

No. 790,955.

PATENTED MAY 30, 1905.

C. DAVIS.
GOLF BALL.

APPLICATION FILED JAN. 6, 1902.

Fig. 1.

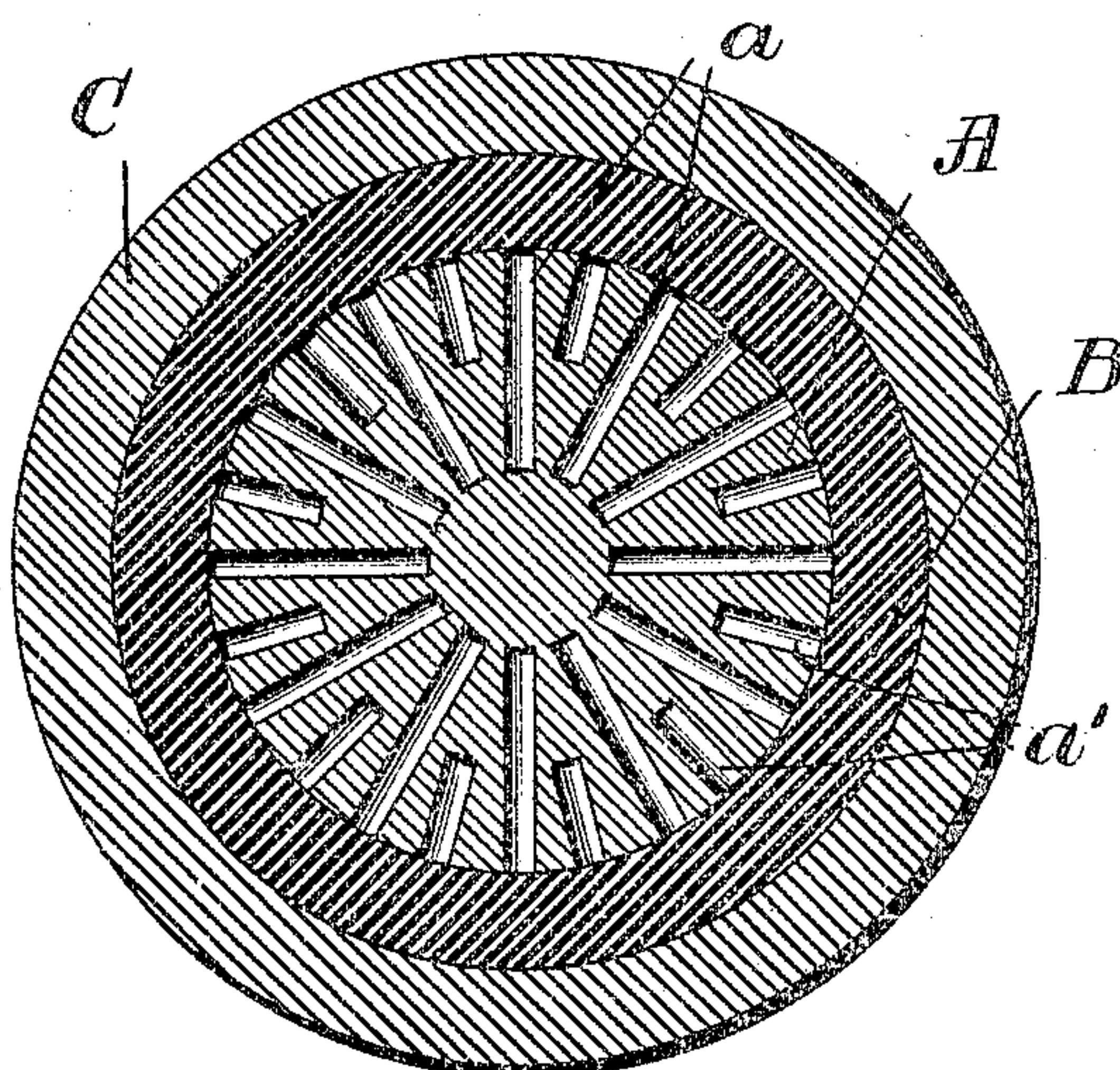
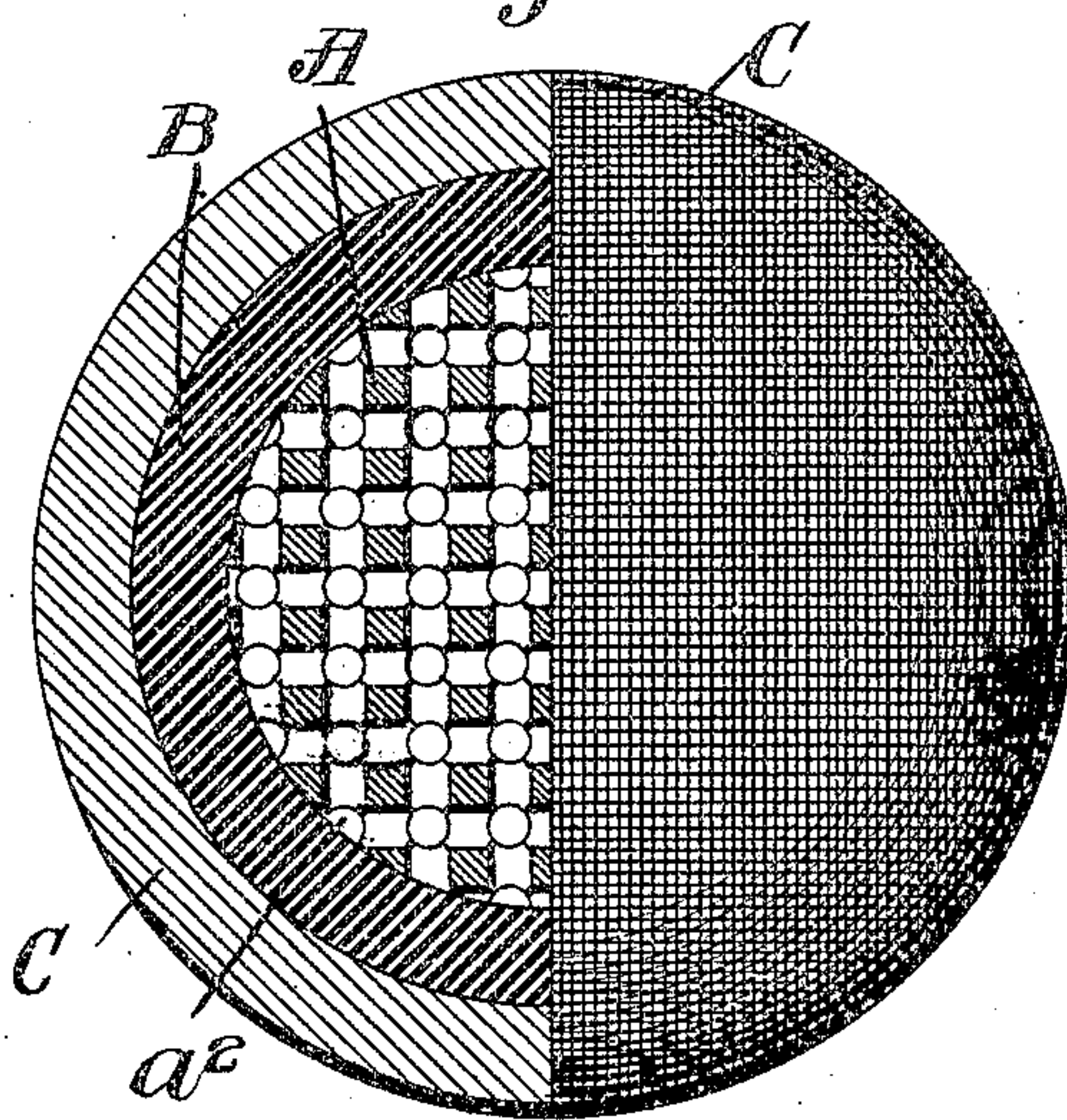


Fig. 2.



Witnesses

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UNITED STATES PATENT OFFICE.

CLELAND DAVIS, OF WASHINGTON, DISTRICT OF COLUMBIA, ASSIGNOR
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GOLF-BALL.

SPECIFICATION forming part of Letters Patent No. 790,955, dated May 30, 1905.

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To all whom it may concern:

Be it known that I, CLELAND DAVIS, a citizen of the United States, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Golf-Balls; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in golf-balls; and it is intended to provide a golf-ball of standard specific gravity of high elasticity and at the same time of greater cheapness than those now generally in use.

Golf-balls as at present constructed have a weight about that of an equal volume of water and are made mainly of gutta-percha or other expensive material.

According to my invention I make the ball partly of a nitrocellulose compound, such as celluloid or the well-known colloid smokeless powder, and in order to reduce the weight of the mass I provide perforations therein. The outer ends of these perforations may be either stopped up with plugs of the same material or of other material, or this mass may be inclosed in a spherical shell or shells of gutta-percha or other suitable elastic material, or the shell or shells of elastic material may be inclosed in the nitrocellulose colloid.

My invention will be more clearly understood by reference to the accompanying drawings, in which—

Figure 1 represents a section of the ball sheathed in gutta-percha or like material and having its core provided with radial perforations. Fig. 2 is a sectional elevation, parts being broken away, of a ball similar to that shown in Fig. 1, except that the perforations are arranged intersecting each other like the axes of X, Y, and Z in geometry.

In Fig. 1, A represents the core, having long radial perforations a and short radial perforations a' . The aggregate volume of these perforations will depend upon the density of the compound used. Thus with smoke-

less gunpowder, which has a specific gravity of about 1.56, it will be necessary to have the perforations take up about one-third of the total mass of the body A. This central core A is inclosed in a shell of rubber or other highly-elastic material B, which shell is also inclosed in an outer shell of gutta-percha C, roughened, as usual in golf-balls, as indicated in Fig. 2.

The device shown in Fig. 2 is generally similar to that shown in Fig. 1, except that the perforations a^2 cross each other at right angles.

In the herein-described constructions instead of the nitrocellulose compound I may use any suitable elastic material of a greater specific gravity than water, with perforations to decrease its weight, and instead of rubber or gutta-percha other suitable equivalent material may be used.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. A golf-ball composed partly of a mass of elastic material having greater specific gravity than water and provided with perforations to reduce its weight, the said perforations being symmetrically disposed about the center of said ball means for closing the outer ends of said perforations, and a hollow shell of elastic material, substantially as described.

2. A golf-ball comprising a spherical core of elastic material, having greater specific gravity than water and provided with perforations therein, a spherical shell of elastic material inclosing said core, and an outer shell of hard elastic material inclosing said inner shell and core, substantially as described.

3. A golf-ball comprising a spherical core of elastic material, having greater specific gravity than water and provided with perforations therein, a shell of rubber inclosing said core, and an outer shell of hard elastic material inclosing said inner shell and core, substantially as described.

4. A golf-ball comprising a spherical core of elastic material, having greater specific

gravity than water and provided with perforations therein, a spherical shell of elastic material inclosing said core and an outer shell of gutta-percha inclosing said inner shell and
5 core, substantially as described.

5. A game-ball comprising a core having a number of symmetrically-arranged chambers, an unperforated layer of elastic material com-

pressed on said core, so as to close said chambers, and a suitable inclosing shell. 10

In testimony whereof I affix my signature in presence of two witnesses.

CLELAND DAVIS.

Witnesses:

GUSTAVE R. THOMPSON,
FRED W. ENGLERT.