

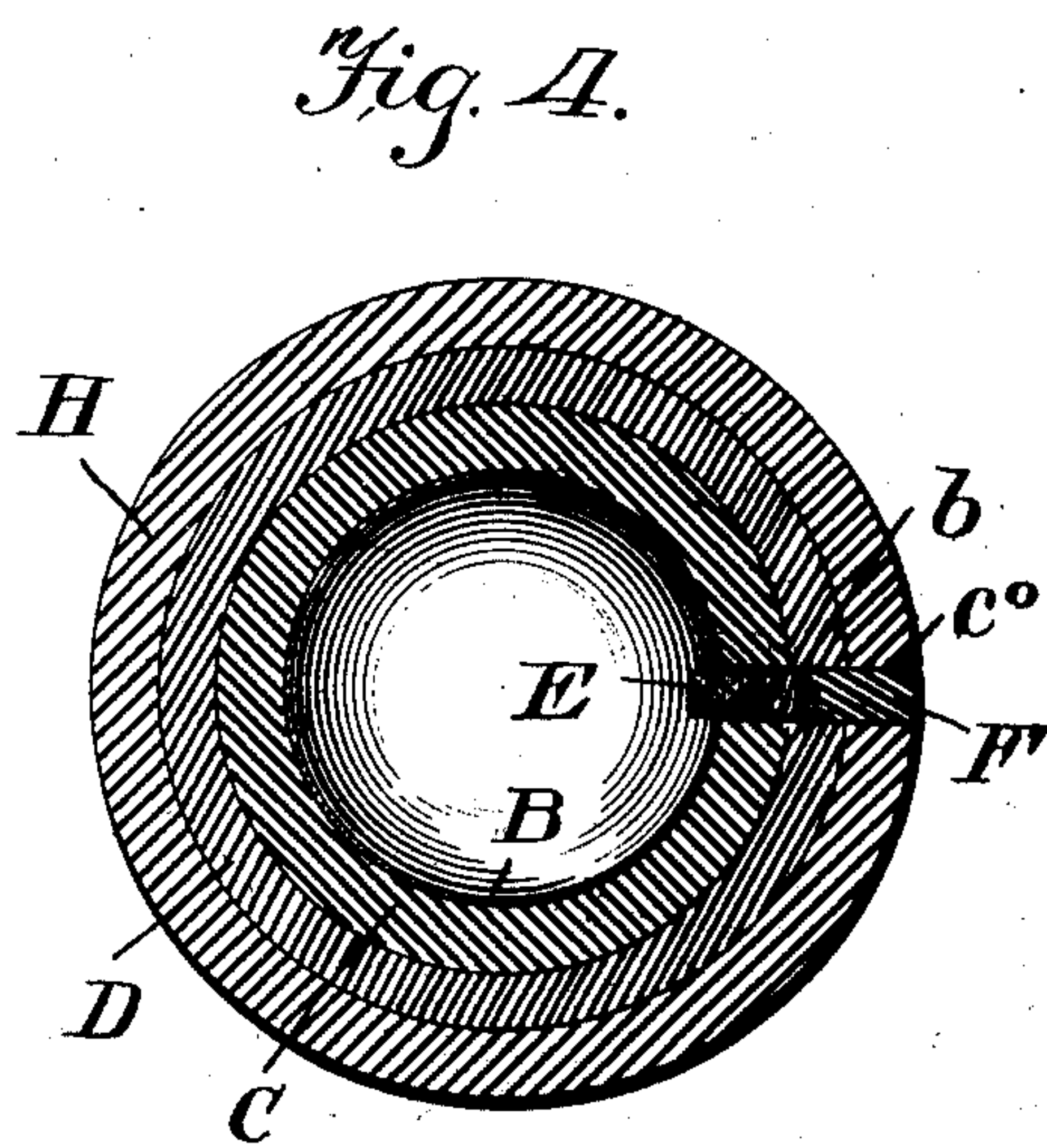
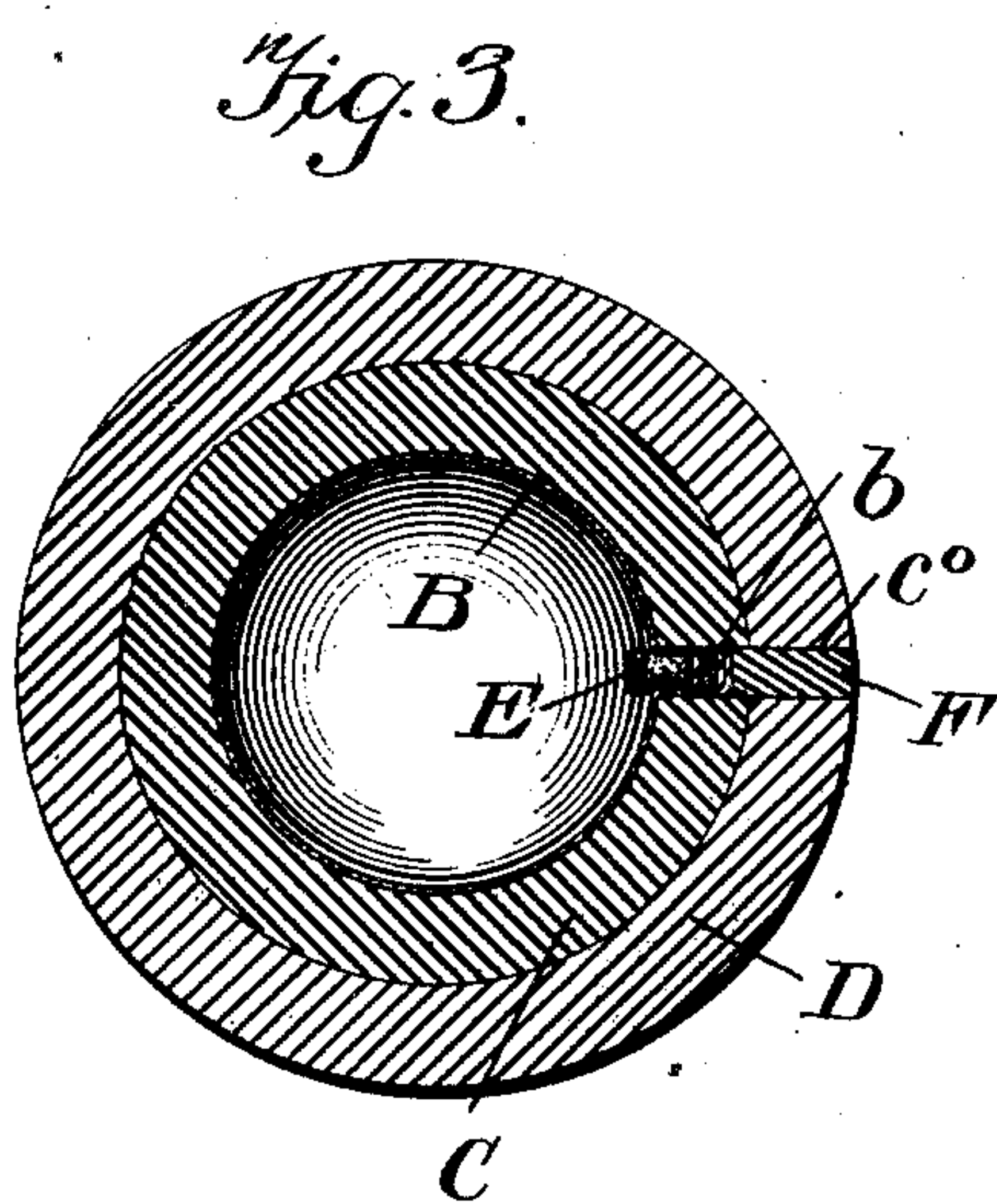
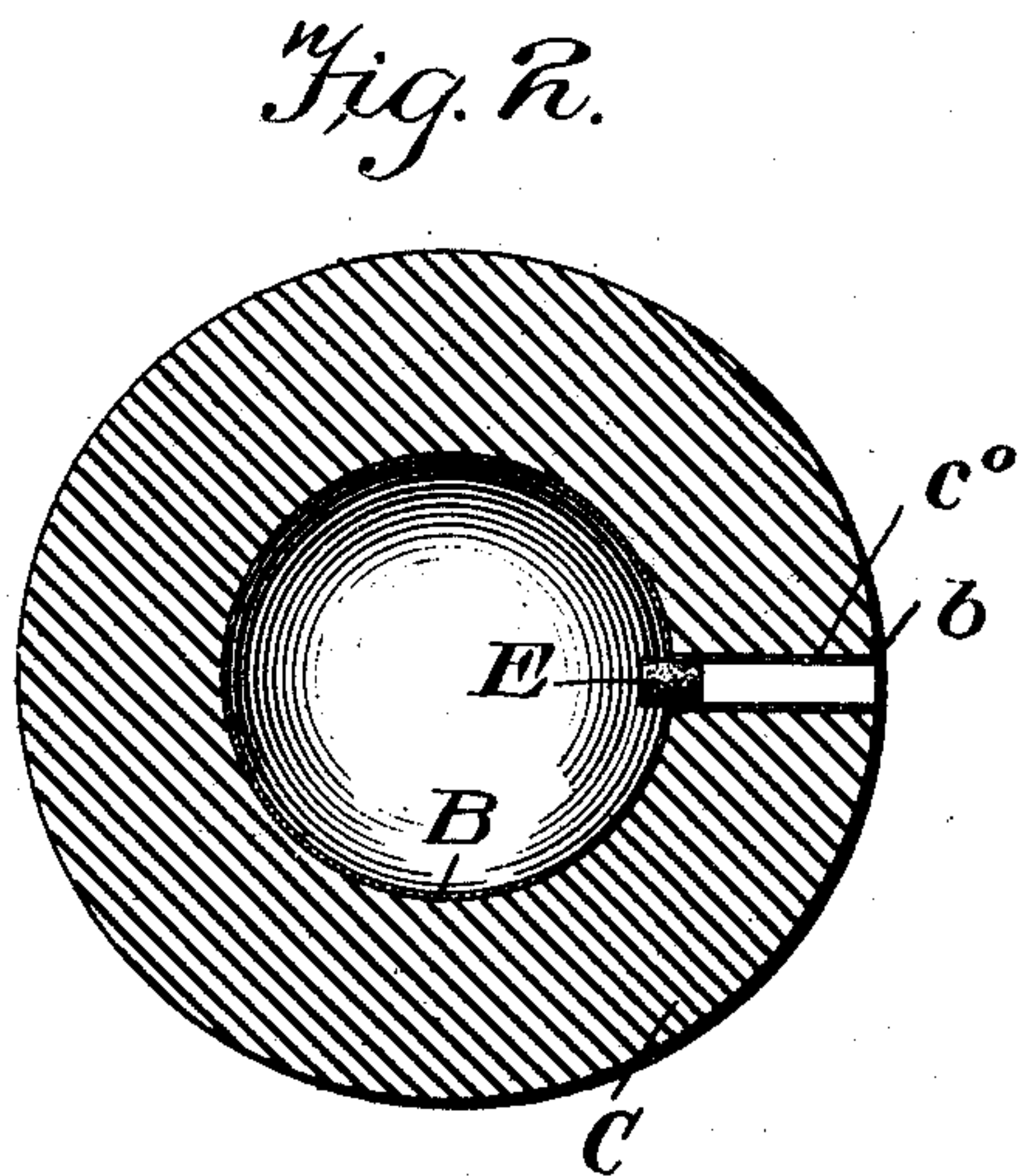
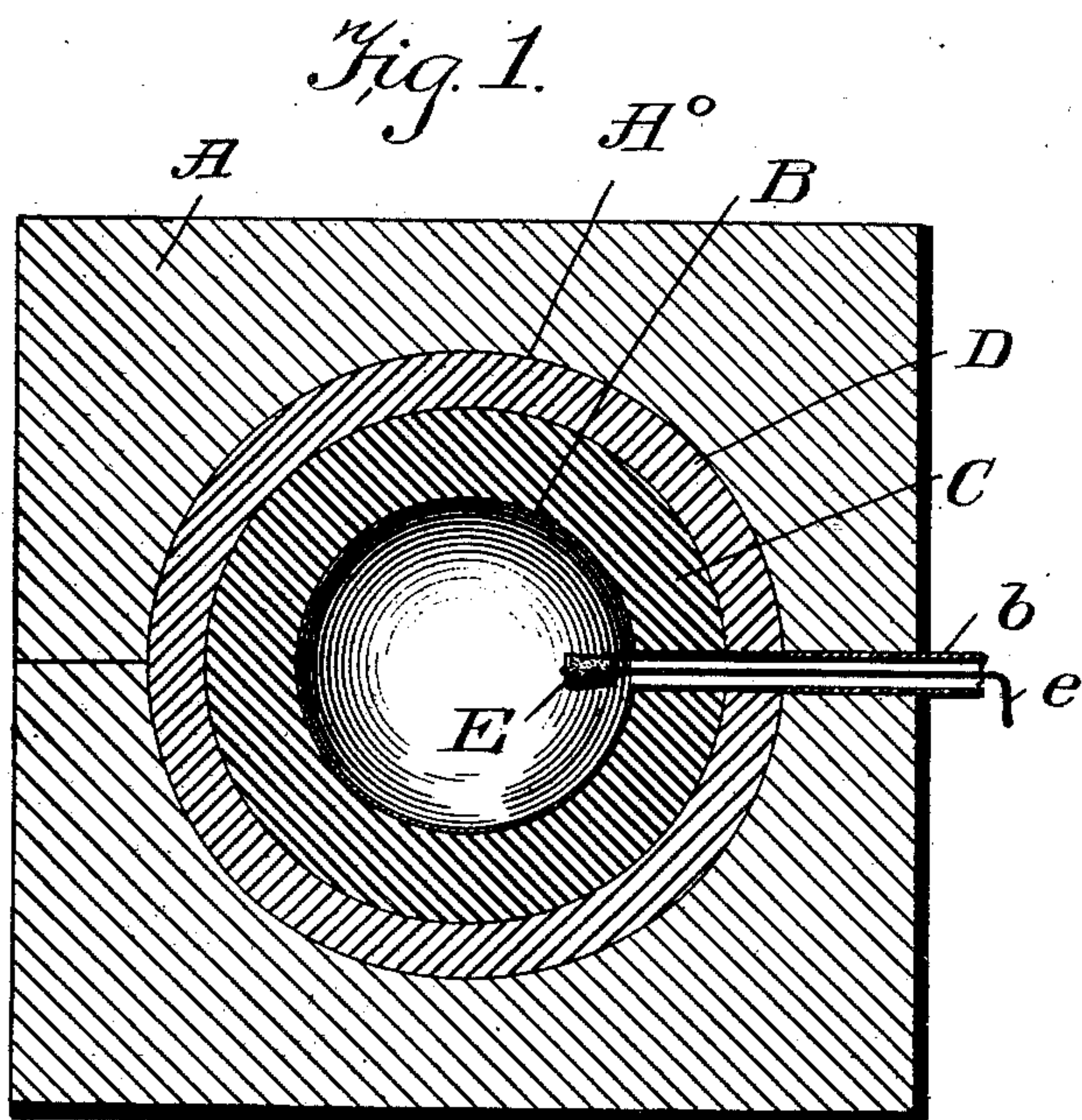
No. 703,239.

Patented June 24, 1902.

C. DAVIS.  
GOLF BALL.

(Application filed Apr. 10, 1902.)

(No Model.)



Witnesses

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# UNITED STATES PATENT OFFICE.

CLELAND DAVIS, OF THE UNITED STATES NAVY.

## GOLF-BALL.

SPECIFICATION forming part of Letters Patent No. 703,239, dated June 24, 1902.

Application filed April 10, 1902. Serial No. 102,277. (No model.)

*To all whom it may concern:*

Be it known that I, CLELAND DAVIS, lieutenant United States Navy, stationed at Washington, in the District of Columbia, have invented certain new and useful Improvements in Golf-Balls, (Case D;) 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 the construction of play-balls, especially those intended for use in playing golf; and it consists of certain novel features which will be hereinafter described and claimed:

Reference is had to the accompanying drawings, in which the same parts are indicated by the same letters throughout the several views.

Figure 1 represents a section through a mold containing a ball and the method of manufacturing the ball. Fig. 2 is a section through a modified form of ball and illustrates the ball before the plug is inserted; and Figs. 3 and 4 are sections of other forms of finished ball, the ball shown in Fig. 3 being of the same construction as that shown in Fig. 1.

The mold A is made of two separable members in the ordinary way. The material to be molded in the form of a hollow ball is placed in the spherical cavity A<sup>o</sup> in the mold, and inclosed in the center of the mass is an inflatable bag B, of rubber, gold-beater's skin, or other suitable material, which bag is provided with a neck b, through which air or other gas may be forced under pressure, thus causing the bag to swell up and force the plastic mass C D outward, filling the spherical chamber in the mold and forming the round ball. The inner walls of the chamber may be indented to form the projections on the ball such as are common with golf-balls, if desired. When the ball is blown up and the hollow chamber in its center is filled with fluid under suitable pressure, the passage through the tube b is temporarily inclosed, as by means of the cork E, pulled in place by the string e, thus retaining the gas under pressure in the center of the ball, as shown in Fig. 2. The end of the tube b may now be cut off, the parts of the tube shoved back in

the opening c<sup>o</sup>, as shown in Figs. 3 and 4, and the plug F of suitable material may be inserted. Where a ball composed of nitrocellulose is used, this plug may be of like compound dipped in a suitable solvent and then put in place, when the parts will weld themselves together. With a gutta-percha ball the gutta-percha may be melted and poured in place. In the form of device shown in Fig. 1 I have represented a ball composed of a hollow rubber core C and a casing of celluloid D. The form of ball shown in Fig. 2 is a single hollow shell of rubber, gutta-percha, or of nitrocellulose compound, as shown.

In the form of device shown in Fig. 3, C represents the rubber core, and D another shell of celluloid or other suitable nitrocellulose compound.

In the form of device shown in Fig. 4 there is an inner shell of rubber C, an intermediate shell of nitrocellulose compound D, and an outer shell of gutta-percha H. In all of these forms the center of the ball is hollow and is filled with an elastic fluid under pressure. By this construction I secure not only the advantages of placing the mass of the ball away from the center, as described in my application, Serial No. 76,766, filed September 27, 1901, but I also insure increased elasticity of the ball owing to the presence in its center of the elastic fluid under pressure.

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

1. A golf-ball, composed wholly or in part of a nitrocellulose compound and provided with a hollow cavity in its center, said cavity being filled with an elastic fluid under pressure, substantially as described.

2. A hollow golf-ball, comprising a shell of nitrocellulose compound, and an outer shell of gutta-percha, and having the cavity therein filled with an elastic fluid under pressure, substantially as described.

3. A hollow golf-ball, comprising an inner shell of rubber, an intermediate shell of a nitrocellulose compound and an outer shell of gutta-percha, and having the cavity therein filled with an elastic fluid under pressure, substantially as described.

4. A golf-ball, composed wholly or in part of

a nitrocellulose compound and provided with a hollow cavity in its center, and an inflated bag containing elastic fluid under pressure inclosed in said casing, substantially as described. 5

5. A golf-ball, comprising a plurality of concentric shells of homogeneous elastic material, the inner shell being hollow, and an inflated bag containing elastic fluid under pressure contained in said inner shell, substantially as described. 10

6. A hollow golf-ball, comprising a shell of nitrocellulose compound, and an outer shell of gutta-percha, and an inflated bag filled with

elastic fluid under pressure in the hollow portion of said ball, substantially as described. 15

7. A hollow golf-ball, comprising an inner shell of rubber, an intermediate shell of a nitrocellulose compound and an outer shell of gutta-percha, and an inflated bag containing fluid under pressure contained in the cavity in said ball, substantially as described. 20

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

CLELAND DAVIS.

Witnesses:

JAS. H. BLACKWOOD,  
STEPHEN GIUSTA.