To the Professional who is an authority on golf clubs --

You've probably heard for the past several months that I have thought I had something different and advanced in golf club design. I was quite sure I was on the right track. I checked my own ideas with many professionals I regard as authorities on golf clubs.

And, after months of hard and thorough work I came up with what I honestly believe is the only club design and construction that has built-in feel. I can't describe the feel to you except to say every shot, with every wood and iron of my new Micro-Balanced clubs, makes the club head feel like it's part of your hands.

The first time I played in competition with a set of these Micro-Balanced clubs, made to the formula I was confident I had perfected, I won the Western Open. And, the second tournament start with them I tied for third in the National Open.

Pros and amateurs on the practice tees at these championships who took a few shots with my new clubs said the built-in feel amazed them.

Golfcraft president, Ted Woolley, and the all star team of clubmakers in his fine modern plant, have done a perfect job of construction with this Micro-Balanced built-in uniform feel.

Production of these clubs is limited. The Micro-Balanced clubs cannot be turned out on a rush assembly basis. Stock a few sets for members who expect you to get them the best — quickly. They're Pro Only, of course! Lloyd Mangrum

Try the Golfcraft 250 golf ball. I played it in the Western and Open championships. Believe me it's a great ball!

L. M.

Lloyd Mangrum
MICRO-BALANCED GOLF CLUBS

July, 1954
Steel Shaft History Told by
First to Play Steel in Open
By HERBERT C. LAGERBLADE

PROBABLY most of the records concerning the development of that revolutionary development in golf club construction, the steel shaft, have been lost or destroyed. More of the history of the steel shaft may get lost as many who were active in the earlier stages of the shaft have passed on or have retired from the golf business.

I call on my memory for some of the high points in the steel shaft's first chapters as the only material historical item I have convenient is an old newspaper clipping. Who wrote the story and where it appeared I don't know.

The newspaper piece tells of the sand wedge being under question by the USGA, then refers to the Schenectady putter, and finally to the steel shaft. The writer comments:

"I was just crawling out of bed in a room at the Oakland Hills Country Club, the first day of the National Open championship of 1924, when I heard the starter chanting:

"'Herbert Lagerblade, using the first steel-shafted club ever swung in the National Open championship.'"

With that reference and my long association with the Horton Mfg. Co. among my credentials, I'll testify.

The shaft originally was patented in 1910 by Arthur F. (Bill) Knight, a General Electric Engineer who also invented the Schenectady putter which Walter J. Travis used in winning the 1904 British Amateur. Why a man named "Arthur F." was called Bill is still a mystery to me.

In 1920 the Horton Mfg. Co. bought the patent on a royalty basis when the patent had seven more years to run. Knight had been unsuccessful in trying to make the shaft. Up to that time no thin wall tubing of the required strength and lightness had been made in this country.

First Shafts Were Brazed

I knew Mr. Knight and some other officers of G. E. and C. E. Treadway of Bristol, so in 1921 was asked to join the Horton company in the development and promotion of the shaft—the "Bristol" we called it.

The first of our shafts were made of thin strip steel folded into a tapered tube and hydrogen brazed by a new method General Electric had perfected. Horton paid two royalties for a number of years; one to Knight and another to G. E. for use of the brazing process.

The first production shafts were made about June of 1921 after hundreds of experiments. Everything about the brazing as well as the heat treating, size of shaft, weight determination, etc., was new.

Crawford, MacGregor & Candy Co., was our first customer. Then very soon came Wilson and Hillerich and Bradsby, after them was Spalding who had been experimenting with Allen E. Lard of Washington on a steel shaft with torsion but could not get the idea into a shaft.

Barred in 1923

Sales of the steel shaft began in earnest in 1922 and we thought we had the world by the tail when wham!, the USGA early in 1923 barred the shaft from official play on the basis that it might be a mechanical aid. Until proved otherwise the shaft could not be used in USGA championships.

Through the cooperation of Joe Graffis we immediately got in touch with the Western Golf Assn., and Albert W. Gates, president; and "Gus" Allen, secretary, of the Western arranged for tests to be made at the Edgewater Golf Club in Chicago.

I'll never forget the great help Chick Evans and Bob MacDonald gave us at that time. The friendliness they and the Western Golf Assn. officials showed us and their attitude of research to help the game was most heartening.

Three Slices No Aid

One of the testers was the new pro at Edgewater, Allan Gow by name, who had arrived from Scotland that spring. He stood on the first tee and promptly sliced three balls over the fence, definitely convincing the Western committee that the steel shaft was not a mechanical aid. At any rate, the WGA quickly approved the steel shaft for tournament play.

In 1923 I had the pleasure of playing
Famous golf stars from the United States and 20 foreign countries!

$205,000 in Prizes!

Again this year—and for bigger prizes than ever—nearly 200 of the best male and female professional and amateur golfers in the world congregate at Tam O'Shanter for the world's greatest golf matches! 10 thrilling days of slam-bang golf by the world's greatest golfers.

Remember Worsham's 104-yard shot?
Last year's winner of the World Championship of Golf made the sensational 104-yard approach shot that was "heard 'round the world" and gave him first prize and the $25,000 first place money. Can Lew do it again this year or will the competition be too tough?

Brilliant golf on 6,915 yard course!
Bring your family, friends and business associates to George S. May's Tam O' Shanter— one of the most beautiful golf clubs in America. This year, for the first time, the International Cup Matches will be played between the two major tournaments. The first prize in the World Championship of Golf is $100,000. Come and see who the leading money winner of all time will be in 1954!
HOST TO WESTERN AMATEUR CHAMPIONSHIP, JULY 19-25

In the beautiful clubhouse of Broadmoor GC at Seattle, Wash., the contestants in the 52d Western Amateur championship will celebrate their joys or forget their defeats, during the week of July 19-25. Pro George Howard’s shop is in the basement of the building, behind the 18th green in the foreground and to the left is one of the most interesting practice putting greens on which many lively competitions are played.

We had exerted to produce so many favorable letters.

Then, early in 1924 the USGA approved the steel shaft and I had the happy experience of being announced as the first user of steel shafts in a major championship. In that event which Cyril Walker won, I must have proved that the steel shaft, if a mechanical aid, certainly didn’t aid my game enough to have me scoring among the leaders.

As I recall “Wild Bill” Melhorn used steel shafts in his woods in that Open championship and Bill finished third; a stroke behind Bob Jones.

Shot Heard ’Round the World

When I hit my first drive in that championship I felt as though the whole future of the steel shaft depended on that shot. I still have a nervous memory of my knees knocking together and barely being able to see the ball. I said a little prayer and lo and behold, the ball went out straight and far. So the business was saved.

After the USGA approval the steel shaft rapidly displaced wood. It is a shock for a veteran to realize that golfers such as Byron Nelson and Ben Hogan probably
never used wood shafts, except, possibly, in an occasional putter.

In 1927 the Union Hardware Co. came out with a steel shaft and in 1928 the American Fork and Hoe Co. produced its True Temper shaft. A few years later the Heddon company produced their shaft.

It's my memory, subject to confirmation or correction by whoever has the official data, that the Royal Canadian Golf Assn. approved the steel shaft in 1923. We went up to Canada shortly after the Western tests and approval and received a most interested and pleasant reception.

The Royal and Ancient approved steel shafts in November, 1929 with the statement: "The Rules of Golf Committee have decided that steel shafts, as approved by the Rules of Golf Committee, are declared to conform with the requirements of the clause in the Rules of Golf on the form and make of golf clubs."

Early in 1930 we sent them a steel shaft which was promptly approved.

From that time on steel shafts became standard equipment.

The Jaycees Show Golf How To Get Work Done
By DON L. NEER

FROM BANGOR, ME., to San Diego, Calif. and from Wenatchee, Wash. to Starke, Fla., the energetic young civic leaders, the Junior Chamber of Commerce members, are building golf courses or staging some of the nation's best-run PGA tournaments.

These promoters of community progress are age 21 to 35 when they won't take "no" for an answer. The Jaycees, as they are best known, make the tough jobs look easy. Among their tasks this year are the financing and reception of the PGA championship in St. Paul, Minnesota July 21-27 and keeping in circulation throughout the country 100 prints of LIFE-PGA's excellent film "Keep 'Em In the Fairway."

With their far-flung membership of 200,000 in 2,700 communities, the Jaycees have built their junior golf tournament into one of the world's greatest golfing events with a starting field of over 20,000 entrants. This year's 9th annual International finals will bring together North America's best 200 junior golfers from

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SOFT • LIGHT • SMART

Loomed of the finest imported zephyr

Your women golfers will be quick to recognize these new Chesterfields as exceptional values. Wool is the finest Australian blend zephyr with every sweater custom finished to exact size.

Sizes from 32 to 42
To sell under $15

Speaking of Pro Shop Success:
Every professional who has sent us a trial order has reordered!

Ideal for Golf, Sports, Casual and Dress

No. 1002 SS—at left, navy blue, white stripes on crew collar, excellent quality ornamental buttons. Pocket emblem of golf bag, clubs and ball. Also No. 1002 LS—long sleeves.

No. 2002 SS—at right, same model as 1002 SS, in white with navy stripes and Johnny collar. Also No. 2002 LS. These same styles available with tennis emblem at $1 extra.

For attractive prices and samples write direct to:

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all 48 states, Canada, Hawaii and the Caribbean for eight days of rugged competition over the rolling 7,250-yd. course of the University of New Mexico at Albuquerque, N. M., August 16-21. These future stars will be shooting for $2,500 in Nash scholarships and an invitation on the National Golf Fund team that travels to London and Paris for matches against Europe’s best juniors this September.

Jaycees Building Courses

Realizing the recreational and commercial value of good municipal golf courses, Jaycees are leading the way in constructing courses in practically every state. Currently, Mississippi has four under way with Vicksburg’s completed, Picayune and Collins being constructed and Meridian starting work on the back 9. By working in their spare time, the Meridian Jaycees have completed the front 9 and are building a clubhouse from donated materials.

Fond Du Lac, Wis., has 9 holes staked out over a former city dump along Lake Winnebago. When finished it will be dedicated as a World War II memorial.

Zanesville, O., Jaycees are in the fifth year of operation of their own public course which they built with the help of a mortgage which was burned long ago.

Green Bay, Wis., Jaycees are spearheading a county course as part of a $150,000 war memorial plan and at the moment are in the midst of a legal battle to clear legislation that will allow Wisconsin counties of less than 500,000 population to build recreation areas.

In Bangor, Me., the Jaycees took over the Lucerne course and after four years of operation claim to have the best 9-hole course in the state.

Milan, Mich., has a 9-hole course mapped out and Starke, Fla., has plans to build a course on a military reservation. Wenatchee, Wash., after two years of spare-time work, has a fine 9-hole course completed in the Apple River valley by the Jaycees who are now starting to develop the back nine.

Sponsor 7 PGA Events

This year’s summer and winter PGA circuit has the Jaycees sponsoring seven tournaments offering $110,000 in prize money.

Included on the winter circuit were San Diego and Greensboro. Temporarily off this year’s schedule are San Diego and Greensboro. Temporarily off this year’s schedule are San Diego and Greensboro.
Jaycees stops—Jacksonville, Fla., and El Paso, Tex.

The summer swing picked up two new Jaycee hosts in Akron, O., and San Francisco, Calif., and three featured old timers: Fort Wayne, Ind., Hartford, Conn., and St. Paul, Minn. The Hartford Jaycees cleared $12,000 from last year’s Insurance City Open.

The Jaycees have also played an active part in National Golf Day plans. Their national president, Dain Domich, promised LIFE-PGA officials that 25,000 Jaycees would be trying to “Beat Ben Hogan” June 5.

When your city has a golf project ask the Jaycees to take a hand and with their initiative, organization and drive locally, together with the nation-wide background of successful experience they can focus, you’ll get action from the most vigorous working group in golf.

USGA Issues Revised Edition of Women’s Golf Booklet

A REVISED edition of The Conduct of Women’s Golf is being distributed to member clubs of the USGA and to women’s district, state and sectional golf associations. The booklet is prepared by the USGA Women’s Committee.

This edition sets forth, for the first time, detailed recommendations for rating courses for women’s play. As these recommendations are adopted and implemented by women’s district and state associations, women’s ratings will be substituted for women’s par in computing handicaps.

Course rating is a method of rating each hole, in decimals when necessary, according to the average score a scratch golfer should make every ten times she plays it, without making any poor shots or any exceptionally good ones. The total of the hole ratings, to the nearest whole number, is the course rating.

This contrasts with par, in which the rating of each hole, in a whole number, is based primarily on the yardage of the hole. Since course ratings are more refined than par, they provide a more accurate measure of the relative playing difficulty of courses and hence a more accurate basis for handicaps.

The USGA Handicap Committee adopted the Massachusetts Golf Assn. recommendations for course ratings for men in 1947, and men’s ratings developed by men’s district and state associations have been used for some time instead of par.
"30 Years' Experience Sells Me on AGRICO and AGRINITE!"

On the green at Grossinger's Golf Course, Ferndale, N. Y. (inset) ANDY SALERNO, Superintendent.

"I've been in this game of keeping golf courses in top shape for some 30-odd years," writes Andy Salerno, Superintendent, Grossinger's Golf Course, Ferndale, N. Y., "and — take it from me, so far as fertilizers are concerned, I've used more brands than I can remember!

"For the best all-around performance, I choose and use a combination of AGRICO COUNTRY CLUB Fertilizer and AGRINITE, the natural all-organic.

"AGRICO COUNTRY CLUB has helped us produce turf that's consistently colorful, healthy and vigorous — without lushness. And for supplemental feeding with organic nitrogen to last over a prolonged period, AGRINITE* fills the bill!"

*Organic derived from AGRINITE, the better (over 8% nitrogen) all-organic plant food.

in computing men's handicaps in those areas.

The USGA course rating system for women is patterned closely upon the USGA course rating system for men, except for changes necessitated by the fact that women require different clubs than men to play strokes of the same distance. The changes were worked out by a subcommittee of the Women's Committee, headed by Miss Dorothy Kirby, of Atlanta, Ga., and comprising also Mrs. Joseph C. Herron, of Portland, Ore., Mrs. William L. McGiverin, of Grosse Pointe, Mich., and Miss Frances E. Stebbins, of West Newton, Mass.

The task of establishing course ratings is one which must be assumed by district and state associations for the courses within their areas. The USGA recommends a system of course rating, but it cannot rate the 1,800 courses of its member clubs all over the country. It is necessary, therefore, for district and state associations which adopt the system to establish course rating committees, comprised of women of better than average playing ability. These committee members then share the task of rating their associations' courses uniformly.

The Conduct of Women's Golf has been expanded in other ways, too. New sections have been prepared for detailed guidance in the conduct of match play and team events and to assist women serving as Chairmen of Rules of Golf, Handicap and Junior Golf committees. The sections on the functions of the Golf Committee and on the responsibilities of contestants have been expanded. In the preparation of these sections, material has been adapted from the excellent booklet of the Chicago Women's District Golf Assn. entitled Handbook for Golf Chairmen.

The recommendations for computing handicaps remain the same in principle but the section has been reorganized and rewritten for clarification. The substance of the recommendations follows:

"Each handicap should be based upon:

1. The five best scores made under USGA Rules of Golf within the current and the last previous playing seasons or calendar years, and

2. USGA course rating or par.

The handicap is figured by taking 4/5 of the difference between the average of course rating or par for the five rounds played and the average of the five best scores, a fraction of one half or more to
This can't happen at clubs with

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Stop Shower Complaints — Keep your club members happy, comfortable, safe — banish "booby trap showers." Have your plumber install POWERS Thermostatic WATER MIXERS. They always keep the water temperature where the bather wants it. No unexpected shots of hot or cold water. No waste of time or water. Phone your plumber today for a quotation on installing Powers Mixers. They are tops for comfort, safety and economy.

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THE POWERS REGULATOR CO., Skokie, Illinois • Over 60 Years of Temperature Control.

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POUNDS LIGHTER!
LASTS 10 TIMES LONGER!

Lightweight, durable COBON PLASTIC hose is glass smooth — inside and out. This assures full flow of water or fertilizer solution.

• COBON Plastic Hose is non-aging — will not crack or peel.
• Its gleaming white color gives high visibility for twilight mowing.
• Unusual color identification reduces theft.
• Heavy Duty precision machined couplings.
• Low drag resistance will not damage greens.

COBON Plastic Hose can be purchased at your local Golf Course Supply House NOW!
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July, 1954
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A smooth rolling turf pays off in player satisfaction and increased profits. That's why you can't afford to let ants, grubs and crickets sabotage your fairways and greens. With Chlordane, a proved insecticide, you get effective, lasting control of these destructive pests. And Chlordane is safe, economical and easy to apply. Any standard spraying or dusting equipment does the job. Contact your insecticides supplier today and ask about Chlordane.

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count as a stroke, under one half to be dropped."

There has been a revision in the recommendations for handicap allowances in various forms of play, so that they now conform to those recommended by the USGA Handicap Committee for men.
The Conduct of Women's Golf may be obtained from the USGA headquarters, 40 East 38th Street, New York 16, N. Y. The price is 25 cents per copy.

Busy Program Set for Florida Turf Confab

Second Turf Conference and Field Day at the University of Florida in Gainesville, Aug. 3, 4 and 5 offers a variety of activities including formal educational talks, panels made up of members from the Turf industry, a diversified Field Day program, the Annual Florida Turf Assn. Banquet, and the Annual Florida Turf Assn. golf tournament.

Included in the Golf Turf section will be a number of Florida's outstanding turf management specialists including Glen Byrd (Miami Shores CC), Pat Deavy (Beaucerc CC, Jacksonville), Walter Hartewig (Mountain Lake Corporation, Lake Wales), NGCSA President Norm Johnson (San Jose CC, Jacksonville), R. F. (Red) Laurence (Indian Creek CC, Miami Beach), Walt Ripley (Sawano CC, Quincy), Florida Turf Assn. Pres. John Schabinger (Palm Beach Golf Course), Hans Schmeisser (Sunset Isles, St. Petersburg), and Ward Wood (Everglades CC, Palm Beach). Such national Turf figures as O. J. Noer, Fred Grau and B. P. (Robbie) Robinson will intersperse the program with discussions and comments based on their rich background of travel and experience.

The general educational sessions will include discussions of new developments in Turf research and allied fields as well as placing emphasis on the basic aspects of Turf production. Dr. J. C. Harper, Agronomist in charge of Turf research with the U. S. Department of Agriculture, will be on the program along with outstanding workers from the University and the Florida industry.

The Field Day program will feature a review of the Turf research nurseries, including performance tests of some 84 strains and varieties of bermudagrass, as well as a wide collection of Zoysia, St. Augustine, centipede and miscellaneous grasses. Fertility tests will be reviewed.