Jan. 12, 1932. W. L. McEVOY 1,840,406

GOLF CLUB

Filed Nov. 8, 1930

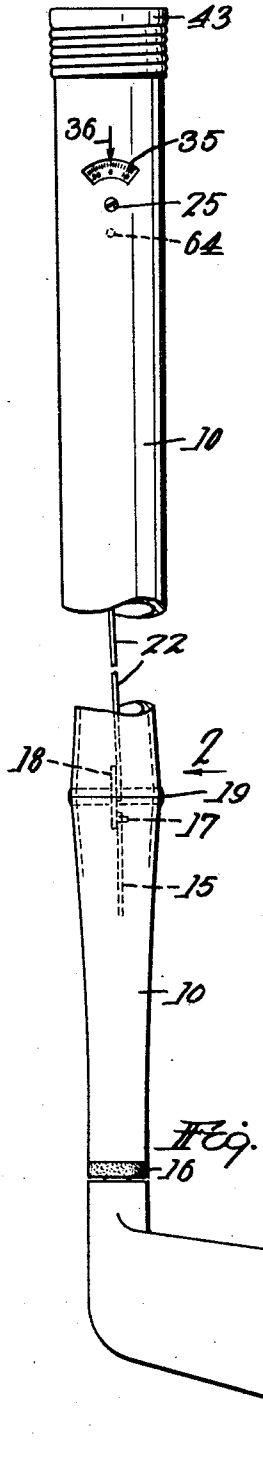


Fig. 1.

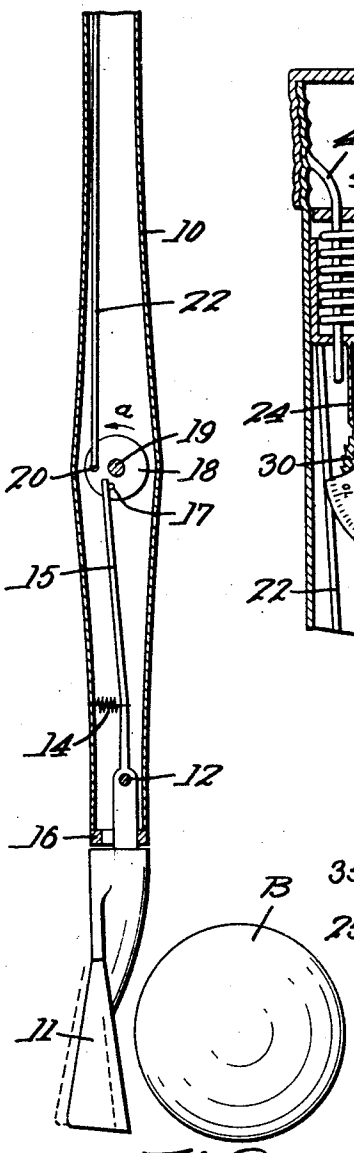


Fig. 2.

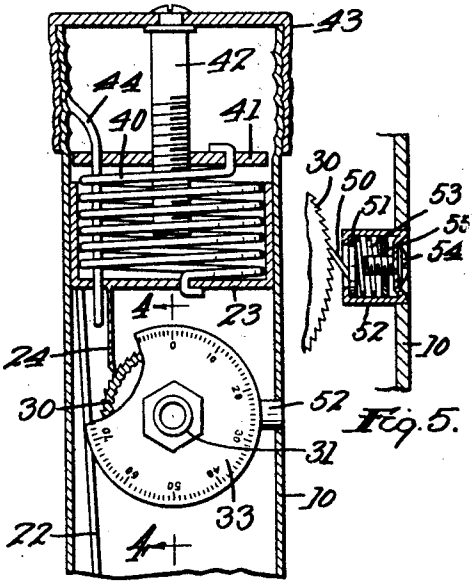


Fig. 3.

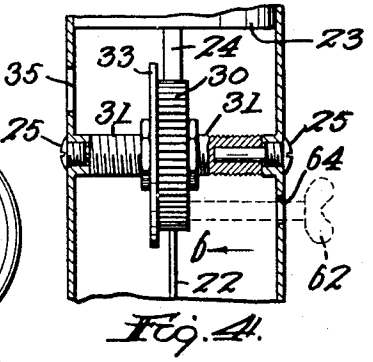


Fig. 4.

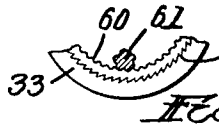


Fig. 6.

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Patented Jan. 12, 1932

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UNITED STATES PATENT OFFICE

WILLIAM L. McEVOY, OF WEST BROOKFIELD, MASSACHUSETTS, ASSIGNOR OF ONE-HALF TO FRANCIS HARTLEY, JR., OF BROOKLINE, MASSACHUSETTS

GOLF CLUB

Application filed November 8, 1930. Serial No. 494,350.

This invention relates to golf clubs and particularly to the clubs used in playing so-called "miniature" golf. In such games, a single club is used throughout the game.

It is the object of my invention to provide a golf club having mechanism incorporated therein by which the number of strokes made with the club may be automatically recorded. In the case of a miniature golf game, or any games in which a single club only is used, this device will indicate the player's record for the game.

In the carrying out of my invention in the preferred form, I provide a counting device actuated by a slight relative movement between the head of the club and the stick or handle portion thereof, when a blow is struck by the playing face of the head.

An important feature of the invention relates to the provision of means by which the device may be conveniently re-set after each game.

A preferred form of the invention is shown in the drawings, in which

Fig. 1 is a side elevation of a golf club embodying my invention;

Fig. 2 is a sectional side view of the lower portion of the club, looking in the direction of the arrow 2 in Fig. 1;

Fig. 3 is an enlarged sectional view of the handle portion of the club;

Fig. 4 is a detail sectional elevation, taken along the line 4—4 in Fig. 3;

Fig. 5 is an enlarged sectional elevation of certain parts to be described; and

Fig. 6 is a detail side elevation, looking in the direction of the arrow 6 in Fig. 4.

Referring to the drawings, I have shown a golf club comprising a stick 10, having a handle portion and a head 11 which is shown as being in the form of the usual putter. The head 11 is not mounted in fixed position on the handle or stick 10, as is the usual practice, but is mounted on a pivot pin 12 in the stick 10, so that when the head strikes a ball B it can move relatively to the stick 10 from the position shown in full lines in Fig. 2 to that shown in dotted lines.

The head is normally held yieldingly in the full line position in Fig. 2 by a spring 14 which is mounted within the stick 10 and engages an arm 15 extending upwardly from the head 11. A slotted rubber or fibre bushing or washer 16 is secured to the lower end of the stick 10 and provides a stop to determine the normal position of the head 11.

At its upper end, the arm 15 engages a pin 17 in the side of a disc 18, pivoted at 19 in the stick 10. When a blow is struck by the club, the disc 18 thus receives an angular movement in the direction of the arrow *a* in Fig. 2.

A second pin 20 in the disc 18 is connected by a steel wire or other suitable connection 22 to a cup-shaped member 23 (Fig. 3) slidably mounted in the handle portion of the stick 10. A spring pawl 24 projects downward from the member 23 and engages the teeth of a ratchet wheel 30 having an elongated bearing member or hub 31 (Fig. 4) and rotatably supported in the handle of the golf stick by pivot studs 25. Each time a blow is struck by the head 11, the wire 22 is pulled downward, depressing the member 23 and causing the feed pawl 24 to advance the ratchet wheel 30 the space of one tooth.

A graduated disc 33 is rotatable with the ratchet wheel 30, and the graduations thereon may be seen through an opening 35 in the handle portion of the stick. The record may be read in reference to a fixed index mark 36 on the outside of the handle, as clearly shown in Fig. 1.

The parts are returned to normal position after each stroke by a tension spring 40 (Fig. 3) having its lower end secured to the cup member 23 and having its upper end secured to a disc 41 movable vertically in the handle of the stick 10 by an adjusting screw 42, which is mounted in a cap 43 threaded to the upper end of the handle. The screw is held from axial movement in the cap 43 and is threaded in the disc 41.

The disc 41 is held from rotation in the handle by a guide rod 44 secured to the handle at its upper end and extending downward loosely through openings in the disc 41 and also in the member 23.

By turning the adjusting screw 42 the tension of the spring 40 may be conveniently adjusted. This adjustment will determine the

force of the blow on the head 11 necessary to actuate the recording mechanism.

A hold-back pawl 50 (Fig. 5) for the ratchet wheel 30 is mounted on a plate 51 which is yieldingly slidable but non-rotatable in a cup-shaped casing 52 which is secured in the handle portion of the stick 10 and adjacent the ratchet wheel 30. A spring 53 pushes the disc 51 yieldingly toward operative position. The pressure of the spring 53 may be adjusted by a screw 54, mounted in the head of the casing 52 and threaded in a plate or nut 55.

The pawl 50 thus yieldingly engages the ratchet wheel 30 and prevents reverse movement thereof as the feed pawl returns to normal position.

In order to re-set the device after a game has been completed, the ratchet wheel 30 is provided with internal gear teeth 60 (Fig. 6) which may be engaged by pinion teeth 61 on the inner end of a key 62 (Fig. 4) which may be inserted through an opening 64 in the side of the handle. After inserting the key, the disc 33 may be turned forward to complete a revolution and bring the indication back to zero.

Having thus described my invention and the operation thereof, the advantages will be readily apparent. The player need give no attention whatever to his score, as the club will automatically register every blow struck therewith and at the end of the game the total score may be read through the opening 35 by referring to the index 36. The disc may then be re-set to zero and another game may be played. My invention not only relieves the player from the necessity of keeping track of his score but also provides a much more accurate total, as the human liability to error is omitted.

Having thus described my invention and the advantages thereof, I do not wish to be limited to the details herein disclosed, otherwise than as set forth in the claims, but what I claim is:—

1. A golf club comprising a stick, a head mounted for yielding limited movement thereon, a counting device mounted in said stick, and operative connections between said head and said device whereby said counting device is actuated whenever a blow is struck by said head.

2. A golf club comprising a stick, a head pivoted thereto, means to limit relative movement between said parts, a spring to yieldingly hold said head in normal advanced position, a counting device mounted in said stick, and connections between said head and said device whereby yielding movement of the head when a blow is struck will effect an advance movement of said counting device.

3. A golf club comprising a stick having a handle portion, a head pivoted to the lower end of said stick, a counting device mounted in the handle portion, and operative connections extending lengthwise within said handle between said head and said device, through which connections said head is rendered effective to advance said counting device when a blow is struck by said head.

4. A golf club comprising a stick having a handle portion with an opening therein, a graduated dial mounted in said handle portion and visible in part through said opening, a head mounted for limited movement on said stick and held yieldingly in normal advanced position, and operative connections between said head and said dial through which relative movement of said head effects an advance movement of said graduated dial when a blow is struck by said head.

5. A golf club comprising a stick having a handle portion with an opening therein, a graduated dial mounted in said handle portion and visible in part through said opening, a head mounted for limited movement on said stick and held yieldingly in normal advanced position, a ratchet wheel fixed to said dial, a feed pawl and a holding pawl for said ratchet wheel, and operative connections between said head and said feed pawl whereby relative movement of said head effects an advance movement of said ratchet wheel and dial when a blow is struck by said head.

6. The combination in a golf club as set forth in claim 5, in which said connections multiply the relative movement of said head.

7. The combination in a golf club as set forth in claim 5, in which means is provided for resetting the dial.

8. The combination in a golf club as set forth in claim 5, in which said ratchet wheel is provided with internal gear teeth and in which a key is provided having pinion teeth adapted to engage said internal gear teeth, whereby said dial may be reset.

9. A golf club comprising a stick having a handle portion with an opening therein, a graduated dial mounted in said handle portion and visible in part through said opening, a head mounted for limited movement on said stick and held yieldingly in normal advanced position, a ratchet wheel fixed to said dial, a feed pawl and a holding pawl for said ratchet wheel, a disc mounted in the lower end of said stick, and a flexible connection between said disc and said feed pawl, said head having an upwardly extending arm engaging a pin eccentrically mounted in said disc and thereby giving said flexible connection a multiplied movement upon movement of said head relative to said stick.

In testimony whereof I have hereunto affixed my signature.

WILLIAM L. McEVOY.