## A. R. SPEAR. GOLF BALL.

APPLICATION FILED DEC. 29, 1902.

NO MODEL.

Fig. 1.

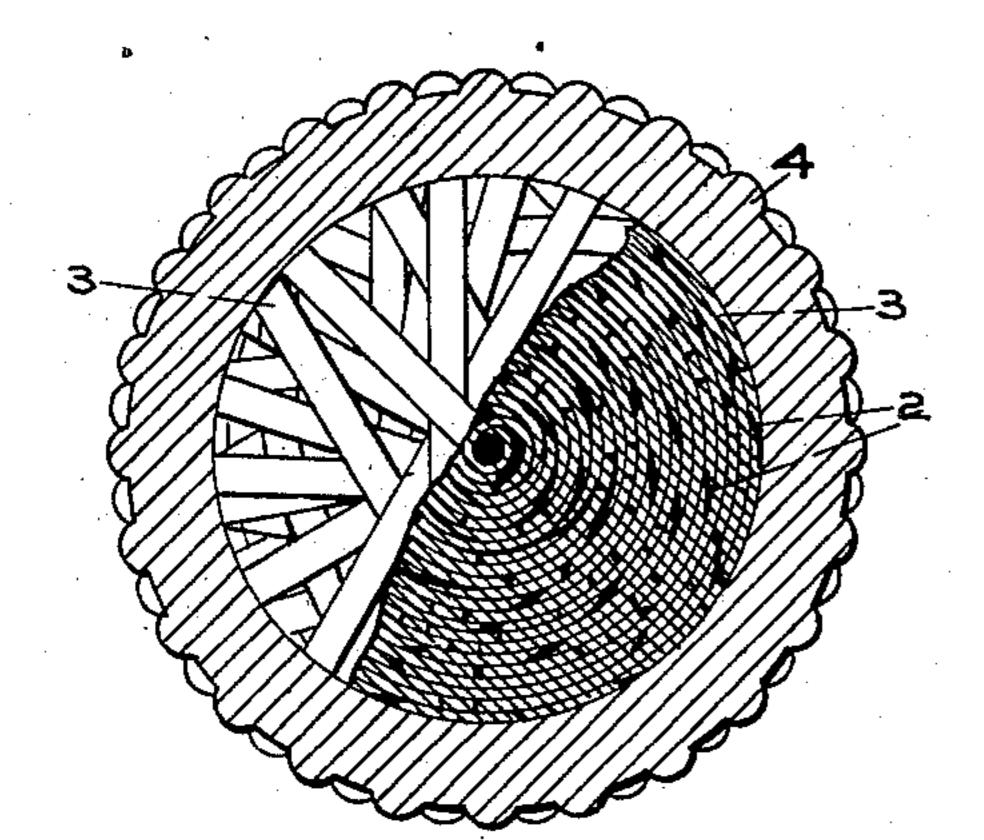
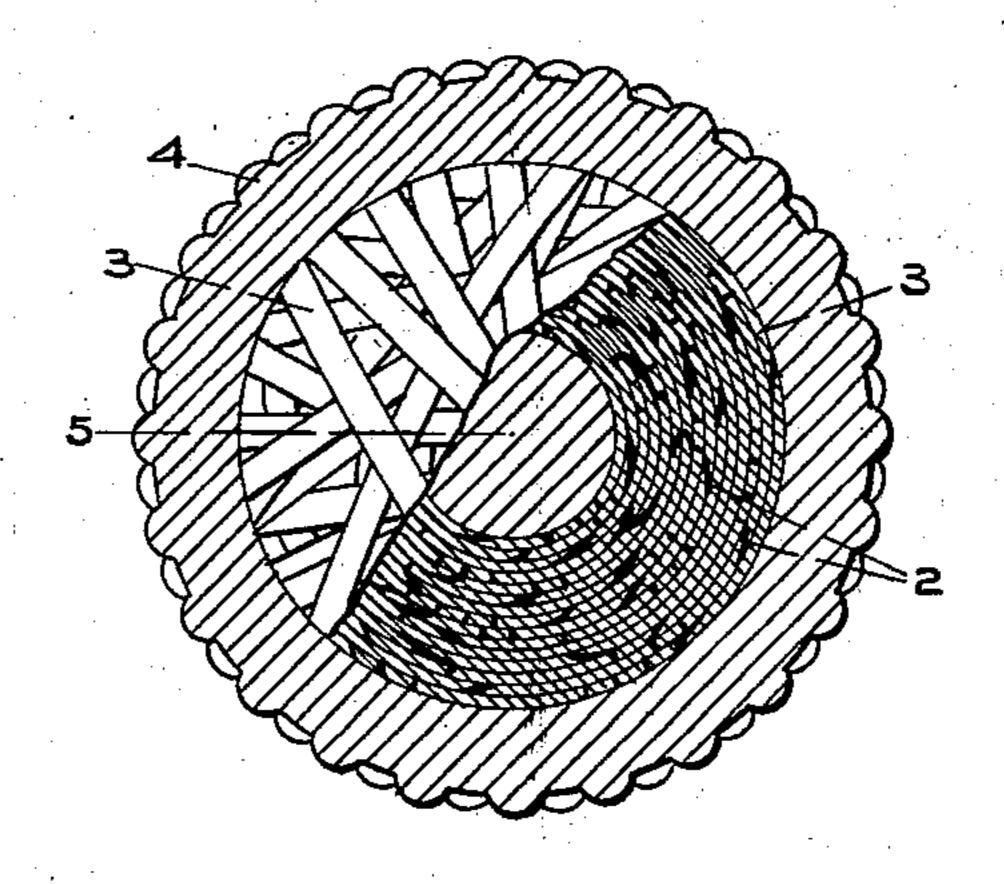
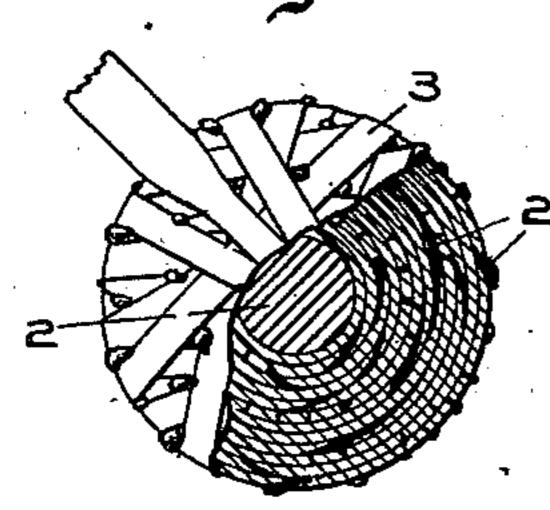


Fig. 2.



Sig. 3.



Witnesses, WHolmer Emily F. Otto Inventor, Anson R. Spear. by fothy african his Attorneys.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

## United States Patent Office.

ANSON R. SPEAR, OF ST. PAUL, MINNESOTA.

## GOLF-BALL.

SPECIFICATION forming part of Letters Patent No. 723,938, dated March 31, 1903.

Application filed December 29, 1902. Serial No. 136,978. (No model.)

To all whom it may concern:

Be it known that I, Anson R. Spear, a citizen of the United States, residing at St. Paul, in the county of Ramsey and State of Minnesota, have invented certain new and useful Improvements in Golf-Balls, of which the following is a specification.

My invention relates to improvements in golf-balls, its object being to improve the quality and efficiency of the ball, and particularly to secure accuracy of centering and evenness of construction, together with solidity and durability.

To this end my invention consists in the features of construction and combination hereinafter particularly described and claimed.

In the accompanying drawings, forming part of this specification, Figure 1 is a partial section of my improved ball. Fig. 2 is a similar view of a modified construction; and Fig. 3 is a similar view of the ball, partly wound.

In making my improved ball I first preferably take a plastic mass or pulp of elastic ma-25 terial, as rubber. Around the mass 2 I wind in miscellaneous directions, preferably under tension, the strips 3. As the rubber strips are wound around the pulp they will sink therein, causing the pulp to ooze outwardly 30 into the interstices between the windings, as shown in Fig. 3. As the winding of the strips is continued the inner portion of the windings will sink farther and farther into the pulp, until when the ball reaches the finished 35 form shown in Fig. 1 there will under ordinary circumstances be little or none of the pulp left in the center of the ball. The pulp, after it has filled the spaces between the windings, will slowly dry and harden un-40 til it becomes almost of the consistency of the windings themselves. The pulp will thus hold the windings under tension and also prevent their slipping to one side. After the body of the ball is constructed as above de-45 scribed an ordinary covering of gutta-percha or other suitable material 4 is placed upon the body of the ball. .

In Fig. 2 I have shown the body of the ball provided with a solid center piece 5. In maksing up this form of ball the pulp will be placed upon the center piece and the strips wound around the same in the same manner as in the preferred construction.

In using the word "strips" in the specifi-

cation and claims I intend to indicate either 55 a single long strip or thread or a plurality of strips or threads of any suitable material. In using the word "pulp" in the specification and claims I designate a plastic elastic mass of thick pulpy consistency, which when the 60 rubber strips are wound upon and in it under tension will be compressed by the strips and will ooze outward between the same to completely fill all the interstices. The pulp being elastic material, as rubber, is under 65 tension on account of being compressed or distorted by the strips. The pulp also oozes outward beyond the outer windings, so that when the inclosing shell is in place the pulp will adhere to the shell, holding the elastic 70 windings more or less out of contact with the shell, so that when the shell is removed the windings will not strip, and also so that in use the cover will not slip upon the core.

Having now described my invention, what 75 I claim as new, and desire to secure by Letters

Patent, is—

1. A golf-ball, comprising elastic strips wound under tension upon and in an elastic plastic mass.

2. A golf - ball, comprising strips wound upon and in a plastic mass of elastic material, which material fills the interstices between the windings.

3. A golf-ball, comprising a core of elastic 85 strips wound under tension upon and in an elastic pulp of such consistency as to be compressed by such strips, and to ooze into and fill all of the interstices between said strips.

4. A golf-ball, comprising a core of elastic 90 strips wound under tension in a rubber pulp, the said rubber pulp filling the interstices between said windings and protruding beyond the outer windings, and an inclosing shell.

5. A golf-ball, comprising a springy center piece and a surrounding core of tensioned elastic strips wound upon and in a rubber pulp, said rubber pulp being compressed by said windings and filling the interstices be- 100 tween the same, and an inclosing shell.

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

ANSON R. SPEAR.

Witnesses:

H. S. Johnson, Emily F. Otis.