

Spalding clubmaker, John St. Clair (r), checks with Bill Duncan on custom set that is being made up for Paul Leming (center). Duncan has been in charge of forging operations at Spalding for 25 years.

## A Craftsman Suggests

# Four Principles to be Followed in Fitting Clubs

### By ED TOOLE

John St. Clair of Spalding and Bros., Inc., has made clubs for golfers ranging from the touring pros to the highest handicap golfers. He has made them for U. S. Open, PGA, and Masters champions. He has made custom clubs for Dwight Eisenhower. He has been and is still consulted by all the golfing greats, no matter what their professional or amateur affiliation.

It is St. Clair's sound pronouncement that a golf club must be designed to perform a specific function in the easiest and most efficient manner. Confidence at address is of utmost importance if clubs are to meet the player's requirements beauty is a by-product! The well designed, well fitted club must encourage a smooth, uninterrupted followthrough without built-in compensating factors.

#### **Quick Service**

It took Bob Jones many years to gather together his "perfect" set of clubs. Today, however, topflight competitive golfers, discriminating professionals and low and high handicap amateurs alike can obtain perfectly matched sets by being "fitted" to precision-made, perfectly fitted and designed custom-made clubs in a matter of weeks. Furthermore, these can be exactly duplicated at any time.

In years gone by, woods used, say for 72 holes in the rain, were far from the same clubs used in 85-90 degree humid weather. Actually, they became two different sets of clubs, where swing weight was involved, in a mere matter of a few days. As a result, consistency in play had to suffer.

#### Pick Up Very Little Moisture

The hydro-sealed process used in the manufacture of clubs today prevents woods from picking up as much as a quarter of an ounce of moisture that results in no more than a four-point change in swing weight. Modernization and standardization of all the features of golf clubs have led to vastly improved play by the masses.

St. Clair points out that all golfers do not require custom-made clubs. Many golfers' playing requirements can be satisfied with registered clubs available from regular stock. However, the player whose physical characteristics do not fall into the category of "standard" should be guided to a "golf-doctor" for fitting. In fitting a player, St. Clair says the pro should be guided by these four principles:

1. An evaluation of the golfer's physical characteristics — such as — "Hand-height" (distance from extended fingertips to the ground) plus the distance from the end of the club shaft to the ground surface when the golfer is in hitting position.

2. Determination of the golfer's status as either a swinger or a hitter. Does he "fly" the ball or does he have trouble in getting it airborne?

3. Evaluation of the golfer's strength, size of hands, wrists, forearms and age — all having a direct bearing on correct specifications for clubs that will be playable for him.

4. After ascertaining the swing weight requirement, length of shaft, type of shaft and grip size accurately, the head weight required to properly position the club's center of gravity is determined.

Ideal fitting conditions prevail, says

St. Clair, when information from the pro details shaft flex, exact grip size, lie of the club and swing weight, and thus provides a complete picture of the requirements of the individual. It is very important to determine whether the golfer being "fitted" hits from the outside-in or inside-out. The person being fitted may not want to change his swing and, at times, this must be taken into consideration, especially if the golfer has been playing for many, many years and is middle aged or elderly.

St. Clair emphasizes that when a prois ordering "specials" for his customer he must be specific in all respects. As an illustration, he points out that some orders received for custom-built clubs may read "undersize . . . or oversize grips," requested. But no indication is given as to at what point measurement was taken, nor is there any given degree of adjustment specified in fractions or decimals with a slide caliper. Too, some pros request "flat lie . . . or upright lie" with no indication of the degree of flatness or uprightness required by the individual.

#### Uses Layout Table

The Spalding clubmaker uses a "classified" layout, in table form, of head weight, shaft weight, shaft length and grip weight so that when all data is put together after the fitting an absolute and accurate swing weight is available at a glance. This enables St. Clair to locate the center of gravity for the complete set of clubs.

John St. Clair points out that a short person with low hand height, using a standard lie club, is certain to hook his shots. The golfer's deep divot, taken at the heel of the club, and the resulting "light toe" causes the hook. Therefore, short persons, and most women, need a flatter lie club.

He explains that a driver, with a D1 swing weight and 43-inch shaft is changed to a D5 by increasing the length by a half inch to 43<sup>1</sup>/<sub>2</sub> inches. The increase in swing weight reduces club speed through the hitting zone and also changes leverage due to the increase in length.

#### Head Speed Slowed

By lengthening the shaft one inch, swing weight is changed above the proper (Continued on page 100)



# **Club Fitting Principles**

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specifications. With this buildup of the swing weight, head speed is slowed down through the hitting zone. Thus there is absolute necessity of maintaining required swing weight with a custom-made club embodying extra length shaft and all relative requirements.

What about the requirements for ladies? While most women on the pro tour use clubs with men's length and men's medium shafts and a DO swing-weight, amateurs follow two definite patterns. The weaker use a flex "L" shaft with the swing weight spread ranging between C4 and C6. Stronger women use a medium "L" shaft with swing weight anywhere between C6 and C9.

#### **Compensation in Stance**

There is a case of a middle age golfer who questioned John St. Clair: "How come," he asked, "I never hook even though I always use a closed stance?" The answer: This man had built up his grips to an actual "oversize," thus increasing his club weight to 14<sup>4</sup>/<sub>8</sub> ounces and his swing weight to a D6. A middle age, average golfer usually is unable to swing or play this type of club. Therefore, the individual found it necessary to close his stance in order to offset the lateness of the head at the point of impact with the ball in order to keep from slicing!

When such a golfer, using compensating factors such as an incorrect stance to offset the use of a club of wrong design, finally turns to seeking a perfectly fitted custom-made set that is made to correct specifications for his particular requirements, he will find it will take time and work on the practice tee to get used to his new and correct fairway implements. A lesson or two from his club professional will be fruitful at this point.

"Other Clubs" Better

Take, too, the golfer who buys a "registered" set off the shelf in the pro shop, finds himself unable to play well with them and becomes dissatisfied with both



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WRITE US TODAY GEORGE A. DAVIS, INC. 5440 NORTHWEST HIGHWAY CHICAGO, ILLINOIS 60630 the manufacturer and the pro. Perhaps he has seen a fellow player with a new set, made by a different golf company, tries them and finds they work much better for him than does his own new ones. He doesn't realize that the other clubs just happen to be of proper specifications for him while those he had selected were not. Here again a custommade set, when he originally decided to buy new clubs, would have been completely satisfactory!

Another thing that comes up frequently is the question of the design of a wood head suitable to the golfer's playing requirements. Here must be asked the question: "Does he fly the ball, or not? Does he have a problem getting the ball up in the air?" With these answered it becomes possible to determine what model head will enable the golfer to realize his potential.

What is the length of time to expect for delivery of a custom-made set of clubs? At Spalding it is approximately four weeks from the receipt of the order, plus shipping and delivery time.

# Sarazen Was Right

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way to make an adjustment. Often it means loss of the profit on a sale, but he has found that the customer's satisfaction is worth more in future sales and referrals.

Chances of customers damaging tryout clubs are lessened by letting them get the feel of them on the practice range *only*, and then while LoPresti or one of his assistants stands by. Only low handicappers who are regular customers and seriously in the market for new clubs are allowed to take a demonstration set out on the course. He tries to "trade regular customers up" to a new set every two years.

#### **Big Service Business**

LoPresti runs a fully stocked repair shop. His cart repair business has made him the largest dealer in parts for this equipment in the world. Golfers who buy their carts from him receive free service for three years — the only charge