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C. LEVEN
APPARATUS FOR OBTAINING PRACTICE IN GOLF OR OTHER GAMES OR
PHYSICAL EXERCISES
Filed Oct. 17, 1921

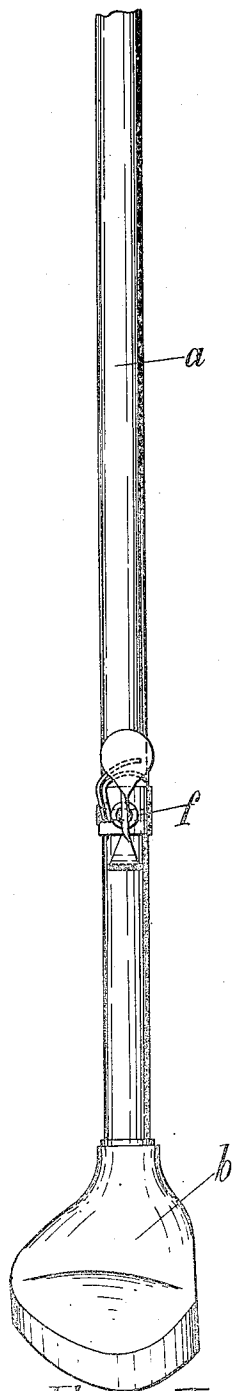
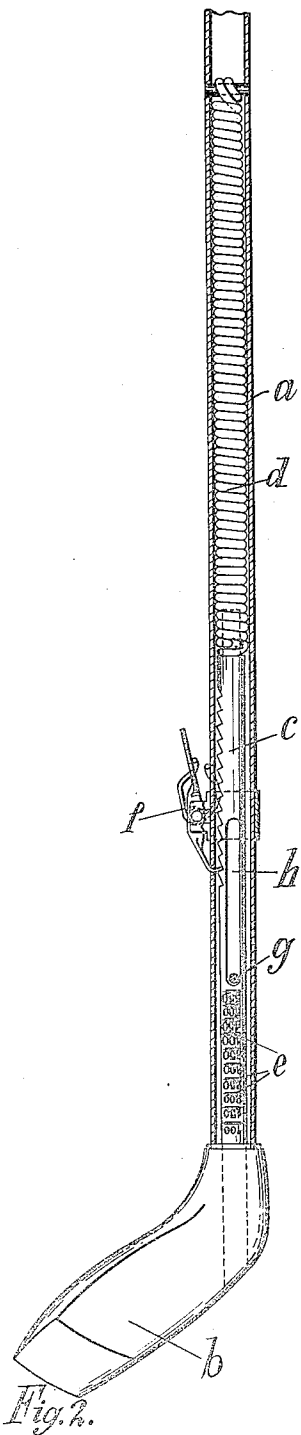


Fig. 1. *Inventor*
C. Leven
By Marked Club
A. v. v. s.

UNITED STATES PATENT OFFICE.

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APPARATUS FOR OBTAINING PRACTICE IN GOLF OR OTHER GAMES OR PHYSICAL EXERCISES.

Application filed October 17, 1921. Serial No. 508,122.

To all whom it may concern:

Be it known that I, CHARLES LEVEN, M. I. E. E., a subject of the King of Great Britain and Ireland, and residing at 109-
5 111 New Oxford Street, London, W. C. 1, England, have invented a certain new and useful Improved Apparatus for Obtaining Practice in Golf or Other Games or Physical Exercises, of which the following is a
10 specification.

The object of the present invention is to devise a form of apparatus which is primarily intended to enable the user to obtain
15 practice in golf but which may be applied with equal advantage and like effect in connection with practice in other games such as cricket, base-ball, hockey, polo and the like, or for physical games and exercises
20 generally.

The invention aims at providing a form of apparatus which in addition to enabling the user to obtain the necessary practice will also afford a satisfactory indication of the
25 state of proficiency at which he has arrived and the invention consists in apparatus comprising a stick, bat or other like article or device having a weight or other member
30 movable thereon or in connection therewith under the action of centrifugal force and preferably against a suitable spring or like resistance, means being provided to maintain the weight or the like in any position
35 which it may be forced to take up under the action of the centrifugal force so that it will serve as an index of the power of the swing or other movement imparted to the device.

The accompanying drawing illustrates one convenient mode of carrying out the invention in its application, for example, to a
40 practice golf club.

Figure 1 is an elevation; and

Figure 2 is a sectional elevation.

In carrying my invention into effect in
45 one convenient manner as for example, in its application to a device intended for the obtaining of practice in golf, I form the device with an outer tubular member *a*, resembling more or less the usual driver or
50 other golf club and with the lower part of such member I provide a weight *b* which will represent approximately the head of the golf club, and which is arranged on a rod *c* within the tube and against a resist-
55 ing force such as that provided by a spring

d, elastic fluid or other resilient means or device. The arrangement is such that when the club is used in the manner of an ordinary golf club the weight will move
60 outwards under the action of centrifugal force, the extent of such movement being an index of the power of the swing.

In conjunction with such weight, I may provide a scale or index *e* which may be calibrated by calculation or by practical ex-
65 periment or otherwise in terms, for example, of the length of drive or any other convenient units, and the tube is provided with a spring controlled detent *f* adapted to en-
70 gage notches in the rod *c* or other member on which the same is movable, or it is provided with a pawl and ratchet arrangement or with any other means or device by which
75 it may be temporarily held in any position which it may have been made to take up under the action of centrifugal force, there-
80 by showing in conjunction with the scale the power or skill of swing or other factor affecting the practical result that would have been attained thereby,

If desired a leather loop or other like de-
85 vice may be provided at that part of the stick or tube member which is gripped so that the hand of the user may be passed through such loop, thus facilitating the
90 gripping operation and serving to maintain the hold upon the stick or handle.

The head *b* may be guided in its move-
95 ment by means of one or more pins *g* passing through the tubular member and through a slot *h* in the rod *c*.

It is to be understood that the foregoing details and the particular application de-
100 scribed are given by way of explanation and not of limitation as it will be clear that the invention may be applied to various devices used in the playing of games or in the carry-
105 ing out of physical exercises and the form of member influenced by the centrifugal force, the manner of disposing the same and the means adopted for enabling it temporarily to maintain any position in which it may be set may all be modified to suit the particular purpose for which the invention is to be employed or any practical requirements that
110 may have to be fulfilled.

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

1. A swingable game piece comprising a 110

handle and a heavy head, spring responsive means associated with the head and actuable thereby under centrifugal force during the swinging of the game piece and means to register after the stroke the power or force incident to the swing.

2. An arrangement as claimed in claim 1 wherein means is provided for releasably holding the weight actuated means in its indicating position.

3. An apparatus of the character described including in combination, a swingable game piece composed of an elongated handle portion and a head portion acting as a weight and having a graduated and notched shank, spring means associated with the shank of the head portion and actuable by the head during the swinging of the game piece due to the centrifugal force generated to indicate the power of the swing, and means for releasably holding the parts in their indicating positions.

4. An apparatus of the character described including in combination, a swingable game piece composed of an elongated tubular handle portion and a head portion acting as a weight and provided with a graduated and notched shank slidably

mounted within the handle portion and also provided with an elongated slot, spring means associated with the shank of the head portion and actuated by the head during the swinging of the game piece due to the centrifugal force generated to indicate the power of the swing, a spring controlled catch pivoted exteriorly of the handle portion and operating through the handle portion for contacting with the notches on the shank of the head portion for releasably holding the parts in their indicating positions, and stop means carried by the handle portion and traversing the slot in the shank of the head portion for preventing accidental displacement of the head portion during the swinging of the game piece.

5. A golf stick comprising a handle, a head slidably connected to the handle and a spring arranged between the head and handle for resisting the centrifugal force generated by the swinging stroke of the stick and means for releasably holding the head in an indicating position.

In testimony whereof I have signed my name to this specification.

CHARLES LEVEN.