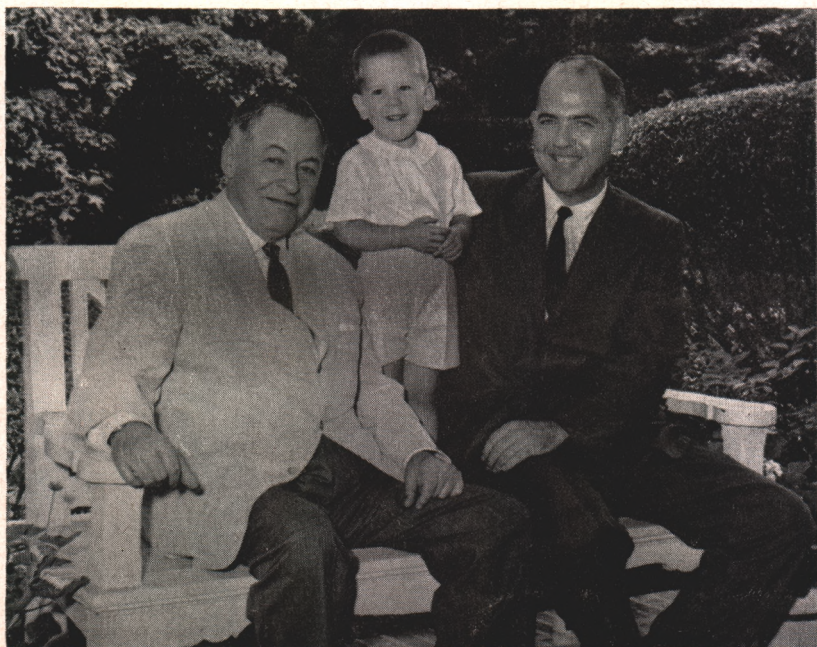




USGA JOURNAL

AND
TURF MANAGEMENT

WHICH ONE IS BOBBY JONES?



Answer: All three. A recent grouping of Robert T. Jones, Jr., with his son and grandson of the same name, Numbers III and IV.

NOVEMBER, 1959



USGA JOURNAL

AND
TURF MANAGEMENT

Published by the United States Golf Association

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USGA COMPETITIONS FOR 1960

Championship or Team Match	Entries Close	Qualifying Rounds	Dates of Event	Location
Curtis Cup Match††	—	—	May 20-21	Lindrick G. C., Workshop, Nott., Eng.
Open	May 4	Local: May 23 Sectl: June 7**	June 16-17-18	Cherry Hills C. C., Englewood, Colo.
Amateur Public Links	*May 19	†June 5-12	July 11-16	Ala Wai G. C., Honolulu, Hawaii
Women's Open	July 6	None	July 21-22-23	Worcester C. C., Worcester, Mass.
Junior Amateur	June 29	July 19	Aug. 3-6	Milburn G. & C. C., Overland Park, Kans.
Americas Cup Match***	—	—	Aug. 11-12	Ottawa H. & G. Club, Ottawa, Canada
Girls' Junior	July 29	None	Aug. 15-19	The Oaks C. C., Tulsa, Okla.
Women's Amateur	Aug. 3	None	Aug. 22-27	Tulsa C. C., Tulsa, Okla.
Amateur	Aug. 10	Aug. 30	Sept. 12-17	St. Louis C. C., Clayton, Mo.
Senior Amateur	Aug. 24	Sept. 7	Sept. 19-24	Oyster Harbors C., Osterville, Mass.
World Amateur Team	—	—	Sept. 28-Oct. 1	Merion G. C., Ardmore, Pa.

** Open Championship: Sectional Qualifying Championships date may be changed to June 6 if local authority in charge deems advisable.

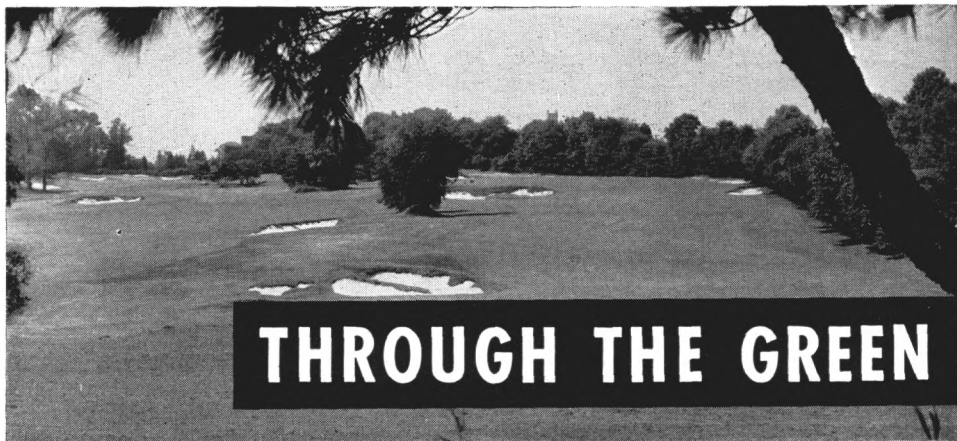
Amateur Public Links Championship:

* Entries close with each Sectional Qualifying Chairman.

† Exact date in each Section to be fixed by Sectional Chairman.

†† Curtis Cup Match—Women's amateur teams: British Isles vs. United States.

*** Americas Cup Match—Men's amateur teams: Canada vs. Mexico vs. United States.



High Placed Golfers

Heads of State or Heads of Government—a lot of them are golfers. The list includes President Eisenhower, Prime Minister Macmillan, King Baudouin of the Belgians and Prime Minister Kishi of Japan.

And to prove again that old Scotland is a golf attraction almost without equal, three of them were knocking around Scotland at almost the same time earlier this Autumn—President Eisenhower at Turnberry, Mr. Macmillan on two or three different courses and King Baudouin at Gleneagles.

Pros and the Ladies

Questions that make you wonder???

In the mail comes a request for information on "the duties of the professional in relation to the ladies?" Does he call the ladies by their first names? What about starting the ladies on Ladies Day play?

The answers, of course, vary with clubs and it is the duty of club governing boards to outline their desires.

1961 Competitions

The 1961 Walker Cup Match will be held on the Pacific Coast for the first time. The scene will be the Seattle Golf Club, in Seattle, Wash., which also entertained the 1952 Amateur Championship. The British can take one of the new jet flights over the North Pole and reach the Pacific Coast just as easily as they

could fly the Atlantic. The dates will be Friday and Saturday, September 1 and 2.

Following the Match, both Teams will go down the coast to the famous Pebble Beach Links, in Pebble Beach, Cal., for the Amateur Championship, September 11 through 16. The Amateur was held previously at Pebble Beach in 1929 and 1947.

The 1961 Amateur Public Links Championship will be held at the Rackham Golf Course, Detroit, Mich., in July. Rackham previously entertained the event in 1940.

Golf and Daylight

Colorado was on standard time, and therefore daylight fell early during the Amateur Championship at the Broadmoor Golf Club, in Colorado Springs, Colo. In an attempt to insure that all players would be able to finish their first matches, the USGA moved the first starting time up to 7:30 a.m. and issued the following plea to players:

"How would you like being prevented by darkness from finishing a match the day you start it?

"This could happen at Broadmoor in the National Amateur Championship.

"The last scheduled starting time Monday is 2:36 p.m. The deadline for fair playing conditions is about 6:10 p.m.—about 3 hours 34 minutes after the last time. This does not allow for extra-hole matches and perhaps other unavoidable delays.

"The late starters can, and will, finish

if those ahead will do their part. Here are some simple ways to do it:

- "1. Early starters—Set a good pace.
- "2. All following players—Keep up with players immediately ahead, without lag.
- "3. All players—Play the course within three hours. It is reasonable to expect mature golfers in the National Amateur Championship to do this. There is quite enough time for 144 players to get around the course in the first round.

"Whether those at the end of the field finish their matches is largely up to those preceding. What happens at 7:30 a.m. has a decided bearing on what happens at 6 p.m.

"This is a real opportunity for you to show the whole country how the game should be played, without dawdle or dally. The professionals showed it in the last round of this year's Open in another serious situation involving daylight.

"Now you, the best amateurs in the country, can help further in reversing the slow pace of play which has blighted championship golf for many years."

The results were reasonably satisfying. Only two matches were cut off by darkness, and they were within a hole or two of the end so that it was relatively easy for them to finish out the next morning.

Boatwright and Slappey Join USGA Staff

P. J. Boatwright, Jr., and Sterling G. Slappey have been appointed Assistant Directors of the USGA on the New York staff.

John P. English has resigned as Assistant Executive Director to do alumni work at Williams College, Williamstown, Mass. Mr. English had been a member of the staff for more than ten years and had helped inaugurate the USGA JOURNAL. He had performed outstanding service, and the Association wishes to commend him heartily. Present and former members of the Executive Committee presented him with a silver platter, suitably inscribed and engraved with 21 signatures, upon his retirement.

Mr. Boatwright moves to New York from Pinehurst, N. C., where he has been



P. J. Boatwright, Jr. Sterling G. Slappey

Executive Secretary of the Carolinas Golf Association since November, 1955. He is an amateur golfer of skill, is the present Carolina Open Champion, and has competed in both the National Amateur and the National Open. He is a native of Augusta, Ga.

Mr. Slappey was for seven years a foreign correspondent with the Associated Press with headquarters in London and Moscow. He was European Sports Editor for several years and covered golf extensively throughout the British Isles. He is a native of Fort Valley, Ga., and was a resident of Atlanta before going abroad.

The USGA executive staff now comprises:

Executive Director—Joseph C. Dey, Jr.

Assistant Directors—P. J. Boatwright, Jr., and Sterling G. Slappey.

Administrative Assistants—C. Edmund Miller and Paul R. MacDonald.

Tournament Relations Manager—Robert C. Renner.

Office Manager—Anthony A. Kesaris.

Britons Visit Golf House

British Ryder Cup team members visited Golf House and toured the library and museum. The players were just off the Queen Elizabeth and on their way to a series of transcontinental matches to be topped off with the Ryder Cup matches at Eldorado Country Club in Palm Desert, Calif.

British golf writers paying their first call to "Golf House" were Frank Pennink, London Daily Mail, and Leonard Crawley, former Walker Cup player and golf writer for the London Daily Telegraph.

Timely Ace

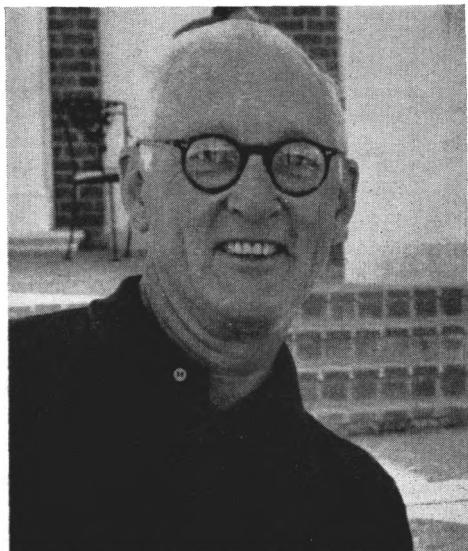
J. A. H. Torrey—68 years old, 12 years a golfer and an 18-handicap player—was winner of the third PGA National Hole-in-one contest. Mr. Torrey hit the perfect shot on the 190-yard, 11th at Burning Tree Club, Bethesda, Md. He used a No. 4 wood. Nearly 115,000 golfers throughout the nation competed.

Tables Turned on Treadwell

They turned the tables on George Treadwell, Sr., at the USGA Players' Dinner preceding the Senior Amateur Championship at the Memphis Country Club.

Mr. Treadwell, as the Club's General Chairman for the Championship, was all set to pay honor to the guests. So he did, and he was right in character, for he has been a warm and gracious host on countless golfing occasions.

But before the evening was through Mr. Treadwell was the recipient of a rare honor. He was presented a silver box bearing the seals of the Southern, the Tennessee and the Memphis Golf Associations with an appropriate inscription by those organizations. It was a fitting tribute to a gentleman who has been unusually generous in his contributions to the welfare of golf. Roy Moore and Earl Briggs made the presentation.



George Treadwell, Sr.



SPORTSMAN'S CORNER

Richard Crawford, 20, Southern Amateur and National Collegiate Champion who lost 4 and 3 to 50-year old David (Spec) Goldman of Dallas in the third round of the Amateur Championship, is a candidate for any sportsmanship trophy.

The young collegian from the University of Houston and El Dorado, Ark., had squared the Goldman match on the fourth. On the next hole Goldman hit his approach 12 feet short. Crawford, who had been short with his approach, chipped five feet shy, his ball stopping in Goldman's line.

Goldman asked the youngster to mark his ball and Crawford complied. Goldman bent over his putt, his back to Crawford, but before he could stroke the ball Crawford interrupted him:

"Pick up your ball, Mr. Goldman," Crawford said. "I have lost the hole."

The surprised Goldman stepped back from his putt, and Crawford continued: "I cleaned my ball."

Goldman scolded, "I don't play golf that hard. You leave that marker of yours right where it is."

But before he could bend over his putt again, Crawford had picked up Goldman's ball, too, and was headed toward the sixth tee.

1960 Green Section Educational Program

The proper use of water on the golf course raises questions with many sided answers. At the USGA Green Section Educational Program, to be held January 29 at the Biltmore Hotel, in New York, N. Y. panels of specialists will discuss the controversial subject before opening the morning and afternoon sessions to question and answer periods.

The morning session will be devoted to The Mechanics of Applying Water. Water Requirements of the Golf Course will be discussed during the afternoon. Among the subject-matter will be: sources of water supplies and the merits of each source; distribution systems and the relative merits of cast iron, steel, plastic, and asbestos cement pipes; cost and efficiency of various sprinkler systems; the agronomic point of view of how fast water should be applied, and frequency of application; the golfer's point of view on how soft putting greens should be kept, and the effect of moisture on the roll of the ball. The highlights of the program will be discussions on the relative needs of golfers and plants, and can differences in requirements be reconciled.

The fourth annual Educational Program, like the preceding, will be presented for the benefit of club green committee chairmen and golf course superintendents. Full details are to be released at a later date.

Necrology

It is with deep regret that we note the deaths of:

Vincent Richards, famed tennis star of the 1920's and later an executive with Dunlop's sports division. He was largely concerned with golf ball manufacture. He was 56 and died of a heart ailment.

Dennis Smalldon, 33 year old golf professional from Cardiff, Wales, died of injuries suffered in an automobile accident.

Books Received

FUNGAL DISEASES OF TURF GRASSES by J. Drew Smith (The Sports Turf Research Institute of Bingley, Yorkshire, England) deals with the principles of disease control and the effects of environment and management as well as with individual diseases common to Britain. Many of these diseases will be familiar to American readers. The principles discussed by Mr. Smith are universally applicable.

USGA COMPETITIONS FOR 1961

<u>Championship or Team Match</u>	<u>Entries Close</u>	<u>Qualifying Rounds</u>	<u>Dates of Event</u>	<u>Location</u>
Open	May 3	Local: May 22 Sect'l.: June 6**	June 15-16-17	Oakland Hills C.C., Liverngham, Mich.
Women's Open	June 14	None	June 29-30, July 1	Baltusrol Golf Club, Springfield, N.J.
Amateur Public Links	*June 1	‡June 18-25	July 10-15	Rackham Golf Course, Detroit, Mich.
Junior Amateur	June 28	July 18	Aug. 2-5	Cornell University Golf Course, Ithaca, N.Y.
Girls' Junior	July 28	None	Aug. 14-18	Broadmoor Golf Club, Seattle, Wash.
Women's Amateur	Aug. 2	None	Aug. 21-26	Tacoma Country & G.C., Tacoma, Wash.
(1) Walker Cup Match	—	—	Sept. 1-2	Seattle Golf Club, Seattle, Wash.
Amateur	Aug. 9	Aug. 29	Sept. 11-16	Pebble Beach Course, Del Monte G. & C.C., Pebble Beach, Cal.
Senior Amateur	Aug. 30	Sept. 19	Oct. 2-7	Southern Hills C.C., Tulsa, Okla.

****Re Open Championship:** Sectional Qualifying Championships date may be changed to Monday, June 5 if local authority in charge deems advisable.

Re Amateur Public Links Championship:

* Entries close with each Sectional Qualifying Chairman.

‡ Exact date in each Section to be fixed by Sectional Chairman.

(1) **Walker Cup Match:** Men's amateur teams—Great Britain vs. United States.

RELAXATION IN RULES

A NEW YEAR'S GIFT

By

JOSEPH C. DEY, JR.
USGA Executive Director

Come New Year's Day of 1960 and the game will be somewhat easier—but in a qualified sense.

When you're on the putting green, you'll be free to do the following without having a twinge of conscience:

(a) Clean the ball at any time.

(b) Repair a ball mark anywhere on the green, including your line of putt, by any method except by stepping on the damaged area.

Those are among the more substantial amendments in the world-wide Rules of Golf produced by a joint American-British committee.

The spirit of softening life for the golfer will have a special trial under the USGA code only, and for 1960 only, in these particulars:

(a) Ball out of bounds—loss of distance only (not stroke and distance, as now).

(b) Ball lost—lost of distance only (not stroke and distance, as now).

(c) Ball unplayable—optionally either (1) stroke and distance, or (2) one stroke for dropping directly behind the unplayable position (in a bunker the ball must be dropped in the bunker). (The latter penalty now is two strokes.)

Yes, the game will be somewhat easier—but you'll still have to hit that little white ball yourself with that little club-head.

Provisional Ball under USGA Code

In the USGA experimental amendments for 1960, the one-stroke relief from an unplayable lie will bring it into line with the water hazard Rule.

These two Rules will thus have two identical optional methods of getting out of trouble. Consequently, a provisional ball will be unnecessary and will be prohibited for a ball unplayable or in a water hazard, under the USGA trial code.

A provisional ball may be played only if the original ball may be lost or out of bounds.

The water hazard Rule has not been changed in the USGA code.

A Court's Dictum

"While silence is the conventional courtesy when a golfer is addressing his ball and swinging, the ban is relaxed between shots, and presumably the nature of the comments depends in some measure upon the success or failure of the player in negotiating the hazardous water."

From New Jersey Supreme Court Decision
Sans vs Ramsey Golf and Country Club

The Royal and Ancient Golf Club of St. Andrews, Scotland, has not adopted the USGA trial Rules, although it has concurred with the idea of USGA experimentation. In other respects the R&A and the USGA are in full agreement on the 1960 amendments.

Rules books for 1960 may be obtained at 25 cents from the USGA, 40 East 38th St., New York 16, N. Y.

Below are changes in substance in the world-wide Rules:

Definitions

7—"Equipment" is newly defined as anything used, worn or carried by or for the player except his ball in play. One object is to make clear that "equipment" does not include a ball.

12—Flagstick must be straight and circular in cross-section.

20—"Obstructions" do not include any artificial construction which is an integral part of the course, such as retaining walls of hazards and masonry on banks or beds of open water courses.

Rules

8—Practice on course on day of match play is permissible unless the Committee decides otherwise.

11-1—In stroke play, no penalty can be imposed after the competition is closed unless wrong information had been given by the competitor. Close of competition is defined.

18-1—Loose impediments shall not be removed when ball is in motion.

21—Meaning of a wrong ball is changed to apply only to a ball other than the player's (and not to a ball owned by the player and wrongly put in play by him).

22—A ball dropped or placed but not played may be lifted without penalty if (a) dropped or placed not in accordance with an applicable Rule, or (b) if dropped or placed under a Rule which does not apply to the case. (At present a ball is in play when dropped or placed, even if wrongly done.) A ball dropped or placed properly under the right Rule shall not be abandoned.

27-1—Through the green or in a hazard: Ball at rest moved or lie altered by opponent, fellow-competitor, another ball, or any outside agency except wind—player must place ball on spot from which moved if possible to determine exact spot. (At present ball is dropped.) Same principle applies to multi-ball play (Rules 40-1, 40-3 and 41-4).

31—"Obstruction" other than attended flagstick or players' equipment shall not be removed when ball is in motion.

34-1—If flagstick is not attended before stroke is played, it shall not be attended or removed while ball is in motion. (At present this may be done at any time.)

34-2—In match play, opponent or his caddy shall not attend flagstick without knowledge or authority of player. In stroke play, unauthorized attendance of flagstick by fellow-competitor or his caddy is clarified.

34-3—Flagstick may be adjusted only by placing it in normal position in center of hole and as nearly upright as possible.

35-1—If ball is moved when player moves loose impediment on putting green, no penalty and ball shall be replaced. (At present one-stroke penalty, and ball shall be played as it lies.)

35-1—Damage to putting green caused by impact of a ball may be repaired but player may not step on damaged area. (A new provision.)

35-1—Ball on putting green may be cleaned at any time. (A new provision.)

35-3—In stroke play, two-stroke penalty for ball striking fellow-competitor's ball is extended to apply when both balls are on putting green as well as when both are within 20 yards of hole.

36-4—Stroke play: When a round is can-

celled, all penalties incurred in that round are cancelled.

37-6—Procedure clarified for discontinuing play in accordance with Rules.

37-8—Stroke play: Competitor is to be disqualified for refusing to comply with a Rule affecting rights of another.

37-9—Artificial devices are prohibited for gauging or measuring distance or conditions which might affect play; penalty—disqualification.

USGA FILM LIBRARY

"St. Andrews, Cradle Of Golf," a 14-minute, full color, 16m.m. travelogue of historic St. Andrews, Scotland, its Old Course and the Royal and Ancient Golf Club clubhouse.

"First World Amateur Team Championship for Eisenhower Trophy," a 14-minute, full color, 16m.m. film of the first World Amateur Team Championship at St. Andrews, Scotland. Twenty-nine countries compete for the Eisenhower Trophy.

"On the Green," a 17-minute, full color, 16 m.m. presentation filmed at the Mid-Ocean Club, Bermuda, illustrating correct procedures under the Rules of Golf governing situations arising on the putting green.

"Golf's Longest Hour," a 16 m.m. full color production, running for 17½ minutes, depicting the closing stages of the 1956 Open Championship. Filmed at the beautiful Oak Hill Country Club, Rochester, N.Y., it shows the eventual winner, Cary Middlecoff, set a target at which Ben Hogan, Julius Boros and Ted Kroll strive in vain to beat.

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

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

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

The distribution of all seven prints is handled by National Educational Films, Inc., 165 West 46th Street, New York 36, N. Y., which produced the films in cooperation with the USGA. The rental is \$20 per film; \$35 for two; \$50 for three, \$60 for four and \$70 for five, in combination at the same time, including the cost of shipping prints to the renter.

ESPIE'S FINE RECORD IN THE SENIOR AMATEUR

Won Twice, Runner-up Once
in Last Four Years

In a game where form can be uncertain, the record which J. Clark Espie, Jr., has made in the USGA Senior Amateur Championship is among the most remarkable in the annals of national events.

The Senior Championship has now been held five times. Espie has played in the last four tournaments, after failing to qualify sectionally in the first. He has won twice, been runner-up once, and a semi-finalist and the qualifying medalist on the fourth occasion.

His style of play is not exactly lyrical, but it is deceptively solid. It is reinforced by a keen yet always friendly competitive spirit which never admits defeat before the game is over.

Clark Espie is a 60-year-old advertising representative from Indianapolis. He has several grandchildren. He has won the Indianapolis, Indiana Senior and Western Senior Championships. He is a member of the USGA Senior Championship Committee.

His second victory for the USGA Championship was so touchingly gratifying to him that he said "I could almost cry" in his moment of joy when the final match ended. It came about last month at the Memphis Country Club, Memphis, Tenn., one of the fine homes of American golf.

The runner-up was J. Wolcott Brown, of Manassquan, N. J. Playing in his first USGA Senior Championship, Brown was co-medalist at 73 with George Dawson, of Chicago, and loomed as a potential Champion as he won four matches through the semi-finals. He seemed to own the first nine, and played it in an average of even par in the qualifying and the first three matches.

Espie had squeaked through the qualifying round with a 79, and in the second round pulled through a 24-hole match with a fellow-Indianan, Larry E. Stage, of Lafayette. This was the longest match in the history of the Championship.

Then Espie struck his best streak of

the week in eliminating Martin McCarthy, of Washington, 5 and 3, and George Dawson, 5 and 4; he was only one over par for the 29 holes of these two matches.

The final was all square after nine holes. Espie holed several good recovery putts coming home, whereas Brown had an opposite fate. Espie won the 10th, 16th and 17th for a 3-and-1 decision. A par at the bye hole would have given Espie 75 for the round.

The defeated semi-finalists were George Dawson and William E. Norvell, Jr., of Chattanooga, who lost to Brown by two holes.

The defending Champion, Thomas C. Robbins, of Pinehurst, N. C., missed qualifying in the Championship flight of 32. His 81 was one stroke above the play-off score. The 1958 runner-up, John Dawson, brother of George, did not compete.

Espie led a strong contingent of Indiana players, five of whom qualified in the Championship 32.

With no handicap limit for the first time, the entry list increased from 370 to a slightly higher record of 391. Among the qualifiers at Memphis was Charles Evans, Jr., of Chicago, former Open and Amateur Champion.

It was an unusually happy golfing party—and that is saying a good deal, for seniors invariably have jolly tournaments. The Memphis Country Club provided the most hospitable home possible. The warmth of fine feeling in this club is proverbial, and George Treadwell, the General Chairman, James P. Robinson, the President, and their colleagues are to be thanked for another splendid contribution to the game. This was the third USGA Championship at the Club, the others being the 1937 Women's Amateur and the 1948 men's Amateur. The course was never better; Superintendent Jimmy Hamner has some wonderful putting greens of Tifton 328 bermudagrass. The new clubhouse is a showplace.

"THE HAPPIEST MOMENT . . ."



J. Clark Espie, of Indianapolis, is telling how it feels to be the USGA Senior Amateur Champion for the second time. Standing at left is William McWane, Chairman of USGA Senior Championship Committee. Seated, from left: James P. Robinson, President, Memphis Country Club; Max Holden, member of Club Committee; J. Wolcott Brown, of Manasquan, N. J., runner-up to Espie; Mrs. Brown; George Treadwell, General Chairman of Memphis Country Club Committee for Championship. The permanent Championship Trophy was presented by Frederick L. Dold, of Wichita, Kans., former member of USGA Executive Committee.

For non-qualifiers in the Championship division, there were consolation match play flights of 16, and the finals resulted as follows:

First Sixteen—Mark Robertson, Memphis, defeated Maurice R. Smith, Kansas City, 3 and 2.

Second Sixteen—Paul A. Dunkel, Ridge-

wood, N. J., defeated Elfred Beck, Tulsa, 5 and 3.

Third Sixteen—George E. Hale, Albuquerque, N. M., defeated Dr. Millard S. Rosenblatt, Portland, Ore., 4 and 3.

Fourth Sixteen—G. Douglas Henderson, Oakmont, Pa., defeated Gerald D. Bert, Seattle, 6 and 5.

18-Hole Score Needed

Handicap Decision 59-6

Reference: Men: Sect. 4-3

Women: Sect. 14-3

Q: Some of our members, particularly in the early spring, play less than 18 holes during a round. This may be due to squalls, low temperatures or lack of stamina. These incomplete rounds range anywhere from 9 to 17 holes. There is a difference of opinion as to whether these incomplete games should be acceptable as an incomplete scorecard for handicap purposes.

Section 14-3 of The Conduct of Women's Golf provides that, in no more than two holes where a player has picked up without concession, the handicapper may record scores as two

or three over par, depending on the player's handicap. When there are more than two pick-up holes in a round, the score itself should not be used in handicap computations, but the round should be noted in the player's scoring record as "No Card."

Should these incomplete scores be recorded as "No Card?"

Question by: Mrs. Paul Watson
South Bend, Ind.

A: When players play less than a full 18-hole round, they do not have a sufficient score to provide worthwhile information for handicap purposes. Therefore, such scores should be ignored and should not be entered in any form in their handicap scoring records.

JOHN G. CLOCK NOMINATED FOR USGA PRESIDENCY

Three new nominees
for Executive Committee

John G. Clock, of Long Beach, Cal., for nine years a member of the Executive Committee, has been nominated for the presidency of the United States Golf Association in 1960.

The nomination, made by the USGA Nominating Committee, will be considered January 30 at the Annual Meeting of the Association in New York.

Others nominated as officers are: Vice-Presidents—Emerson Carey, Jr., of Denver, and John M. Winters, Jr., of Tulsa, Okla.; Secretary—Clarence W. Benedict, of White Plains, N. Y.; Treasurer—William Ward Foshay, of New York.

Mr. Clock has served for two years as a Vice-President. Mr. Carey would move to a vice-presidency from the treasurer-ship, and Mr. Foshay would become Treasurer. Mr. Winters and Mr. Benedict would serve in current positions.

New nominees for the Executive Committee are: Edwin R. Foley, of Oakland, Cal.; Henry H. Russell, of South Miami, Fla., and A. Vinton Stegeman, Jr., of Ft. Thomas, Ky.

John D. Ames, of Chicago, has served the last two years as President and will retire from that office and from the Executive Committee. The other members of the Executive Committee—William McWane, of Birmingham, Ala., and Richmond Gray, of Richmond, Va.—have made themselves unavailable for renomination.

Executive Committeemen renominated are Messrs. Clock; Benedict; Carey;

Foshay; Winters; Fred Brand, Jr., of Pittsburgh; William C. Chapin, of Rochester, N. Y.; Charles C. Clare, of New Haven, Conn.; Harry L. Givan, of Seattle; Hord W. Hardin, of St. Louis; Harold A. Moore, of Chicago, and Bernard H. Rider, Jr., of St. Paul.

Philip H. Strubing, of Philadelphia, has been renominated to be General Counsel.

Nominations were made by a committee of Richard S. Tufts, of Pinehurst, N.C.; F. H. Corrigan, of Minneapolis; Stuart A. Heatley, of San Francisco; Robert K. Howse, of Wichita, Kans., and Charles M. Pyle, Jr., of Boston.

Isaac B. Grainger, of New York, was nominated to head the 1961 Nominating Committee of Ben Lee Boynton, of Dallas; John W. Roberts, of Columbus, Ohio; Julian H. Roberts, of Augusta, Ga., and James M. Royer, of Chicago.

Mr. Clock has served as Chairman of the Membership, Senior Championship and Amateur Status and Conduct Committees. He is a former President of the Southern California Golf Association and of the California Golf Association.

Earlier this year he received the Southern California Professional Golfers' Association Award of Merit. He also is an honorary life member of the Southern California section of the PGA.

Mr. Clock is a member of the Fellows of the American Bar Foundation, and of the Virginia Country Club.



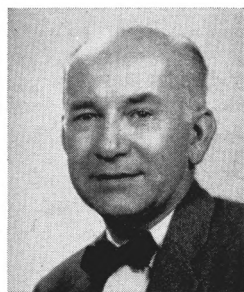
John G. Clock



Edwin R. Foley



Henry H. Russell



A. V. Stegeman, Jr.

A CLASSIC AMATEUR BENEATH THE ROCKIES

By

JOHN P. ENGLISH

The final had the ingredients of classic drama.

On one side was Charlie Coe, of Oklahoma City, Okla., the defending champion, already a winner on two previous occasions, captain of the Walker Cup Team and a man who melded great native skill with the experience of 35 years.

On the other was Jack Nicklaus, of Columbus, Ohio, a boy wonder in his early 'teens, the baby of last spring's Walker Cup Team, a strong contender—but still a boy of 19.

It might not have been hard to choose between them. Crowds almost invariably are susceptible to the appeal of a young athlete challenging an entrenched veteran.

This time it was hard, though.

Charlie Coe is one of the most gentlemanly and popular golfers in the distinguished history of American amateur golf—and here he was, seeking his third victory. If he succeeded, he would be the first since Bob Jones to win so many. (Jones and Jerry Travers won four times each, Walter J. Travers won three times.)

Jack Nicklaus has the same gentlemanliness and sportsmanship, plus the attraction which challenging youth always generates.

One could only cheer for both and hope it would be a good match. It was just that and 3,500 saw the classic at Broadmoor Golf Club in Colorado Springs, Colo.

Coe, fired to a high pitch, started the final by rolling in a slippery, downhill 35 footer for a birdie 3 on the first green.

Nicklaus countered by holing a 15 footer for a birdie 3 on the second, and Coe put a 14 footer in on top of it for the half, to remain 1 up.

Both easily carried the pond in front of the third green and made 4s for another half in birdies.

At this point, while the dew was still heavy on the fairways, Coe had started birdie-birdie-birdie and was only 1 up. Or to put it another way, Nicklaus had started par-birdie-birdie and was 1 down.

Wild horses could not have torn the gallery away from this one, although, of course, the initial velocity could hardly be maintained.

Coe did, however, complete the morning round in 69, two under par, and enjoyed a two-hole lead as he took his iced tea, heavily sugared, at noontime. Or to put it another way, Nicklaus had played the round in par 71 and was 2 down.

Errors on two of the first three holes in the afternoon cost Coe his entire hard-earned lead. He pulled his drive into the woods on the first hole, and he failed to get home in two to match Nicklaus' birdie at the third.

Although Coe drew ahead again by holing a five footer for a birdie 3 at the sixth, he erred seriously once more on the 220-yard twelfth, where he hit the green and then three-putted from twenty-five feet, allowing Nicklaus to win with a chip and a putt and square the match a second time. Nicklaus was playing at a one-under-par clip to this point and allowing no leeway for such mistakes.

It was still even, after one more exchange, as they came to the final hole, a 430-yard monster with a fairway which slopes to the right and a pond which can catch a careless, long tee shot.

Both played straight down the fairway, safely short of the pond.

Coe played the odd with a No. 8 iron. His ball flew true but a little low. While it landed only a third of the way onto the green, it skidded all the way over and trickled down into the rough in a depression behind the green.

Nicklaus then played a No. 9 iron—and masterfully. His ball hit and came to an abrupt stop about eight feet short of the hole, dead on the target.

Coe faced a difficult chip from long grass, up over a banking to a green which sloped away from him. It had to be a perfect shot—and it was.

The ball lofted lightly out of the grass, landed just on the green and trickled



Runner-up and former Champion Charles R. Coe, right, congratulates the 1959 Amateur Champion Jack Nicklaus.

slowly but ever so surely toward the center of the hole.

The gallery instinctively drew in its breath and prepared to let out a roar. It seemed, almost surely, that the old master had holed his chip for a birdie 3, stretching Nicklaus' putt into one of the longest eight footers in history for a half to keep the match alive.

But the roar never came. As abruptly as if someone had slammed on brakes, the ball stopped on the very brink of the hole, looking down into it but not falling.

Both players stepped up to see whether there was any chance that it might be moving almost imperceptibly. After only a quick look, Coe made the decision that it was not.

So it became Nicklaus' turn to putt, and his putt now was a somewhat easier one for a win and the Amateur Champion-

ship, rather than for a tie and extra holes.

While the gallery hushed, he looked the line over with great care, tested his stroke several times and then knocked his ball squarely into the hole to become, at 19 years and 8 months, the second youngest Amateur Champion, by a margin of 1 up. Nicklaus' score for the afternoon round was a two-under-par 69, matching Coe's morning round. Coe faded to a 73.

The youngest winner, incidentally, was the late Robert A. Gardner, of Chicago, who won in 1909 at the age of 19 years 5 months while a student at Yale. Nicklaus is a pharmacy sophomore at Ohio State. The only other 19-year-old winner was the late Louis N. James, who won in 1902 at the age of 19 years 10 months.

For sheer excitement and drama, the match reminded old hands of the 1936

final when young Johnny Fischer finished with three successive birdies at the Garden City (N.Y.) Golf Club to beat Jack McLean, of Scotland, on the 37th hole. Of course, there was nothing dull about Gene Littler's victory over Dale Morey in 1953 at the Oklahoma City Golf and Country Club. Leading 2 up with three holes to play, Littler lost the next two holes to birdies and then made a twenty footer for a birdie of his own on the last green to win the title, 1 up.

Veterans at the Broadmoor had some difficulty in recognizing the course as set up for the first Amateur Championship in Colorado. Broadmoor prides itself on its long, tangled rough and icy fast, undulating greens. Normally, fairways are generous, but he who leaves them does so at a real peril and the key to success is everlastingly to place one's approaches so the ball stops below the hole. However, for the Amateur the rough was cut back to the traditional four inches, with borders shorter, and the mowers were raised a trifle to slow a couple of the more sloping greens.

This changed the character of the course and confounded some of those who figured to have an advantage in local knowledge. But it didn't appear to make it any easier. Par golf would still get a fellow a long way.

Coe and Nicklaus may have benefited particularly from the editing of the rough since they do not always rank among the world's straightest drivers.

Coe, as a westerner who has vacationed and played at the Broadmoor many times over the years, showed the advantages of familiarity with greens, although he is invariably a fine putter, as witness his play in the quarter-finals against William Hyndman, III, the 43-year-old Philadelphian who so richly deserves a Championship some day.

After losing a stroke to par on the first hole, Coe putted superbly and hit the turn in 34, two under par, at which point he was 3 up. Then, to spice the punch, he holed birdie putts for 3s on the tenth and eleventh to go four under par and 5 up with seven holes to play.

It was now or never for Hyndman, and he rallied magnificently. A 2 on the short twelfth and a birdie 3 on the thirteenth cut Coe's margin to 3 up again. A par 4 won the fifteenth, when Coe for once

three-putted, and a six-foot putt for a 2 won the sixteenth. At the eighteenth tee, Coe was only 1 up and holding on for his life.

Neither hit the right drive off the eighteenth tee, and both were in the rough. Hyndman's ball nestled at the bottom of a thick, tangled clump of wet grass which gave him little chance to bring off his shot, and his mighty effort only knocked his ball into the pond guarding the green. Coe, from a more fortunate lie, played safely onto the green, whence he had two putts for a 68, and that was the match.

Nicklaus' semi-final victory over Gene Andrews, of Los Angeles, Cal., the 46-year-old veteran who spends the practice days compiling notes on the course and then plays out of his notebook, was another of the great give-and-take matches of the week. Nicklaus went 3 up by doing the course in 70 in the morning, but Andrews won four of a run of six holes to pull even at the ninth tee in the afternoon. Nicklaus won the ninth with a conceded eagle 3, but Andrews came back with a birdie and a par to win the tenth and eleventh and go ahead by a hole. Nicklaus then made birdie 3s on the thirteenth and fourteenth to regain the one-hole lead which he held to the end. His score for the afternoon round was 76.

Coe had a less hectic semi-final with young Dudley Wysong, 20, of Dallas, who was in the process of transferring from the University of Houston to North Texas State. Wysong had a muscle hemorrhage behind his right shoulder and when he did settle down it was too late to get back in the match. Coe won, 6 and 4, with three-over-par golf.

Weather in Colorado Springs generally was comfortable, clear and beautiful except for a freak cloud-bank and icy rain which enshrouded the course on Thursday and delayed the round of sixteen and quarter-finals. Although play started on time, the fog thickened steadily and three of the eight morning matches finally were suspended with two or three holes to play. The other five matches were played out by the players' choice despite the murk. Teh fog lifted enough to permit the three suspended matches to finish in early afternoon, however, and the quarter-finals, although delayed, were finished before dusk fell.

Similar delays due to fog were encountered at the Baltusrol Golf Club, Springfield, N.J., in 1946 and at the Knollwood Club, Lake Forest, Ill., in 1956.

The only matches which had to be carried over were the last few of the first round on Monday. Darkness falls early in Colorado, where there is no daylight saving time, and even though the first round was started at 7:30 A.M. they were cut off near the finish and had to complete their matches on Tuesday morning.

The losing quarter-finalists, in addition to Hyndman, were:

David (Spec) Goldman, 50, of Dallas, Texas, the runner-up in 1934, who lost to his fellow-townsmen Wysong, 3 and 1;

Charles W. Harrison, 28, of Atlanta, the current Georgia Champion, who bowed to Andrews, 1 down; and

Richard Yost, 29, of Portland, Ore., a member of the 1955 Walker Cup Team, who lost his clubs in a clubhouse fire just before the Championship but won five matches with a borrowed set before yielding to Nicklaus, 2 and 1.

On his unassuming way to the quarter-finals, Goldman beat Richard Crawford, 19, of El Dorado, Ark., and the University of Houston, the Southern Amateur Championship and National Collegiate Athletic Association Champion, 4 and 3; Roger T. McManus, of Cincinnati, Ohio, a semi-finalist last year, 4 and 3; and E. Harvie Ward, Jr., of San Francisco, Cal., the 1955 and 1956 Champion, in the round of sixteen, 3 and 1.

Harrison and Yost both beat current Walker Cup players in the round of sixteen. Harrison defeated his fellow-Georgian, Thomas D. Aaron, of Gainesville, 4 and 2, and Yost stopped Dr. Frank M. (Bud) Taylor, of Pomona, Cal., 3 and 1.

Billy Joe Patton, of Morganton, N. C., another Walker Cup player and perennial favorite of the galleries, kept his supporters in high hopes through three rounds but fell in the fourth before 45-year-old Tom Draper, of Royal Oak, Mich., 4 and 3. Draper also took out Rep. Jack Westland, of Everett, Wash., the 1952 Champion, 1 up, in the third round, and equalled the best first-nine score of the week, a 32, in disposing of Ron Moore, of Denver, Colo., 4 and 2, in the second round.

Ward Wettlaufer, of Buffalo, N. Y., one of the four Whiz Kids of the Walker Cup team, was eliminated, 2 and 1, in the very first round by Robert W. Allen, of Pawtucket, R. I. Deane Beman, of Washington, D. C., another of the Whiz Kids and reigning British Amateur Champion, also lost his first match, after drawing a bye. Dee Replogle, of Oklahoma City, Okla., a solid veteran of 40 years, beat him with par golf, 4 and 3.

Among others who vanished from the competition in the hurly-burly of the first four rounds, during which the field was cut from 200 players to 16, were Dr. Edgar R. Updegraff, of Tucson, Ariz., the Western Amateur Champion, a 2 up victim of Robert A. Brue, of Milwaukee, Wis., in the first round; Brue himself, the national leader in sectional qualifying, a 4 and 3 victim of Richard Davies, of Pasadena, Cal., in the third round; William A. Wright, of Seattle, Wash., the USGA Public Links Champion and first Negro to play in the Amateur, a 2-and-1 victim of Robert W. Knowles, of Aiken, S. C., in the first round.

The oldest player once again was the smiling former champion, Charles Evans, Jr., of Chicago, who won in 1916 and 1920. Chick was 69 last July 18. This was his 47th consecutive Amateur; the string began at Cleveland, Ohio, in 1907. Since then he has played 91 matches, winning 57 and losing 34. The 34th loss came at Broadmoor when Don Hoenig, of Wethersfield, Conn., current New England Amateur Champion, beat him in the second round. Chick had received a first round bye.

Chick's return to Broadmoor was a sentimental occasion in another respect. He played in the exhibition which opened the original Broadmoor course on July 4, 1918.

The youngest player was Bob Littler, a 16-year-old high school boy from Athens, Ohio, who won his first-round match.

Broadmoor is used to entertaining and has outstanding facilities for it. The President of the Club, Thayer Tutt, and the General Chairman, L. B. (Bud) Maytag, displayed the ultimate in efficiency and hospitality, and the players responded with sincere and generous compliments. Everyone hopes to return another day.

GOLF IN AUSTRALIA

By

J. VICTOR EAST

Where there's golf there's a Scot.

John Reid, a transplanted Scot started golf on a permanent basis in the United States in 1888.

Likewise, the Honorable James Graham pioneered the game in Australia in 1847.

From that early beginning in Australia, interest in the game there has so grown, except for a temporary lull, that the number of players exceeds that in the United States on a per capita basis. And well it might be because Australia is geographically located to provide pleasant all-year playing conditions.

In point of fact the National Championships and other important events are held during the Australian winter, which is simultaneous with our summer.

To appreciate the favorable golfing circumstances, it should be known that the main centers of population for the most part are along or quite near the shores of the semi-tropical continent so that even in mid-summer heat the ocean breezes make the playing of out-door sports comfortable.

The proximity of the principal cities to the sea further enhances golfing pleasure in that the terrain is to a considerable extent made up of linksland so very desirable for developing the skills of the game.

As an example of what golf is like in Australia, there are ten courses near Melbourne on the eastern shore of Port Phillips Bay. Metropolitan, within an easy fifteen minute motor drive from the city, adjoins the next course and the other eight come in pretty close succession. Of the ten, five are of championship calibre.

Perhaps there's no other place in the world where the natural conditions contain so much excellent golfing terrain. The nearest comparable golfing condition known to me in the United States is the Monterey Peninsula, on the Pacific Coast, upon which, of the fine courses there, is the famous Pebble Beach Links.

The foregoing comment upon similarity between places north and south of the

equator is intended to convey the impression that golf is very much alike in both places. Any difference could well be said to come from the relative closeness of Australia to the Antarctic, the windy influence of which makes playing a bit more rugged at times.

Since it is my purpose to give the reader a fairly general knowledge of Australian golf, that is, how and when it started, what has happened since or what has made it tick, it should be set down that the administration of the game lies with the Australian Golf Union, which functions quite like the United States Golf Association does in governing the game in the United States.

Perhaps it would be amiss for me—with constructive intent—to point out that one of the courses in New South Wales, currently classified as of Open Championship standard, was when I carefully went over it about seven years ago quite out-moded because of failure to recognize the increased carrying capacity of the modern ball and the companion advancements in clubs. Having the immediate foregoing in mind it would be my suggestion the Australian Golf Union make sure the championship course specifications be kept abreast of the International Standard, for if not, it could be that their Open Championships, from time to time, will fall below outside competitive levels.

The Australian Golf Union is supplemented by the Ladies Golf Union which has for ever so long been a strong supporting influence for the general betterment, as has also the Professional Golfers Association of Australia.

Harmony and complete co operation between the Australian Golf Union and the professionals were only arrived at after the formation in 1906 of the Professional Golfers Association. The earlier circumstances were not dissimilar to those which then applied in Great Britain, in that when professionals competed with ama-

teurs, the off-the-course facilities for personal hygiene were far from equal. This inequality was so keenly resented by the professionals, they banded together, set up their own association and informed the amateur body that a change was desirable and expected.

So much for the early background of Australian golf.

From here on it will be my endeavor to explain something about how the mechanical techniques of stroke making have evolved to the point of where Australian players have come into prominence in international golf, notable in winning the Eisenhower Trophy, emblematic of the World Team Championship, at St. Andrews, Scotland, last year.

The early pattern of stroke making in Australia was set by two British professionals, Richard Taylor, of Hoylake, and James Scott, of Elie. The former had been brought out in 1891 by the Melbourne Golf Club, and shortly thereafter Scott was engaged by the Sydney Golf Club.

The next influence was that of the great triumvirate, Taylor, Vardon and Braid, who in more or less that order for the period of 1894 to 1914 dominated the British Open Championship.

The last and present influence is American.

Just how these separate influences worked could first be described by stating that James Scott by having a natural, easy-to-acquire swing brought on a rapid efficiency in the converts to the then new game, and it should perhaps be pointed out the ball of the time was the solid gutty which, unlike its successor, the rubber core, had to be struck quite truly in getting it to fly far and sure. Scott's swing contributed greatly to the thrill of getting the gutty up and away to good distance as it did to simplifying the control for direction.

As just one example of the Scott stroke making and teaching technique, one of his pupils, E. P. Simpson, broke the Royal Sydney Golf Club record within the first year after starting to play and during his third season won the New South Wales State Amateur Championship.

Although many other British professionals followed Taylor and Scott to Australia, they were almost universally disciples of the triumvirate and principally of Vardon. Unfortunately, they taught the

NEW MEMBERS OF THE USGA

REGULAR

Westwood Country Club	Ind.
Riverview Country Club	Kans.
Biddeford Saco Country Club	Maine
Pine Ridge Golf Club	Md.
Turf Valley Country Club	Md.
Cheboygan Golf and Country Club	Mich.
Naticpo Country Club	Miss.
Pass Christian Isles Golf Club	Miss.
Woodstock Country Club	N. Y.

ASSOCIATE

Macktown Golf Course	Ill.
Turner's Lodge and Golf Course	Okla.

techniques attributed to him, as had been erroneously interpreted from the high-speed pictures taken about the turn of the century.

Briefly put, the errors in description of these early high speed shots came from the selection of key positions, such as the address, half-way up, top of backswing and so forth. A leading British writer stated, for example, that, in getting the club started from the ball, certain localized actions were responsible. They were followed by other local movements in getting to the top of the back swing, while other independent actions returned the club to and on through the ball to the finish.

By actual fact Vardon had a united and spontaneously complete movement of his whole figure. The pictures showed this, but the interpreters not only described it as being composed of separate parts but asserted it included movements which did not fit into the whole pattern.

This was a decadent period for Australian golf, and it was not until the so-called synthetic swing was replaced by the one-piece swing that Australia came out of its slump. The leading exponents of the change were Joe Kirkwood, followed by Jim Ferrier and later Peter Thomson.

With particular reference to Peter Thomson, as a very young boy he was coached by Jimmy Grace, who was in the United States for eight years (1922-1930) and played with many of America's greatest players, including Walter Hagen and Bob Jones, before returning to his native land.

Jimmy himself was a highly proficient player and though troubled with epilepsy, which kept him out of competitive events,

was the record holder on every course wherever he had played. He had, shall I say, a "fluid" swing, and luckily came into the game after Australians had experimented with and discarded the "synthetic" one.

Since the coming of Joe Kirkwood and other leading Australian players there have been other things which have helped to communicate the American simplified technique of stroke making, notably the visit by the first American team of professionals in 1934, the tours of Walter Hagen, and Gene Sarazen, (he; Gene, won the Australian Open Championship in 1936). Additionally many leading tournament professionals, including Ryder Cup players, have accepted invitations from the great promoter of Australian Golf, Mr. George Wakeley, to take part in the annual Ampol Tournament.

The impact of the form displayed by the visiting professionals upon Australian golfers, especially the up-and-coming ones, has been of great help in understanding and acquiring the simplified technique of stroke making.

In passing it might be noted modern travel by air between countries is a great help to athletes in maintaining physical condition, previously ocean travel to or from Australia was about 3 weeks—lots of time to go stale at sea, besides the added ashore problem of getting one's "land legs." Now-a-days, the time for such a trip is reduced to less than 2 days.

As seen by me the foregoing, though sketchily put together, represents much of the background of golf in Australia. As to the future, I would say that this great land under the Southern Cross, blessed as it is with an all year out-of-doors climate, with much in the way of natural facilities for play, and ample material wealth to support participation in recreational activities will produce golfers who will be found worthy in the international field and they will not be unlike some of their people who hitherto became world champions in boxing, sculling, cycling, track, etc; and more recently have set new world's records in swimming and running as well as achieving considerable success in Davis Cup Tennis.

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MISS BARBARA McINTIRE

A DESERVING CHAMPION

USGA Amateur Title
Rewards Long, Patient Quest

Sometimes it must appear that a national golf championship is held for the exclusive benefit of the winner. All attention is finally focused on him, and his name and fame live preeminent in the records and in public memory.

In the USGA Women's Amateur Championship, there are 127 losers; they expend much effort and money in attending. Dozens of members of the entertaining club devote thousands of hours, gratuitously, to prepare for the event, and the club underwrites considerable cost.

Why? Surely there must be values beyond the determination of a Champion.

For the players, there is the great sport of keen competition among the best—the joy of reviving friendships and making new ones with people from all over the country, and some from abroad—the simple fellowship of like-minded people interested in a wholesome sport.

For the host club, there are rewards in the pleasure of entertaining happy and appreciative guests, and in contributing to the ongoing welfare of golf.

In short, the original idea of a national championship as being a golfing party among friends still animates the occasion, even though there are the newer elements of wide public attention and prestige for the winner.

The Women's Amateur Championship nowadays has a particular zest since many of the prominent players are delightfully refreshing girls and young ladies who have recently come up through the USGA Girls' Junior Championship, which started in 1949.

And now, for the fifth time in the last six years, one who has come up through the Girls' Championship is the Women's Amateur Champion. If, contrary to the basic idea, the Championship had been staged for her especial benefit, there might have been a measure of justice in it, for Miss Barbara McIntire had been denied USGA titles on three other oc-

casions when she was just one last step away. She played in the first Girls' Championship and was twice runner-up (1951-52). She tied for the Women's Open Championship in 1956, only to lose a play-off to Mrs. Kathy Cornelius, a professional.

The first time Miss McIntire played a match in the Women's Amateur, in 1950 as a girl of 15, she eliminated the six-time Champion, Mrs. Glenna Collett Vare, in the opening round. She has compiled a splendid record, including membership in our Curtis Cup team and the Western Amateur title last year. But she had never gone as far as the semi-finals of the Women's Amateur until this past August at the Congressional Country Club near Washington, D. C.

Now, at age 24, after long deferment, Miss McIntire is National Champion, and a most becoming one. She is a quiet and modest young lady, pretty and dimpled. In late years she has lived in Lake Park, Fla., where she is a real estate agent; she was raised in Toledo, Ohio, and is a graduate of Rollins College. Miss McIntire and her parents, especially her mother, have been members of the USGA championship family for a long while, and it was pleasing to see them finally take a gold medal home.

Miss McIntire stands in the tradition of those Champions who could rise to inspired heights under stress. She was 3 down in both her quarter-final and semi-final matches. In the final she was 1 up after 18 holes and after 22 holes, then played the rest of the match in one better than par for a 4-and-3 victory over Miss Joanne Goodwin, of Haverhill, Mass.

Miss Goodwin is a petite young lady of 23 who, up to the final, had played perhaps the best golf of the field:—three over par for 96 holes in six matches. She had defeated Miss McIntire twice in Southern tournaments earlier in the year, and tied Miss McIntire for second amateur prize in the USGA Women's Open. But her cross-handed putting touch de-



Finalist Joanne Goodwin, left, and Women's Amateur Champion Barbara McIntire.

served her in the final at Congressional.

Miss McIntire had two great wins just before the final, both in extra holes. Her quarter-final match with Miss Anne Quast, the defending Champion, was a classic.

Miss McIntire had been 2 up after five holes, then had to watch Miss Quast play the next seven in three below par to go 3 up. Three down and 6 to play against Anne Quast is a fearsome position. Barbara McIntire surmounted it. She squared on 16. Miss Quast won 17, and was 1 up. On the par-3 home hole Miss Quast pushed her tee shot to an atrocious lie, and so they went extra holes. Miss McIntire's par 3 on the 20th was good enough to win when Miss Quast's putt for a 3 died just short of the cup.

Miss Quast in her Championship victory of 1958 had won three matches after being 3 down, and now Miss McIntire caught the idea. In her semi-final she was three holes in arrears at the turn, then had an inspirational surge with a 35 coming

home, three below par. Her opponent, Mrs. Paul F. Klinefelter, Jr., of Philadelphia, kept the match alive with a thrilling bird 2 on the home green, only to fall victim to Miss McIntire's par on the 19th.

Mrs. Klinefelter was a remarkable competitor in her first Championship in some twelve years. One of her victims was Miss JoAnne Gunderson, the 1957 winner.

The other semi-finalist was another Philadelphian, Mrs. Mark A. Porter, Jr., titleholder in 1949. Her conqueror at Congressional was Miss Goodwin.

It is worth noting that the last five Champions have remained amateurs. Of the nine winners between 1946 and 1954, six became professionals.

The Congressional Country Club was a most hospitable host. Sincere gratitude is hereby recorded to the Club's committees, headed by Frank Murphy, Jr., as General Chairman; Dr. Luther Gray, the President; and the excellent staff, of which A.E. Martin is Manager, with Wiffy Cox as Professional.

COUNTRY CLUB OPERATIONS IN 1958

By

JOSEPH H. NOLIN, C.P.A.
Member of the firm
of Horwath & Horwath

The large country clubs were again the only group to have dues available for members' equity in 1958, according to our tenth annual study of country club operations. Not only did the small and medium-sized clubs show deficiencies in the dues available for members' equity but these deficiencies were greater than in 1957. On the other hand, the large clubs fared better than in the preceding year. The clubs supplying operating data for this study are divided into the following groups:

- 16 small country clubs, each with membership dues income of under \$100,000 (including a regular assessment in one of the clubs);
- 23 medium-sized country clubs, each with membership dues income of between \$100,000 and \$200,000 (including regular assessments in five clubs);
- 11 large country clubs, each with membership dues income of between \$200,000 and \$300,000 (including regular assessments in four clubs); and

This study is similar in scope to those of the four preceding years and is based on all but two of the clubs included in "Country Club Operations of 1957." However, there has been some rearrangement of the clubs according to total dues and assessments. Since dues are the principal source of club income, they are the most common, acceptable basis for comparing operating data. Income from regular, or recurring assessments has been added to dues because it is similar in nature to dues. Only assessments which for all practical purposes are dues have been included.

On page 20 is a summary of the average operations of the three groups expressed in relation to dues and assessment income for both 1958 and 1957.

Operating Costs Increase

The small and medium-sized clubs showed sharp decreases, in both amount

and ratio to total dues income, in the dues available for depreciation in 1958, compared with 1957. In the small clubs the net costs of the clubhouse operations and outside activities were higher than in 1957 in spite of increases in total sales and other income.

There were also rises in the net cost of clubhouse operations and outside activities in the medium-sized clubs, which were only partially due to the decline in total sales and other income recorded by the group. The small clubs showed a slight decrease in fixed charges from the preceding year, while the medium-sized clubs showed an increase. The large clubs had more dues available for depreciation in 1958, but, as the increase over 1957 was proportionately the same as the increase in total dues and assessment income, there was no change in the ratio to dues.

Although the total sales and other income of the large clubs were 2 per cent higher than in the preceding year, there were rises in the costs of clubhouse operations and outside activities. The increase in total dues and assessment income, however, effected decreases in the ratios of these expenses to dues, but these apparent reductions were offset by the rise in fixed charges.

Depreciation and Rehabilitation

The average depreciation charges were higher than in 1957 in all three groups of country clubs, but in the large clubs the ratio to dues showed a decrease. Rehabilitation expenditures and/or reserves were down sharply from the preceding year in the large clubs. The small clubs also recorded a decrease, while the medium-sized country clubs showed a decrease only in the ratio to dues. However, the averages were distorted by heavy improvement and rehabilitation programs in several of the clubs. The funds for such heavy expenditures came from special gifts, assessments, initiation and

SUMMARY OF OPERATIONS, 1958 AND 1957

	16 Small Country Clubs (Dues* of \$100m) 1958 1957		23 Medium Country Clubs (Dues* of \$100m to \$200m) 1958 1957		11 Large Country Clubs (Dues* of \$200m to \$300m) 1958 1957	
Membership dues.....	\$ 77m	\$ 75m	\$ 137m	\$ 129m	\$ 239m	\$ 225m
Assessments.....	20 ^b	20 ^b	37 ^b	41 ^b	52 ^b	40 ^b
Total.....	\$ 78m	\$ 76m	\$ 145m	\$ 138m	\$ 258m	\$ 240m
SUMMARY OF OPERATIONS						
Income from dues and assessments.....	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Deduct cost of operations (Bold type represents net income)						
Clubhouse (detail below).....	34.8	33.5	43.7	40.7	41.5	41.6
Golf and grounds—net.....	41.2	39.1	29.5	31.3	24.5	25.0
Swimming pool—net.....	1.9 ^b	2.1 ^b	1.4 ^b	1.3 ^b	.8 ^b	.7 ^b
Tennis—net.....	1.4 ^b	1.1 ^b	2.6 ^b	2.4 ^b	1.9 ^b	1.9 ^b
Other outdoor activities—net.....	1.9 ^b	.3 ^b	.4 ^b	.3 ^b	.5 ^b	.5 ^b
Total.....	78.4	74.7	75.3	74.0	68.5	68.8
Net before fixed charges.....	21.6	25.3	24.7	26.0	31.5	31.2
Fixed charges.....						
Rent.....	23.3 ^b	26.0 ^b	16.8 ^b	14.9 ^b	5.5 ^b	5.7 ^b
Taxes and insurance.....	7.0	7.2	12.6 ^b	11.9 ^b	12.2	12.1
Interest.....	7.2 ^b	5.8 ^b	4.4 ^b	4.5 ^b	5.4 ^b	6.3 ^b
Total.....	19.7	20.4	17.2	16.6	16.8	16.5
Dues* available for depreciation.....	1.9	4.9	7.5	9.4	14.7	14.7
Depreciation and/or rehabilitation expenditures or reserves.....						
Depreciation.....	16.5 ^b	15.3 ^b	18.9 ^b	18.0 ^b	10.9 ^b	11.3 ^b
Rehabilitation.....	7.3 ^b	7.6 ^b	12.5 ^b	12.7 ^b	11.9 ^b	13.9 ^b
Total.....	14.8 ^b	14.0 ^b	17.0 ^b	17.5 ^b	13.4	13.7
Dues* available for members' equity.....	r11.4%	r7.6%	r8.9%	r7.6%	1.3%	1.0%
CLUBHOUSE OPERATION						
Departmental profit or loss (r)						
Food.....	5.2 ^b %	5.6 ^b %	r.8 ^b %	r.9 ^b %	.8 ^b %	1.3 ^b %
Beverages.....	31.0 ^b	32.6 ^b	23.7 ^b	25.3 ^b	14.0 ^b	15.6 ^b
Total.....	35.2	36.7	22.3	23.9	13.9	14.2
Rooms.....	4.9 ^b	5.3 ^b	10.4 ^b	12.6 ^b	3.3 ^b	4.7 ^b
Locker rooms.....	r2.1 ^b	r2.3 ^b	r.9 ^b	r1.2 ^b	r1.3 ^b	r1.9 ^b
Other sources of income ^a	4.5 ^b	4.6 ^b	4.3	5.0	5.4	5.9
Total.....	39.1	40.8	28.3	30.9	19.1	19.8
Undistributed operating expenses.....						
Clubrooms.....	11.9	12.1	16.0	15.6	13.9	14.0
Entertainment—net.....	3.9	4.4	3.9	3.6	3.3 ^b	3.2 ^b
Administrative and general.....	39.6	38.5	34.0	34.0	29.3	29.9
Heat, light and power.....	9.8	10.7	8.8	9.3	7.4	8.0
Repairs and maintenance.....	8.7	8.6	9.3	9.1	7.3	6.9
Total.....	73.9	74.3	72.0	71.6	60.6	61.4
Net clubhouse cost.....	34.8%	33.5%	43.7%	40.7%	41.5%	41.6%
FOOD AND BEVERAGE STATISTICS						
Cost per dollar sale.....						
Food (before credit for employees' meals).....	56.8¢	56.6¢	57.4¢	57.5¢	55.2¢	55.7¢
Beverages (exclusive of bottle sales).....	35.6	35.1	33.2	33.8	34.8 ^b	35.4 ^b
Ratios to food and beverage sales.....						
Payroll.....	27.2%	27.2%	31.1%	30.6%	33.7%	33.8%
Departmental profit.....	19.7	20.1	15.8	15.9	11.5	11.2
GROSS MAINTENANCE COST OF GOLF COURSE AND GROUNDS^a						
Per golf course hole.....	\$1858	\$1764	\$2678	\$2679	\$2822	\$2684
Ratio to membership dues ^a	42.9%	40.5%	36.3%	38.0%	25.0%	25.6%

m—thousands. *—All ratios are to membership dues (dues plus assessments in Clubs 10, 22, 26, 29, 31, 33, 42, 46, 47, and 49).

^b—Average only of those clubs reporting this item. *—Income from initiation or entrance and transfer fees is excluded.

^a—Does not include greens fee income nor costs for golf shop, caddies, fixed assets and fixed charges (see explanatory text).

Three clubs have 36-hole courses; four have 27-hole courses; and the remainder, 18, r—red figures.

transfer fees and other sources, all of which are excluded from our study as they do not pertain to regular club operations. In order to show more equitable average ratios for rehabilitation and consequently for dues available for members' equity, we have limited to 20 per cent of dues income the individual amounts of rehabilitation included in the

computation of the averages shown on page 20.

Payroll Rose Faster than Income

The rise in total club payroll over 1957, however, was even greater than the increase in total income, including dues and assessments, in all three groups of country clubs. The restaurant departmental payroll was also higher than in the pre-

ceding year in all three groups, but only in the medium-sized clubs was the increase evident in the ratio to total food and beverage sales. The restaurant departmental profit of the medium-sized clubs reflected the rise in payroll in spite of decreases in the food and beverage costs per dollar sale. The ratio of the departmental payroll to total food and beverage sales showed no change from 1957 in the small clubs, but the ratio of the departmental profit to sales was down as both the food and beverage costs per dollar sale showed rises. Only in the large clubs did the restaurant departmental profit show an improvement, but this improvement, due to cuts in the food and beverage costs per dollar sale, was less than the increase in total dues and assessment income.

Golf Course and Grounds Costs

Only the small clubs showed an increase in the gross maintenance cost of the golf course and grounds, as measured by the average ratios to dues, although the total gross maintenance cost of the large clubs also rose 5 per cent over 1957. While the total gross maintenance cost of the medium-sized clubs was practically the same as in the preceding year, there was a decrease of 1.7 points in the average ratio to dues and a reduction of one dollar in the average cost per golf course hole. These expenses increased \$94 per golf course hole in the small clubs and

\$138 per hole in the large clubs. The table at the bottom of page 00, which summarizes the operating costs per hole of the golf course and grounds, emphasizes the continued advances in these expenses in 1958 in both the small and the large country clubs.

The greens and grounds maintenance payroll, which constitutes approximately 70 per cent of the gross maintenance costs, rose 10 per cent in the large clubs, 8 per cent in the small clubs and 2 per cent in the medium-sized clubs, compared with 1957. We wish to point out, however, that these golf and grounds costs do not include any fixed costs (improvements, additions, replacements or depreciation) nor any fixed charges, such as real estate taxes, property insurance or interest on borrowed capital. The net cost of golf and grounds, after the addition of golf shop, caddie and tournament expenses and the deduction of greens fees and other golf income, was \$1,783 per hole in the small clubs, an increase of 5 per cent over 1957 and one of 2.1 points in the ratio to dues. In the medium-sized clubs, the net cost of golf and grounds was \$2,190 per hole in 1958, a decrease of 1 per cent from the preceding year and one of 1.8 points in the ratio to dues. The net cost per hole in the large clubs was \$2,769, an increase of 6 per cent over 1957 but a decrease of .5 of a point in the ratio to dues since total dues and assessments increased at an even faster pace.

GOLF COURSE AND GROUNDS EXPENSES

COST PER HOLE

	16 Small Country Clubs (Dues under \$100,000)		23 Medium Country Clubs (Dues of \$100,000 to \$200,000)		11 Large Country Clubs (Dues of \$200,000 to \$300,000)	
	1958	1957	1958	1957	1958	1957
Greens and grounds maintenance						
Payroll	\$1289	\$1229	\$1871	\$1827	\$2001	\$1818
Supplies and contracts	385	322	500	493	390	393
Repairs to equipment, course buildings fences, bridges, etc.	130	143	174	203	254	305
Water, electricity and other expenses	54	70	133	156	177	168
Total maintenance exclusive of fixed charges ..	1858	1764	2678	2679	2822	2684
Golf shop, caddie and tourna- ment expenses	273	268	309	321	433	428
Total	2131	2032	2987	3000	3255	3112
Deduct green fees	348	333	797	779	486	494
Net golf course and grounds expense exclusive of fixed charges	\$1783	\$1699	\$2190	\$2221	\$2769	\$2618



THE REFEREE

Decisions by the Rules of Golf Committees

Example of Symbols: "USGA" indicates decision by the United States Golf Association. "R & A" indicates decision by the Royal and Ancient Golf Club of St. Andrews, Scotland. "59-1" means the first decision issued in 1959. "D" means definition. "R. 37-7" refers to Section 7 of Rule 37 in the 1959 Rules of Golf.

Breaking Grass

USGA 59-28

R.17-3

Q: A is playing B in the club championship, match play. A has a good lie in the fairway. While pondering his next shot, he reaches down beside his ball, plucks a blade of grass and places it in his mouth. In no way did he improve his lie.

B then invoked Rule 17-3 and took the hole.

Was B right?

Question by: JOHN MARSHALL
Rices Landing, Pa.

A: No. According to your statement, A did not "improve . . . his line of play or the position or lie of his ball."

Holding Flagstick on Short Putt

USGA 59-26

R. 34-2

Q: Rule 34-2 appears quite clear. However, on several occasions where the player's ball has stopped within a few inches of the hole, the player himself has held the pin with one hand while he putted the ball with the other. This player's

ball then would strike the flagstick. It appears then that the normal penalty for this violation is in order. Many people argue that this case is different. Your comments would be appreciated.

Question by:
BRIG. GEN. STANLEY J. RIDDERHOFF
Newport Beach, Cal.

A: Holding the flagstick constitutes attending it. It is a violation of Rule 34-2 for a player's ball to strike an attended flagstick, and the penalty is loss of hole in match play or two strokes in stroke play. If it were otherwise, the way would be open for a player unfairly to adjust the flagstick.

Exempt Competitors Seek Medal

USGA 59-27

R. 36-1

Q: In a flight of 16 players where you have seeded four people, may these four try on qualifying day for medalist?

Question by: MRS. LOUIS K. CASSETT
St. Louis, Mo.

A: There is no pertinent Rule. The matter is up to the committee in charge (see Rule 36-1), and the committee should announce its decision in advance.

If the four exempt players elect to compete for a prize in the qualifying round, equity would seem to require that they forfeit their automatic qualification and compete on the same basis as all other competitors in that round.

When Ball is Holed

USGA 59-29

D. 20; R. 16, 23-3, 31-1, 34-4

Q1: One of our players chipped a ball onto the green. It came to rest against the flagstick. The player ran up, pulled the flagstick, and the ball came out with the flagstick.

Her opponent told her to putt it out, which she did. She must count the putt, but does she have to add a penalty?

A1: We understand that the ball as it rested against the flagstick did not lie within the circumference of the hole and all of it was not below the level of the lip of the hole; it therefore was not holed—see Definition 4. We further understand that the player, in pulling the flagstick, moved the ball.

Since the flagstick is an obstruction (Definition 20), Rule 31-1 would govern and there would be no penalty. The ball must be replaced on the lip of the hole.

If the ball had fallen into the hole with the removal of the flagstick, the player would be considered to have holed on his last stroke (see Rule 34-4).

Q2: If she picked up the ball as it rested against the flagstick and counted it as in, would she have incurred a penalty of two strokes in medal play or loss of hole in match play?

A2: Yes. See Rule 16 and, for stroke play, Rule 23-3.

Questions by: MRS. RINDA J. STURGIS
Canton, Ohio

Ball Unplayable: Choices

USGA 59-30

D. 30; R. 29-2

Q: A golfer hit her drive off of a tee. The ball lodged in tree roots in the rough. The player chose to try to hit the ball out and stroked at it but missed it completely. She then went back to the tee and played 4 from the tee.

Rules Committee No. 1 said that was wrong, that after whiffing she could

count the whiff as one of the two penalty strokes, drop back and be shooting 4.

Rules Committee No. 2 said she could not go back to the tee but was forced to drop back, counting the whiff as stroke two, taking the two-stroke penalty under Rule 29-2b and be shooting 5. She could not go back to the tee and take stroke and distance but must take the two-stroke penalty because stroke two, even though she did not hit the ball, gave her no place to go back to.

Rules Committee No. 3 said the player had to count the whiff as stroke two and then had the choice of either going back to the tee and hitting 4, or dropping back, counting the whiff as 2, then the two-stroke penalty and be shooting 5; and that she was OK when she went back to the tee and counted her stroke from the tee as No. 4.

After much discussion Rules Committee No. 2 ruling was accepted. Her reasoning was that the player could not go back to the tee because she had taken the second stroke at her ball even though she did not move it and thereby lost her right to go back to the tee.

Question by: MRS. FRANK R. LOVELL
Southfield, Mich.

A: Rules Committee No. 2 was generally correct.

Technically, the player had two alternatives under Rule 29-2:

(a) She could under other circumstances drop a ball under penalty of one stroke, and play her fourth stroke, as nearly as possible at the spot where the ball lay when she made her second stroke, i.e., in the tree roots whence she had failed to dislodge it; or

(b) She could drop and play her fifth stroke, after accepting a penalty of two strokes, keeping the point from which the ball was lifted between herself and the hole.

However, in order to proceed under the first alternative, she would have to drop into a lie where she already had declared her ball unplayable, and so her only practical choice would be the second.

The player clearly made a stroke in her attempt to dislodge her ball from the tree roots (see Definition 30), and this not only counted in her score but also deprived her of the opportunity she had at that point to play again from the tee.

Rule 29-2a requires that she play her third stroke "as nearly as possible at the spot from which the original ball was played . . ."

Time Limit for Claim In Stroke Play

USGA 59-34
R. 11, 33-2, 33-3

Q: On a par 3 hole a water hazard protects the putting green at the front and runs around one side of the green to the rear. The water hazard has not been classified as a lateral water hazard, and there is no published local rule pertaining to it.

In stroke play Competitor A's tee shot crossed the water hazard in front of the putting green and entered the hazard behind the green. It was not possible for Competitor A to observe Rule 33-2a by dropping a ball behind the hazard so as to keep the spot at which the ball last crossed the hazard margin between himself and the hole; the width of the water hazard and the proximity of out of bounds on the far side of the hazard prevented this.

Competitor A asked his fellow-competitor, who was the resident professional, if there were any special rule applicable to a ball in this particular water hazard. The fellow-competitor said it was the custom of the Club to treat it as a lateral water hazard (but there was no special rule to that effect, nor was any special rule published for the competition).

Competitor A thereupon dropped a ball on the green side of the hazard within two club-lengths of the hazard margin, in the manner prescribed in Rule 33-3b for a lateral water hazard, and scored 4 for the hole.

After Competitor A returned his score and had left the Club, Competitor C protested, claiming that Competitor A should have proceeded under the stroke-and-distance penalty provided in Rule 33-2b on the hole in question. Competitor C claimed that Competitor A should be disqualified under Rule 1, since his breach of Rule 33-2 was a serious one (see Note 1 to Rule 33).

The Committee did not settle the question at the time. Meanwhile, the results of the competition as recorded on the scoreboard were published in the press,

with Competitor A the winner and Competitor C second, one stroke behind Competitor A.

Competitor A was not informed of Competitor C's protest until three days after the event.

The Committee is aware of USGA Decision 57-20, which provides in part as follows:

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

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

In view of the lapse of time since the original order of finish was published and the fact that the Committee did not let it be known that there was any question as to the outcome, should the competition be considered closed within the meaning of USGA Decision 57-20?

Question by: CLAUDE HARMON
Mamaroneck, N. Y.

A: It depends upon whether Competitor C's claim was made before the results were officially announced and whether the Committee considered the claim to be in force in the ensuing interval. If the claim was timely made, the Committee must dispose of it.

The purpose of Decision 57-20 is to establish time limits for application of Rules and penalties in stroke play (in the absence of dishonesty). If Competitor C's claim was made before the time limit—that it, before the results were announced—we believe it should be upheld and that Competitor A should be considered to have disqualified himself.

The information given to Competitor A by his fellow-competitor, the resident professional, is irrelevant. Such information could have been effective only if published as a local rule for the information of all competitors.

Competitor A could have protected himself against possible disqualification by playing a second ball as provided in Rule 11-5.



Better Turf for Better Golf

TURF MANAGEMENT

from the USGA Green Section

Fungus Gnat Found To Inhibit Development Of Turfgrass

BY ELIOT C. ROBERTS AND ROBERT LAVIGNE

Associate Professor, Department of Agronomy, and
Instructor, Department of Entomology and Plant Pathology, respectively
University of Massachusetts

Greenhouse experiments conducted at the University of Massachusetts from 1956 through 1958 have revealed an injurious effect of Fungus Gnat *Bradysia impatiens* (Joh.) larvae on the growth of Kentucky bluegrass *Poa pratensis* (Linn.) and Creeping red fescue *Festuca rubra* (Linn.) sod. Growth of both foliage and roots became reduced as the infestation of larvae increased. At no time was an entire culture completely destroyed; however, such thin and weak turf resulted that normal characteristics of quality turfgrass were eliminated. Larvae of the fungus gnat were observed to feed on the fine roots of these turfgrass species.

Turfgrass grown in nutrient solution cultures was found susceptible to a mildly pathogenic fungus of the genus *Cephalosporium**. This organism developed during early sod formation and has been found in the upper root zone and throughout the crowns of the plants. Coincident with the period of fungal development all stages of the fungus gnat *Bradysia impatiens* (Joh.)** were observed. Sufficient gnats were present in the greenhouse during fall, winter and spring to provide an infestation whenever conditions within the cultures were favorable. At such times adult flies gradually increased in numbers over a period of a

week or two accompanied by corresponding increases in numbers of larvae and pupae. These (larvae and pupae) were observed in the culture seedbed and on the upper roots and within the crowns.

Bradysia impatiens (Joh.) is widely distributed throughout the eastern United States. The species breeds abundantly in soil and compost mixtures used for growing greenhouse plants. It has rarely been reported from any other type of habitat. There have been no known previous reports of fungus gnat injury to grasses. Parr et al⁽³⁾ report that larvae have been found feeding on root hairs of greenhouse tomato plants causing growth retardation and collapse of the plant by further tunneling into the stem. Injury to potato tubers has also been reported⁽²⁾. A few species have been known to cause damage to mushrooms in cultivation⁽¹⁾.

Complete control of larvae was obtained by dipping roots in a suspension of chlordane (50% wettable powder mixed at a rate of 0.6 oz. per gallon of water). One treatment provided sufficient residual effect to kill larvae as they hatched during succeeding weeks. It was noted that immediately following treatment, new roots developed and turf resumed normal growth. The standard rate of chlordane for application to turfgrass grown in soil (8 oz. 50% wettable powder

in 25 gallons of water for 1,000 sq. ft.) would be equivalent to that used in these experiments.

Conclusions

Larvae of the fungus gnat *Bradysia impatiens* (Joh.) were found to feed on the fine roots of Kentucky bluegrass *Poa pratensis* (Linn.) and Creeping red fescue (*Festuca rubra* (Linn.)). It was noted that a moist seedbed and the presence of fungus mycelium were necessary for a fungus gnat infestation. Satisfactory control was obtained by use of chlordane in amounts equivalent to recommended rates. Conditions favorable for fungus gnat injury to turfgrass grown out-of-doors are believed to occur less frequently than in the greenhouse; however, chlor-

dane applied at standard rates should provide good control.

References

1. Curran, C. H. 1934. The families and genera of North American flies. The Ballou Press, New York, N. Y.: 118-119.
 2. Gui, H. L. 1933 The potato scab gnat *Pnyxia scabiei* (Hopkins) Ohio Agriculture Experiment Station Bulletin 525: 9-11.
 3. Parr, W. J., Crocker, C. and Speyer, E. R. 1954 A Sciarid Fly Injurious to Seedlings. Thirty-ninth Rep. Exp. Res. Sta. Cheshnut, England: 36-39.
- * As determined by Joseph Troll, Department of Agronomy, University of Massachusetts.
 ** As determined by R. R. Shaw, Department of Entomology, University of Massachusetts.

Golf Course Ponds and Lakes

BY JAMES B. MONCRIEF AND DR. MARVIN H. FERGUSON

Southwestern Agronomist, and Mid-Continent Director, USGA Green Section

Small bodies of water on a golf course contribute to the beauty of the course and in some cases may be involved in the strategy of play. A good "water" hole adds to the interest of a golf course.

Some ponds are completely man made, having been created by the golf course builder who needed a source of soil for construction purposes. Others, of course, may occur naturally or may have been formed by the damming of a water course through the club property.

The building of a lake must be based upon some of the conditions of the surrounding area. Usually, about 25 acres of watershed will provide enough runoff for a one-acre pond. However, this figure will vary with amount and distribution of rainfall, degree of slope, kind and amount of vegetation and other factors which influence the runoff characteristics of an area. Runoff water from an area covered by close growing vegetation is to be preferred over that from areas which may be cultivated. Turfed areas allow relatively little silt to be moved by runoff water.

If ponds are large enough to permit effective management they may be stocked with fish. At country clubs, a stocked lake provides an added form of recreation for members. About $\frac{1}{2}$ acre is the minimum size lake suitable for stocking with fish. On the other hand the management of

lakes larger than 3 acres in size becomes a rather large job.

Fertilization of ponds has come to be an accepted practice. It has been demon-

Table 1

CHEMICAL CONTROL OF THE COMMON EMERGENT AND FLOATING PLANTS

Plant	Control Mixture
Water hyacinth (Eichhornia) Lotus (Nelumbo)	40 percent amine salt of 2,4-D at rate of $1\frac{1}{2}$ gallons of 2,4-D amine salt solution plus $\frac{1}{2}$ gallon of emulsifiable oil to 100 gallons of water per surface acre to be sprayed. Use pressure sprayer.
*Cattails (Typha) Bulrush (Scirpus) Water lilies (Nuphar, etc.) except spatterdock or yellow water lily. Other broad-leaved emergent plants	40 percent amine salt of 2,4-D at the rate of $2\frac{1}{2}$ gallons of 2,4-D amine salt solution plus 2 gallons of emulsifiable oil to 100 gallons of water per surface acre to be sprayed. Use pressure sprayer.
Spatterdock or yellow water lily.	2,4,5-T (4 pounds acid equivalent) at the rate of 2 gallons 2,4,5-T plus 1 gallon emulsifiable oil plus 100 gallons of water per surface acre to be sprayed. Use pressure sprayer.

*Cattails also can be controlled by using 25 pounds of Dalapon (sodium salt 85%) mixed with 100 gallons of water. This mixture is sufficient for spraying 1 acre of cattails.

strated that pond fertilization increases the production of fish, reduces the growth of algae, and eliminates some of the undesirable aquatic weeds.

Walker (3) advocates the use of float-

ing fertilizer distributors. These consist of inverted 5-gallon cans. These cans are partially filled with water soluble fertilizer (Walker found 16 20-0 to be preferable) and depend upon trapped air to

Table 2
TOXICITY OF INSECTICIDES TO FISH

	<u>Concentration</u> <u>p.p.m.</u>	<u>Mortality</u>
1. INORGANICS		
Arsenic Trioxide (sodium arsenite)	2, 6	no reaction by bass, bluegill, crappie, goldfish
	10	33% loss
	20	100% loss after 36 hours
	250	100% loss after 16 hours
Copper Sulphate	1	toxic to yellow and white perch
	10	toxic to goldfish, minnows
2 BOTANICAL INSECTICIDES		
Nicotine	3.3	toxic to fish
Pyrethrum	0.33	death in 3-4 hours
Rotenone	0.5 to 1.0	100% loss
3. CHLORINATED HYDROCARBONS		
Aldrin	0.01	10% loss
	0.02	50% loss, goldfish
	0.032	80% loss
	0.033	100% loss, fingerling trout
Benzene Hexachloride (BHC, 666, HCH, Lindane)	0.05	100% loss, brown and rainbow trout
Chlordane	0.1	50% loss, bass and bluegill fingerlings
	0.05	50% loss in 4 days, goldfish
	0.125	100% loss, goldfish
DDD	0.03	toxicity threshold, bluegill
	1	50% loss, goldfish
	2	100% loss, goldfish
DDT	0.1	100% loss in 12 hours
	0.01	a few fish will survive
	0.005	many fish will be killed
Dieldrin	0.006	50% loss, bass
	0.01	50% loss, bluegill
	0.016	50% loss, brown trout
	0.04	50% loss, golden shiners
	0.006 to 0.25	50% loss, goldfish
Dinitro Compounds		
DNOC	30	probable threshold for rainbow trout
DNOCHP	3 to 5	100% loss, all fish
Endrin	0.0003	50% loss, bass, bluegill, goldfish
	0.0015	50% loss, golden shiners
Heptachlor	0.05 to 0.5	some loss
Isodrin	0.0025	50% loss, bass
	0.006	50% loss, bluegill and golden shiners
	0.0015	50% loss, goldfish
Methoxychlor	0.063	60% loss, goldfish
	0.25	100% loss, goldfish
	0.2	100% loss, bluegill and black bass
Toxaphene	0.1 to 1	100% loss in 9 hours, brown trout
	0.025 to 0.05	80% loss in 48 hours, brown trout
	0.005 to 0.01	killed 1-inch rainbow and brown trout
	0.02	lethal to silverling, minnows, spotfin shiners, creek chubs, dace
	0.01	threshold for bluegills
	0.2	100% loss in 45 hours, bluegill and bass fingerlings, goldfish
4. ORGANIC PHOSPHATES		
Malathion	0.1	toxic to salmon fingerlings
Parathion	0.2	threshold, bluegill fings.
	2.0	100% loss, goldfish
TEPP	0.3	toxic to bluegills
5. SOLVENTS AND ADDITIVES		
Detergents	5	lethal to sticklebacks, carp

keep them afloat. A small anchor of some sort keeps the can in an inverted position. Holes are punched in the submerged part of the can and dissolved fertilizer may diffuse into the surrounding water. Broadcast fertilizer applications were found to encourage aquatic weeds in some cases but the fertilizer distributed by the specially made floats showed some herbicidal effects. This effect was due partially to a large increase in plankton bloom with consequent shading but there also appeared to be some direct toxicity in the case of 16-20-0 fertilizer.

Walker also found that pelleted simazin and a dalapon—2,4-D mixture did not injure fish or fish food species. He found that simazin controlled most submerged weeds. Pelleted herbicides have been longer lasting and more effective than liquid materials.

Weed control is one of the difficult phases of pond management and consequently, a great deal of attention has been given to the matter. Table 1 is taken from Texas Agricultural Extension Service Bulletin B-213 (1).

Algae is a troublesome plant in many ponds. Copper sulfate at a rate of 0.5 to 2 parts per million is a standard treatment. Dichlone has come to be used to a considerable extent, though its use is not as common as that of copper sulfate. To treat at the rate of 0.5 p.p.m., 4.15 lbs. of copper sulfate should be dissolved in each million gallons. The 2 p.p.m. rate requires 16.6 lbs. of copper sulfate for each million gallons.

It is recommended that only about $\frac{1}{4}$ of a pond be treated at one time. Fish may then move to an untreated area. In a few weeks the other sections may be treated.

Because of the widespread use of insecticides and the toxicity of these materials to fish, care must be taken to prevent the introduction of insecticides into stocked lakes. Rudd and Genelly (2) have published data to indicate the relative toxicity of insecticides to fish species. Their findings are shown in Table 2.

Most state agricultural experiment stations or extension agencies have literature relating to pond management. This information is usually prepared from the standpoint of farm ponds, but it will be adaptable to some extent to ponds on golf courses. Making use of available information will help to make your pond a source of greater pleasure with less trouble.

References

1. Cooper, Edwin H., Improve Your Farm Fish Pond. Texas Agricultural Extension Service Bulletin B-213
2. Rudd, Robert L. and Genelly, Richard E., Pesticides, their use and toxicity in relation to wildlife. California Fish and Game Department. 1956.
3. Walker, Charles R., Control of Certain Aquatic Weeds in Missouri Farm Ponds. Weeds 7:3 July 1959.

New Laboratory Facility At UCLA Aids Research

The U.S.G.A. Green Section Research and Education Fund, Inc. makes numerous grants for the purpose of supporting research in turfgrasses. These funds become much more useful when the institution to which they are granted is equipped with adequate facilities for carrying out fundamental studies. The Department of Ornamental Horticulture at the University of California at Los Angeles has recently built and put into use six "phytotrons" which are a part of a rather elaborate greenhouse and laboratory facility.

The following release by the Department of Ornamental Horticulture describes this facility:

"A new laboratory facility has been added to the UCLA campus at 300 Veteran Avenue. This building is dedicated to the quest for knowledge in plant science with particular reference to the ornamental plants. Within this building are facilities which will allow the conduct of studies in plant genetics and in the physiology and biochemistry of ornamental plants.

"The heart of the installation is six controlled environment rooms for plant growing. Each of these rooms will be supplied with dirt-filtered, smog-filtered, washed air at a controlled temperature and humidity. All air from the room will be circulated through an air-conditioning

unit every two minutes and 10 per cent new air will constantly be introduced. This means that every twenty minutes the air will be completely renewed. Temperatures will be controllable to plus

or minus 1°F. Each room then operates at an automatically controlled temperature and humidity.

"Each room is divided by light-tight partitions into four chambers. The ceil-



Light tight partitions divide this controlled environment room at U.C.L.A. into four rooms of differing light intensity. Plants are wheeled into the innermost chamber on a specially designed tall cart, made to bring plants near fluorescent lights. In use, outer door and inner partitions are closed.

ing of two of the chambers will be a solid bank of fluorescent light (with a few incandescent lights) which is planned for an output of 2000 foot candles. In these chambers it will be possible to grow plants through their entire life cycle. The other two chambers are equipped with low intensity fluorescent and incandescent lights which will be useful for photoperiod studies. All lights are automatically turned off and on by time clocks. The envelope temperature of the fluorescent tubes in the high light intensity chambers will be kept constant at most efficient operating temperature regardless of room temperature. To accomplish this the lights are separated from the chamber by a glass ceiling and the temperature is controlled above this ceiling by an automatic damper and blower system which allows cooling air to pass over the lights when necessary.

"Attached to these controlled environment chambers are two 36' x 95' free span greenhouses of steel frame and aluminum bar construction. One of these is divided into three chambers which will allow for 3 temperatures. All chambers will be ventilated with smog-filtered, evaporative-cooled, forced air. The greenhouse has a concrete floor which will facilitate moving plants on carts to and from the controlled environment rooms and between chambers. With the three greenhouse chambers and the controlled environment rooms, it will be possible to subject plants to numerous combinations of well controlled environments. Experience at the Earhart Plant Research Laboratory of the California Institute of Technology has

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proven the worth of such controlled environments for plant research.

"Laboratories are located on the floor above the controlled environment rooms. There are five office-laboratories for individual staff members. There is a general biochemistry laboratory, a small "hot" lab for preparation of radioactive plant materials, a counting room for radioactive counting, a general cytology-anatomy laboratory, and a sterile culture laboratory with a transfer chamber.

"A small secretary-receptionist office, a conference room, and a plant and soil handling area complete the facility except for the machinery rooms and service area. The total floor area, including the greenhouses is 11,692 sq. ft."

The Role Of Water In Plant Growth

BY DR. MARVIN H. FERGUSON

Mid-Continent Director, National Research Coordinator, USGA Green Section

Water is the most abundant material in a growing plant. The weight of water contained in a plant is usually four or five times the total weight of dry matter. Water is one of the constituents of many of the complex substances found in plants but it is interesting to note that liquid water is never found in a pure state in the environment of living organisms.

The essentiality of water is readily apparent. It has many functions in the plant.

It is a solvent for mineral nutrients and the complex substances manufactured within the plant.

It is a transportation agent and the means whereby the equilibrium of salts and other dissolved products is maintained between the various plant parts.

It is a raw material for the process of photosynthesis—the basic process underlying all life.

It acts as a temperature regulator in that water vapor given off by

leaves produces a cooling effect.

It even acts as a structural agent. When plant cells contain an abundance of water they are turgid and the plant stands erect; when there is a moisture deficiency, the cells are flaccid and the plant droops and wilts.

We think of protoplasm as being one of the basic materials of life in all organisms whether plant or animal. Protoplasm is that material contained within each living cell. This is an extremely active material and the protein and other substances of which protoplasm is composed becomes inactive and lifeless without water. This relationship may be visualized by considering the protein in a fresh egg white as compared to that in the dry and powdered form.

We may consider the effect of water on protoplasm by using a seed as an example. As seeds mature their water content is reduced. A mature seed actually is living but it is in a relatively inactive state. It lives but does not grow. When water enters the environment of the seed water is imbibed, enzyme activity begins to take place, the seed germinates and begins growth to produce a living and active plant.

Water outside the plant, as well as that contained within the plant, performs an important role in the growth and well being of the organism. Water dissolves the soil minerals which are essential to plant growth and the major part of plant nutrients are believed to be taken into the plant while they are in solution. Water moving through the soil performs a function in the flushing of pore spaces. As water moves downward in the soil it replaces the gases, such as carbon dioxide, which occupy pore spaces and as the water drains out of soil more air is drawn in, thus it aids in gas exchange and in bringing oxygen into the root environment. It is known that roots make their best growth in a moist soil, and numerous observations indicate that roots will not penetrate a soil that is completely dry. Vapor in the atmosphere surrounding the aerial parts of plants has a great deal to do with their performance and growth because of the fact that transpiration is affected greatly by the humidity and surrounding temperature.

Because of the fact that water is essen-

COMING EVENTS

December 7-8-9

14th Annual Texas Turfgrass Conference
Texas A. & M. College
College Station, Texas
Dr. Ethan C. Holt

1960

January 5-6

Mid-Atlantic Turfgrass Conference
Lord Baltimore Hotel
Baltimore, Maryland
Dr. George S. Langford

January 18-21

Rutgers-New Jersey Turfgrass Course
Rutgers University
New Brunswick, N. J.
Dr. Ralph E. Engel

January 28-February 6

31st Annual Conference
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Shamrock Hilton Hotel
Houston, Texas
Dr. Gene C. Nutter

January 29

USGA Green Section Educational Program
New York, N. Y.

February 15-18

Penn State Turfgrass Conference
Penn State University
University Park, Pa.

tial in the performance of several functions of a plant, it is not possible to consider any one of these functions as more important than the other. In its function as a solvent, water dissolves the mineral elements in the soil which are taken into the plant roots. Then, in its role of a transportation agent, water moves these dissolved minerals upward through the plant to the stems and leaves where they are used in the synthesis of complex compounds. The manufactured materials from plant leaves are moved downward through the plant to the roots, crowns and stems; thus, water serves as a dissolving agent for both simple and complex materials and as a transportation agent for these same materials. By passing through the membranes of the cell walls, water helps to maintain in equilibrium the dissolved substances.

Water is one of the raw materials whereby carbohydrates are manufactured from carbon dioxide and water in the presence of light through the process of photosynthesis. The hydrogen for the manufacture of carbohydrates is contributed by the water. Carbohydrates are represented by the sugars and starches, which are components of other more complex compounds, and by cellulose which

is the chief component of the plant skeleton. Other equally important but less abundant compounds are also classed as carbohydrates.

Water may be considered to have a function as a structural agent in that it maintains the turgor of plant cells. As long as the cells are filled tightly with water, the plant is a more or less rigid structure, but when they become less turgid through the loss of water, then the relatively thin walls of the skeletal components of the plant may not be rigid enough to keep it from drooping.

Many observers have found that turf trampled when it is in a wilted condition will be injured more severely than turf which has an adequate supply of moisture and in which the plants are turgid. A lack of turgor in plants also reduces the photosynthetic activity because leaves tend to roll or fold following a water loss, thereby reducing light and retarding this important process.

One of the important, but less frequently mentioned, functions of water is that of temperature control. Water is given off by the leaves through the process of transpiration, and the evaporation of this water is accompanied by cooling. This cooling effect helps to maintain a favorable temperature around the leaves of the plant.

Modifications of plants in relation to water environment is one of the important factors determining areas of adaptation of those plants. These modifications are also among the chief factors which determine management requirements of various plants.

Red fescue may be used as an example of a grass that will tolerate relatively drouthy conditions. The red fescue leaf has a heavily cutinized lower leaf surface. The top surface of the leaf is strongly ribbed and the stomates through which water is lost to the outside air are located at the bottom of the grooves in the leaf; therefore, when the leaf of red fescue begins to transpire rapidly and the guard cells lose their turgor, the grooves close and further water loss is retarded.

On the other hand, Kentucky bluegrass is not equipped with the same mechanism whereby it may protect itself from water loss and it is damaged much more seriously by drouth. The bluegrass leaf folds because of two rows of thin-walled cells

called bulliform cells along either side of the midrib of the leaf; therefore the bluegrass plant wilts from water loss and may be permanently damaged.

Zoysia serves as an interesting example of a plant having a defense mechanism against water loss. Members of this genus have leaves which contain numerous parallel rows of thin-walled cells through which water loss occurs. The fact that these rows of cells are closely spaced causes the leaf to roll tightly in the presence of conditions causing rapid transpiration. The plant thus defends itself against continued water loss, but tight rolling of the leaves reduces the surface available for photosynthetic activity and growth is retarded. This is one of the reasons that Zoysia makes better growth in humid than in dry areas.

The mechanisms whereby water loss from plants is prevented are too numerous and varied to be discussed here, but the presence and effectiveness of such mechanisms have much to do with the range of adaptation of the turfgrasses that are used in this country.

Many other modifications affect the ability of a plant to grow and do well in a given set of environment conditions relative to water. Rice grows in standing water, whereas many plants would die because of a lack of oxygen in the root zone. Plants differ in the development of their root systems, some being able to extract a greater amount of the available soil water than others.

The grower of plants of any kind will do well to learn as much as possible about his particular species in relation to its water needs and its response to an abundance or a deficit of water in the soil, in the plant, and as humidity in the atmosphere surrounding the plant.

TURF MANAGEMENT

The book "Turf Management," sponsored by the United States Golf Association and edited by Prof. H. B. Musser, is a complete and authoritative guide in the practical development of golf-course turfs.

This 354-page volume is available through the USGA, 40 East 39th Street, New York 16, N. Y., the USGA Green Section Regional Offices, the McGraw-Hill Book Co., 350 West 42nd Street, New York 36, N. Y., or local bookstores. The cost is \$7.

IT'S YOUR HONOR

Views of the Rules

TO THE USGA:

I am delighted with the change of the rules covering out-of-bounds, lost balls, and unplayable lie for 1960. I am also pleased with the rule permitting cleaning the ball on the green. This gives the ordinary player the same right enjoyed by the professionals.

The right to substitute the ball on the green should also be added to help the amateur score better without using new balls constantly.

However, the main purpose of my letter is to plead for a total simplification of the golf rules. Contrasted to all other sport rules, the golf rules are petty, contradictory and in some instances ridiculous. I am now acting as a referee in a club championship and have reviewed the Rules of Golf for that purpose. Even as a lawyer trained in the interpretation of laws and court rules, I find it very difficult to decide on the application of golf rules.

Golf in itself is a most difficult game and the rules should not add to the woes of the golfers.

HARRY GOTTLIEB
Atlantic City, N. J.

TO THE USGA:

Every legitimate sport has its rules drawn up by a body of men qualified to give their unbiased opinions and expressed so the layman can grasp the decisions readily and understand why penalties are required.

If golfers would study their rules diligently, knowledge of them would

enhance the pleasure of the game and give them a keener insight of its real meaning—best of all it would bring them in closer touch with the true spirit of the sport as our forefathers fostered and enjoyed it.

The Rule book covers such a broad field that the true sportsman is inclined to say there are too many rules. He obeys many by instinct and his inherent intellectual honesty guides his actions into the proper channel.

Our governing body, the USGA, has accomplished a gigantic compendium of almost every conceivable situation that might arise during a game. I have been constantly impressed by the calm and dignified manner and the fairness which have been evident in the consideration of the various phases of progress by this body in its efforts to make clear the rulings of the game as it sees them. It seems to me that the work accomplished is more a labor of love than otherwise. The work is complimentary, the endeavor being to give every player due credit. The compilation must have been a heavy task, and it gives pleasure to repeat that the work is thoroughly well done and deserving of sincere and wide appreciation.

There always will be differences of opinions. They arouse and exercise the mind, but please never throw away hastily any old faith, tradition or convention. They may require modification, but they are the result of the experience of generations.

J. MARTIN WATSON
Boise, Idaho

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