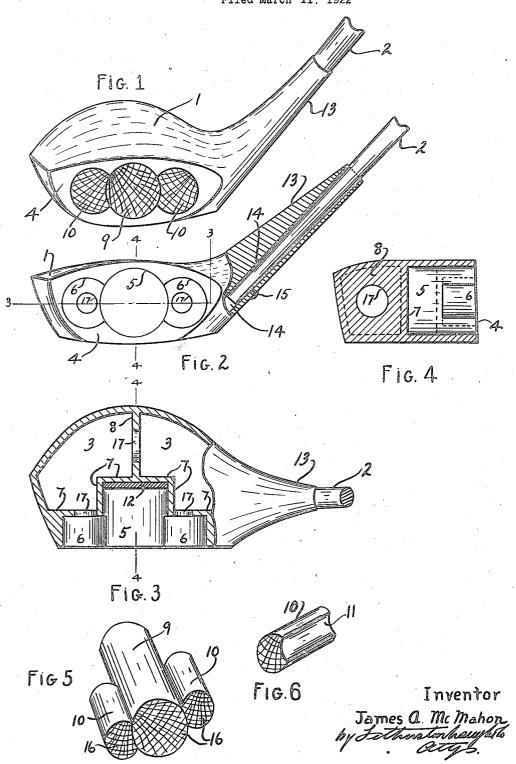
J. A. McMAHON

GOLF CLUB

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STATES PATENT UNITED OFFICE.

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To all whom it may concern:

Be it known that I, James Alexander McMahon, a subject of the King of Great Britain, and a resident of the city of Hamilton, in the county of Wentworth, Province of Ontario, Dominion of Canada, have invented certain new and useful Improve-ments in Golf Clubs, of which the following is a specification.

My invention relates to improvements in golf clubs and the method of making same and the object of the invention is to devise a metal construction for the heads of clubs such as drivers, which have formerly been 15 made of wood, whereby a club of superior appearance and greater durability is produced, and a further object is to so construct the metal head, that a very exact balancing of the club may be readily obtained.

My invention consists of a golf club having a cast metal head suitably cored for lightness and adapted to receive the shaft, said head provided with inwardly extending orifices in the driving face thereof into 25 which are secured hardwood inserts, and provision being made for placing a balancing weight within the central portion of the head behind the wooden inserts, all as hereinafter more particularly described and illustrated in the accompanying drawings in which;

Fig. 1 is a perspective view of the head of a golf club constructed according to my invention.

Fig. 2 is a side elevation showing my improved metallic head before the insertion of the wooden inserts, the right hand portion being shown in section.

Fig. 3 is a plan view of Fig. 2, the left 40 hand portion being shown in section on the

line 3, 3.

Fig. 4 is a vertical section on the line 4, 4 of Figs. 2 and 3.

Fig. 5 is a perspective view showing the 45 form of the wooden inserts.

Fig. 6 is a perspective view of one of the smaller side inserts.

Like characters of reference indicate corresponding parts in the different views.

1 is my improved golf club head and 2 is the shaft of the golf club.

The head 1 is cast preferably of an aluminum alloy and is cored at 3 to provide a hollow interior for reducing the weight of the head.

4 is the driving face of the head and the

head is provided with recesses extending inwardly thereinto from the driving face 4.

There are three of these recesses consisting of a large central recess 5 and two side 60 recesses 6. The recesses are cylindrical and their axes are parallel.

The large central recess 5 intersects the peripheries of the side recesses 6 and is of greater length than said side recesses.

7 is a partition extending across the hollow interior of the head and forming the rear ends of the recesses, and 8 is a partition extending rearwardly from said partition 7.

9 is a cylindrical hardwood insert which is adapted to be secured within the central

10 are cylindrical hardwood inserts each having a groove 11 extending longitudinally 75 thereof.

The inserts 10 are adapted to be secured within the side recesses 6 and the grooves 11 engage the outer peripheral surface of the large insert 9.

12 is a balancing weight of lead or other suitable material which is carried at the rear end of the recess 5 behind the insert 9.

13 is an upwardly inclined shank or neck portion carried by the head and is provided SS with a tapering orifice 14 into which the lower end of the shaft 2 engages.

15 is a screw engaging a threaded orifice in the shank 13 and its inner end engages the lower end of the shaft for retaining the 20 head in place upon the shaft.

17 are core holes in the partition 7.
After the inserts 9 and 10 are in place their outer ends 16 are finished and made to align with the driving face 4 of the head 95 and thus form the greater part of the driv-

The entire driving face is suitably serrated after the usual practice.

Hitherto golf clubs of the pattern referred 100 to have been made entirely of wood and it has been with a view of overcoming certain objectionable features of these wooden clubs that my invention has been devised.

In the case of a wooden club in order to 105 maintain same in good condition it is necessary that it be scraped and varnished at frequent intervals, while a very objectionable feature of the wooden club has been that it splits where the shaft is attached 110 to the head

It will be apparent that both these

troubles have been overcome in my club since after the head has been properly finished and polished it will not suffer deterioration as is the case with the wooden bead and further my improved head is practically unbreakable.

In order to retain the desirable resiliency of drive, the hardwood inserts 9 and 10 are each firmly secured in the head and comprise the greater part of the driving face. The grain of the wood runs longitudinally

of the inserts.

A further advantage of my head resides in the facility with which a very exact de-15 gree of balance may be readily obtained.

In the wooden heads formerly used a piece of lead was inserted into the rear face of the head to obtain the desired weight.

In my head however the weight 12 is placed at the rear end of the recess 5, behind the insert 9, and is thus located adjacent to the center of gravity of the head and by varying this weight 12 any desired degree of weight of club may be obtained and at the same time an exact balance of the head maintained.

A feature of my construction is the manner in which the central insert 9 interlocks

with the side inserts.

From the foregoing it will be evident that I have devised valuable improvements in golf clubs which will greatly increase their

appearance and durability.

Various modifications may be made in the exact details of construction without departing from the spirit of the invention or the scope of the claims and therefore the exact form shown is to be taken as illustrative only and not in a limiting sense.

For instance the shape and arrangement

of the inserts might be altered.

What I claim as my invention is:

1. A golf club comprising a hollow metallic head having the driving face thereof open, a wooden insert carried within the head, the outer face of said insert coinciding with the driving face of the head, and

a single balancing weight carried within the head adjacent to the center of gravity thereof and situated centrally behind the insert. 50

2. A golf club comprising a cast metal head suitably cored to form a hollow interior and a plurality of intercepting, parallel, cylindrical recesses extending thereinto from the driving face thereof, wooden inserts secured within said recesses, the outer ends of said inserts coinciding with the driving face of the head, and a balancing weight mounted within the head centrally behind the inserts and adjacent to the centre of 60 gravity of the head.

3. A golf club comprising a cast metal head suitably cored to form a hollow interior and having three intercepting parallel cylindrical recesses extending thereinto from the driving face thereof, cylindrical wooden inserts secured within said recesses, a portion of the side inserts being cut away to form longitudinal grooves into which a portion of the middle insert engages, the outer ends of said inserts coinciding with the driving face of the head, and the rear ends engaging the inner end

walls of the aforesaid recesses.

4. A golf club comprising a cast metal 75 head suitably cored to form a hollow interior and having three intercepting parallel cylindrical recesses extending thereinto from the driving face thereof, cylindrical wooden inserts secured within said 80 recesses, a portion of the side inserts being cut away to form longitudinal grooves into which a portion of the middle insert engages, the outer ends of said inserts coinciding with the driving face of the head, 85 the rear ends engaging the inner end walls of the aforesaid recesses, and a counterbalancing weight situated at the inner end of the middle recesses directly behind the middle insert.

JAMES ALEXANDER McMAHON.

Witnesses:

John G. Hayward, Norten Coles.