Aug. 23, 1960 M. G. HURDZAN 2,950,115

GOLF CLUB ATTACHMENT

Filed July 29, 1958

Fig.1

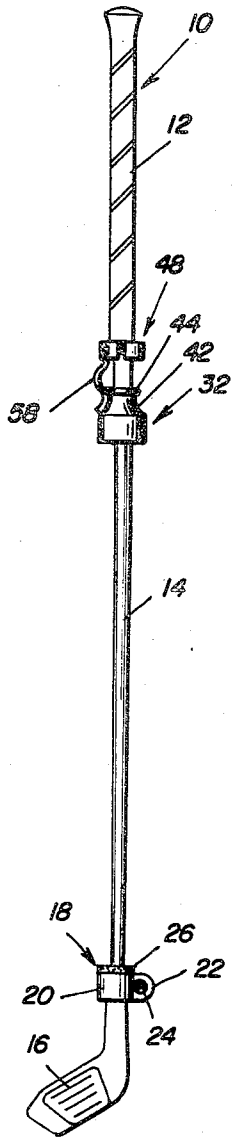


Fig.2

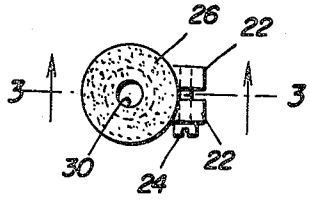


Fig.3

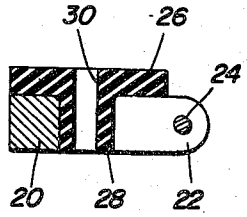


Fig.4

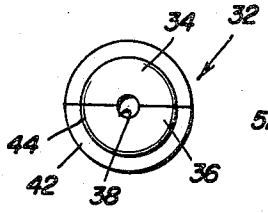


Fig.7

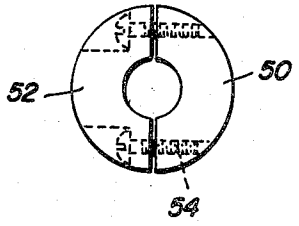


Fig.5

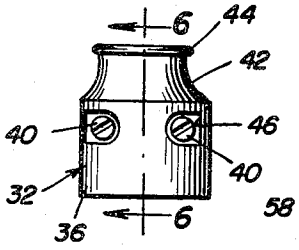


Fig.8

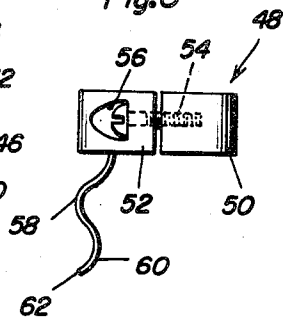
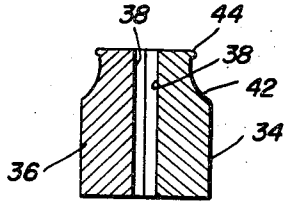


Fig.6



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United States Patent Office 2,950,115 Patented Aug. 23, 1960

2,950,115

GOLF CLUB ATTACHMENT

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Filed July 29, 1958, Ser. No. 751,674

3 Claims. (Cl. 273—186)

The present invention generally relates to an attachment for golf clubs which will fit any standard golf club and may be installed when the club is manufactured or may be added to any club by the owner thereof and will effectively assist the user to develop proper timing of his stroke so as to achieve maximum hitting power as a result of optimum centrifugal force and will in no way whatsoever hinder the normal use of the club since the club can be used for practice as well as for play.

An object of the present invention is to provide an attachment for a golf club especially useful when practicing so that a golfer can properly develop his timing and may be used when hitting golf balls or when only swinging without hitting the golf ball.

The primary object of the present invention is to provide a golf club attachment in accordance with the preceding object in which there is provided a movable member or slide which slides longitudinally on the shaft of the golf club for indicating the proper place that the hands of the person using the golf club should uncock in his swing thus indicating to the user the point of maximum club head speed so that that this point of maximum club head speed can be coincided with the instant of impact of the golf club head with the ball.

A further important object of the present invention is to provide a golf club attachment which is simple in constructure, easy to install, easy to use, well adapted for indicating to the golfer the point of uncocking of his swing and relatively inexpensive to manufacture.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawing forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

Figure 1 is an elevation of a golf club including the attachment of the present invention mounted thereon;

Figure 2 is a plan view of the stop member located at the lower end of the shaft of the club;

Figure 3 is a sectional view taken substantially upon a plane passing along section line 3—3 of Figure 2 illustrating the details of construction of the stop member;

Figure 4 is a plan view of the movable slide;

Figure 5 is a side elevation of the movable slide;

Figure 6 is a vertical sectional view taken substantially upon a plane passing along section line 6—6 of Figure 5 illustrating the construction of the slide;

Figure 7 is a plan view of the clamp having the spring finger mounted thereon; and

Figure 8 is a side elevation of the spring clamp and finger.

Referring now specifically to the drawings, the attachment of the present invention is shown mounted on a conventional golf club generally designated by the numeral 10 and including a handle 12, an elongated shaft 14 and a head 16. Mounted adjacent the head 16 on the shaft 14 is a stop member generally designated by the

numeral 18 and including a split clamp member 20 having a pair of projecting ears 22 on each side of the split clamp for receiving a clamp screw 24 therethrough with the clamp screw serving to collapse the split clamp 20 into clamping engagement with the shaft 14 inasmuch as the screw 24 is threaded through one ear and has a headed end engaging the outer surface of the other ear 22. Mounted on top of the split clamp 20 is a rubber cushion member 26 generally in the shape of a circular washer having a depending cylindrical central boss 28 thereon which is received within the split clamp 20. The rubber washer 26 as well as the boss 28 is provided with a longitudinal bore 30 for engaging around the shaft 14. The washer 26 and the boss 28 may be slit longitudinally for facilitating the insertion of the rubber member onto the shaft 14. Thus, by tightening the screw 24 in an obvious manner, the clamp 20 and the rubber resilient washer or stop member 26 may be mounted rigidly on the shaft 14.

Slidably disposed on the shaft 14 is a slide or weight member generally designated by the numeral 32 and including a pair of facing members 34 and 36 each being generally semi-cylindrical in construction and having a semi-cylindrical recess 38 in the facing surfaces thereof. The members 34 and 36 are held into engagement with each other by fastening screws 40 with the recess 38 cooperating to slidably engage the shaft 14 without clamping the shaft 14 thus providing free sliding movement of the slide 32. The exterior surface of the members 34 and 36 is provided with an inwardly extending concave portion 42 adjacent the upper end thereof together with an outwardly extending rib or rim 44 at the upper end thereof which projects beyond the concave portion 42 as illustrated in Figure 5. It is noted that the member 34 is provided with recesses 46 receiving the heads of the screws 40 thus providing a smooth exterior surface to the slide 32.

A clamp and clip assembly generally designated by the numeral 48 is mounted on the shaft 14 adjacent the handle 12 and includes a pair of clamp members 50 and 52 secured in clamping relation by setscrews 54 having the headed ends thereof received in recesses 56 in the clamp member 52. Extending longitudinally downwardly from the clamp member 52 is a leaf spring clamp 58 which has a rounded clamping surface 60 with an outwardly flared lower end 62 for clamping engagement with the concave portion 42 and for riding up over the rib 44 when the slide 32 is moved vertically upwardly so that the rounded portion 60 will be engaged with the concave surface 42 and it is pointed out that the surfaces 60 and 42 are complementary to each other so that the spring clip 58 will hold the slide 32 in its uppermost position until centrifugal force overcomes the frictional engagement of the spring clip 58 whereupon the slide 32 may slide outwardly and engage the rubber stop member 26 for indicating the place that the user's hands should be uncocked in his swing.

The purpose of this attachment when used in actual play is intended to assist the user to time the uncocking of his wrist action so that maximum club head speed can be achieved at the instant of impact with the ball. The inability of the novice golfer to achieve this action at the proper time is one of the major causes of loss of hitting power and lack of proper flight control. Since perfection of timing cannot be controlled by visual observation due to the speed of movement of the golf club, the present device overcomes this problem by providing an audible timing device in order to assist the golfer in improving his timing so as to achieve maximum hitting power and directional flight control. The desired result can be achieved in the following manner: As the golfer addresses the ball, slide 32 is held in top position by the spring catch 58 throughout the back stroke. As the

downstroke of the club is initiated, slide **32** continues to be held in place by spring catch **58** until such time as the golfer forcibly uncocks his wrist or the centrifugal action of the club head brings about this action. If forced uncocking of wrist by the golfer is premature club head speed will develop high in the downstroke (club head action catching up with hand action) thus causing slide **32** to release from spring catch **58** and propel itself down shaft **14** of the club and thus striking the stop member **26** prior to impact of the golf club head with the ball and indicating to the golfer that the hitting action was premature. Having had this fault indicated audibly, the golfer may easily correct this timing fault by delaying the uncocking of his wrist until later in the downstroke, thereby delaying the release of slide **32** from spring catch **58** until later in the downstroke.

When the golfer has achieved this delayed action, slide **32** upon release from spring catch **58** will strike the stop **26** at the precise instant of impact between the golf club head and the ball thereby indicating audibly the achievement of perfect timing. If, on the other hand, the user delays the uncocking of his wrist to a point too late in the downstroke, slide **32** as a result will be released from spring catch **58** correspondingly late and this will be indicated audibly to the golfer by the pound of the impact of the club head with the ball prior to the sound of slide **32** coming into contact with stop **26**. Thus by using the device of the present invention, the novice golfer can further his understanding of the complexity of the stroke thereby enabling him to enjoy better golf through self-endeavor. Also, teaching professionals can use the invention to great advantage to teach proper timing of the stroke so that maximum hitting power is obtained from each stroke and so that precise directional control of the flight of the ball can be had.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly, all suitable modifications and equivalents may be resorted to, falling within the scope of the invention as claimed.

What is claimed as new is as follows:

1. In combination with a golf club having a head for contact with a golf ball, an elongated shaft and a handle on the upper end of the shaft, a stop member longitudinally adjustably mounted on said shaft and including a split clamp for clamping engagement on the shaft in spaced relation to the head, a resilient bumper on said stop member, a slide freely longitudinally slidably mounted on said shaft with the slide being in the form of a weight having a peripheral rib on the upper end thereof, a two piece clamp disposed on the shaft adjacent the handle whereby the two piece clamp may be disassembled from the shaft, one piece of said two piece clamp having a spring clip integral therewith, said spring clip extending alongside of the shaft and including a rounded inwardly extending projection for engagement behind the shoulder on the slide thereby frictionally and resiliently retaining the slide adjacent the handle of the golf club with centrifugal force caused by uncocking of the golf club causing the slide to unlatch itself from the spring catch and move outwardly to hit the cushion on the stop member with an impact.

2. In combination with a golf club having a head, shaft and handle, a stop member mounted on the shaft in spaced relation to the club head, a slide slidably mounted on said shaft above the stop member, and a spring catch means mounted on said shaft adjacent the handle for normally retaining the slide in a position adjacent the handle with the spring catch means being overcome by centrifugal force occurring during uncocking of a golfer's wrist during a golf swing whereby outward movement of the slide to contact the stop member will audibly indicate to the golfer the point of maximum club head speed so that the point of maximum club head speed may be coincided with the instant of impact of the club head with a ball, said slide including a weight having a concave external surface adjacent the upper end thereof with a peripheral rib on the upper edge, said spring catch means including a two piece clamp with one piece of the clamp provided with a spring clip extending axially thereof having a rounded surface for engagement with the concave surface of the slide and the rib thus resiliently frictionally retaining the slide in its uppermost position, said stop member including a split clamp removably attached to the shaft, and a bumper of resilient material disposed on the surface of the split clamp facing the slide whereby the slide will engage the resilient bumper during the outward movement thereof for cushioning the slide but yet providing an audible sound as well as providing a cushioned shock to the golf club shaft and handle for indicating to the golfer by sound and by feel the point of greatest club head speed, said bumper including a boss extending downwardly into the split clamp whereby clamping of the split clamp onto the shaft will maintain the bumper in position.

3. An attachment assembly for a golf club having a head, shaft and handle comprising a stop member adapted to be mounted on the shaft adjacent the head, a slide adapted to be slidably mounted on the shaft above the stop member, and a spring catch means adapted to be mounted on the shaft adjacent the handle and normally retaining the slide in a position adjacent the handle with the spring catch means adapted to be overcome by centrifugal force occurring during uncocking of a golfer's wrist during a golf swing with the club whereby outward movement of the slide to contact the stop member will audibly indicate to the golfer the point of maximum club head speed so that the point of maximum club head speed may be coincided with the instant of impact of the club head with a ball, said slide including a weight having a concave external surface adjacent the upper end thereof with a peripheral rib on the upper edge, said spring catch means including a two-piece clamp adapted to be clamped onto the handle with one piece of the clamp provided with a longitudinally extending spring clip adapted to extend alongside of the shaft, the outer end of the spring clip having a rounded surface on the inner surface thereof for engagement with the concave surface of the slide whereby the rounded surface engaging the rib on the slide will resiliently and frictionally retain the slide in its uppermost position, said stop member including a split clamp adapted to be removably attached to the shaft, and a bumper of resilient material disposed on the surface of the split clamp facing the slide whereby the slide will engage the resilient bumper during the outward movement thereof for cushioning the slide but yet providing an audible sound as well as providing a cushion for the shock of the slide hitting the stop member thus further indicating to the golfer by sound and by feel the point of greatest club head speed.

References Cited in the file of this patent

UNITED STATES PATENTS

272,974	Pearce	Feb. 27, 1883
516,602	Kershaw	Mar. 13, 1894
1,559,546	Bosket	Nov. 3, 1925
2,135,648	Stumpf	Nov. 8, 1938
2,203,893	Chapman	June 11, 1940
2,326,941	Heitner	Aug. 17, 1943
2,608,409	Pinkerton	Aug. 26, 1952