

# USGA JOURNAL

TURF MANAGEMENT

WALKER CUP BASKS IN SMILES OF VICTORY



Photo by Alex Bremner

Captain William P. Turnesa and U. S. Walker Cup Team receive the trophy after triumph over British Team at Birkdale Golf Club, Southport, England. From left: Charles R. Coe, James B. McHale, Jr., Richard D. Chapman, Frank R. Stranahan, William P. Turnesa, Captain; Sam Urzetta, Robert W. Knowles, Jr., William C. Campbell, Harold D. Paddock, Jr., with H. F. Simpson, Captain of Birkdale Golf Club, who made presentation, and Raymond H. Oppenheimer, non-playing Captain of British side.

JUNE 1951



# USGA JOURNAL

# TURF MANAGEMENT

### 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.	IV, No. 2	June, 1951				
	THROUGH THE GREEN	1				
	A WORLD CODE OF RULES	Joseph C. Dey, Jr. 5				
	OAKLAND HILLS' NEW LOOK FOR THE C					
	THE WALKER CUP MATCH					
	THE BRITISH WALKER CUP CAPTAIN'S V	IEW RAYMOND H. OPPENHEIMER 13				
	FINANCES OF THE PGA					
	This "Inside to Out" Business	F. H. Frostick 15				
	DETROIT CADDIES GET A BREAK	JOHN WALTER 16				
	THE CHAMPIONSHIP PICTURE	•				
	THE CONDUCT OF WOMEN'S GOLF					
	"Golf House" Helps Itself					
	THE REFEREE: DECISIONS BY THE RULES OF GOLF COMMITTEE 23					
	TURE MANAGEMENT: USGA GREEN SE					
	COMPACTION OF TURE SOILS	R. B. Alderfer 25				
	OBSERVATIONS OF NEMATORES IN YELL					
		A. C. TARJAN AND M. H. FERGUSON 28				
	IT'S YOUR HONOR: LETTERS					
Publish		e, July, August, September and November by the F ASSOCIATION				
except to Gre Industr	ptions. \$2 a year. Single copies: 30c. Subsc pertaining to Green Section matters, should be se en Section matters should be addressed to USG y Station, Beltsville, Md. Entered as second-cla	riptions, articles, photographs, and correspondence ent to the above address. Correspondence pertaining A Green Section, Room 397, South Building, Plasss matter March 3, 1950, at the Post Office a sory Committee—John D. Ames, Chairman, Isaac B Graw. All articles voluntarily contributed.				

### **USGA COMPETITIONS FOR 1951**

(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 Rounds, see entry forms.)

Championship	Entries Close	Sectional Qualityina Rounds	Championship Dates	l'enue
Open			June 14-15-16	Oakland Hills C. C., Birmingham, Mich.
Amat. Public Links		**June 15 to 25	Team: July 7 Indiv.: July 9-14	Brown Deer Park G.C., Milwaukee, Wis.
Junior Amateur	July 2	July 17	July 25-28	Univ. of Illinois, Champaign, Ill.
Girls' Junior	July 30	none	August 13-17	Onwentsia Club, Lake Forest, Ill.
Women's Amateur	August 6	none	August 20-25	Town and Country C., St. Paul, Minn.
Amateur	August 13	August 28	Sept. 10-15	Saucon Valley C. C., Bethlehem, Pa.

<sup>\*\*</sup>Exact date in each Section to be fixed by Sectional Chairmen.

# THROUGH THE GREEN

Try, Try Again

Richard D. Chapman, of Pinehurst, N. C., is the new British Amateur



Champion after defeating another American, Charles R. Coe, 5 and 4, in the final at Porthcawl last month. Chapman twice had been turned back in the final. Now he joins the select of circle who have won both the USGA and British Amateurs. His USGA title was achieved in 1940.

### Additions to Executive Committee

We beg to introduce two new members of the USGA Executive Committee, elected to fill the places created at the annual meeting of the Association last January when the Committee was enlarged from 13 members to 15.

The newcomers to the body that wrestles most strenuously with USGA problems are William P. Castleman, Jr., of Brook Hollow Golf Club, Dallas, Texas, and John G. Clock, of Virginia Country

Club, Long Beach, Calif.

Mr. Castleman, a native of Kentucky, now a Texas oil operator, plays a very sound game of golf himself. He was runner-up for the Kentucky State Amateur title in 1937 and has participated in four USGA Amateurs. He played basketball for Notre Dame from 1935 until 1938.

Mr. Castleman, 33 years old, has served as executive vice-president of the Dallas Golf Association and is now Trans-Mississippi Golf Association tournament chairman.

Mr. Clock, president of Virginia Country Club last year, has been president of both the Southern California Golf Association and the California Golf Association





W. P. Castleman, Jr.

John G. Clock

tion, in addition to holding other offices in those associations.

An attorney, he has headed the Long Beach Bar Association, has been vicepresident of the State Bar of California and a member of the Board of Trustees of the Los Angeles County Bar Association. He is 55.

The Schenectady Putter

Next to "Calamity Jane, II," Bob Jones's historic weapon, the old original Schenectady putter with which Walter Travis won the 1904 British Amateur is American golf's most famous club, judging by the questions of "Golf House" visitors.

This is the putter which Travis, plagued by a putting slump, took abroad in some desperation. With it, he "putted his eyes out," as Sam Snead sometimes expresses it, and won the British Championship. The British later prohibited the use of center-shafted putters and the ban exists to this day, although their representatives in conference with USGA negotiators in London last month recommended lifting it.

Since we must tell the truth and shame the devil, we confess that Travis's old putter is not in "Golf House." "Calamity Jane, II" hangs proudly in the reception hall, and upstairs we have an original Schenectady, a replica of the Travis club. But it is not THE club. Many a golf club or individual believes he has that putter, and where ignorance is bliss, it may be folly to put them wise. But there is an interesting letter on the subject in our Museum files—a letter written years ago by H. B. (Dickie) Martin, author of FIFTY YEARS OF AMERICAN GOLF, one of the most authoritative histories of the game in the United States.

"I know at least half a dozen golfers who think they own that putter," Mr. Martin wrote. "What they have, probably, is a copy of it or second cousin or step-brother—maybe one of the original lot that was turned out.

"The original Travis putter is snugly enclosed in a glass case in the Garden City Golf Club. It cost the club \$1,500 and I suppose they consider it money well invested.

"Strange to say, I had something to do with the purchase. In 1918 I was booking Red Cross matches. Travis finally agreed to play an exhibition match against Findlay Douglas. He got out the famous old putter and permitted us to auction it to the highest bidder. I remember telling one of the members they should never permit anyone to outbid them as Garden City should own that club. Garden City finally got it—the money went to the Red Cross.

"That is the story of the famous club and you can understand why I smile when someone tells me he owns the original."

### To the Ladies

We have a copy of "The Development of Women's Golf in the United States," with the compliments of Miss Ellen Philbeck, now affiliated with High Point College, N. C. That is the title of the thesis Miss Philbeck submitted toward obtaining her Master's degree at the University of North Carolina.

We have on our library shelves books of instruction directed primarily to women, but to the best of our present knowledge this is the first history of women's golf in the United States we have seen. Much of the material deals with early golf in general and has been

repeatedly covered but Miss Philbeck has turned up some engrossing facts.

She says Mary, Queen of Scots, was probably the first woman golfer and became adept but suffered much criticism and ridicule for playing the game. Miss Philbeck points up the remarkable improvement made in the year between the first and the second women's Amateur Championships — the first title was won with a score of 132; the medalist scored 95 the next year and it took 111 to qualify. It may surprise you to know, too, that by 1900 women were at times driving nearly 190 yards.

### **Putting Members to Work**

The Rockville Country Club, of Rockville Centre, N. Y., has a good idea for putting its members to work. The club sends out a notice explaining that the Board of Directors feels that everyone should share in the Club's operation. The notice includes a list of committees with boxes for the member to check that in which he feels he is best suited to serve. That puts it squarely up to him.

### "-From Little Acorns"

A year ago the JOURNAL carried a story by Dr. John R. Williams describing the memorial trees at Rochester's Oak Hill Country Club, site of the 1949 Amateur. When one was planted in honor of Charles R. Coe after he won that tournament, members of the British Walker Cup Team who witnessed the ceremony were so impressed that a beautiful pin oak was dedicated as a memorial to their visit.

Curiously, the tree fruited for the first time that fall and acorns from it were sent through the British Embassy to each of the clubs represented by the British side. They were planted according to instructions. Now Dr. Williams writes that he has had many reports from England that the trees from those acorns are growing and creating much good will. Twelve British clubs have them.

### Golf in Print

The June issue of HOLIDAY MAGAZINE carries an article on St. Andrews by

Herbert Warren Wind, titled "Scotland's Shrine of Golf," which not only describes the Old Course but relates some feats of Bob Jones in winning Championships there. One of the photographs illustrating it is of Old Tom Morris.

A new golf publication from Great Britain has reached us. It is the first issue of ENGLISH GOLF, the new official organ of the English Golf Union. It appears to be very readable and attractive.

### **Another Type of Tournament**

Our reprint of "Tournaments for Your Club" in the April Journal brought forth still another attractive type of competition, described to us by Paul L. Lewis of Merion Golf Club, near Philadelphia. According to Mr. Lewis, Merion's annual fixture, "Match Play Against Dr. Billings," brings out the biggest entry of the season.

Dr. Arthur E. Billings, the popular president of Merion, is a golfer of no mean ability himself. On this day he plays every other player in the tournament. Every card is matched against that of the redoubtable doctor, with an allowance of three-fourths of the handicaps. The three players making the best showing receive prizes and everyone who finishes up on the club president receives a small token. Those who lose pay a forfeit which is donated to the Caddie Fund.

The Caddie Fund does all right. There are very few winners.

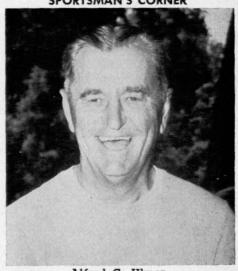
### Fighting Golfers

The New York Royal Gazette for April 21, 1779, carried the advertisement:

"To the golf players. The Season for this pleasant and healthy exercise is now advancing. Gentlemen may be furnished with excellent clubs and the veritable Caledonian Balls by inquiring at the Printers."

This makes it clear that even then, in time of war, gentlemen found some time for the pleasant and healthy exercise the Season for which is now advancing. And, of course, everyone knows how the Civil War boys played. Out in '61, back in '65.

### SPORTSMAN'S CORNER



Alfred C. Ulmer Forty years later, a title

By Charles Evans, Jr.
Open Champion 1916, Amateur Champion 1916, 1920
Picture, if you will, the clubhouse of a great
eastern country club, in the late afternoon light
of an Amateur Championship, with a crowd encircling the 18th green. Club employees are at
the upper windows. The veranda is crowded
with that portion of the gallery which prefers
to take its golf sitting rather than walking. The
air is warm and soft about the rolling green,
and every eye is on that verdant spot. The
caddie yard is quiet; even the flowers seem to
bend toward the home green. The stillness is
broken only by the singing of a bird.

It is a short hole, and the players have just tried to pitch across a mirror-like lake, dotted with water lilies. One ball splashes into the water, but the player hits his next nicely on the green, near the hole. The other's ball finds a trap on the left edge of the green.

As the crowd stands hushed and he is about to play out of the bunker, the silence is broken by his own voice:

"I have grounded my clubs. It is your hole."
This player was from Florida, his opponent from California. The Californian, victor when his opponent ruled himself the loser, was eliminated in the next round. Both were golfers of promise, but neither was seen again in the Amateur as a serious contender.

Last year, almost 40 years later, the Florida man returned to a site not far from that remembered scene and won a title. Alfred C. Ulmer, of Jacksonville, scored 69-77-146 to win the United States Seniors' Golf Association championship. He is a golfer of ability, five times Florida State Champion.

But my richest memory of him is his sportsmanship in a bunker many years ago. That's the sort of memories golf leaves us.

### A Rare Distinction

Francis Ouimet has received many honors in his long and respected golf career, but never before one like that bestowed upon him last month.

The Royal and Ancient Golf Club of



Francis Ouimet

St. Andrews paid him a tribute never accorded before to anyone but a Briton. The R. & A. elected Mr. Ouimet captain of that club.

Many famous players of golf have held the captaincy during the club's 198-year history. Among them were the King of England in 1930 and the Duke of Windsor in 1922. To choose an American to the post is a tribute that only a Briton can fully appreciate.

Mr. Ouimet will assume office when he drives off the first ball in the Autumn Medal tournament over the Old Course in

September.



### Rule 99

During negotiations on the Rules of Golf among representatives of Great Britain, Australia, Canada and the United States in London last month, Viscount Simon, former Chancellor of the Exchequer, stopped at the luncheon table of the conferees in the House of Lords to offer the following proposal:

#### "Rule 99"

"A player who is stymied by his opponent's ball may pick it up, put a lump of mud on it, and require his opponent to play it from the other side of the hole."

Viscount Simon's memorandum also included the following:

"On 'deeming' to be unplayable, add this:

"'Note—Lord Halsbury, former Lord Chancellor, laid it down that when a thing is DEEMED to be so, you know that it isn't so".'

### A Farewell to Elbows

A great and fighting heart was stilled last month when Leo Diegel died in North Hollywood, Calif., after a long illness. He was 52.

Diegel was one of the great competitors of the era that knew Jones and Hagen and Sarazen and none was more colorful than the nervous, excitable Leo. When he lost

the Open Championship of 1920 by only one shot, he appeared destined for great things. The heights he scaled were not as high as had appeared within his reach.

His greatest claim to fame came as PGA champion of 1928 and 1929, and on the



Leo Diegel

way to the first of those titles he stopped Walter Hagen, 2 and 1, in the third round, ending Walter's streak of four successive PGA Championships.

But it was Leo's odd putting crouch, with his elbows pointed out straight in opposite directions, which captivated galleries. With this style, Leo maintained one could putt just as well either left-handed or right-handed and often sank them both ways in tournaments.

Nobody played or loved golf more ardently than Leo Diegel.

# A World Code of Rules

By JOSEPH C. DEY, Jr. USGA EXECUTIVE SECRETARY

Twelve men sat around a large conference table. They were in a committee room of the House of Lords in London.

The twelve men represented the governing authorities of golf in Great Britain, Australia, Canada and the United States. They were trying to develop a code of Rules of Golf which could be used uniformly throughout the golf world. In the main, this meant trying to reconcile the differences between the British and American codes, in substance and form.

At the moment of which we write, the conferees were in a deep discussion of a point. After full consideration, the British view prevailed. At lunch, the British representatives decided it would be preferable to change their position because of possible complications for the USGA.

"That," said Lord Brabazon of Tara, "is the way to negotiate: you win your

point and then concede it."

This symbolized the spirit of the meetings. For four days those twelve men explored every phase of the Rules. There were no axes to grind, no ultra-nationalistic views. They were just golf-lovers, and they worked together in complete harmony.

They reached full agreement on a uniform code. They had a wonderful experience together, and a memorable one.

The London meetings had been preceded by months of correspondence. After London, the meetings were adjourned to St. Andrews, in Scotland, the home of golf. There, in the clubhouse of the Royal and Ancient Golf Club, overlooking the historic Old Course, four of the negotiators worked five days more as a Drafting Committee in rounding the London decisions into shape.

The recommendations of the Negotiating Committees now must be considered by the USGA Executive Committee and by the full membership of the Royal and Ancient Golf Club of St. Andrews, which is the governing authority of British golf. The next R. and A. General Meeting is to be held in September, at which time the proposals will be acted upon. The USGA Executive Committee will have two meetings before then.

If approved, the changes probably will

go into effect January 1, 1952.

### Proposed Changes

The major points proposed:

Among the changes which would affect both the USGA and the R. and A. codes are:

1. The Stymie—abolition.

- The Putting Green to be all ground of the hole being played which is especially prepared for putting or otherwise defined by the Committee in charge. Heretofore it has represented all ground except hazards within 20 yards of the hole.
- Practice Stroke to be prohibited during a round, including the re-trying of putts after holing out.
- 4. Ground under Repair and Casual Water to be treated alike.
- 5. Out of Bounds penalty: stroke and distance.
- 6. Sand Sand not in a hazard no longer a hazard.

Among the changes which would affect only the USGA code are:

- Size of the Ball the use of the British ball of 1.62 inches diameter to be permitted in the United States. This compares with the American standard of 1.68 inches. The weight remains the same— 1.62 ounces avoirdupois.
- 2. Adoption of British format of code.
- 3. Obstructions adoption of British definition.

### A "United Nations" of the Rules of Golf



Photo by ALEX BREMNER

Negotiators representing four countries drafted a Rules of Golf code designed for world-wide use during meetings last month at London and St. Andrews, Scotland. Differences between the American and the British Rules will be eliminated if the proposals from these historic meetings are ultimately approved by the governing bodies which appointed the negotiating committees. Above, nine of the negotiators outside the clubhouse of the Royal and Ancient Golf Club of St. Andrews. Left to right: Front row—Dr. James Lawson, R. and A.; Isaac B. Grainger, Chairman of the USGA Rules of Golf Committee; Dr. Harold Gardiner-Hill, Chairman of the R. and A. Rules of Golf Committee and Chairman of the Joint Negotiating Committees; Comdr. J. A. S. Carson, R. and A. Secretary, Rear row—Joseph C. Dey, Jr., USGA Executive Secretary; Ivo Whitton, of the Australian Golf Union; Lt. Col. John Inglis, Deputy Chairman of the R. and A. Rules Committee; Richard S. Tufts, USGA Secretary; Colin Rankin, Rules Chairman of the Royal Canadian Golf Association. Negotiators missing from the picture are three R. and A. representatives—Col. T. J. Mitchell, Lord Brabazon of Tara, and Roger Weithered, former British Amaieur Champion, and Herbert Jaques, former USGA President, who did not make the trip.

4. Lateral Water Hazards — adoption of British definition and rule. Among the changes which would affect only the R. and A. code are:

- 1. The Clubs adoption of the American provisions for:
  - (a) Permitting shaft of putter to be fixed at any point in the head of the club.
  - (b) Prohibiting channels, furrows and molding of grips for any part of the hands.
  - (c) Specifications limiting markings on the faces of iron clubs.
- Roads no longer classified as hazards.
- Ball Lost or Unplayable—penalty: stroke and distance.
- 4. Restoration of the General Pen-

alty to loss of hole in match play and two strokes in stroke play.

Those who participated are:

For the R. and A. — Dr. Harold Gardiner-Hill, Chairman of the Rules of Golf Committee; Lord Brabazon, Lt. Col. John Inglis, Dr. James Lawson, Col. T. J. Mitchell, Roger Wethered and Comdr. J. A. S. Carson, Secretary.

For the Australian Golf Union — Ivo Whitton.

For the USGA — Isaac B. Grainger, tion — Colin Rankin.

For the USGA—Issac B. Grainger, Chairman of the Rules of Golf Committee; Richard S. Tufts, Secretary; Herbert Jaques, former President (by correspondence), and Joseph C. Dey, Jr., Executive Secretary.

Dr. Gardiner-Hill served as chairman.

# Oakland Hills' New Look for the Open

By M. F. DRUKENBROD GOLF EDITOR, DETROIT TIMES

It was at Oakland Hills Country Club, 20 miles north of Detroit and just west of Birmingham, that Cyril Walker won the USGA Open Championship in 1924 with a score of 297, Ralph Guldahl set a record of 281 (since broken by Ben Hogan) in 1937 and Miss Glenna Collett won the Women's Amateur in 1929. But that same club will offer a course for the Open, June 14-16, quite different from that over which those titles were won.

Oakland Hills is still big and expansive, with pleasantly rolling fairways. But no longer is it the sluggers' paradise it was known as for years.

A modernization designed and supervised by Robert Trent Jones, well known golf architect, has changed it considerably. It has been transformed into a course putting a premium on accuracy and position play. Those who learned their lessons in these important essentials at Merion a year ago and have not

forgotten them should do well at Oakland Hills.

"I think the Open at Merion proved that players as well as spectators enjoy a course that is a real test of golf, where every shot must be well thought out and properly executed or there will be a justified penalty," said Mr. Jones. "Such a course, as proved at Merion, will produce a real champion."

Meets Changed Conditions

Mr. Jones explained his purpose was to remodel the course to meet the standards of modern playing conditions. The ball and equipment have changed radically; obviously the course values have changed.

"We have attempted to match these changes with new features at strategic locations, creating hazards and pitfalls to make the current Open a test of intelligence and playing skill," he said.

"Recent tests I made during Open Championships proved that the average

Where Open Champion Will Be Crowned



Detroit News Ph

The tightly-trapped 18th green at Oakland Hills Country Club, Birmingham, Michigan, with rambling clubhouse in background. Here is where a Champion will emerge at the USGA Open Championship, to be played June 14-16.

carry of the entire field is about 240 yards. Better than ten players carry 250 yards and scarcely anyone in the field carries less than 230 yards, illustrating that features outside these limits are of

no penal value."

Accordingly, the trapping Mr. Jones placed at Oakland Hills begins at the 230-yard distance. Traps flank both sides of the fairways except where natural features made that unnecessary. are also occasional positional or strategic traps in the center or just off center, which demand that a golfer position his tee shot.

There's always a target area with plenty of room in which to park a drive if the player doesn't want to risk the carry of

the trap.

Despite the accent on accuracy, which carries all the way to the putting greens, ability to power the ball will not be without its reward—if the hitting is controlled. Proof of this is the fact that the course, with a revised par of 35-35-70, will measure 6,927 yards. Par at the eighth and 18th has been reduced from 5 to 4 through use of middle tees. There are now only two par 5 holes, the second and 12th.

### Long Hitters Take Risks

Under favorable conditions, the longer

hitters can get home in two on the second and it could happen rarely at the 12th — if the hitters are willing to risk the traps guarding the elevated green. But it is not all to the siege gun, Mr. Jones has made sure.

"The topography of Oakland Hills was almost ideal for the development of our plan," he said. "The green contouring, while rugged in certain parts, was extremely adaptable for the new tongue or pin areas we have attached to them. New trapping was placed to protect certain pin areas that were open or unprotected, so missed shots will be penalized and wellplayed ones rewarded.

"The green contours will play a part in offsetting to some extent the benefit of the wedge and the pitching wedge, which have no doubt made the game somewhat less difficult, particularly in the hands of modern first class professionals."

There will be four testing one-shotters ranging from the 169-yard 13th to the 216-yard ninth, which will be played from a tee gouged out of the hillside below the old elevated tee.

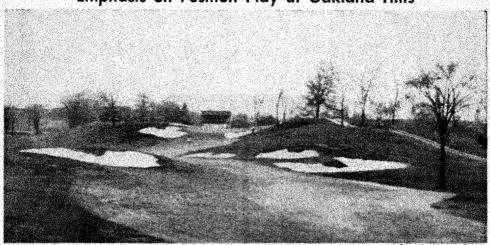
The real length will show up on the 12 par-4 holes. Not more than four of these will be of the drive-and-pitch variety. On the others, the second will be

# A Tight One-Shotter for Title Aspirants



The well-guarded 13th hole, Par 3, 169 yards, showing some of trapping put in by Robert Trent Jones to emphasize accuracy.

# **Emphasis on Position Play at Oakland Hills**



Detroit News Photo

A view of the rolling and well protected terrain which must be traversed on the way to the 11th hole, 407 yards, par 4.

played with a medium or long iron, or sometimes a wood.

The eighth, where Ralph Guldahl coasted in a 40-foot putt for an eagle 3 that started him on the way to the 1937 Championship, will measure 458 yards with the last stages uphill. The 13th, with a sharp dogleg to the right after the drive, measures 459 yards from the tee to be used this time, and the green is well trapped.

Oakland Hills' most famous hole is the 405-yard 16th, with a big lake which extends to the very edge of the green and which must be crossed with the second shot. It was here Walker made the birdie 3 that virtually sewed up his 1924 Championship. It will no longer be possible to bee-line a drive directly toward the green as he could and as others did then and in 1937. The green was enlarged by building out into the lake while the rough now swings well in from the right, changing the line from the tee. And the rough will be rugged.

### 10th Costly to Bob Jones

It will interest Bob Jones to learn that two more traps have been added at the 448-yard tenth, one of the best par-4 holes anywhere, as Jones can attest. This hole cost him the 1924 Open when it exacted two 5's and two 6's from him and caused him to finish second, three strokes back of Walker.

This Open will mark Sam Snead's return to the course on which he played in the classic for the first time. When the West Virginian chipped close to the pin on the last hole for what then was a birdie 4, he took the lead with a score of 283. But Sam barely had time to reach the clubhouse before a mighty roar from out on the course signalized the cagle 3 with which Guldahl opened his winning spurt. Ralph followed with a 2 on the ninth, made the turn in 33 and came down the last nine in 36 for his second 69 of the tournament, beating Snead by two strokes.

"We have tried to eliminate anything that could be considered tricky," said Mr. Jones. "Al Watrous, the club's popular pro, has hit hundreds of balls to prove the values are testing but just.

"In a nutshell, Oakland Hills has been re-designed with target areas to be hit from the tee and by second shots on long holes and pin areas to be aimed for at the green. The truly great and accurate shots will earn their just rewards. The slightest miss or badly executed shot will be punished. A great champion should emerge."

# The Walker Cup Match

By WILLIAM P. TURNESA

CAPTAIN, USGA WALKER CUP TEAM; FORMER USGA AND BRITISH AMATEUR CHAMPION

Every now and then one hears isolated queries as to whether the Walker Cup series should be continued. The thirteenth Match in the series was held last month, and the United States has won all but once from the British amateur teams.

Those who have ever had the fun of being in the show know that the value of the Walker Cup competition far transcends the mere winning and losing of a handsome silver trophy. It has been demonstrated repeatedly that the event serves a wonderful purpose in friendly international relations, so sorely needed today.

The recent Match demonstrated not only that point but also that Great Britain has some really fine amateur golfers with which to challenge us in future. Ronnie White is perhaps as proficient an amateur as there is in the world, as he showed in both the 1949 Match at Winged Foot and the recent event at the Birkdale Golf Club, Southport, England.

He was 3 under 4s for the 35 holes of his singles victory over Charley Coe. Ian Caldwell is a very promising youngster, just 21. John Langley and John Morgan will bear watching in the future with their sound styles of play. Certain it is that the British have come upon and have developed some very fine players under the watchful eye of their splendid Walker Cup Team Captain, Raymond Oppenheimer.

If the British amateurs were to practice as diligently and to play in competition as extensively as do our boys, the Walker Cup might have a different inscription for 1951. In play from trouble, particularly with the wedge from bunkers, and on the putting green, our fellows have an edge, primarily because they expend a great deal of effort in practice. On the other hand, it is rare to find a British golf

# A Pat on the Back for a Good Comeback



Photo by Alex Bremne

Harold D. Paddock, Jr., of U. S., is warmly congratulated on 18th green at Birkdale by Totton P. Heffelfinger, a Vice-President of the USGA, for the remarkable rally which squared 36-hole single match with Ian Caldwell, promising British star. Crowd on this day exceeded 8,000. Picture graphically reveals dunes and links-land on which Birkdale course is laid out near Irish sea.

 $p_{te}$ 

course with practice facilities such as are common in our country.

British amateurs do not sharpen their games in tournaments nearly as much as we do. Only a few of this year's British Walker Cup Team entered for the British Amateur Championship. With us, it would be almost unthinkable for a Walker Cupper to miss our Amateur.

The British are frank to tell you that economics enter largely into the question of how much tournament golf they may play. When Max McCready, former British Champion, finished his Walker Cup single at Birkdale, he remarked: "Well, that winds up my golf for the year. I've got a job I must attend to. It's a good one, but I've a house to keep and, besides, I'm only 32, and so I've tons of time for tournaments."

The result at Birkdale was 6 to 3,

with three matches halved, and it was a well-deserved victory for our side. It was far closer than the score indicates.

On the first day we won two of the foursomes, with two halved, but it was a struggle. After the first 18 holes of the foursomes, the British were leading in three matches and the fourth was even.

The foursomes could have gone quite differently — and perhaps the entire Match also — had it not been for a courageous finish by Charley Coe and Jim McHale, of our Team, against the long-hitting John Langley and veteran Cecil Ewing. McHale and Coe found themselves 2 down with three holes to play. But they played those last three in two under par and finished the match all even to save a half for our side.

Bill Campbell and Frank Stranahan teamed almost perfectly to manage a halved match against the highly regarded

### 1951 WALKER CUP MATCH

### FOURSOMES

 $p_{te}$ 

	T 13.		1 63.
United States		Great Britain	
Frank R. Stranahan and William		Ronald J. White and Joseph	
C. Campbell (halved)	0	B. Carr (halved)	0
Charles R. Coe and James B.		R. Cecil Ewing and John D. A.	
McHale, Jr. (halved)	0	Langley (halved)	0
Richard D. Chapman and Robert			
W. Knowles, Jr. (1 up)	1	Alex T. Kyle and Ian Caldwell	0
William P. Turnesa and Sam		James Bruen, Jr., and John L.	
Urzetta (5 and 4)	1	Morgan	0
•			_
Total	2	Total	0
	~****		
	SINC	GLES	
Sam Urzetta (4 and 3)	1	S. Max McCready	0
Frank R. Stranahan	0	Joseph B. Carr (2 and 1)	1
Charles R. Coe	0	Ronald J. White (2 and 1)	1
James B. McHale, Jr. (2 up)	1	John D. A. Langley	0
William C. Campbell (5 and 4)	1	R. Cecil Ewing	0
William P. Turnesa	0	Alex T. Kyle (Ž up)	l
Harold D. Paddock, Jr. (halved)	0	Ian Caldwell (halved)	0
Richard D. Chapman (7 and 6)	1	John L. Morgan	0
			*****
Total	4	Total	3
Grand Total	6	Grand Total	3

No. 1 British pair of Joe Carr and Ronnie White. Campbell holed from six feet

on the 36th green to tie.

Dick Chapman and Bobby Knowles were even going to the 35th green against Alex Kyle and Ian Caldwell. Here reliable Dick ran in a 25-footer to put his side 1 up. Again on the 36th he saved the day with a spectacular bunker shot which came to rest five feet from the hole. Knowles calmly tapped this one in for a 1-up victory.

Sam Urzetta, our national Champion, and I trailed for 27 holes, then found our groove and won by 5 and 4 from John Morgan and Jimmy Bruen. Bruen had the misfortune to injure a wrist.

This 2-0 lead in the foursomes, with two matches halved, stood us in good stead, for the British came out the next day for the singles and pushed us hard. We won four singles and they won three, with the eighth halved.

Our winners were Urzetta, McHale, Campbell and Chapman. Little Harold Paddock, the pride and joy of our team, was 3 down with 4 to go and 2 down with 2 to go against Caldwell, but he saved a half with a 3-4-3-4 finish.

My congratulations to the British for a gallant effort, and to the Americans for a victory well earned both on and off the golf course.

# Their Plucky Struggle Was in Vain



Photo by Alex Bremner

British Team which lost after a stirring contest. Left to right, front row: Ronald J. White, R. Cecil Ewing, Raymond H. Oppenheimer, non-playing Captain; Alex T. Kyle, James Bruen, Jr. Second row: S. Max McCready, John D. A. Langley, John L. Morgan, Joseph B. Carr. Top row: Ian Caldwell, Dr. F. W. G. Deighton, David Blair, reserve.

### THE BRITISH WALKER CUP CAPTAIN'S VIEW

By RAYMOND H. OPPENHEIMER CAPTAIN, 1951 BRITISH WALKER CUP TEAM

My good friend Joe Dey has asked me to write a little about the 1951 Walker Cup Match, and I do this with great pleasure. Naturally, what I write will be from the British point of view, but I shall hope that my understandable bias will not cause me to present an unfair picture.

Let me begin then by saying at once that there is no shadow of doubt that the right side won, but it really was a very tight squeeze, especially in the four-somes, which in the end were the deciding factor.

At one moment of the afternoon of the first day, all foursomes matches were all square. A little later Britain was one up in two matches and all square in a third. At the end there was no British weakening, but rather American brilliance.

This was instanced by the facts that in the top foursome, Ronnie White and Joe Carr of our side finished 4-3-4, and yet, due to two great putts by Bill Campbell, could only halve. Alex Kyle and Ian Caldwell finished in the same perfect figures and actually lost as Dick Chapman holed a cruelly long putt at the 35th for a 2.

And so at the halfway stage Britain was 2-0 down, instead of 2-1 up as could so easily have happened.

The second day, with eight singles matches, was always an uphill struggle for us, but at one point in the afternoon there was just a chance that with real luck we could have saved the Match.

Now just a word or two in conclusion about individuals:

Willie Turnesa proved a great captain for America, but he proved something even more than that: he lost his single after being once 5 up, but in the manner of his defeat he proved himself as graceful a loser as he has so often here been a great and graceful winner. The more often he comes back to see us, the happier we shall be.

The Coe-White match was one of the

greatest I ever saw, and for sustained accuracy I never remember one to equal it between two amateurs. Its only possible rival in my memory was that at Sandwich 21 years ago when Don Moe of America beat Bill Stout at the last hole.

And now it is time to say good-bye and to congratulate your side on yet another splendid victory. But win or lose, any days as happy as those we spent at Birkdale must always constitute a precious memory for those who took part.

### A Call for Help

This is a call for help. We've asked for it before and received it, and we appreciate it. But we need still more help.

An important feature of "Golf House's" Library is permanently bound volumes of valuable old golf magazines. We'd like these as nearly complete as possible but we lack a number of past issues.

So we thought if you looked up in the attic or down in the cellar, you might come across some of them. If you could find some and donate them to the Library, you would be doing a real service. Those we particularly seek are:

THE AMERICAN GOLFER: 1908 — November (1st No.); 1909—February; 1910—April. December; 1911—April, May, October, November, December; 1912—December; 1913—December; 1914—August; 1916—November; 1918—May, July, September; 1920—May 1, June 26, July 3, August 21, December 11, 18, 25; 1923—September 8; 1928—October; 1932—April; 1933—all numbers; 1934—all numbers; 1935—all numbers; 1936—February through December.

GOLF ILLUSTRATED (U. S.): 1914—January through April, July, September; 1915—February through August; 1916—March, April, August through December; 1917—March, June, July, October, December; 1918—March, April, May, June, August, September, December; 1919—January through July, December; 1920—January through July, December; 1921—January through May, July through September; 1922—January through July, October, November; 1925—February, March, May through August; 1935—September through December.

PGA MAGAZINE: 1947—October.

# Finances of the PGA

By HARRY L. MOFFITT

TREASURER OF THE PROFESSIONAL GOLFERS' ASSOCIATION OF AMERICA

Mention the word "treasurer," and one naturally expects to hear or read about finances. Consequently, the writer, being treasurer of the Professional Golfers' Association of America, will use the space allotted in this issue of the USGA JOURNAL to give a brief word picture of the financial structure of the PGA.

Financially, the PGA is divided into four departments, each of which operates under a budget approved by the Executive Committee and supervised by the Finance Committee and the treasurer. These departments are our Tournament Bureau, Magazine, PGA National Golf Club and that which is concerned with our functions as an association.

The finances of our Tournament Bureau are under the direct control of our Tournament Committee, subject to the Tournament Bureau Budget. Bureau's income is derived in part from an appropriation which is received annually from the manufacturers of golf equipment through The Athletic Institute and the balance comes from the fees received for services rendered to the sponsors of approved PGA Tournaments. The Athletic Institute, incidentally, is a not-for-profit corporation operated by the sporting goods industry generally for the promotion of all forms of sport and no part of the dues income of the PGA is allocated to its Tournament Bureau.

# Magazine Self-Supporting

The PGA Magazine, which has a monthly circulation of some 8,000 copies, is now self-supporting, with its income derived from advertising and subscriptions. Each PGA member subscribes to the magazine through an allocation from his dues. The magazine has also become very popular with amateur golfers because of the many instructive, informative and interesting articles included and the number of amateur subscribers is in-



Harry L. Moffitt

creasing with every issue. Of course, a good portion of its contents is devoted to subjects which can be of assistance to the professional in his every-day activities.

The PGA National Golf Club at Dunedin, Fla., is the newest activity of the Professional Golfers' Association. A portion of each PGA member's dues is allocated to the Golf Course Operating Fund. This amount, with the green fees collected, maintains the club and permits a planned program of improvements to be carried out each year. The Club's facilities are used extensively by PGA professionals, not only as a vacation spot, but as an educational center and a "proving ground" for PGA recommendations and policies. With these ends in view, there is a constant program activity there during the winter months which encompasses virtually every phase of the professional's work. Club's facilities are also made available to the members of clubs with which PGA members are affiliated.

(Continued on Page 17)

# This "Inside to Out" Business

by F. H. FROSTICK

PROFESSIONAL AT ST. GEORGE'S HILL, ENGLAND

(Reprinted by permission of Golf Monthly, British publication)

For a number of years many of the world's greatest experts at the game have propounded the theory that the best way of hitting a golf ball is what they call "From inside to out."

Most of the leading players in America appear to have adopted this idea, and it has been so persistently advised by prominent players and writers in this country that one sees evidence of it everywhere. I feel it is about time someone "called a halt" to this teaching, which is most harmful and will not stand even a few minutes' scientific examination.

It should be the ambition of all golfers to be able to strike a golf ball in such a way that it does not deviate off line from the time it leaves the club face until it lands on the turf again. In golfing language: "To hit a straight ball."

Now to all golfers who would like to be able to do this I say, in a most em-

phatic manner:

"You will never be able to hit a perfectly straight ball if you cultivate a swing which trains you to hit the ball with your club traveling on a path which is from 'inside to out'!"

Further, I say to all those very fine players—on both sides of the Atlantic:

"If you wish to play a long shot which will not deviate from a perfectly straight path, you cannot do this by hitting the ball with the club actually moving 'inside to out.' I challenge anyone of these experts to prove my statement incorrect!"

There is one way, and one way only, to strike a ball that will not deviate from its path during the whole of its flight and that is: During the period the clubhead must be moving in a perfect direction, and the clubhead must be facing in the same direction.

(The perfect direction is, obviously, towards the object, not out to the right of that object.)

This is the only way to obtain a perfectly straight flight.

One does not need to be a player of golf to appreciate the truth of what I have written. There must be many who have never played a golf shot in their lives who could vouch for the truth of my statement.

It is an elementary scientific fact!

This "hitting from inside to out" is nothing but playing for a slight "pull," and it should be evident to any person capable of clear thinking that endeavoring to play straight shots is far safer than to cultivate shots that have a curved flight. Besides, any endeavor to force one's club from "inside to out" can have a ruinous effect on a player's swing.

The expert can take "liberties" and, perhaps, "get away with it," but not the

average player.

Here is a simple fact for all golfers (including these experts) to consider. A ball, when struck with any implement, is always inclined to fly in the same direction as the implement is moving. If the implement is facing the same direction as it is moving, the result will be a straight flight, but if facing in a different direction, the ball will be inclined to swerve in flight.

In a perfect golfing drive, the clubhead at no time during its movement crosses the ball line, either "inside to

out" or "outside to in."

Now you experts (or any other person who would like to argue about this)—what about it?

British Keep Cup—Awhile

Although the United States Team retained the Walker Cup last month in England, the British are going to hold the handsome silver trophy for several months. It will be on display until October at the National Sporting Trophies Exhibition in London.

# Detroit Caddies Get a Break

By JOHN WALTER

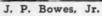
GOLF EDITOR, DETROIT NEWS

The Detroit District Golf Association has never been one to take caddies for granted. It has had a long line of officials who devoted great attention to them and the result today is a caddie program many another association might follow with profit.

The importance of the DDGA's Caddie Welfare Committee is even more evident now that Michigan State law prohibits boys under the age of 14 from caddying. Rules are set up under the Hittle Juvenile Employment Act governing the employment of males under 18 years old as caddies. They cover the maximum hours and set certain deadlines for daily employment.

As is the case in some other states with similar laws, each club must have a permit from the Department of Labor approving it as employer of such boys as caddies. Each boy, in turn, must







C. L. Miller

secure a working permit, carrying the signatures of his parents and school authorities, and the permit must be on file at the club where he caddies.

At a time when impending calls to service are taking older caddies, the Detroit district, in particular, faces a caddie shortage because of the competition of other types of employment for the youths. That's why the work of the DDGA's Caddie Welfare Committee is significant.

For years the late Edward L. Warner,

Sr., of Detroit Golf Club, annually brought caddie chairmen of district clubs together to discuss mutual problems and ideas for the betterment of the caddie's lot. Then Kenneth A. Moore, of Oakland Hills, took over, in turn to be succeeded by Lawyer Frank A. Kenney, Detroit Golf Club.

For the past five years C. L. (Bud) Miller, of Orchard Lake Country Club, insurance firm vice-president, handled the reins. Here are some of the salient points of the program recommended to the caddie committee of each club, and followed by most:

### Does Your Club Have These?

- 1. Employment of a full-time caddie-master for the training and supervision of caddies.
- 2. A proper caddie house or shelter and adequate food and beverages available on the premises at reasonable prices.
- A well-organized and supervised sports program, including course privileges each Monday.
- Contacting of parents and school authorities to stimulate greater interest in caddying.
- 5. A careful record of attendance and performance of each caddie.
- 6. A spring outing under supervision of the Caddie Committee at which time organization and registration take place and the program is explained to the boys. A fall party at the end of the season, at which time recognition can be given the caddies for their work, is also recommended.
- Raincoats furnished by the clubs to be available for the caddies when necessary.
- 8. The opportunity of earning an Honor Caddie Badge, which is awarded to each of the 10 best caddies in each member club of the Western Golf Association.
- The opportunity of earning the right to be nominated for college scholarship aid from the James D. Standish, Jr., Scholarship Fund of the Evans Scholarship Foundation.

### Raincoats and Pay for Waiting

Each spring the DDGA calls together caddie chairmen of member clubs for a discussion of recommended fees. Last spring it was recommended caddies b paid 25 cents extra for caddying in the rain, at the discretion of the caddie-master. If kept waiting during the lunch period, a payment of 25 cents was recommended, and if kept waiting an unreasonable period of time, in the judgment of the caddie-master, it was recommended they be paid 40 cents per hour for such time.

An additional 25 cents for twilight rates was recommended, starting as early as 4:30 o'clock at some clubs.

Group buying of T-shirts bearing club insignia and caddie badges also has been done through the committee's efforts, accomplishing worthwhile savings for the boys.

"Two of the most important points these days, we feel, are the contacting of school officials to get their cooperation and reaching parents to impress them that caddying is a preferred form of employment for their boys," says "Bud" Miller.

"By stressing the relative advantages of caddying to school authorities, and by writing letters to parents, pointing out the opportunity for their sons to earn money under trained supervision in healthful surroundings, many of our

Finances of the PGA (Continued from Page 14)

The fourth department of the PGA is that which pertains to general activities. These are financed entirely by the dues of the members of the association through the association's General Fund and allocations are made from these revenues to various committees and projects for the wide program of other activities which the PGA carries on. These are much too numerous to detail in the space allotted this article, but more will be heard of many of them in succeeding. articles which will appear in the JOURNAL below the names of the officers and committee chairmen in charge of each.

### Aim Is To Promote Game

The operations of the PGA's headquarters office at 134 N. La Salle St., Chicago, which handles the many details required in the conduct of an association of 3,000

clubs are able to get caddies excused from school when special tournaments occur."

In three years, members of 23 DDGA clubs contributed \$6,409.28 to the Standish Scholarship Fund of the Evans Scholarship Foundation. This is adequate to cover five scholarships used by caddies from DDGA clubs, but the interest in this program is so great that Miller is going to devote his time to it, turning over caddie welfare duties to Gordon Birgbauer, of Lochmoor.

Oakland Hills Country Club members contributed \$2,250 of the Standish Fund last December when 479 members were interested as the result of a campaign initiated by Jack Henderson. It was the second largest club contribution in

the nation last year.

If the plans of Miller and Jerome P. Bowes, Jr., President of the Western Golf Association, materialize, 40 Michigan caddies will receive such scholarships. Bowes told DDGA directors there is such enthusiasm for the program in the Chicago district that he anticipates 60 clubs there will have 100 per cent subscription by their members for the WGA bag tags in 1951, one of the four revenue sources of the fund.

members, are also governed by the Association's General Fund Budget. A \$1,000 life insurance policy for each member is also provided for in this budget and many of the other activities which are included are designed to create new golfers and promote golf's popular acceptance and growth through the PGA professional. Among the latter are such things as the association's programs of Junior Golf and Caddie Training and Welfare.

With this same end in view, many other activities are constantly under way which are also designed to keep the PGA member up to date with respect to better methods of serving the amateur golfer. This is another method of insuring the attainment of one of our major objectives — that every golfer may derive the greatest possible measure of enjoyment and benefit from a truly great and beneficial game.

# The Championship Picture

By HARRY ROBERT USGA ASSISTANT EXECUTIVE SECRETARY

When a Champion emerges from the scramble after a hard-fought tournament, the public usually hails him as a man who has outlasted a field of 128 to 210 players. Actually, they fail to do him full justice. Each USGA Championship for males attracts from about 500 to 1,500 entrants for the sectional qualifying rounds, which are part of the competition too.

Public ALA Birming! ARIZ Phoenix	nam Birmingham Phoenix	Amateur Phoenix
CALLos Ang San Fran	eles Los Angeles acisco San Francisco	Los Angeles San Francisco
COLODenver D. CWashing FLAJacksons Miami		Denver Clearwater
GA: Atlanta HAWAII Honolulu ILL. Chicago	Atlanta Chicago	Atlanta Honolulu Chicago
Peoria INDIndianas South B	olis Indianapolis	
IOWADes Moi KANSWichita	· —	Des Moines
KY Louisvill LANew Or	Roston	New Orleans Boston Baltimore
MD MICHDetroit MINNSt. Paul MISS MOKansas	Detroit Minneapolis Jackson	Detroit Minneapolis
MO	is St. Louis	Kansas City St. Louis
MONT. NEB. Lincoln N. M. Albuque N. Y. Buffalo New You Syracuse N. C. Pinehurs	Albany rk Buffalo	Lincoln Albuquerque New York Rochester Troy Salisbury
N. C. Pinenurs N. D. Clevelan Dayton Toledo	t Charlotte Fargo d Cincinnati Cleveland	Cincinnati Cleveland
OKLAOklahom OREPortland PAErie Philadel Pittsburg	Portland Philadelphia phia Pittsburgh	Tulsa Portland Philadelphia Pittsburgh
S. C TENNMemphis Nashvill	Columbia Memphis	Memphis
TEXAS Dallas Galvesta	Abilene on Dallas Houston	Dallas Houston Midland
UTAH	Salt Lake City	Salt Lake City Richmond
WASH. "Seattle Spokane	Seattle Spokane	
W. VAMilwauk	Charleston see Milwaukee	Huntington Milwaukee

There will be a total of 154 sectional qualifying tests this year for the four tournaments for male golfers conducted by the USGA. There were 30 qualifying sites set up for the Open, there will be 43 for the Amateur Public Links Championship, 45 for the Junior and 36 for the Amateur.

The accompanying table shows the qualifying sites for all but the Open.

#### Public Links

The Public Links Championship Sectional Qualifying Rounds, at 36 holes, will be run off on various dates between June 15 and 25. From these trials a field of 210 will be graduated for the Championship proper, to be played at the Brown Deer Park Golf Club at Milwaukee, Wis. The tournament, scheduled for July 9-14, will be preceded by the Team Championship July 7, in which three-man Sectional teams compete at 18 holes stroke play.

The Championship proper is an all-match play competition and the entry fee is \$3.50.

The winner is invited to take part in the Amateur Championship and is exempt from qualifying sectionally. Other semifinalists are invited to take part in the Sectional Qualifying for the Amateur. Only these may apply to play in both the Public Links and Amateur Championships in the same year.

The Public Links Championship is open to male amateurs who, since January 1 of this year, have not had the privileges of any course from which the general public is excluded or privileges of private clubs maintaining their own courses.

#### Junior

Entries for the USGA's fourth annual Junior Amateur Championship must reach the USGA office in New York by

5 P.M. on July 2. And juniors, like other golfers, are warned this year that the new address of the association is 40 East 38th St., New York 16.

Entries must be filed on USGA forms

and accompanied by the fee of \$2.

The sectional rounds for the juniors, scheduled for July 17 with a few exceptions, are at 18 holes, and the tournament proper will be held at the University of Illinois golf course in Champaign, Ill., July 25-28, with all rounds at 18 holes match play. A field of 128 will take part in the Championship proper.

Rooms and meals will be available at reasonable rates at the University of Illinois. The USGA Junior Championship Committee will be there to supervise

the boys.

Competition in this event is open only to boys who will not reach their 18th birthday before midnight on the day of the final, July 28.

#### Amateur

Competition in the Amateur is restricted to members of USGA member clubs, the only tournament for male golfers run by this association to which that applies. The tournament this season will be held at Saucon Valley Country Club, Bethlehem, Pa. It will be an allmatch play event, September 10-15.

Entries must be received at the USGA offices by 5 P.M. on August 13, accompanied by the fee of \$7. Sectional qualifying rounds at 36 holes will be conducted August 28, with one exception.

Women's and Girls' Events

The Women's Amateur Championship will be held at the Town and Country Club, St. Paul, Minn., August 20-25 and the Girls' Junior Championship will be played August 13-17 at the Onwentsia Club, Lake Forest, Ill. There is no sectional qualifying for either. Entrants must be members of USGA member clubs.

# THE CONDUCT OF WOMEN'S GOLF

There is a little booklet issued by the United States Golf Association called THE CONDUCT OF WOMEN'S GOLF. It could very well be called "The Woman Golfer's Friend," for it is actually a manual of tournament conduct for women. This 15-page booklet has just been brought up to date by the Women's Committee of the USGA, the first change made in it since 1949.

This manual can be of help to individual golfers, but is primarily useful to tournament or handicap chairmen of clubs and state, district or sectional associations.

One woman member of a state association who called at the USGA office for copies said she found it very helpful as a guide to standardizing women's pars on member courses. All clubs wishing to belong to their association had to submit for approval their course cards for women. Often a club would list a 380- or 390-yard hole as a par 5. By using the directions in the manual for computing women's par and the handicap stroke list for the 18 holes, they had

been able to establish a fair basis for handicaps.

One woman came into the office very puzzled. She had been put in charge of handicapping for her club. The position was new to her and she was trying to bring about order in the maze of various systems. On the locker room of the club she had seen a faded Calkins handicap chart (this system went out before the last war) and wondered how she was ever going to adapt it to post-war play. The Conduct of Women's Golf helped her straighten out the handicap cards.

These are just a couple of instances in which the booklet was of aid. There are other paragraphs on tournament details, local and tournament rules and responsibility of contestants.

Excluding the directions for computing women's par and the handicap requirements for entry into the USGA Women's Amateur Championship, the booklet could provide a lot of valuable advice for men's committees as well. It is available at 25c per copy.

# "Golf House" Helps Itself

As a home for the USGA Museum and Library, "Golf House" has made good far beyond expectations. Besides housing these exhibits, the new home of golf in the United States is proving a stimulant in expanding them.

Contributions for the USGA's collection of fascinating memorabilia have been coming in at a much faster rate since the association opened its new residence.

One of the first gifts registered for 1951 is Erwin S. Barrie's handsome oil painting of the first hole at Apawamis, which hangs over the fireplace in the reception hall. Another is a pastel portrait of Mrs. Edwin H. Vare, Jr., which the former Glenna Collett presented. hangs at the top of the stairway leading up to the second floor.

### Here's An Interesting Item

James D. Standish, Jr., President of the association, brought a suitcase full of material when he arrived for the annual meeting last January. Besides, he had sent ahead a real curio — the cabinet containing the old USGA eligibility file of 1916 through 1921 — before sectional qualifying was used to determine participants in the Amateur.

David R. Tod, of Spokane, Wash., sent three rare old prints representing the conception of the artist, Michael Brown, of the final of the 1904 British Amateur Championship at Sandwich with Walter J. Travis putting against Edward Blackwell; of surviving British Open Champions in 1905 at St. Andrews and of surviving British Amateur Champions in 1906 at Hoylake, England.

Jack Jolly, of Newark, presented us a number of interesting old balls representing the evolution of the modern ball and including some rare items. He also presented a large framed sepia photograph of Old Tom Morris and one of his cancelled checks.

And, by no means least, Sam Urzetta.

on his way to England with the Walker Cup Team, brought in his pitching wedge, presented him by his pro, Frank Commisso, and which Sam used successfully in defeating Frank Stranahan for the Amateur Championship last summer.

### And Many More

Other contributions for the year include:

William N. Beveridge, Milwaukee. toothed tee.

Robert Woodruff, Jackson Heights, N. Y., THE OUT-OF-DOOR LIBRARY, by

Innis Brown, Manhasset, N. Y., several copies of THE AMERICAN GOLFER, completing files on certain years.

Robert Craigs, Louisville, Ky., a lead-weighted rubber tee.

E. E. Connor, New York, copy of In Praise of Golf, a book of golf quotations. Massachusetts Golf Association, Record of

Association.

Maidstone Club, East Hampton, N. Y., FIFTY YEARS OF THE MAIDSTONE CLUB.

Seattle Golf Club, Seattle, Wash., SEATTLE COLF CLUB'S FIFTIETH ANNIVERSARY.

Bob Harlow, GOLF WORLD, Pinehurst, N. C., copies of Golf World completing 1950 files.

John B. Morse, Pebble Beach, Cal., A Риото-GRAPHIC STUDY OF PEBBLE BEACH GOLF LINKS (booklet).

Edward P. Comins, Boston, two large framed action photographs of Harry Vardon.
PGA MAGAZINE, Chicago, several copies of

magazine to complete our files.

United States Seniors' Golf Association, several issues of annual BULLEIN to complete our files.

Association of Senior Golfers of the Royal Antwerp Golf Club, Antwerp, Belgium, twelve copies of David R. Forgan's definition of golf, printed on ancient presses, with printing material from the original workshop of Plantin (16th century).

Warren Orlick, Monroe, Michigan, one spliced head driver, one old putter head, one old wood

Bob Kepler, Columbus, Ohio, more that 100 different types of tees. A left-handed wooden club head, such as was used in clubs with spliced shafts.

James Forrest, Sec'y., Prestwick St. Nicholas Golf Club, Prestwick, Scotland, a copy of the history of his club by Mr. William Galbraith. Robert Trent Jones, New York, a copy of GOLF COURSES-DESIGN, CONSTRUCTION AND UP-KEEP.

C. G. Waldo, Jr., Detroit, cartoon of 1926 Walker Cup Team, framed.

Mrs. Seth Wood, Needham, Mass., one Haskell-bramble rubber cored golf ball and two unusual golf tees.

Agar M. Brown, The Golf Course Superintendent, St. Charles, Ill., several back issues of magazine to help complete our files.

Henry Holt & Co., New York, copy of IF I WERE IN YOUR GOLF SHOES, by Johnny Farrell.

John Durant, New Lisbon, N. Y., one copy of the Spalding Athletic Handbook, How to Play Golf, by James Braid and Harry Vardon, published about 1912.

James Gallagher, Arlington, N. J., three old wooden clubs, a driver by P. R. Wilson of St. Andrews, Scotland, which is about 80 years old and a driver and brassie, both by Willie Dunn when living in New York, estimated at fifty years each.

Kenyon T. Payne, MIDWEST REGIONAL TURF FOUNDATION, Lafayette, Ind., a set of MIDWEST TURF publications. Victor C. Armstrong, Phoenix, Ariz., a brassheaded putter and a No. 2 iron, formerly used by Leo Diegel.

GOLF MONTHLY, Edinburgh, Scotland, bound volumes of this publication to complete our Library files.

William B. Langford, Chicago, 1923 Amateur contestant medal and several programs and booklets on golf.

H. W. Sherring, Sydney, Australia, copies of Golf in Australia to help complete files of this publication, Rules of Golf booklets and The Key to the Rules of Golf and Definitions, by Hastings C. Reid.

Golf Clubs Association, London, England, Golf Club Handbooks.

Golf-lovers are paying for "Golf House" and thus far \$83,048.27 has been raised toward the goal of \$100,000, donated by 4,524 individuals, clubs and associations. Contributions of any amount are welcome. Following are Founders not previously recorded in the Journal:

#### Α

Capt. J. W. Allen, MC, USN

В

Lou Barbaro
Mrs. William R. Bell
Arthur D. Bennett
Duane Bergstrom
H. Lloyd Beyer, Jr.
Mrs. Ernest Stowe Blanton
Tom Blaskovich
Comdr. R. P. Bowles, USN
Llewellyn Boyd
J. K. Bradshaw
William M. Briggs
E. H. Burwell

C

Johnny Capebianco
John S. Chapman
Edward Lafourcade Cheyney
Julian N. Childs
Frank Connolly
Karl W. Corby
C. Carroll Corcoran
Leslie J. Correll
Jack Cuttle
George S. Culp

#### D

Prof. J. L. Daley Frederick G. Damaske Bill Davis William Y. Dear, Jr. J. M. De Camp Harry Dee Lieut. Cmdr. R. C. Dennehy USN Charles E. Diffendal, Jr. Anthony Di Paolo Sam Dixon Vincent Draddy Charles B. Dudley

E

Maj. Bethell Edrington, Jr., USA Cliff Eley Albert E. Escolme

F

Floyd Forley Edward J. Flowers L. E. Foster Sidney W. French Phil Friel

G

Jim Gallagher
Johnny Gaucas
Alick Gerard, Jr.
Capt. M. D. Gilmore,
USN, (Ret.)
Ben Goodes
William G. Grainger
Charles D. Gray
Samuel Greer
Capt. O. C. Gregg, USN

Lieut. Col. John G. Gross, USAF

н

Frederic M. Hadley Charles K. Hallowell Lieut. (jg) H. A. Hamberg, USN John S. Hamilton Mr. and Mrs. Henry P. Hamlin D. Claude Handy Clarke Hardwicke Stuart A. Heatley Jay Hebert Preston H. Hennies, Jr. Dr. J. B. Hibbitts Robert Arthur Hill Capt. Clifford G. Hines, MC, USN Jimmy Hines James M. Hoak Chuck Hyatt

O. H. Ingram

David G. H. Kim Chris Kling Miss Sue Ann Kohlmann John F. Kraft Michael Krak, Jr. Fred E. Krohn H. M. Krupinsky

Martin M. Landay Karl H. Lemke Dr. Theodore N. Lenczyk Capt. M. F. Leslie, USN Van Lewis Dr. Charles P. Leydecker Allan M. Loeb Harold O. Long Jack Lovegren

Ray Maguire Jack Mallon Hobart L. Manley, Jr. Shelley Mayfield **Bob McKendrick** Adrian C. McManus W. A. Moncrief John B. Morrow Jack R. Munger Claude F. Myers, Jr. N

Fred D. Newton

Harold L. Oatman

Joseph C. Parker Jack Patroni Mike Pavella A. G. Paves Ray T. Pettegrew Raymond D. Petti Harry Pezzullo Livingston Platt Jules Platte Capt. Robert B. Pirie, USN Henry C. Poe Art Pomy Gus Popp

Jay H. Raab Harry E. Radix Curtis H. Reed Robert J. Reed Al Reynolds Charley Rice Joe Robinson Lewis F. Rodgers Frank Rodia Walter A. Romans Merrill S. Rose Lincoln Rourn, Jr. Tony Ruddy Jack Ryan Del W. Ryder S

Karl H. Schlicht A. H. Schrenkel Donald R. Schwab Mr. and Mrs. Richard H. Semple, Jr. Robert E. Seyler Capt. W. D. Sharp, SC, USN

(Ref.)

Thomas E. Sheehan Charles F. Shelden Mr. and Mrs. Harvey A. Shuler Joseph N. Shumate George W. Slobodian Gordon Smith, III Comdr. James H. Smith, Jr., USN Victor P. Soitz Comdr. O. W. Spahr, Jr., USN James D. Standish, Jr. Neil B. Stewart John S. Sutton

Leland A. Swanson T

Lieut. (jg) Robert T. Tartre, USN Leslie L. Taylor William M. Thomas Dr. Robert P. Thompson John A. Thoren David G. Tinsley Rear Adm. Harold C. Train, USN (Ret.) Marshall C. Trusttum Forrest Tucker W. B. Tucker, Jr.

Robert Vaillancourt D. A. Vann, Jr. Nelson Vaughan W. E. Vert

John Keener Wadley J. M. Wagner Comdr. E. T. Wais, DC, USN Robert R. Walker Mrs. Mahlon B. Wallace, Jr. Paul R. Watkins Lyle Wehrman Donald M. Weiland Harry Welch Lieut. Comdr. James C. Whiteker, USN Bert Whitehead Earl Wilde Page Wilson Malcolm Lloyd Wister Kenneth W. Wolcott Jimmy Woodard

Guy E. Yaste, Jr. Harvey Yox

Leonard S. Zigo

#### **CLUBS**

Algonquin Golf Club, Mo. Arcola Country Club, N. J. Baltimore Country Club, Md. Charlotte Country Club, N. C. Colonia Country Club, N. J. **Dallas Athletic Club Country** Club, Texas Dearborn Country Club, Mich. Detroit Country Club, Minn.

Detroit Golf Club, Mich. **Dutchess Golf and Country** Club. N. Y. Elmhurst Country Club, Ill. Firestone Country Club, Ohi Forest Hills Country Club, Fox Hills Men's Golf Club, Cal. Glen Oaks Club, N. Y. Glen Ridge Country Club, N. J. Hayden Lake Golf Club, Idaho **Huntingdon Valley Country** 

Club, Pa. Huntington Country Club, N. Y. I. B. M. Country Club, N. Y. Lakepointe Country Club, Mich. Links Golf Club, N. Y. Manito Golf and Country

Club, Wash. Meadowbrook Country Club. Mich.

Merion Golf Club, Pa. Mission Valley Golf Club, Cal. Mount Lebanon Golf Club, Pa. Normanside Country Club, N.Y. North Hills Golf Club, N. Y. North Jersey Country Club, N. J.

Oahu Country Club, Hawaii Oakwood Club, Ohio Old Guard Society of Palm Beach Golfers, Fla. Old Oaks Country Club, N. Y. Palmetto Golf Club, S. C. Pawtucket Golf Club, R. I. Peachtree Golf Club, Ga. Pensacola Country Club, Fla. Pine Brook Country Club, Mass. Pine Valley Golf Club, N. J. Plainfield Country Club, N. J. Portsmouth Country Club, N. H. Rainier Golf and Country Club, Wash.

Rancho Santa Fe Golf Club. Cal.

Riverside Golf Club, III. Rock Spring Club, N. J. Sadaquada Golf Club, N. Y. Saint Andrew's Golf Club, N. Y.

San Francisco Golf Club, Cal. Saratoga Golf Club, N. Y. Seawane Harbor Club, N. Y. Sleepy Hollow Country Club, N. Y.

Southern Hills Country Club, Okla.

Split Rock Golf Club, N. Y. Sunningdale Country Club, N. Y.

Sunnybrook Golf Club, Pa. Wahconah Country Club, Mass. Wellington Hills Golf and Country Club, Wash.

Westchester Country Club, N.Y. Westmoreland Country Club, Pa.

# THE REFEREE

# Decisions by the USGA Rules of Golf Committee

Example of symbols: "No. 51-1" means the first decision issued in 1951. "R 7(3)" means
Section 3 of Rule 7 in the 1951 Rules of Golf.

### Temporary Substitution of Club

No. 51-5. Pre.

Q: Competitor, who started play with 14 clubs, exchanged his putter for another after holing out at No. 9 and before striking from the 10th tee-there was no undue delay.

Competitor handed his second putter to his caddie and played to the tenth putting surface (a par 3). He was then advised that he could not exchange a club for another unless the original club became unfit for play through normal use, etc. He then exchanged putters (without undue delay, fortunately, because a fellow competitor in the same threesome had asked for and received a ruling from the Rules Committee on another matter; this momentary de-lay allowed the "switch") and continued play with his original putter. The 15th club had been in the hands of the competitor and in those of his caddie-it had never been used, of course, nor had it entered the competitor's golf bag. Should these facts have any bearing?

Question by: HOWARD CAPPS

TOURNAMENT SUPERVISOR PGA OF AMERICA CHICAGO, ILL.

A: The competitor replaced a club which had not become unfit for play. As he was already carrying 14 clubs, he violated the Preamble to the Rules of Golf and disqualified himself. What happened subsequently has no bearing. The competitor had opportunity to use more than 14 clubs.

### Provisional Ball Optional

No. 51-1. R. 8 (1), 19

Q: In the 1950 Rules, Rule 19(1b) says a provisional ball may be played only before the player goes forward to search for the original ball; but Rule 8(1) says that the player shall play his next stroke as nearly as possible at the spot from which the lost or unplayable ball was played.

It seems to me these two rules conflict with each other; Rule 8 makes you go back to the tee, and Rule 19 says you can't go back after

you go forward to search for the ball.

Question by: C. Beckett MUNCIE, IND.

A: There is no conflict. A player is not obliged to play a provisional ball; it is optional with him as to whether he does so or not. If the player believes his original ball may be lost or unplayable among other things. Rule 19 allows him to play a provisional ball immediately, be fore he or his partner goes forward to search for the original ball. When he elects to play a provisional ball, the player must observe the directions in Rule 8(1) as well as in Rule 19.

If a provisional ball has not been played and the original ball is either lost or unplayable, the

player must proceed under Rule 8.

#### Concession Can Be Declined

No. 51-3. R. 12(5e), 18(9)

Q: In a four-ball match, my partner has picked up and both of my opponents are on the green, almost exactly the same distance from the hole; in fact, the one farther from the hole is only about one-fourth inch from his partner's hall. One lies 3 and the other 4. I lie 3, about 15 feet from the hole, and am away. I putt and make a birdie 4. I then concede the putt of the opponent who lies 4, as he cannot win or halve the hole: and I knock his ball away.

My opponents protest and say the man who had already played 4 had the right to putt; apparently his partner, who lay 3, wanted to see

how the putt would roll.

I contend that the man who had already played 4 was out of the hole, as he could not beat or tie my score. I would like to know whether I could concede the putt of my opponent who had already played 4.

> Question by: RICHARD K. KALLIO WASHINGTON, D.C.

A: As you knocked your opponent's ball away after you and your partner had completed play of the hole, you were within your rights and no penalty was incurred—see Rule 18(9). However, the concession did not have to be accepted by your opponent. He could have replaced his ball without penalty and completed play of the hole.

The act of replacing the ball and putting under the circumstances cited would constitute, in equity, a clear rejection of the concession. If you had knocked your opponent's ball away before you and your partner had completed play of the hole, you would have violated Rule 12 (5e) and your side would have lost the hole.

#### Casual Water on Putting Green

No. 51-7. R. 16 (2), 18 (Def.).

Q. 1: My niblick shot on our 14th hole went six feet off the prepared putting surface but only 23 feet from the hole. It had rained the night before and there was a yard-square accumulation of casual water one foot in front of my ball directly in line to the hole. I contended it my privilege to lay around to nearest clear shot to the hole - under Rule 16(2) and Rule 18.

- A. 1: Your contention is correct.
- Q. 2: I notice also in the Rules that mowing does not define the green's limits. Therefore, if my ball is off the green 50 feet from the hole and about five feet short of a trap, with an accumulation of casual water between me and the hole, could I move over to nearest clear shot to hole?
- A. 2: Yes, in the manner provided in Rule 16(2). The ball lay on the putting green as defined in Rule 18.

Questions by: RAY FORRESTER HERNDON, CALIFORNIA

#### Ball on Grass, Not in Hazard No. 51-10, R. 7(1)

Q: The ball has come to rest on grass at the edge of a bunker or on a grass mound within the bunker. As I understand it, this grass is not part of the hazard and the club may be grounded. However, the ball is so close to the sand that in order to ground the club it would be necessary to do so in the sand. May the club still be grounded?

A: Yes. As the ball does not lie in or touch a hazard, Rule 17(1) does not apply. However, the player still is subject to the restrictions in Rule 7(1).

Question by C. F. COCKRELL NORTHFIELD, ILL.

### Things Growing; Dropping from Obstruction

No. 51-18. R. 7(3), 7 (4 b) Q. 1: Our course has numerous evergreen trees. One is quite bushy and the branches extend within one foot of the ground. Rule 7(3) states that a player shall not improve the position of his ball by moving, bending, or breaking anything fixed or growing, except (1) so far as is necessary to enable him fairly to take his stance in addressing the ball, and (2) in making his backward or forward swing. Some of our members contend that since a backward or forward swing cannot be made while under one of these trees, the Rule permits the player to break or chop off any of the branches.

A. 1: Rule 7(3) prohibits improving the position of the ball. The Rule contemplates that there may be some moving, bending, or breaking of fixed or growing objects as an incident in the course of taking a fair stance at address and in making the backward or forward swing, and it excuses such incidental movements. However, the Rule prohibits purposeful moving, bending or breaking with the aim of improving the position of the ball. The second exception in Rule 7(3) condones only such moving, bending or breaking as may incidentally be done

in making the swing, but it does not allow such action in order to make the swing.

Q. 2: With reference to Rule 7(4) and (4b) which way do you lay the ball from an artificial obstruction? What is the interpretation of "where the ball originally lay?" Is it the position at the obstruction or the position from where the stroke was previously played? We have a hole where to the left of the green is No. 9 tee-house. If the ball comes to rest in the middle of the tee-house, it would certainly make a difference where the ball was placed since if required to place the ball north, back in the direction from where the shot was originally played, the player then would have a barrier in the form of a tree. If moved two lengths south the shot would be free to the green.

A. 2: Rule 7 (4b) gives the player the right to lift without penalty and drop within two club-lengths of that point of the obstruction nearest where the ball originally lay, but the ball must come to rest not nearer the hole. The player may drop away from the obstruction in any direction, provided it is not nearer the hole.

Q. 3: With reference to Rule 7(3), it is stated that drawing a club backward and forward across the line of play is illegal. We have several putters who while getting set to putt do swing back and forward over the top of the ball in the direction of the hole. Is this illegal?

A. 3: No.

Questions by: Joseph W. Menzie MANHATTAN, KANSAS

#### Smoothing Sand in Bunker

No. 51-19. R. 17 (le)

Q. 1: A player plays from a sand trap. The ball does not get out of the trap. The player smoothes his footprints made in executing the first shot before playing the next, which is from an entirely different area of the trap. Is there a penalty?

A. 1: Not unless the player's actions assisted him in subsequent play of the hole. Rule 17(1e) relieves the player of penalty for smoothing irregularities made in a hazard by his stroke. provided nothing is done that improves the lie of the ball or assists the player in his subsequent play of the hole.

Q. 2: A player plays his shot from a sand trap. The ball goes over the green into another trap. Before leaving the first trap the player smooths his footprints. He then makes his shot from the second trap and his ball goes back into the first trap, possibly right where he had smoothed it over. Is there a penalty

A. 2: Not unless there is a preponderance of evidence that his actions improved the lie of his ball or assisted him in subsequent play. It is a question of fact whether or not his actions aided him, as stated in Rule 17(1e).

Questions by: Mrs. C. F. COCKRELL

NORTHFIELD, ILL.



Correspondence pertaining to Green Section matters should be addressed to: USGA Green Section, Room 307, South Building, Plant Industry Station, Beltsville, Md.

### COMPACTION OF TURF SOILS — SOME CAUSES AND EFFECTS

By R. B. ALDERFER

ASSOCIATE PROFESSOR OF SOILS, PENNSYLVANIA STATE COLLEGE

Compaction of turf soils is a condition which has existed for as many years as turf areas have been walked on and driven over.

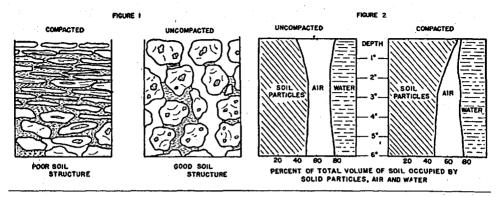
What is a compacted soil? It is a soil whose particles have been fitted together so closely that the openings or pores which remain between them are of such a size, shape and arrangement that the plumbing, ventilation and heating systems within the soil are out of order. It is within this system of pores, as they occur in the soil, that both water and air are held and through which the soil is warmed or cooled. Soils, as they consist of many different sizes and shapes of particles as well as clusters of particles (called soil aggregates), also have a great many pores of different sizes and shapes.

There are two general types of pores in soils, the large or non-capillary pores and the small or capillary pores. The larger pores serve as drainage conduits. It is through these pores that most of the water enters the soil, and any excess which the smaller capillary pores cannot hold is drained into the substratum. As these pores are unable to hold water against gravity, they not only make up the over-

flow system of the soil but also serve as air chambers through which the soil "breathes."

One of the characteristic features of many compacted soils is the way in which the particles assume a flat, platy shape, and are layered together much as bricks are laid in a wall. In this layering, the particles often overlap each other as do shingles on a roof. The pores between these particles not only are small but also offset from one another due to this peculiar particle arrangement. Both air and water movement through these flat. horizontal pores often is very slow. loose, porous soil has a preponderance of the larger, rounded particles between which there is more likely to be a much more ideal assortment of pores. The larger pores tend to be more or less connected into a pattern of continuous passageways into the substratum. The differences in the physical characteristics of a soil in good and poor structure is illustrated in Figure 1.

Where does compaction occur in turf soils? Water-tight layers, of course, occur everywhere within the soil. Many turf areas are underlain by heavy, natur-



ally compact subsoils, in which tile drains are placed to remove some of the excess moisture in the soil above them. In a great many naturally well-drained turf soils, compaction occurs right at the surface. In many respects, this is the worst place for this condition to exist in the soil. The different proportions of a surface soil occupied by solid particles, air and water (Figure 2) furnish a means of illustrating the location and the effects of compaction in a typical turf soil.

How does one measure or determine whether or not a particular piece of turf soil is compact? Numerous techniques have been proposed for measuring soil compaction. Penetrometers of either the impact or steady load type have been used extensively by turf specialists. Another method of measuring compaction is to determine the permeability of the soil to water and air. The effects of compaction on the rate of water intake, in

TABLE 1. EFFECT OF SOIL COMPACTION ON INFILTRATION, RUNOFF AND NON-CAPILLARY POROSITY

	Kentucky	Bluegrass	Sod	
8	Rate			ry : layer
Compaction by Trampling	Infiltration	Ins. per hour Runoff	% % Rainfall	Non-Capillar) Porosity - 0-1" surface %
Heavy		.35	76	6.1
Moder		.67	52	19.2
None	1.	50+	0	33.1

percent of  $1\frac{1}{2}$  inches per rainfall lost as runoff and percent non-capillary porosity, under a Kentucky bluegrass sod are shown in Table 1.

What are some of the causes of compaction in turf soils? Most compaction takes place as a result of mechanical pressure on the soil, such as trampling and wheel traffic, and to some extent rolling.

Under what conditions does compaction take place? Soils become highly vulnerable to compaction when, for some reason or other, the soil is left bare of any surface cover; when the resistance of the soil to compaction is low; and when the moisture content of the soil is such as to permit maximum compactibility.

When does most compaction take place and how long does it take? Experimental results reveal that most compaction takes place during the spring and early summer. The surface permeability of the soil, however, can be decreased materially by only one trampling when the soil is near its maximum water-holding capacity.

TABLE 2. EFFECT OF SOIL TEXTURE ON INFIL-TRATION, RUNOFF AND NON-CAPILLARY POROSITY UNDER HEAVY COMPACTION IN BLUEGRASS SOD

Soil type	Infiltration Ins. per hr.	Runoff % Rainfall	Non-capillary porosity 0-1"surface layer %
Hagerstown Clay loam	.81	36	9.4
Morrison sandy loam	.83	41	9.5

Table 3. Effect of quality and amount of surface cover on infiltration, runoff and soil porosity under heavy trampling.

	covered	Bluegrass sod.		
	% of surface c on fertilization	Infiltration rate ins. per hour	runoff	Non-capillary porosity 0-1" surface layer
55%	unfertilized	.24	88	6.1
85%	fertilized	.72	42	9.4

Simply by walking over the moderately compacted sod plots included in Table 1, their infiltration rate was reduced from .67 to .46 inch per hour; runoff was increased from 52 to 67 percent; and the non-capillary porosity of the first inch of surface soil was reduced from 19.2 to 8.6 percent—all in a matter of a few minutes.

What effect does texture have on the compactibility of the soil? Two heavily compacted Kentucky bluegrass sods on a clay loam and on a sandy loam soil were selected for the purpose of determining

Table 4. Effect of fertilization of Kentucky bluegrass on soil organic matter content, aggregation and non-capillary porosity

Fertilization per 1,000 sq. ft.	Organic matter %	Aggregation %	Non-capillary porosity %
5 lbs. nitrate of sod	a 2.48	23.6	13.3
25 lbs. 10-10-10	2.79	25.5	17.6
50 lbs. 10-10-10	3.22	27.6	21.2

whether, with the same amount of trampling, sandiness was any real protection against compaction. No differences in permeability, runoff or non-capillary porosity were obtained, as shown in Table 2.

The question naturally arises as to what can be done to prevent, to minimize the effect of, or to correct compaction as it exists in soils under turf. It has been found that the cushioning action which a dense high-quality sod has on the compactibility of the soil is quite important, as shown in Table 3.

# Another Reason Why Compaction is a Problem



The use of this and bigger motorized caddie carts does not help to relieve soil compaction on golf courses. On the cart, from left, are Mr. Mitchell, professional at the River Crest Country Club, Fort Worth; Fred V. Grau, Director of the USGA Green Section, and Frank Goldthwaite, of Fort Worth, Tex.

One of the simplest ways of providing for proper growth of turf is, of course, to provide the grass plants with sufficient nutrient elements by adequate fertilization. In Table 4 are shown the effects of different fertilization of a Kentucky bluegrass sod on the accumulation of organic matter which is so important in the aggregation of soils, and the loosening effect of stimulated root activity in the first two inches of surface soil as reflected by an increase in non-capillary porosity.

Specialized implements such as the Aerifier, Terferator, and others are now being used for puncturing compacted surface layers in turf soils. These

machines, in removing plugs of soil from turf areas, actually create a system of large or non-capillary pores by which moisture, fertilizer and seed can be taken into the soil. They also provide a breathing system through which air can escape during rainfall or irrigation and through which fresh air can enter the soil later. The rapid intake and movement of water and air are recognized generally as prime necessities in compacted soils. The widespread use of these mechanical devices in opening up or in aerating compacted surface layers would indicate that results are being obtained in terms of better turf.

# OBSERVATION OF NEMATODES IN YELLOW TUFT OF BENTGRASS

By A. C. TARJAN and M. H. FERGUSON
ASSISTANT NEMATOLOGIST, DIVISION OF NEMATOLOGY, AND AGRONOMIST, USGA GREEN
SECTION, RESPECTIVELY, B.P.J.S.A.E., BELTSVILLE, MARYLAND

Yellow tuft in bentgrass occurs as small circles in the turf \(^1/4\) to 1 inch in diameter. A close examination discloses that the tufts are formed by many small shoots arising from a node on the stolons of bentgrass. The majority of these shoots will contain a number of fine leaves, many of which are yellow and some of which may be dead. The yellow color may persist indefinitely or may be present only a few months until the advent of more favorable growing conditions, after which the normal green color reappears. This condition is apparent mostly in the fall or early spring but may persist through-

### FIGURE 1



Comparison of tufted shoots in upper row with normal shoots in lower

out the year. Although this disease may occur on other grasses, it is most common on bentgrass turf. Similar conditions have been reported on Bermuda grass in Florida and in South Africa. Fig. 1 shows a comparison of tufted shoots with normal shoots of bentgrass.

### Historical

Yellow tuft was first described by R. A. Oakley' in 1924. In this account he stated: "A close examination shows the small tufts or rosettes which cause the mottling or spotting to be made up of young grass plants produced on the stems of the older plants. Botanically the tufts or rosettes are proliferations from the older turf. So far as can be ascertained, they are not due to any fungus disease or to any insect or nematode". This investigator tried to alleviate the condition by applications of ammonium sulfate, ammonium phosphate, and iron salts but did not obtain any noticeable results.

Oakley, R. A. MOTTLED CONDITION OF BENT TURE. Bulletin of the Green Section of the U. S. Golf Association, Vol. IV. No. 41, p. 259, Nov. 1924.

Monteith and Dahl<sup>2</sup> published on various turf diseases in 1932 and in relation to the cause of yellow tuft made the following statement: "Although various explanations have been made as to the cause of yellow tufts, the real cause remains unknown. A similar tufted growth occurs on many trees and shrubs, where it has been traced to injuries resulting from some mechanical factor or from the invasion of parasitic organisms, particularly bacteria".

### Economic Importance

The presence of yellow tufts does not greatly harm the quality of a putting surface but may, under severe conditions, cause enough unevenness of the surface to deflect a putt. The unsightliness of the putting greens, however, is the chief difficulty caused.

This condition, although generally unnoticed, is common throughout the Mid-

<sup>2</sup> Monteith, J. and A. S. Dahl. TURF DISEASES AND THEIR CONTROL. The Bulletin of the U. S. Golf Association Green Section. Vol. 12, No. 14, August 1932.

### COMING EVENTS

June 12: Turf Field Day. Central Plains Turf Foundation and Kansas State College at Manhattan, Kansas. Ray A. Keen.

August 20: Golf Association of Philadelphia and Philadelphia Association of Golf Course Superintendents at Plymouth Country Club. Mrs. Ralph I. Raynor, 629 Chestnut Street, Room 303, Philadelphia 6, Pa.

August 22-23: Twentieth Annual Greenkeepers' Field Days. University of Rhode Island at Kingston, R. I. J.

A. DeFrance.

August 27-31: American Society of Agronomy Annual Meetings, Pennsylvania State College, State College, Pa. L. G. Monthey, Madison, Wis.

G. Monthey, Madison, Wis.

September 5-7: Turf Field Days. The
Pennsylvania State College and Turf
Advisory Committee, State College,
Pa. H. B. Musser.

September 17-18: Turf Field Days. Purdue University and Midwest Regional Turf Foundation. West Lafayette,

Indiana. W. H. Daniel.
October 7-9: National Turf Field Days.
Beltsville Turf Gardens, Plant Industry Station, Beltsville, Md., USGA
Green Section and U. S. Department

### FIGURE 2



Photomicrograph of a nematode of the species Eucephalobus Oxyuroides in leaf tissue of bentgrass.

dle Atlantic States, where it seems to have increased in severity during the past two years. Last year, particularly, putting surfaces were damaged on several golf greens around the Washington area. In one case a green planted from stolons in December had yellow tuft the following summer.

### Results of Examinations

Numerous examinations of yellow tufts from various locations have re-

of Agriculture cooperating. Fred V. Grau.

October 24-26: Turf Conference. Central Plains Turf Foundation and Kansas State College at Manhattan, Kansas. L. E. Lambert and Ray A. Keen.

(Note: The Advisory Committee for the Northern California Turf Conference is considering changing the spring dates to fall dates. Early November is being considered. It is hoped that turf conference groups in the Western half of the United States can integrate dates through the Green Section for efficiency and economy of travel.)

1952

January 8-9: Turf Conference. Mid-Atlantic Association of Golf Course Superintendents. Lord Baltimore Hotel, Baltimore, Md. E. N. Cory, University of Maryland.

February 3-8: 23rd Annual Turf Conference and Show of Golf Course Superintendents Association of America, Neil House, Columbus, Ohio.

February 18-21: Turf Conference. The Pennsylvania State College, State College, Pa. H. B. Musser.

March 3-6: Turf Conference. Midwest Regional Turf Foundation and Purdue University, West Lafayette, Ind. W. H. Daniel. vealed the presence of several nematodes among which two forms, Eucephalobus oxyuroides and Panagro laimus rigidus, appear in relatively large numbers. Other nematode forms observed in tufts, but never as numerous as the two mentioned, are Tylenchus, Aphelenchoides, Doryloimus, Monhystera, Ditylenchus and Plectus. When healthy shoots were examined, however, in some cases a few specimens of Eucephalobus oxyuroides and Panagrolaimus rigidus were also found, but never in as large numbers as found in diseased tufts.

Throughout the examinations of affected shoots, these nematodes were usually found either well within healthy tissues of the leaf sheaths (Fig. 2 and 3) or between the leaf sheaths and the stem, apparently feeding on the contents of the cells. Observations of the intestinal contents of several of these nematodes revealed the presence of green chloroplasts indicating that these forms had been feeding on healthy cells where chloroplasts are usually found.

### Conclusions

Whereas P. rigidus and E. oxyuroides had been regarded as free-living soil forms normally feeding on decaying plant material, the possibility that they may be plant parasitic is now worthy of consideration. It is conceivable that the formation of the number of fine leaves which make up a diseased tuft may be stimulated by the feeding of nematodes on the meristematic tissues of the plant, or that the effects of their presence in sufficient numbers within shoots may manifest the symptoms of yellow tuft. It is equally as strong a possibility, however, that yellow tuft is made up of a group of concurrent symptoms to which the deleterious effects of these nematodes may add.

### Movie Being Revised

The U. S. Department of Agriculture's 16mm kodachrome short entitled, "Lawns that Live," designed for television showings, was considered by the movie experts unsuitable for motion picture use. Therefore this film is in the process of revision and no copies are available for sale

### TURF RESEARCH REVIEW

The second edition of TURF RESEARCH REVIEW, a directory covering turf activities in the United States for the calendar year 1950, is now ready for distribution at the Green Section office. A limited number of copies are for sale at \$1.25 a copy, postage free, first come, first served.

TURF RESEARCH REVIEW belongs in the library of every turf enthusiast. It is the first time in history that there has been presented a complete up-to-date inventory of turf research, education, and extension in the United States. Here is what you will get in Turf Research Review:

A list of experiment stations which have active turf projects in research teaching or extension.

A directory of turf workers who spend part or all of their time in turf work.

A list of active turf projects (who is doing what and where).

A list of turf publications, by states and by subject matter.

A survey of turf conference and field days.

A directory of Green Section Service Subscribers.

A review of turf research fellowships and research grants.

A summary of accomplishments.

To those of you who purchase copies we suggest prompt action. Mail \$1.25 to:

USGA GREEN SECTION P. I. Station (T.R.R.) Beltsville, Md.

Be sure to give accurate mailing address.

TURF RESEARCH REVIEW in effect is an annual supplement to the USGA's new book, TURF MANAGEMENT, by H. B. Musser, published by McGraw-Hill Book Co. at \$6 a copy. It is available from bookstores, from McGraw-Hill Book Co., 330 West 42nd St., New York 18, N. Y., or from the United States Golf Association, 40 East 38th Street, New York 16, N. Y.

### TRAVEL HIGHLIGHTS

By the Green Section Staff

Plans are under way to release the Z-52 strain of Japanese lawngrass officially. This will be a joint action by the USGA Green Section and the U.S. Department of Agriculture, Bureau of Plant Industry, Forage Crops and Diseases.

Common bluegrass has been damaged hadly by Helminthosporium leafspot. Our spring has been long, cold, and wet. Where Z-52 zoysia has been planted into common bluegrass lawn turf it is covering up for the diseased common bluegrass.

Merion bluegrass with Z-52 zoysia and also Merion bluegrass with common Japanese lawngrass are the two top turf combinations at the Beltsville Turf Gardens.

The top creeping bents under our system of management (no artificial watering and no fungicidal treatments) are Arlington (C-1), Congressional (C-19)

and Dahlgren (C-115).
Several "F" fescues from the Penn State breeding program show definite superiority this spring in the cooperative test plots. Commercial fescues now on the market are having a tough struggle to cope with the serious disease problems of the Maryland area. Crabgrass easily chokes disease-weakened turf.

At last we can report that we see very definite differences in the performance of strains of tall fescues for turf. Kentucky 31 gets the nod over Alta in our trials. The price structure is favorable,

Al Radko is very busy with the national coordinated crabgrass trials. Some cooperators want to change the rules, which of course would throw their tests out because they would be different from all the others.

Charles Wilson is working diligently on the national coordinated fungicide trials. Returns to date and participation in the program has been somewhat disappointing. Perhaps when disease hits harder there will be more interest in these national coordinated trials.

New Green Section Service Subscribers

Artefactos De Papel, S. A., Monterrey. Mexico

Bentley-Milorganite Co., Seattle, Wash. Bob Dunning-Jones, Inc., Tulsa, Okla. Buckner Mfg. Co., Chicago, Ill.

Calvert Distilling Co. (The), Baltimore, Md.

Carter, H. V., Co., Inc., San Francisco. Cleary, W. A., Corp., New Brunswick. N. J.

Dickinson, Albert, Co. (The), Chicago,

Dixie Lawn Supply Co., Inc., Louisville. Ky.

Foxcroft School, Middleburg, Va. Hart, Chas. C., Seed Co. (The), Wethersfield, Conn.

Mitchell Bros., Inc., Danvers, Mass. Nelson, L. R., Mfg. Co., Inc., Peoria, Ill. Philadelphia Association of Golf Course Superintendents, Havertown, Pa.

Roseman Mower Corp., Evansion, Ill. St. Louis Division of Parks and Recreation, St. Louis, Mo.

Schmedemann, C. R., Implement Co.,

Manhaitan, Kansas Standard Mfg. Co., Cedar Falls, Iowa Toro Equipment Co., Inc., White Plains, N. Y.

Turf Equipment, Inc., Kansas City, Mo. United Seeds, Inc., Omaha, Nebr. Vaughan's Seed Co., Chicago, Ill. Warren's Turf Nursery, Palos Park, Ill.

### West Coast Trip

Most of the putting greens in the Seattle area tend to develop a thick "felt pad" which strongly resists the movement of water, air and nutrients. Aeration of this pad immediately starts new live, healthy root action which did not exist before.

Observations indicate that most turf would benefit from some additional nutrients, particularly nitrogen. There is some evidence that perhaps more water is being used than may be needed.

Dandelion, chickweeds and English daisy constitute the principal offenders 2, 4-D does very well except on the chickweeds and English daisy. There is some indication that sodium arsenite would be an excellent material.

Poa annua and Poa trivialis seem to

be two predominant grasses in lawn and fairway turf. Occasionally some red fescues do a fair job of making turf. For the most part the red fescue looks quite unhappy. The reason is not altogether clear.

The best fescue turf observed is under light shade where it is mowed to 3 inches high and about 2 or 3 times during the season. Under close mowing the fescue disappears, especially on fairways.

### The Bay Area

We were fortunate to be shown around Stanford University by Ellis Van Gorder, Superintendent at Stanford University's Golf Course. Aerifying is producing excellent results. His rake-brush machine, which is pulled with an old 3-wheel tractor across the greens, is largely responsible for keeping the putting greens in tournament condition at all times. One of the best jobs of water management found on any golf course may be observed here.

At Burlingame we saw plots of Merion bluegrass two years old which had been mowed at 3/16-inch during those two years. The ordinary commercial fescues were unable to take this treatment. Common bluegrass simply disappeared.

Deep "felt pads" develop in the Bay area exactly as they do in Seattle, Portland and other places where moisture is plentiful. Chlorosis and other troubles develop under these conditions.

Nearly everywhere we saw the need for combs or rakes on fairway mowers.

### Los Angeles Area

A 30-minute tape recording for the Armed Forces Radio Service was done with John Gallagher, O. J. Noer, H. B. Musser, Robert Hagan, with Fred Grau monitoring the discussion.

It was a perfect day for the inspection of the plots at the Southern California Turf Conference. A great deal of interest centered around the combination turf of U-3 Bermudagrass and Congressional bent. One got the feeling that quite a number of people were going to try this combination because of its toughness, drought resistance, deep rooting and beauty.

Kikuyugrass continues to spread and as yet no control for it has been found. Billy Bell reports that roots were found at a depth of 7 feet. (I hope I quote correctly).

Bill Beresford's No. 13 green at the Los Angeles Country Club is a beauty. The drainage is excellent; his own strain of bentgrass is doing an excellent job under his management.

The biggest need in California today is that of an extension specialist in turf.

#### Omaha

Merion bluegrass seems to be outstanding as compared with common bluegrass because of its resistance to Helminthosporium leafspot. Leafspot is ruining most common Kentucky bluegrass turf in this area but it is difficult to detect unless the turf is observed closely.

## McCall Retires; Myers Leaves Forage Corps

A memorandum dated April 30 from Dr. R. M. Salter, Chief of the Bureau of Plant Industry, announced the impending retirement of Dr. M. A. McCall and the transfer of Dr. W. M. Myers from Head of the Division of Forage Crops to Director of Field Crop Research. This reorganization was effective May 1, 1951.

Dr. McCall long has been a friend of the Green Section and an active member of the Green Section Committee. We shall miss him. Dr. Myers has done much to effect close coordination between the Department of Agriculture and the USGA Green Section in the short time that he has been here.



# IT'S YOUR HONOR

### The Kindest Cut

TO THE USGA:

I cannot refrain from making complimentary comment on the photo on the cover of the April USGA Journal. That one issue alone should save a million divot holes. The picture should be posted in all club houses and proshops.

Believe me, after 17 years, using every means to appeal — hoping to get careless golfers to replace turf — you certainly help by producing cuts like this one. Keep up the good work.

A. R. EMERY Salt Lake City, Utah

### **Good Turf Work**

TO THE USGA:

We again wish to thank you and the USGA for permitting your Extension Agronomist, Mr. Charles Wilson, to visit our country club this spring. He did an excellent job, gave a most understandable report to our committee, made a lot of good recommendations and left us with a better appreciation of golf and turf problems.

I know you will be pleased to hear of the good work Mr. Wilson is doing in the field, and that we owe a great deal to his sound advice.

> P. E. DRACHMAN, Chairman Grounds Committee Evansville Country Club, Ind.

### Play It as It Lies

TO THE USGA:

Your article in the April issue of the Journal entitled "No Local Rules" should be called to the attention of every president of every USGA member club. Many of the present day officers of golf clubs are men who have little or no knowledge of the game and I doubt if 1% of them have ever read the Rules.

As a result, there has been much tampering with the Rules, usually in line with efforts to make the game "easier" and, if such actions continue, the game will lose the character which makes it great. Such variations of golf as "winter rules" and "mulligans" should be vigorously forbidden and discouraged in every way.

It seems to me there should be emphasized to the president of each club the necessity

of adherence to the Rules in their entirety and elimination of local rules as far as possible. If this is not done, and each year, some men who might be considered nongolfers will completely ruin the game which I, and I know you, love so well.

"Play the ball as it lies." There is a real challenge to a sportsman and I sincerely hope you can see that it becomes

the method of playing golf.

On the back of the scorecard of Chicago Golf Club, which is within sight of my house, the simple statement: "USGA rules govern all play," could well be the model for all clubs. It has no local rules and it is very much in keeping with the great traditions of Chicago golf.

CHARLES R. WILSON Wheaton, III.

### Two Sportsmen

TO THE USGA:

During the presentation of prizes at the recent Masters Tournament in Augusta, Georgia, Skee Riegel made one of the finest speeches in defeat I have ever heard.

Skee has always been known for his sportsmanship and happy acceptance of any breaks that may go against him. When asked what he thought about his chances after he had finished the 72 holes with a splendid score of 282 (6 under par), he said: "I knew that whatever I shot out there today the 'little man' would be better." His reference was to Ben Hogan, of course.

I know everyone joins me in wishing Skee the best of luck in his future events.

I had the privilege and honor to play the final round with Sam Urzetta, the Amateur Champion. He displayed the poise and balance of a seasoned competitor; but more important than that, exhibited all the qualities of an outstanding sportsman.

Sam Urzetta is an inspiration to the rising young stars and millions of golfers in our country.

RICHARD D. CHAPMAN Pinehurst, N. C.

Editor's Note: The USGA Journal invites comments on matters relating to the welfare of the game and will publish them as space permits.

