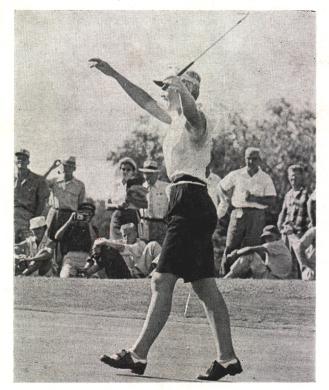


WOMEN'S CHAMPION AT EIGHTEEN

Conceded a short winning putt on the 30th areen, in the final of the **USGA** Women's Amateur Championship at Del Paso Country Club, Sacramento, Cal., Miss Jo-Anne Gunderson, of Seatlle, Wash., shows her elation in her moment of glory. At 18 years of age, JoAnne is the youngest holder of the title since Miss Beatrix Hoyt won in 1896 at the age of 16.



SEPTEMBER, 1957





Published by the United States Golf Association

Permission to reprint articles herein is freely granted (unless specifically noted otherwise) provided credit is given to the USGA Journal

VOL. X, No. 5

SEPTEMBER, 1957

Through the Green	1
Findlay S. Douglas—A record in ServiceJohn P. English	5
Strong U. S. Finish Retains Walker CupJoseph C. Dey, Jr.	9
JoAnne Gunderson A Joyous Champion	13
Judy Eller Sets the Girls an Example	16
The Amateur Returns to a New Brookline	18
Don Essig Captures Public Fancy and Title	20
The Referee	22
Turf Management: USGA Green Section	
Weed Control	24
Turfgrass—Its Development and Progress	28
It's Your Honor	33

Published seven times a year in February, April, June, July, August, September and November by the UNITED STATES GOLF ASSOCIATION

40 EAST 38th ST., NEW YORK 16, N. Y.

Subscription: \$2 a year. Single copies: 30c. Subscriptions, articles, photographs, and correspondence should be sent to the above address.

Entered as Second-class Matter March 3, 1950, at the Post Office at New York, N. Y., under the Act of March 8, 1879. Additional entry at Post office in Sea Cliff, L. I., N. Y.

Edited by Joseph C. Dey, Jr., and John P. English. Managing Editor: Miss Nancy Jupp. All articles voluntarily contributed.

USGA COMPETITIONS FOR 1958

Championships

Championship or Team Match	Entries Close	Sectional Qualifyi ng Rounds	Dates of Event	Location
Open	May 15	June 2	June 12-13-14	Southern Hills C. C. Tulsa, Okla.
Women's Open	June 13	None	June 26-27-28	Forest Lake C. C. Bloomfield Hills, Mich.
Amateur Public Links	*May 29	†June 15-21	July 7-12	Silver Lake G. C. Orland Park, Ill.
Junior Amateur	June 27	July 15	July 30-Aug. 2	University of Minnesota Golf Course, St. Paul, Minn.
(a) Curtis Cup Match			August 8-9	Brae Burn C. C. West Newton, Mass.
Girls' Junior	July 25	None	August 11-15	Greenwich C. C. Greenwich, Conn.
Women's Amateur	Aug. 1	None	August 18-23	Wee Burn C. C. Darien, Conn.
(b) Americas Cup Match			September 5-6	Olympic C. C. San Francisco, Cal.
Amateur	Aug. 7	Aug. 26	September 8-13	Olympic C. C. San Francisco, Cal.
Senior Amateur	Aug. 29	Sept. 16	Sept. 29-Oct. 4	Monterey Peninsula Country Club,

Pebble Beach, Cal. Dates entries close mean last dates for applications to reach USGA office, except in the case of the Amateur Public Links Championship. For possible exceptions in dates of Sectional Qualifying the Amateur Public Links Championship: For possible exceptions in dates of Decisional quarks for a second second



Amateur Souvenir of 1936 Returns to Scotland

The 1936 final of the Amateur Championship at Garden City Golf Club, Garden City, N.Y., between John W. Fischer, of Cincinnati, Ohio, and Jack McLean, of Scotland, a member of the visiting British Walker Cup Team of that year, was one of the most exciting of all time. Fischer clinched the title at the 37th after finishing with three birdies.

A well-wisher intercepted the luckless McLean on the quayside as he was about to return to Britain and asked him to autograph a dollar bill as a memento. He signed his name and the date, Oct. 13, 1936.

Jack McLean turned professional, and a few years ago took up an appointment as pro at Gleneagles, Perthshire, Scotland.

This summer an American tourist, visiting Perthshire, changed a number of dollar bills into British currency at a nearby bank, among which was the one bearing McLean's signature. The former Walker Cupper was contacted and "bought back" the bill which is now among his treasured possessions.

Golf in Swing Time

So much has been written about slow play that it comes as a shock to find that the actual swinging time for a round of 76 strokes has been timed at only 58.4 seconds.

The man clocked was Ted Bickel, Sr., pro at the Springhaven Club, Wallingford, Pa. He was further timed for all actions calculated to produce a good shot—studying the lie, reading the green, addressing the ball and completing the stroke. The total came to II minutes 54 seconds.

Start asking yourself where the other four hours go!

Freshmen in the Seniors

Around 340 golfers of 55 or more years young are competing in sectional qualifying rounds for the third USGA Senior Amateur Championship at the Ridgewood Country Club, Ridgewood, N. J. at the end of September. About thirty of these will be "freshmen" who have recently achieved the required span of eligibility.

Frederick J. Wright, of Watertown, Mass., the holder, is among four entrants who will be exempt from sectional qualifying. The others are J. Wood Platt, of Philadelphia, Pa., the 1955 Champion; J. Clark Espie, of Indianapolis, Ind., last year's runner-up; and former Amateur Champion, Charles Evans, Jr., of Chicago, Ill. They will join 116 others for a further elimination round at Ridgewood to determine the 32 match play places.

Family of Seniors

And talking of seniors, we hear that 85-year-old R. E. Baker, of Woodward, Okla., brought along his own family four to compete in the twenty-third Tri-State Seniors' Tournament (low age limit 50) at the Amarillo Country Club, Amarillo, Texas. His fellow family competitors were

his three sons, Dorsey, 59, of Portland, Ore.; Orie, 57, and Milo, 52, of Tulsa, Okla.

Lightning Precautions for Electric Carts

Lightning has taken further toll of golfers' lives this summer and has brought to light a fresh danger, the electric cart, though obviously a lightning stroke would go to the ground by flashing over the rubber tires.

Nevertheless, one golfer was killed and his two companions were injured when lightning struck their cart at the Lexington Country Club, Lexington, Ky.

With a view to obtaining safety precautions for such vehicles, we applied to the National Bureau of Standards. Here is their reply:

"We believe that reasonable lightning protection for the occupant of an electric golf cart may be secured by either of two methods:

- "I. Providing a whip antenna, similar to that used on most passenger cars, of a length that will reach above the top of the rider's head. Alternatively, a non-collapsible tubular antenna of steel, copper or bronze could be used.
- "2. Providing a metal top or canopy. A metal top will, admittedly, add considerably to the weight. On the other hand, it will provide weather protection in case of a sudden storm and, therefore, might be justified."

We would draw golfers' attention again to suggestions for "Protection of Persons Against Lightning on Golf Courses" in the Rules of Golf booklet. It is suggested that if there is a choice of shelter, one should choose in the following order:

- 1. Large metal or metal-frame buildings.
- 2. Dwellings or other buildings which are protected against lightning.
- 3. Large unprotected buildings.

4. Small unprotected buildings.

- Keep away from:
 - I. Small sheds and shelters if in an exposed location.

- 2. Isolated trees.
- 3. Wire fences.
- 4. Hilltops and wide open spaces.
- Seek shelter in:
 - I. A cave.
 - 2. A depression in the ground.
 - 3. A deep valley or canyon.
 - 4. The foot of a steep or overhanging cliff.
 - 5. Dense woods.
 - 6. A grove of trees.

Do not raise golf clubs or umbrellas above the head.

Posters bearing these precautions may be had free of charge from the USGA, "Golf House," 40 East 38th Street, New York 16, N. Y., for display on club notice boards.

Over the Years

One of the most prominent invitation tournaments in the West is that conducted by the Broadmoor Golf Club, in Colorado Springs, Colo. It attracts a great field, year in and year out.

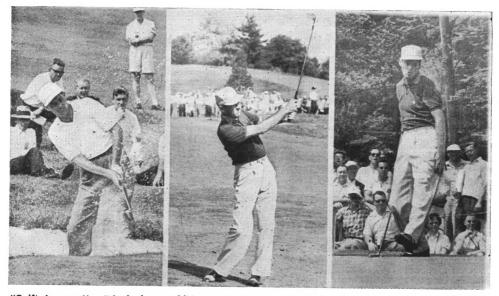
What, then, about the remarkable performance of that distinguished 53-year old left-hander, Howard Creel, of Colorado Springs, who has just won it for the third time? His previous victories came in hold your hats—1926 and 1938!

Annual Meeting A Big Draw

The Western Pennsylvania Golf Association has a yearly headache when it comes to the Annual Meeting, but one with which it willingly copes. Its difficulty is not how to induce delegates to attend, but how to cope with the vast numbers who wish to participate.

This reversal came about when the Executive Committee decided to preface the dinner meeting with a golf event. That was in 1952. Now the meeting has reached such proportions that three courses had to be used to accommodate the 500 golfers who entered this year, 450 of whom stayed to attend the evening's functions.

Any golfing member from the sixty member clubs is eligible to participate and a very moderate fee covers golf, dinner, entertainment and prizes.



"Golf's Longest Hour" is the latest addition to the "Golf House" Film Library. It covers the closing stages of Cary Middlecoff's final, winning round in the 1956 USGA Open Championship at the Oak Hill Country Club, Rochester, N. Y., and the anxious waiting he endured as Ben Hogan, Julius Boros and Ted Kroll kept vainly shooting at his score. Filmed in color, with close-ups of the large gallery adding atmosphere to the scene, the presentation runs for 17½ engaging minutes. (For details see page 8).

Dark Horse Takes Western Title

The name of Dr. Ed Updegraff, the 1957 Western Amateur titleholder, may not be tamiliar to golfers outside the West and Southwest, but the 35-year-old medico, who practices in Tucson, Ariz., has long been reckoned good by those in the know. He qualified for the Amateur in 1954 and 1955 and each time gained the third round. His resounding 9 and 8 victory over Walker Cup player, Joe E. Campbell, of Knoxville, Tenn., in the final stamps him as a golfer of the highest potential.

What's Your Rules Handicap?

Roy Staton, a Rules Committeeman at the Great Southern Country Club, Gulfport, Miss., is a crusader for greater Rules knowledge, and to that end he is contributing an excellent series of articles to The Southern Golfer.

"It is an odd fact," Mr. Staton points out, "that this is the most neglected phase of and the weakest link in the game of most golfers."

He goes on to point out that there is no easy way to learn the Rules and lists as the three necessary steps: "Read and re-read the Rules book, learn to use the index, and dig, as a prospector for gold, into Section II, 'Definitions.'

"One further suggestion: Commence with an open mind. The Rules are written in the English language, and each word means exactly what it says, but not necessarily what you may have thought it means."

Thirteen Times Champion

Joe E. Bernalfo, Jr., a mining engineer who plays at the Country Club, Salt Lake

v, Utah, has recently won his club chambionship for the thirteenth time out of thirteen attempts.

This may be a record for consecutive victories. Who knows of more?

As we published in our September, 1954 ssue, A. D. S. Duncan, of Wellington, New Zealand, won his club championship 23 times over a span of 38 years. T. Val Bermingham, a member of the Wykagyl country Club, New Rochelle, N. Y., playing in 26 consecutive championships, won 20 and reached the final on another "ccasion.

NEW MEMBERS OF THE USGA

Regular

Regulai	
Bass Rocks Golf Club	Mass.
Castlewood Country Club	Cal.
Center Golf Club	Md.
Columbia Country Club	Mo.
Crawfordsville Country Club	Ind.
Fresh Pond Golf Club	Mass.
Green River Golf & Country Club	Wash.
Happy Valley Golf Club	Mass.
Lenoir Golf Club	N. C.
Needham Golf Club	Mass.
Oakbourne Country Club	La.
Pauls Valley Golf & Country Club	Okla.
Sherwood Forest Country Club	La.
Spruce Pine Golf Club	N. C.
Sunset Hills Country Club	Ga.
Tequesta Country Club	Fla.
Torrington Country Club	Conn.
Visalia Country Club	Cal.
Winding Hollow Country Club	Ohio
Women's Golf Club of	
Recreation Park	Cal.
Associate	
Jamestown Municipal Golf Course	N. Y.

A Fund is Born

The Philadelphia Section of the PGA is justly proud of its Caddie Scholarship Fund, it being the only branch of the PGA to sponsor such a fund.

So far it has only one beneficiary in college, but through several tournaments already scheduled and others which it hopes to instigate, the Chapter is anxious to set up the scheme in no uncertain manner.

Meanwhile, the very flourishing Evans Scholars' program, sponsored by the Western Golf Association, will have more than 350 caddie scholars in college during the 1957-1958 school year, as compared with 304 last year.

Cleaning Out Your Locker?

The worn pair of golf shoes, the shirt, sweater or windbreaker you are thinking of discarding from your locker may yet have a use.

Maynard Garrison, of San Francisco, suggests that provision be made to collect such items of apparel for donation to worthy organizations. Many of the items no longer considered of value to the club member can be used by these organizations. Mr. Garrison suggests that clubs consider the possibility of requesting club members to clean out their lockers and deposit unwanted items in a basket provided for that purpose.

Rees' Ryder Cup Record

The twelfth Ryder Cup contest will be held next month at Lindrick Golf Club, near Sheffield, Yorkshire, England. The series now stands at 9-2 in favor of the United States.

The respective captains will be Jack Burke, Jr. (US), who will be playing in his fourth successive match, and Dai Rees (GB), who will establish a record for either country by making his seventh appearance.

Rees played in his first match in 1937 at Southport and Ainsdale, England, when he beat Byron Nelson in the singles. He has since played in every post-war encounter and captained the 1955 Team at the Thunderbird Country Club, Palm Springs, Cal.

Rees and Burke clashed in the 1953 singles at Wentworth, England, when Burke ran out the 2 and 1 winner.

Muirfield to Host Walker Cup

The Royal and Ancient Golf Club of St. Andrews, Scotland, has announced that the 1959 Walker Cup Match will be played at Muirfield, Scotland, May 15 and 16.

Held by many to be the stiffest test of golf in Britain, Muirfield, on the southern shores of the Firth of Forth, has hosted many Open and Amateur Championships and the Curtis Cup Match of 1952. This will be the first time that it has housed the Walker Cup.

Manley Loses Amateur Status

According to information he has furnished to the United States Golf Association, Hobart L. Manley, Jr., of Savannah, Ga., accepted expenses in connection with the 1952 British Amateur Championship and has thus forfeited his amateur status.

FINDLAY S. DOUGLAS -A RECORD IN SERVICE

THERE are various ways of making a contribution to golf. Many contribute by the excellence of their play. Some contribute by the exemplary quality of their sportsmanship. A few contribute by administrative service, unselfishly providing the stage on which the great players and sportsmen enact their roles.

In the year when Cdr. Albert K. Murray's handsome portrait of Findlay S. Douglas was hung in the clubhouse of the National Golf Links of America, Southampton, N.Y., to honor his contributions to that Club, it is timely to recall what he has contributed in all three phases, but particularly in administrative service.

We know of no one whose career spans a broader range.

Oldest Living Amateur Champion

It is fairly common knowledge that Findlay Douglas, who will be 83 next November, is the oldest living Amateur Champion, having won in 1898. In the five years from 1897 through 1901, as a matter of impressive fact, he was Champion once, runner-up twice and semi-finalist twice. He also won the Metropolitan New York Amateur in 1901 and 1903. In his only appearance in the Open Championship, in 1903, he tied for eighth and won the amateur's gold medal.

Even now he looks the part of a golfer —tall, erect, with the twinkle in his eye which bespeaks his enjoyment of the sociability of golf and with the burr in his speech which reveals his Scottish birth.

It was no coincidence that, when friends asked him to pose for the portrait, he insisted that it be "a picture of an old-time golfer" and that he be shown wearing his blue Royal and Ancient Golf Club jacket and holding his hickory-shafted driving iron. He continues to play regularly at the Blind Brook Club, in Port Chester, N. Y., with hickory-shafted clubs. by

JOHN P. ENGLISH USGA Assistant Executive Director

Yet he takes his greatest pride in what he has been able to contribute. Findlay Douglas was willing to give not just money, which sometimes is not difficult, but also time, thought and effort, which invariably constitute a more generous gift.

Former USGA President

One of the two Amateur Champions who have risen to the presidency of the United States Golf Association (the late William C. Fownes, Jr., was the other), he came up through the Metropolitan Golf Association to that office in 1929 and 1930 in time to present to that other great amateur golfer, Robert T. Jones, Jr., the Open and Amateur trophies which formed a part of the immortal "Grand Slam" of 1930.

This would have been a fitting climax to ten years of service with the Metropolitan Golf Association and five years of service with the United States Golf Association, but it was not the end.

When he passed into the ranks of the seniors, he pursued the Championship of the United States Seniors' Golf Association until he won it with a record score of 74-74—148 in 1932. The record, four strokes lower than any previous score in the tournament, came in spite of 7s on the long tenth hole in both rounds and it endured for eleven years.

As a senior, also, Findlay Douglas started again up the administrative ladder and became president of the United States Seniors' Golf Association from 1937 to 1941, as long a tenure as any president has had.

There was, of course, more—much more. It is unlikely that any man can match this record of giving of oneself:

President, University Golf Club, St. Andrews, Scotland, 1896.

Captain, St. Andrews University golf team, 1896.

Green Committee, Nassau Country Club, Glen Cove, N. Y.

USGA JOURNAL AND TURF MANAGEMENT: SEPTEMBER, 1957

5

Captain, New York Lesley Cup Team, 1905 et seq.

Original Founder, Director and Chairman Tournament Committee, National Golf Links of America, Southampton, N. Y., 1909 et seq.

Original Founder and Chairman Green Committee, Blind Brook Club, Port Chester, N. Y. 1916 et seq.

Executive Committee, Metropolitan Golf Association, 1910-1914, 1925-1926.

President, Metropolitan Golf Association, 1922-1924.

Chairman, Nominating Committee, Metropolitan Golf Association, 1927.

President, Robert Burns Society, 1927. Board of Managers, St. Andrews Society, 1928-1931.

Vice-President, United States Golf Association, 1926-1928.

President, United States Golf Association, 1929-1930.

Chairman, Nominating Committee, United States Golf Association, 1941:

President, United States Seniors' Golf Association, 1937-1941.

Chairman, Nominating Committee, United States Seniors' Golf Association, 1945.

President, Twenty Club, National Golf Links of America, Southampton, N. Y., 1918 to date.

Native of St. Andrews

Born in St. Andrews, Scotland on No-

vember 17, 1874, Findlay Douglas was of course a player first. As a student of Madras College there, he won the medal for boys under 14 and subsequently the medal for boys 14 and over, playing the Old Course with the gutty ball. When he went on to St. Andrews University, which he attended from 1892 to 1896, he was a member of the University golf team.

This led to his first administrative service in golf, the presidency of the University Golf Club and the captaincy of the University team in 1896, but his responsibilities by no means dulled his game. While holding office, he won the Gold Medal put up by the Royal and Ancient Golf Club for competition among members of local clubs, and the runner-up was Laurie Auchterlonie, at the time an amateur, but only six years later the United States Open Champion.

Having established himself as a golfer of promise in the homeland of the game, he decided, upon graduation, to visit his oldest brother, Robert, who had emigrated to the United States. On March 20, 1897 he landed in New York, a set of clubs grasped hopefully under one arm.

Early Contacts in America

Although the game had been established here ten years earlier, the average citizen of Manhattan had little information about it, and it was not easy for a young Scot to find out where he could play. Eventually,



Findlay S. Douglas in his hey-day. He learnt to play at St. Andrews, Scotland, in the pre-Vardon daysnotice two-handed grip. There is nothing old-fashioned, however, about his position at impact which incorporates all the modern edicts.

this particular Scot found his way to the A. G. Spalding & Bros. store in Nassau Street, one of the few places where golf equipment was sold, and struck an acquaintance with Charles S. Cox, the manager. In the course of the conversation, it is possible that the young Douglas may have put his best foot forward in describing his game. If so, it was good for American golf that he did. Cox's curiosity was aroused to the extent that he invited him to play on the public course which had been opened three years before in Van Cortlandt Park with H. L. Fitzpatrick of the New York Sun and Chappie Mayhew of the New York Herald, two of the first golf writers. It was Findlay Douglas' first game in this country and the day was in April, 1897.

Naturally, he passed the test and in a short time found other courses and other golfing friends. Through two of them, Julian W. and Ed B. Curtiss, he joined the Fairfield County Golf Club, in Greenwich, Conn. (now the Greenwich Country Club). The dues, incidentally, were \$25.

A popular form of competition in that day was the team match, and talented young Scots were eagerly sought. As a member of the Fairfield County team he played regularly that first summer in weekend matches against Knollwood, Ardsley, St. Andrews, Brooklawn, the Island Golf Club (later the Garden City Golf Club), Dyker Meadow, Tuxedo and other early clubs in Metropolitan New York. And his success was such that, when autumn rolled around, he took a whirl in the Amateur Championship. He qualified with 182 at the Chicago Golf Club but in the semifinals lost to H. J. Whigham, who was on his way to a second successive championship.

Despite his quick success in golf, Findlay Douglas was anything but a career golfer The only time he could give to golf in his early years here was on week-ends and during the two-week vacations which he saved for championships. Yet on that regimen he won the Amateur in 1898, defeating Walter J. Travis in the semi-final. The following year, 1899, he again defeated Travis in the semi-final but lost to Herbert M. Harriman in the final. In 1900 he gained the final for the third year in



Photo by Courtesy of the Grand Central Art Galleries

Commander Albert K. Murray's striking portrait of Findlay S. Douglas which now hangs in the clubhouse of the National Golf Links of America, Southampton, N.Y.

succession, but this time Travis took his measure.

Those were the glory days of early American golf, and Findlay Douglas had a key role in nearly all the golfing activities around New York. He was, for example, captain of a series of New York teams in the annual Lesley Cup matches against Boston and Philadelphia, and the membership of his first team in 1905 makes particularly interesting reading. Other members were: Archie Graham, Charles B. Macdonald, Ralph T. Peters, Percy R. Pyne, II, Charles B. Seely, Jerome D. Travers, Walter J. Travis, John M. Ward and Harold Wilcox.

His Horizon Widens

They were days of fine old clubs, too, and Mr. Douglas was associated with several. In 1900 he joined the Nassau Country Club, on Long Island, where Alex Smith was the professional and where Jerry Travers played most of his golf. And in 1901 he joined the Apawamis Club, in Westchester County, after winning the Metropolitan Amateur there.

Findlay Douglas' long association with the National Golf Links of America started about 1908 when Charles B Macdonald formally organized a group of 70 Founders,

USGA FILM LIBRARY

Latest addition to the USGA Film Library is a $17^{1/2}$ minute, full color 16 mm. presentation entitled "Golf's Longest Hour." Filmed at the Oak Hill Country Club, Rochester, N. Y., during the 1956 Open Championship, it covers the closing stages when Cary Middlecoff had to wait it out while Ben Hogan, Julius Boros and Ted Kroll were striving in vain to beat his score.

Other films in the Library are:

"Play Them As They Lie," a 16 mm. color production, running for 16½ entertaining minutes in which Johnny Farrell, the Open Champion of 1928, acts as intermediary between Wilbur Mulligan, a beginner of unimpeachable integrity, and Joshua P. Slye, a past master in the art of breaking the Rules. The film was made at the Baltusrol Golf Club, Springfield, N. J., where Farrell is professional.

"Inside Golf House" gives the viewer an opportunity to see the many interesting exhibits in "Golf House," USGA headquarters in New York, and to re-live golf triumphs of the past with many of the game's immortals. The film is a 16 mm. black and white production and runs 28 minutes.

"The Rules of Golf—Etiquette" also has proved popular. The film stresses the importance of etiquette by portrayal of various violations of the code in the course of a family four-ball match. Ben Hogan appears in several scenes, and Robert T. Jones, Jr., makes the introductory statement. A 16 mm. color production, the film has a running time of 17½ minutes.

The distribution of all four prints is handled by National Educational Films, Inc., 165 West 46th Street, New York 36, N. Y., which produced the films in cooperation with the USGA. The rental is \$20 per film; \$35 for two; \$50 for three, or \$60 for four, in combination at the same time, including the cost of shipping prints to the renter.

each of whom contributed \$1,000 to construct a classic American course which would compare with the best in Great Britain. Findlay Douglas was one of the original Founders and, incidentally, of the 70 only he and Stephen C. Clark remain alive.

The first rounds were played at the National in 1909, and the wonderful links overlooking Peconic Bay, near the tip of Long Island, became his favorite week-end retreat for years thereafter. The custom of National members in those days was to gather in New York, ride down to Southampton together in a Pullman for a weekend of golf and bridge and return to the city in the same sociable Pullman. As a regular at the Club, Findlay Douglas became, of course, active in its management as Chairman of the Tournament Committee and later as a member of its Board of Directors and its Executive Committee. He is still a member of both the Board and the Executive Committee.

Incidentally, the National never held a club championship until 1934, and when it did, Findlay Douglas was 60 years old. Nevertheless, he won it, with an 81 in a high wind. He won again later with a 74, which was more like it as a score.

A Hand in Architecture

A few years after the organization of the National, three older members of the Apawamis Club came to the weary but reluctant conclusion that they needed a course which would be easier to walk. The three were E. C. Converse, W. Hamblen Childs and Frederick S. Wheeler. They assembled a group of 160 Founders, of which Findlay Douglas was one, and organized the Blind Brook Club, in nearby Port Chester, in 1916. Although this was to be unashamedly an easy-walking course for older men, it was to be designed and built by Charles B. Macdonald and his assistant Seth Raynor. However, Macdonald and Raynor logarles interest in building a course in that corRayception, so Findlay Douglas, as Chairmandesignate of the Green Committee, built it with the assistance of George Low, the professional at the Baltusrol Golf Club and an architect of parts.

With the advance in his own years, and Blind Brook's greater convenience, it has become more and more Findlay Douglas' favorite retreat for a single day of golf. He seldom gets down to the National for the golfing week-ends anymore, except for the outings of the Twenty Club, which twenty National members organized in the waning days of World War I and of which he has been the first and only president. But he does travel out to Blind Brook about every week in season and plays nine holes, without, he insists, the aid of an electric cart.

"I would play eighteen," he adds happily, "but the old fellows I play with can't go more than nine."

STRONG U. S. FINISH RETAINS WALKER CUP

66 A T about 3 o'clock this afternoon I thought the Walker Cup was half-way across the Atlantic."

Charlie Coe was accepting the handsome international trophy for the United States team he captained, and he was pointing out what a very near thing it was that the British had not won.

The Walker Cup Match consists of four foursomes and eight singles, all at 36 holes. Last month at the Minikahda Club in Minneapolis the score was 8 to 3 in favor of the United States, with one match halved.

But the mere score tends to obscure other important facts, such as the wonderful effort made by the British, the brave winning finish of the Americans, and the effect which all this may have on the future of the competition.

The foursomes had resulted in a 2-1 advantage for the United States, with one matched halved (Walker Cup matches are not played to a conclusion if all square after 36 holes). Next day in the singles, at the 18-hole juncture, Great Britain led in three matches, America led in three matches, and the two other matches were even. It could not possibly have been tighter. In fact, lumping those eight matches together, the British had a net lead of one hole.

After 27 holes, there was an edge for America, which led in four matches, to three for the British, with one square. There still was nothing in it.

Still later, three games were even with the end in sight—one had six holes to go, one five holes and one two holes. America pulled through in all three. Had the British won these three matches, they would have won the Walker Cup, 6 to 5, assuming no change in the other games.

Series Apparently "Saved" These facts are perhaps significant in the by JOSEPH C. DEY, JR. USGA Executive Director



USGA Executive Committeemen lined up on the tee at Minikahda, sporting the new emblem on their blazer 'pockets, are from left to right: Charles L. Peirson, John M. Winters, Jr., William C. Chapin, C. W. Benedict, William McWane.

history of the series. The Walker Cup competition has been going since 1922, and the Match last month was the 16th. The United States has won all but one. Voices had been heard in Britain questioning the worth-whileness of the event—all unofficial, to be sure, but a sentiment just the same. And a fairly natural sentiment. Not only had the United States dominated the winning column but our future prospects were strong, having as we do several times more courses, golfers and competitions than does British amateur golf.

But among the believers in British golf were the members of the Walker Cup Selection Committee of the Royal and Ancient Golf Club of St. Andrews. Headed by Raymond Oppenheimer, this Committee has spent the last two years in searching out all likely prospects. They came up with a

USGA JOURNAL AND TURF MANAGEMENT: SEPTEMBER, 1957

9

comparatively young and "new" team. They had outstanding leadership in their non-playing Captain, Gerald Micklem, and fine support in the R & A Championship Committee, of which the Chairman is N. C. (Bob) Selway.

The British program paid handsome dividends at Minikahda and seems certain to do so in future. Already the British are preparing for 1959, when the Match will be played at Muirfield, Scotland.

So the Walker Cup series has, in a sense, apparently been "saved." The meaning of this is deeper than just the continuation of a competition. It signifies the ongoing of friendships and close working relationships which exist among British and American golfers and golf administrations, as well as the sense of affinity between the golfing publics of both nations. Sports can forge some strong bonds, and thus it is in golf.

The American Finish

The ability to deliver their best at the finish has seen American teams through to victory in the past, and so it was at Minikahda. Charlie Coe's side were magnificent.

The pace was set by Billy Joe Patton.

In the No. I singles he was 5 down after 18 holes to Reid Jack, the British Amateur Champion. Billy Joe wiped out the deficit in the next nine holes, which he played in 32, three under par, and gained his ultimate advantage of I up on the 35th. No wonder his British friends refer to him as "that old scoundrel." Billy Joe is an inspirational golfer who often can evoke his best game when it counts most.

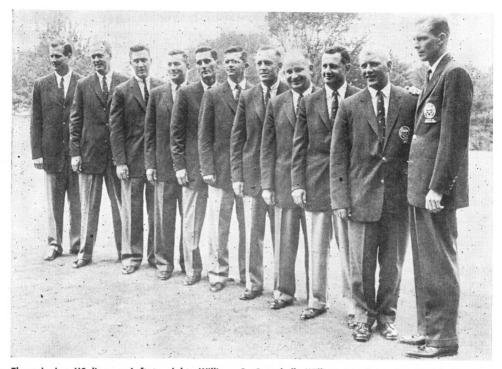
There was another great American finish in the No. 2 singles. Joe Carr, British Amateur Champion of 1953, and Bill Campbell, our Walker Cup Captain of 1955, were even after 18; Carr was 2 up after 27. Campbell won five of the next seven holes for a 3-and-2 victory. He was three under par for the last five.

Rex Baxter, one of our finest young players, met Alan Thirlwell in the third singles. They were even at 18. Baxter went out in 31 in the afternoon, and that was that.

William Hyndman, III, made it four in a row for the United States by 7 and 6 over Dr. Frank Deighton. The other American points were scored by Dr. Frank M. Taylor, Jr., who had a very close match with Douglas Sewell, and Pvt. Mason



The British Team, left to right: Gerald H. Micklem, Captain; Douglas Sewell, Philip F. Scrutton, Reid Jack, Alan Bussell, Dr. Frank W. G. Deighton, Alec Shepperson, Michael Bonallack, Joseph B. Carr, Alan Thirlwell, Guy B. Wolstenholme.



The winning US line-up. Left to right: William C. Campbell, William Hyndman, III, Rex Baxter, Jr., William J. Patton, Lt. Hillman Robbins, Jr., E. Mason Rudolph, Dr. Frank M. Taylor, Jr., Charles R. Kocsis, Arnold Blum, Joe E. Campbell, Charles R. Coe, Captain.

Rudolph, who defeated Philip Scrutton after being even with five holes to go.

Britain's point-winners in singles were their youngest player, 20-year-old Alan Bussell, and Guy Wolstenholme, whose victims were Joe Campbell and Lt. Hillman Robbins, Jr., respectively.

Bud Taylor probably expressed the experience of all the players when he said "I never worked so hard in a golf match." This is how the Walker Cup affects all the fine men who are privileged to represent their countries. It is for a cause higher than self.

Minikahda and Tot Heffelfinger

The competition had the benefit of wonderful preparations by Minikahda, whose committees did a superlative job under the General Chairmanship of Totton P. Heffelfinger, former USGA President. There was great public interest, some 6,000 witnessing the day of singles matches.

In an international team match the Rules of Golf permit use of both the small British ball and the larger American ball. The British used the American ball, with occasional and rare exceptions.

For the first time in history the American side did not include a single former winner of either the United States or the British Amateur Championship. The British side included two winners of the British title—Reid Jack and Joe Carr.

Charles Kocsis was a member of the USGA Team 19 years after his first selection. He played on the Teams of both 1938 and 1949.

Two of the participants are busy professional men—Dr. Frank Deighton is a physician in Glasgow, and Dr. Frank Taylor is a dentist. Alec Shepperson, 21-yearold Briton, was recently graduated from Oxford and is studying law. The American side claimed two members from military services—Mason Rudolph from the Army and Hillman Robbins from the Air Force. It was a Match played in the best spirit of amateurism.

1957 INTERNATIONAL MATCH FOR THE WALKER CUP

Held at the Minikahda Club, Minneapolis, Minn.

August 30 and 31, 1957

FOURSOMES

Point	ts Points
GREAT BRITAIN	UNITED STATES
Joseph B. Carr and F. W. G. Deighton Alan Bussell and Philip F. Scrutton	William C. Campbell and Frank M. 1990, Jr.
Reid Jack and Douglas Sewell (1 up) A. E. Shepperson and Guy B. Wolstenholme (halved)	1 Arnold S. Blum and Charles R. Kocsis 0 Hillman Robbins, Jr. and E. Mason Rudolph
– Total Foursomes	1 Total Foursomes
s	INGLES
Reid Jack	0 William J. Patton (1 up) 1
Joseph B. Carr	0 William C. Campbell (3 and 2) 1
Alan Thirlwell	0 Rex Baxter, Jr. (4 and 3) 1
F. W. G. Deighton	0 William Hyndman, III (7 and 6) 1
Alan Bussell (2 and 1)	1 Joe E. Campbell 0
Douglas Sewell	0 Frank M. Taylor, Jr. (1 up) 1
Philip F. Scrutton	0 E. Mason Rudolph (3 and 2)
Guy B. Wolstenholme (2 and 1)	1 Hillman Robbins, Jr
Total Singles	2 Total Singles
Grand Total, Great Britain	3 Grand Total, United States
Non-playing Captain: Gerald H. Micklem	Non-playing Capitali: Charles K. Coe

USGA PUBLICATIONS OF GENERAL INTEREST

THE RULES OF GOLF, as approved by the United States Golf Association and the Royal and Ancient Golf Club of St. Andrews, Scotland. Booklet, 25 cents (special rates for quantity orders, more than 500).

USGA GOLF HANDICAP SYSTEM FOR MEN, containing recommendations for computing Basic and Current Handicaps and for rating courses. Bookløt, 25 cents. Poster, 10 cents.

THE CONDUCT OF WOMEN'S GOLF, containing suggestions for guidance in the conduct of women's golf in clubs and associations, including tournament procedure, handicapping and course rating. 25 cents.

HANDICAPPING THE UNHANDICAPPED, a reprint of a USGA Journal article explaining the Callaway System of automatic handicapping for occasional players in a single tournament. No charge.

TOURNAMENTS FOR YOUR CLUB, a reprint of a USGA Journal article detailing various types of competitions. No charge.

LETTER AND SPIRIT OF THE AMATEUR CODE,

a reprint of a USGA Journal article by Joseph C. Dey, Jr. No charge.

PROTECTION OF PERSONS AGAINST LIGHT-NING ON GOLF COURSES, a poster. No charge.

HOLE-IN-ONE AWARDS. No charge.

GAMBLING IN GOLF TOURNAMENTS, a reprint of a USGA Journal article by Richard S. Tufts. No charge.

WORK OF A CLUB GREEN COMMITTEE, a reprint of panel discussions conducted by the USGA Green Section Committee. No charge.

MISTER CHAIRMAN, a reprint outlining the duties of the Chairman of the Green Comtee. No charge.

TURF MANAGEMENT, by H. B. Musser (Mc-Graw-Hill Book Co., Inc.), the authoritative book on greenkeeping. **\$7**.

USGA CHAMPIONSHIP RECORD BOOK. Detailed results of all USGA competitions since their start in 1895. \$2.

USGA JOURNAL AND TURF MANAGEMENT, a 33-page magazine published seven times a year. \$2. a year.

JOANNE GUNDERSON A JOYOUS CHAMPION

TO watch some golfers in amateur tournaments, you'd hardly imagine they were engaged in a game for fun and recreation. Good golf requires such concentration as to make it seem sometimes a life-or-death matter. It is not always easy to balance seriousness of purpose with a happy outlook.

With JoAnne Gunderson, there's no doubt that she plays for the sheer joy of playing. She concentrates well enough to wear the national title of Women's Amateur Champion very deservingly. But she is a truly happy golfer-a refreshingly natural young lady of 18 with almost a won't-come-off smile. JoAnne instinctively applauds her opponent's good shots-literally claps her hands along with the gallery. She roots for the opponent's less good shots -- "One big bounce over," she'll say to a ball headed for a bunker. With her own game she's somewhat more severe: a putt stops short of the cup, and she mumbles to herself "Chicken!" When her caddie neglects to replace a divot, she'll go out of her way to do it, be it first round or final.

Miss Gunderson's competitive record is fully as compelling as her sunny disposition. She is, mind you, only 18 years old just a few months out of high school in Kirkland, Wash. But in the last three seasons she has both won and been runner-up in both the USGA Women's Amateur Championship and the USGA Girls' Junior Championship—two gold medals and two silver medals in five USGA starts.

In winning the Women's Amateur last month at the Del Paso Country Club in Sacramento, Cal., Miss Gunderson became the second youngest Champion in history. Back in 1896 Miss Beatrix Hoyt at age 16 won the second women's tournament conducted by the USGA. At Age 18, is Second Youngest to Win USGA Women's Title

Miss Anne Richardson, of Columbus, Ohio, a semifinalist, extracates herself from a ticklish spot.

Lesson from the Ladies

Ever since Glenna Vare and her generation opened to women the new world of shooting for the pin instead of generally for the green, the calibre of play among ladies has steadily improved. Today the better players swing increasingly like men.

JoAnne Gunderson has a short backswing with a pronounced pause at the top, and she drives the ball amazing distances.

By comparison with strong men, ladies get results which are hard to believe unless seen. Del Paso's professional, Frank Minch, expressed the following insight to Ed Burt of the SACRAMENTO BEE:

"Women do not have the strength to hit long shots, so they are very careful to learn and execute correct form. All of the players in this tournament pay careful attention to their stance and grip and use a grooved swing and perfect timing to get control and distance.

"Most men never take this much trouble to correct their faults and keep trying to overpower the ball with sheer strength. Sometimes they get distance but only rarely do they also achieve the control of the women and the low handicapped men players."

Sacramento's large galleries were charmed not only by the skill of the players but by their general loveliness of manner. Youngsters were especially prominent three of the four semi-finalists were 21 or under. Watching the new generation, one was soon drawn to conclude that all the good things for which golf stands are entirely safe in the good hands of these fine young ladies. They do honor to themselves and to the game.

A measure of credit for this is due to sponsors of junior programs throughout the country. The USGA has conducted a Girls' Junior Championship since 1949, for a trophy presented by Mrs. Edwin H. (Glenna Coliett) Vare, Jr.

This year it was held the week before the Women's Amateur, and the Chairman of the Girls' Junior Committee was Mrs. John Pennington, of Buffalo. Mrs. Pennington thereafter played at Sacramento and reached the quarter-finals (in 1956 she was in the last sixteen). On the way she eliminated the 1955 Women's Champion, Miss Patricia Lesser (now Mrs. John Harbottle).

In the quarter-finals Mrs. Pennington was called to play JoAnne Gunderson. Before the match she received a telegram from Buffalo friends to remind her that "This is not Be-Kind-to-Juniors-Week." She took JoAnne to the 16th hole.

Mrs. Johnstone's Comeback

At Del Paso, Miss Gunderson played 128 holes in eight over women's par. Her closest match was against the new Girls' Junior Champion, 16-year-old Judy Eller, of Old Hickory, Tenn.; they went 20 holes.

Mrs. Ann Casey Johnstone, of Mason City, Iowa, was four under par for 72 holes before the final. She unfortunately lost her touch in the title match, at 36 holes, and Miss Gunderson's margin was 8 and 6.

Mrs. Johnstone, mother of a four-yearold girl, was runner-up in the Women's Western Amateur and the North and South this year.

Mrs. Johnstone lost her amateur status for a while due to teaching golf along with other duties at Stevens College, Columbia, Mo. She was a school-teacher rather than a golf professional in the usual sense. After several years out of competition, she has made a splendid return in the last two seasons. A year ago she was a semi-finalist in the USGA Women's Amateur, losing to Miss Gunderson, I down. Now 34, she is a jolly and popular player.

One of the most improved players of the year is 21-year-old Anne Richardson, of Columbus, Ohio. She was a semi-finalist, losing 3 and 1 to Miss Gunderson.

In the quarter-finals Miss Richardson won a classic match, 1 up, from her roommate, Miss Anne Quast, of Marysville, Wash.; they were around in 74 and 73, respectively, against par of 74. This was the third year in a row for Miss Quast to reach at least the quarter-finals; in 1956 she was a semi-finalist. The Sacramento tournament was her first competition in more than four months after a siege of sickness. Another victim of Miss Richardson was Miss Barbara McIntire, low amateur in the Women's Opens of 1956 and 1957.

The fourth semi-finalist at Sacramento was the Pacific Northwest Champion, Carole Jo Kabler, of Sutherlin, Ore., aged 19. She lost to Mrs. Johnstone by 7 and 6, but in the previous round eliminated the defending Champion, Mrs. Marlene Stewart Streit, of Toronto, with a sub-par performance. Miss Kabler was USGA Girls' Junior Champion two years ago and played



Miss JoAnne Gunderson, of Seattle, Wash., receives the congratulations of Mrs. Ann Casey Johnstone, of Mason City, Iowa, the runner-up, after winning the Women's Amateur Championship. Miss Gunderson, with the exuberance of youth, has reached the pinnacle of women's amateur golf in two bounds. She jumped halfway up the ladder last year when she won the Girls' Junior title.

this year on the University of Oregon freshman team.

Young ladies from the Northwest have played striking parts in women's golf in recent years—Pat Lesser, JoAnne Gunderson, Carole Jo Kabler, Anne Quast, Grace DeMoss. Miss Lesser took the Championship trophy to the Sand Point Country Club, Seattle, in 1955, and Miss Gunderson has now returned it to the same club.

Mrs. Barbara Romack Porter, Champion of 1954, had three extra-hole matches, and

the last one, against Mrs. Johnstone, proved her undoing in the quarter-finals. Del Paso is her home club, and she had a considerable hand in arranging for the event to the plaved there.

Del Paso's committees did a superlative job under the General Chairmanship of Dr. Robert Wallis. The Club encountered unusual problems of maintenance of the putting greens during a particularly hot spell earlier in the summer, but the 93 players took them in their stride.

JUDY ELLER SETS THE GIRLS AN EXAMPLE

Competitive Courage at Girls' Junior Championship

COMPETITIVE courage is by no means confined to men. The two attractive young ladies who played in the final of the Girls' Junior Championship at the Lakewood Country Club, Denver, Colo., had it in large measure.

Miss Judy Eller, of Old Hickory, Tenn., came to the eighteenth and presumably last green of the final, 1 up, and made a nice conservative 5 to complete the round in 79 strokes. Miss Beth Stone, of Muskogee, Okla., then ran down a 12-foot putt for a 4 to send the match into extra holes.

Again on the nineteenth hole, Judy, the Tennessee Champion, made her 4 easily it could well have been a 3. And again Beth, the Oklahoma Girls' Champion, came out of a bunker and holed a 12-foot putt to remain alive.

It was a breath-taking exhibition of cool nerves under pressure.

It was also enough for Judy. On the second extra hole, she ran her 25-foot putt from the edge of the green squarely into the hole for a birdie 3, and that was the end of the longest final the event has seen.

The final properly adorned a fine tournament in which, once again, 51 young ladies under 18 disproved all the old wives' tales about women's golf by playing with wonderful good sportsmanship, light hearts and perfect grace. These girl golfers are a charming, happy group.

Miss Eller, pretty, dark-haired and 16 at the time of the Championship, is a fine example of what girls' golf is today. On the afternoon before the final, she and her mother picked up her prospective opponent and they spent some thrilling, giggling hours driving the precipitous shelfroads of Virginia Canyon and picnicking, high in the Rockies.

These friendships often are formed at the Players' Dinner which the USGA gives the evening before play starts. Their effect was clearly revealed when the Chairman of the USGA Girls' Junior Committee, Mrs. John Pennington, of Buffalo, N. Y., requested a show of hands and developed the information that three girls, Miss Constance Gorsuch, 17, of Greensboro, N. C., Miss Kaya Caldwell, 16, of Kansas City, Mo., and Miss Margot Morton, 14, of Indiana, Pa., were playing for the fourth time, and many more were playing for the third or second time.

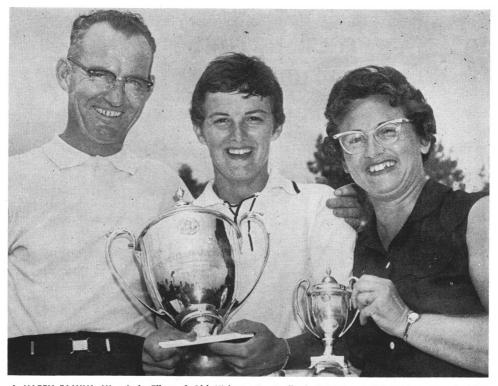
Daughter of the golf professional at the Old Hickory Country Club and a high school basketball star as well, Judy has been playing successfully with the grownups for two years. She has won the Tennessee Championship each year, beating Mrs. Scott Probasco, Jr., in the semi-final this summer. She also went to the semi-final of the Southern Championship this summer, beating the Misses Mary Patton Janssen, Polly Riley and Mary Mills along the way.

Following the Girls' Junior, she accepted an invitation to play in the Women's Amateur and defeated Miss Grace Lenczyk and Miss Janssen again before losing in the third round.

Judy will be eligible to enter in defense of her championship at the Greenwich Country Club, Greenwich, Conn., next year. Although her birthday falls on August 24, shifting dates have enabled her to play in two successive years as a 16 year old.

The hospitable Lakewood Country Club proved a big test for the girls. Its course stretched out to 6,208 well-conditioned yards, and the watering system coupled with the moist season meant they all had to be earned. Par was 75.

Miss Patsy Hahn, 17, of Wilmington, the Delaware Champion, took the medal with a fine 78, and there were two 79s by Miss Sharon Fladoos, 14, of Dubuque, Iowa, who had been a semi-finalist the year



A HAPPY FAMILY. Miss Judy Eller, of Old Hickory, Tenn., flanked by her delighted parents after her dramatic 20th hole victory over Miss Beth Stone, of Muskogee, Okla., in the final of the Girls' Junior Championship at Lakewood Country Club, Denver, Colo.

before, and Miss Gorsuch. Sharon bowed to Miss Eller in the first round; while Patsy and Connie went down in the quarter-finals before Miss Andrea Cohn, 17, of Waterloo, Iowa, and Miss Joanne Bruni, 17, of Laredo, Texas. Miss Cohn and Miss Hahn both had 75s in their match, which went to the nineteenth. Miss Sherry Wheeler, 17, of Glasgow, Ky., fresh from her victory in the Western Girls', was a first-round victim of Miss Stone.

Once again, the Championship was distinguished by the high caliber of play of some very young girls. The youngest, for the second year in a row, was little Miss Judy Torluemke, now 12 years and 67 pounds, of Washington, Iowa, who had only missed qualifying by two strokes last year. This year she improved her score by five strokes and made the grade safely with an 87. The luck of the numerical draw brought her together in the first round with Miss Sandra Haynie, 14, of Austin, Texas, who had been the youngest and smallest in the field two years ago, and Miss Haynie, now the Texas Public Links Champion, won.

Incidentally, Miss Torluemke, Miss Cohn and Miss Fladoos were only three of five Iowa girls who qualified. The other two were Miss Jeannie Richey, of Villisca, and Miss Karen Widmer, of Paullina.

The second flight was won by Miss Judy Kier, of Phoenix, Ariz., who defeated Miss Paula Maier, of Denver, in the final, 4 and 2. The third flight was won by Miss JoAnne Baird, of Denver, who defeated Miss Donna Curtis, also of Denver, in the final, 5 and 4.

Of the twenty-five girls who were defeated in the first round of all flights, nineteen played in the consolation stroke play tournament at the Green Gables Country Club. The winner was Miss Fladoos, who made a 78, and the handicap winner was Miss Richey, who had 83-10-73.

THE AMATEUR RETURNS TO A NEW BROOKLINE

The Country Club Celebrates Jubilee Year

THIS is an auspicious year for The Country Club, Brookline, Mass., for two reasons. It is entertaining the Amateur Championship in this, its seventy-fifth jubilee year.

The Country Club members have long been championship-minded and are always delighted to welcome the nation's top line amateurs.

Throughout the past fifty-four years the Club has staged seven USGA Championships and the 1932 Walker Cup Match. This will be its eighth USGA Championship and fourth Amateur.

The Club was incorporated in 1882, but it was not until 1893 that the members appropriated \$50 to lay out a six-hole golf course. It was a modest beginning, but the following year, with the appointment of Willie Campbell as the Club's first professional and the aid of a further \$100, the course was extended to eighteen holes.

The year 1894 not only marked the extension of the golf course, it saw the founding of the United States Golf Association with The Country Club as a charter member.

Introduced by a Lady

The Country Club's interest in golf can be traced back to a young lady who was visiting the family of Arthur Hunnewell, one of the original members of the then horse-racing Club, at his Wellesley, Mass., home. She had brought a set of clubs with her from Pau, France, the oldest club on the continent, and demonstrated their use to her host.

Mr. Hunnewell, his brother-in-law, R. G. Shaw, and his nephew Hollis Hunnewell, all ardent lovers of sport, were quick to recognize the attraction of the new game and eagerly adopted it.

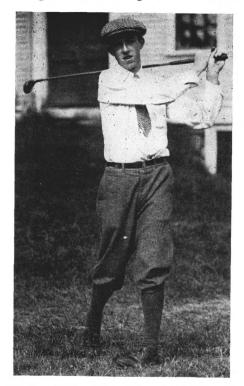
These gentlemen induced the Executive

Committee of The Country Club to incorporate this sport in its activities.

The original home green was constructed on a lawn in front of the clubhouse in dangerous proximity to the front piazza and had later to be moved to a safer distance.

New Championship Circuit

By 1927 the Club had three nine-hole circuits known as Clyde, Squirrel and Primrose. The traditional Old Course, a combination, has been revised for this Championship in order to bring it more into line



Francis Ouimet won the 1913 Open Championship at The Country Club as a slip of a lad of nineteen.



The victorious US Walker Cup Team of 1932. Squatting on the lawn at Brookline are from left to right: George Voigt, George T. Dunlap, Jr., Harrison R. Johnston, Maurice J. McCarthy, Jr., William R. Howell, Gus Moreland, Charles Seaver, Jess Sweetser, Donald K. Moe, Francis Ouimet, Captain; Jack Westland.

with modern requirements. The committee has incorporated three holes from Primrose at the expense of Clyde, which formerly formed the first nine of the Old Course.

The yardage of the reconstructed course, to be known as the Anniversary Course, is 6,845 yards with a par of 72.

The anecdotes originating from The Country Club are numerous and oft repeated. Perhaps the earliest is the one attributed to Arthur Hunnewell when he took part in the first exhibition match to be held on the course. He delighted the spectators by holing his first tee shot, but their disappointment was most marked when he failed to maintain this form on the following holes.

During the Walker Cup Match in 1932 Leonard Crawley won Britain's only point when he beat George Voigt on the last green after Crawley's ball had ricochetted back off the Walker Cup itself, denting it in the process. Crawley, who took part in three subsequent matches and is now golf correspondent of the London Daily Telegraph, 1s covering the Amateur for his British readers.

Ouimet's Open Victory

The man who did more to popularize golf in the United States than any other of his generation did so at The Country Club. The man, of course, is Francis Ouimet who, as a slip of a lad of 19 and an amateur to boot, tied with the great Harry Vardon and Ted Ray in the 1913 Open and beat them soundly in the play-off.

It was here, too, that Lawson Little, having won the British Amateur of 1934 brought off the Little Slam, the first of his two consecutive Amateur titles.

British title-holder Reid Jack, with his Walker Cup compatriots is making an effort to match Little's feat.

The Country Club has contributed six presidents to the USGA. They are: Laurence Curtis, 1897-98; Washington B. Thomas, 1899-1900; G. Herbert Windeler, 1903-04, Herbert Jaques, 1909-10, the younger Herbert Jaques, 1933-34, and Harold W. Pierce, 1940-41.

The Country Club is located in the village of Brookline, which is entirely surrounded by Metropolitan Boston. It comes as a suprise to many visitors that this huge tract of land, devoted to golf, can exist in an area as congested as Boston. But the Club is there, in some respects very much as it was originally, with additions made entirely in keeping with the architecture of the first structure which may have been a gentleman's manor house. The rolling contour of the course, together with its beautiful trees and shrubbery are an inspiring sight.

The 1200 members, by being hosts to the 57th USGA Amateur Championship, ure re-emphasizing their enthusiasm for tournament golf on the highest plane.

USGA JOURNAL AND TURF MANAGEMENT: SEPTEMBER, 1957

19

DON ESSIG CAPTURES PUBLIC FANCY AND TITLE

Teenager Wins at Hershey

SOME tournaments run their quiet courses without generating heroes or emotional excitement. And then, every so often, a tournament starts on a quiet course and suddenly assumes dramatic values because an individual player captures public fancy. This pleasant biochemical reaction occurred in the Amateur Public Links Championship at the Hershey Park Golf Club, in Hershey, Pa., and lifted the event far above its normal level, which was a fitting reward for the keen galleries and hospitable hosts.

The Public Links is a golfers' golf tournament. As much as any other and perhaps more, it attracts men who love golf for its own sake, make sacrifices to play and have neither achieved nor primarily desire the personal publicity which surrounds so many in the Amateur and Open. When they gather in a different part of the country each year, they are comparative unknowns to the local public—although well-known to each other and on their public courses back home.

It remains for the local public to search for a hero each year, and it developed one to its liking this year in Don Essig, III, of Indianapolis, Ind., an 18-year-old sophomore at Louisiana State University. Don is a very slightly built young man with an attractive boyishness about him, an overwhelming enthusiasm for golf and an extraordinary penchant for laying an iron shot up against a flagstick and holing the putt. The enthusiasm places him on a golf course practically from sunrise to nightfall every day, and the skill stems from the enthusiasm.

It wasn't long, as tournament days go, before spectators arriving at Hershey Park were asking: "How's the kid doing?"

"The kid" was invariably doing fine. After qualifying with 72-72—144, he played below-par golf and went right through



Gene Towry, of Dallas, Texas, (left) clasps the hand of Don Essig, III, of Indianapolis, Ind., in a congratulatory grip after the eighteen-year-old Louisiana State University sophomore beat him for the Amateur Public Links title at Hershey Park Golf Club, Hershey, Pa.

three fine golfers with no appreciable difficulty to meet the defending champion, James H. Buxbaum, of Memphis, Tenn., who also had been playing impressively, in the quarter-finals.

This was a real test, and drew a nice gallery. Don met the test head-on. He played the established distance in 68, two under par, and found Buxbaum still holding on, having cleared the brook and gotten home with his second at the eighteenth to square the match with a birdie 4. On the extra hole, Don, playing the odd to the green, faded a beautiful No. 5 iron around a guarding tree about four feet from the hole. He won anti-climactically when Buxbaum's second, slightly pulled, bounded off the bank of the elevated green and out of bounds.

After that, Don the giant killer, was not only the chief protagonist but practically the only one. He beat Don Sckrabulis, of Kewanee, Ill., in the semi-final, 4 and 3, and Gene Towry, of Dallas, Texas, in the final, 6 and 5. In the last, Don scored another 68 in the morning and was 4 up at noon. He was even par for the thirteen holes in the afternoon.

Essig is not quite the youngest Champion. Les Bolstad, now professional at the University of Minnesota Golf Course, was born on May 9, 1908 and won on August 7, 1926, at the age of 18 years, 3 months, while a student at Minnesota, Don was born December 6, 1939, and was 18 years, 8 months, at the time of his victory. And despite his rather tender years, Don is now a veteran of seven USGA Championships. He qualified for the Junior Amateur Championship four times without ever going beyond the third round. In his final year of eligibility last year, he lost to Larry Beck, the fine young player who came on to win that title this year. He also qualified for two previous Public Links Championships, in 1954 and 1955, and went to the fourth round in 1955.

His eighth USGA Championship will be the Amateur this year. As Public Links Champion, he is not only invited to play but is exempt from sectional qualifying.

Towry, a fine player and a worthy opponent in the final, is also a college student although on a somewhat different plane. A member of the North Texas State teams which won collegiate championships a few years ago, Towry later toured briefly as a professional, then went into the Navy and acquired an interest in electronics. He is now 28, and reinstated as an amateur and a civilian, back in college at Southern Methodist studying electrical engineering. In the semi-finals, Towry beat J. Paul Popovic, of San Francisco, Cal., 7 and 6.

The Hershey Park course as resurveyed for the Championship measures only 6,055 yards and is one of the shortest on which a men's event has been played. Par is 70. Yet it held up remarkably well both in the estimation of the players and in the matter of scoring.

The equalizer, to compensate for the shorter distance of the course, is Spring Creek, which winds past or across twelve holes, sometimes more than once, and the wooded, rolling terrain on which the late Maurice McCarthy, Sr., laid out the course. Incidentally, despite the hot, dry summer in the East, its watered fairways were green and beautifully conditioned.

In the 36-hole qualifying to determine the sixty-four qualifiers for match play, the only rounds in which every ball had to be put into every hole, Bud Kivett, of High Point, N. C., won the medal with 72-69— 141. Kivett, a 35-year-old mail carrier who was vacationing with his wife and 4-yearold daughter, was in the round of sixteen two years ago, and went to the quarterfinals this year, losing to Towry.

The lowest single score in the qualifying was a 68 on the second day by Jack S. S. Chun, of Honolulu, T. H., a 49-year-old plumber. Chun's total of 142 was matched by Dr. Sam W. Valuck of Denver, Colo., a 34-year-old osteopathic physician and surgeon who recently moved there from Muskegon, Mich., and Buxbaum. Dr. Valuck scored 73-69 and Buxbaum 71-71.

Highest score to qualify was 153, two strokes lower than last year, and only five of the ten who made 153 qualified. The playoff winners were Donald L Thornton, of Los Angeles, Cal., with a par 4 on the first hole; Ralph Emery, of Salt Lake City, Utah, and Anthony E. Pistorio, of Baltimore, Md., with 2s on the second hole; and John F. Butler, of Atlanta, Ga., and Bill Conroy, of Seattle, Wash., with 3s on the second hole

The qualifiers, incidentally, represented twenty-four states and Hawaii.

For the first time, Honolulu won over 22 other teams in the championship for the Warren G. Harding Trophy, which is conducted simultaneously with the qualifying play. Its three-man score for 36 holes was 440, five strokes lower than Memphis' winning score a year ago. In addition to Chun's 74-68—142, George Nahale made 71-73— 144 and Edward Nakagaki scored 80-74— 154. Indianapolis and San Francisco tied for second at 443.



THE REFEREE

Decisions by the Rules of Golf Committees

Example of symbols: "USGA" indicates decision by the United States Golf Association. "R & A" indicates decision by the Royal and Ancient Golf Club of St. Andrews, Scotland. "57-1" means the first decision issued in 1957. "D" means definition. "R. 37-7" refers to Section 7 of Rule 37 in the 1957 Rules of Golf.

Water May Be Scooped From Hole Without Penalty

USGA 57-16 R. 35-1b

Q: A heavy rainstorm started while a match was on the 14th green. The teams finished the 14th hole and then went into the shack for approximately one hour. It was then decided between the two teams to continue the match. At that time the 16th green was flooded and the approach to the 17th green was also flooded. The teams reached the 17th green. One of the players was putting a two-foot putt toward the cup and he noticed that the cup was filled almost to the brim with water. He had the caddie take a cigarette package and scoop three packagefuls of water from the cup. It cannot be said that any portion of the rim of the cup was touched.

The two foot putt was hit into the cup, after which the win of the hole was protested by the opposing team and a ruling requested.

Question by: ARNOLD H. BACHNER Harrison, N. Y.

A: There is nothing in the Rules of Golf to prevent a player from removing water or any other foreign matter from a hole before putting, provided the line of putt is not touched in violation of Rule 35-1b and no other Rule is infringed.

Ball Inside Orange Must Be Played or Deemed Unplayable

USGA 57-17

D. 17; R. 16, 29 Q: A player pulled his drive into the rough and hit an orange tree. The force of the ball was responsible for the latter entering an orange, which dropped to the ground and rolled along with the ball inside. What is the ruling?

A: The player would have to play the ball as it lay or deem it unplayable. The orange was not a loose impediment under Definition 17, because it adhered to the ball (or vice versa), and so the player could not invoke Rule 18. The ruling would be the same if the orange had been lying loose in the fairway when the ball struck it.

Ball Rolled On Green Incurs Penalty

USGA 57-18 R. 35-1d

Q: In stroke play, after heavy rain some

of the greens had pools of water. On the 14th green there was a pool of water between a player's ball and the cup, and a pool of water behind the ball. The player did not move his ball around the water in front of his ball, as I understand he is allowed to do providing he is no nearer the hole, but took a ball out of his pocket and, by hand, rolled it through the water which was behind his ball. Ball was rolled diagonally to path of ball he was playing. Other players claimed this an infraction of the rule and a two-stroke penalty should be invoked. The player claims he learned nothing by his action and proceeded to three-putt the green.

Will you kindly give me the ruling?

Question by: T. W. HAMILTON So. Norwalk, Conn.

A: The player incurred a two-stroke penalty for violating Rule 35-1d, as follows: "During the play of a hole, a player shall not test the surface of the putting green; he shall not roll a ball or roughen or scrape the surface."

Bases for Fencing Posts Are Not Obstructions

USGA 57-19

R. 31-2; D. 20

Q: Fence posts were set in approximateby 14-inch concrete bases for a fence which bounded the course. Is the part of the concrete base which is within the boundary of the course considered an obstruction? A ball was lying against such concrete base.

> Question by: M. SANDERS Valley Stream, N. Y.

A: A fence defining out of bounds is not an obstruction (Definition 20); posts and other means of supporting such a fence ordinarily should not be regarded as obstructions. We recommend that the local committee publish a local rule stating that the concrete bases of the fence posts are not obstructions.

If it were ruled otherwise, inequities and confusion could arise from the fact that under Rule 31-2, relief would be available from the concrete bases but would not be available from the fence and its posts.

Time Limits for Applying Stroke Play Penalties

USGA 57-20 R. 11

Q: In stroke competition, is there a time limit for applying penalties for violations of Rules? In match play time limits for claims are set forth in Rule 11-1, but there does not appear to be any counterpart for stroke play.

A: In stroke play, no penalty for a Rules violation can be applied after the competition has closed (unless wrong information had been given by the competitor). The competition is deemed to have closed:

- (a) Stroke play qualifying followed by match play—When the player has teed off in his first match.
- (b) Stroke play only—When the results are officially announced.

Flag is Attended At Putter's Risk

USGA 57-21 R. 34-2

Q: A and B are playing stroke play with a double caddie. The caddie is raking a bunker after A's shot. It is B's turn to putt. To speed play, A offers to attend the pin for B. B requests her to remove it. She does so and steps away from the cup. A sees B's ball rolling toward cup and thinks it is going to roll over cup so she rushes up and puts the pin back in, by her own admission, "to stop the ball."

Does A incur a penalty under Rule 35-1h for having taken action to influence the position or movement of the ball?

Does B incur a penalty under Rule 34-2 for hitting an attended pin?

Do both A and B incur penalties for above reasons?

Question by: MRS. C. S. BEATTIE Oak Park, Ill.

A: B in effect requested that the flagstick be attended and therefore incurred a penalty of two strokes if the ball struck the attended flagstick; see Rule 34-2.

There was no other penalty.

Better Turf for Better Golf TURF MANAGEMENT from the USGA Green Section

WEED CONTROL by A. M. RADKO

Director, Eastern Region, USGA Green Section

GOOD progress has been made in the past decade in the control of weeds in the fine turf field. Today's herbicides are more selective, more specific; and weed control is now more or less routine in every well rounded turf management program. *Poa annua* excepted, available herbicides control most weeds that are troublesome in our Northeastern states. Yet weed control is by no means a one treatment affair. There are many reasons why weeds are more or less a pesky and perpetual problem on golf courses.

- Golf courses cover extensive acreages. Within the bounds of each golf course, a variety of conditions prevail, i.e. soil, drainage, topographic, and environmental conditions. A turf man's task is to attempt continuously to balance these factors through management to keep turf healthy and weeds at a minimum.
- 2. Millions of viable weed seeds infest normal soils, golf course soils are no exception; therefore, any injury or weakness to the turf cover exposes soil saturated with weed seeds. Foot, car, and cart traffic, divot and ball marks all contribute to weed troubles.
- 3. Extreme climate conditions accelerate weed problems. For example, the hurricane floods of '55 caused turf weaknesses, and therefore many

weeds; while the severe dry spell now being experienced in many parts of the Northeast has made conditions ideal for weed encroachment, especially knotweed.

- Individual plants of many of our annual weeds produce thousands of seeds which remain viable in soils for many years.
- 5. Most annual weeds have the unusual faculty of being able to adjust to maintenance and management practices in order to complete their life cycles. Crabgrass, chickweed, *Poa annua*, and plantain notably adjust to height of cut, and therefore are troublesome in putting green surfaces as well as other turf areas. Anyone who has witnessed plantain curling its head beneath its basal leaves to escape the mower set at putting green height indeed has renewed respect for Mother Nature.
- 6. Weed seeds are wind-borne, or catried in by equipment, on shoes, by birds, or other animals. Seeds deposited in healthy turf apparently remain viable for many years to await the chance to germinate when or if some turf weakness develops.
- 7. Mechanical injury due to constant use of equipment over tight areas,

notably the bruising of aprons, and bruising of approach areas.

Weed control generally falls into two categories: the first is weed prevention, and the second is weed eradication. Under the heading of Weed Prevention several factors are worthy of consideration:

- I. CULTURAL PRACTICES—A healthy turf is the first approach to weed prevention and proper cultural practices are of paramount importance on golf course turfs. These include the selection of the proper turfgrasses; proper mowing technique on each individual area; the correct amounts of lime and fertilizer; adequate drainage throughout; proper watering; good insect and disease practices; and all other requirements necessary to grow healthy turf.
- 2. PRE-EMERGENCE HERBICIDES-These are the newest types of herbicides for the most part, although one of the oldest, lead arsenate, has been used for many years as a crabgrass, chickweed, and Poa annua deterrent. The pre-emergence herbicides appear now to be the most interesting of the newer chemicals because of the bright prospect of killing weeds as they emerge, and before they ever get to the troublesome point. Several new pre-emergence herbicides are now available, but are being used with caution and presently on a rather small scale. With many herbicides of this general class, Experiment Station trial results varied widely from year to year with any given product, indicating that climatic conditions have much to do with their performance, and that we need to follow Experiment Station results carefully for answers to these buzzlers.
- 3. SOIL STERILANTS—In this general class, we have mainly three products used by golf course superintendents. They are Aero-Cyanamid (calcium cyanamid), Dowfume MC-2 (methyl bromide), and Vapam (sodium N-methyl dithiocarbamate). Each has been used to good advantage in soil

sterilization. Each of these chemicals kills most of the weed seeds in the soil, thus assuring a minimum of difficulty with new plantings. There is a required waiting period for each of the soil sterilants, and the manufacturer's recommendations on the label must be carefully followed.

A good program of weed control indeed should include sterilization of soils for critical areas. Soil sterilization eliminates most, not all, weed seeds. There are a few. notably hard clover, seeds which escape injury, but these few escape weeds normally pose no real problem. In putting green construction, the golden opportunity of soil sterilization often is erroneously bypassed. Secondly, in the preparation of top dressing soils for greens, the failure to sterilize this soil unquestionably causes future weed problems. Weeds introduced into putting greens through non-sterilized top dressing soils may not show up for several years, but assuredly they will, if turf weaknesses develop.

Weed Eradication

Since the advent of 2,4-D and, more recently, 2,4,5-T, broad-leaved weeds and clover are no longer difficult weeds to eradicate from fine turf areas. Each herbicide is selective, and when used at proper rates, damage to permanent grasses normally is negligible. On bentgrass and close cropped fairway turf, minimum rates are recommended. Important factors to consider in any herbicide treatment are: soil moisture, temperature, wind velocity, grass species, safe rate of application, height of cut of turf area, and the all important factor of timing.

At this writing (late July) many of our Eastern states are in the grip of the severest drought in some 70 years, according to authoritative sources. Many areas have not had rainfall since April. Because of the extreme dryness, knotweed has invaded unwatered fairways, while clover is most prominent on watered fairways. If the drought continues, any herbicide treatment is going to be a ticklish problem on unwatered areas. If there is any question of safety, it would be advisable to delay Fall treatments or defer to next Spring.

SUBSCRIBERS TO USGA GREEN SECTION RESEARCH & EDUCATION FUND

Augusta National Golf Club	Augusta, Ga.
Catto & Putty	San Antonio, Texas
Cooperative Seed & Farm	
Supply Service	Richmond, Va.
Dorado Beach Development	Dorado, P. R.
Bob Dunning-Jones, Inc.	Tulsa, Okla.
E. I. DuPont de Nemours	
& Co.	Wilmington, Del.
Lynde & Rowsey Lawn Grass	5
Nurseries	Muskogee, Okla.
New England Golf Ass'n.	Boston, Mass.
Maine Golf Association	
Massachusetts Golf Ass'n	
New England Golf Ass'n	
New Hampshire Golf Ass	"n.
Rhode Island State Golf	
Association	CALL AND
Vermont Golf Association	- To restore -
Watson Distributing Co.	Houston, Texas
Western Pennsylvania Golf	
Association	Pittsburgh, Pa.

Elaboration of Weed Control Chart

CRABGRASS—Smooth crabgrass is more predominant in the Northeastern states and fortunately is easier to control than hairy crabgrass. Since crabgrass germinates over a long period, several treatments are normally required for good control. If phenyl mercuric acetate (PMA) formulations are used, it is preferable to begin treatments early—before crabgrass emerges. This appears to be especially important on greens that are in part or entirely velvet bentgrass.

For fairway and rough treatments of crabgrass, sodium arsenite used properly is still one of the best and most economical herbicides to use. Critical factors in the safe use of sodium arsenite are soil moisture and temperature; therefore it is usually best to time treatments following rainfall or good watering when temperatures are below 85°.

SILVER CRABGRASS—This weed is one of the more difficut pests to eradicate. Silver crabgrass or goosegrass as it is sometimes called is more susceptible to herbicide treatment in the seedling stage. The PMA —2,4-D treatment suggested above was first given the author by Joe Valentine, eminent Superintendent of the Merion Golf Club, Ardmore, Pennsylvania. Where applied to *seedling* plants of silver crabgrass, this combination of chemicals has done a satisfactory job of control. Since dimethyl sodium arsonate entered the picture, some progressive superintendents have tried the DMSA and 2,4-D combination also with reported good results.

CLOVER—If clover persists in any given area, it would be advisable first to check for soil compaction, or drainage or nitrogen deficiency. Before herbicide treatments are applied, the deficiency should be corrected, otherwise reinfestation will occur.

On fairway turf, minimum rates of 2,4, 5-T are recommended, as high rates sometimes injure permanent grasses. 2,4,5-T is a slow acting herbicide on clover sometimes taking three weeks for results to show.

KNOTWEED—This weed often makes its appearance just as dry weather approaches. Therefore it becomes a touchy problem of whether to risk treatment with sodium arsenite. Sometimes intervals between treatments on unwatered fairways must be delayed to coincide with rainfall to insure good soil moisture conditions. This may require more than three treatments.

CHICKWEED — Many superintendents prefer to plug chickweed out of greens, as treatment with arsenate of lead sometimes leaves the green pitted, and therefore a poor putting surface.

Where chickweed occurs in greens, it seems desirable to discourage it gradually with light treatments of lead arsenate, or a 50-50 mixture of lead arsenate and ammonium sulphate. Scuffing the chickweed plant with the sole of the shoe prior to dusting with herbicides suggested, seems to work best.

Several superintendents report good control of chickweed in greens with disodium methyl arsonate preparations used at rates recommended for crabgrass control.

POA ANNUA—This weed is conspicuous by absence from the chart presented and for very good reason. We simply have no sure-fire selective control for *Poa annua* at present. Experiment station tests with many herbicides look promising, but further testing is essential. Lead arsenate for the present seems to be the favorite stand-by of most superintendents for putting green applications.

WEED				
	GREENS	FAIRWAYS	ROUGHS	REMARKS
Smooth and hairy crabgrass	PMA formulations applied prior to emergence or in seedling stage, DMSA formu- lations on seedling or later stages.	Phenyl mercuric acetate, or dimethyl sodium arsonate, or sodium arsenite, or potas- sium cyanate. Latter primari- ly on blue grass turf only.	Same as fairways.	Three to four treatments at weekly intervals required for smooth, additional treatments required for hairy crabgrass.
Silver crabgrass	HAND WEED	Normal rates of PMA or DMSA with 1/5 oz. 2,4.D amine in 5 gals. water per 1000 sq. ft. Three or more treatments at 7-10 day in- fervals.	Same as fairways.	Begin treatments when in 2- leaf stage. Correct soil com- paction.
Clover	Spot treat with light rates of ammonium sulphate.	$\frac{1}{2}$ to $\frac{3}{4}$ lb. 2,4,5-T to the acre.	11b. 2,4,5-T to the acre.	Mid-spring or mid-fall best time.
Seedling and mature knotweed		Liquid sodium arsenite at 1)2 pints followed by 2 treat- ments at weekly intervals of 1 qt. to the acre.	Same as fairways.	Soil moisture must be good. Avoid using sodium arsenite when temperatures are above 85°.
Broad leaf weeds; i.e. dandelion, plantain, etc.	HAND WEED	1/2 to 3/4 lb. 2,4-D amine to the acre. One treatment mid- spring or early fall.	1 lb. 2,4-D per acre.	Yearly applications may be required until desired con- trol attained.
Mixed clover and broad leaf weeds		<i>Ys</i> to <i>3</i> 4 lb. each 2,4-D amine and 2,4,5-T per acre. 1 treat- ment in mid-spring or mid- fall.	Ilb. each 2,4-D and 2,4,5-T per acre.	Yearly applications may be required until desired con- trol attained.
Chickweed	Dust with lead arsenate or 50-50 mixture of lead arsen- ate & ammonium sulphate.	Similar sodium arsenite treat- ments as for knotweed.	Same as fairways.	Follow usual precautions for use of sodium arsenite (see above).

. L

TURFGRASS—ITS DEVELOPMENT AND PROGRESS

BY T. T. TAYLOR

Northeastern Agronomist, USGA Green Section

THE average golfer thinks little if at all about progress toward achieving the healthy green fairways and extraordinary putting surfaces of greens as he relaxes and enjoys his game of golf. Except perhaps for some circumstance which might have affected the turf adversely, or because his own lawn has suffered from some serious setback, he takes good turfgrass pretty much for granted. He will frequently remark on the beauty of the golf course and occasionally ask the superintendent, "How do you do it?" The superintendent usually replies with a shrug of his shoulder, but the obvious answer is "know-how."

The road to "know-how" has been a long and sometimes rough trail to travel. To the superintendents who have suffered many frustrations; to the men of science who have labored with fascinated interest; and to many prominent and successful business men who have found recreation in the mysteries of turf, golf owes a debt of gratitude.

Golf is a relatively new sport in this country—it was first introduced in the United States about 1888. In 1922, there were an estimated 1834 golf courses and by 1956, the total had climbed to more than 5300 in number. Hence golf, and thus golf course maintenance, is now big business.

To understand or to evaluate the development of turfgrass and turfgrass maintenance into the field of big business, we should consider the various stages in its progress. Broadly speaking, those stages were:

- (1) the period of trial and error.
- (2) the period of transition.
- (3) the period of chemistry.

Period of Trial and Error (1885-1920)

The first work done toward establishing an experimental turf garden began in the United States as early as 1885, when Mr. J. B. Olcott conceived the idea of selecting samples of turf and expanding them by vegetative propagation. After the work was well under way, he was assisted by the Connecticut Experiment Station.

Olcott selected many hundreds of samples, not only in the United States but also during his travels in Europe, Australia, and New Zealand. Most of his selections were of stains of red fescue and bentgrass.

Olcott was certainly a pioneer and few, if any, recognized the significance of his work at that time, since golf courses were not established in this country until many years later. In fact, it was not until 1906, more than twenty years later, that golf course turf problems were pronounced enough to command any attention from the standpoint of scientific research. It was then that Dr. W. S. Harban met with Dr. C. V. Piper and Dr. R. A. Oakley to discus with them the possibilities of obtaining help from the United States Department of Agriculture. The need for further assistance was emphasized when in 1908 Charles B. MacDonald, well-known architect of his day, encountered such severe problems in establishing turf on the sand dunes at the National Links at Southampton, Long Island, N. Y., which was then being built, that he requested technical aid from the Department of Agriculture.

Early Articles on Greenkeeping

No funds for research were available but a considerable amount of investigation was begun and continued by Piper and Oakley in cooperation with many golf clubs. As a result, articles began to be published in the golfing magazines of the day, the first of which appeared in January 1913.

In the spring of 1915, the Executive Committee of the USGA formally requested additional help in solving greenkeeping problems.

It is interesting to note that their appeal was partly based on the fact that ten million dollars per year was being spent on the establishment and maintenance, combined, of golf course turf in the United States. By comparison, in 1955, it has been estimated that over \$4,000,000 for maintenance alone was spent in the one state of New Jersey. In Los Angeles County, Cali-

fornia, an annual maintenance expenditure of over \$2,300,000 was spent on 33 golf courses in just one county. In 1955 the maintenance costs for an 18 hole course in Los Angeles County averaged over \$70,000.

As a result of the USGA appeal, the turfgrass experiments were begun at Arlington in the spring of 1916.

Through the efforts of E. J. Marshall (Inverness Club, Toledo) and Hugh Wilson (Merion, Philadelphia), the Executive Committee of the USGA formally established the Green Section November 20, 1920, the first Bulletin being published February 10, 1921.

The Transition Period 1920-1930

The intense interest of Piper and Oakley combined with the supporting efforts of the USGA. This interest and support was the basis upon which the first era of organized scientific research was founded.

Prior to the establishment of the Green Section, much of the information available was obtained from reports of experiences and maintenance practices as they pertained to individual courses. There was no clearing house through which these results could be verified by duplication nor any source through which the results could be coordinated and distributed by publication for general information and use.

As a result, every superintendent was more or less self-sufficient without technical support in his opinions when he was right, and without sufficient reason for condemnation when he was wrong.

However, these were only growing pains and served the useful purpose of indicating to the superintendent that he must be better informed if he hoped to protect himself against amateurs and quacks.. Today the situation is reversed; the science of growing turf has far outstripped the knowledge of any one man and the average golf club is only too glad to turn the whole mess of headaches over to the man responsible for results. As for the amateur expert, he now seeks the advice of the man he once so freely gave it to. So much for the professional turfman as an individual, but just how did he shape up as a craftsman? In terms of the way we think today:

1. He believed in frequent and periodic

COMING EVENTS

September 16-17 Midwest Regional Turf Foundation Field Days Purdue University Lafayette, Ind. Dr. Wm. H. Daniel September 17-19 Florida Turf Conference University of Florida Gainesville, Fla. October 3 and 4 Washington State Turf Conference Washington State College Pullman, Wash. Dr. J. K. Patterson October 7 and 8 Utah-Idaho Turfgrass Conference Ogden Country Club Ogden, Utah J. W. Richardson October 10 and 11 Rocky Mountain Turf Conference Colorado State College Prof. George A. Beach Fort Collins, Colo. October 14 and 15 New Mexico Turf Conference New Mexico College of Agriculture and **Mechanic Arts** State College, N. M. Prof. C. E. Watson October 16-17-18 Kansas State Turfgrass Conference Kansas State College Manhattan, Kans. Dr. Ray A. Keen October 17 and 18 Arizona Turf Conference University of Arizona Tucson, Ariz. Prof. J. S. Folkner October 21-22 Louisiana Turfgrass Conference Lafayette, La. SLI Box 65, Lafavette Mr. L. G. Vickers November 18-22 American Society of Agronomy Annual Meeting Atlanta Biltmore Hotel Atlanta, Ga.

topdressing which today is somewhat controversial.

- 2. He practiced thatch removal.
- 3. He did not believe in overstimulating turfgrass with chemical fertilizers, but used organics liberally.
- 4. He had some knowledge of chemical weed control using iron sulphate and sodium arsenite in a limited way.
- 5. He used corrosive sublimate for earthworm control.
- 6. For brownpatch he used mostly Bordeaux mixture, but prior to 1920 brownpatch fungus had not been isolated as a definite disease.

- 7. The use of lime was rather limited in the belief that it encouraged weeds. Although a little later he led the way to the liberal use of lime..
- 8. He occasionally used complete fertilizer, mixing his own in various combinations of sulphate of amonia or nitrate of soda with acid phosphate and muriate of potash.
- Grasses used on the greens were mostly red fescue and bents, while for fairways Kentucky bluegrass, Red Fescue and Red Top predominated.
- 10. Aeration was not widely used but when helpful the tools were forks, discs, and spiked rollers.

Fundamentally the superintendent before 1920 was acquainted with many of the theories and practices of today; the main difference being in the limitation of technical knowledge and refinement of practical application.

With the improved standards of maintenance demanded today the superintendent could not get by in the use of the limited knowledge and tools of his early predecessors.

Greenkeepers Form Association

Two of the great influences of this period were in the form of publications. The Bulletin of the Green Section was first published in 1921 and in 1926 the National Association of Greenkeepers of America was organized. This organization published The National Greenkeeper as the official organ of the association. The two publications provided a much needed source of information. The Green Section Bulletin stressed the scientific and technical aspects of turfgrass maintenance, while the National Greenkeeper provided the medium for the exchange of practical ideas and methods.

Although the turf plots at Arlington were established in 1916, it was not until August of 1927 that the first meeting sponsored by the Green Section was held at the site of the plots. The 10-year period preceding this meeting was devoted to establishment of the plots by volunteer workers of the USGA who donated their time and efforts and acted as advisors. O. B. Fitts and G. T. Cunningham were the only paid employees of the Green Section and their job must have been stupendous during the early 1920's.

Early experiments at Arlington dealt with only most urgent problems of the day. Space does not permit a detailed report of these experiments and they are not particularly important now except that each experiment contributed to the progress being made. In passing, it should be noted that it was during this phase of development that the mercurials were discovered as an agency of control for turf diseases and are still today important chemical fungicides.

Except for earthworms, insects were not universally troublesome. It was for earthworm control that bichloride of mercury was first used, and with excellent results. It could be surmised that from experiments carried on for earthworm control that the fungicidal value of the mercurials might have evolved. This value was substantiated by the work of Dr. John Monteith, Director of the Green Section from 1927.

Interest in the fertilizer experiments seemed to center around the use of sulfate of ammonia and acid residual fertilizers compared to nitrate of soda and alkaline types. This interest was stimulated by the problems of weed control, particularly clover. Much work was done on the chemical fertilizers because organics had long been used as practically the only source of fertilizer and much had already been learned from their practical use. On the other hand, chemical fertilizers were relatiely new insofar as turf was concerned.

Propagation of Bents

Perhaps the most important development in the scientific field which might serve as a great impact on the future was the selection and vegetative propagation of certain types of bents. Up to 1920 only four types of bents were available for golf turf. They were known as

- I. Agrostis alba (red top)
- 2. Agrostis tenuis (Rhode Island)
- 3. Agrostis canina (velvet bent)
- 4. Agrostis palustris (carpet bent creeper)

Rhode Island bent seed was also im-

ported from New Zealand and was at that time classified as Colonial bent.

All of the principal types were found in South German mixed bent harvested in Germany.

From established turf areas of this mixed bent, Piper, Oakley, and Lyman Carrier made selections and propagated them vegetatively for distribution to member clubs of the Green Section. Just who originate the vegetative method of propagation is not known, but in a search for information on the subject a reference was found to a Dr. William Richardson. He was a Doctor of Divinity and an agricultural hobbyist who prepared a publication in 1818-"An Essay on Agriculture" --- a memoir drawn up at the express desire of Arch-Duke John of Austria on the nature and nutritive qualities of Fiorin grass (creeping bent).

Dr. Richardson was a native of Ireland where creeping bent was known as Fiorin.

By 1927 Washington, Metropolitan, Velvet, Columbia and Virginia strains of creeping bent had been added to the list of vegetatively propagated grasses. Also Lyman Carrier had developed a seed-bearing creeper known at that time as Cocoos bent (Seaside) Agrostis maritima.

In April 1927 Dr. John Monteith was appointed Director of the Green Section and under his guidance much scientific progress in turf was made. Meanwhile state experimental stations were developing experimental work in various parts of the Country including the New Jersey experimental plots with Dr. Howard Sprague (1928).

During the development period of the Green Section research program, the National Association of the Greenkeepers of America was expanding and solidifying its membership, laying another cornerstone in the building of knowledge which was to follow.

Thus it was during this period that the practical and scientific fields joined forces in the evolution of progress as illustrated in joint efforts of the Green Section and Superintendents in every section of the country in the establishment of demonstration gardens. The Green Section provided the materials and the superintendents applied them and evaluated the results on monthly reports. All reports were then consolidated and a composite picture of the entire country could be arrived at.

These demonstration garden experimental plots were the forerunner of the pie green which again was a cooperative effort between the Green Section and the superintendents. From the pie green new strains of putting green turf were developed such as: Arlington, Congressional, Cohansic, Toronto, and Dahlgren.

Similar procedures followed in the development of Merion blue grass and the Zovsias.

As a result of experimental work at State Experiment stations in the south, combined with practical tests by the superintendents, new Bermuda grass strains including Tif green (Tifton 328), Tiffine (Tifton 127), Gene Tift and other selections have found wide acceptance in Bermuda grass areas.

This work was followed somewhat later by the release of Pennlu and Penn Cross both bent grasses developed and released by Pennsylvania Agriculture Experiment Station, as likewise was Pennlawn Creeping Red Fescue.

Combined efforts of the practical and the scientific fields continue at many state Agriculture Experiment Stations such as Georgia Coastal Plains Experiment Station, Texas Agriculture Experiment Station, Kansas State College, New Jersey Experiment Station, Purdue, and Rhode Island Experiment Station.

Mechanization Takes Over

In the practical field a milestone was reached in the passing of the horse drawn equipment and while the Green Section did not experiment in the mechanical field at that time it did act as a clearing house for information. Between 1920 and 1925 the transition period from horse to tractor drawn equipment was well under way and revolutionary maintenance practices were receiving shots in the arm as a result of the work being done by Monteith and others such as Sprague, Musser, Noer and the Greenkeepers of America. Commercial fertilizer was being more widely used; the

mercurials were rapidly being adopted as a fungicide, and arsenate of lead was the answer to the Japanese beetle which was then rapidly becoming a pest; fairway water systems had begun to feel their way into a never ending controversial issue. The golf course superintendent was catching up at this time in his knowledge of maintenance practices and familiarity with technical advances, which was to prepare him to meet very shortly an unexpected collapse of our whole economic system with the crash of 1929, followed by the 1930's and the depression.

Golf, being a luxury, was hit hard and immediately by the economic depression. Income dropped far below operating costs and many clubs passed completely out of the picture, others retrenched to a minimum, and no monies were spent which could possibly be avoided.

Research suffered for the same reasons and by 1933 scientific work had reached a standstill except for extension work. For eight or nine years, both practical and scientific work faltered. About 1937 or 1938 an upward swing in our economy was felt, to be followed by World War II and its effects—and we entered into an age of chemistry.

The Age of Chemistry

While the wartime years of the early and middle '40's saw a curtailment of maintenance practices and of turfgrass research, there were pressures exerted which contributed to progress. A shortage of mercury necessitated a search for other turf fungicides. Thiram and the cadmium materials were the result of this search.

Widespread use of DDT was born of wartime urgency and this insecticide was followed by a whole group of related chlorinated hydrocarbons.

Considerable work had been done with sodium arsenite as a weed killer, and it found wide usage, particularly in clover control. The war had shut off imports of foreign seed and prices advanced to such an extent that domestic seed growers in the states of Washington and Oregon expanded their seed production to include varieties of fescues and Colonial bents such as Astoria and Highland. In New Jersey,

Raritan and Emerald strains of velvet bent (selections of Dr. H. B. Sprague) found a limited market as did Piper and Arlington from Rhode Island.

During the depression a receptive market was found at the clubs for power equipment such as the power green mower, but the professional turfman showed sales resistance because it meant reduction of labor forces—not a very popular idea of that time; also he still preferred the hand type of maintenance.

However it was inevitable that with increased labor costs, due to the war, equipment would be found to replace antiquated hand methods. As golf clubs recovered from the depression they found themselves in a more favorable financial position and the road block to new equipment was broken. Manufacturers were encouraged to expand, and a flood of new types of equipment found early buyers in the market. Aeration devices, thatch removal machines and attachments, multi-purpose equipment, and even caddie carts are only a few types to find a place on the golf course.

Perhaps the most controversial of all mechanical aids is the fairway irrigation system. Controversial because it most certainly has its proponents as well as its opponents. The question of fairway irrigation however, will be discussed in a later issue.

The search for better ways and means to produce improved turf will continue. Golf clubs can still lead the way in turf improvement by

- (1) Subscribing to the Regional Turf Service and to the Green Section's Research and Education Fund.
- (2) Providing adequate expense allowance for the superintendent to attend local and national educational turfgrass conferences and short courses.
- (3) Providing in the budget for one or more trainees for the superintendent to train for the future.

Turfgrass is big business—it needs superintendents, technicians, scientists and funds.

For better golf, every golfer should find a way to contribute, either individually or through his club, to better turf.

IT'S YOUR HONOR

Attention All Golf Writers

TO THE USGA:

It seems to me that if some golf writers would read the current USGA Rules Book every year and would try to be careful about stating points pertaining to the Rules, the average golfer would be better informed.

Golf writers often refer to "medai play" (not found in the Rule Book), instead of "stroke play" (used throughout the Rule Book); talk about a twostroke penalty for out of bounds; use the term "dormie" to refer to the score of the player who is down instead of the player who is up; and overlook the difference in Rules between an attended flagstick and an unattended flagstick. A little research would turn up many other discrepancies.

Maybe some urging on your part might get the golf writers better in line with the Rules.

> W. DAVIS HAMILTON ATLANTA, GA.

Turfletters Praised

TO THE USGA:

Our club has subscribed to the Regional Turf Service since it was introduced in this area in 1955.

The recommendations made in the reports following these visits by Green Section agronomists have in most cases been followed and the results have been very satisfactory.

The regional Turfletters have been excellent and are looked forward to. Messrs. Radko, Hallowell and Taylor are to be commended for the choice and presentation of *the* topics.

> PAUL J. O'LEARY, Supt. WARWICK COUNTRY CLUB WARWICK NECK, R. I.

The Hand of Friendship

TO THE USGA:

May I say a few words of very grateful thanks for all your many kindnesses to me at the Walker Cup. I have never had a happier time for which you all were in great part responsible.

> RAYMOND OPPENHEIMER WHITE WALTHAM BERKS, ENGLAND

Golf, An Excellent Liaison

TO THE USGA:

As officer in charge of the Yokota Golf Club, I work in close contact with the golf-loving Japanese because we are located at the Tokyo Country Club. Your publications are not only a great help to both me and the Japanese, but serve as an excellent media for public relations which is very important to me in my position.

> CAPT. R. CASEY, USAF Tokyo, Japan

Praise from Canada

TO THE USGA:

Congratulations on your USGA Open Championship. I hear it was a huge success and you certainly had a terrific finish. It was very nice to see a Champion such as Dick Mayer.

> Ken Murray Montreal, Canada

Request from Chile

TO THE USGA:

I am interested in the USGA publication concerning gambling in golf tournaments as advertised in your USGA JOURNAL and would appreciate your sending it by airmail to the address noted below.

> G. EDWARDS SANTIAGO, CHILE

USGA OFFICERS, EXECUTIVE COMMITTEE AND COMMITTEE CHAIRMEN

PRESIDENT Richard S. Tufts, Pinehurst, N. C. VICE-PRESIDENTS John D. Ames, Chicago, III.

John G. Clock, Long Beach, Cal. SECRETARY

Charles L. Peirson, Boston, Mass. TREASURER

J. Frederic Byers, Jr., Pittsburgh, Pa.

EXECUTIVE COMMITTEE

The above officers and: C. W. Benedict, White Plains, N. Y. Emerson Carey, Jr., Denver, Colo. William C. Chapin, Rochester, N. Y. John W. Fischer, Cincinnati, Ohio Richmond Gray, Richmond, Va. Stuart A. Heatley, San Francisco, Cal. Gordon E. Kummer, Milwaukee, Wis. William McWane, Birmingham, Ala. F. Warren Munro, Portland, Ore. John M. Winters, Jr., Tulsa, Okla.

GENERAL COUNSEL

Wm. Ward Foshay, New York, N. Y.

COMMITTEE CHAIRMEN

RULES OF GOLF: John M. Winters, Jr., Tulsa, Okla. CHAMPIONSHIP: John D. Ames, Chicago, Ill. AMATEUR STATUS AND CONDUCT: John W. Fischer, Cincinnati, Ohio IMPLEMENTS AND BALL: Charles L. Peirson, Boston, Mass. MEMBERSHIP: Gordon E. Kummer, Milwaukee, Wis. GREEN SECTION: William C. Chapin, Rochester, N. Y. WOMEN'S: Mrs. Charles Dennehy, Lake Forest, Ill.

SECTIONAL AFFAIRS: F. Warren Munro, Portland, Ore.

PUBLIC LINKS: Emerson Carey, Jr., Denver, Colo.

HANDICAP: Richmond Gray, Richmond, Va. Handicap Procedure. William O. Blaney, Boston, Mass.

JUNIOR CHAMPIONSHIP: J. Frederic Byers, Jr., Pittsburgh, Pa.

SENIOR CHAMPIONSHIP: John G. Clock, Long Beach, Cal.

GIRLS' JUNIOR: Mrs. John Pennington, Buffalo, N. Y.

MUSEUM: C. W. Benedict, White Plains, N. Y.

BOB JONES AWARD: Totton P. Heffelfinger, Minneapolis, Minn.

FINANCE: J. Frederic Byers, Jr., Pittsburgh, Pa.

USGA HEADQUARTERS

"Golf House", 40 East 38th Street, New York 16, N. Y. Joseph C. Dey, Jr., Executive Director

John P. English, Assistant Executive Director

USGA GREEN SECTION

EASTERN REGION

Northeastern Office: Rutgers University, New Brunswick, N. J. Alexander M. Radko, Director, Eastern Region

T. T. Taylor, Northeastern Agronomist

Mid-At!antic Office: South Building, Plant Industry Station, Beltsville, Md. Charles K. Hallowell, Mid-Atlantic Director

Southeastern Office: South Building, Plant Industry Station, Beltsville, Md.

James M. Latham, Jr., Southeastern Agronomist

MID-CONTINENT REGION

Southwestern Office: Texas A. and M. College, College Station, Texas Dr. Marvin H. Ferguson, Director, Mid-Continent Region and National

Research Coordinator

James B. Moncrief, Southwestern Agronomist

Mid-Western Office: Room 241, LaSalle Hotel, Chicago 2, Ill.

James L. Holmes, Mid-Western Agronomist

WESTERN REGION

Western Office: P.O. Box 567, Garden Grove, Cal.

William H. Bengeyfield, Director, Western Region