F. E. CHESTER.

BALL.

APPLICATION FILED NOV. 9, 1911.

1,023,504. Patented Apr. 16, 1912.

Fig. 1.

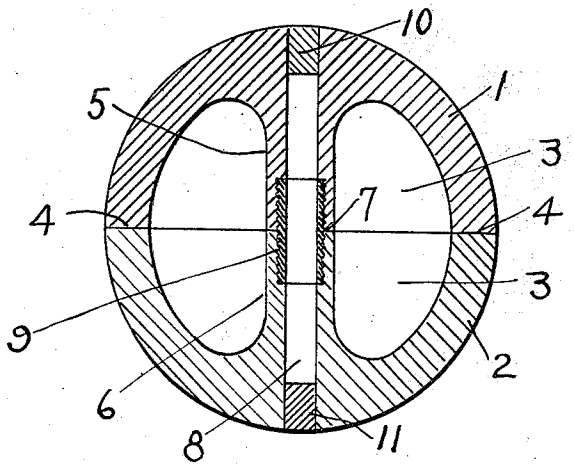


Fig. 2.

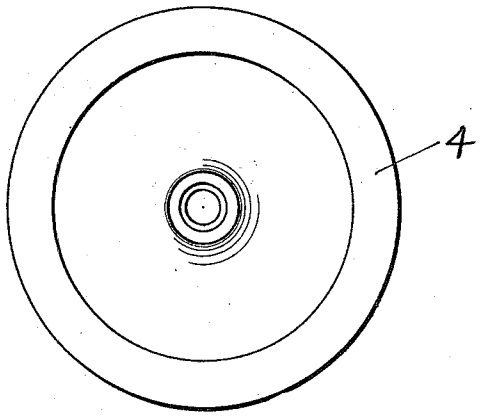
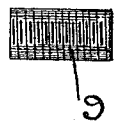


Fig. 3.



Witnesses
E. D. Ogden
A. Bodell

Inventor
Frank E. Chester.

By Howard E. Barlow
Attorney

COLUMBIA PLANOGRAPH CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

FRANK E. CHESTER, OF PROVIDENCE, RHODE ISLAND.

BALL.

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To all whom it may concern:

Be it known that I, FRANK E. CHESTER, a citizen of the United States, and resident of the city of Providence, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Balls, of which the following is a specification.

This invention relates to the construction of a hollow ball to be used more particularly as a house ball, or a surf ball, the same being very light in weight and possessing great buoyancy when floating upon the water.

This invention has for its object to provide such a ball and construct the same of cork, compressed cork, wood, or other light material, the same being formed of two hollow halves, each half having a comparatively broad meeting edge by which the parts are cemented together, and each of said halves being also provided with a hub projecting inwardly to the meeting line, said hub serving the purpose of stiffening the shell and also providing an increased cementing area. A further object of this hub is to provide an elongated central bearing through which an arbor may be passed and on which the ball may be turned in finishing its outer surface.

A further object of the invention is to provide a hollow externally threaded bushing screwed into each half for further securing the parts together.

With these and other objects in view, the invention consists of certain novel features of construction, as will be more fully described and particularly pointed out in the appended claims.

Of the accompanying drawings: Figure 1— is a central sectional view through the inwardly projecting hub members. Fig. 2— is a front view showing the meeting peripheral edge and the end of the central hub of one of the halves. Fig. 3— is a side elevation showing a detail of the central bushing.

Referring to the drawings, 1 designates one of the ball halves, and 2 the opposite half. These halves may be made of any suitable light material, but are preferably constructed of cork, more particularly ground cork, each half being pressed or molded so that its middle portion 3 will be hollow for the purpose of reducing the weight of the ball to the minimum when used as a house ball for indoor games, and also to give the ball its maximum buoyancy when used as surf ball for water sports. In forming these halves hollow a comparatively broad meeting peripheral edge 4 is formed thereon to provide a substantial surface by which to cement these halves together and each half is also provided with a central hub 5 and 6 respectively, formed integral therewith and projecting inwardly at substantially right angles to the parting line until they meet in the center at 7. This central hub serves a number of useful purposes, first, it greatly stiffens and supports the walls of the ball; second, it provides an additional surface for receiving the cement by which the parts are secured together; and third, a hole 8 is formed through this hub for the purpose of receiving an arbor on which the rough ball may be turned to finish the outer surface thereof.

Another feature of the invention is that a bushing 9 is provided, the same being preferably formed of wood with a hollow center and with a threaded outer surface. One end of this bushing is screwed into the end of one hub and the opposite end into that of the opposite hub whereby the halves are firmly drawn together to hold and bind them in position while the cement on the contacting surfaces is setting.

In assembling the parts of this ball after the halves have been pressed, molded or otherwise roughed out the hubs are drilled, the bushing inserted, cement applied to the meeting portions, and the halves screwed together by means of the central bushing thereby binding and holding the parts firmly in position permitting no possible relative movement of the parts while the cement is setting. After the cement has become dried an arbor is passed through the hole 8 in the hub and the ball is turned on the lathe, or other special machine, and its surface finished into a perfect sphere. The arbor is then removed and the ends of the hole 8 are closed as at 10 and 11 with cork plugs, leaving a perfectly continuous outer surface, which is then painted, lacquered, or otherwise attractively finished.

I do not wish to be restricted to the use of the hollow bushing 9 in the construction of this ball, as it is found in practice that in some instances the halves of the ball may be secured together without the use of this bushing.

A ball formed of my improved construction is extremely light in weight, and strong and durable, which are features particularly

desirable for house balls and the like, and as the same is constructed of cork and hollow it is extremely buoyant giving it all the necessary qualifications for use as a surf ball.

I claim:

1. As a new article of manufacture a ball formed of two halves each having a hollow center portion and a peripheral meeting edge by which the halves are cemented together, a central hub on each half projecting inwardly to the parting line whereby the ball shell is stiffened a greater cementing area provided and a hollow central bearing formed for the reception of an arbor on which the outer surface is finished.

2. As a new article of manufacture, a cork ball formed of two hollow halves, each having a peripheral meeting edge by which the halves are cemented together, and an integral central hub projecting inwardly from each half to the meeting line.

3. As a new article of manufacture, a cork ball formed of two hollow halves each having a peripheral meeting edge by which the halves are cemented together, an integral central hub projecting inwardly from each half to the meeting line, and means in said hubs for joining the parts together.

4. As a new article of manufacture, a cork ball formed of two hollow halves, each having a peripheral meeting edge by which the halves are cemented together, an integral central hub projecting inwardly from each half to the meeting line, and a threaded bushing screwed into each half hub for securing the parts together.

5. As a new article of manufacture, a hollow pressed cork ball formed of two halves each having a hollow central portion and a comparatively broad meeting edge by which said halves are cemented together, an integral central hub projecting inwardly to the center thereof from each half and at substantially right angles to said meeting edge whereby the ball is stiffened and a greater cementing surface is provided.

6. As a new article of manufacture, a hollow pressed cork ball formed of two halves each having a hollow central portion and a comparatively broad meeting edge by which said halves are cemented together, an integral central hub projecting inwardly to the center thereof from each half and at substantially right angles to said meeting edge whereby the ball is stiffened and a greater cementing surface is provided, and a threaded bushing screwed into each half hub for securing the parts together.

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

FRANK E. CHESTER.

Witnesses:
HOWARD E. BARLOW,
E. I. OGDEN.