important and valuable function of the Green Section of the USGA.

Could such a close knit organization for the creation of a sound set of basic principles of turf culture be developed?

In the first place, would the state experiment stations accept responsibility for their share of the job? The answer is complicated by a number of things. Theoretically, they should do so. Certainly turf production is an agricultural problem whether it is grown for use as a pasture, a lawn or a golf course green. Practically, research work requires money and state experiment station budgets are, almost universally, very modest.

#### Must Compete With Other Interests

When the turf interests ask the experiment station to investigate their problems they immediately find themselves in direct competition for service with every agricultural interest in the state. For example, the poultrymen discover that a virulent chicken disease is seriously affecting their business. Immediately, they urge the experiment station to make an effort to discover a remedy.

Or again, there is tardy recognition of the fact that the fertile top soil of our farms is disappearing through a combination of factors that may be controlled by certain changes in cropping and land utilization. It becomes necessary for the experiment station to set up an extensive program of research to develop soil saving principles. And so it goes. Most of the agricultural interests long ago learned the power of their organized voice in getting attention for their particular headaches.

In the few states where investigation of fine turf problems is under way this has been recognized. The research program is functioning primarily because the turf interests, usually represented almost entirely by the greenkeeping superintendents, have insisted that it be done. Not only that, but they have watched the pro-gress being made and have contributed many vital suggestions on the conduct of the work. Coupled with this has been a sustained enthusiasm on the part of every one concerned for the thing they are trying to do-founded on a clear conviction that it is important and necessary.

Thus, here and there, have been established series of front line trenches. They are functioning, mainly independently, in trying to meet local problems. As their resources and equipment permit they are doing what they can to contribute to the wider general questions of turf culture. But they will not and cannot do a first class job for the country as a whole unless their numbers are multiplied and their findings properly correlated to develop a sound body of facts that have general application. This requires not only concerted effort on a national scale but a centralized agency which can direct the effort and sift the information.

But, whatever the method, the fact remains that there is a definite need for more action. It goes without saying that interest in a critical analysis of the problems can not forever live on its own fat. We can have short courses and educational sections of national conventions just so long. Eventually they will die of starvation unless a more solid diet can be provided for them. Solution of research problems is not an overnight job and the few who are interested in it can not possibly keep the plates full at every meal time.

#### HOW TO BUILD A GREEN

WILLIAM WATSON, noted golf course architect, presents in the diagram below, the second in an exclusive GOLF-DOM series of 'hints on better green construction'. Green diagrammed in June GOLFDOM was designed as a more or less level one, on level ground. Green below illustrates a raised (built-up) green, constructed on level ground.



Raised green built on level ground. Scale: 1" 71.5 ft. KEY

- A.B.C Highpoints on left side of green
- D.E.F.
- Highpoints on left side of green Series of undulating mounds to fit with green. Left side of green built up with irregular, but gentle slopes. Low cuts in contour at termination of shallow drainage swales. This makes a beautiful green, and is suit-able for a long par 3 or long par 4 hole. It should be raised high enough to avoid water-logging in wet weather. G.H.I.

### **Advantages of Fencing Are Many**

By W. H. Bleecker Page Fence Association

PROTECTION of persons and property is the major function of a fence. The home owner has a fence erected to restrain undesirable trespassers—both human and canine—and to safeguard children against thoughtless running into dangerous street traffic. Industrial management installs fencing to protect buildings and contents, and effect control over entry and exit also to reduce accidents and lessen possible liability suits. Institutions, schools and playgrounds are fenced for protection and privacy.

Because it is attractive in appearance, non-obstructive to view, economical in maintenance and long-lasting in protective service, chain link fence is the most widely used property enclosure. Practically all enclosed golf courses have chosen it, but chain link fence is still the missing link at many clubs.

#### Fence Is Dignified Barrier

The privacy afforded by chain link fence is appealing to both present and prospective members. It is a dignified barrier against unauthorized entry into the grounds, and it is an effective protection against careless trespassers. And of no small importance is the factor of revenue from tournaments and exhibition matches.

Chain link fence may run as high as 18 feet, but the usual fence is 7 or 8 feet in height. It may or may not be topped with strands of barbed wire, firmly attached to vertical or angle extension arms. The fence fabric may be woven of preformed wire from the lightest to very heavy gauge wire. It may be one of four different metals, chosen for most effective resistance to destructive local atmospheric conditions or to meet specific service requirements. Or it may be a combination of several of these specifications, according to the requirements at various points in the boundary line.

### Posts Are of Metal

All posts are of metal, either wing channel, H-beam or tubular, set at 10-foot intervals in bell-shaped concrete footings. The concrete "bell" resists side pressure and lift and gives the fence rigidity, and being domed slightly above the ground, the bell sheds water away from the post metal.

Science has made many advances in achieving longer life for chain link fencing and engineering has raised erection standards to a high level, but one of the major strides has been in the field of metallurgy. Here it was discovered that some metals have longer life than others under the various atmospheric conditions peculiar to different localities. Such conditions include salt spray, alkali or other chemical fumes—often carried long distances in the



Chain link fence surrounding course (left) affords utmost protection, and at the same time, is non-obstructive to view. Fence shown here is topped with strands of barbed wire, attached to angle extension arms.

Another view of chain link fence, used to enclose tennis courts on private club grounds. Note the metal posts set at 10foot intervals in bell - shaped concrete footings.

air from oceans, mineral soils, chemical plants or other classes of factories.

Any consideration of chain link fencing should include a study of local atmospheric peculiarities and the selection of the metal most resistant to any deteriorating condition. Available metals are heavily galvanized copper-bearing steel, Armco ingot iron, Alcoa aluminum and Allegheny stainless steel.

Above all, the fence should be erected by a crew of experienced workmen under supervision of a capable and responsible fence engineer. If he is permanently located in your vicinity, so much the better because he will have a lasting interest in the job.

## **Recent Golf Divots**

ENE ROOT, pro at Huber GC, Borger, Grex., recently shot a 69 to set a new men's record for the course. Two days later his wife shot an 88 for a new women's mark. . . . The Paullina (Ia.) GC opened its course to the public from May 12 to May 26; anyone who wished to play golf during these two weeks did so without charge. Paullina club officials used the plan this spring to interest more people in the game. . . . Jim East, San Diego, Cal. golfer, made 4 hole-in-ones during May on the Presidio Hills course. This brings to 36 the number of aces he has made on that course, a record that will probably stand forever.

Mrs. George Thompson, Jr., of Ft. Worth, has been re-elected president of the Women's Southern Golf Assn. Memphis CC has been chosen site of the 1941 Women's Southern event. . . Ernest Stanley, greenkeeper at Quantico (Va.) Officers Club, won the Kicker's Handicap in the June tournament of the Mid-Atlantic Greenkeepers Assn., held at the Belle Haven layout.

Jimmy Nichols, widely known onearmed golfer, has been named pro at the Montaup CC, Portsmouth, R. I. . . . Chuck Kocsis, who as an amateur won the National Intercollegiate championship, and who recently turned professional, was recently appointed pro at the Stony Croft GC in the Detroit District. Other pro appointments: George Beech at the Webster-Dudley (Mass.) GC; Roland Wingate at the Asheville (N.C.) CC; Charles Klein at the new Landa Park GCse, New Braunfels, Tex.; William Urban at the Aldecress GC, Demarest, N. J.

Ted Ray of England, U. S. Open champion in 1920, has retired. Ted, now just past 63, has been in poor health for some time. He recently gave up his job as pro at Oxhey, Herts. . . . Curley Vesey, Barbara Worth CC pro, having closed his club at El Centro, Calif., for the summer, is now working at Lake Tahoe, where he opened for the summer a few days ago. . . Construction of the new caddie shelter building at Christiana CC, Elkhart, Ind., is nearing completion. . . Sylvania CC (Toledo, Ohio) is installing a new deluxe swimming pool; plans called for its completion by July 1. . . Edward J. Burns, proprietor of the Wesburn GCse, South Rockwood, Mich., died May 26, following a short illness. . . Joc Kroc, 34 years old, pro at Interlaken club, Fairmont, Minn., died suddenly May 21.

Harry Bassler, newly appointed pro at the Los Gatos (Calif.) club, produced the hottest golf in the recent Northern California PGA tourney. Bassler, playing against Johnny Battini of Millbrae, started out with an eagle, birdie, birdie and an eagle to be six under par after four holes. . . . City Manager R. L. J. Wager hit the first ball in colorful opening ceremonies at the dedication of the new Mills Creek GCse at Sandusky, Ohio, on May 30. . . . Work on the new public golf course at Richmond, Va., is progressing rapidly; it is expected it will be ready for use next fall. . . . Pipestone (Minn.) golfers have leased 40 acres of land immediately south of the city, and work will begin immediately to convert the property into a golf course.

In squads of 12, caddies at the Pomonok CC (New York Met district) are sent out for an hour's work in dandelion extermination prior to being allowed privilege of the course Monday, Wednesday and Friday mornings. Joe Sylvester, Pomonok pro, says the kids do a good job and get keenly interested in condition of the course. ... A plan whereby \$35,000 will be available for remodelling the Forsyth CC (Winston-Salem, N. C.) clubhouse, and for improvements on the equipment and grounds, has recently been given to the club directors. R. J. Reynolds, new presiment of Forsyth, has agreed to put up most of the cash needed for the project, provided stock-owning club members will surrender their stock.

George Apalakis has taken over the professional duties this season at the Bear Hill GC in Massachusetts. George succeeded Leslie Cottrell. . . . Charley Yates, former British Amateur champion, recently shot a 61 at the Capital City Club, of Atlanta, Ga. Yates' round included an ace on the 178-yard 11th hole, and a 27 on the 'in' nine holes, one of the lowest 9-hole scores ever recorded. . . . The Northern California PGA awarded the 1940 N. Cal. Open championship to a 9-hole course, the Vallejo GC, which was the first time the event had been played on a course of less than 18 holes. The result: Vallejo raised a purse of \$1,000 and put on the most successful tourney in the history of the event. The citizens of Vallejo became so golf conscious that as a result of this tournament, the city plans to build a new 18-hole course. The chances are that the N. Cal. Open in 1941 will go to another small town.

### Meadowbrook `Immortalizes' Acers

MEADOWBROOK GC at Racine, Wis., has a panel in its clubhouse devoted to the "Meadowbrook Fraternity of Aces." It's an attractive "hall of fame" idea presenting those who have made holes-inone on the Meadowbrook course.

The accompanying illustration shows how Meadowbrook glorifies its sharpshooters. H. T. Lynch, Meadowbrook's manleaf clover, which gives a subtle hint of what the average person thinks of a hole-in-one, contains four pictures, each a 3-par hole on the course. They all have been aced at some time or other. Around the clover are sixteen pictures of "Aces", all members who have had a hole-in-one since the club started 14 years ago. Two women are included, Mrs. Don Ramsey and

> View of Meadowbrook's Fraternity of Aces, believed to be the first of its kind in the country. The club was begun 14 years ago.

ager, says about the "Fraternity" panel: "We believe this fraternity is the first of its kind in the country. The picture speaks for itself. Across the top are two views of the clubhouse, and a panorama shot from the first tee. The large fourMrs. Willis Tolfson. In the lower right hand corner is an action picture of Al. Falkenrath, the "Daddy of 'em all." He is nearly 70, can still break 80, and has had four witnessed holes-in-one. In the other corner is the March cover of Golfing.



# Florida Opens Two New Courses

By R. M. French, Jr.

TWO of the sportiest courses in south Florida were opened to lovers of the Royal and Ancient game last winter. Both are located in the heart of Florida's tourist area and typify two extremes of golf course construction—one is 6,624 yards of golfing headaches, with big greens, plenty of traps and water thrown in to give the player grief in larger doses; the other is a mere 2,840 yards of narrow fairways, tiny greens with trees and water in abundance to make it one of the most difficult nines in Florida.

The Miami Shores CC is located on famous Federal highway in Miami Shores Village, on the main thoroughfare of Florida's east coast and just north of the city limits of Miami. This course is the product of nearly 10 years of planning and more than two years of active work. It was conceived by Roy Hawkins, general manager of Bessemer Properties, Inc., in 1930, and large holdings of that company were set aside for the proposed course. Construction was started in November, 1937, and with the aid of a federal government grant, was completed this past December at a cost of approximately \$300,000.

#### Hauled 38,000 Yards of Soil

The course with a par of 71 has been built on a 131-acre tract formerly white sand land on which pineapples were grown. More than 38,000 yards of top soil and \$15,000 worth of trees and shrubs have been placed over the rolling terrain which is watered from a 40-foot well through more than five miles of underground sprinkler system.

The clubhouse, of colonial style, fronts

on Federal Highway, and was designed by Robert Law Weed, one of Miami's leading architects. Mary Abbot Hinton supervised the decorations of the building, on which construction was started late in 1938 and completed just prior to opening of the course.

#### Clubhouse Is 225' in Length

The clubhouse is 225 feet long, and is placed facing the highway. A beautiful lounge, 50 by 28 feet, extends from the highway side of the clubhouse through to the course side and opens on a veranda 50 feet long which looks out over the 18th green, which drops away from it in a long terrace. The women's lockerroom is in the wing to the left of the entrance, or south end of the building, and has space for 32 lockers. In the righthand wing, or north end of the clubhouse, is the men's locker-room, with space for 138 members, kitchen and taproom on the ground floor. The pro-shop and additional locker space is provided in the basement of this wing, on the first tee end of the building.

Enhancing the beauty of the colonial building is its elevation above the surrounding area, and while it is actually only slightly more than three feet above the adjacent highway, the architects have so blended the building with the landscape that you are taken from Florida to the rolling country of Virginia all in the blink of an eye.

In keeping with the "rolling country impression" given by the clubhouse, the course itself has been raised on virtually every hole, making the layout much more sporty and giving the players from the



Accuracy is at a premium on the 138-yd. 11th hole. The canal takes those hooked shots, while the big traps at the right await your slice. Says Willie MacFarlane. "but wait until you've played No. 11; that's the toughest hole on the course."



North a course more in keeping with their home eighteens.

With the exception of the par 3 holes, every one on the course is a dogleg, with rolling fairways and the greens well guarded with deep traps. A railroad which runs through the length of the course has made necessary longer than average distances between tees and greens, but this distance, which at first seems unnecessary, has permitted the designers to make the course much more difficult than is ordinarily the practice with semi-public courses. During the winter the Miami Shores course averages better than 150 players per day and yet there is little waiting between shots. The walks between green and tee seem to be the answer. Despite the difficulty of the course, there is plenty of rough and natural hazards to delay play to the point where it would be troublesome on most courses; this greater distance between greens and tees seems to give that needed few minutes for each hole to compensate for a lost ball.

#### Membership Is Chief Problem

One of the chief problems of any golf course in Florida is the question of membership. If a course is strictly a membership one it virtually has to close in the summer in order to operate at a profit. Miami Shores has solved the problem by opening the course to all comers, at \$2 greens fees, during the winter, and annual memberships for local residents at \$100. As the management explains it, the course has the benefit of the tourist play during the winter, and the added income, at a time of year when the local residents are so busy they are unable to make full use of the course anyhow. So far the practice is working splendidly, they report.

Those mentioning the Miami Shores course always add: "And that 11th hole now let me tell you, there's a hole." And indeed it is a thing of beauty to look at and a nightmare for most golfers who face its hazards.

To Willie MacFarlane, former National Open champion, and winter professional at the course, as well as to Andy Kay, resident professional, No. 11 is "the hole." Its length is 138 yards, par 3, and boasts all the nasty things that make a golf hole tough. Angling from right to left in front of the tee is the Biscayne canal,



Veranda of Miami Shores clubhouse overlooks the 18th green-which doesn't make the final hole any easier. The building is a part of the \$300,000 plant opened this past season.

which runs through the course, and which on this hole gobbles up a hook ball with the greatest of ease.

The green is fairly large but is trapped all the way around except for a narrow strip directly in front. So, a slice goes into traps on the right, a hook or too short a shot goes into the canal, and if you're too strong, you're over the green in more trouble. Added to these troublesome things is the fact the tee is guarded from any easterly wind, the prevailing one in Florida, by the railroad embankment under which you walk to reach it. You just have to guess at the strength of the breeze and that just adds to the "take" of the canal.

#### **Richardson Course Is Compact**

In sharp contrast to Miami Shores is the Richardson Golf Course at Fort Lauderdale, 30 miles to the north. This course is the realization of the dream of George Richardson who has been building golf courses for a quarter of a century.

The Richardsons, George, Mrs. Richardson and their son, George, Jr., found the spot in 1937 and purchased a 40-acre tract in the heart of a cypress hammock along the Middle River at Fort Lauderdale.

When Richardson, Senior, left for the North that spring, he already had staked out the course and it was then up to George, Jr., and Mrs. Richardson, who immediately decided on a pay-as-you-go

Golfers on the Chicago Cubs and White Sox baseball clubs will play their annual golf match at Twin Orchard CC, July 9, under the auspices of the Illinois PGA. Newspaper and radio sports department men also will have their annual exhibition at the same time. The initial event put on by Lew Waldron in 1939 was well attended by sports fans who were treated to some weird golf. Gate this year goes to the Red Cross. policy, and the result was that when the links was opened in December, it was completely free of debt.

Where the Miami Shores course spreads over a considerable area, this 9-hole layout utilizes the 40-acre tract completely. The 9 holes all place a premium on straight shots and have a total yardage of 2,840 with a par of 34. The longest hole is but 475 yards and the shortest is 150 yards, without a breather in the lot.

The Richardson course clubhouse is the old home which was on the 40 acres when the family bought it. The downstairs has been converted into lounge, office, pro-shop and locker-rooms, on a miniature scale, of course.

During the few months the course has been in operation it has drawn most of its play from the fashionable Lauderdale Beach Hotel and the Hillsboro club. The Richardsons operate the club under a restricted membership plan, counting on the "no waiting to tee off" to help them draw players from the surrounding eighteens, of which there are three. It is too early to determine if this policy will succeed, but with the course under family operation as it is, it seems to have better than an even chance.

CHARLEY BURNS, Akron (O.) muny course official and director of the GSA has done an outstanding job in getting newspaper publicity for the greenkeepers. In his study of sport section factors he's found one reason why golf news lag. The reason is expense of newspaper pick-up of golf club news.

Burns' survey of sports editors reveals that if pros and managers would telephone scores and other news to sports depts., instead of expecting short-handed sports depts. to do the telephoning, golf club news would increase.

### My Theories On ``How To Teach''

### By Lester Bolstad, Pro

#### Minneapolis GC

THE past 15 years have seen an unparalleled advance in the teaching of golf. The search for teaching truths has held no theory too sacred for careful scrutiny. Everybody's credos from those of Horton Smith, Tommy Armour, and Henry Picard to those of Bobby Jones, Alex Morrison and Ernest Jones, have been held up for merciless examination.

In their earnest groping ways, pros have rediscovered the Law of Individual Differences. This only served to complicate the teaching issue. No set rule of form or procedure could be held up as final for the one person involved—the pupil of the moment.

As diagnosticians, golf professionals have few equals in athletics. They seem to have a sixth sense. And this in view of the fact that they can't see with the naked eye most of the action they are trying to teach. Some, like Al Watrous, have a "camera eye" and cannot only remember swings but can detect minute changes in them. With the general use of the motion picture and the fast lens camera in analyzing golf swings this eye diagnosis faculty has been heightened. The instructor better knows what to look for.

#### Simplicity Is Success Secret

Of late the focus in golf has turned from "how to play" to "how to teach." On one score there will be agreement: simplicity is the keynote of successful instruction. The Piltdown Man had his club and his elementary urges. The veneer of 20th century civilization can't remove the fact that a man with a club and a ball down in front of him has much the same urges. He wants to sock the ball and chase it. With that primal urge a golfer can't rea-

The Ogden (Utah) G&CC 'Club Bulletin,' which, by the way, is one of the newsiest club organs it has lately been our pleasure to peruse, reprints in its June issue some of the prize entries in GOLFING'S May Queerie Contest, and at the same time, announces that the club will hereafter conduct a 'screwy golf story' contest of its own, and will award suitable prizes for the best entries. The Ogden club will print the best stories in the July issue of the Bulletin. Gus Wright edits the lively club monthly. sonably be expected to learn more than one thing at a time.

Harry Pressler out in Los Angeles has the right idea; he teaches the big swing in sequence. After getting you set as far as placement of feet, hands and ball are concerned, he drills on the start away from the ball (truly a climax point in the swing). Then comes in order the swing of the hands and the club up to the top of the backstroke, the start down, the swing through the hitting area, the finish, etc. Pressler's success and popularity speak for themselves. Incidentally, Harry makes his pupils drill and drill until they can't help but do as the maestro dictates.

Such a method is called teaching from the specific move up to the big general move. Its success would depend in large part upon first establishing in the pupil's mind a mental picture of the entire stroke. Almost anything we learn well or do well is preceded by a mental picture, a mind's eye flash of the entirety. It is comparable to having all the green light "go" signals turned on in our complicated bodily mechanism.

A mental picture of the swing might show a whirling move in a tilted elliptical arc revolving around the head as a center. The move would be one continuous action building up gradually to a healthy whirl, and coasting to a finish. The hands, the feet, and the club would move in time.

#### How Does Golfer Learn?

But we get ahead of our story. Before talking about simple mental pictures, about learning one thing at a time, about teaching from the specific to the general, we should explore how a person learns. How does a golfer learn? A youngster sees and imitates even as Bobby Jones aped Stewart Maiden. This imitative faculty exists in diminishing degrees in older persons.

Adults have a combined physical, mental and neural performance such as swinging a golf club, through the medium of habit formation. Old habits, which have become ingrained in a golfer's swing pattern, are hard to eradicate (ask any one of a thousand perspiring pros). But

habits can be broken and supplanted by new reaction tendencies. Seven years ago when I started teaching golf I borrowed a phrase from the psychology books, "make your (golfing) habits your friends and not your enemies."

If we pros would but open an education book or two or delve into the field of educational psychology, we would find this whole business of how we learn, how to teach, and what the future horizons in learning might be.

Most pros began as caddies and learned on the field of battle. Their contact with the college campus is often limited to Saturday afternoon football. Theirs is an intimate knowledge of golf from practical experience. Their actual experience in play and teaching would enable them to get a wealth of good from ascertained educational facts.

To begin with, the golf swing is not inherent or natural, but is an overlaid function which has to be learned. (By overlaid function is meant that parts of the body coordinated in the swinging act have other functions to perform which are more vital than swinging a golf club and for which they primarily exist.)

#### Learn In Three Stages

Learning takes time and we learn in three different stages: 1. The awkward stage of the beginner. 2. The intermediate stage of development where the golfer would alternately get the swing and lose it. 3. The smooth running stage of the expert. Any expert golfer who laid off for a few months would briefly go through these stages. Maybe you have felt them.

If you could graph the progress of a beginning golfer, you might find he would improve rapidly and then level off. At this point don't let him place all the blame on you because he has hit what is called a "plateau" in learning. For him to reach a higher level of attainment will take time, practice sessions, more lessons under your eagle eye, and some help from the deities.

How would you handle a beginner? By now it's old stuff "to know your pupil." Yes, and it adds an air of thoroughness when you ask how much he has played, how much instruction he's had, what his athletic background is, etc. Incidentally, he's sizing you up, too. Sometimes a smile, your voice tone, your neatness of dress, the condition of your nails, or the note of authority in your statements may determine your success with him as much as



Shown above is the new practice driving shed constructed this year at the Whitemarsh Valley CC in the Philadelphia District. The cost of the shed was around \$300, according to Pro Morrie Talman. Morrie is now able to give lessons at any time, rain or shine, and can also provide an added bit of privacy for students taking lessons from him. The practice shed has been 'well worth the cost,' Morrie says.

your knowledge of golf. To a beginner you should map out your intentions for the one particular lesson and for the ensuing series.

I like to say: "The golf swing has to be learned and learned in sequence. I don't make any pretense to teach you how to hit the ball. I will teach you a method of swinging and the hitting of the ball should follow. First, I will hit some balls and give you a mental picture of the entire swing. Then I will show you how to stand, how to hold the club, and how to work your feet."

(At this point an assignment of two exercises is given the pupil. He is taught how to exercise his feet and hold his head steady minus any club. And he is importuned to exercise his hands up and down while his club is held out in front of him. This is to make the grip comfortable. These assigned exercises are an important part of orderly progress.)

#### Study Swing Thoroughly

"In this first lesson I will show you how to start the swing back and probably a little about how to reach the top of the swing. Beyond this we won't go. The second lesson may be an exact duplicate of this without a new word added. It takes time to learn and you will learn by drilling these things time and again."

At the conclusion of this and every lesson, a resume of what has been done could well be impressed on the willing learner. It focuses attention.

Care should be taken to make your language understandable to your pupil. You must remember that to many such seemingly well-known terms as stance, pivot, top of the backswing, coordination, timing, swing from the inside, hitting area

