

# THE MYSTERY OF THE BASEBALL COVER



**L**OOK at it—the baseball of today! It is perfectly spherical. The seams of its cover present the only perfect solution of one of the most difficult problems in the application of geometry. The sewing of the seams presents the only solution of a problem equally difficult, yet arrived at by the dogged, stubborn slugging of repeated experiment. It has saved you fortunes; it has cost you for-

tunes. It has flung away one vast fortune and it is making other fortunes.

The modern baseball is a miracle of mathematics, a prodigy of patience, a triumph of science which the nation has made its work and its play, its world-famed industry and its world-famed relaxation.

And it bids fair, also, to be the national mystery, the eternal enigma, more dubious than the

riddle of the Sphinx, more debatable than the authorship of the Junius letters, more puzzling than the origin of "Beautiful Snow."

For who invented the double figure 8 cover now universally in use? That is the great mystery of baseball manufacture. The man who invented the modern cover and neglected to patent it missed a great fortune.

of the old form. The figure 8, as we call the modern cover, became the standard recognized the country over. To Ben Shibe, indomitable slugger at any problem he undertakes, belongs the credit of the final victory of mind over the rebellious matter that enters into the modern cover of the baseball. "Al" Reach was in the sporting goods business in Philadelphia, while Shibe was a manufacturer from 1884. In 1881 the two formed their partnership, mutually advantageous as giving Reach an interest in the control of an excellent manufacturing business and Shibe a partnership in a leading sales concern.

Shibe, at the time, was deep in the mysteries of the modern ball cover, for the inventor—that great unknown, learned mathematician or untaught, inspired genius—had not perfected his wondrous scheme of things. In 1888 a ball player who had bought the queer novelty in some shop gave his stray sample to Shibe, and that expert of the whirling sphere comprehended at first glance the marvel that had been wrought. Yet, when he came to make it—and for a long while he did make it—and even while he sold it, with ever-increasing success and profit, he was dissatisfied.

### OLD COVER LACKED SMOOTHNESS

Perfect as was the design, it never worked out perfectly in the stitching. Somewhere—usually where the tips of one "8" were fitted on either side of the waist of the other, the stitches always "drew," calling for the incessant work of the workmen in the adjustment of the cover yet never making the absolute smoothness which insured protection to the full strength of the hide.

For years after the partnership was formed "Ben" Shibe struggled with that vexatious problem, testing, trying, measuring, designing—all in vain. But he would not give it up; and, at last, by dint of sheer, unconquerable pluck and patience, he discovered that the nature of the sphere demanded that the stitches at the end of the "8," if they were to fit perfectly with the stitches in the waist, they must be more numerous and more closely grouped, in a steadily decreasing space of separation, than the others. He worked it out to the last obscure stitch of the 16 stitches. Then, wise where the numbers of the new hemispheres had been foolish, he took a patent on it in 1888.

But there was one more thing to be done; for the hour when the first fruit of his genius was put on sale without the magic safeguard of the patent, to reap the riches that belonged to his golden Harpides—for him to receive his reward in money.

But there not, among the millions whose memory carries back to the early seventies, some lover of the game who can give the clue to the unknown benefactor, whom all of us should hail with his missing meed of praise?

**O**NE sporting goods firm alone manufactures 1000 dozen standard baseballs every working day of the year. Any one can calculate the millions in the twelvemonth; and any one can count the millions of dollars that total output brings—the amount millions any people ever paid for the health or comfort of honest outdoor sport.

Two members of the firm of A. J. Reach & Co. linger in, heavily as the youngest of them, from the days when professional ball players were not and the game was strictly a gentleman amateurs' game. They are "Al" Reach and "Ben" Shibe. It is an old-fashioned partnership, where the partners are onies, with the good old times constantly recalled to cheer the good new times and the victories of youth revived to push the pulses of benighted age. And always the cronies' chat ends thus: "Ben, I wonder whether we'll ever find out who it was made the first real ball?"

"Al, there isn't a man alive to tell the world the name to put on his monument."

That four-leaf clover thing, among the illustrations, is the cover of the old-time baseball; and that sphere with the straight line of stitching across the top, where the seams of the clover leaves join, is the ball itself.

It is one of the two gilded trophy balls that remain out of the bushel they used to treasure. One of those balls bears the glorious legend, "Athletics vs. West Philadelphia, July—, 1888; 4 to 19." The other harks back another classic year: "Athletics vs. Union of Morrisania, August 2, '85; 28 to 12."

"The old ball used to cost us \$1," said Mr. Reach, in one of his vain efforts recently, just before he left his Adirondack camp for the summer, to solve the baseball's mystery.

"There were two manufacturers with reputations when I began to play ball back in the fifties—Harvey

Ross, of Brooklyn, and John Van Horn, of New York city. The cover was made of horsehide then as now. Ross was a member of the famous old Atlantic club, and they used the Ross ball. Van Horn belonged to the Union of Morrisania, and they used the Van Horn ball.

"Both were good balls, as well made as man could make them in that day. Their one weak spot was where the ends of the cover were attached together; it was usually there that the cover ripped during a hard game, for the batsman was a hitter then and runs were many."

"Even when I went into business in '66, those two were the standard balls. When the new ball did appear, what a fortune the man threw away who invented it and did not patent it—it did not do at first spring popularity. The reputation of the Ross ball was too firmly fixed. But gradually the absolute perfection of the new design, combining such sturdiness with such a maximum of strength, compelled the total abandonment

## NO MORE HEADACHES

Suffered From Constant Headaches—Cured by "Fruit-a-tives" When Doctors Failed.



"I was a sufferer from fearful headaches for over two years, sometimes they were so bad that I was unable to work for days at a time. I took all kinds of medicines, was treated by physicians, and yet the headaches persisted. I was rarely free from headache. A short time ago I was advised to try 'Fruit-a-tives' and I did so with, I must confess, very little faith, but after I had taken them for three days my headaches were easier and in a week they left me. After I had taken a box of the tablets my headaches were quite cured. My appetite was always poor and my stomach bad, and now my appetite is splendid and my digestion is excellent. I had become thin and weak from the constant headaches, but now not only have I been cured of all these awful headaches, but my strength is growing up once more, and I feel like a new man. I have taken in all three boxes of 'Fruit-a-tives.' I am exceedingly grateful to 'Fruit-a-tives' for curing me, and I give this unsolicited testimonial with great pleasure, as I hope thereby some other sufferers will be induced to try 'Fruit-a-tives' and will be cured."

(Sgd.) B. Cornell, Taylorville, Ont.  
"Fruit-a-tives" is now put up in the new 25c trial size as well as the regular 50c boxes. Write Fruit-a-tives Limited, Ottawa, if your dealer will not supply you.

You can't get better flour than

# Rainbow Flour

Milled in the careful Tillson way, from the best Manitoba wheat

Milled by the Tillsons at Tillsonburg

## THE SUNDAY SCHOOL LESSON

LESSON VII. AUGUST 16  
Read chapters 18, 19.  
SAUL TRIES TO KILL DAVID  
GOLDEN TEXT:  
"The Lord God is a sun and shield," Ps. 84:11.  
EXPOSITION:  
I. Saul's Envy of David, 6-11. David's great achievement raised him at once to a high position in the estimation of Saul, and in the army. But it did not turn David's head. He acted with remarkable modesty. He was perfectly obedient to all Saul's orders, though he knew that he had been himself divinely appointed to the chief leadership in Israel (cf. vs. 18, 23). He conducted himself with great wisdom. He patiently awaited God's time. Saul himself was at first disposed to put David forward (v. 5). He was commander-in-chief over the rude and undisciplined army which Saul had gathered together (cf. ch. 14: 52). In our day in times of war, men rise rapidly from obscurity to a place of great prominence by some act of great courage and prowess. Much more would this be true in a time of such primitive warfare. His was so splendid in the eyes of all that none dreamed of disputing his superiority. It was the custom of the women of Israel to greet their conquering armies with dances and songs of victory and praise as they returned from the battle (Ex. 15:20; Ju. 11:34; Ps. 68:25). Nothing is dearer to the average soldier's heart than the admiration and praise of the fair women of the land. David was naturally the idol of the hour. He was the nation's saviour. More-over he had performed a deed of unparalleled bravery. It is no wonder that the women went wild with enthusiasm. Their comparison was just

### BABY'S GREAT DANGER DURING HOT WEATHER

More little lives are lost during the hot weather than at any other time of the year, diarrhoea, dysentery, cholera, infantum and stomach troubles come without warning, and when a medicine is not at hand to give promptly the short delay too frequently means that the child has passed beyond aid. During the hot weather months Baby's Own Tablets should be kept in every home where there are small children. An occasional dose of the Tablets will prevent stomach and bowel troubles. Or if the trouble comes unawares the prompt use of this medicine will bring the child through safely. Mrs. J. Renard, New Glasgow, Que., says:—"One of my children had a severe attack of diarrhoea, which Baby's Own Tablets promptly cured. I know of no medicine so good for stomach and bowel troubles." Sold by medicine dealers or by mail at 25 cents a box from The Dr. Williams' Medicine Co., Brockville, Ont.

experience. Under the influence of this evil spirit Saul "prophesied," i.e., he was under the control of the evil spirit (cf. Acts 16:16-18; 1 K. 18:23; 22:12, 20-23).

II. Saul's Fear of David, 12-16. Saul's tormenting life now becomes coupled with tormenting fear. David's conduct commanded him to God and "the LORD was with David" (cf. ch. 16:18). He had been with Saul in the past (ch. 10:7), but He was now "departed from" him.

### CALENDAR FOR JULY 1908

MOON'S PHASES:  
First Quarter 7 11 4 m. 25 p. m.  
Full Moon 14 11 5 m. 48 p. m.  
Last Quarter 20 11 8 m. 2 a. m.  
New Moon 27 11 3 m. 17 a. m.

Day of Week	Sun Rises	Sun Sets	Moon Rises	Moon Sets	High Water
1 W	4:38	8:06	10:25	1:00	11:59
2 Th	4:39	8:06	10:55	1:46	12:35
3 F	4:40	8:05	11:28	2:29	1:13
4 Sa	4:40	8:05	11:41	3:23	1:59
5 Su	4:41	8:05	a. m.	3:27	2:50
6 M	4:42	8:05	0:05	4:03	3:40
7 Tu	4:42	8:04	0:28	4:40	4:33
8 W	4:43	8:04	0:49	5:32	6:16
9 Th	4:44	8:03	1:10	6:11	7:20
10 F	4:44	8:03	1:47	7:00	8:28
11 Sa	4:45	8:03	2:22	7:51	9:21
12 Su	4:46	8:02	3:08	8:45	10:29
13 M	4:47	8:01	3:58	9:36	11:23
14 Tu	4:48	8:01	4:54	10:30	12:11
15 W	4:49	8:00	5:56	11:21	12:54
16 Th	4:49	8:00	7:01	12:14	1:00
17 Fr	4:50	7:59	8:10	1:43	1:00
18 Sa	4:51	7:58	9:20	2:20	2:04
19 Su	4:52	7:57	10:32	3:14	3:07
20 M	4:53	7:56	a. m.	3:38	4:05
21 Tu	4:54	7:56	0:07	4:43	5:14
22 W	4:55	7:55	0:36	5:24	6:26
23 Th	4:56	7:54	1:16	6:14	7:38
24 F	4:57	7:53	1:41	7:00	8:45
25 Sa	4:58	7:52	2:22	7:52	9:46
26 Su	4:59	7:51	3:08	8:47	10:46
27 M	5:00	7:50	4:03	9:37	11:25
28 Tu	5:01	7:49	4:58	10:33	12:11
29 W	5:02	7:48	5:54	11:21	12:54
30 Th	5:03	7:47	6:50	12:11	1:00
31 F	5:04	7:45	7:46	1:13	12:25

### CHARLOTTETOWN MARKETS

Correct for every Wednesday and Saturday issues.

Beef quarter	6 to 8
Beef small	10 to 14
Flour	2.80 to 2.90
Oatmeal	2 to 5
Cabbage	3 to 5
Beets per bunch	5 to 8
New onions per bunch	5 to 8
Butter fresh per pound	21 to 22
Lamb per lb	8 to 9
Chickens per pair	65 to 1.00
Straw per cwt	30
Hay per cwt	45 to 50
Hay (new) per cwt.	32 to 35
Black Oats	45 to 50
White Oats	45 to 48
Green Peas quart	18 to 20
Lettuce	5 to 10
Cauliflower	5 to 10
Potatoes per bus.	36
Raspberries per qt.	10 to 12
Cherries per qt.	10 to 12

## THE CHARLOTTETOWN GUARDIAN

MORNING DAILY AND RURAL DAILY

The Island Guardian Publishing Company, Proprietors

Sworn Average Circulation Last Year **7,072** For the Morning Daily and the Rural Daily

The following statement of distribution shows the advertiser the value of The Guardian as an advertising medium. A detailed sworn circulation statement will be given to any one interested for the asking.

Morning Daily Average for 1907,---3,084  
DISTRIBUTED AS FOLLOWS:

Daily average, City of Charlottetown, delivered and street sales.....65  
Daily average to towns, villages and country post offices in P. E. I.....927  
Daily average to Canadian cities and United States.....277  
Total..... 3,084

Rural Daily Average for 1907,---3,987  
DISTRIBUTED AS FOLLOWS:

Daily average to towns, villages and country post offices in P. E. I. 3,277  
Daily average to Canadian cities and United States..... 690  
Daily average in Charlottetown (advertisers and office papers)..... 920  
Total..... 3,987

Sworn Average for Morning Daily and Rural Daily for 1907

# 7,072

Net Gain of 748 Over Average for 1906.

Use "SUNBEAM" Flour

The Flour with Flavor! when made into either BREAD OR PASTRY

Manufactured by

### John Campbell, Co., Ltd. St., Thomas, Ont.

# 2 in 1 Shoe Polish Lovers

are never fickle. The dealer who attempts to turn the course of true love by offering a substitute for what the purchaser knows to be the Best Polish in the World, richly deserves the fate that is dealt out with a liberal hand to all meddlers.

No dealer who values his reputation will offer a substitute.

At all dealers 10c. and 25c. tins