No. 704,881. Patented July 15, 1902.

E. KEMPSHALL.

PLAYING BALL.

(Application filed May 12, 1902.)

(No Model.)

Fig. 1.

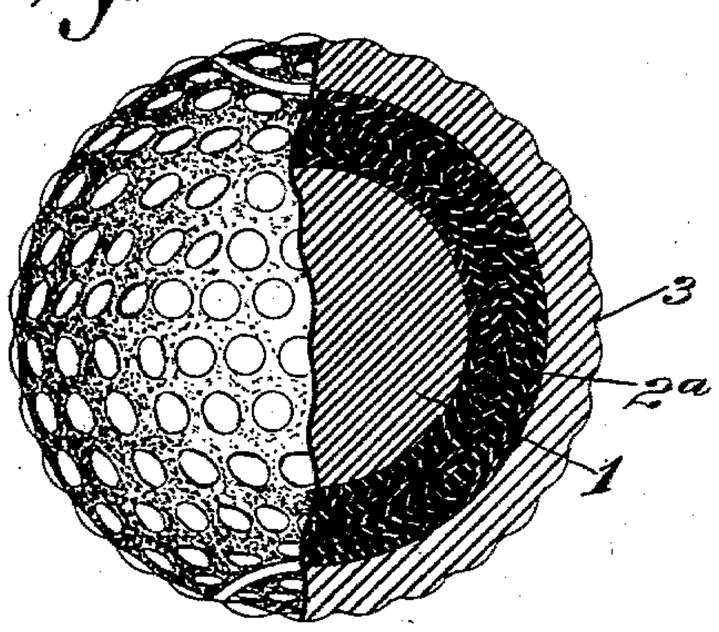


Fig. 2.

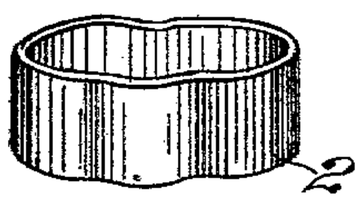
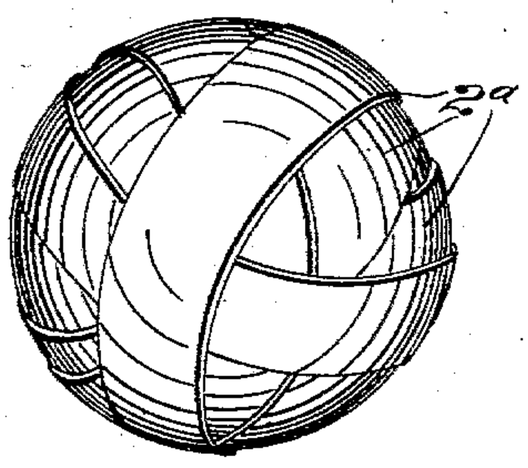


Fig. 3.



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UNITED STATES PATENT OFFICE.

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PLAYING-BALL.

SPECIFICATION forming part of Letters Patent No. 704,881, dated July 15, 1902.

Application filed May 12, 1902. Serial No. 107,019. (No model.)

To all whom it may concern:

Be it known that I, ELEAZER KEMPSHALL, a citizen of the United States, residing in Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Playing-Balls, of which the following is a specification.

This invention relates to playing-balls, and especially to those used in the game of golf. Its chief object is to increase the flying power of the ball, while reducing the liability of its becoming damaged in use.

In the drawings forming part of this specification, Figure 1 is a part-sectional view of a ball made in accordance with my present improvements. Fig. 2 illustrates a broad rubber band such as used in making a portion of the ball, and Fig. 3 illustrates a core partly built up of bands such as shown in Fig. 2.

For a center piece 1 I prefer to employ firm but compressible rubber. It is preferably in the form of a solid sphere, although, if desired, it may be otherwise constructed. To this center piece I apply a succession of broad thin rubber bands 2, forming a complete core, as shown at 2^a, Fig. 3, and upon this core I apply a shell 3, of plastic material, preferably gutta-percha, and preferably holding the core under high compression. The material of the bands 2 is preferably much softer than that of the center piece 1 and all of said bands are highly tensioned upon the core, thereby actively resisting distortion of the ball, so that when it is struck the reaction from the blow is hastened and it receives a powerful impetus and flies a great distance.

By means of my present improvements I overcome the liability present in the usual continuous-rubber-thread cores of bursting when a few of the threads are cut through by a blow from a club or otherwise. It will be seen that owing to the breadth of the bands none of them is likely to be severed or to receive such an extensive cut as would cause it to break, and also that even if one should break it would not affect the others, as each band is complete in itself and independently tensioned upon the ball. It will also be seen that owing to the tense condition of the broad rubber bands they exert a great compressive or restraining tendency, and hence the danger of bursting of the shell is minimized.

Having described my invention, I claim—

1. A playing-ball comprising a yielding center piece, a series of independent, endless, broad, thin rubber bands independently tensioned thereon and forming a larger sphere, and a shell of plastic material upon said sphere.

2. A playing-ball comprising a yielding center piece, a series of independent, endless, broad, thin rubber bands independently tensioned thereon and forming a larger sphere, and a shell of plastic material holding said sphere under compression.

3. A playing-ball comprising a sphere of solid rubber; a succession of independent, endless, broad rubber bands independently tensioned thereon and forming a larger sphere; and a shell of plastic material upon said sphere.

4. A playing-ball comprising a sphere of solid rubber, a succession of independent, endless, broad bands of softer rubber independently tensioned thereon and forming a larger sphere, and a shell of plastic material upon said sphere.

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