ALLEN GEIBERGER scored a 296, eight over par, on the University of New Mexico golf course in Albuquerque August 16-21 to become the fourth Californian and the youngest golfer ever to capture the Jaycee International Junior Golf championship.

The 16-year-old champion bested a field of 190 finalists who emerged from the original 25,000 entries from all 48 states, Hawaii, Canada and the Caribbean, with rounds of 73-72-77-74. He and tournament medalist Phil Rodgers (70) of San Diego, California each won $1,000 Nash scholarships for their efforts. Hugh Paterson of Toronto, Can. was awarded the $500 best sportsmanship scholarship by popular vote of his American competitors to add to the Junior Chamber International Trophy he won with a score of 306 for 6th place in the final standings.

The California team, which included Geiberger, Rodgers, Ronald Reif and Bob Boughner, regained possession of the state team trophy with an aggregate four man 36 hole total of 615. The defending Georgi team trailed the Californians by four strokes.

The ninth annual tournament was hosted by the Albuquerque Jaycees, who, under the chairmanship of Chuck Lanier, organized a smoothly run schedule of activities that included clinics by Gene Sarazen, Jimmy Nichols and Byron Nelson, a huge banquet and an outdoor barbecue. This year’s event set a high mark for next year’s hosts to shoot at in Columbus, Georgia, where the tenth annual Jaycee International Junior Golf Championships will be held August 15-20, 1955.

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FAWICK FLEXI-GRIP CO.
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September, 1954
Research and Development
Center Opened by Toro

TWO YEARS AGO Toro Mfg. Co. began construction of a $300,000 research and development plant in suburban Minneapolis with the objective of coordinating grass and machinery testing under golf course operating conditions.

The completed plant was the scene of the recent meeting of the Toro distributors.

On 11 acres of the 22 acre test grounds are green, fairway, rough, tee, bunker and lawn areas built to present a wide range of normal and difficult conditions, many grass test plots, and a large building equipped for constructing and testing future items of the Toro line. This building also houses Toro's agronomy and mechanical department offices. A considerable quantity of Toro parts are warehoused in this building which is 10 miles from the company's main plant.

In the summer of 1952, construction of the research and development center was put under way by Dave Lilly, pres.; and Bob Gibson, vp., of Toro. They engaged Jim Watson as agronomist. Watson came from Texas A&M where he was teaching and doing turf research for the Texas Agricultural Experimental station.

After taking his bachelor of science degree at Texas A&M Watson had worked three years at Penn State on grass research under Bert Musser. There he acquired his PhD.

Built Course Test Features

M. R. (Scotty) McLaren, widely known as Toro's veteran field service engineer, and Leo Feser, long prominent as a successful golf course supt., and an official of the national and Minnesota golf course supt.' associations, collaborated in laying out the golf course testing features. These include a huge green that presents in its contours, bunker shoulders, approaches and general design every sort of a maintenance problem. Tees with slopes that give maintenance and budget headaches, steep and sharply rolling fairways and swampy rough also were provided.

Part of the area is irrigated.

The veteran Scotty McLaren points out results of tests made on specially built green.
and the Minnesota Golf Assn. cooperate with Toro in appraising research projects and financially.

The machinery development phase of the operations is under the management of Don O. Benson, who is well known in engineering circles as a sound and brilliant practical man. Machinery development and testing is being done pretty much on the policy of the major automobile companies with "top secret" work going on, some of which will eventually be presented to the golf market as thoroughly and severely tested before getting onto the production line.

Watson Sets Up Research

With Watson in the agronomy phase of the operations is John L. Kolb, a gradu-ate of the University of Minnesota.

Watson's broad experience as an experimental station scientist and in his relations with course supts. on their courses and in their meetings, before and since becoming associated with Toro, gave him a practical approach to the research problem.

There is no "basic" research at the R&D plant. It takes the basic research of the agricultural experiment stations and colleges and applies it to course operating conditions. Watson is working with Paul Weiss, chairman of the GCSA committee on research, and with Emil Picha and Leo Feser of the Minnesota GCSA research committee.

The turfgrass plots were put in during 1953. By fall good coverage was obtained

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on the irrigated areas but drought in the summer of 1953 resulted in scanty coverage of the non-irrigated areas and a crop of weeds. This latter condition, instead of being regarded as altogether a loss and disappointment, is operated by Watson as another research project of potential value to many courses.

There are 15 strains of cool season turfgrasses in the plots. There were 16 warm season strains in the plots at the start. Of these three zoysias and two Bermudas survive. Last March the Minneapolis district had 25 below as bottom temperature. The surviving Bermudas came in with other grass sent by Texas A&M. The surviving Bermudas are being sent to Robinson at Tifton, Ga., for breeding experiments.

Management Practices Appraised

The broad principle of the research projects is “the improvement of turf through management practices.” There are four major projects:

(A) To determine the efficiency of various types of turfgrass cutting equipment for specific grasses on various usage areas;

(B) To determine optimum fertility levels for specific turfgrasses on various usage areas;

(C) The improvement of turf through selection and breeding of turfgrasses; and

(D) A study of the efficiency of various chemicals used in turfgrass culture.

Subdivisions of these major classifications involve a vast number of subjects covering almost every phase of turf management. This year work has been done by the Minnesota GCSA and Toro on nightcrawler control, poa annua control, influence of copper on peat fairways, and snowmold control.

Mowing Height Tests

Although too early to evaluate conclusively any of the research results, numerous jobs show interesting promise. Among them are the tests on mowing heights. These tests began last year. Generally, indications point to frequency of mowing rather than height of cut being the significant factor on many turfgrasses. Results to date show that when ¼ in. to ½ in. of the grasses tested is mowed off the grass remains in robust condition but when 2 in. or 3 in. are whacked off at a cutting many grasses are seriously injured.

Watson is reporting on the work at the station as he makes the rounds of the superintendents’ sectional meetings.
USGA Adds National Seniors' Championship in 1955

A meeting of the USGA Executive committee, held during the National Amateur at the Country Club of Detroit, decision was reached to conduct a USGA annual championship beginning in 1955 for male senior amateurs who are at least 55 years of age.

The championship will be entirely at match play.

Time, place and other details of the championship will be determined later.

The USGA has been considering establishing a seniors' championship for several years to present an event for the elders on a top competitive level. Senior competition hitherto has been limited by membership restrictions in the various seniors' organizations.

WGA Awards Evans Scholarships to 207

The Evans Scholars Foundation of Western Golf Assn. celebrated its 25th anniversary by awarding 207 college scholarships to deserving caddies. The awards, announced by WGA President Stanley J. McGiveran, included 81 new scholarships for freshmen and renewals for 126 Evans Scholars previously in the program.

The new roll call of 207 caddie-scholars, compared to 154 last year, continues the WGA program as the nation's largest scholarship plan supported by contributions. The scholars represent 87 golf clubs throughout the nation and will be enrolled at 25 colleges this year.

Of the 81 freshmen selectees, 16 will attend the University of Illinois, 15 the University of Michigan, 14 Northwestern University and 10 the University of Wisconsin. At each of these four schools the scholars will live in chapter houses owned by the Evans Scholars Foundation. The total enrollments of Evans Scholars at these universities are: Northwestern, 51; Illinois, 40; Michigan, 32, and Wisconsin, 19.

DYER'S LIE MEASUREMENT DEVICE HELPS HIS SALES

Jerry T. Dwyer, pro at Albany (N. Y.) municipal course, has invented what he calls a Lie De-tek-tor that has proved a valuable aid to him in fitting clubs to buyers.

Of the device Dwyer says: "The device will give the necessary data to correctly fit any individual. All
GET GREATER TRACTION!

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SELF LOCKING
GOLF SPIKES

EXCLUSIVE!

YOU CAN'T BREAK 'EM APART!

ARE YOUR SPIKES MARKED Hardened Steel? THEN THEY'RE CHAMPS THE PROVEN SPIKE! 20,000,000 NOW IN USE! CHAMPS OUTSELL ALL OTHERS 2 to 1

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A reliable source of supply since 1920.

Offer for this fall Washington, Cohansey (C7), Arlington (C1), Congressional (C19), and Toronto (C15).

True to name, weed free, and in vigorous growing condition.

HIRAM F. GODWIN & SON

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Detroit 19, Michigan

the pro has to do is to ask the prospective customer to take his normal address. The device is operated simply by attaching clips of the Lie De-tek-tor to the club. The Lie De-tek-tor is actually only a pendulum suspended from a graphic scale, which will show the actual degree of lie the club is in at the address position. We are after the natural position of the hands of each individual. We do this with each club of a complete set, recording the result on each club.

"The results will follow a definite pattern showing that if the complete set were adjusted merely two, three or four degrees on each club in the same graduation they will fit the natural hand position of the individual.

"The customer sees for himself and is convinced without sale pressure of any kind.

"By utilizing the Ellingham bending tool a complete set of irons can be custom fitted in a matter of moments.

"The whole idea is based on the fact that the center of gravity of the swing will cause the hands to come out and higher; that the shaft of the club would be more upright, which would change the center of gravity of the club face to an upright position, and this proves that the club face must be in the right position at the beginning of the swing to make up for the change in the club face when the player contacts the ball.

"After working on this for some years and checking over 500 players including pros and men and women amateurs, I found that the variation at the natural hand position of the players could be noticed regardless of the player's size. Each individual has his or her natural hand
position; a short man could hold a more upright position than a tall man. Since body build and natural position differ so greatly, it doesn't make good sense to me that each player can get the best result using practically the same angle of the lie of club. I doubt that a carbon copy of all the golfer's swings could be taken that we could match any two.

"My own personal club sales have increased tremendously since starting the proper clubs for each player sales promotion. Each and every customer knows that he has been personally fitted with the set of golf clubs which fit his or her natural physical capabilities.

"The Ellingham Tool Co., Springfield, Mass. who made my gadget, has a fine bending fixture that will do a good job of changing the lie of the iron clubs."

Club Championship Plan
Has 'Em All Happy

M ASSIE B. MILLER, pro at Arbor Hills CC, Jackson, Mich., together with the club's tournament committee, devised a plan for the club's annual championship which has greatly pleased all the members.

The 16 lowest handicap members, and all others who wish a crack at the title (26 declared themselves two weeks before the deadline for entries) play 72 holes medal play on two consecutive week ends. There are official pairings and all the other big-time details.

All other members who desire to play are paired in flights of 16 each for match play which concludes the same day as the final of the championship at stroke play.

The plan has eliminated the trouble with qualifying rounds, dragged-out match play, and locker-room kidding (?) about mug-hunters.

Massie says his club is blessed with more fine golfers than any other club he's known. Massie has a champion in his own family. The Millers' 16-year-old Stevie went through a tough bracket to become the Jackson City champion. He was 20 under par for five matches and 7 under for the 31 holes of the final. He was medalist this spring in the Michigan State High School championship. He's got two more years in high school.

Stevie went to the USGA Junior and lost his first match by 1 down. Davey Hill, Jackson CC 17-year-old caddie, who lost to Stevie in the Jackson City finals, won three matches in the USGA Junior at Los Angeles before bowing out. Arbor Hills and Jackson CC sent their young stars to L. A.

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By fertilizing with MILORGANIZE in the fall, you accomplish two things: (1) Grass population is increased and strengthened; (2) Weeds are crowded out.

MILORGANITE is the ideal fertilizer to use because it contains all of the essential elements (as well as many of the rarer elements) required for producing strong, healthy turf. And there is NO WASTE because any Milorganite that is not absorbed during the fall season remains in the ground as available plant food for early spring growth. Order your fall supply of Milorganite now. Write for descriptive bulletin and name of nearest distributor.

THE SEWERAGE COMMISSION,
Milwaukee, Wis.

GRAU SEED FARM NOW HAS CROWN VETCH SUPPLY
Fred V. Grau's 235 acre farm near Bellefonte, Pa., is the only commercial source of crown vetch seed. Development of the source of the seed on a commercial basis for highway systems, golf courses and other users represents years of work and a heavy investment.

Seed, which now retails at $5 a pound in smaller lots, probably will be distributed through leading golf course supply houses.

Grau says, "Penngift Crown Vetch is a sturdy deep-rooted perennial legume which combines unusual beauty with great utility. For several weeks during June and July it flowers in profusion, producing masses of pinkish, rose and white clusters of blossoms. At other times it hugs the ground with a blanket of green that defies erosion, chokes the weeds and builds a spongy, rain-absorbing soil.

"Crown vetch is not a plant to be used in the line of play on a golf course except on the banks of a tee or in the wide sweep of rough between the tee and the fairway where the rough mowers will keep it low enough to be acceptable. Another place for it is on a slope or a bank which the golfer may see on his rounds but not where he may drive his ball into it. Some creek banks are difficult to hold—crown vetch might help even where the ordinary grasses fail.

"Some courses are planting crown vetch on the banks of the entrance to the club to provide beauty as well as utility. Occasionally there are rock outcrops which could use the softening effect of the graceful semi-trailing stems of crown vetch.

"Unused areas of the course where seeds abound may well be planted to this soil-building legume. Soil beds which need improvement could well be planted to crown vetch because it is an excellent soil conditioner. For this purpose it would be superior to the usual soybeans and rye, constantly plowed under and continually losing the organic matter. Crown vetch builds organic matter best by being allowed to grow unhindered.

"It will survive mowing at about 2 in. Under regular mowing it tends to produce flowers over a greater period of time. "Crown vetch develops slowly—it is not one rapidly to cover the soil. A companion crop of ryegrass or red fescue will help the slower-growing crown vetch. As for climate it can be found growing near Griffin, Georgia and at Dallas, Texas. Reports from Colorado indicate that it does well under very limited rainfall. The quality of soil seems to make little difference—it seems to do equally well in sands or clays. It exists on low soil fertility but may respond to phosphorous and potash."
BURKE TRAILER TAKES LINE TO PRO'S SHOP

Burke Golf salesmen Sammy Sligh, covering Illinois, Iowa and Minnesota; and Jim Vincent in Florida during the winter, have been able to save pro time and their own with a specially designed Indian Trailer.

The trailer has a knotty pine interior with racks for holding clubs and bags and spike-resistant rubber flooring. It pulls up close to the pro shop where the pro can come aboard and look over the entire Burke line, sometimes getting immediate delivery on items.

Clubs and bags don't have to be hauled into the pro shop which often is already quite crowded with inventory and where the pro is subjected to interruptions that interfere with his buying job.

Midwest Industrial Event Has 384 in Field

A field of 384 industrial golfers competed for the team and individual championships of the Ninth Annual Midwest Industrial Golf Tournament held August 21-22 at Southmoor CC and Silver Lake GC in the Chicago district.


The General Electric Aircraft Division team of Cincinnati, Ohio, nosed out last year's team champions, the Wright-Patterson No. 1 team of Dayton, Ohio, by one stroke to take the 1954 team title with a two day total of 316-307—623.

The two day event consisted of 18 holes of play at each of the two golf courses by the 96 industrial teams.

Canton, Ohio has been selected as the site of the 1955 tournament to be hosted by the Timken Roller Bearing Co.
Turnesa and Fazio Organize Golfers Tour of Italian Courses

Jim Turnesa and George Fazio will lead the first international flying golf tour this fall in cooperation with LAI-Italian Airlines.

The trip, for men only, will leave New York Idlewild Airport October 5 and return October 19. The group will enjoy guest privileges on five of Italy's finest courses; the Rome GC., Gli Ulivi G&CC., San Remo; Golf Club of Ugolino, Florence; Golf Club Villa d'Este, Lake Como; and Milan Golf Club. Turnesa and Fazio will golf with members of the tour.

There will be trips to famous spots in each city, reservations at the finest hotels (Ziga chain), and dining at Italy's most talked about restaurants.

The price of the tour ($1500.00) includes transportation via LAI-Italian DC-6 Airliner, hotel reservations, meals, transportation to and from golf clubs, greens and caddy fees and gratuities. For further details write: Marshall Bachenheimer, 161 E. 37th St., New York 16, N. Y.

RAY COOK MADE MGR. OF NEW WILSON BAG PLANT

Ray Cook, mgr. of the Wilson golf bag factory at Buffalo, N. Y. since 1944, has been appointed resident mgr. of the company's new bag factory at Springfield, Tenn. He will supervise activities of both plants.

Cook has been with Wilson for 23 years, starting at the Buffalo plant shortly after it opened.

A. F. Vaughan, who has been asst. mgr. at the Buffalo plant, has been promoted to mgr. of that factory.

MacGregor "Toney Penna" white woods, custom-made, and pro-only, are selling even more than expected, Henry Cowan, says. The woods are made for men and women.

BEN HOGAN NOW SHIPPING HIS CLUBS

On Aug. 17 the first set of irons off the production line at Ben Hogan Golf Co., Ft. Worth, Tex. were shipped air express to Bob Riley, pro at Forest Park GC, St. Louis, Mo. Riley's order was the first received by Ben when he announced his line.

Hogan's insistence on precision manufacture that exactly suited him delayed production. Now with the personnel and production details operating smoothly Hogan expects to make up for the time spent in getting production on a highly satisfactory basis.