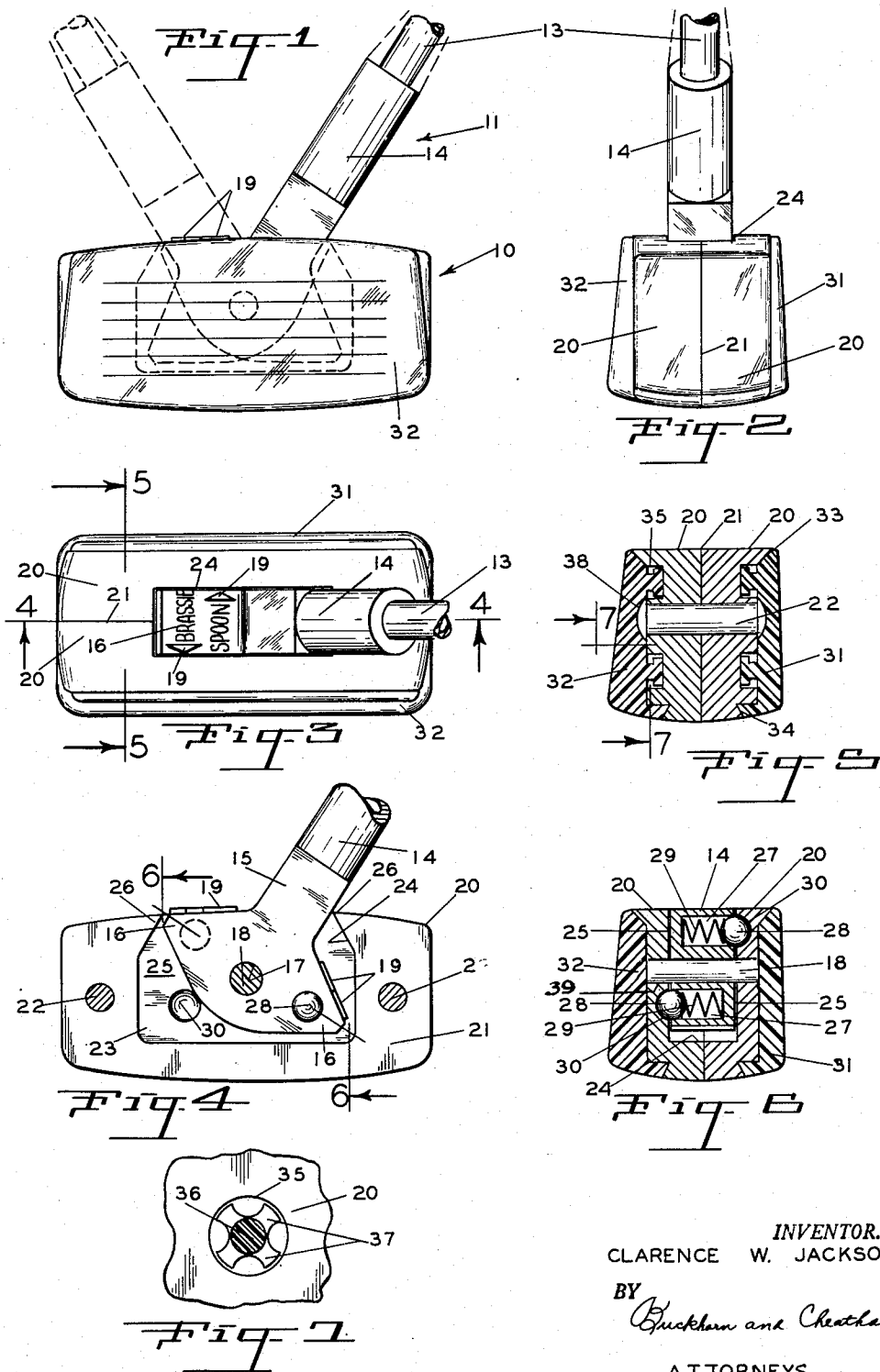


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DOUBLE-FACED GOLF CLUB

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DOUBLE-FACED GOLF CLUB

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3 Claims. (Cl. 273-80)

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The present invention comprises an improvement in golf clubs, the invention being directed toward the provision of means whereby a single club may serve for a plurality of uses. One object of the present invention is to provide a golf club which may be readily adapted for use by right-handed or left-handed players. A further object of the present invention is to provide a golf club having a pair of oppositely disposed impact faces of differing character and a shaft which may be disposed in oppositely directed, angular relationship to the head whereby the same club may be used for dual purposes, such as would be the case if one of the impact faces were designed for driving a ball from a tee and the other were designed for lifting the ball from the fairway, such as in the manner of a brassie or spoon. The ultimate object of the present invention, therefore, is to provide a four-way golf club having opposed impact faces of differing character and which may be used by either a right-handed or left-handed player.

A further object of the present invention is to provide a golf club of the foregoing character which is easily formed of durable materials and which may be economically fabricated and assembled.

A further object of the present invention is to provide a golf club of the foregoing character comprising a metal core which is symmetrically disposed with respect to the shaft whereby the weight of the club will be properly distributed in any position of use, and a pair of plastic impact members disposed upon the opposite faces of the metal core. By reason of this construction, impact faces of differing character may be provided, any difference in volume on opposite sides of the head involving plastic material of light weight, the effect upon the balance of the club resulting therefrom being negligible.

The foregoing and other objects and advantages of the present invention will be more readily apparent from inspection of the following specification, taken in connection with the accompanying drawing, wherein like numerals refer to like parts throughout.

In the drawing,

Fig. 1 is a face view of a golf club built in accordance with my invention, only a portion of the shaft being shown;

Fig. 2 is an end view of Fig. 1;

Fig. 3 is a plan view of Fig. 1;

Fig. 4 is a vertical section taken substantially along line 4-4 of Fig. 3;

Fig. 5 is a vertical section taken substantially along line 5-5 of Fig. 3;

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Fig. 6 is a vertical section taken substantially along line 6-6 of Fig. 4; and

Fig. 7 is a vertical section, on an enlarged scale, taken substantially along line 7-7 of Fig. 5.

The present invention comprises a golf club consisting of a head, generally indicated by the numeral 10, and a shaft, generally indicated by the numeral 11. The shaft may be of any suitable construction, in the present instance comprising a tubular steel shaft 13 mounted in a hosel in the stem of a lower end portion 14. The lower end portion 14 consists of a symmetrical, metal member having parallel side surfaces 15 and a pair of toes 16 symmetrically extending in opposite directions, and is provided with a centrally disposed, transverse bore 17 for reception of a transverse pivot 18. The centerline of the bore 17 is disposed along the intersection of the major axis of the lower end portion in the vertical sense and the major axis of the lower end portion in the horizontal sense, the former axis including the axis of the shaft 13 and the latter axis being in a central plane through the tips of the toes 16. The toes are outwardly tapered in a vertical sense whereby when the shaft is moved through a vertical arc from one extreme position to the other, as illustrated in Fig. 1, one or the other upper surfaces of the toes 16 may be brought to a horizontal position. Each of the upper surfaces of the toes 16 is provided with a pair of oppositely disposed, directional arrows 19 alongside of which are provided words indicating the character of the faces of the head toward which the arrows point. The arrows 19 and the associated words may be cast into the metal when the part 14 is being formed.

The head 10 comprises a symmetrical, metal core consisting of a pair of identical cast metal core members 20 having centrally disposed, vertical faces in face-to-face relationship along a central plane as indicated at 21, the core members 20 being held together by a pair of rivets 22. Opposed depressions formed in the surfaces 21 of the core members 20, indicated at 23 in Fig. 4, define a substantially rectangular, upwardly opening, centrally disposed slot 24 in the head. The vertical sides of the depressions 23 form the side walls 25 of the slot 24, which side walls are parallel, vertical, and in symmetrical disposition with respect to the vertical, central plane of the metal core of the head defined by the surfaces 21. The dimensions of the slot are such that when one upper surface of one toe 16 is brought into substantially flush relation with the upper surface of the head, the lower surface of the opposed toe will be close to the bottom of the slot 24. While

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the slot is substantially rectangular, the mouth thereof may be reduced in length by means of overhanging lip portions indicated at 26 in order to prohibit the entry of grass and other debris into the slot.

In order to retain the shaft in its positions of utility with respect to the head, there is provided ball detent means as follows. Each of the toes 15 is provided with a laterally directed socket 27, the sockets being in horizontally spaced relation to the pivot 18 and opening toward the opposed side walls 25 of the slot. A ball 28 is loosely mounted in each of the sockets 27 and is urged outwardly by means of a spring 29 compressed between the bottom of the socket and the ball. A plurality of hemispherical depressions 30 are provided in the side walls 25, the depressions being arranged to provide upper and lower symmetrically disposed pairs of depressions engageable by the balls 28 when the shaft is at its limits of movement. It will be appreciated from the foregoing that the metal mass of the head is symmetrically disposed with respect to the shaft 13 in either relative position of the shaft to the head.

In order that the same club may be used for a plurality of purposes, it is preferred that the impact faces be of differing character, as indicated at 31 and 32. However, it will be appreciated that the face members are substantially identical except as to the surface characteristics thereof. Each of the outer surfaces of the core members 20 is preferably provided with angularly disposed edge portions which interlock with angularly disposed edge portions of the impact members so as to key the impact members to the core, such portions being indicated generally at 33 and 34 in Fig. 5. The outer surface of each of the core members 20 is provided with a plurality of cylindrical sockets 35, as more clearly seen in Fig. 7, and the inner surface of each of the impact faces is provided with a plurality of cooperative key projections comprising cylindrical stems 36 of smaller diameter than the sockets 35, at the inner ends of which are a plurality of radially projecting arms 37. When assembling the impact face members to the core, the sockets 35 are partially filled with a suitable adhesive in plastic condition and the key projections of the impact faces are pressed therinto, causing the plastic to flow around and over the radial arms 37 whereby the members are locked together by the adhesive when it hardens. As will be seen in Fig. 5, the inner surfaces of the impact face members are provided with suitable depressions 38 to receive the ends of the rivets 22. It will be seen in Fig. 6 that the pivot member 13 may be loosely disposed in the transverse bore 17 and in aligned openings 39 in the core members 20. Assembly of the construction is thereby facilitated, and repair is made possible since the impact face members may be removed whereupon the pivot 13 may be driven from its position.

Having illustrated and described a preferred embodiment of the present invention, it should be apparent to those skilled in the art that the same permits of modification in arrangement and detail. I claim as my invention all such modifications as come within the true spirit and scope of the appended claims.

I claim:

1. A four-way golf club comprising a generally rectangular head having opposed impact faces, said head having a centrally disposed,

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elongated slot opening toward its upper surface, said slot having vertical, parallel side walls, a shaft having a lower end portion, said lower end portion having vertical side surfaces disposed in face-to-face relation to said side walls, pivot means extending normally to said side walls and pivotally connecting said shaft to said head at the center of said slot, said lower end portion having an opposed pair of toes thereon extending toward the ends of said slot from said pivot means, each of said toes having a socket therein parallel to said pivot means and opening in opposite directions, a ball loosely mounted in each of said sockets and a spring compressed between each of said balls and the bottom of its respective socket, and symmetrically arranged upper and lower pairs of ball-receiving depressions in the respective side walls of said slot engageable by said balls along the paths of movement thereof when said shaft is rocked about said pivot means, one of said balls engaging an upper socket and the other of said balls engaging a lower socket simultaneously to retain said shaft in an extreme position of angular relationship with respect to said head.

2. A four-way golf club comprising a generally rectangular head having opposed impact faces of different character, said head having a centrally disposed, elongated slot opening toward its upper surface, a shaft having a lower end portion disposed in said slot, transverse pivot means pivotally connecting said shaft to said head midway of said slot, said lower end portion having oppositely extending, outwardly tapering toes thereon extending toward the ends of said slot, each of said toes having a socket therein parallel to said pivot means and opening toward a side wall of said slot, a ball loosely mounted in each of said sockets and a spring compressed between each of said balls and the bottom of its respective socket, and symmetrically arranged upper and lower pairs of ball-receiving depressions arranged in the respective sides of said slot engageable by said balls along the paths of movement thereof when said shaft is rocked about said pivot means, one of said balls engaging an upper socket and the other of said balls engaging a lower socket simultaneously to retain said shaft in an extreme position of angular relationship with respect to said head, said head comprising a metal core symmetrically disposed with respect to the longitudinal, vertical, central plane of said slot, and plastic face members secured to the opposed, outer sides of said core.

3. A four-way golf club comprising a generally rectangular head having opposed impact faces of different character, said head having a centrally disposed, elongated slot opening toward its upper surface, a shaft having a lower end portion disposed in said slot, transverse pivot means pivotally connecting said shaft to said head midway of said slot, said lower end portion having oppositely extending, outwardly tapering toes thereon extending toward the ends of said slot, each of said toes having a socket therein parallel to said pivot means and opening toward a side wall of said slot, a ball loosely mounted in each of said sockets and a spring compressed between each of said balls and the bottom of its respective socket, and symmetrically arranged upper and lower pairs of ball-receiving depressions arranged in the respective sides of said slot engageable by said balls along the paths of movement thereof when said shaft is rocked about

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said pivot means, one of said balls engaging an upper socket and the other of said balls engaging a lower socket simultaneously to retain said shaft in an extreme position of angular relationship with respect to said head, said head comprising a metal core consisting of a pair of identical core members having inner faces engaged along the longitudinal, vertical, central plane of said slot whereby the weight of said core is symmetrically disposed with respect to said shaft, means fastening said core members

together, and plastic face members secured to the opposed outer sides of said core.

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