July 15, 1924. 1,501,344

E. L. HUBBARD

PLAYING CLUB

Filed July 3, 1922

Fig. 1.

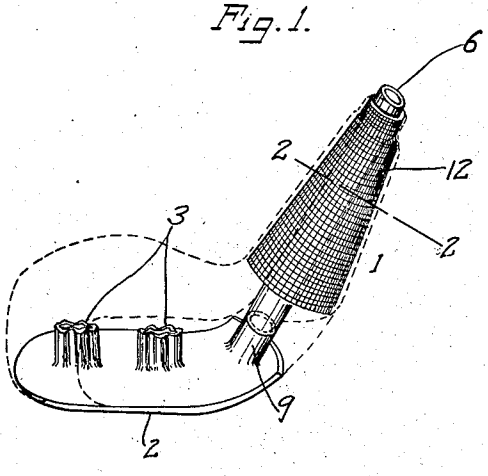



Fig. 2.

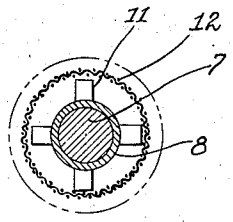
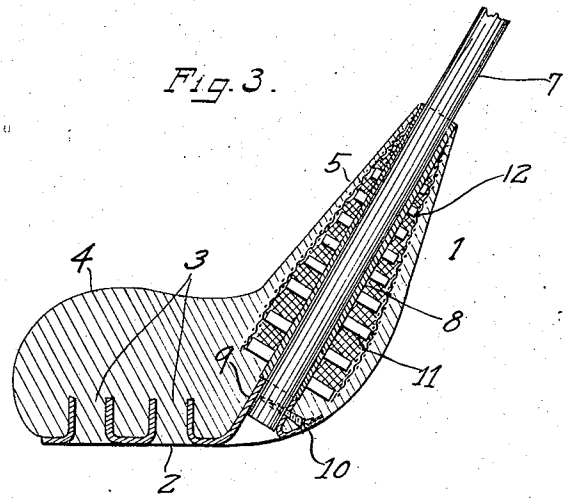



Fig. 3.




Inventor

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Patented July 15, 1924. 1,501,344

# UNITED STATES PATENT OFFICE.

EDWARD L. HUBBARD, OF OAKLAND, CALIFORNIA, ASSIGNOR OF ONE-HALF TO C. C. PAYNE, OF OAKLAND, CALIFORNIA.

## PLAYING CLUB.

Application filed July 3, 1922. Serial No. 572,598.

*To all whom it may concern:*

Be it known that I, EDWARD L. HUBBARD, a citizen of the United States, residing at Oakland, in the county of Alameda and State of California, have invented certain new and useful Improvements in Playing Clubs, of which the following is a specification.

My invention is an improvement in playing clubs, particularly golf clubs, in which the head is formed of a molded material.

The object of my invention is to provide a reinforcement for the body and neck of the golf club, which will absorb or reduce the contracting stresses of the molded material and prevent cracking of said material.

Another object of my invention is to provide a reinforcement which will remain in the proper position and which is inexpensive to manufacture.

Referring to the drawing which forms a part of this specification:

Figure 1 is a perspective view of my golf club head reinforcement.

Figure 2 is a sectional view taken on the line 2—2 of Figure 1.

Figure 3 is a longitudinal sectional view of a golf club head embodying my invention.

Referring more particularly to the drawing, the numeral 1 indicates a playing club neck reinforcement and 2 a bottom plate which has upstanding reinforcements 3 formed therein. The reinforcements 3 are formed by forcing the metal of the bottom plate 2 inwardly to form the upstanding lugs having a rough edge which will grip the club body. The reinforcements 1 and 2 are formed within a head which is formed of a molded material and has a body 4 and neck 5.

The core 6 which forms the aperture for the shaft 7 is held in a neck sleeve 8, and extends downwardly to a socket 9 in the base plate 2. The shaft 7 is slipped into the cored aperture and into the socket 9 and a set screw 10 holds it securely in place. This construction enables the shaft 7 to be held securely in the club head and gives greater strength and rigidity to the head. The sleeve 8 has radial lugs 11 formed thereon, and a fine mesh screen 12 is wrapped around said lugs. The molding material flows through the interstices of the screen and binds it firmly in the neck. The screen also acts to reduce the cooling strains.

The body reinforcements 3 are also roughened so that a greater surface is presented to the molding material and also to better absorb the strains of cooling.

Having described my invention, I claim:

1. In a playing club having a body and hollow neck, a shaft adapted to extend into said neck, a sleeve surrounding said shaft, radial lugs carried by said sleeve and a wire mesh being interposed between the lugs and the neck.

2. In a playing club formed of a molded composition and comprising a body and a neck, a base plate on the bottom of said body. a reinforcement for said neck, and upstand- roughened reinforcements projecting from said plate.

3. In a playing club formed of a molded composition and comprising a body and a neck, a base plate on the bottom of said body and having a socket therein, a shaft extending into said socket, a reinforcement for said neck, said reinforcement comprising a sleeve surrounding said shaft, radial lugs on said sleeve, and a screen surrounding said lugs.

4. In a playing club formed of a molded composition and comprising a body and a neck, a base plate on the bottom of said body, a reinforcement for said neck, said neck having a central bore, a shaft adapted to extend into said bore, a socket in said base plate in which the shaft sets and a set screw extending through said socket into the shaft.

5. In a playing club having a body of molded material, a bottom plate therefor, reinforcements carried by said bottom plate and extending upwardly into the body portion, said reinforcements being sinusoidal in cross section.

In testimony whereof I affix my signature.

EDWARD L. HUBBARD.