Feb. 27, 1923. 1,446,577.

J. L. NIX.

GOLF CLUB.

FILED DEC. 17, 1921.

Fig. 1

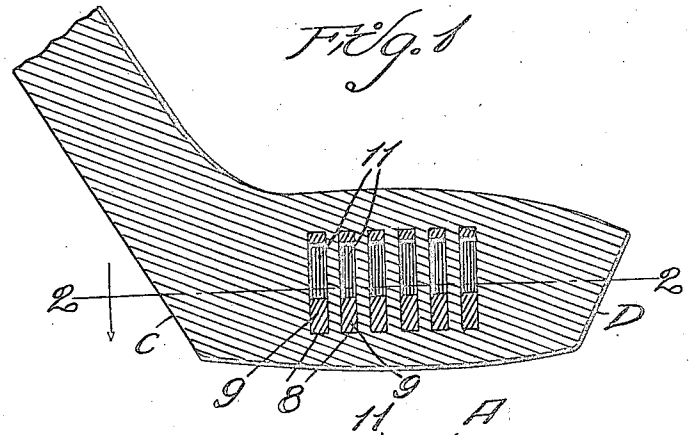


Fig. 2

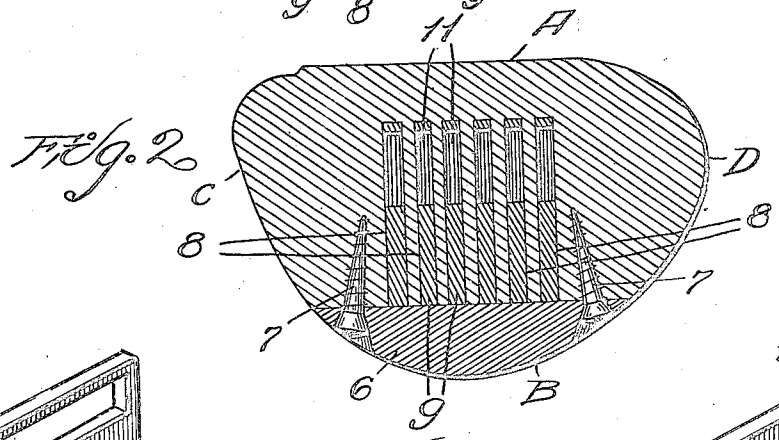


Fig. 3

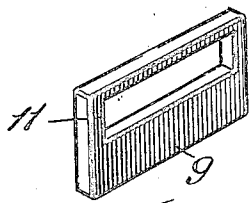
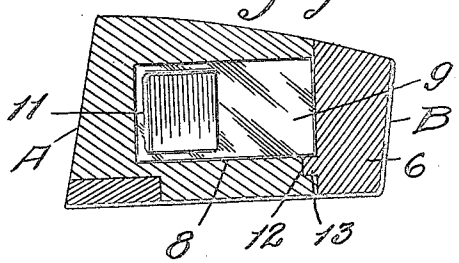


Fig. 4



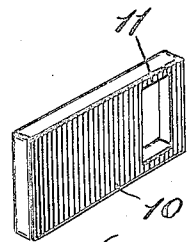


Fig. 5

INVENTOR

JAMES L. NIX,

by James L. Hopkins, ATTORNEY.

Patented Feb. 27, 1923. 1,446,577

UNITED STATES PATENT OFFICE.

JAMES L. NIX, OF HOMER CITY, PENNSYLVANIA.

GOLF CLUB.

Application filed December 17, 1921. Serial No. 522,978.

To all whom it may concern:

Be it known that I, JAMES L. NIX, a citizen of the United States, residing at Homer City, in the county of Indiana and State of Pennsylvania, have invented certain new and useful Improvements in Golf Clubs, of which the following is a specification, reference being had therein to the accompanying drawing.

My invention relates to improvements in golf clubs and has for its object to provide means for adjustably weighting and balancing a club-head.

By means of my invention the player, employing only a screw driver as a tool may himself alter the weight and shift the center of gravity of the club, to the end of adjusting the club to the particular requirements of the player.

Drawings.

Fig. 1 is a median vertical sectional view of the head of a golf-club, embodying my invention.

Fig. 2 is a horizontal sectional view of the same taken on the line 2—2 of Fig. 1.

Fig. 3 is a transverse vertical sectional view of the same.

Figs. 4 and 5 are perspective views of the weights or inserts employed.

Description.

As indicated in Fig. 2, for the purpose of this description, the golf-club head has the usual face A, back B, heel C, and toe D, its top and bottom faces being contoured as illustrated in Fig. 1; and the problem dealt with in this invention is to shift the balance of said head by means of removable weights, the weights themselves having characteristics hereinafter described.

To this end I provide a metallic back plate 6 removably held in place by screws 7—7, and serving to close the outer apertures of the pockets 8, extending into the club head as shown.

For use in said pockets 8 I provide metallic insert 9—10, contoured to fit exactly in said pockets 8, and punched out at one side of its normal center of gravity to form the apertures 11, for the purpose of having the bulk of the weight at its top, bottom, front or back when seated in the pocket 8. The weight 9 for example, is situated in its pocket with the aperture 11 uppermost, in order to add weight to the club-head at a point beneath its normal center of gravity, and said weight 9 will be reversed when desired to shift its weight above said normal center of gravity. Similarly, the insert 10 is reversible end for end within either of the pockets 8, in order to shift the balance of the club head.

It is obvious that the club head may be used if desired without inserts, or with inserts in any one or more of the pockets 8. The club head is provided with a groove 12 receiving the tongue 13 of the plate 6 to hold said plate accurately in position when secured in place by the screw 7.

In the commercial production of the club of my invention the club itself unweighted should preferably weigh about 9 ounces. The back plates 6 may be furnished of various weights in aluminum, brass or other metals, to obtain a wide range of weight therein, and the inserts 9—10 may be furnished in a wide range of weights so as to provide for delicate adjustments of the weight of the club, by any desired fractions of ounces, to make the total weight of the club precisely as desired, from the minimum weight to sixteen (16) ounces or more, at the same time providing the capacity of shifting the balance of the head of the club as desired, according to the dimensions of the pockets and the characteristics of the weights.

While I have illustrated as the preferred form of my invention rectangular pockets and rectangular inserts, either pockets or inserts may be of any desired conformation provided that the inserts fit accurately and precisely and interchangeably, in the pockets.

Instead of cutting out of the inserts 9 and 10 the apertures 11 to lessen the weight and shift the center of gravity of said inserts 9 and 10 the same result may be attained by making said inserts of combined materials of various specific gravity, such as combining part wood with part metal, or part lead with part aluminum. The essential object of my invention will be accomplished by the use of any form of pocket with an insert closely fitting therein (so far as weight-adjustment of the head is concerned), and (for balancing purposes) employing an insert so constructed that its weight may be shifted relatively to the pocket (and therefore relatively to the club-head) by reversing said insert, top-for-bot-

tom or end-for-end as its construction may call for, within said pocket.

While my invention requires a plurality of the pockets 8, they may be arranged and grouped in series or otherwise; said pockets being of uniform contour and dimensions, and the inserts being uniformly of a size and comformation to fit precisely in, and completely fill, either of said pockets.

Claims.

Having thus described my invention, what I claim as new and desire to have secured to me by the grant of Letters Patent, is—

1. In a golf club, a head provided with a series of pockets; an insert having an aperture formed at one side of its normal center of gravity and arranged to be removably seated in either of said pockets; and means for securing said insert when so seated.

2. In a golf club, a head provided with a plurality of pockets of uniform contour and dimensions; an insert formed to completely fill either of said pockets and having an aperture at one side of its normal center of gravity; and means for removably securing said insert in place within either of said pockets.

3. In a golf club, a head provided with a series of pockets; and an insert contoured to fit either of said pockets and whose weight may be shifted relatively to the pocket by top-for-bottom or end-for-end reversal in said pocket, said insert having an aperture formed at one side of its normal center of gravity.

In testimony whereof I hereunto affix my signature.

JAMES L. NIX.

Witnesses:
JOHN D. GEORGE,
H. D. MCCUMMINGHEY.