Arnold Palmer Plays Arnold Palmer

In a schizophrenic round of golf, an all-time great pro tests his modern steel-shafted clubs against hickories like those used 30 years ago

I EXPECTED that playing a round of golf with the old style hickory-shafted clubs after 30 years of using the steel shafts would be like trying to fly an old Curtis Jenny after 3000 hours in a jet. The difference was not that great, but I'm glad I was born 30 years too late.

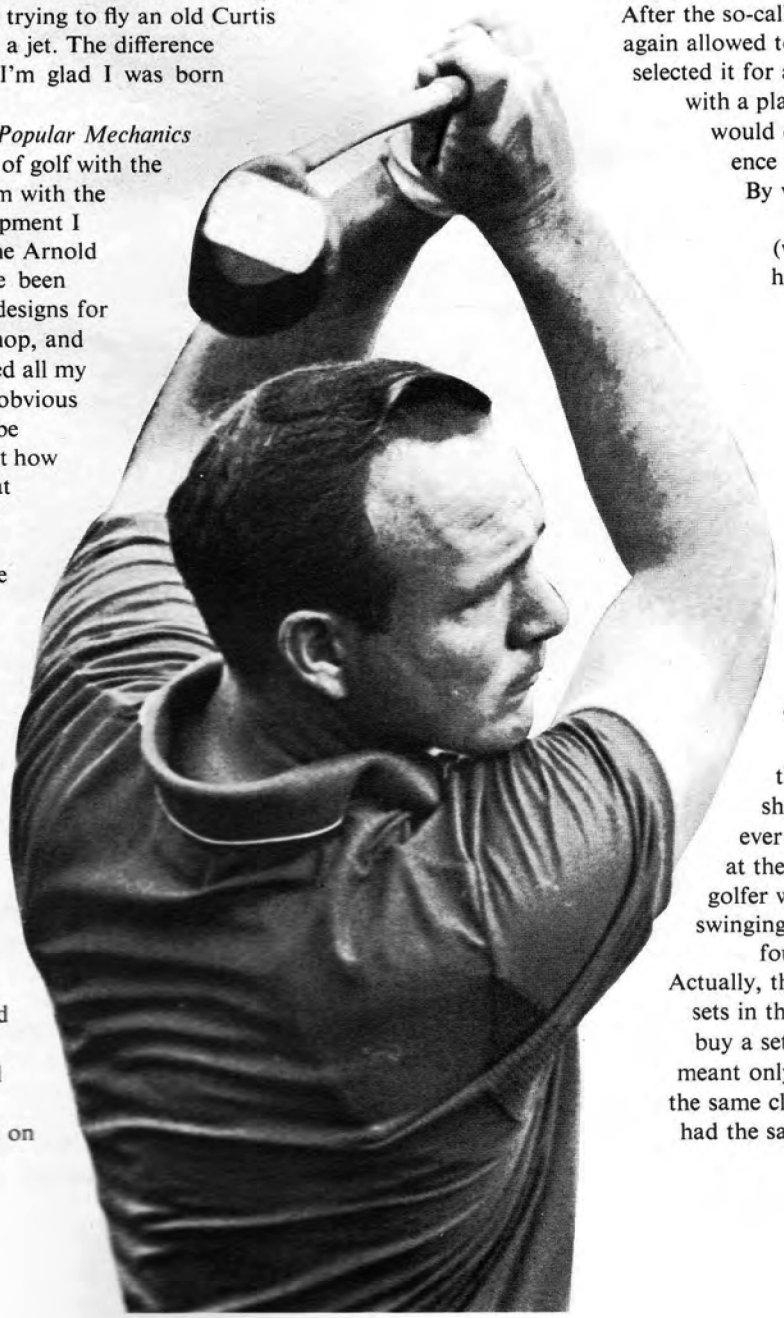
The story began when *Popular Mechanics* asked me to play a round of golf with the old clubs to compare them with the modern professional equipment I personally designed for the Arnold Palmer Company. I have been experimenting with club designs for years down in my workshop, and the new clubs incorporated all my favorite ideas. It seemed obvious to me that they would be unquestionably better. But how much better? And in what ways were the old-timers really bad? The more I thought about it the more intrigued I became with the idea of an all-out "battle of clubs."

After we had decided to go ahead with the project, I did some research into the old style hickory-shafted clubs.

Scotland is the home of golf, and, as might be expected, all the best early golf clubs came from that country. Iron club-heads were hand forged of mild steel and woods laboriously turned one at a time.

The shafts were turned on a lathe from carefully dried hickory, selected for weight, straightness of grain and flexibility. After the so-called blank was turned, it was again allowed to "age" until the clubmaker selected it for a certain clubhead. Working with a plane, a file and sandpaper, he would draw on his years of experience to fit the club to the player. By varying the amount of stock that he took from the shaft (while still keeping it round), he could alter both its weight and flexibility. The player who wanted a heavier but flexible shaft would find that his was thicker with more of a curve than the player who wanted a light, stiff shaft.

Keeping the old clubs in the right condition was always the big problem, though. One former pro says, "When I first started, we had to "pop them" often (rub with linseed oil and shellac) or they'd warp and dry quickly, shattering into splinters whenever even a good pass was made at the ball." If that happened, the golfer would begin again, hopefully swinging clubs by the dozen until he found an approximate match. Actually, there were no real "matched" sets in the early days. A player could buy a set of clubs but their matching meant only that they were all made by the same clubmaker and all (hopefully) had the same approximate weight and



flexibility. But after a few months, weather would take its toll and the oil and shellac used to preserve the wooden shafts would begin to dry out. Then, each club took on a different temperament.

After playing with the clubs for a while, the golfer would find that he liked, say, five of the clubs in his set, but couldn't get used to the "feel" of the other two. Then he'd begin the search—swinging and comparing, swinging and comparing - until he found replacements that he liked. By contrast, my own clubs are matched so that every club balances at the same point on the shaft, assuming a uniform "shield" throughout the set. And by adapting the firmness of each shaft to the weight of its head, we are able to give every club the same flex characteristic. Precise measurements have replaced the old-timer's hunch.

Weather affected the old clubs, too. On a damp day, the clubs had a completely different feel than they did on dry days. On a damp day, you could slug the ball a little harder, while on a dry day you just had to baby certain shots for fear of shattering your shaft.

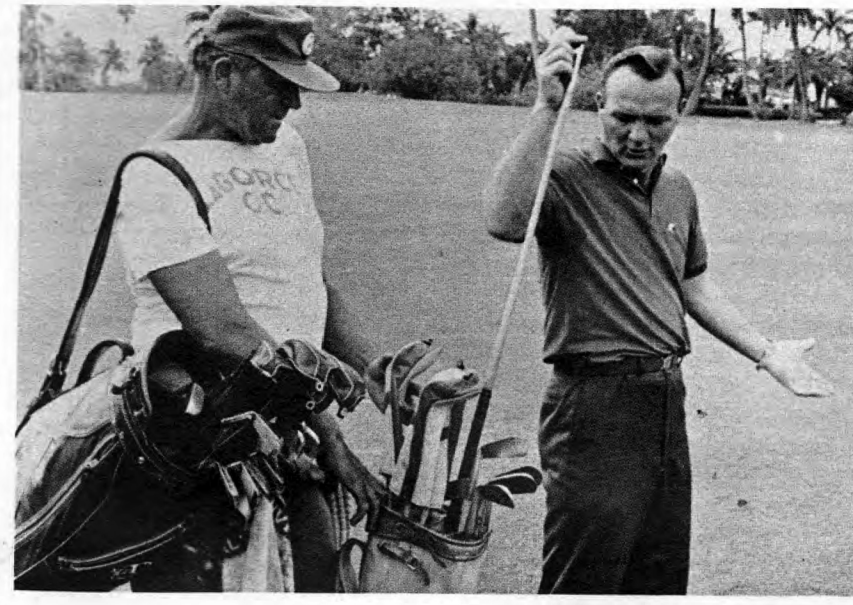
In the late 20s and early 30s the tubular steel shaft had been perfected and put into production, but they didn't take over the golf world by storm.

You just can't change the thinking of several hundred thousand golfers overnight. In fact, as late as 1939 one big manufacturer was advertising that his steel-shaft clubs were the only ones "with the shape and feel of hickory." The changeover was inevitable, however, and one by one the club makers and the golfers made it.

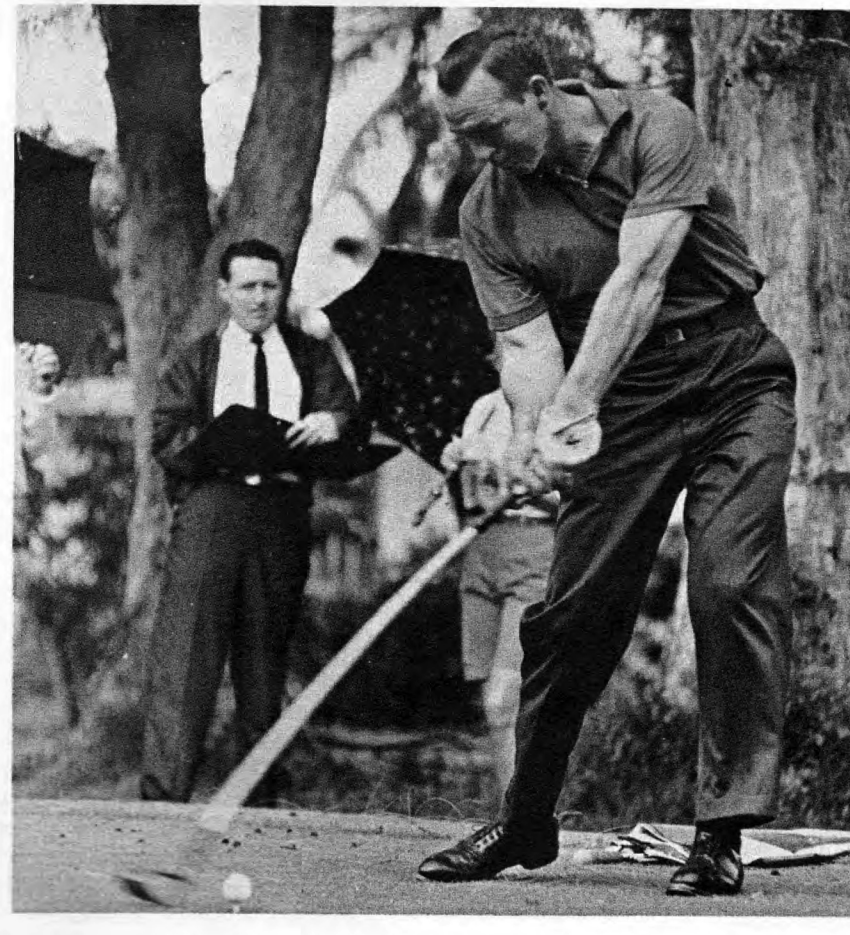
The courses changed, too. As the boys watching the record books and keeping the greens saw the scores begin to dip downward as a result of the steel shafts, they tightened up the rules and began their never-ending struggle to keep their courses as challenging and still as beautiful as possible. Some greenskeepers today literally spend as much time working on their roughs as the old greensmen used to spend on their greens and fairways.

Compare courses as they were in 1925 to what they are now, and you find many efforts have been made to minimize the advantages of the steel club. Let's look at a few examples.

The steel-shafted club should hit the same golf ball farther. Fine—so that



Two sets of clubs confused Palmer at times. Concentrating too much on unfamiliar hickories, he lost his concentration on shots with his own clubs.



Hickory clubs "really sling the ball," Palmer said after the round. Extreme whip action forced him to slow down his swing and bothered his control.

string of bunkers that ran across the fairway 210 yards out in 1925 (the average drive for the better golfer in those days) is now out at 250 to 265 yards, erasing the distance advantage the steel shaft gave for getting past the bunkers.

Sand traps were not nearly as deep, nor as wide, nor did they ring the greens on most courses as they do now. The old golfer who needed a long, but inaccurate, iron shot and then a short, accurate punch to the green can now reach it with a moderately accurate mid-iron, so they've made it tougher on him and demanded even more accuracy.

Roughs were not as demanding, nor as ardently nurtured as they are today. Again, in the old days, the prudent golfer would chip directly back to the fairway and then reach for the green. Today's golfer, with stronger shafts and low-numbered irons of great accuracy, will often elect to go right for the green. Now the greenskeeper lets the grass in the rough grow a little longer, so its long blades can reach up and grab the club head, slowing it or turning it just enough to impair the shot.

In the old days, the pros continually reminded their students, particularly the stronger and more enthusiastic swingers, to let the club hit the ball. "Swing easy, don't try to kill it."

My dad (and I think luckily for me) realized that the game would undergo a big change, one that might not be felt for a long while, but one that would put the advantage on the side of the player who had the power. So, when I first started winging a ball, he encouraged me to give it all I had. I've been told that, even when I was five years old, my feet would leave the ground as I connected with the ball.

The steel shaft gave us two main qualities that let us develop this concept of power hitting. The first was its reliability—we no longer had to fear that a shaft might break right in the middle of a crucial round, so we could give every shot all we had.

The other was consistency—forging techniques had perfected matched heads, but even the most closely matched set of heads relied on the ability and patience of the clubmaker to find and prepare a set of hickory shafts to go with them. Technology gave us the matched and graduated steel shafts which forgive us many of our sins. But even most of these scientifically engineered instruments are not perfection by a long way. That's why, for years, I spent endless hours filing, sawing, weighting, balancing and re-balancing hundreds of the best available steel-shafted clubs. I was determined to have a set of perfect clubs even if I had to make them myself. Eventually, that's exactly what I did. My Arnold Palmer golf clubs are the result, and they are as close to perfectly matched clubs as a set of clubs ever will be, I'm convinced. To make them just the way I wanted them, I had to set up my own company, where we can keep a sharp eye on quality control. We have limited their sale through pro shops only, since they are engineered for serious golfers. But for any average golfer, the new clubs can overcome those minor errors that creep into his swing after a short layoff. The first holes on an early Saturday round are often not quite so difficult when a good, well-matched set of clubs is along to ease the burden. The golfer can concentrate on hitting the ball, knowing that his regular swing will fit the shot.

Typical Swing with his own clubs shows Palmer, with full, powerful arc and high follow-through, every muscle participating.

Again, swinging one of the low-numbered irons for distance used to be a problem, and shots with these clubs are still an anathema to many golfers. With properly matched clubs, the swing that makes the 5-iron such a deadly scorer for Mr. Average should not need much adjustment to be just as successful with a 2-iron.

New Shafts for Old Hickories

I was quite pleased and surprised to see the hickory clubs that *Popular Mechanics* assembled for me for the round. In the early days of golf in this country, there were only seven clubs used in most tournaments—Francis Ouimet used that many when he won the Open in 1913. But those seven clubs were often assembled over a period of years, as each golfer put together his own "right" combination. To give me a chance to attempt the same thing in a short space of time, *PM*'s editors had found almost three dozen irons and nine woods and had them all reshafted. I had my pick of them for the round.

(Editor: We assembled the clubs by placing newspaper ads and collecting well over five dozen clubs in various stages of repair.

It was a wild assortment ranging from drugstore branded souvenirs to hand-made "special" clubs that belong in a golf museum. The ones we finally selected had warped shafts, rusty heads, and ragged and rotten leather grips. Varnish on the heads of the woods had long since turned white, and rust covered all but those few of the irons that were chrome or stainless steel.

A single pin through the neck of the iron head held it to the shaft, and once this pin had been located and punched out it was a simple task to remove the old shaft. The head was then cleaned with steel wool, emery cloth and, in some cases, a short soaking in muriatic acid.

We let a professional club maker, Bert Dargie, remove the wood heads from their shafts. As it turned out, he had to pull an almost-forgotten trick out of his hat and steam the heads off!

Equipped with two barrels of blanks turned for us by the C. F. Work Company, he rebuilt the assortment we sent him.

Each shaft was carefully fitted to its head, cut to the proper length, and then a delicate curve painstakingly planed into its length.

Following the final shaping, the shafts were sanded, given a few coats of spar varnish and allowed to dry. Then the new grips, made of leather treated to keep a tacky feel, were applied.

With the wood heads, Dargie followed

the same practice, first having removed all of the old varnish and filler from them.

The Round

The course selected for the round was La Gorce Country Club, one of the oldest in Miami Beach, Florida.

My first impression after swinging a few of the hickory-shafted clubs was that they were extremely light. I hadn't really expected to see the clubs in such good shape, either.

I went through all the assembled clubs, picking out those which I thought would most likely fit my swing. With an armload of clubs we headed for the practice tee. I always warm up before a round, and for this round I began with my own clubs, starting with the nine iron and working up gradually to the low numbers and then through the woods. I like to hit five or six balls with each club I select, gradually getting the muscles loosened up and renewing the "feel" that is so important.

Once I'd warmed up, I attempted to repeat the process with the hickory shaft clubs, beginning with the niblick, going to a spade mashie, then a mashie niblick, another space mashie with less loft, and then three of the first irons to be manufactured with numbers rather than names—a 5, a 3 and a 2. I should perhaps have picked others with the more traditional nomenclature stamped on them, but I liked the feel of those numbered clubs. By then, I was getting anxious to get out onto the course and see what I could do with them in comparison with my own. (The box gives a hole by hole description of my double round.)

The Nineteenth Hole

When it was over, I had a renewed appreciation of players like Ouimet, Bobby Jones and Walter Hagen. They had problems that we don't have today.

I can appreciate now why the old pros told their students to swing easy. The hickory shafts have so much whip to them that swinging hard and fast, like I do, will only get you into trouble with them.

Because of the whip, and the torque, you can get plenty of distance with them but you can't control them. I just didn't feel I knew where the ball was going to land. The torque—get an old hickory and hold the ends in either hand and twist it; you can't do that with a steel shaft—also twisted the clubhead during the downswing. That's one more thing to control.

Well, what did we prove? My answer is, "Nothing!" We didn't expect to. We knew when we started that modern golf clubs would be better than the old ones.

For our nine holes, the difference was 3 strokes—let's say 6 for eighteen holes. With some practice with these clubs and some better work with the putter, I believe I could reduce that to about 4 strokes. If you look at the records, the differences in tournament scores from the '20s to the '60s average about the same—from about 300 down to 284—or 4 strokes per round.

The average player wouldn't have noticed as much difference in the clubs as I did, but I play every day and practice many hours. Much of that practice is devoted to developing a feel for each shot in the bag and learning to sense exactly what the club will do every time I swing it. I can notice the slightest change in the weight of a club. Even a few thousandths of an inch change in the thickness of the grip can change the feel of a club for me.

For the average golfer, whose swing is not as well-tuned through constant practice, the hickory clubs offer too much chance for error. What would feel like a good shot during the downstroke and at the moment of impact could well be a bad slice or a yardage-gaining hook, but he'd never be sure what caused the difference.

A perfectly matched set like my own enables the golfer to "fly blind" on occasion. Even with a tricky shot, he doesn't have to adjust the swing because the club helps him swing properly so his shots must be better, no matter how tough.

So if our experiment proved anything about golf, it's that today's equipment is better for both of us, the pro and the amateur.

Fairway shots were tossups between steel-shafts and hickories, except for accuracy. Palmer had no confidence where the hickory shot was going to land.

Sand trap was another problem with hickories. Set had no sand wedge, so Palmer used niblick with poor results. He scooped ball and it overran green.