

No. 698,024.

Patented Apr. 22, 1902.

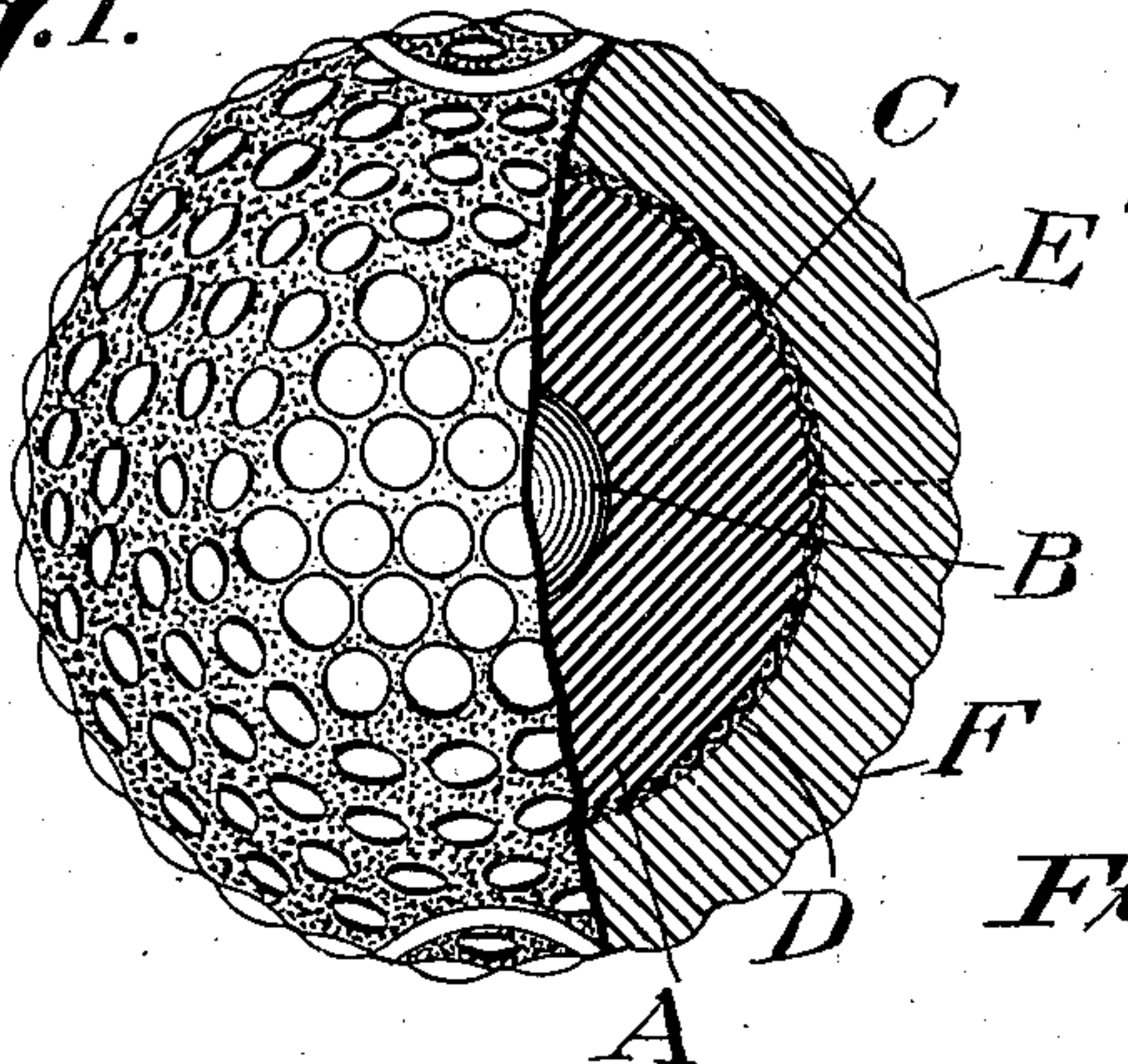
E. KEMPSHALL.

GOLF BALL.

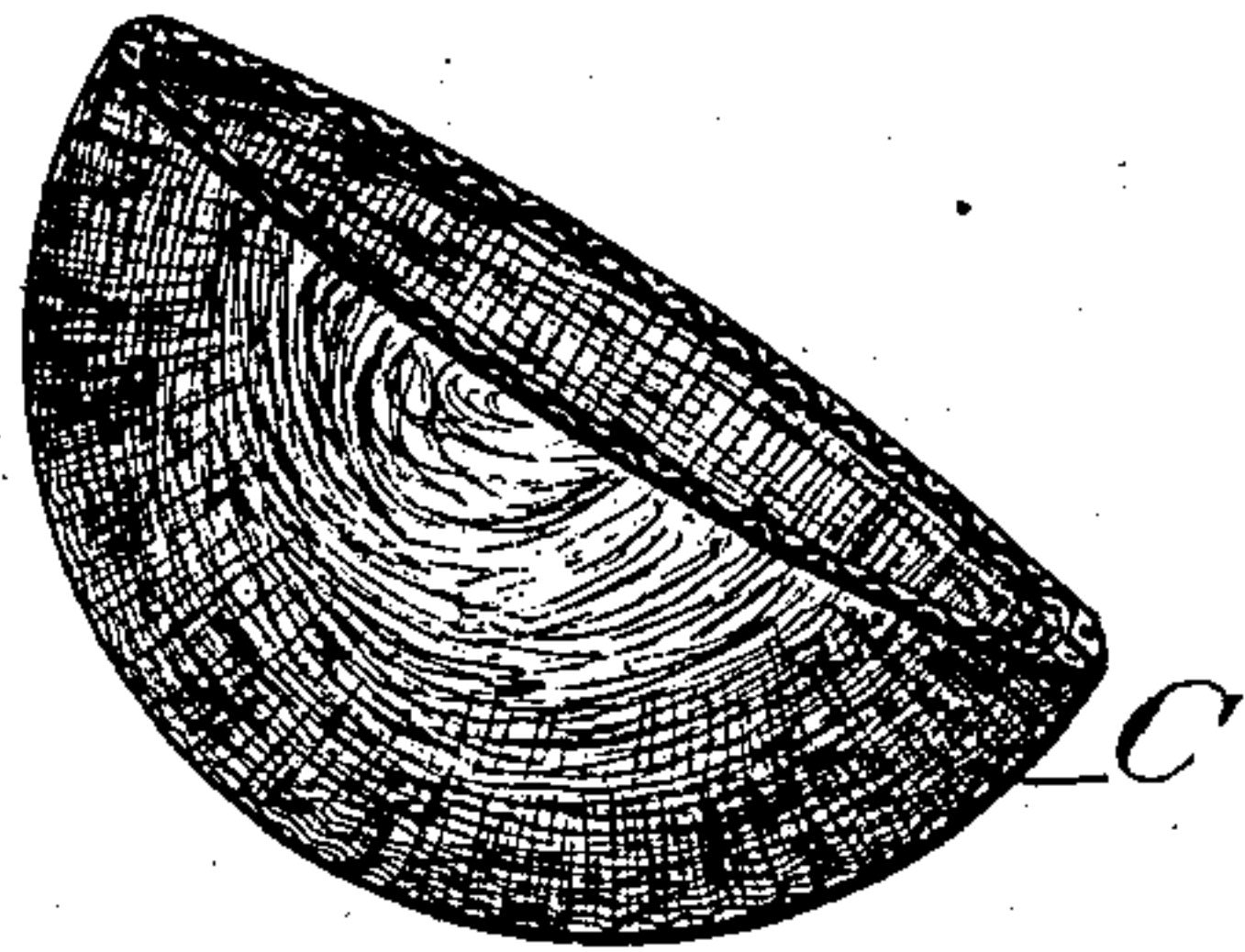
(Application filed Mar. 24, 1902.)

(No Model.)

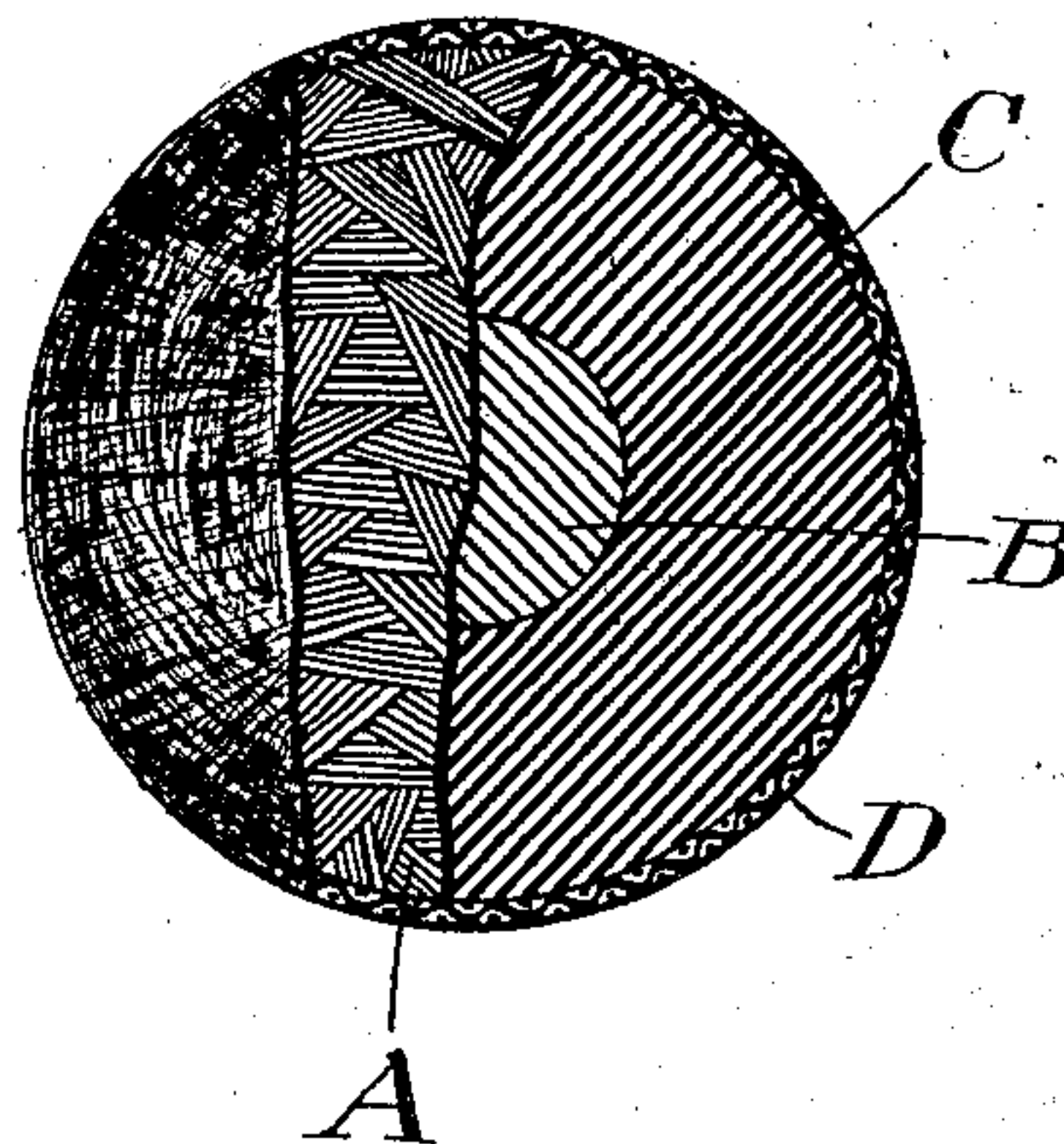
*Fig. 1.*



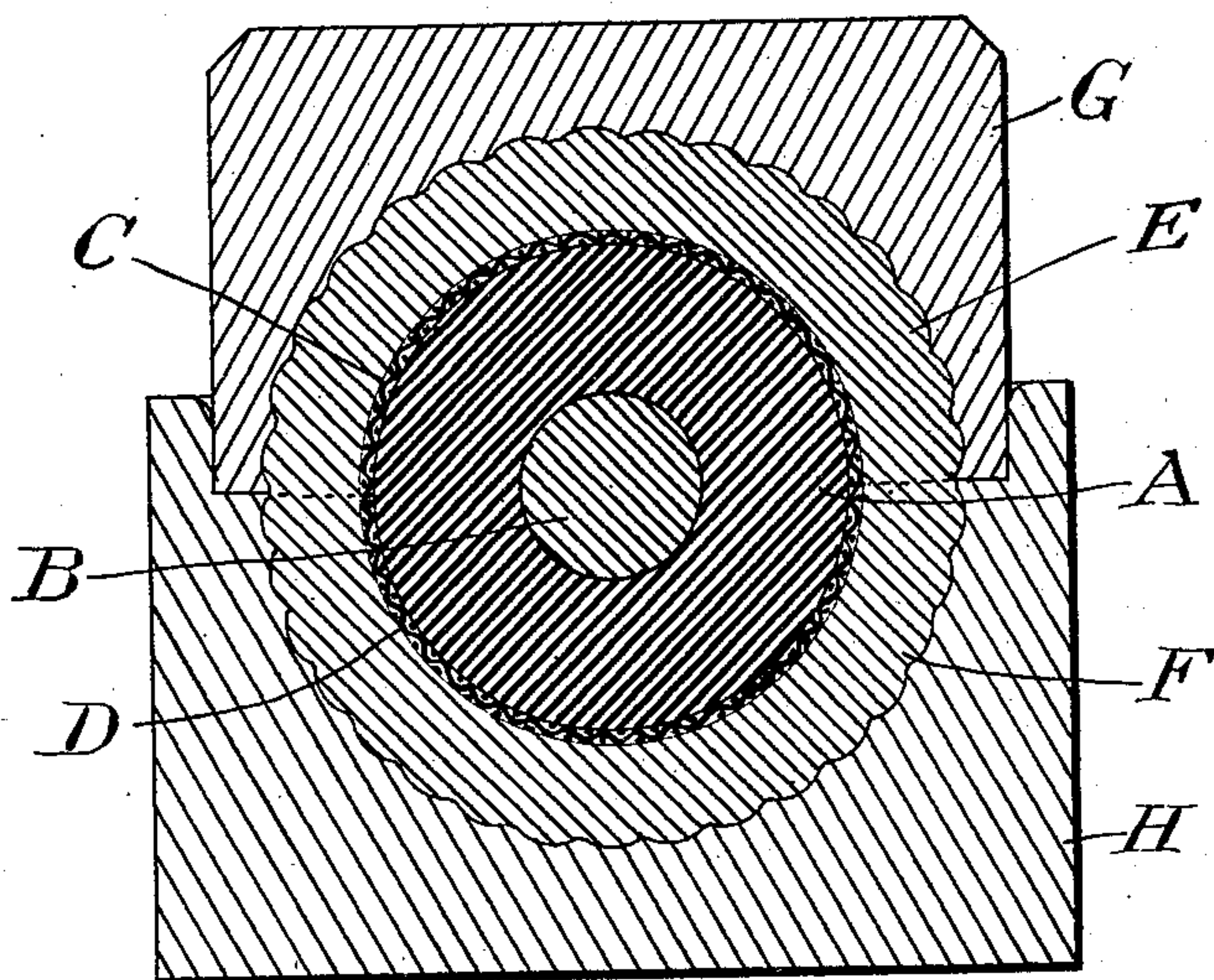
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



Witnesses

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# UNITED STATES PATENT OFFICE.

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## GOLF-BALL.

SPECIFICATION forming part of Letters Patent No. 698,024, dated April 22, 1902.

Application filed March 24, 1902. Serial No. 99,619. (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, but especially to those used in the game of golf; and its object is to produce a ball which shall fly a long distance when struck a hard blow by a club, but which shall be practically dead when given a light tap, thereby meeting all the requirements of the game in question.

In the accompanying drawings, Figure 1 is a view, partly in section, of a ball made in accordance with my present improvements. Fig. 2 shows a fabric cup or hemisphere which is preferably used in practicing my invention. Fig. 3 shows, partly in section, a ball wound with rubber threads under tension and inclosed in a pair of cups of the Fig. 2 kind; and Fig. 4 illustrates the process of finishing the ball.

For the core of the ball I employ a spherical body made of windings of rubber thread A, the thread being wound under high tension, preferably upon a small gutta-percha center piece B. A core thus formed is highly elastic and has excellent driving qualities, but is too elastic for light blows or "putting." To correct this fault, I inclose the sphere A in an envelop of fibrous material, preferably by placing thereon hemispherical cups C and D, preferably of rather heavy woven fabric, and the ball thus formed I then inclose in segments of gutta-percha E and F, which I place in the finishing-dies G and H, the gutta-percha being heated and the dies being brought together with great force, so as to compress the shell forcibly upon the inclosed sphere A, the pressure of the dies being maintained while the shell cools and hardens, so that the latter in the finished ball holds the core as thus inclosed in a powerful grip.

It is found in practice that a tensioned-

thread sphere A, provided with the fabric C and covered with a gutta-percha shell E, as described, has phenomenal flying qualities, while being dead when given a light blow, thereby admirably adapting it for all the requirements of the game.

Variations may be made within the scope of my invention.

Having described my invention, I claim—

1. A playing-ball comprising a spherical body consisting of rubber threads under tension, a fabric covering upon said body, and a gutta-percha shell upon said fabric covering.

2. A playing-ball comprising a sphere which consists of tensioned soft rubber, a shell consisting entirely of gutta-percha lined with fabric and inclosing said sphere.

3. A playing-ball comprising a sphere which consists of tensioned soft rubber, and a shell consisting entirely of gutta-percha lined with fabric and inclosing said sphere and holding said sphere under compression.

4. A playing-ball comprising a spherical body consisting of tensioned rubber threads, and a fabric-lined shell of gutta-percha compressed upon said spherical body.

5. A playing-ball comprising a spherical body consisting of tensioned rubber threads and a fabric-lined shell of gutta-percha compressed upon said spherical body, said shell consisting of segments of gutta-percha and fabric which are united at their edges.

6. A playing-ball consisting of a spherical body of soft rubber under tension, a fabric covering thereon, and segments of gutta-percha welded at their edges and compressed upon said spherical body.

7. A playing-ball comprising a soft-rubber spherical core inclosed in an envelop of fabric, and an outer inclosing covering of gutta-percha compressed upon the ball.

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Witnesses:

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JOHN O. SEIFERT.