This invention relates to golf clubs. More particularly, this invention relates to the construction of a golf club head and shaft thereof, whereby the driving and lofting of golf balls is greatly improved and facilitated.

One of the objects of this invention is to provide an improved golf club head and shaft wherein the weight of the club is so concentrated and distributed as to provide the best possible centrifugal balance thereof.

It is another object of this invention to provide an improved golf club head wherein the top surface edge thereof is contoured to permit easy alignment of the club perpendicular to the line of flight of a driven golf ball.

It is an object of this invention to provide a golf club head having a bottom surface contoured in a manner to eliminate heel or toe contact of the club head with the ground at any angle of inclination or declination of the club to the ground.

It is another object of this invention to provide a golf club head having an undersurface contoured in a manner to accommodate the club to any angle of inclination or declination thereof to the ground, whereby play out of divot holes or other irregular conditions of the fairway is facilitated.

It is another object of this invention to provide a golf club head having an undersurface contoured in a manner to minimize any resistance to the club when in the process of taking a divot, thereby permitting a smoother follow-through of the swing of the club.

Other objects and attendant advantages will appear from the following detailed description of the attached drawings wherein:

FIG. 1 is a front view of the golf club head and shaft as constructed in accordance with this invention.

FIG. 2 is a rear view of the golf club head and shaft as constructed in accordance with this invention.

FIG. 3 is a side view of the golf club head and shaft as constructed in accordance with this invention and as seen from the left of FIG. 1.

FIG. 4 is a plan view of the golf club head and shaft as constructed in accordance with this invention.

FIG. 5 is a perspective view of the golf club head and shaft as provided in accordance with this invention.

The following description is directed to the specific form of the golf club as constructed according to this invention and shown in the drawings and is not intended to be addressed to the scope of the invention as exemplified by the drawings. It will be appreciated that the drawings represent preferred embodiments of the invention which is capable of being practiced in a wide variety of forms and arrangements.

Advancing herewith to the specific form of the invention illustrated in the drawings, a golf club head 10 having a shaft 11 formed integrally therewith is contoured to have a flat monoplanar surface or face 12 of generally semicircular proportion, as shown in FIG. 1. The plane of the face 12 is disposed in a direction to form an obtuse angle at the front of the club with the axis of the shaft 11 so that the top of the face surface 12 lies rearward of the center-line of said shaft 11 and the bottom of the front surface 12 lies forward of the center-line of the shaft 11, as may be seen in FIGS. 3 and 4. As illustrated in FIGS. 1 and 4, the face 12 of the club head 10 is provided with grooves 13 which conform with U.S.G.A. specifications. The rearward portion of the club head 10 is dual planar and contoured to have an upper rear surface area 14 and a lower rear surface area 15, the planes of which intersect along the line 16. The angle formed between the intersecting plane surfaces 14 and 15 is an obtuse angle measured inwardly of said head, the apex of which at any point on the line 16 is the point on the rear surface of the club head 10 farthest removed from the face 12, and consequently, the intersection 16 forms a ridge which describes the thickest part of the club head. As seen in FIG. 2, the line described by the ridge intersection 16 of the plane surfaces 14 and 15 stems from the topmost portion of the club head 10 adjacent the shaft 11 above the heel of the club head diagonally downward to a point 17 on the periphery of the club head 10 approximately midway between the sole of the club head and its toe. The plane surface 14 angles or slants inwardly toward the flat face 12 from the ridge intersection 16 to the top surface 18 of the club head 10 and forms a triangular intersection thereof at the side of said head, as may be clearly seen in FIGS. 2 and 5. Likewise, the plane surface 15 angles or slants inwardly from the ridge intersection 16 toward the flat face 12 to a point 19 intermediate the rearmost and frontmost points of the front surface 12 at the bottom of the club head 10. In addition, the plane surfaces 14 and 15 angle inwardly in the direction of the flat face 12 from the peripheral portion of the club head on the side farthest removed from the shaft 11 progressively to the peripheral portions of the club head 10 nearest the shaft 11 and to those portions of the head adjacent the shaft 11.

At the top of club head 10 there is formed the relatively narrow flat monoplanar edge surface 18 which is easily visible to the golfer using the club and which may be used for aligning the club perpendicularly to the line of the projected flight of the golf ball. The surface 18 is a contoured surface which extends around the entire periphery of the club head 10 adjacent the flat face 12, being widest at the topmost portion of the club head and forming an obtuse angle thereat with the shaft 11 and steadily narrowing to merge ultimately with the bottom or sole surface 22 of the club head 10 at the point immediately adjacent the shaft 11. An outwardly forming side portion 23 is formed between the peripheral edges of the plane surfaces 14 and 15 rearwardly of the club head 10 and the peripheral edge surface 18 adjacent the flat face 12. The curved surface 23 originates at the triangular intersection 24 of the surface 18 and the surface 14 at the top portion of the club head 10 farthest removed from the shaft 11 and steadily widens (as may be best be seen in FIG. 3) to form a side surface of the club which reaches its maximum thickness at the ridge intersection 16. The surface 23 narrows from the intersection 16 progressively as it extends around the periphery of the semicircular club head 10 until it becomes the sole portion of the club and subsequently merges with the surface 18 at the sole portion of the club closest to the shaft 11. The sole portion 22 of the surface 23 is narrowest at the point of juncture thereof with the shaft 11, into which said surface smoothly merges.

It will be easily apparent that in the use of the golf club head and shaft, as aforesaid, the rounded contours of the sole portion thereof enable the player completely to avoid any undesirable heel or toe contact of the club head while driving or lofting the ball. Moreover, the sloped and rounded contours of the sole surfaces of the club head as provided in accordance with this invention greatly minimize any resistance in the process of taking a divot, thereby facilitating a smooth follow-through of the club when driving the ball.

It is a significant advantage of this invention as well that the club head is proportioned in a manner to place the center of the area of impact of the face of the club
with the ball between the point of greatest weight concentration and the shaft of the club, thereby promoting a balanced stroke while affording undiminished striking power.

Still another advantage of the club head and shaft as constructed according to this invention lies in the manner in which the top surface edge of the club head is contoured to enable the player to align the face of the club head perpendicularly to the line of flight of the ball.

Although this invention has been disclosed with reference to specific forms and embodiments thereof, it will be evident that a great number of variations may be made without departing from the spirit and the scope of this invention. For example, parts may be reversed, equivalent elements may be substituted for those specifically disclosed, and certain features of the invention may be used independently of other features, all without departing from the spirit and scope of this invention as defined in the appended claims.

Having thus described my invention, I claim:

1. A golf club having a head and a shaft, said head having a mono-planar front surface of generally semicircular proportion extending in a plane disposed angularly to said shaft whereby the top of said front surface lies rearward of said shaft and the bottom of said front surface lies forward of said shaft, a relatively narrow, flat edge surface extending around the periphery of said head, said edge surface forming a mono-planar top surface of said head, said top surface forming an obtuse angle with said shaft, said peripheral edge surface being widest at the top of said head and progressively narrowing to vanish at the bottom of said head at a point adjacent said shaft, a dual-planar rear surface comprising an upper area and a lower area, said areas being disposed in intersecting planes forming an obtuse angle inwardly of said head, said angle defining a ridge formed on the rear surface of said head extending diagonally from a point near the top of said head adjacent said shaft to a point on the periphery of said head intermediate the top and bottom thereof, said ridge defining at all points thereof the thickest part of said head, said upper area of said rear surface slanting inwardly toward said front surface from said ridge to said top surface and forming a triangular intersection therewith at the side of said head and said lower area of said rear surface slanting inwardly toward said front surface from said ridge to a point intermediate the rearmost and frontmost points of said front surface, said upper and lower areas of said rear surface slanting inwardly from the peripheral portions of said head farthest removed from said shaft progressively to the peripheral portions of said head nearest said shaft and to the portions of said head adjacent said shaft, a curved side surface formed between the peripheral edges of said dual-planar rear surface and said peripheral edge surface, said side surface originating at said triangular intersection of said upper area of said rear surface with said peripheral edge surface at the top of said head and progressively widening to a maximum between said ridge and said peripheral edge surface, said side surface being formed to curve smoothly at the base of said head to become a sole surface thereof, said sole surface progressively narrowing to a minimum adjacent said shaft and merging threat with said peripheral edge surface.

2. The golf club defined in claim 1, wherein said side surface slants outwardly of said head from the periphery of said rear surface to said peripheral edge.

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