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3,458,203

GOLF PRACTICE APPARATUS

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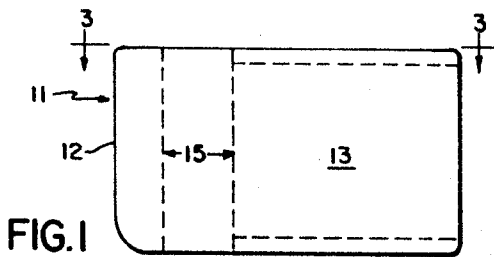


FIG. 1

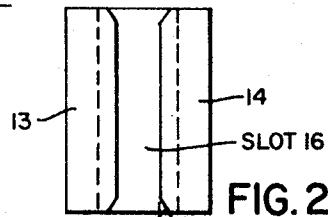


FIG. 2

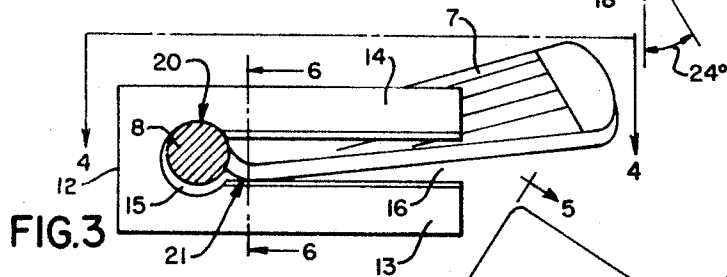


FIG. 3

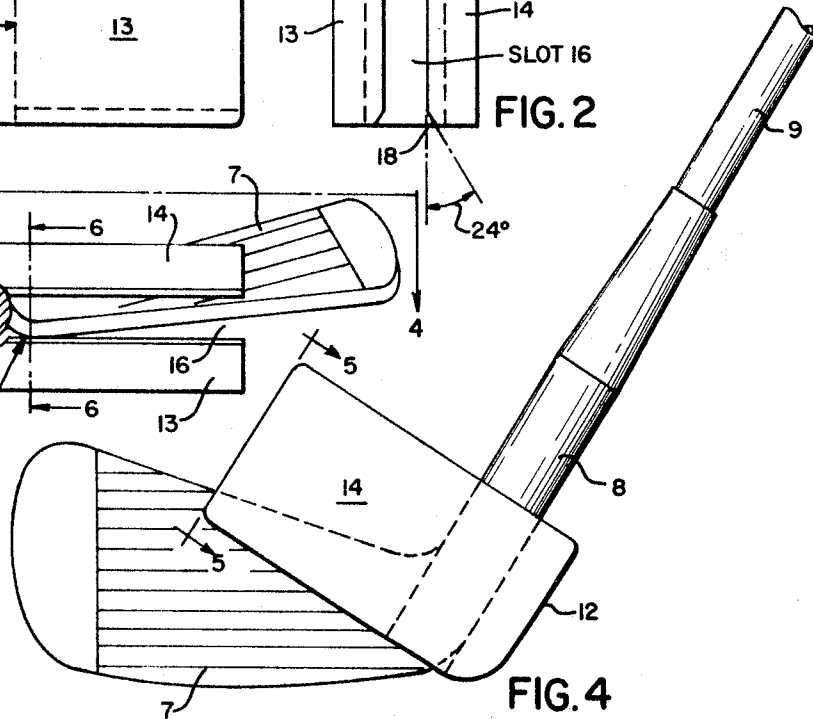


FIG. 4

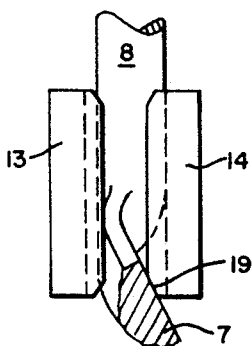


FIG. 5

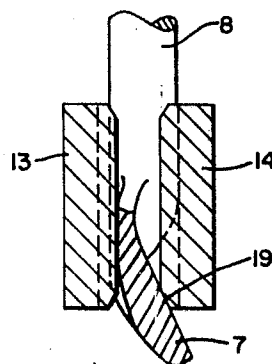


FIG. 6

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GOLF PRACTICE APPARATUS

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2 Claims

ABSTRACT OF THE DISCLOSURE

A weight-providing attachment is detachably secured to a golf club of the type presenting a head shank of a large diameter and a shaft shank of a smaller diameter. The attachment is a rigid body including a slot which accommodates the thickness of the upper part of the club head and a bore which communicates with the slot and receives the head shank. The slot width is large enough to pass over the shank of the shaft but not over the shank of the head. The lower edge of one wall of the slot may be beveled to engage the striking face of the club head.

BACKGROUND OF THE INVENTION

Field of the invention

This invention relates to a golf club and an attachment which may be removably secured to the head of the club to increase the weight of the club for practice swing and like purposes.

Description of the prior art

U.S. Patents No. 2,608,409, No. 2,950,115 and No. 3,133,735 recognize the desirability of increasing the weight of the head end of golf clubs for warm-up practice swing purposes. Thus, Pinkerton, in his Patent No. 2,608,409, provides a club with a tapered cylindrical collar either (1) composed of a single piece of rubber, having a central bore and a slot extending from along the full length of that bore radially outward through the peripheral surface of the collar so that it may be yieldably forced over the shank of the shaft and then moved axially downward to the head of the shaft for weight increasing purposes or (2) composed of two pieces of metal hinged together so that a hinged section can be swung outwardly to permit the weight to be installed or removed.

SUMMARY OF THE INVENTION

Objects of the invention

The principal object of the present invention is to provide a superior practice swing weight of the Pinkerton type.

Other important objects are: to provide a Pinkerton type of practice swung weight which is so durable that it will normally have a long life; to provide one, which can be put on the club right-side up or upside down; and to provide one, which, during use, cannot fly off of the golf club.

Another important object is to provide a Pinkerton type of practice swing weight which, when used on a golf iron, will lock itself to the club head so that it will not fall gravitationally downward along the club when the club is raised.

Statement of the invention

The principal objects of my invention can be achieved in a practice swing weight, which can be quickly attached to and removed from a golf club of the type having a head shank of larger diameter than the shaft shank, by constructing the weight in the form of a U-shaped block of non-yieldable material, such as metal, by providing

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the opening of the U with a bight portion or bore extending along the full length of the bight of the U and with a leg portion extending from the bore outwardly between the legs of the U, by making the bore large enough to receive the head shank and by making the minimum width of the leg portion of the slot large enough to permit the shaft shank to pass therethrough but small enough to prevent the head shank from passing therethrough.

One or more of all of the other objects of my invention can be achieved in a practice swing weight for golf irons by arranging the inner bottom edge of the front leg of the weight to engage the slanted front face of the golf head as the weight moves downwardly into its lowermost position on the golf iron. Through such engagement, the weight is forced to turn horizontally (i.e., rotate or twist about the head shank) until it reaches the bottom of its downward movement. While such forward movement is slight, it is sufficient to lock the weight to the golf club.

Brief description of the drawings

The invention is illustrated in the accompanying drawing wherein:

FIG. 1 is a side elevational view of a practice swing weight constructed in accordance with my invention;

FIG. 2 is an elevational view of the open end of the weight, as seen at the right in FIG. 1;

FIG. 3 is a top plan view of the weight corresponding to the view seen along line 3—3 of FIG. 1, this view showing the weight locked to the head of the golf iron;

FIG. 4 is a front face elevational view corresponding to the view seen along line 4—4 of FIG. 3;

FIG. 5 is an end view corresponding to one taken along line 5—5 of FIG. 4; and

FIG. 6 is a vertical sectional view corresponding to one taken along line 6—6 of FIG. 3.

DESCRIPTION OF THE PREFERRED EMBODIMENT

The presently preferred embodiment of my invention is intended for use with a golf iron of the type having a head 7, a head shank 8 and a shaft shank 9, the external diameter of which is smaller than the external diameter of head shank 8.

As shown in the drawings, the preferred embodiment comprises an integral horizontally elongate U-shaped block 11 of metal, such as brass, having a bight 12 and legs 13 and 14. The block 11 has vertically spaced end edges providing top and bottom ends and horizontally spaced end edges providing first and second ends with bight 12 at its second end. The slot of the U, which, laterally, is open at its first end and which is vertically open at both top and bottom ends, has a bight portion or bore 15 and a leg portion 16. The bight portion 15 is in the form of a bore extending along the full length of the bight 12 of the U, and having a diameter large enough to pass freely over the shaft shank 9 and to fit loosely (less freely) over the head shank 8.

The leg portion 16 of the slot extends from the full length of the bight portion or bore 15 radially outward to the outermost ends of the legs 13 and 14. The width of the leg portion 16 is smaller than the diameter of the bore 15 and preferably uniform. But, if not uniform, the minimum width of the slot portion 16 is made large enough to permit the shaft shank 9 to pass freely through the slot portion and small enough to prevent the head shank 8 from passing therethrough.

With the foregoing arrangement, it will be appreciated that a rigid U-shaped weight, constructed in accordance with my invention and arranged either "rightside" up with one end of its vertical bore 15 at its bottom or

"upside" down with the other end of its bore at its bottom, may be easily and quickly placed over a golf club shaft 9 and then moved along shaft 9 toward the head 7 of the club until its bore passes over and fits somewhat snugly around the shank 8 of the golf club head 7 and the slot contemporaneously passes over the upper part of the head and engages the front and rear faces thereof. Since it is made of rigid material and since the width of the slot portion 16 will not permit its being removed directly from the head shank 8, it cannot normally fly off the golf club accidentally or otherwise.

In further accordance with my invention, the inner horizontal bottom edge of leg 14, as seen in FIG. 2 (which leg is intended to extend on the front face side of the golf club head, as seen in FIGS. 3-6), is beveled, preferably throughout the full length of the leg portion 16, as indicated at 18. The angle of this bevel preferably (but not necessarily) approximates 24°. If desired, it may be made to conform to the angle of the slanted front face of a particular golf club iron with which the weight is to be used.

When a U-shaped weight 11, having a beveled edge 18, is operatively positioned on a golf iron with its legs 13, 14 projecting horizontally on the front and back sides of the golf head 7, the bottom bevel 18 will engage the slanted front face of the golf iron along a horizontal line 19. Viewing the golf head and an attached U-shaped weight from above, as they appear in FIG. 3, and assuming that the head 7 remains stationary, it will be understood that a contact pressure is created where the front leg 14 of the weight engages the stationary front face of the head 7 along line 19.

As a result of this contact pressure, the weight (as a whole) is urged counterclockwise about stationary head shank 8. Accordingly, the weight should tend to rotate counterclockwise.

With the slightest degree of counterclockwise rotation, the bore wall on the front side of the weight is forced to engage the shank 8 at point 20 while the rear leg 13 of the weight is urged forwardly into pressurized engagement with the golf iron at a rear contact point 21 near the shank 8. As a result of the contact pressures created along line 19 and points 20 and 21, an operatively positioned weight appears to be firmly locked to the golf head without, at the same time, rendering its removal difficult. It can be easily unlocked by applying a slight upward lifting pressure at the lower end of the bight 12.

When only one long horizontal slot-side edge of a leg is provided with a bevel 18, the weight should be arranged to place that edge at the bottom of the weight and on the front side of the golf head. To permit the weight to be attached to right-hand club, such as the one shown, without paying any attention as to which leg is the front leg and which end of the bore 15 is its top or bottom end, the top slot-adjacent edge of leg 13 is beveled. When all four of its "slot" edges are beveled, the weight can be used on right-hand and left-hand golf clubs with either end of its bore 15 at the bottom of the weight.

I have obtained excellent results with an 8 oz. U-shaped weight dimensioned as follows: horizontal length 2½ inches, overall horizontal thickness 1 inch, height 1¼ inches, a uniform slot width of .390 inch and a uniform bore diameter of .578 inch.

Having described my invention, I claim:

1. Golf practice apparatus comprising the combina-

tion of a golf club and a weight-providing member adapted to be detachably secured thereto,

(A) said club including

(1) a head having a slanted ball striking front face, a rear face, a heel end and a head shank of a predetermined diameter secured to said heel end,

(2) a shaft of a diameter less than said predetermined diameter axially aligned with and secured to said head shank,

(B) said detachable member comprising an elongate rigid body having

(1) horizontally spaced end edges providing first and second ends,

(2) vertically spaced end edges providing top and bottom ends, and

(3) a slot extending vertically through said body from its top end to its bottom end and extending horizontally therethrough from its first end to adjacent its second end and there terminating in open communication with a bore extending vertically through said body adjacent said second end,

(a) said slot having a width smaller than said predetermined shank diameter to prevent the passage of said head shank therethrough but large enough to permit said club shaft to be passed freely therethrough,

(b) said bore having a diameter larger than said slot width to receive said club shaft from said slot and larger than said predetermined shank diameter to permit the vertical insertion of said head shank into said bore,

(c) said slot width being larger than the thickness between the upper part of the front and rear faces of the club head to permit the insertion of that part of the head vertically into said slot,

(d) said slot width and the horizontal length of said slot including the diameter of said bore being such that, when said upper head and said head shank are respectively inserted into said slot and bore, opposed walls of said slot are forcibly engaged, respectively, with said front and rear faces and said head shank is forcibly engaged against said bore so that the removal of said detachable member is prevented when swinging said club.

2. The apparatus of claim 1, wherein:

the lower edge of at least one wall of said slot is beveled for engagement with the slanted front face of the head.

References Cited

UNITED STATES PATENTS

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GEORGE J. MARLO, Primary Examiner

U.S. Cl. X.R.