Feb. 6, 1934. L. A. YOUNG 1,946,378

GOLF BALL AND METHOD OF MAKING

Filed June 8, 1931

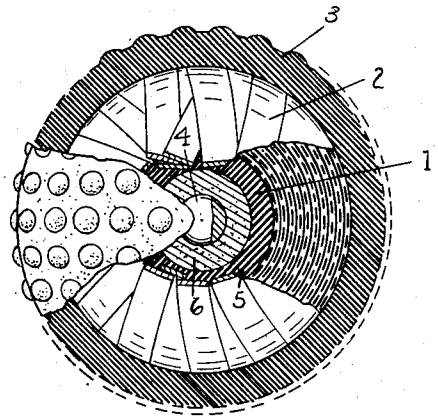


Fig. 1.

Fig. 2.

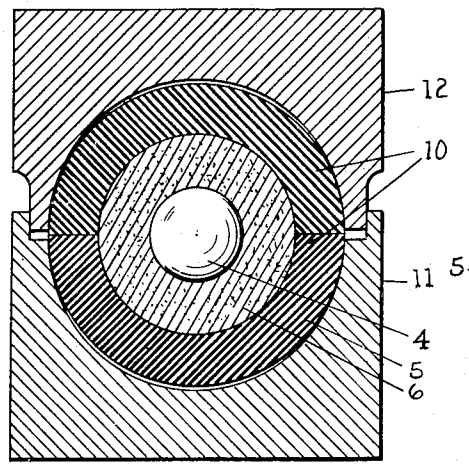


Fig. 5.

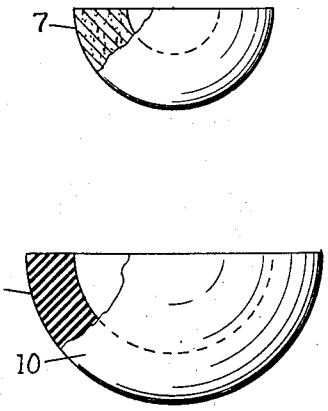


Fig. 3.

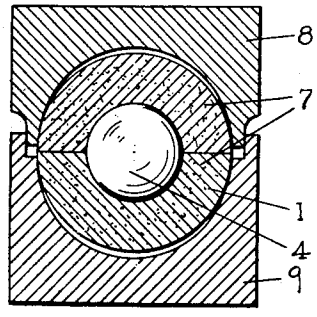


Fig. 4.

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Patented Feb. 6, 1934 1,946,378

UNITED STATES PATENT OFFICE

1,946,378

GOLF BALL AND METHOD OF MAKING

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Application June 8, 1931. Serial No. 542,849

3 Claims. (Cl. 273—62)

The main objects of this invention are:

First, to provide a golf ball having a long true "carry"

Second, to provide a golf ball having the above mentioned advantages which has a soft "feel" off the club.

Third, to provide a golf ball having an even roll in putting.

Fourth, to provide a method of making golf balls and cores therefor by means of which the results above set forth may be obtained.

Objects pertaining to details and economies of my invention will definitely appear from the description to follow. The invention is defined in the claims.

A structure embodying the features of my invention and made by my method is clearly illustrated in the accompanying drawing, in which:

Fig. 1 is a fragmentary section of a golf ball embodying the features of my invention.

Fig. 2 is a fragmentary view of one of the core elements or segments.

Fig. 3 is a fragmentary view of another core element or segment.

Fig. 4 is a sectional view illustrating one of the steps of manufacture.

Fig. 5 is a sectional view illustrating a succeeding step in the manufacture.

In the accompanying drawing 1 represents the winding core generally, 2 the body of elastic strands wound thereon, and 3 the outer shell or casing. The winding and the outer casing are shown in conventional form.

The core of my improved golf ball comprises a spherical center weight 4 of metal such as lead, steel, copper or other suitable alloy, or may be of a composition having the desired specific gravity and preferably non-elastic. The winding core or shell 5 is formed of rubber and is a hollow sphere of substantially greater internal diameter than the center weight.

Between the shell 5 and the center weight 4 is an intermediate sphere 6 preferably of soft Pará rubber or other rubber of relatively high resilience.

In manufacture the center weight is arranged within a pair of molded segments 7 as shown in Fig. 4, these segments being enclosed within a curing mold consisting of members 8 and 9 and the curing carried up to the desired extent so that the weight is enclosed within a complete integral sphere of soft resilient rubber. This element is then placed within a pair of pre-formed segments or sections 10 of resilient but relatively dense or unyielding rubber and within a curing mold consisting of the sections 11 and 12, and the curing or vulcanizing is effected so that the sections are united into one sphere.

As the curing temperature required for the intermediate shell 6 is substantially higher than that required for the outer shell 5, the inner shell is not injuriously affected by the second step.

The core thus formed is preferably frozen according to methods now employed in the manufacture of golf balls, the winding 2 applied, and the outer casing applied to finish the ball.

My improved golf ball is highly desirable in that it has the soft "feel" which is much sought for, a long and accurate "carry", and is also desirable for putting.

Having thus described my invention what I claim as new and desire to secure by Letters Patent is:

1. A golf ball comprising a hollow spherical winding core of relatively dense unyielding rubber, a spherical center weight of relatively high specific gravity disposed centrally within said core, the internal diameter of said core being substantially greater than that of the center weight, the space between said core and center weight having a filler of spongy rubber for maintaining said weight centrally of said core, a body of elastic strands wound under tension on said core, and a casing on said winding.

2. A golf ball comprising a hollow spherical winding core of relatively dense unyielding rubber, a spherical center weight, the internal diameter of the winding core being substantially greater than that of the center weight, an intermediate sphere of relatively soft rubber in supporting engagement with the winding and center weight, a body of elastic strands wound under tension on said core, and a casing on said winding.

3. A golf ball comprising a hollow spherical winding core of relatively dense unyielding rubber, a spherical center weight, the internal diameter of the winding core being substantially greater than that of the center weight, and an intermediate sphere of relatively soft rubber in supporting engagement with the winding core and center weight.

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