

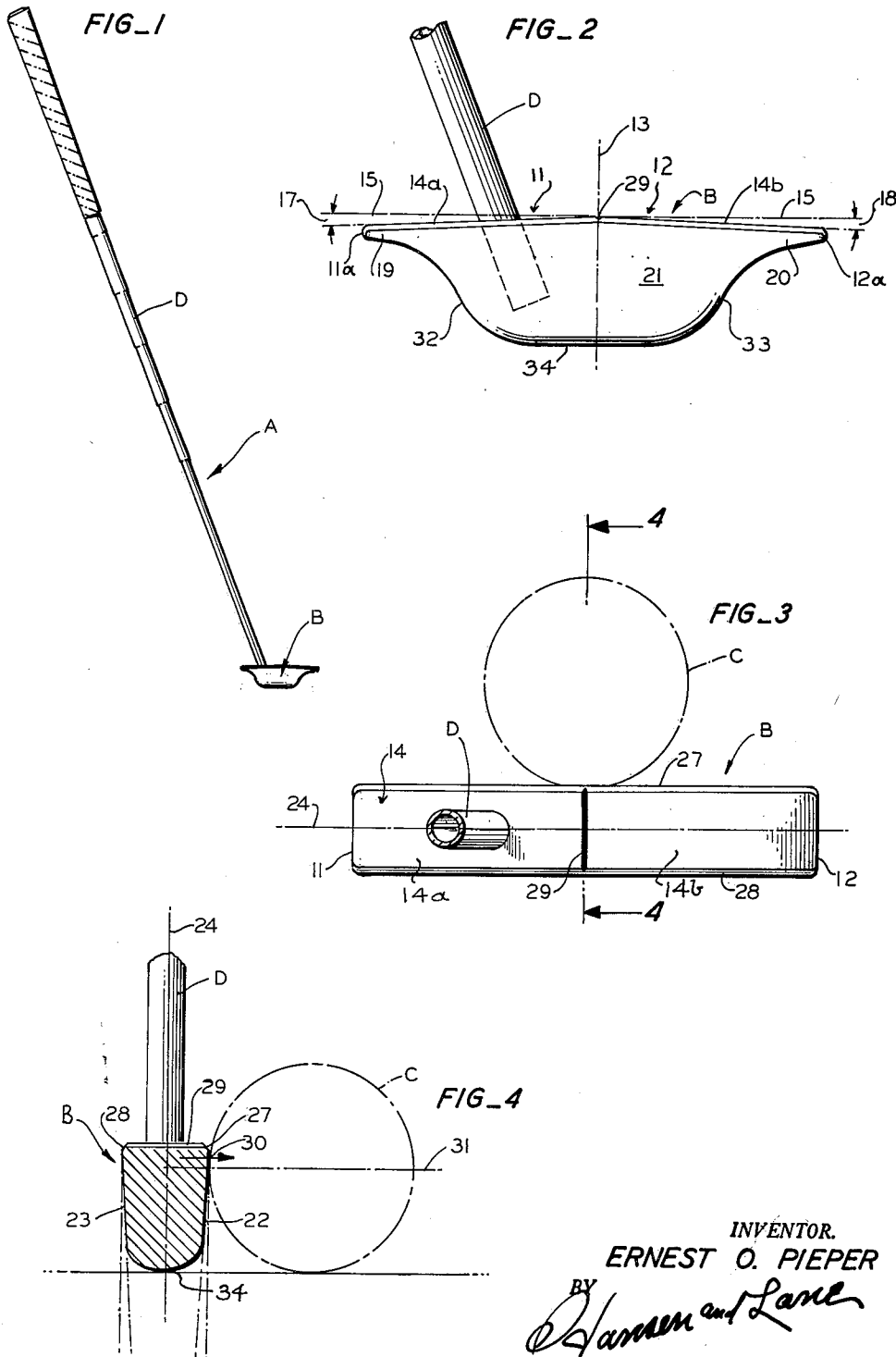
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GOLF PUTTER

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GOLF PUTTER

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The present invention relates to golf clubs, and pertains more particularly to a putter.

An object of the invention is to provide an improved putter head in which the weight is well centered and balanced, which has minimum resistance from the turf on which it is used, and which has a long top face with straight side edges of maximum length to facilitate accurate putting.

A further object of the invention is to provide an improved putter the head of which has a long, uniform, straight-sided top surface divided into two slightly divergent planes intersecting each other substantially centrally of the length thereof in a line at right angles to the length of the putter, the putter head having the major portion of its mass located well inwardly from both ends thereof, the two side faces thereof being symmetrical to permit use of the putter as either a right or left hand club.

A further object of the invention is to provide a putter head having a short under side, with a major portion of the mass of the head located well inwardly from its ends, and with a thin flat top extension at each end thereof, the upper face of the putter having straight, parallel side edges co-incident with the ball striking side faces of the putter, the side faces being planform and symmetrical and converging slightly toward the lower edge of the club head to provide a slight overspin on a ball struck by the club.

These, and other objects and advantages of the invention, will be apparent from the following description and the accompanying drawings, wherein:

FIG. 1 is a side elevational view of a putter embodying the present invention.

FIG. 2 is an enlarged, fragmentary, side elevational view of the lower portion of the putter shown in FIG. 1.

FIG. 3 is a plan view of the portion of the putter shown in FIG. 2, the position of a ball being struck by the putter being indicated in dot-dash lines.

FIG. 4 is a sectional view taken along line 4-4 of FIG. 3.

Briefly, a putter A comprises a conventional golf club shaft D which may be of steel tubing, and a head B embodying the present invention. The head B may be of suitable metal, such as, for example, bronze or stainless steel. The two end half portions 11 and 12 (FIGS. 2 and 3) of the club head B on opposite sides of a transverse, vertical, medial plane indicated by the line 13 in FIG. 2 and the section line 4-4 of FIG. 3 are similar. The top 14 of the club is rectangular in outline as is apparent in FIG. 3, and comprises two planform top faces 14a and 14b which incline downwardly at slight, equal angles 17 and 18 from the horizontal 15 (FIG. 2) toward the ends of the club head B. Thin, overhanging end portions 19 and 20 of the club head provide a long top surface 14, but with the major portion of the mass of the head concentrated in a thick central portion 21. Ball engaging side faces 22 and 23 of the club head B are planform throughout, and converge symmetrically downwardly toward a longitudinal vertical central plane of the club head indicated by the line 24 in FIG. 4. Uniform bevels 27 and 28 are provided one along each longitudinal upper edge of the club head B to facilitate disposing the club head with these edges perpendicular to the desired initial line of travel of a golf ball C when struck by the club. A transverse sighting groove 29

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preferably is provided along the line of intersection of the inclined top faces 14a and 14b of the club head B to facilitate lining up the club head B with a ball C to be putted.

Referring to the drawings in greater detail, the club head B in plan, as shown in FIG. 3, is in the form of an elongated rectangle. With substantially the proportions illustrated and in stainless steel, a head length of approximately 4 inches, a width of $\frac{3}{4}$ of an inch and a height of one inch provides a club head having a weight of between 9 and 10 ounces, which is a desirable weight for a club to be used by men. For women's use these dimensions preferably are reduced slightly to provide a head weight of 7 or 8 ounces. The angles of divergence 17 and 18 (FIG. 2) between the planform top faces 14a and 14b and a horizontal plane 15 is slight, for example, of the order of one to three degrees, and the edge bevels 27 and 28 are uniform throughout the entire length of the club head B. Thus, when viewed from above as in FIG. 3 said bevels have the appearance of straight lines. The small groove 29 may be provided transversely of the center of the club head and preferably is located at the intersection of the planform top faces 14a and 14b. Each of the side faces 22 and 23 of the club head B is planform, these two side faces preferably converge symmetrically toward the lower edge of the club head, so that if continued they would intersect each other at the central plane of the club head indicated by the broken line 24 in FIG. 4. The angle of convergence of these side faces with the central plane 24 preferably is of the order of $\frac{1}{32}$ of an inch per inch of height of the club head. With the side faces of the club head thus inclined, when a ball C (FIG. 4) is struck by the club with the club shaft D disposed substantially in a vertical plane indicated by the broken line 24, the point of impact 30 (FIG. 4) of a striking face 22 with a ball C will be slightly above the horizontal central plane of the ball indicated by the line 31 in FIG. 4. This striking of the ball above its center of gravity tends to impart a slight overspin to the ball, which is desirable in putting.

As best illustrated in FIG. 2, the projecting end portions 19 and 20 of the club head B are quite thin, and therefore of light weight. The club head thickens symmetrically along curved lines 32 and 33 a substantial distance inwardly from the ends, so that the major portion of the mass of the club head is thus concentrated in the thick central portion 21 of the club head and well inwardly from the ends 11a and 12a. This concentration of the mass centrally of the club head tends to impart a solid driving force to a ball C when struck by the club. The bottom surface 34 of the club head preferably is curved transversely as shown in FIG. 4, and, due to its relatively short length, permits slight variances in its position from one shot to the next without noticeably changing its resistance of the turf (not shown) when swung across it.

The invention provides a simple, and effective putter, which is perfectly balanced, which facilitates properly lining up the putter when addressing the ball, and which, by concentrating and centering the mass of the club head adjacent the point of impact with the ball, it aids a player using the club in directing a ball along its desired initial course with a minimum of error.

While I have illustrated and described a preferred embodiment of the present invention, it will be understood, however, that various changes and modifications may be made in the details thereof without departing from the scope of the invention as set forth in the appended claims.

Having thus described the invention, what I claim as new and desire to protect by Letters Patent is defined in the following claims.

I claim:

1. In a golf putter comprising a shaft, and a putter head mounted on the lower end of said shaft; said head being elongated, a substantially flat striking face on each of the long sides thereof, the upper edges of said faces being parallel, the two half portions of said club head on opposite sides of an upright, medial, transverse plane therethrough being substantially symmetrical, a flat top face on each half portion of the club head, a head portion of substantial thickness centered medially of the length of said head, and containing a major portion of the weight of the head, each end portion of the head being cut away on its under side for a substantial distance and to a substantial height inwardly from each end of the head, thereby leaving a thin, and therefore light weight, portion extending beyond each end of the thick, heavy central portion, whereby the parallel top edges provide extended sighting lines, parallel with the striking faces of the club head, and the cut away portions leave most of the weight of the club head centered in the deep, heavy central portion thereof for maximum impact force.

2. In a golf putter comprising a shaft, and a putter head mounted on the lower end of said shaft; said head being elongated, a substantially flat striking face on one of the long sides thereof, the longitudinal upper edges of said head being parallel, the two half portions of said club head on opposite sides of an upright, medial, trans-

verse plane therethrough being substantially symmetrical, a flat top face on each half portion of the club head, a head portion of substantial thickness centered medially of the length of said head, and containing a major portion of the weight of the head, each end portion of the head being cut away on its under side for a substantial distance and to a substantial height inwardly from each end of the head, thereby leaving a thin, and therefore light weight, portion extending beyond each end of the thick, heavy central portion, whereby the parallel top edges provide extended sighting lines, parallel with the striking face of the club head, and the cut away portions leave most of the weight of the club head centered in the deep, heavy central portion thereof for maximum impact force.

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