

G. A. REACH.
BASE BALL.

APPLICATION FILED SEPT. 30, 1907.

917,658.

Patented Apr. 6, 1909.

Fig. 1.

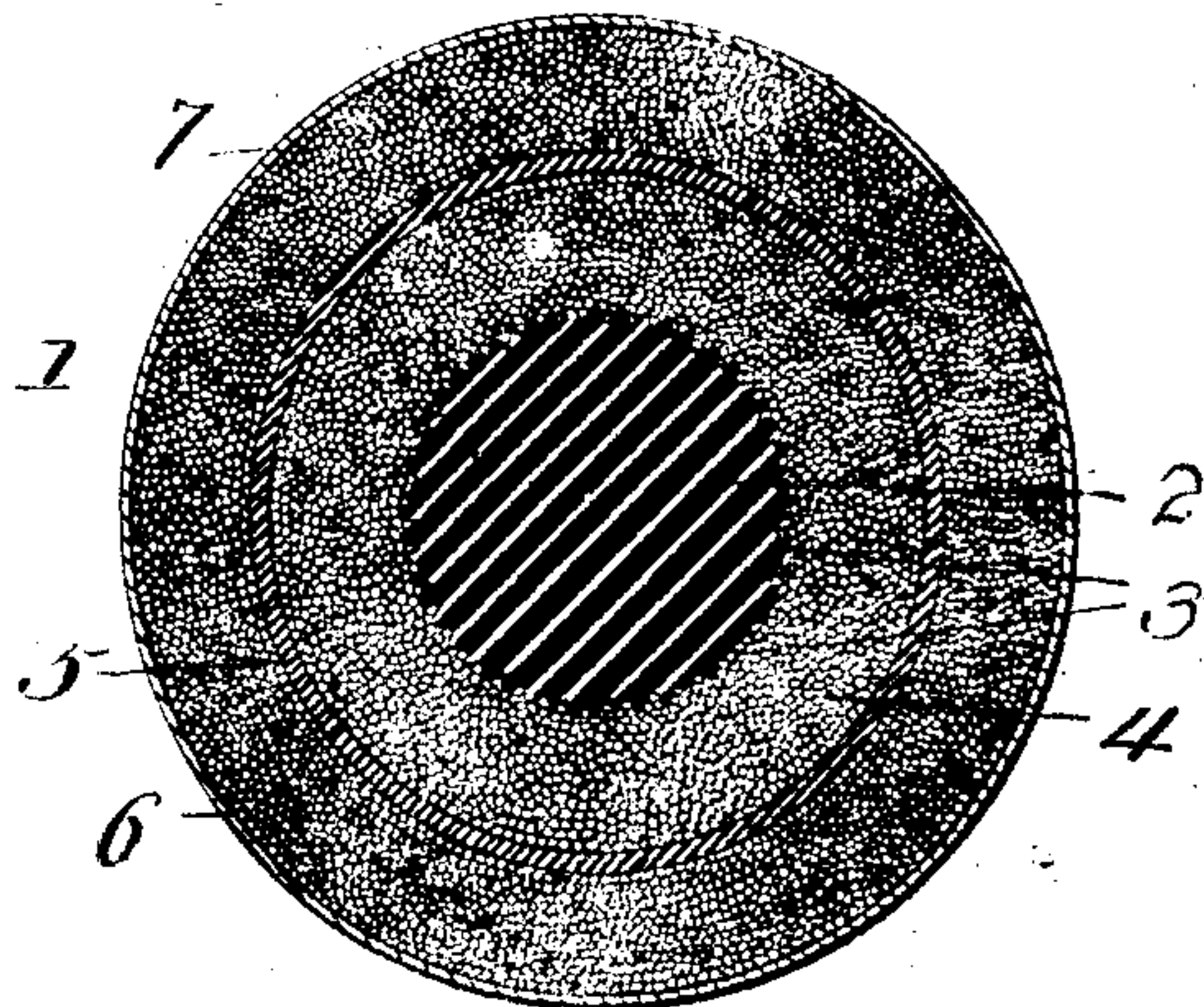


Fig. 2.

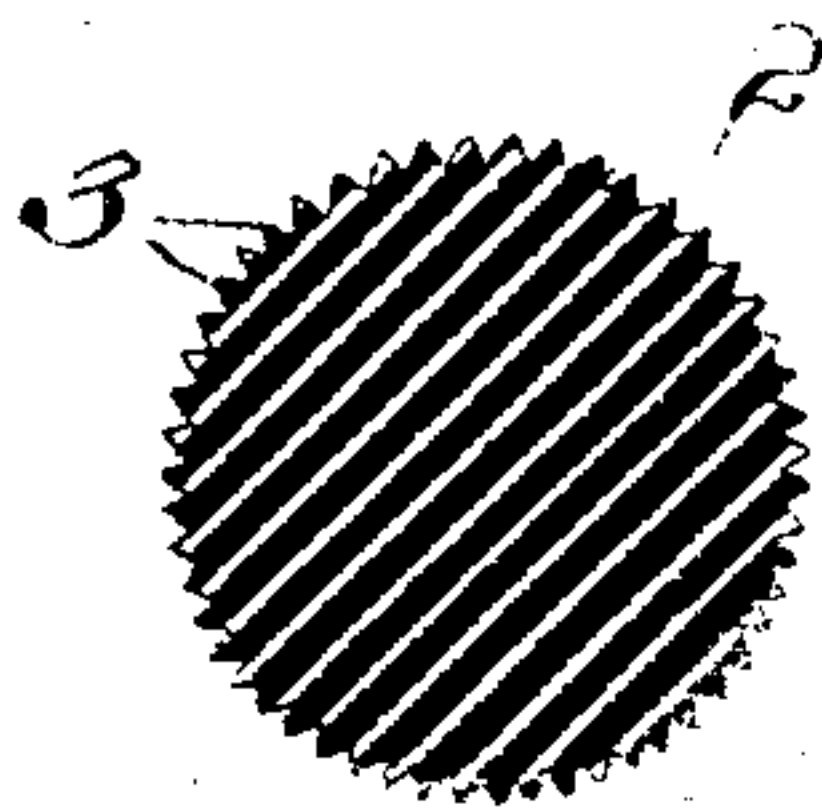


Fig. 3.

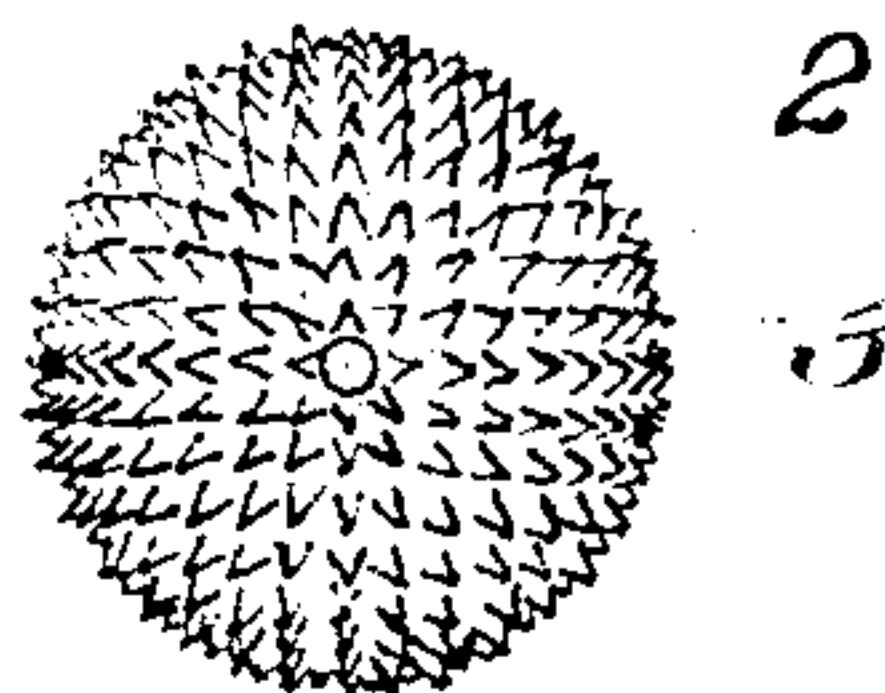


Fig. 4.

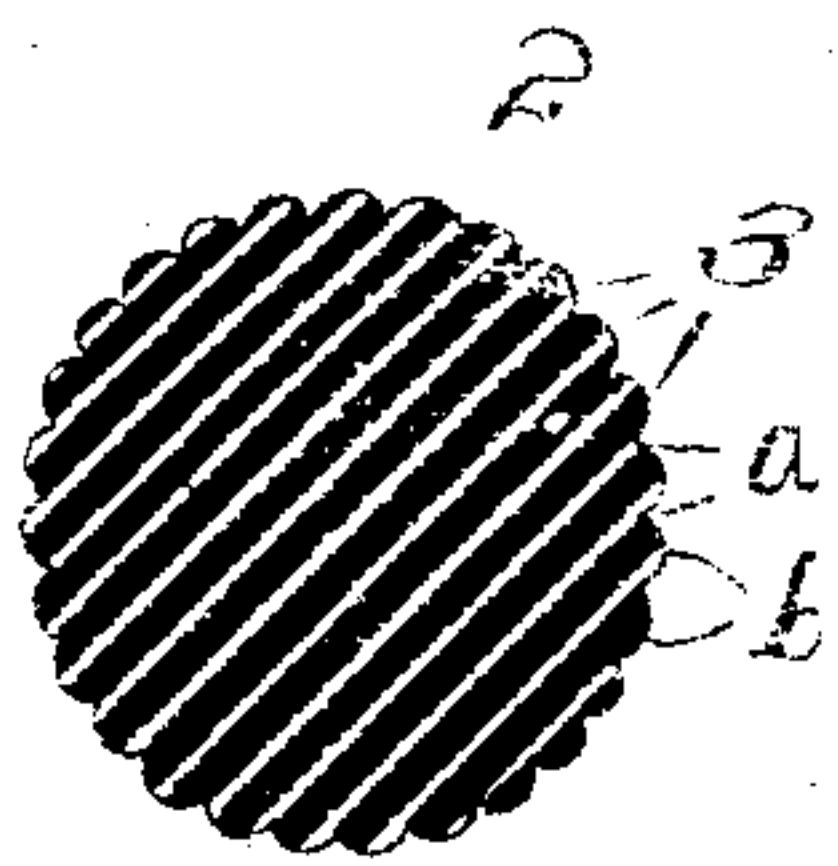
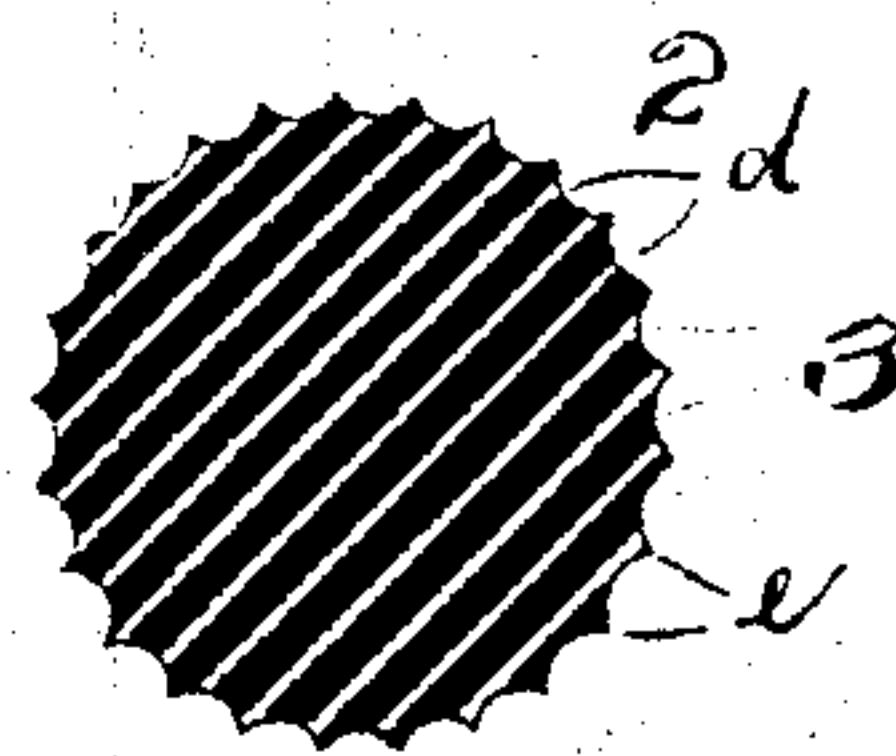


Fig. 5.



Fig. 6.



WITNESSES:

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BASE-BALL.

No. 917,658.

Specification of Letters Patent.

Patented April 6, 1909.

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To all whom it may concern:

Be it known that I, GEORGE A. REACH, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and useful Improvement in Base-Balls, of which the following is a specification.

My invention relates to playing balls, and pertains more particularly to base balls in which the center is formed of a resilient sphere having next adjacent thereto a layer of yarn or other thread tightly wound upon said central sphere.

The object of my invention is to produce a playing ball of said class in which the central sphere is firmly held concentrically within same, and the tendency of the adjacent layer of thread to slip away from same when subjected to severe blows during use in play is obviated.

As heretofore constructed, the central resilient sphere, or core, has been formed of rubber having a smooth surface, the adjacent layer of yarn being wound thereon and depending upon its tension and the frictional contact with the rubber to retain its position. In use, it has been found that under hard impact, the thread sometimes slips, causing the resilient sphere to shift, which results in the ball becoming eccentric, producing soft places therein, and materially destroying its resiliency.

The purpose of my invention is to provide a central sphere having a roughened or notched surface upon which the adjacent layer of thread will take hold and be secured against displacement, to be hereinafter described and more particularly pointed out in the claim.

In the accompanying drawings illustrating my invention, Figure 1 is a sectional view through the center of a base ball showing my central sphere in use; Fig. 2 is a sectional view of my central sphere detached; Fig. 3 is a perspective view thereof, and Figs. 4, 5 and 6 illustrate modified forms of my invention.

Referring to the drawings, 1 designates a base ball having a resilient central sphere 2, preferably of solid India rubber, the periphery of which is roughened by corrugations or other depressions 3. Upon said central sphere is tightly wound a layer of thread 4 of equal and uniform thickness. The char-

acter of the thread is not material to the purposes of this invention, but hard woolen yarn has been found to be most desirable. The corrugated periphery 3 of the central sphere 2 affords depressions upon the surface thereof in which the strands of the layer of thread become seated when wound thereon, and from which they cannot slip as heretofore. The layer of thread 4 is incased in a layer 5 of an adhesive plastic composition adapted to retain the spherical contour thereof, and this is wound with a layer of thread 6, which is incased in an outer cover 7, preferably of horse hide.

In the modified forms of the central sphere 2, of my invention, shown in Fig. 4 of the drawings, various forms of roughening the periphery thereof to afford a retaining surface for the thread are shown. In Fig. 4, the periphery 3 of the central core 2 is provided with a plurality of annular grooves *a* between rounded annular ridges *b*. In Fig. 5, the regular surface of the core 2 is provided with annular V-shaped grooves *c*, and in Fig. 6, the periphery of the core has concave annular grooves *d* and sharp annular ridges *e* between the grooves. In each of the modified forms shown, the grooves afford a retaining seat for the thread 4, and it will be appreciated that the same may be varied within a wide range without departing from the spirit and scope of my invention.

Having thus described my invention, what I claim as new and desire to be secured by Letters Patent, is—

A base ball, comprising a central resilient sphere provided with depressions and projections upon the periphery thereof, a resilient layer of woolen yarn wound upon same, the strands thereof adjacent to the core being seated in the depressions and held by same and the projections against displacement, and an outer cover of flexible material incasing same, whereby the central core is held against shifting in concentric position.

In testimony whereof, I have hereunto signed my name in the presence of two subscribing witnesses.

GEORGE A. REACH.

Witnesses:

JOHN T. BYRNE,
LUCIUS O. LEE.