L. H. VORIES.

GOLF CLUB.

APPLICATION FILED FEB. 19, 1914.

1,165,559. Patented Dec. 28, 1915.

Fig. 1.

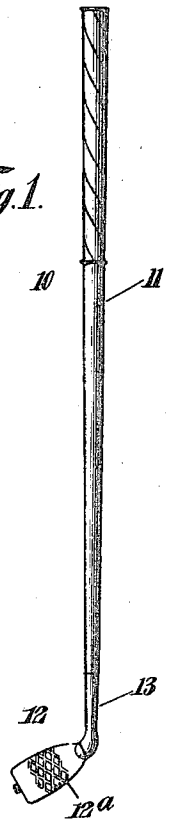
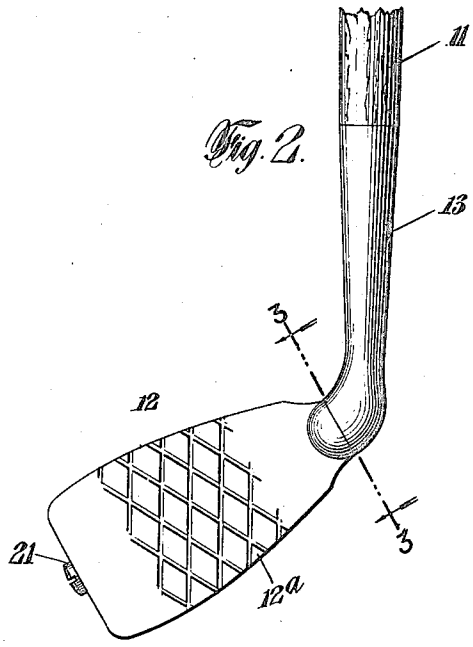


Fig. 2.



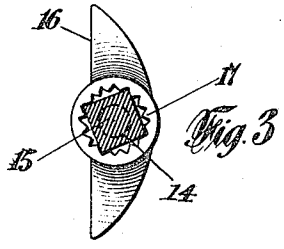
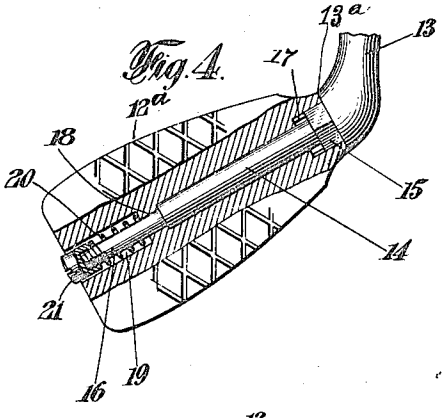


Fig. 3

Fig. 4.



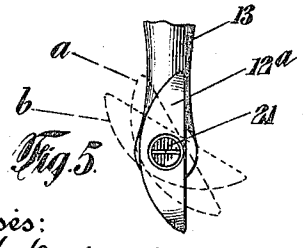


Fig. 5.

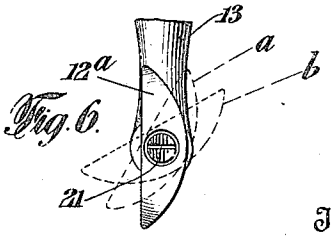


Fig. 6.

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UNITED STATES PATENT OFFICE.

LOUIS H. VORIES, OF NEW YORK, N. Y.

GOLF-CLUB.

1,165,559. Specification of Letters Patent. Patented Dec. 28, 1915.

Application filed February 19, 1914. Serial No. 819,633.

To all whom it may concern:

Be it known that I, LOUIS H. VORIES, a citizen of the United States, residing at the city of New York, borough of Manhattan, county and State of New York, have invented certain new and useful Improvements in Golf-Clubs, of which the following is a full, clear, and exact specification.

My invention relates to improvements in that type of golf clubs in which the head is both adjustable and reversible so as to permit of said head being adjusted to different angles relative to the shaft in order to adapt the club for use in making different kinds of strokes, and also to adapt said club for use by left-handed as well as right-handed players.

To the attainment of the aforesaid object and ends my invention consists in the novel details of construction and in the combination, connection and arrangement of parts hereinafter more fully described and then pointed out in the claim.

In the accompanying drawings forming part of this specification, wherein like numerals of reference indicate like parts, Figure 1 is a side view showing one form of golf club constructed according to and embodying my said invention; Fig. 2 is an enlarged detail side view showing the lower portion of the shaft with a head constructed according to my invention applied thereto; Fig. 3 is a transverse section taken on the line 3—3 of Fig. 2 looking in the direction of the arrow; Fig. 4 is a central, longitudinal section of the head showing the means for adjusting the same relatively to said shaft, and the means for automatically holding the same to its adjusted position; Fig. 5 is an enlarged detail side view of the lower portion of a shaft with the head shown in several adjusted positions for use by a right-handed player, and Fig. 6 is a similar view showing the head adjusted to a plurality of positions for use by a left-handed player.

In said drawings 10 designates the club as a whole comprising a shaft 11 made of wood or other suitable material, and provided at its lower end with a metallic head 12. The said head 12 comprises a tapered tubular shank 13 adapted to receive the lower end of the shaft 11 to which it is firmly secured and a head proper 12^a.

14 denotes a support in the form of a bolt having one end rigidly secured to the lower end of the shank 13 and its other end free. The said bolt 14 is provided adjacent to its inner end, which is secured to the shank 13, with a squared head 15, and at its opposite end said bolt is provided with a reduced screw-threaded portion 16.

The head proper 12^a is recessed longitudinally from end to end and at its inner end the same is provided with a series of angular projections or teeth arranged side by side and forming a serrated opening 17 adapted to receive the square portion or head 15 of the bolt 14. The forward or reduced end of the bolt 14 extends through a bearing 18 provided in the head proper 16 adjacent to its cutter end. The inner side of said bearing 18 also serves as a stop for the forward end of the bolt 14.

The extreme outer end of the opening in the head 12^a is made slightly larger in diameter than the remainder of said opening so as to form a chamber portion 19 to receive a coil spring 20 which is disposed upon the reduced threaded end 16 of said bolt, and to receive a nut 21, which latter is adapted to engage with the screw-threaded end of said bolt 14 and bear against the outer end of the spring 19 and hold the inner end thereof against the bearing 18 for said bolt 14. By screwing the nut 20 more or less upon the threaded end 16 of the bolt the tension of the spring 20 may be increased or diminished in order to hold the inner end of the head 12 firmly against the shoulder 13^a provided upon the lower end of the shank 13.

The operation of my improved club is as follows: When it is desired to use the club for driving great distances, as for example at the beginning of a game, the head 12 should be adjusted to about the position indicated in full lines at Fig. 5. In this position the flat side of the head will be substantially parallel with the length of the shaft of the club and thus present a flat surface to the ball, which will be substantially at right angles to the direction of its flight. When it is desired to drive the ball and at the same time raise the ball slightly, it merely becomes necessary to grasp the head 12 in one hand and draw it outwardly in order to release the square head 15 of the bolt of its engagement with the serrated opening 17 in said head, and then give said head a slight turn to the right, as indicated by the dotted position (*a*) at Fig. 5, whereby said head 12 will be brought to a slight

angle, relative to the length of the shank. When it is desired to drive the ball and at the same time elevate it still farther than can be accomplished by the adjustment just above described, the head 12 should be drawn outwardly again, as above described, and then further adjusted to the right, as shown in Fig. 5, and assume the position indicated by the dotted position (*b*). In this position the head will be brought at an angle of substantially 45° to the direction of the shaft and thus cause the ball to be materially lifted as the same is struck.

It will be noted that by means of my improved club I am enabled to overcome the necessity of carrying a number of clubs now required to drive a ball in different manners above described. By means of a single club constructed according to my invention I am enabled to obtain all the benefits and advantages of a series of clubs each having its head permanently adjusted at an angle slightly different from the others, which must now be employed when it is desired to make different drives. Further it is to be noted that my club is equally adapted for use by left-handed players as by right-handed players, and that the same when used by a left-handed player is capable of adjustment in the same manner and to the same extent that it is capable of adjustment when used by a right-handed player.

Having thus described my said invention, what I claim and desire to secure by Letters Patent is,—

A golf club comprising a shaft, a shank secured thereon, a bolt extending laterally from said shank and provided at its free end with screw threads, a polygonal head upon said bolt, a reversible head having a longitudinal opening extending therethrough to receive said bolt whereby to revolubly support said head upon said bolt, said head having a recess at one end adapted to engage with the polygonal head on said bolt, a spring for maintaining said recess in engagement with said polygonal head, and means for securing said head under tension upon said bolt all arranged wholly within the geometrical outline of said head, substantially as specified.

Signed at the city of New York, in the county and State of New York, this 13th day of February, nineteen hundred and fourteen.

LOUIS H. VORIES.

Witnesses:
CONRAD A. DIETERICH,
LOUIS B. HASBROUCK.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."