke of the club providing the swing is correctly taken. In order to afford a guide as to the location of the ball, indicating marks 40 may be formed upon opposite sides of the horizontal struts 14 and 15 denoting the correct position in which the ball should be located. This will prevent an inexperienced player from positioning the ball so far forward between the wings that the club head will hit the top of the bag at the end of the stroke. It will be observed from an inspection of Fig. 1 that the bottom of the bag is cut away to avoid the wear incident to the movement of the club head when hitting the ball.

It is desirable under certain conditions that some indication be had as to the flight of the ball and to this end a strip of paper 41 is supported to hang downwardly from the upper edge of the bag. If the ball is correctly driven, it will pass through the strip of paper which is supported midway of the bag and the height at which the ball pierces the paper affords an indication of the probable distance which the ball will travel. In the illustrated embodiment of the invention, the strip of paper may be supported on a roll 42 which is journalled for rotation in brackets 43 supported between the two transverse members 24 and 25.

Under certain conditions, as when using

the cage indoors with a mashie or other club intended to lift the ball, it may be desirable to provide an overhead canopy in connection with the cage. To this end, a pair of vertical standards 50 are shown as detachably secured at their lower ends to the horizontal and diagonal struts of the supporting frame. These standards carry a rectangular frame 52 extending forwardly therefrom over the top and part of the open end of the bag 10. Depending downwardly from the rectangular frame 52 are a series of lugs 54 which are adapted to loosely support a flexible canopy indicated generally at 55. This canopy as shown in Fig. 1 may be composed of netting having a top portion 56 and side and back portions 57. It is loosely connected to the depending lugs at the four corners of the top and has its lower corners weighted or connected with the supporting frame in any suitable manner. This canopy is intended to intercept the balls which, for one reason or another, would normally pass above the opening of the bag 10 and otherwise not be caught. It is only intended for use under certain conditions of operation and normally the fabric bag 10 will be sufficient to intercept and receive the ball under any conditions which may prevail.

While it is preferred to employ the specific construction and arrangement of parts shown and described, it will be understood that this construction and arrangement is not essential except so far as specified in the claims, and may be changed or modified without departing from the broader features of the invention.

The invention having been described, what is claimed is:

1. A golf cage comprising a flexible receiving bag open at the front end and having forwardly extending wings, the upper edges of which slope rearwardly and upwardly in substantially the line of flight of the club head after hitting the ball and serving as a guide for determining the flight of the club head, and means for retaining the bag in distended position.

2. A golf cage comprising a flexible receiving bag open at the front end, means for holding the bag in distended position, and a guide extending in direction of flight of the club head after hitting the ball rearwardly and upwardly to the top of the receiving bag.

3. A golf cage comprising a flexible receiving bag having an open front end and forwardly extending wings, the upper edges of which slope rearwardly and upwardly, a supporting frame for the bag and a flexible canopy overhanging the bag and connected with the supporting frame.

4. A golf cage comprising a flexible receiving bag open at the front end, a frame for holding the bag in distended position, and guide members designed and located with respect to the bag in such a manner that the ball when teed upon a line connecting the guide members may be driven into the bag without causing the club head to hit the bag or frame work after impact of the ball.

5. A golf cage comprising a rigid supporting frame, an open front flexible bag, and means for connecting the bag to the frame constructed and arranged to hold the walls of the bag in spaced relation to the frame to prevent rebound of a ball impinging against the bag.

6. A golf cage comprising a flexible bag having an open front end and a back wall inclined downwardly and rearwardly, and means for supporting the bag in distended position, comprising two skeleton frames connected together at the rear end and inclined with relation to one another, and adapted to support the bag in the acute angle formed between the frames.

7. A golf cage comprising two frames pivoted together at one end and inclined with relation to one another at an acute angle, and an open front flexible bag received in the angle formed between the frames and connected loosely thereto.

8. A golf cage comprising two supporting frames inclined with relation to one another, an open front flexible bag received in the angle formed between the frames, and means for connecting the bag to the frames adapted to hold the walls of the bag in spaced relation to the frames.

9. A golf cage comprising a horizontal supporting frame, a diagonal supporting frame connected to one end of the horizontal frame, arms extending forwardly from the upper portion of the diagonal frame, a flexible bag supported between the frames, connections between the lower corners of the bag and the horizontal frame, and connections between the upper corners of the bag and the forwardly extending arms.

10. A golf cage comprising a flexible bag open at the front and having substantial triangular sides, a supporting frame for holding the bag in distended position and a strip of paper depending from the upper edge of the bag into the open front substantially midway between the sides.

11. A golf cage comprising a flexible receiving bag open at the front end, a supporting frame comprising horizontal and diagonal struts between which the bag is received and held distended, vertical standards connected to the supporting frame, a rectangular frame connected to the vertical standards and over-hanging the bag, and a flexible canopy loosely connected to the rectangular frame.

12. A golf cage comprising a horizontal frame consisting of two parallel struts each made in two sections, a diagonal frame pivotally connected to the rear end of the horizontal frame, a bracing member for supporting the diagonal frame in inclined relation with respect to the horizontal frame, means for detachably connecting the bracing member to the horizontal frame, and a flexible bag open at the front end and received in the angle formed between the frames.

13. A golf cage comprising a fabric bag having an inclined back portion, forwardly extending side walls, a cut away bottom portion, and a frame for supporting the bag in distended position.

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