

W. W. ZIMMERMAN.

CAPTIVE BALL DEVICE FOR PRACTICING GOLF.

(Application filed Apr. 29, 1899.)

(No Model.)

FIG. 1

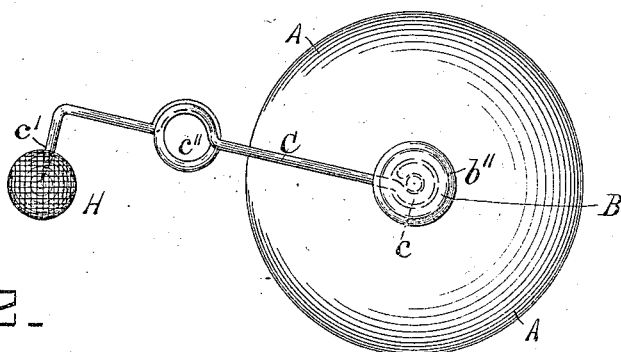


FIG. 2.

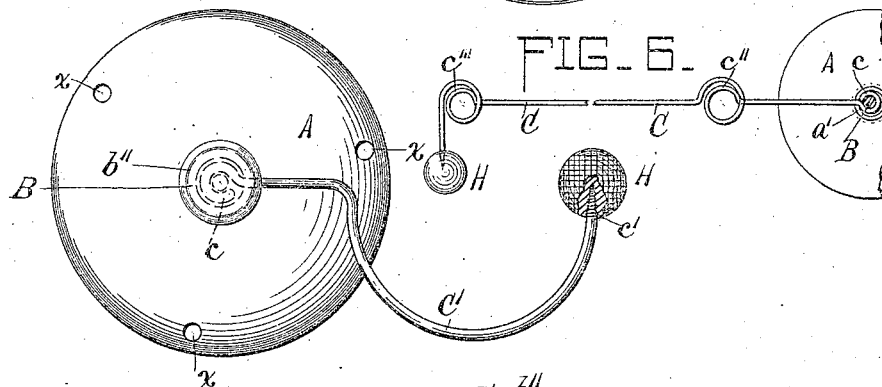


FIG. 3.

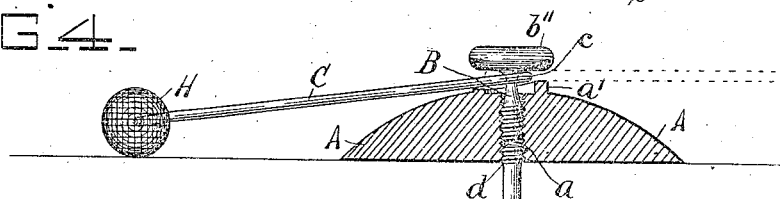
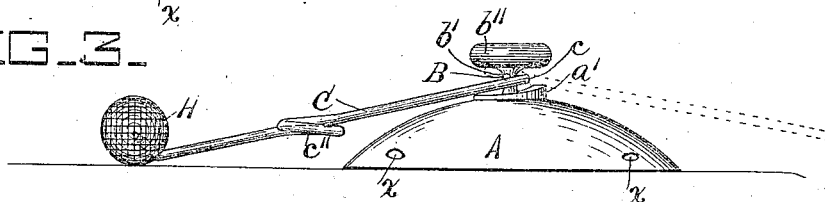
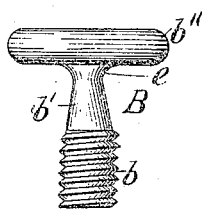


FIG. 5.



Witnesses

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UNITED STATES PATENT OFFICE.

WILLIAM W. ZIMMERMAN, OF YOUNGSTOWN, OHIO.

CAPTIVE-BALL DEVICE FOR PRACTICING GOLF.

SPECIFICATION forming part of Letters Patent No. 649,190, dated May 8, 1900.

Application filed April 29, 1899. Serial No. 714,954. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM W. ZIMMERMAN, a citizen of the United States, residing at Youngstown, in the county of Mahoning and State of Ohio, have invented certain new and useful Improvements in Captive-Ball Devices for Practicing Golf; 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.

This invention relates to a captive-ball device for practicing golf-strokes.

The object of my invention is to provide a simple, convenient, and portable device by means of which a captive ball may be placed in all possible positions, thus providing strokes for the driver, the brassy, the mashie, the cleik, and all other clubs, whereby a person may learn or improve his stroke with the different clubs used in the game of golf.

The devices and combination of parts constituting my invention will be defined in the claims.

I will now describe my device in detail by reference to the accompanying drawings, in which—

Figure 1 represents a top plan view of my captive-ball device. Fig. 2 represents a similar view, showing a modification. Fig. 3 represents a side elevation of the device. Fig. 4 represents a vertical section through the base with the other parts in elevation. Fig. 5 represents a detached view, on an enlarged scale, of the adjustable pivot. Fig. 6 represents a top plan view, on a reduced scale, showing a slight modification.

In my device I provide a circular base A, having preferably a convex upper surface and a flat lower surface, as shown in Figs. 3 and 4. A base of heavy material, such as cast metal, may be used, so that it will retain its place on the ground or floor without fastening. I also make the base of wood or other light material, provided with three or more screw-holes x near the periphery for securing it to the floor or ground. It may also be made of hollow metal and secured in the same manner. The base is provided with a central screw-threaded opening a for holding the adjustable pivot B and the fastening pin or rod D. The base is also provided at its upper

surface with an inclined circular runway a' , concentric with the central opening a . This runway projects vertically from the top of the base and is higher on one side than the other, being inclined, as shown in Figs. 3 and 4, for supporting the ball-carrying arm C at different elevations. Evidently the convex surface of the base may be made higher on one side than the other around the pivot for thus supporting the arm.

The adjustable pivot B is made with a screw-threaded lower end b , a tapering stem b' , and a hand-knob b'' . The tapering stem b' connects by a flaring part e with the hand-knob b'' , as shown in Fig. 5.

The ball-carrying arm C is made of spring-steel wire or of a metal which is elastic or resilient, so as to better resist the force of the blow without bending. It is provided at its inner end with an eye or loop c , which is engaged by the adjustable pivot B, and has a bent and tapering screw-threaded outer end c' for attachment of the ball H. The screw-threaded end is made tapering or pointed, so that the ball can be adjusted and firmly secured on it when it becomes loosened.

The arm C may be made straight, of spring-steel, as shown in Fig. 4, but is preferably made with a coil c'' in its length, as shown in Fig. 1, or with two coils, such as $c'' c'''$, as shown in Fig. 6, so that it will resist a violent blow upon the ball without bending. This construction, with resilient spring-wire, and particularly with one or more coils, effectively prevents bending of the arm even when the ball is struck with a violent blow. The arm may also be made with a curved portion, as shown at C' in Fig. 2, and this curved arm may also have a coil. The spring-steel used for the arm may be one-fourth or five-sixteenths of an inch, according to the quality of steel used.

The fastening pin or rod D is made with a sharpened lower end and a screw-threaded upper end d for screwing it into the opening a of the base, as shown in Fig. 4. The pin D can thus be forced into the ground for firmly holding the base in position when powerful strokes are to be given to the ball.

The screw-threaded pivot B may be raised and lowered in the base for regulating the relative height of the ball H. If the pivot is

raised high, the ball will lie on the floor or ground at all points around the base for every stroke. If lowered somewhat, the ball will lie on the floor or ground around a part of the circumference of the base for a majority of the strokes and will be elevated for a few strokes, for the reason that during part of the revolution of the ball its arm C will be raised on the highest part of the inclined runway *a'*.

10 If the pivot B is still further lowered, the ball will lie on the floor during about one-half of its revolution and will be more or less elevated during the other half of its revolution, thus providing a position on the floor for about

15 one-half of the strokes and more or less elevated positions for the other one-half of the strokes. Thus all the different strokes or "lies" at golf are provided for.

By means of the tapering stem *b'* of the adjustable pivot the arm C when rapidly revolving will climb or ascend the pivot, thus clearing it from the runway *a'*.

The device will be painted, nickel-plated, or finished in any other attractive manner.

25 Having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination with the base, of a pivot having a head, a swinging arm, having a coil in its length, pivotally connected to said pivot, and having a ball attached to its outer end, substantially as described.

2. The combination with the base, of a pivot at the top and a fastening rod or pin D at the bottom, a swinging arm pivotally connected to said pivot, and having a ball attached to its outer end, substantially as described.

3. In a device for practicing golf, the base having a convex surface higher on one side

than the other and a pivot, in combination with a swinging arm connected by an eye to said pivot and having a ball attached to its outer end, substantially as described.

4. The combination with a base having an inclined upper surface and a vertically-adjustable pivot having a knob, of a swinging arm pivotally connected to said pivot and having a ball attached to its outer end, substantially as described.

5. The base having at the top an inclined runway, in combination with a central pivot, a swinging arm connected thereto and a ball attached to the outer end of said arm, substantially as described.

6. The base having at the top a circular inclined runway, in combination with a vertically-adjustable pivot, a swinging arm connected thereto and a ball attached to the outer end of said arm, substantially as described.

7. The base A, having a central screw-threaded opening, in combination with the adjustable screw-threaded pivot and the screw-threaded fastening rod or pin D held in said opening and a swinging arm connected to said pivot and having a ball attached to its outer end, substantially as described.

8. The combination with the base, of an adjustable pivot having a tapering stem and head or knob, a swinging arm pivotally connected to said stem and a ball attached to its outer end, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM W. ZIMMERMAN.

Witnesses:

H. A. ERNST,
M. R. ATTIG.