

FORE!

If you have ever hit a golf ball (or been hit by one), you owe it to yourself to find out how that dimpled little sphere, and the game you play with it, got so hard.

By BOB DARDENNE

One day, somebody held a little round white object up to the world and said, "Hey, if we put our minds together, this is what we can achieve."

Well, the world strained and squinted and focused and what it finally saw was a golf ball.

Greek shepherds might have swatted stones through the pastures; Roman legions probably batted wooden balls about the battlefields; but Scotsmen first played golf as we know it with feather-stuffed leather pouches, then with solid balls of rubberlike sap.

During centuries of evolution the ball went from rocks, ivory, wood and even iron, to stuffed leather, then the gutta-percha sap. But the ball Somebody held up to the world? It had a viscous liquid core to channel impact into energy, a middle of tightly wound bands of strong elastic thread and a precisely dimpled cover of a tough plasticlike substance born of a thousand chemical equations.

**AMERICA HAD
DISCOVERED THE GOLF
BALL!**

Whoever controls the ball controls the game, and once the United States got into golf seriously - in the late 1880s - it took just 20 years for a frustrated golfer in Cleveland to design the ball that shook the Royal & Ancient sport to its very roots.

Golf is royal because at one time balls were so expensive only royalty could afford to play with them, and ancient because, in one form or another, it has been

around for centuries. More imaginative minds have suggested shepherds, using their curved staffs as clubs, were the first golfers.. The Flemish played a game where one team hit a ball toward a goal a mile away, and the opposing team had a hit in every four to knock it somewhere else. This and a number of other ball and stick games added up to what we know as golf today.



During the 1400s, Scotsmen made golf their national pastime. They used heavy wooden clubs and crudely stuffed leather or wood or cloth balls, and loved the game so that they began to neglect their archery practice. King James II got

so angry about that, he decreed the game illegal. Golf was often interrupted by royal decree until gunpowder came along. Gunpowder did two good things for golf. First, it got rid of this competition with archery practice, and it gave the bow - and arrow - makers something else to do. They made golf clubs, elevating a primitive skill to an art.

A British essayist and golfer once said, "It is this . . . undying hope for improvement that makes golf so exquisitely worth the playing."

Sisco Offers

THE FINEST TURF SYSTEM. . . custom designed to meet your Club's specific needs.

Whatever your needs, we can furnish you a complete line of quality products and all the technical help you will ever need.

WE'RE THE EXPERTS IN ALL KINDS OF GOLF COURSE SYSTEMS!

Sprinkler Irrigation Supply Co. A division of A.J. Miller Inc.
1738 Armitage Court, Addison, Ill. 60101

Call your SISCO man today!

(312) 629-7730

Buckner®



Johns-Manville

No doubt, his "undying hope" was for an improvement in the way he played the game rather than in the way the game was played. But such personal goals never stopped Somebody from finding ways to make the game easier.

After all, you can only hit a wad of old cloth or a carved-out root so far with a wooden stick before you want better equipment. And that's apparently what Somebody in Scotland thought in the 1600s when he sat down with a leather pouch and invented the featherie, the world's first designed golf ball.

The featherie was made by stuffing boiled feathers inside a wet leather pouch and placing them in the sun to dry. During the drying, the leather would shrink and the feathers expand and the result after a couple of weeks was a firm ball that was almost round and almost white.

Today's longest hitters, using the best clubs and balls, can drive consistently around 300 yards. In the 1550s a 150-yard drive was

ROY G. ZEHREN

PH: 414/242-5740

NATURAL ATHLETIC TURF INC.

Specializing in

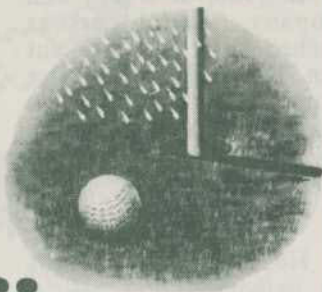
"PURR-WICK" TEES & GREENS

and

conventional turf & erosion control

5322 W. County Line Rd. Mequon, WI 53902

First on the green...



Irrigation, Inc.

DISTRIBUTORS FOR

RAIN BIRD
SPRINKLER
EQUIPMENT

- Plastic Pipe and Fittings
- Pumps & Pump Controls
- Electric Controls & Valves
- Design & Spec. Service
- Drainage Supplies

CALL COLLECT (414) 258-4223

IRRIGATION INC.

6510 W. River Parkway, Milwaukee, WI 53213

probably talked about for weeks. But in 1836, Frenchman Samuel Messieux playing at St. Andrews in Scotland mashed a featherie off the tee 361 yards.

You can imagine the excitement over the new ball. It, in fact, set the pattern for the evolution of the game. Probably no other sport has developed around a piece of equipment as golf has around the ball. The featherie changed everything but the basic structure of the game.

A more refined ball that went farther meant more refined courses with greater distances between holes. Up to then the links was a public picnic ground where cattle grazed, children played, women washed. Golf's first "caddies" cleared paths through all the activity and found the hole for oncoming players.

Now that balls weren't stones or pieces of wood, clubs could be more delicate, functional and stylish - not just durable. Another thing the featherie did was turn the

game over to the rich. Since the fastest ballmakers could make only four a day, prices went far beyond the average man.

The featherie had other problems besides expense. It was useless in rain or damp weather, and it neither bounced nor rolled very well. After a couple of centuries, those things combined with a growing interest in sports for the masses, to set the game up for another revolution, again led by the ball.

Around 1848 a Scotsman named Rob Paterson received a Hindu statue sent to him by a brother who was a missionary in India. The statue came packed in blackish-brown shavings which Paterson ultimately discovered were *gutta-percha*, the dried gum of a Malaysian tree. What he discovered first, however, was that by heating the shavings he could form solid sheets which, when sewn to the bottom of his shoes, were more durable than leather.

AN IDEA!

Paterson wadded one of his soles into a round ball and tried to play golf with it. The ball was lousy, squirting right and left and barely leaving the ground. Bored or frustrated, Paterson turned the project over to another brother and moved to Binghamton, New York where he founded American Bible College and died some three decades later, never realizing what he had started.

What Paterson's brother and others learned was that while smooth gutta-percha balls were lousy, those with surfaces that had been cut and scuffed were terrific! That's why golf balls to this day have dimples - little indentations that create air turbulence around them, giving the ball a higher and truer flight.

The expensive featherie was almost immediately obsolete and the game of golf came in for massive changes. With cheaper balls in use, golf courses were soon overpopulated with "gutter whackers". New, even longer courses were springing up overnight. Before the gutty, golfers played so many holes in one direction, then played the same ones in reverse. The increased traffic caused courses to be designed with two holes on each green (they played one side going out, the other coming back) and eventually with a separate green for each hole.

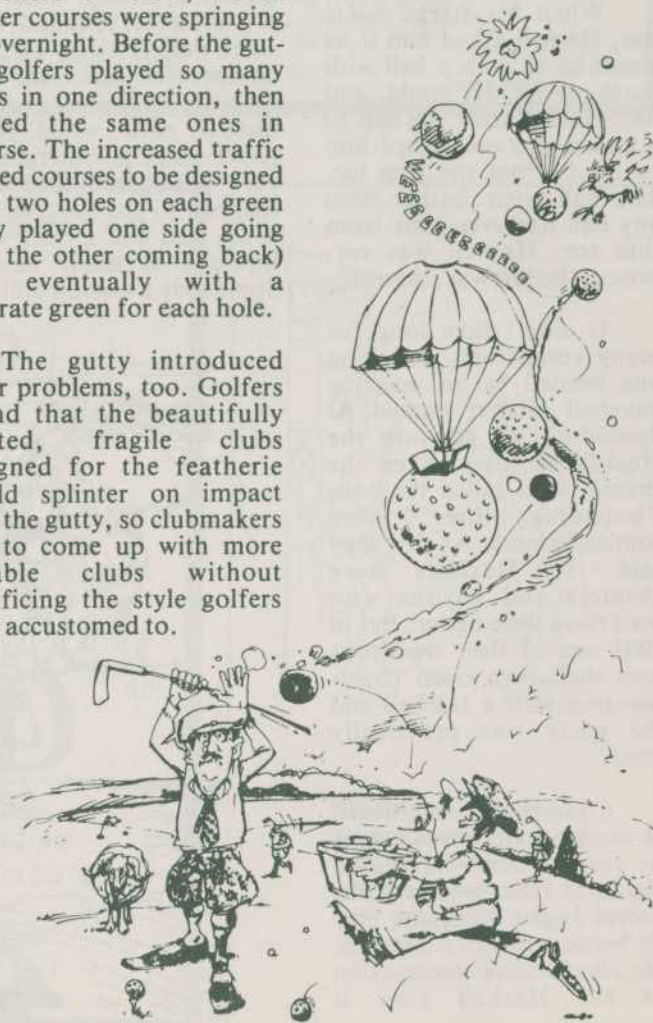
The gutty introduced other problems, too. Golfers found that the beautifully crafted, fragile clubs designed for the featherie would splinter on impact with the gutty, so clubmakers had to come up with more durable clubs without sacrificing the style golfers were accustomed to.

The gutty also tended to fly apart in cold weather, so a rule change allowed golfers to drop a second ball by the largest fragment he could find from the first one. (They scooped up the other pieces and took them home for recycling.)

Commercial industries entered golf for the first time as rubber companies made molds and manufactured gutties. The British then internationalized the game, taking the new rules and cheap balls with them to their many outposts.

For awhile, the game seemed to settle down. The evolution of golf, remember, follows the evolution of the ball, and the gutty was the perfect ball. At least, that's what the English rubber companies of the 1880s were saying. But there was one important thing going on that they couldn't see.

Golf had spread to the United States.



Picking it up from British and Scotch immigrants, Americans liked the game. They imported equipment and played on courses often designed and named after those in Great Britain. On such a course in the late 1890s a sportsman named Coburn Haskell was continually frustrated by the longer drives of his playing partners.

It seems very American to say Haskell thought there must be a way to make his ball sail out beyond his partner's drives. He could have practiced more or changed his swing. He didn't. He changed the ball, thereby changing golf again.

There are many stories on how Haskell became Somebody, but essentially he was sitting waiting for a friend at Goodrich Rubber Company offices, occupying his time twirling some rubber into a ball.

AN IDEA!

When his friend came out, Haskell asked him if he could cover such a ball with gutta-percha. He could, and did. Haskell took the ball to a course pro and asked him to hit it from the first tee. The ball went farther than any ball had ever gone from that tee. Haskell was surprised; the pro was stunned.

It didn't take long for many companies, including one headed by an amazing baseball pitcher named Al Spaulding, to get into the Haskell business. Even the British, who called the balls "bounding billies," were coming around. At first they said the Haskell's were cheaters and anyone who used them little better. But in 1902 one of their own pros won their own open championship with a Haskell and the gutty was practically dead.

Courses were lengthened as much as 100 yards a hole to accommodate increased distances from wound balls. Scores began dropping, partly because of extra distance, but also because construction of the Haskell gave it

backspin which enhanced its flight. It gave golfers the ability to hit high and stop short, whereas before the game had been to hit low and run. Clubmakers, as usual, adapted to the ball, putting ribbed faces on their clubs because ribs increased backspin.

In some ways the story begins with the Haskell. The ball and hit-high-and-stop-short style of play took golf away from its roots and transplanted it in the United States. Since 1902, or thereabouts, U.S. golfers and equipment have dominated the game. But the changes since then in that 1.68 inch diameter and 1.62 ounce ball have been incredible.

In the last 75 years, bizarre things have happened inside the ball. Remember that first rubber core? It went away. Among the things that took its place were solid steel, pulverized steel, Indian ox horn, glycerine, honey, water, ice, dry ice, wine, celluloid, cork, steel pellets (that rattled), compressed air (that exploded on hot days), oil metallic paste, wood, paper, paper pulp, polymeric solid, corn pith, sponge, whiskey (banned by the government), white lead and a thick white liquid that made another Somebody a million dollars.

In 1930, at a golf ball company, several persons watched as a ball was cut open. The gooey white center squirted out on one man's shoe. He couldn't get the stuff off.

AN IDEA!

He found out what it was, patented it and made a million dollars selling it as a dressing for white shoes. It may be sold yet.

In the early 1960s, James Bartsch, first doing business in a barn converted from raising chinchillas and then in an icehouse, began rebuilding the *cispolybutadiene* molecule. Synthetics such as orlon, dacron and nylon had come from such experiments. What he wanted was a solid

golf ball to eliminate the complicated and costly winding process. In fact, from the beginning manufacturers had sought to get around the awkward aspect of production. Bartsch did. And there are several one-piece balls around today, though they aren't popular playing balls.

The one-piece, though, led to a two-piece - solid inside and a cover - that is still popular.

What's left you ask? Well, just a few years ago in California, two non-golfers became intrigued by the flight characteristics of golf balls. Working in their spare





time they rearranged the dimple alignment (taking many off) and massed a bit of the covering at the poles of the ball, keeping it, however, round. What resulted was the gyroskopelike Polara ball which correct itself in flight; that is, it straightens out when it begins to hook (curve to the left) or slice (curve to the right.)

It may be a duffer's dream ball, but it's causing nightmares for the United States Golf Association which doesn't know what to do with it, even though it technically meets all

requirements for a golf ball. At last accounting, the association was considering another regulation to ban any equipment that makes golf less a game of skill.

The ball isn't through developing though, and before long Somebody will give the golfing establishment something else to worry about. Patents have been issued on balls with parachutes attached, embedded sirens and mechanisms that emit smoke.

And as sure as you are reading this, Somebody else is out there, doing something else to the golf ball.



MILAEGER Well and Pump Co.

INDUSTRIES MUNICIPALITIES SUBDIVISIONS

- Deep Well Drilling and Pump Installation
- Well Development by Acidizing & Shooting
- All Makes of Pumps Repaired
- 24 Hour Service
- TONKA • Water Treatment Equipment

BYRON JACKSON PUMPS
Division of Borg Warner Corporation

Line Shaft Turbine Pumps and Submersible Pumps
to 500 HP and 1,000 ft. Settings
Servicing Wisconsin and Illinois for Over 60 Years.

20950 Enterprise Ave.
Brookfield, WI 53005
(414) 784-3960

640 Pearson Street
Dez Plaines, ILL. 60016
(312) 296-8707



Stedi Flo II & V

let us help YOU! with your tree program

DHD

SYSTEMS INC.

2467 South 170th Street
New Berlin, Wisconsin 53151

414-784-3556

DISTRIBUTORS OF MAUGET • ARBOTECT 20S • ARBOTECT S
• CORREX



"Before I tell you how things went while you were on vacation, let me tell you how very, very sorry I am."