

Why Pitchers' Averages Mean Nothing

By M. G. Lloyd, Ph.D.

THE method at present in vogue in the professional baseball leagues for rating pitchers is crude, unjust and almost ridiculous. The pitcher's average is based upon the results of the games in which he has played, and is the ratio of the games won by himself and teammates to the total number of games in which he has played. Why this should be taken as a record of the pitcher's ability is a conundrum to which no one has as yet vouchsafed an answer.

The average obtained in this way is a measure of the ability of the entire nine, and not of any one man. It is true that more responsibility rests upon the pitcher than upon any one other man, but he has not as much power to decide the game as have the other eight combined. Any man on the team may throw away a game by his poor play, and many a pitcher has done work that would ordinarily win a game, only to have it lost by another player's errors. This is such common experience as to need no specific illustration. Yet the pitcher must bear the brunt of the discredit of losing the game, whether the poor play be his or another's.

Even supposing the pitcher receives perfect support from the fielders, he is powerless to win a game by pitching alone. To win, it is just as essential that his team shall do good work during their innings at bat, as that they should prevent their opponents from scoring. The same work by pitcher and by fielders will net the pitcher a higher average if he plays with a team of heavy hitters than if he plays with a team which is poor at stick-work. His record even in case of perfect fielding depends upon the prowess of his mates at the bat, and

upon the identity of the pitcher who, by chance or design, opposes him. The result of all which is that the leading pitchers are largely, of necessity, those attached to leading and heavy hitting teams, such as Pittsburg, Detroit and the Chicago Cubs.

A few illustrations may add support to my argument. In the American League last year, on September 9, Gehring, in the second game between Washington and New York, held the Highlanders to five hits and two runs, neither of which was earned, while the Nationals failed to score. In the first game between Boston and Philadelphia on September 14, the former hit Bender for eleven safeties, yet this pitcher is credited with a victory, simply because the Athletics contrived to score one run more than Boston. Gehring's performance was much the more creditable, yet he was charged with a defeat. Young held the Athletics down to ten hits, yet he also is charged with a defeat.

If we look at the pitchers' averages in the National League for 1907 we see that the leading ten pitchers represent the teams which finished in the first division: Cincinnati, Boston, Brooklyn and St. Louis having no representation. Of these ten, five hail from Chicago. Similarly in the American League, the leading ten pitchers include no representative of New York, St. Louis or Washington. It is only by a mere chance that any Washington pitcher, however good, could rank high on this list. As it is, we find most of them congregated near the bottom, while Detroit, Philadelphia and Chicago pitchers fill the higher ranks. But if we compute the runs per game, we find Johnson,

of Washington, leading all other pitchers. These facts demonstrate that the so-called "pitchers' average" is really a record of team-work.

NATIONAL LEAGUE 1907.

	Won	Lost	PerCt.
Reulbach, Chicago	17	4	81.0
Brown, Chicago	20	6	76.9
Overall, Chicago	23	8	74.2
Sparks, Philadelphia	22	8	73.3
Lundgren, Chicago	18	7	72.0
Mathewson, New York... .	24	12	66.7
Willis, Pittsburg	21	11	65.6
Pittenger, Philadelphia... .	9	5	64.3
Camnitz, Pittsburg	13	8	61.9
Fraser, Chicago	8	5	61.5

AMERICAN LEAGUE 1907.

Donovan, Detroit	25	4	86.2
Joss, Cleveland	27	11	71.1
Dygert, Philadelphia.	20	9	69.0
White, Chicago	27	13	67.5
Bender, Philadelphia	16	8	66.7
Smith, Chicago	22	11	66.7
Killian, Detroit	25	13	65.8
Siever, Detroit	19	10	65.5
Plank, Philadelphia	24	16	60.0
Young, Boston	22	15	59.5

Especially where pitchers are changed during a game is the present method unsatisfactory and unfair to the pitchers. The entire game must be credited to one pitcher, and very often to the one who has had least to do with it. We have all seen cases of this kind. Thus pitcher A has pitched winning ball for seven innings, but shows signs of weakening and is replaced by B. In the ninth inning the opposing team, through the assistance of errors, scores the winning runs. B, who has pitched only $1\frac{2}{3}$ innings, is charged with a defeat for which he is not responsible, and A gets no credit for seven innings of good work. Or perhaps B comes in with the bases filled and runs are scored while the succeeding batters are being retired. B is again charged with a defeat, for which in this case A is responsible, but A is treated to a clean record. This is manifestly unjust, and it is really surprising to find such a primitive method applied in a sport which has been the foremost for so many years.

How should the pitcher's average be determined? In fielding each man stands upon his own merits. So should it be with the pitcher. He should be judged solely by the effectiveness of his own work, regardless of whether his team is able to win the game. The first object of a pitcher is to prevent the opposing batsmen from making hits. This then may be taken as a criterion of his ability. Subtract the number of hits made by the opposing batters from the total times at bat, and take the ratio of this number to the times at bat for the pitcher's average. For this purpose, bases on balls and bases for being hit by a pitched ball should be counted in both with the hits and with the times at bat. Sacrifice hits, as in computing batters' averages, might be excluded from consideration, since they are of some advantage to each side.

This method (with possible modifications) ranks a pitcher entirely upon the effectiveness of his pitching, and seems the most equitable that could be employed. The average could be expressed in per cent, and 100 per cent would represent perfection, *i. e.* no hits or bases on balls.

It is not, however, the only alternative. The pitcher's average might be based upon the number of earned runs made by opposing teams in relation to the number of innings pitched, but innings per earned run would not give convenient numbers. This, again, would make him independent of errors by his own team and of the ability of the opposing pitcher, but would leave a little more to chance than the former method.

A good pinch hitter may win more games than the man with the fat batting average. And the pitcher who is effective with men on bases and keeps the hits well scattered may be more valuable than he who allows fewer hits in the large run, but goes to pieces at a critical stage of the game. Nevertheless the ratio of batters retired to total times at bat gives a good measure of the effectiveness of a pitcher and would be a vast improvement upon the present crude, unscientific, illogical and inaccurate system.