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GOLFER'S HEAD MOVEMENT INDICATOR

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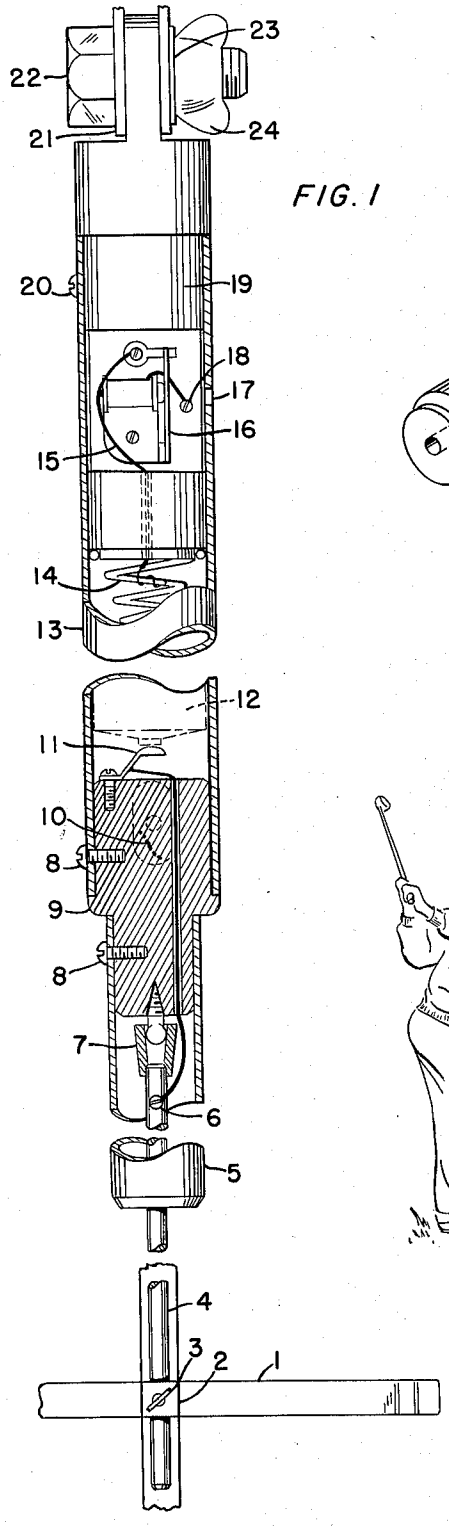


FIG. 1

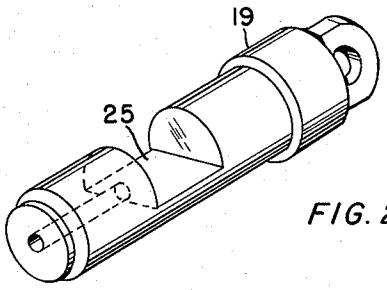
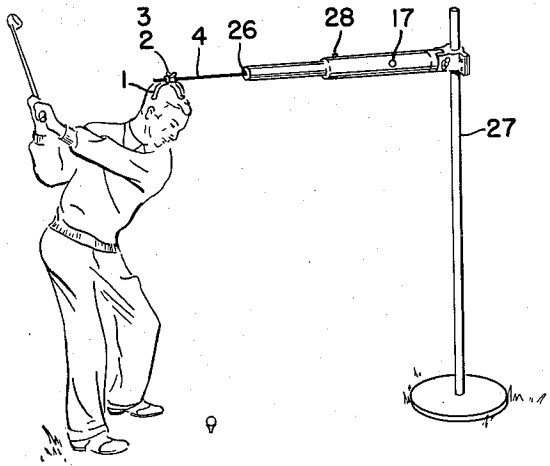


FIG. 2

FIG. 3



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GOLFER'S HEAD MOVEMENT INDICATOR

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This invention relates to a device which signals to a golf player when his head moves during the swing of the golf club thereby indicating to the golfer that an error in his swing is being committed.

An object of my invention is to provide a device which notifies the golfer of a mistaken head movement in any part of the swing.

A further object is to provide such a device which does not in any way interfere with or distract from a proper golf swing.

A further object is to provide such a device which is easily and quickly adapted for use in all places and for all persons regardless of size.

Other objects of the present invention are to provide a device of the above type which is of simple construction, inexpensive to manufacture and efficient to operate.

For other objects of and for a better understanding of the invention, reference may be had to the following detailed description taken in connection with the accompanying drawing in which:

FIGURE 1 is a cross-sectional view of the body portion of my device

FIGURE 2 is a detailed view of body member

FIGURE 3 is a perspective view showing the device in use.

Referring to the drawing showing the preferred structure and in which like numbers represent like parts, in FIGURE 1 the number **1** represents a head connector. This is preferably attached bands of metal or plastic which fit comfortably on the head of the golfer. This portion extends over the top of the head and partially down the sides for a snug fit. Alternative forms such as a cap or bowl may be used. Item **1** is secured to contact rod **4**. There is threaded engagement **2** through adapter **3** which secures the connector to the rod. Said rod is an electrical conductor, preferably aluminum, of one-fourth inch in diameter of the length of approximately thirty inches. At the opposite end of said rod is swivel **7** of the ball and socket type. Electric wire contact **6** permits connecting the rod to contact **11** by conventional insulated electric wire. A connecting block **9** serves as a base for securing swivel **7** and contact **11**. The connecting block is preferably cylindrical in shape of two different diameters and of solid material. It is an electrical conductor preferably aluminum. It is provided with a drilled hole lengthwise to contain said insulated wire.

A body member **19** shown in FIGURE 2 is also of cylindrical construction. It is preferably of three different diameters with the center portion the same diameter as the larger diameter of said connecting block. A section of said body member is cut-away to the center thereof to provide a saddle **25** to receive signal **16**. Such signal is preferably a common electromagnetic vibrator of sufficient size to be clearly audible to the golfer. This vibrator, commonly called "buzzer" is connected to the body member **19** to retain it in place and its electromagnet is connectecd to screw **18** by insulated wire as illustrated. To complete the electrical circuit insulated wire **15** contacts the signal energizer, preferably a plurality of one and one-half volt flashlight battery **12** (four in number). This may be accomplished by ordinary spiral spring **14** at the base thereof. Wire **15** may be connected thereto as part of the circuit.

A conventional pushbutton switch **28** is put in the

electrical circuit with wire **10** so that the circuit is broken when the device is not in use. A main housing **13** encloses some of said members as is illustrated. Said housing is preferably formed as an aluminum tube of inside diameter 1 5/16 inches and preferably sixteen inches in length. It is slotted at one end thereof to accept switch **28** and provided with orifice **17** as a sound outlet. It snugly surrounds a portion of member **19** and is secured thereto by screw **20** at one end thereof. At the opposite end thereof block **9** snugly fits therein and is secured thereto with screw **8**.

An important part of my invention is contact tube **5**. This tube is formed of an electrical conductor, preferably aluminum. Formed as 7/8 inch diameter tubing. Experience shows that an overall length of 12 inches operates best. The tube surrounds rod **4** and one end thereof is held secure to the connecting block by snugly fitting over it. Screw **8** secures it.

A stationary support **27** may be provided as a vertical standard. This support may be portable, consisting of a vertical tube or pipe with a rotatably heavy base as illustrated; of course, many and various arrangements may be resorted to without departing from the scope of my invention. The described parts of my device are connected to the stationary support **27**, preferably by clamp **21** provided with ears and orifices to secure a corresponding ear and orifice on the end of member **19**. Threaded bolt **22**, washer **23**, and wingnut **24** complete the obvious and adjustable support arrangement.

The operation of my device is as follows:

A golfer raises clamp **21** to the approximate height of his head. Connector **1** rests upon his head. Nut **24** is adjusted so that the connector rests comfortably when the golfer is in a position to hit the golf ball. The swing is executed in the conventional manner; the usual club and ball may be actually used. If during the swing the head moves, rod **4** will be caused to contact the end of tube **5** at point **26**. This will complete the electrical circuit and cause the buzzer to sound. In this manner the golfer will know he has moved his head.

The sensitivity of the device is controlled by sliding the adapter **3** and connector **1** along rod **4**. As the distance between point **26** and adapter **3** becomes greater, the greater the distance the head may move before electrical contact is made. Beginners may use the head connector near the end of the rod and as skill increases the connector may be moved towards point **26**.

Although preferred embodiments of the device are as illustrated and described, it is to be understood that further modifications and changes in the details of construction that may be resorted to will fall within the scope of the invention as claimed.

What is claimed is:

1. A golf training device to indicate head movements of a golfer during a golf swing, comprising a vertical standard, a laterally extending arm vertically adjustably mounted on the vertical standard adjacent the upper end thereof, said arm being of tubular form and including an electrical conductor rod projecting from its outer end, a head-embracing member at the outer end of the conductor rod, a conductor sleeve at the outer end of the tubular arm surrounding the conductor rod for a portion of its length and normally spaced therefrom, a buzzer in the tubular arm and a source of contained electrical energy in the tubular arm in communication with the buzzer, conductor sleeve and rod and rendered active by movement of the head of the golfer to cause the conductor rod to contact the conductor sleeve for energizing the buzzer.

2. A golf training device as in claim **1**, wherein the cylindrical member is mounted in the inner end of the tubular arm and has a cut-away portion intermediate its ends for the mounting of the buzzer.

3. A golf training device to indicate head movements of a golfer during a golf swing, comprising a vertical standard, a laterally extending arm vertically adjustably mounted on the vertical standard adjacent the upper end thereof, said arm being of tubular form and including an electrical conductor rod projecting from its outer end, a head-embracing member at the outer end of the conductor rod, a conductor sleeve at the outer end of the tubular arm surrounding the conductor rod for a portion of its length and normally spaced therefrom, a buzzer in the tubular arm and a source of contained electrical energy in the tubular arm in communication with the buzzer, conductor sleeve and rod and rendered active by movement of the head of the golfer to cause the conductor rod to contact the conductor sleeve for energizing the buzzer, a solid cylindrical block at the outer end of the tubular arm and projecting therefrom for the support of the contact sleeve, the source of electrical energy comprising storage batteries in the tubular arm arranged between the aforesaid cylindrical member and cylindrical block and a conductor wire extending from the terminal end of the outermost storage battery and innermost end of the conductor rod.

4. A golf training device as in claim 1, wherein the cylindrical member is mounted in the inner end of the tubular arm and has a cut-away portion intermediate its ends for the mounting of the buzzer, a solid cylindrical block at the outer end of the tubular arm and projecting therefrom for the support of the contact sleeve, the source of electrical energy comprising storage batteries in the tubular arm arranged between the aforesaid cylindrical member and cylindrical block and a conductor wire extending from the terminal end of the outermost storage battery and the innermost end of the conductor rod.

5. A golf training device to indicate head movements of a golfer during a golf swing, comprising a vertical standard, a laterally extending arm vertically adjustably mounted on the vertical standard adjacent the upper end thereof, said arm being of tubular form and including an electrical conductor rod projecting from its outer end, a head-embracing member at the outer end of the conductor rod, a conductor sleeve at the outer end of the tubular arm surrounding the conductor rod for a portion of its length and normally spaced therefrom, a buzzer in the tubular arm and a source of contained electrical energy

in the tubular arm in communication with the buzzer, conductor sleeve and rod and rendered active by movement of the head of the golfer to cause the conductor rod to contact the conductor sleeve for energizing the buzzer, a solid cylindrical block at the outer end of the tubular arm and projecting therefrom for the support of the contact sleeve, the source of electrical energy comprising storage batteries in the tubular arm arranged between the aforesaid cylindrical member and cylindrical block and a conductor wire extending from the terminal end of the outermost storage battery and innermost end of the conductor rod, and a swivel connection between the inner end of the conductor rod and the outer end of the cylindrical block.

6. A golf training device as in claim 1, wherein the cylindrical member is mounted in the inner end of the tubular arm and has a cut-away portion intermediate its ends for the mounting of the buzzer, a solid cylindrical block at the outer end of the tubular arm and projecting therefrom for the support of the contact sleeve, the source of electrical energy comprising storage batteries in the tubular arm arranged between the aforesaid cylindrical member and cylindrical block and a conductor wire extending from the terminal end of the outermost storage battery and the innermost end of the conductor rod and a swivel connection between the inner end of the conductor rod and the outer end of the cylindrical block.

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