

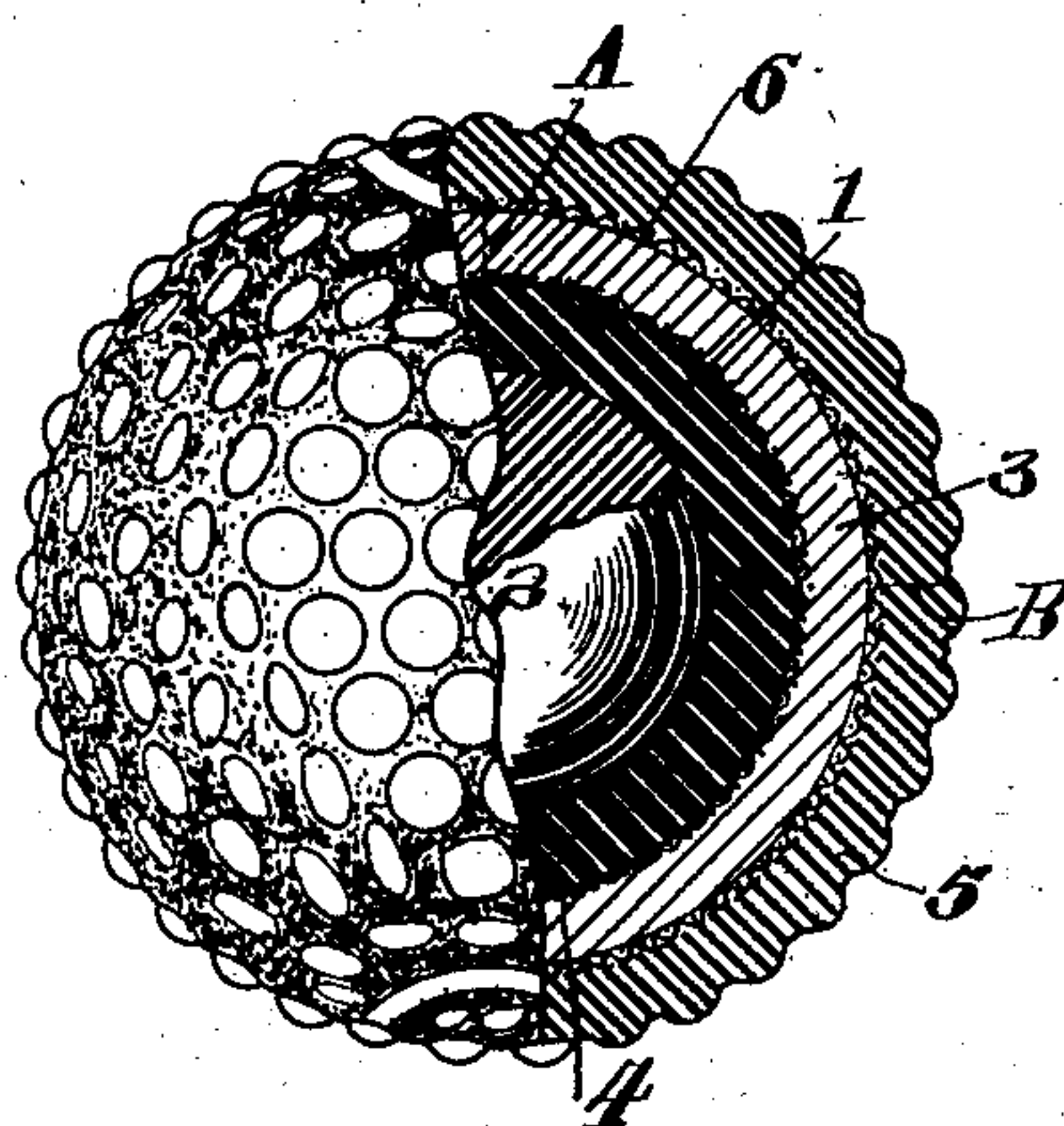
No. 701,738.

Patented June 3, 1902.

E. KEMPSHALL.  
GOLF BALL.

(Application filed Apr. 23, 1902.)

(No Model.)



Witnesses:

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By his Attorney

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# UNITED STATES PATENT OFFICE.

ELEAZER KEMPSHALL, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO THE KEMPSHALL MANUFACTURING COMPANY, A CORPORATION OF NEW JERSEY.

## GOLF-BALL.

SPECIFICATION forming part of Letters Patent No. 701,738, dated June 3, 1902.

Application filed April 23, 1902. Serial No. 104,316. (No model)

*To all whom it may concern:*

Be it known that I, ELEAZER KEMPSHALL, a citizen of the United States, residing in Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Golf-Balls, of which the following is a specification.

This invention relates to playing-balls, especially to those used in the game of golf; and its object is to provide a ball having great strength, durability, and driving power without being unduly sensitive to a light blow.

The part-sectional drawing forming a part of this specification illustrates a ball made according to my present improvements.

For the filling of the ball I prefer to use a soft-rubber sphere 1, which may have a hard center piece 2, preferably of gutta-percha. Upon the rubber sphere I compress hemispherical segments of celluloid or its equivalent, thus forming a shell 3, the weld of said segments being indicated at A. This shell is preferably lined with fabric 4, which is incorporated with the celluloid and preferably cemented upon the rubber. Upon the celluloid shell I apply a casing 5 of gutta-percha, preferably in the form of hemispherical segments, the weld thereof, as indicated at B, running crosswise of the weld A, so that each of said casing and shell elements may reinforce the weld of the other thereof. The gutta-percha casing I preferably line with fabric 6, although this layer of fabric may be incorporated in the celluloid sphere before the gutta-percha casing is applied. Preferably the compound shell of celluloid and gutta-percha holds the soft-rubber sphere 1 under compression.

By the described construction I impart to the ball a high degree of liveliness, this being due to the presence of the celluloid shell, which is relatively thin, and instantly recovers its shape when the ball is distorted by a blow, so that the ball flies with great energy. By having a casing of gutta-percha on said celluloid shell the latter is prevented from being dented sharply and cracked by a golf-club, while the gutta-percha itself in no small degree contributes to the flying quality of the ball. By having a backing of soft rubber the springy qualities of the celluloid shell are developed, while the gutta-percha center

piece 2 coöperates with the rubber sphere and with the remainder of the ball in absorbing power from the club and contributing to the flying ability of the ball. The fabric not only secures a close union between the celluloid and the inner and outer layers of rubber and gutta-percha, but also imparts to the ball the quality of being dead when given a light tap by an implement, thus adapting the ball for "putting."

It is not essential in all cases that fabric be employed in connection with the rubber shell or layer 3.

Having described my invention, I claim—

1. A playing-ball comprising a sphere of soft rubber, a shell of celluloid thereon, and a shell of gutta-percha upon said celluloid.

2. A playing-ball comprising a sphere of soft rubber, a shell of celluloid thereon, and a shell of gutta-percha upon said celluloid; said celluloid and gutta-percha shells holding said soft rubber under compression.

3. A playing-ball comprising a center piece of gutta-percha, a layer of soft rubber thereon, a shell of celluloid upon said soft rubber, and a shell of gutta-percha upon said celluloid.

4. A playing-ball comprising a sphere of soft rubber, a shell of fabric-lined celluloid thereon, and a shell of gutta-percha upon said celluloid.

5. A playing-ball comprising a sphere of soft rubber, a shell of fabric-lined celluloid thereon, and a shell of gutta-percha upon said celluloid, said celluloid and gutta-percha shells holding said soft rubber under compression.

6. A playing-ball comprising a center piece of gutta-percha, a layer of soft rubber thereon, a fabric-lined shell of celluloid upon said soft rubber, and a shell of gutta-percha upon said celluloid.

7. A playing-ball comprising a sphere of soft rubber, a fabric-lined shell of celluloid thereon, and a fabric-lined shell of gutta-percha upon said celluloid.

8. A playing-ball comprising a sphere of soft rubber; a shell of celluloid thereon, and a fabric-lined shell of gutta-percha upon said celluloid; said celluloid and gutta-percha shells holding said soft rubber under compression.



9. A playing-ball comprising a center piece of gutta-percha; a layer of soft rubber thereon, a shell or layer of fabric-lined celluloid upon said soft rubber, and a shell of fabric-lined gutta-percha upon said celluloid.
- 5 10. A playing-ball comprising a sphere of soft, yielding material, a shell thereon com-

pounded of celluloid and fibrous material, and an outer shell of gutta-percha.

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Witnesses:

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