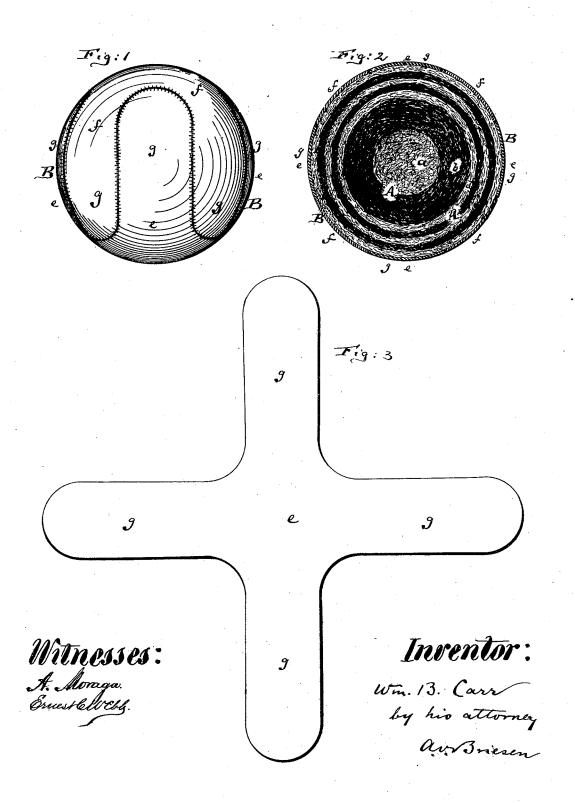
No. 180,110.

Patented July 25, 1876.



## UNITED STATES PATENT OFFICE.

WILLIAM B. CARR, OF BROOKLYN, NEW YORK.

## IMPROVEMENT IN BASE-BALLS.

Specification forming part of Letters Patent No. 180,110, dated July 25, 1876; application filed June 17, 1876.

To all whom it may concern:

Be it known that I, WILLIAM B. CARR, of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Base Ball, of which the following is a specification:

Figure 1 represents a side view of my improved base-ball; Fig. 2, a central section of the same, and Fig. 3 a diagram of one of the

covering-pieces of the ball.

Similar letters of reference indicate corre-

sponding parts in all the figures.

This invention has for its object to improve the filling, and also the covering, of a baseball. As to the filling, it is necessary to render the ball as "dead" as possible—i. e., deprive it of most of its resiliency, without altogether taking away its elasticity. To this end I construct the filling of alternate layers of hard and soft wool, the yarn for the soft wool being spun very loose, and mixed with a species of curly goats' hair to render it elastic. A ball thus made will have the full measure of elasticity without possessing the resiliency of base-balls containing rubber, and will, on the other hand, be as "dead," without being as inelastic, as balls that are filled with but one kind of wool.

As to the covering, my invention consists in making it of two pieces of leather, each piece being made with projecting lapels that have parallel sides, in contradistinction to the lapels made broader at their outer ends, as heretofore.

In the drawing, the letter A represents the filling, and B the covering, of the ball.

The center of the filling is made of a small ball, a, of soft wool, around which a layer, b, of hard wool is laid. Around this is laid another layer, d, of soft wool, and so forth, the layers of soft and hard wool alternating, as indicated in Fig. 2, in which the lighter-shaded circles indicate the soft wool.

By the term "hard wool" I mean ordinary stocking-wool, now usually employed in baseballs. By the term "soft wool" I mean a special preparation of my invention, consisting of

very fine, loosely-spun wool, mixed with long curly goats' hair, and thereby made as elastic nearly as india-rubber. This soft wool, when applied to the ball in manner shown, deprives it of its hardness, and prevents it from breaking or rapidly softening under the influence of the bat, and yet leaves it sufficiently "dead" for the purposes of the game of baseball.

The covering B is made of two pieces, e and f, of leather or equivalent material, one piece being of the same shape and size as the other.

Fig. 3 shows the shape of one of the pieces. It is made with four, more or less, projecting lapels, g g g, as shown, each lapel being made with parallel sides and rounded ends, as shown. This form differs from that heretofore used, in having the parallel sides, where formerly they were made narrower, at their inner ends.

The advantage of the parallel sides is, first, that the material is cut to much better advantage, much less of it being wasted in cutting, as the lapel of one piece can be cut close to that of another piece; secondly, that a shorter seam around each lapel is required; and, thirdly, that in stretching the leather on the ball, each part of the lapel, being of equal width, is stretched to an even degree, which was not possible with lapels that differ in width at different parts of their length.

I claim as my invention-

1. The ball-filling composed of alternate layers or thicknesses of hard and of soft wool, the layers of soft wool being rendered elastic by an admixture of hair, substantially as specified.

2. The base-ball covering B, made with lapels g g, that are of equal width throughout, substantially as herein shown and described.

W. B. CARR.

Witnesses:

A. V. BRIESEN, ERNEST C. WEBB.