

# Where Do Baseballs Come From?

## *Glimpse of a Growing Industry*

THE average observer is apt to be so carried away by the spectacular side of the National Game as displayed on the diamond that he loses sight completely of some of the factors which have had an important bearing on the progress of his favorite pastime. The National Sport is not only a popular game in itself; it is also an industry of enormous proportions. This industry has been affected by the evolution of the game no less than have the rules and the personnel of players and managers. One of the most important factors in this evolution has been the improvement in the implements of the game, particularly in the balls which are used in the big league contests. The manufacture of these baseballs has grown to be a tremendous industry, as the following brief paragraphs strikingly illustrate.

The baseball is one of the big crops that this country produces. There is one factory that turns out 6,000,000 baseballs every year. There are others that turn out millions more. About \$100,000 is spent by the various leagues for baseballs every year, and how much more money is expended by the millions of boys that play in vacant lots is past calculation. While there are no actual figures regarding the total number of baseballs made in a year it is conceded by those familiar with the business that at least 20,000,000 is an average output.

The cheap ball is made by the million and with little care. Figuratively speaking, ground-up carpet rags are poured into one end of a machine and the balls are shelled out at the other. In reality the process of manufacture is almost as fast and as simple as that. The center of the cheap ball is made of ground-up carpet rags—any-

thing that is fit for little else. This material is pressed into a core by machinery. A little string is wound over this core. The string costs more than the core; therefore only enough is used to give the ball a certain resiliency. The coverings are cut out by machines and when the balls are ready they are sent to a big room where an army of women sewers put the covers on. They draw together the seams by hand and it takes about eight minutes to cover each ball. The ball is placed in a small wooden vise and the sewing is done with long needles. No machinery has been found that will replace hand labor in covering balls.

Each year has seen some new improvement in the expensive baseball. In fact, those interested in the game and in the manufacture of this article of sport have spent a great deal of time and thought upon its perfection. The cork center ball is this year's novelty and has been productive of some recent heavy hitting in the professional leagues. It has aroused some complaint. The cork center ball that is hit as a grounder is no faster apparently than the old-style ball, but when the batsman hits the cork center ball squarely "on the trade mark" and sends it sailing through the air it will go much further. This accounts for the great number of extra-base hits that are now being made.

The cork center itself is not a new thing. Some years ago the balls were made with rubber centers. But this ball was not fast enough to meet the demand of that particular time for more runs. Then the experiment was tried of making a ball with a small piece of cork in the heart of the rubber core. This cork made the ball

faster. Cautiously, year after year, the relative sizes of the rubber and the cork in the center of the spheres have been changed. The general public did not know these experiments were going on, but, as a matter of fact, the speed of the ball when batted squarely has varied from year to year. The 1911 league ball is the fastest one yet.

The process through which a baseball passes in its making is interesting. Time was in the early days when they were all wound by hand. An ordinary workman could wind eighteen balls in a working day. The winding is done now entirely by machine and a single machine can wind several hundred in an hour.

The first step is for the man attending one of the winding machines to place in position one of the rubber and cork cores. These weigh just one ounce. Then he pulls a little lever which starts the machine whirring, and in an instant the core is hidden in the winding twine. Gray woolen twine of the best quality is used because it is springier than cotton or any other fiber. Exactly two ounces of this twine is employed. The sphere then weighs three ounces, but has not reached its full size by any means. The ball is next sent to another man and another machine. These add one ounce of white twine. Next the ball passes to still another machine and another set of hands. These put on it the final covering of gray woolen twine, thinner than all the rest. By this time the ball is exceedingly hard and compact and ready to be covered.

Covering these "league" balls is man's work; it is not entrusted to women, principally because they have not the strength to do it all day long. But before the ball is covered it must be weighed. If it is slightly over weight, even a tiny fraction of an ounce, it is rejected. The process of sewing the horsehide covers on is

practically the same as with the cheap balls, but the leather is of better quality and the work is done with exceeding care. Then the balls are transferred to the labeling room, where they are wrapped in tinfoil and stowed in pasteboard boxes ready for shipment.

One of the features of a baseball factory that strikes most persons as peculiar is that several baseball teams and fields are a very necessary adjunct. It is a part of the day's work for these teams to play and thus test out the balls. One from each large shipment is used and if there is any defect in it the whole shipment is thoroughly overhauled and examined. There is no better way of testing than by actually playing with the balls. Therefore the experts engage in heated contests day after day during working hours, stopping now and then to examine the sample ball, figure out the distances that it has been batted and record other statistics that may be useful in arriving at a final judgment of its excellence. Because a baseball is really a delicate piece of workmanship the least thing affects its usefulness, and whenever a slight change is made in its construction or some improvement is contemplated it has to have these severe tests in the field. Close attention is given by men of long experience to the way the ball responds when hit.

At the close of 1910 there were 49 professional baseball leagues in the United States, embracing more than 350 clubs. Including those in minor leagues there are about 6000 baseball players in the profession. The salary list of 1910 reached the vast sum of \$3,550,000, including \$650,000 to the players in the two major leagues. Outside of these there are yet other leagues, both professional and amateur—no one knows how many.

