

No. 731,154.

PATENTED JUNE 16, 1903.

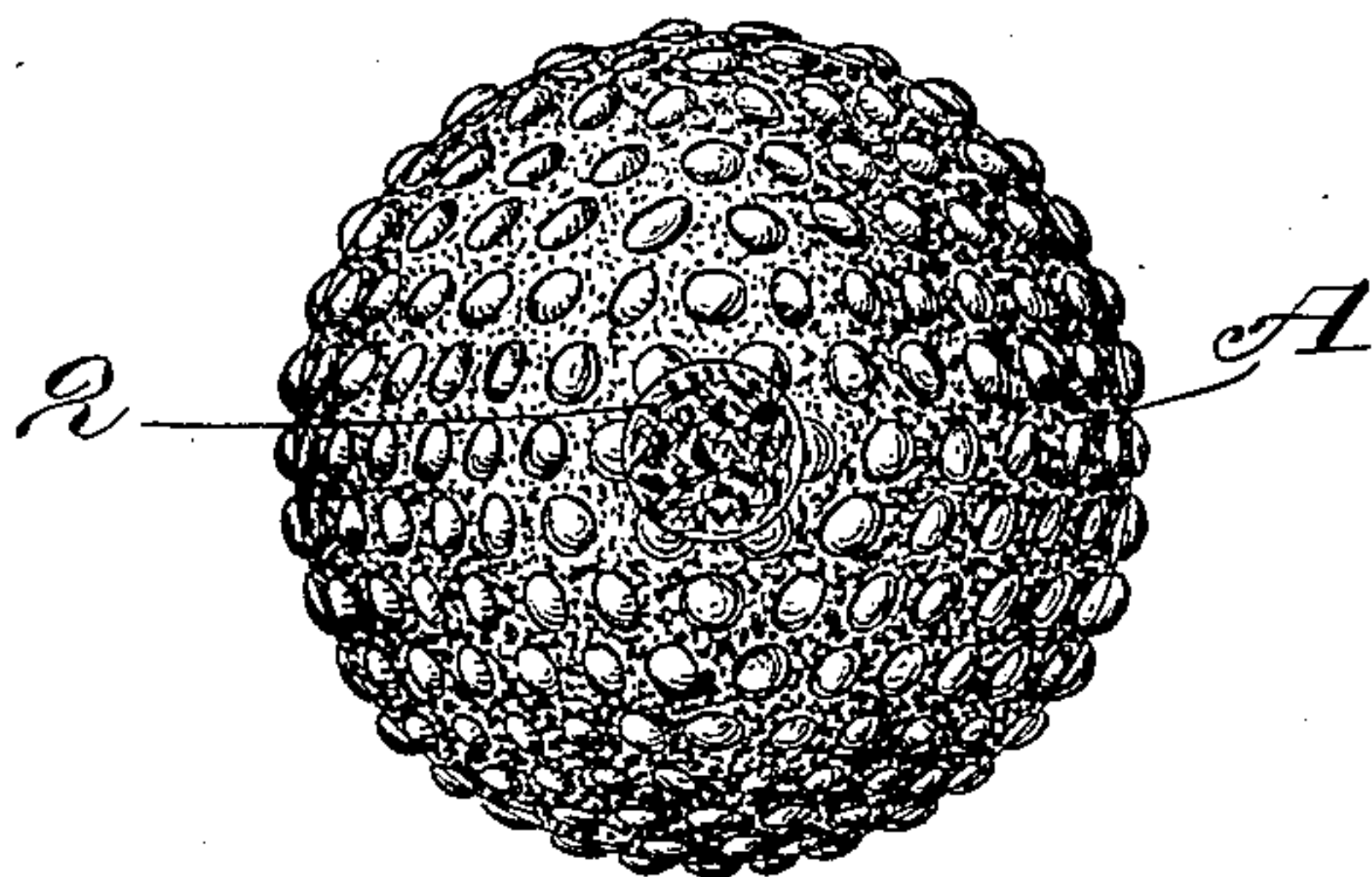
A. E. BARNHART.

PLAYING BALL.

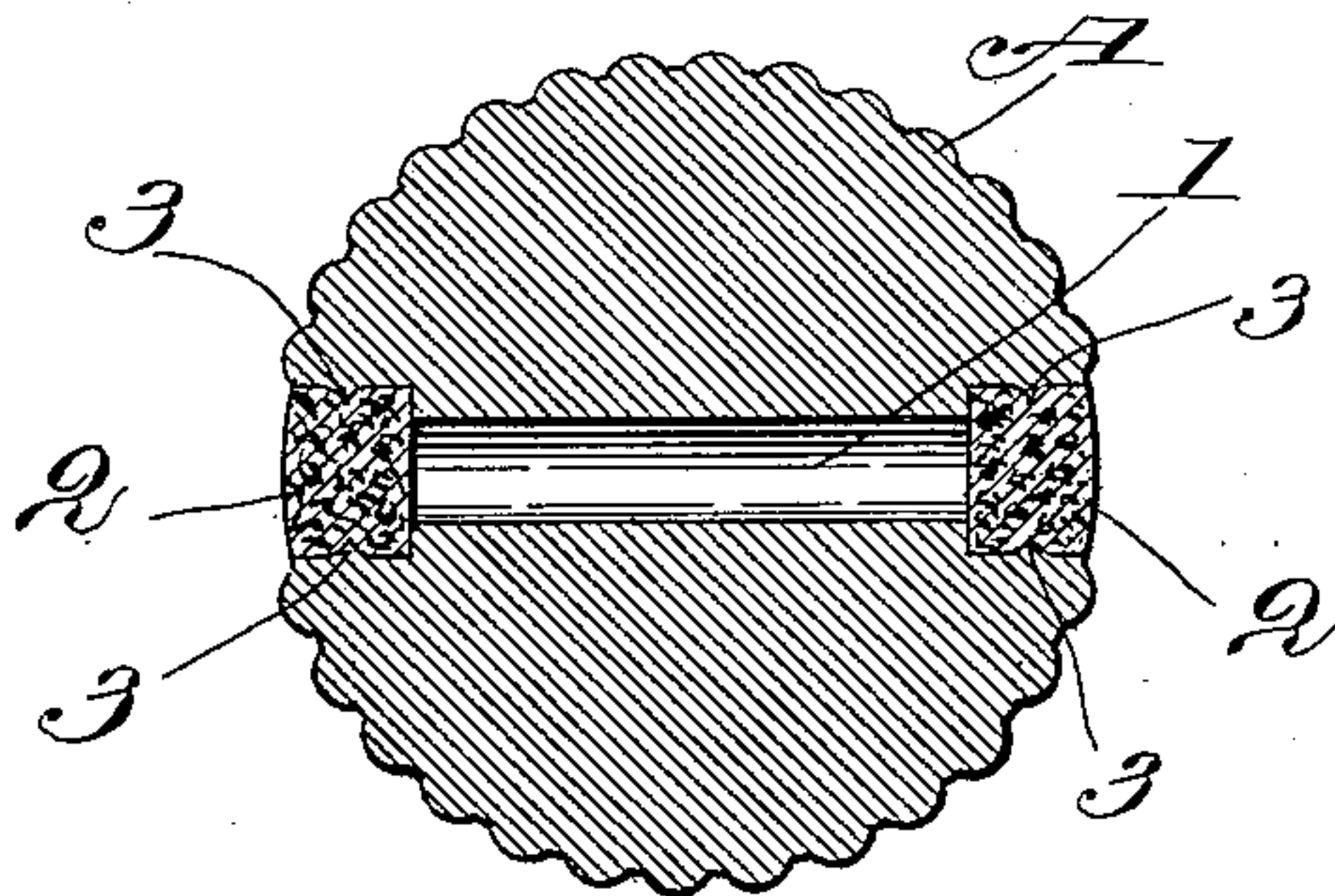
APPLICATION FILED JULY 14, 1902.

NO MODEL.

*Fig. 1.*



*Fig. 2.*



*Witnesses:*

*H. S. Gaither.*  
*J. C. Lee*

*Inventor:*

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*Attorney.*



# UNITED STATES PATENT OFFICE.

ALSON E. BARNHART, OF CHICAGO, ILLINOIS.

## PLAYING-BALL.

SPECIFICATION forming part of Letters Patent No. 731,154, dated June 16, 1903.

Application filed July 14, 1902. Serial No. 115,496. (No model.)

*To all whom it may concern:*

Be it known that I, ALSON E. BARNHART, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Playing-Balls, (Case No. 1,) of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

My invention relates to playing-balls so constructed as to have a high degree of resiliency—such balls, for example, as are used in the game of golf. In the use of these balls, and especially in golf, there are many opportunities for the balls to fall or roll into water. In golf-courses sheets or strips of water, technically called “water-hazards,” are quite common. Ground containing them is selected for the course by reason of their presence or they are created. These water-hazards are arranged either across or alongside of the path the ball will have to go in playing the course, and their presence makes it necessary for the players to have unusual skill in order to avoid them. Needless to say, the balls of unskilful players are continually finding their way into these hazards, and the balls of even very skilful players at times meet similar fates. Effort has been made to avoid the loss of balls falling in water-hazards by making the balls float. So far as I am aware, however, none of these so-called floatable balls are absolutely certain of floating. Many of them will sink immediately, and others have so little rising power as to make their recovery very difficult, especially in the case of a running stream.

It is the object of my invention to provide a very simple and cheap construction of ball which is absolutely certain of floating.

In the manner of carrying out my invention herein set forth I provide a resilient playing-ball with an internal space or chamber, which is filled or partially filled with a substance or substances having a relatively low specific gravity. This can be any light solid material—such as wood, cork, or the like—or it can be air or other gas. In this way the ball as a whole has such a relatively low specific gravity as will insure its floating readily if placed in water.

A convenient and satisfactory method of

carrying the invention into practice is to form a diametrically extending aperture or hole through an ordinary gutta-percha ball and to make the opposite ends of this aperture or hole larger than the central portion, then to insert plugs of some suitable material—such as wood, cork, or the like—into the enlarged ends of the hole. By this arrangement the aperture, with its enlarged ends, forms a chamber in the ball, and the middle portion of this chamber is filled with air and the ends thereof with a comparatively light substance, thus lowering the specific gravity of the ball as a whole. At the same time the interior space filled with air is sealed by the plugs inserted in the enlarged ends of the aperture, and their insertion into the central portion thereof is prevented because of the fact that this portion is smaller than the end portions.

In the accompanying drawings, Figure 1 is a side elevation of a playing-ball embodying my invention, and Fig. 2 is a vertical section of the same.

In the drawings I have shown an ordinary form of gutta-percha ball A, which can be of any suitable style or make. In this is formed an aperture or chamber consisting of a middle or central bore 1 and enlarged end portions, in which are inserted plugs 2 2. The latter can be of any suitable material—as, for example, wood or cork, which latter is shown. The walls of the enlarged portions of the chamber are desirably provided with inwardly-extending projections or burs 3 3, which engage the plugs 2 2 and hold them steadfastly in position, especially against outward movement. Inward movement of the plugs is prevented by reason of the relatively smaller size of the bore 1.

The invention can be applied to balls already made or to new balls. For balls already made an aperture can be drilled or bored through the ball of the size of the bore 1, and then the opposite ends can be countersunk to provide the enlarged chambers at the ends of the bore 1. If the invention is applied to new balls, they can be made in this way or they can be made by molding the balls with the central bore and end chambers, as shown.

Balls thus constructed have such a low specific gravity that they readily float, and thus insure their recovery. They can be easily and



cheaply made, and are simple, practical, and durable. Their flight in the air and their action on the putting-greens is perfectly reliable and is not interfered with in the least by this construction.

It will be seen that the chamber or space of the ball is so small as not to change the character of the ball—that is to say, it still retains its resiliency and inflexibility of structure. In other words, the chamber or space is not of such size as to make the walls of the ball thin enough to become flexible.

It will be understood that I do not intend to limit myself to the construction herein set forth, as it is perfectly obvious that such construction may be varied, modified, or altered without departing from the spirit of my invention.

What I claim as my invention is—

1. A gutta-percha golf-ball having a bore or channel extending from side to side and

closed at its ends only, said bore being of such size as to leave the walls of the ball thick enough to withstand the blows of the golf-clubs without crushing, and being open between its ends, substantially as described.

2. A gutta-percha golf-ball having a bore or channel extending from side to side and closed at its ends, and provided with one or more plugs of cork or like material for closing its ends, said bore being of such size as to leave the wall of the ball thick enough to withstand the blows of the golf-clubs without crushing, and being open between its ends, substantially as described.

In witness whereof I hereunto subscribe my name this 11th day of July, A. D. 1902.

ALSON E. BARNHART.

Witnesses:

A. MILLER BELFIELD,  
I. C. LEE.