July 27, 1943. J. H. GRADY 2,325,128

BALL

Filed Jan. 22, 1941

Fig. 1.

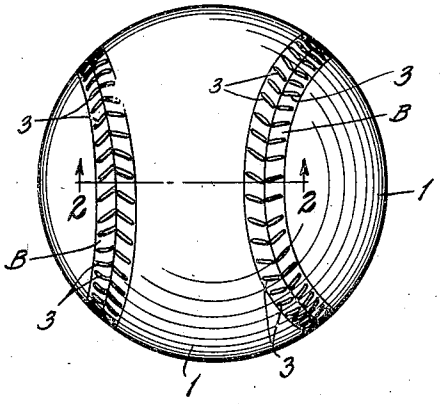
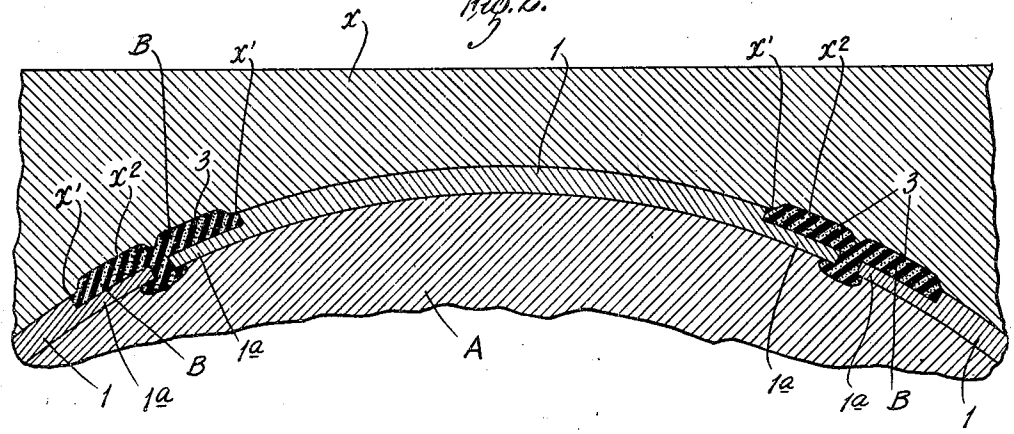


Fig. 2.



INVENTOR:
JOHN H. GRADY,
BY Wells L. Church.
ATTORNEY.

Patented July 27, 1943

2,325,128

UNITED STATES PATENT OFFICE

2,325,128

BALL

John H. Grady, St. Louis, Mo., assignor to J. H. Grady Manufacturing Company, St. Louis, Mo., a corporation of Missouri

Application January 22, 1941, Serial No. 375,437

10 Claims. (Cl. 273—60)

This invention relates primarily to baseballs, although one feature of my present invention consists of a novel method for producing and applying a cover to a ball.

One object of my invention is to provide a baseball that is more durable than the conventional baseball and also less expensive to manufacture.

Another object is to provide a baseball whose cover is constructed in a novel manner that increases the life or period of usefulness of the ball, without detracting from the appearance of the ball or rendering it more difficult to control, manipulate, or handle.

Another object is to dispense with the use of thread stitches or sewed seams in constructing the cover of a baseball.

The conventional baseball consists of a substantially solid core or body portion of spherical form, and a cover for said body portion made up of two or more fitted pieces of horse hide or other suitable sheet material stretched tightly over the core and joined together by seams or thread stitches. One inherent objection to such a ball is that the durability or life of the ball is dependent upon the strength of the thread seams or stitches that join the cover pieces together.

Another objection is the relatively high cost of sewing the cover so as to produce a ball whose cover is perfectly smooth, free from wrinkles, and in intimate contact with the entire surface of the core or body portion of the ball.

Figure 1 is a top plan view of a baseball embodying my invention; and

Figure 2 is a fragmentary sectional view, on an enlarged scale, of the mold employed in the operation of applying the cap strip to the cover pieces.

In manufacturing my improved baseball the core or body portion A is produced by the procedure commonly used in the manufacture of the conventional baseball. The cover for said core A is formed from a plurality of cover pieces 1 of conventional shape, constructed usually of horse hide, and provided with edge portions 1^a of reduced thickness, produced in any way, as, for example, by skiving or channeling. After an adhesive has been applied to the cover pieces 1 or to the cover pieces and the exterior of the core A, said cover pieces are applied to the core and smoothed down, so that the opposed edges of the cover pieces are separated by a joint that extends in an irregular line over the outer surface of the ball. The core A, with the cover pieces 1 thereon, is then placed in a mold x, provided on its exterior with a groove or depression x' that corresponds to the shape or outline of the joint between the cover pieces and which is disposed in alignment with said joint. Thereafter, latex, or some other suitable elastic or resilient plastic or semi-plastic substance is supplied to the groove or depression x' in the inner surface of the mold x, so as to form a cover strip or cap strip B that laps over and adheres tightly to the opposed edge portions of the cover pieces 1, thus hiding the raw edges of same and incorporating into the cover of the ball a finger gripping means, or non-slipping element B that extends in an irregular line over the surface of the ball cover. Preferably, the cover pieces 1 are proportioned so that the joint between the edges of same will be of sufficient width to permit the latex or other moldable substance to completely fill said joint and adhere to the core A of the ball, as shown in Figure 2, thus producing a baseball whose core has molded onto same an element that fills the joint between the fitted cover pieces and laps over the opposed edges of said cover pieces.

The cross-sectional shape and dimensions of the cap strip B may vary, but in order to produce a baseball that closely simulates the conventional sewed cover baseball, I prefer to provide the groove x' in the mold x with transverse indentations x^2, which, in the molding operation, form transverse ridges 3 on the cap strip B that present the appearance of thread stitches, and which perform one function of the thread stitches of the conventional baseball, i. e., they constitute slight protuberances or projections on the exterior of the cover of the ball that tend to prevent the user's fingers from slipping on the cover when the ball is caught, thrown, or manipulated while in use.

My improved baseball can be manufactured at a lower cost than the conventional baseball, due to the elimination of the sewing operation in producing the cover, and it is more durable than the conventional baseball, inasmuch as there are no thread stitches in the cover that are liable to break when the ball is struck with a bat or subjected to abrasion when it is in use. In addition to the desirable characteristics just mentioned, my improved ball presents practically the same appearance as the conventional baseball, and it is as easy to catch, throw, or manipulate as the conventional baseball, due to the fact that the cover has incorporated in same an element formed of elastic or resilient material that extends in an irregular line over the surface of the ball, and which is of sufficient size, shape and area to constitute an efficient finger grip or

slightly roughened or resilient surface that prevents the user's fingers from slipping on the cover.

My invention is applicable to the manufacture of various types and kinds of balls, and from what has been stated previously, it will be understood that my broad idea consists simply in applying the cover pieces to the body portion of the ball and securing them to the body portion by means of an adhesive, and subsequently, closing the joint or joints between the cover pieces by applying a plastic or semi-plastic substance to the opposed edge portions of the cover pieces, it being preferable to use a plastic or semi-plastic substance of an elastic or resilient character. It is also preferable to skive, feather-edge, or channel the opposed edge portions of the cover pieces before they are cemented onto the body portion of the ball, and incorporate the plastic or semi-plastic joint-covering material into the cover of the ball while the covered core or body portion of the ball is encased in a mold.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

1. A baseball, comprising a substantially solid body portion of spherical form, fitted cover pieces surrounding the exterior of same and secured to the exterior of said body portion by an adhesive, the opposed edges of said cover pieces being disposed on the exterior of said body portion, and a cap strip of plastic material covering the joints between the cover pieces and attached in overlapping relation to the edge portions of said cover pieces.

2. A baseball, comprising a substantially solid body portion of spherical form, shaped cover pieces secured by an adhesive to the exterior of said body portion and having their edges disposed on the exterior of said body portion, and a cap strip of elastic, molded material attached to the opposed edge portions of said cover pieces in overlapping relation with said edge portions.

3. A baseball, comprising a spherical body portion of substantially solid construction, leather-cover pieces secured by an adhesive to said body portion and provided with reduced edge portions disposed on the exterior of said body portion, and a cap strip of molded resilient material filling the joints between said cover pieces and lapping over and secured to the reduced edge portions of said cover pieces.

4. A baseball provided with a spherical body portion of substantially solid construction, cover pieces fitted smoothly over said body portion and secured to same by an adhesive, the opposed edges of said cover pieces being disposed on the exterior of said body portion, and a cap strip of latex attached to said cover pieces in overlapping relation with the opposed edge portions of said cover pieces.

5. A baseball provided with a spherical body portion of substantially rigid construction, cover pieces of leather fitted smoothly over the exterior of said body portion and provided with edge portions of reduced thickness arranged in opposed relation on the exterior of said body portion, said cover pieces being secured to said body portion by an adhesive, and a cap strip of molded latex attached to the reduced edge portions of said cover pieces over the joint or joints between the same.

6. A baseball provided with a spherical body portion of substantially rigid construction, cover pieces of horse hide secured by an adhesive to said body portion with their edge portions arranged on the exterior of said body portion, and a resilient molded substance arranged in overlapping relation with the edge portions of said cover pieces over the joints between the same and constructed so as to simulate a sewed seam.

7. A baseball provided with a spherical body portion of substantially rigid construction, cover pieces of horse hide secured by an adhesive to the exterior of said body portion, and an elastic molded substance attached to the exterior of the edge portions of said cover pieces over the joints between the same and constructed so as to simulate a sewed seam, the edge portions of said cover pieces located underneath said molded substance being of reduced thickness.

8. A ball provided with a cover made up of a plurality of fitted pieces of sheet material secured to the body portion of the ball by an adhesive and arranged with their edge portions disposed on the exterior of said body portion, and a closure for the joints between said cover pieces made of resilient, molded material arranged in overlapping relation with the opposed edge portions of said cover pieces.

9. A ball provided with a cover made up of a plurality of fitted pieces of sheet material secured to the body portion of the ball by an adhesive, the edges of said fitted pieces being arranged in opposed relation on the exterior of the body portion of the ball, and a closure for the joints between said cover pieces made of elastic, molded material arranged over the opposed edge portions of said cover pieces, the edge portions of said cover pieces overlapped by said molded substance being of reduced thickness.

10. A ball provided with a cover made up of a plurality of shaped pieces of sheet material secured to the body portion of the ball by an adhesive, the edges of said pieces being disposed on the exterior of said body portion and being spaced apart so as to form joints and a closure for the joints between said cover pieces made of elastic, molded material arranged in overlapping relation with the opposed edge portions of said cover pieces, and constructed so as to simulate thread stitches.

JOHN H. GRADY.