

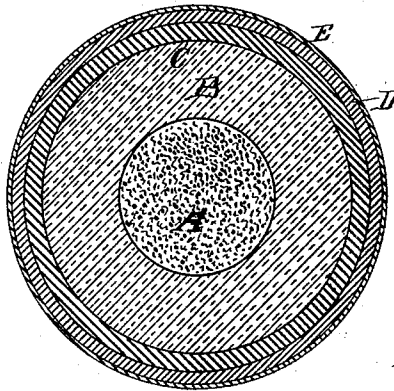
(Model.)

B. F. SHIBE.

BASE BALL.

No. 272,984.

Patented Feb. 27, 1883.



WITNESSES:

*Chas A. Rutter.*  
*John Rodgers*

INVENTOR

*Benjamin F. Shibe*  
*by his attorney*  
*Fred. J. Hallowell*

# UNITED STATES PATENT OFFICE.

BENJAMIN F. SHIBE, OF PHILADELPHIA, PENNSYLVANIA.

## BASE-BALL.

SPECIFICATION forming part of Letters Patent No. 272,984, dated February 27, 1883.

Application filed October 27, 1882. (Model.)

*To all whom it may concern:*

Be it known that I, BENJAMIN F. SHIBE, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a certain new and useful Improvement in the Manufacture of Base-Balls; and I hereby declare the following to be a specification thereof, reference being had to the accompanying drawing, which represents a section cut through the center of a ball containing my improvement.

In the drawing, A represents the core of my ball, which may be made of india-rubber or other suitable elastic substance, whereon is tightly wound yarn B, and upon this yarn is applied in a continuous even layer any well-known india-rubber solution or other suitable plastic cement, C, and upon this cemented surface, and partly embedded therein, the yarn D is applied, as shown. This completes the inner structure of the ball, upon which is placed the horse hide or leather cover E.

The cement C, which contracts as it cools and hardens, holds steadfast the core of the ball and the yarn wound upon it.

It is essential, in order to make and preserve the ball a perfect sphere, that the yarn strands B and D be held rigidly in position; and this I effect by applying on the surface of strands B the cement C, and by afterward covering the cement to such extent with yarn partly embedded therein as may be necessary to perfect the size of the ball, and to this end the cement may be painted upon the ball in successive thin layers. Thus the yarn D is held immovably steadfast, and the ball is formed

into a rigid spherical and compact mass, which admits the cover to slip upon the ball when batted. When the cover is rigidly secured to the ball, the shifting strain to which the inner periphery of the ball is subjected in batting not only tends to impair its sphericity, but actually so greatly impairs it as to render the ball practically useless for its intended purpose, wherefore the base-ball of J. Giblin, patented July 27, 1875, No. 165,994, which I disclaim; is discarded by the Base Ball Union of the United States. His ball is formed with an outer thin layer of india-rubber; but the cover of his ball is also india-rubber, and the outer layer and the cover are consolidated by the heat employed in the vulcanizing process, as explained in his Letters Patent, wherefore when the cover of his ball is subjected to the tangential strain caused by the blow of the bat its sphericity is soon destroyed. It is the purpose of my invention to avoid this error in construction, and thus to produce an improvement upon the Giblin patent, as aforesaid.

What I claim, and desire to secure by Letters Patent, is—

As a new article of manufacture, a base-ball having core A tightly wound by yarn strands B, its strands B and D being rigidly secured and retained in position as a spherical compact mass by cement C, to admit movement of cover E, substantially as shown and specified.

BENJ. F. SHIBE.

Witnesses:

JOHN RODGERS,  
WM. A. WELCH.