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A diagram of a sphere with three concentric layers. The innermost layer is labeled '1' and has diagonal hatching. The middle layer is labeled '2' and is unshaded. The outermost layer is labeled '3' and has diagonal hatching.

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BASE-BALL.

999,527.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, BENJAMIN F. SHIBE, a citizen of the United States, and resident of Bala, in the county of Montgomery and State of Pennsylvania, have invented new and useful Improvements in Base-Balls, of which the following is a specification.

My invention relates to base balls, and pertains more particularly to base balls constructed of yarn and other filaments tightly wound upon a central spherical core.

As base balls have heretofore been constructed, the filamentous windings have been built on a central core or foundation of resilient, yielding substance such as rubber, or similar material, upon the theory that the resiliency of the structure was largely derived from the action of the central core. I have found that the use of a yielding center absorbs the force of a blow from a bat, and fails to react or rebound until the ball has been driven away from contact therewith when the effect is lost, and furthermore that such a center is liable to break down under the strain of use, and destroy the resiliency of the whole structure of the ball.

It is therefore the object of my invention to produce a base ball constructed of filamentous windings built upon a central sphere comprising a rigid, unyielding and non-resilient core having an adjacent layer of highly resilient material such as rubber, upon which the usual layers of resilient woolen yarn is tightly wound to the desired diameter.

To these ends, my invention includes the combinations and arrangement of component parts to be hereinafter described and more particularly pointed out in the claims.

In the accompanying drawings, in which like reference characters indicate similar parts, Figure 1 is a cross sectional view of a base ball embodying my invention, and Fig. 2 is a sectional view of the core of the same.

Referring now to the drawings, 1 indicates a spherical center for a base ball comprising a rigid yielding core 2 of seasoned hard wood incased in a layer 3 of resilient vulcanized rubber. Upon such spherical

center is tightly wound layers of resilient thread 4 of woolen yarn or similar material under such tension as to form a compact and durable structure and possessing the preferred degree of resiliency for use. The said layers of thread may be held in spherical contour by a layer of adhesive plastic composition 5 adjacent to the outer surface which may be surrounded by a layer of thread 6 and is incased in an outer cover 7 of flexible material, preferably of horsehide stitched thereon.

From the foregoing description, it will be appreciated that the rigid and inflexible core will resist instead of absorb the force of a blow from a bat, and that a strong and prompt reaction or rebound therefrom will occur in the highly resilient layer of rubber contiguous thereto which will be communicated through the resilient layers of thread wound thereon and the recoil from the center outward will be had before the ball is driven by the force of the bat from contact therewith.

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

1. A base ball comprising a rigid inflexible central core, a layer of highly resilient material incasing same, layers of thread wound thereon, and an outer cover incasing same, substantially as described.

2. A base ball comprising a rigid inflexible central core, a layer of rubber incasing same, layers of thread wound thereon, and an outer cover incasing same, substantially as described.

3. A base ball comprising a spherical center of wood, a resilient layer of rubber incasing same, layers of resilient thread wound thereon and a flexible outer cover incasing same, substantially as described.

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

BENJAMIN F. SHIBE.

Witnesses:

THOS. S. SHIBE,
ELSIE J. MOHR.