Oct. 5, 1948. W. GROBNER 2,450,474

METHOD OF MAKING PRACTICE GOLF BALLS

Filed Nov. 4, 1944

Fig. 1

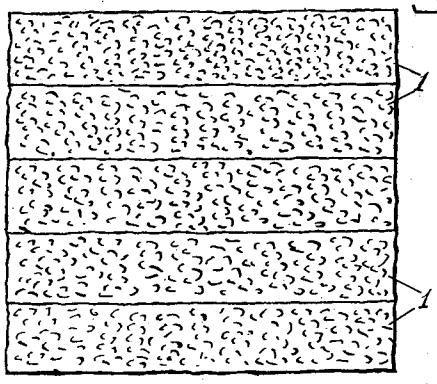


Fig. 2

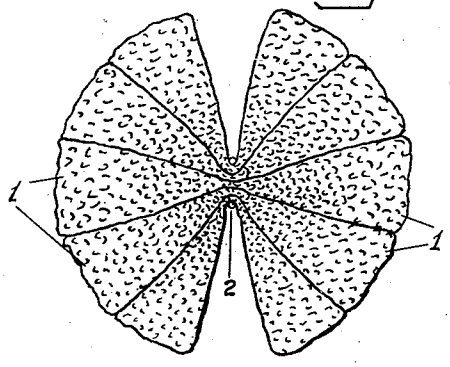


Fig. 3

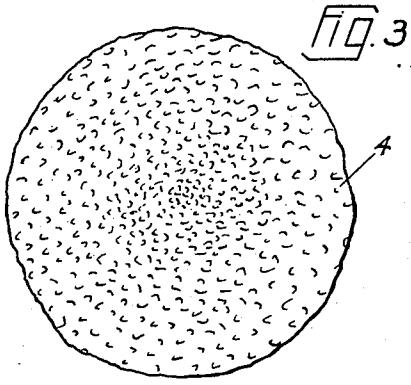


Fig. 4

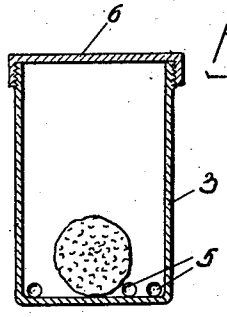


Fig. 5

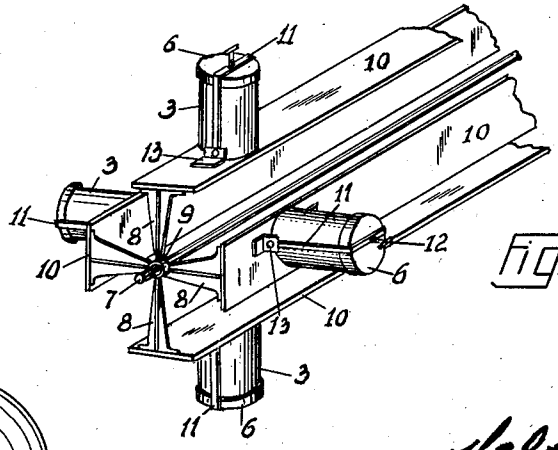
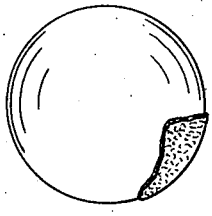


Fig. 6



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METHOD OF MAKING PRACTICE GOLF BALLS

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3 Claims. (Cl. 28—72.3)

1

The object of the present invention is to provide a method of making a novel form of practice golf ball of such type that it will have a more desirable resiliency and a very much longer life than practice golf balls now made.

The characteristic of my golf ball is that it consists of a unitary body of felted wool, the degree of the felting being greater on the outside so that a protecting layer or skin of very closely felted fibres forms an exterior face. The method of manufacture is such that after simple assembly of the elements the processing is automatically effected and at low cost.

The method and article will now be described with reference to the accompanying drawings, in which

Figure 1 is a view in elevation, somewhat schematic showing layers of wool "top" assembled preliminary to a single tie thereof.

Figure 2 is a schematic view in elevation showing the position of the layers after a cord has been placed around them, at the center, the cord tightened and tied.

Figure 3 is a schematic view showing the appearance of the article after it has been immersed in a felting bath.

Figure 4 is a sectional elevation showing a felting container in which the article of Figure 3 is placed along with felting balls.

Figure 5 is a fragmentary view in perspective illustrating one form of apparatus for bodily rotating a plurality of the containers, for felting.

Figure 6 is a view of the completed ball, a portion of the skin surface being broken away.

Referring to Figure 1, in my method, I superpose a number of layers 1 of wool top or other felting material to form a body of rectangular shape. The next step is to encircle the wool body with a strand or cord 2 which is pulled tight and tied. The tying of the strand will cause the layers 1 to swing in the manner shown in Figure 2, and a rough ball will result. This rough ball may be manually pressed to bring the wool fibres at its exterior into more uniform contact if desired, but this is not essential.

The next step is to immerse the rough ball into a felting bath within an agitating chamber which should also contain beater balls. In Figure 4, I have shown a simple form of such chamber, it consisting of a jar 3 having a closure top 6. The ball in its condition after initial immersion is shown at 4. The beater balls are shown at 5. The felting bath may be any wool-felting solution, a simple soap solution being sufficient. The jars should be only partially filled

2

with the solution to permit movement thereof and hence more active movement of the wool rough ball 4.

The jars may be given bodily movement to effect the felting operation by any suitable apparatus. In the apparatus shown in Figure 5, a shaft 7 is connected to any suitable means for rotating it, and carried by the shaft will be a plurality of outwardly projecting spider frames, one being shown in the drawing. The latter frame comprises, in the embodiment shown, four arms 8 extended from an apertured hub 9 on the shaft 7, each arm being connected at its outer end to a flat carrier plate 10. Each plate 10 will be provided with means for securely holding a plurality of the jars 3. The means for such purpose employed in the illustrated embodiment consists of a pivoted loop member 11 having a clamping screw 12 threaded in an aperture in its top area and adapted to engage the top 6 of the jar. The legs of the loop members 11 may be pivoted to small angular brackets 13 spot welded or otherwise secured to the metallic carrier plates 10.

When the jars with their contents are rotated, the felting solution will be picked up by all of the fibres of the rough balls and the latter will be tumbled and their exteriors will have the repeated impact of the beater balls. In such progressive action, the wool fibres will interlock and felt until the article becomes greatly reduced in diameter and forms a compact, uniformly round ball, having such a closely felted exterior that it provides a relatively smooth protecting skin.

The practice golf ball thus provided is greatly superior to the knitted cover balls in common use. My ball is more resilient, is tough and has longer life, enables better simulation, on light strokes in indoor practice, of the regulation golf ball, and may be cleansed with soap and water after repeated use.

It will be understood that my method is capable of modification within the spirit of the invention, what I claim and desire to secure by Letters Patent being as follows:

I claim:

1. A method of making a practice golf ball which consists in the steps of forming a body of wool in rough ball shape, and then tumbling the rough ball in a container in the presence of a felting liquid and beater balls until the fibres of the ball are felted both interiorly and exteriorly and the initial diameter of the ball is substantially reduced.

2. A method of making a practice golf ball

which consists in laying wool fibres in a pile, tying the pile at its center, and then tumbling the rough ball thus formed in a container in the presence of a felting liquid and beater balls until the fibres of the ball are felted both interiorly and exteriorly and until the initial diameter of the ball is substantially reduced.

3. A method of making a practice golf ball which consists in laying wool fibres in a generally rectangular pile, tying the pile at its center, and then tumbling the rough ball thus formed in a container in the presence of a felting liquid and beater balls until the fibres of the ball are felted both interiorly and exteriorly and until the initial diameter of the ball is substantially reduced.

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