

Every member wants a beautiful club, but be sure yours is designed practically. A good architect should be able to accomplish both.

counting office, front desk and cigar counter, and even see his cocktail lounge through a doorway. Through a window, in back of his desk, he can see his dining room. In this design, we have created in effect a functional control center."

ESTHETICS ARE SECONDARY

I then asked Mr. Larson if the architect has foregone esthetics in making "labor savings" a prime feature of club design. He replied: "I feel that, unfortunately, people without experience have a tendency to take the most glamorous part first, and think of the function in a secondary light.

"Once you get 'hung up' on esthetics, you find the functional part that much harder to bring about. This brings you back to the area of economics and the question, 'What will it cost you to operate after you build it?' Then you are returned to the purpose of the building, the people who operate it, and how they will function. This is why, when we create a building, we go through the phases of FUNCTION to FORM to ESTHETICS.

"After the function has dictated

the form, we can make this esthetically pleasing to the eye after all other requirements have been met. This is one of the factors in a committee's selection of an architect which should be considered; 'Does he possess the esthetic tastes to give a finished look to the project after function and form have been dealt with?'"

CONTACTING ARCHITECTS

Once a club has decided on a building project, how is the architect brought into the picture?

"An architect, says Earl, "has an extremely difficult and delicate task from this standpoint, in that he cannot, and rightfully so, bid on a job. He is a professional and a specialist—just as you would not expect a pediatrician, a surgeon, or a dentist to bid on a job or solicit patients. In other words, you must contact him."

The American Institute of Architects has recommended a standard rate of charges for various work. Basic charges are 7 per cent for new construction, and 8 per cent for remodeling work. The additional charge for remodeling comes from the fact that a great deal more research, in the field, is necessary.

"In new construction, if one wants to move a wall, it can be done with a pencil and an eraser. On a remodeling, a two foot change in a wall could bring conflict with the sprinkler system, put you over an underground storage tank, or even into the swimming pool. In remodeling, before we can do anything, we must know what already exists, its relation to the present and ultimate function, and keep our remodeling in direct relationship with these functions. All of this causes the additional field work.

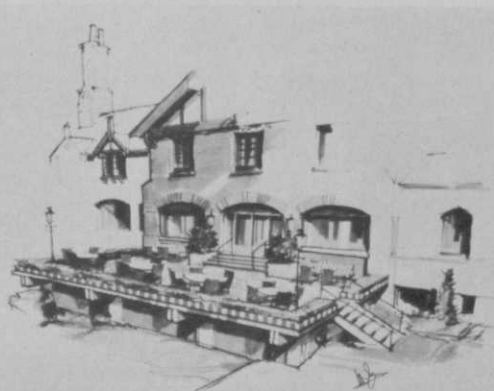
"Let us surmise that we are going to do a remodeling job and that the paper work of the contracts, the fee, and all other details have been worked out; since the contract is usually a standard A.I.A. form which spells out who gets paid, how much, and when. The first thing we need is a set of all of the existing blueprints of the building as it currently exists. Here the manager is a big help because the plans are usually all over the club, at members' homes, and in safe-deposit boxes. It could be a simple sketch of a door moved in 1937 from one location to another; or a complete

Continued on next page

Terrace, Beverly CC



2nd terrace, Beverly CC



Entrance, Idlewild CC, Flossmoor, Ill.



Functional approach Continued from preceding page

layout of a revised heating, plumbing and electrical system done just last summer. But the architect can use any and all material available.

"We gather all of this information together, and with our field work come up with a set of 'as is' drawings. From this we get a complete floor plan of all changes made from the original building until its present date. We now face the physical facts of what we are working with.

"Then we will talk with the committee and the manager to see what their ideas are in regard to the new building; its services, its facilities, and their requirements. We ask about problem service areas, where they feel their service is expensive, what new service or type of service they feel could replace old service. All of this information is tabulated, and from it we get a picture of not only what they desire in the new building, but what has been happening in the old.

"It is then our job to enlarge upon this, and through suggestions, we bring out things like 'number of bars,' 'kinds of grill

and card rooms,' 'have you thought about putting in a sauna?', and 'a tennis court right beside the lockerroom would be very accessible wouldn't it?'

"We suggest these things even though they may not be in the need or contemplated category. But we present what we feel is an overall package, one which will enhance the club, its services, and its enjoyment by its members.

"Here, too, is where I feel we differ from other architects. We not only show the committee what they have, what they say they want, what they are lacking; but tell them what they may need in the future. It is here that we can make them aware of such things as storage, inadequate electrical service for future equipment, variations from present day building codes, need for emergency lighting, and additional fire exits.

"We also think there is a need to visit the club and observe its daily functions. If linen is being delivered through the front entrance, and garbage pickup areas can be seen from the dining rooms, or storage closets open out

into private dining rooms; then after having seen these things, we can, in our new plans create answers to problems they may not have ever been aware of.

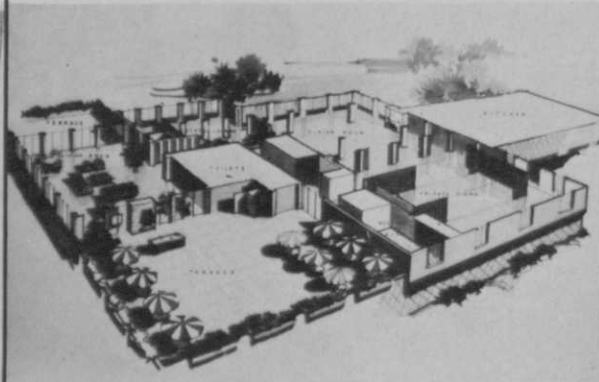
ALL NEEDS STUDIED

"We study the complete needs, not just the immediate need, and we also look into future needs. The advantage of this to the club, is it can then make its own five or ten year plan. This can also prevent future problems in building programs, expansions, or remodeling. If we do not make them aware of these things, then we have not performed a service.

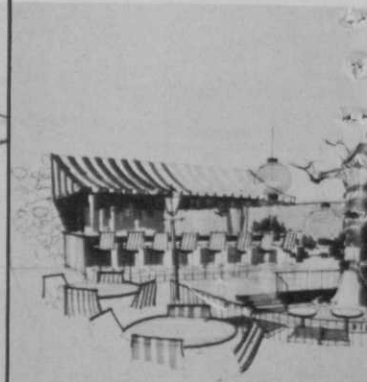
"Another thing we need to know, and make it a point to know, is the type of people we will be talking to when we go into a club. Clubs are individuals, just like you and I, or anyone we will ever deal with. For instance, there is no comparison between a 700 member club on Chicago's west side and a Jewish club of 300 members on Chicago's south side. There is all the difference in the world in the two memberships. Their needs are different, their concept of luxuries are different, as are their social patterns and

These architect's renderings are of work done by Earl Larson & Associates

Men's lockerroom-lounge, Idlewild CC 2nd floor arrangement, Beverly CC



Cocktail lounge, Kankakee CC



their eating and drinking habits."

It has been said, by some managers, that one can tell how affluent, or how well used, or the type of members in a club, by the size of the men's lockers and the men's lockerroom. Mr. Larson had this to say about the point.

"Clubs are fascinating in this respect. For instance, you do not build any 'second rate' men's lockerrooms in clubs today; sometimes the women's. This is why we no longer build the central or 'gang type' shower room. Men want easy access to the shower room, so we build shower rooms and dressing rooms at the end of each aisle. In this way there are no good or bad lockers in the lockerroom. Regarding size, today, more people keep more things in their lockers. Years ago a man needed a locker for his golf clothes, his golf shoes, and his suit. Today he could need space for golfing attire, swimming suit, tennis racquet, a bowling ball, skeet outfit, and even a curling stone.

"You cannot have any set 'norm' for locker size in any two clubs. We used to have a 12 x 14-inch locker, and I have done

some 18 x 24-inch ones lately. Clubs change, members' habits change, and needs change.

THE 12-MONTH CLUB

"Many clubs have had a total change in their members usage of the club. Summer golf clubs have become twelve month operations due to the influx of members and their businesses to the suburbs. Members with a suburban office no longer belong to the Downtown Club, but use your club and some need handball, squash, sauna and steam rooms, barber shops, teen-age rooms, and bowling alleys besides the golf course, tennis court, swimming pool, and skeet range.

"When we plan a club today, we plan it as a twelve or eleven month operation. While the club may not be open, we plan it to be open, if necessary, on a seven day per week basis. This means a manager can employ a year-round staff, provide them job security, and in general give the members more for their money if they have a clubhouse and physical plant capable of being used on a year-round basis.

"Again economics is a factor.

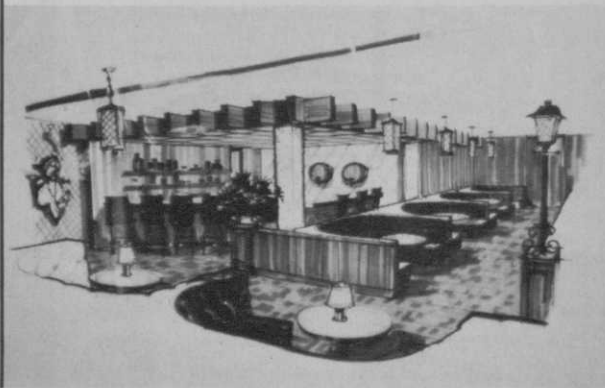
The cheapest thing you can do in a club is to make a capital improvement. Let us say you put \$5,000 into an exercise room, sauna, and barber shop. You now have a twelve month club for your members. This frees the member from waiting in line at the local barber shop. It gives him a place to release his tensions on an afternoon off from the office on a winter day. It gives him something to do at the club after the golfing season is over. Other recreations could be pool tables, curling rinks, bowling alleys, or a skeet range. No one thing will bring out all of the members, but collectively these things will bring people out all year. And, food and beverage business become a valuable adjunct to this usage."

"Do most clubs presently have the basic facilities, and just need to enlarge or improve them?" I asked. "Sure," said Mr. Larson. "They have the kitchen, they have the manager, they have the staff, they have the shower room, the cocktail lounge, and the card rooms. They have the expensive items already; now all they need is the little things to make it complete." *Continued on page 68*

Living room, Beverly CC



1st floor cocktail lounge, Beverly CC



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Does your course cheat?

Is faulty design costing your players 2 or 3 strokes a round?

by Stan Sousa

Golf is tough enough without having your course cheat your members out of two-to-three strokes every round. And, you don't have to be a professional designer to find defects that increase a members' scores.

See if some of the following examples of holes that create extra hardships for the golfer exist at your course.

A perfectly outlined tee, with sharp borders, may look beautiful but it also causes a golfer to line up with its edge. The result is a shot that may be straight but far from the intended line of flight. Faulty design, unwise mowing, or poor maintenance practices create these bordered tee areas.

"Any tee with sharp lines has a subconscious effect on the golfer," agrees William F. Mitchell, golf course architect of Huntington Station, N.Y. "The average player knows where he wants to hit the ball, but once he's on an outlined tee, he ruins his shot by moving his body parallel to the boundary." The result may be a well hit ball but it will be away from the hole, perhaps in the woods or in the rough.

Mitchell was a pioneer of "non-symmetrical" tees—tees that point nowhere. The idea was first used at the Atlantis Country Club in Florida. Rounded tees, instead of the rigid, rectangular types greeted golfers.

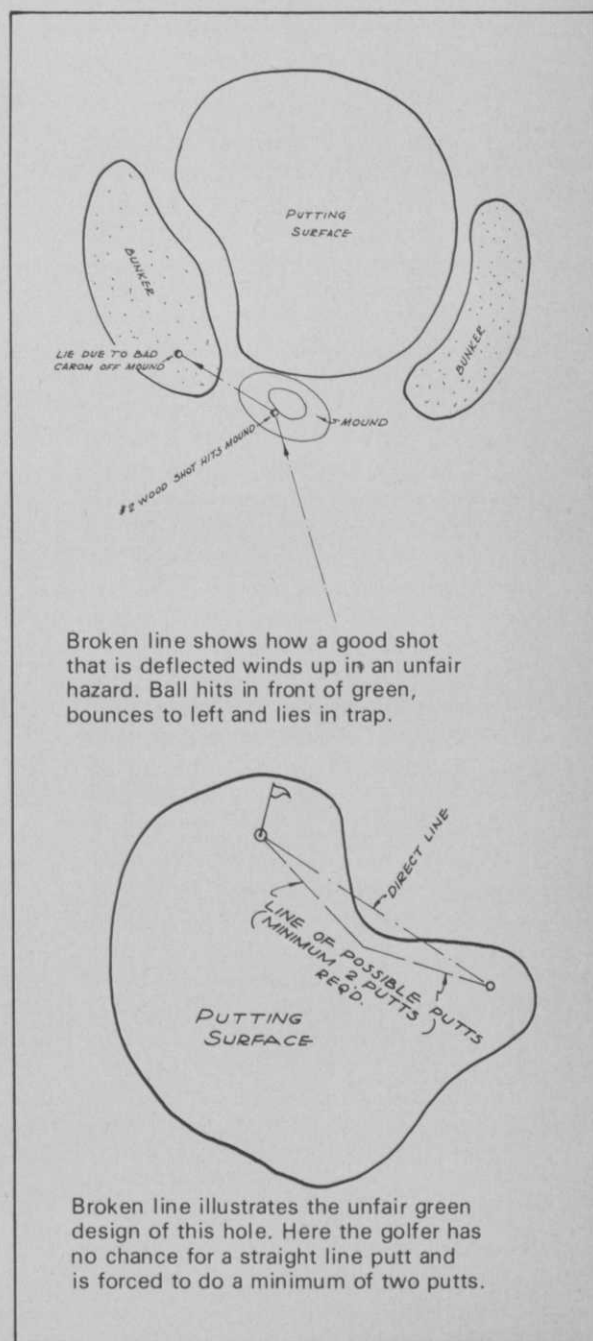
Today's modern tee areas now average about 6,000 square feet. In the long run, they are more economical to maintain and add beauty to the course. And, golfers should not be scowled at for taking divots on short hole iron shots. The higher the iron, the bigger the divot. It's the way golf was meant to be played.

A lot of trouble also turns up on approaches to the green where "gimmick" contours appear. (See illustration).

These ill-conceived obstructions actually aid a poorly played shot and guard against a proper approach to the green. Since a lucky shot now and then is always appreciated, the golfer becomes furious, and rightfully so, when luck destroys a well-played shot.

Once a golfer is on the green, he should be able to line up his putt directly with the cup. If he has to "detour" because of a ravine, the game becomes luck rather than skill. (See illustration).

Your course is also costing players strokes if greens



Analyze your turf & save money

Latest techniques such as spectrophotometer analysis reveal early deficiencies practically and economically

by Academy Laboratories Staff

Modern techniques, using flame photometer, spectrophotometer and polariscope, make complete analysis of turf practical and economical, even at frequent intervals. These modern analytic instruments now monitor turf and warn of nutrient deficiencies before damage becomes visible. However, not all methods are panaceas.

For example, soil analysis does not show how much and what the plant is utilizing. It also has another flaw in that it reflects the composition of the top layer, usually not more than two feet deep. Chemical analysis of grass, on the other hand, is time consuming. Usual gravimetric methods are too cumbersome to be used frequently during growing periods.

The new concept of nutrient element balance requires a complete analysis of the condition of the plant for accurate interpretation of fertilizer needs. Determination of nitrogen, phosphorus potassium, manganese, iron, copper, magnesium and boron are needed. Deficiency of any one of these elements may become a limiting factor in growth.

But at times, before turf can benefit from nutrients added to certain soils, the nutrients wash down out of reach of feeding roots. To complicate the problem, some nutrients wash down faster than others. Still another factor is that although analysis of the soil may show adequate amounts of certain minerals, they may be chemically bound in the soil and unusable by turf.

The pertinent question is, what are trees or turf actually receiving

from the soil? Answers can be found by analysis of grass cutting. Turf analysis will disclose deficiencies long before nutrient lack causes droop or other pathologic manifestation.

TURF RESEARCH

In the following test case, analysis by spectrographic means was used on a grass crop area of 30 acres in south Florida.

The area was a sandy soil one, with a pH of 4.5 to 4.8 and a lime application of two tons per acre added. This did not appreciably increase the yield of grass. Sixteen types of grass were planted. Samples of the grass as clippings were taken at 60 to 90 day intervals.

To perform analysis by spectrographic means, one must take the clippings from a three foot square area. They are cut and collected in a plastic bag. The samples are marked and sent to the laboratory.

Spectrographic analysis of the clippings of all 16 crops revealed low iron, boron, and manganese, and a deficiency of molybdenum. The deficiency was established by comparison of these plants with grass crops of a much higher yield. Spectrographic analysis further revealed correct concentrations of potash magnesium. One of the crops, *Phalaris tuberosa*, made an

exceptional recovery when the trace elements were added with an application of superphosphate with zinc and copper sulfate.

Extreme care had to be employed in adding sodium molybdate to the soil. The maximum amount could not exceed 2 1/2 oz. per acre. Further research revealed that a small dressing of molybdenum had an outstanding effect on the establishment of leguminous cover crops in tropical plantations. Over concentration of sodium molybdenum proved poisonous to livestock in all but the smallest amounts.

SUMMARY

Spectrographic analysis revealed the lime had caused a fixing of the phosphorus, iron, boron, and manganese. Actually, the elements were in the soil but not available to the plant. Further analysis revealed a deficiency of molybdenum, copper and zinc in certain grasses. Nitrogen which was analyzed by chemical means was also a factor in the research program.

As a result of this spectrographic analysis program, an area of 30 acres showed increase of productivity of 100% by its second crop. □

Editor's note: Academy Laboratories, 6321 NW 2nd Ave., Miami, Fla., not only does turf analysis, but work on any engineering system having to do with watering a golf course.

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Golf course owner trims costs by converting and then installing system himself.

Automatic irrigation on a shoestring

Soaring labor costs and a desire for better coverage were the primary reasons the Maple Leaf Golf Course in Linwood, Mich., decided to convert its quick-coupling irrigation system to a fully-automatic one, according to A. J. Jezowski, owner of the nine hole, semi-private course.

"Maintenance costs have been rising steadily during the four years that our course has been in operation," he explained. "And, since labor constitutes the major portion of our maintenance budget, we decided that we had to improve our management practices if we were to keep costs within reason. The installation of an automatic system (which began a year ago and will be completed this fall) is expected to result in substantial savings in labor and watering costs," he said.

Mr. Jezowski was also able to save money on the actual installation. Since he converted, rather than have a new system put in, he saved approximately one-half the cost. The price of putting in a new setup for a nine-hole course is \$24,000. The conversion cost was \$12,000. Further savings, of about 20 per cent, are being realized because Mr. Jezowski is doing the installation himself. However, this is the exception rather than the rule. Unless you are well qualified, have it installed by an expert.

Once Mr. Jezowski made the decision to convert to automatic irrigation, he spent several months evaluating different types of available sprinkler heads and controls. "We chose the Moist O' Matic valve-in-head sprinklers by Toro Manufacturing Corporation because they seemed best suited to our conversion needs."

The valve-in-head sprinklers, he feels, promise: initial savings in installation costs; better performance under a range of water pressures; a wider selection of watering patterns; and fewer maintenance problems.



Before beginning the actual installation, Mr. Jezowski, formerly in the trenching and water main business, enlarged an existing pond on the course by 50 per cent, installed a new six-inch main trunk line from the pump house to the branches, dug a new well, and installed an additional pump. (See photo). These changes were made to increase water capacity in order to meet the demands of the increased coverage the new system would provide.



He is using his own equipment and labor to make the conversion which is being done piecemeal so that use of the fairways is not interrupted.

In most cases, little digging has been necessary to convert the quick-coupling system to an automatic one. The existing quick-coupling connections were simply removed and the new heads put in their place. (See photo). Excavation was necessary only where new pipe was laid for additional fairway coverage. (The course has a single row system in the center of the fairway).

Mr. Jezowski anticipates cutting watering labor costs by as much as 75 to 90 per cent per year as a result of the conversion. "And, the new system permits us to put water where we need it, when we need it and in the proper amounts. Because it's all automatic, waste from overwatering is eliminated."

The gear-driven, two-speed valve-in-head sprinklers are ex-

pected to save water because they eliminate "puddling" and "scalping" by providing even water distribution through the overlap and side areas of the sprinkling pattern. The two-speed rotor accomplishes this by driving the sprinkler nozzles through the overlap areas at twice the rate that it travels through the side of the pattern. Heads are capable of watering areas ranging from 180 to 225 feet in diameter.

The heads are installed flush with the ground and out of the way of turf maintenance equipment. When the system is activated, the heads pop up to deliver a low-angle uniform spray that can be varied to deposit from .3 to .4 inches of water per hour, Mr. Jezowski explained. The full circle heads pop down when the system is deactivated.

Mr. Jezowski also anticipates a substantial savings in maintenance costs since the heads may be cleaned and inspected in the field without excavation. (See photo). "All we need to do is unscrew the cap, lift the sprinkler and its automatic valve from its case for cleaning or inspection, then reinstall it," he explained. He doesn't foresee many maintenance problems since the sprinkler heads are resistant to shock, abrasion and corrosion. Gear-drive mechanisms are insulated and sealed in oil to prevent corrosion and contamination by foreign particles. The first sprinkler heads which were installed last fall were not hurt at all by winter freezing, he added.

The control stations are located between three fairways. Sprinklers are activated automatically in groups by the controllers which can be pre-set to water on any day or combination of days over a two-week period. Each section can be programmed to water from

one to 60 minutes. "Once a sprinkler cycle has been established," he explained, "everything is automatic. The controller determines when the cycle starts, how long it lasts and how often it will be repeated." (See photo).

Mr. Jezowski firmly believes, "With the shortage and high cost of labor, any other type irrigation system is obsolete. Besides permitting us to program our watering patterns and reduce labor costs, the automatic system can be activated during night hours to avoid interrupting play on the course." □

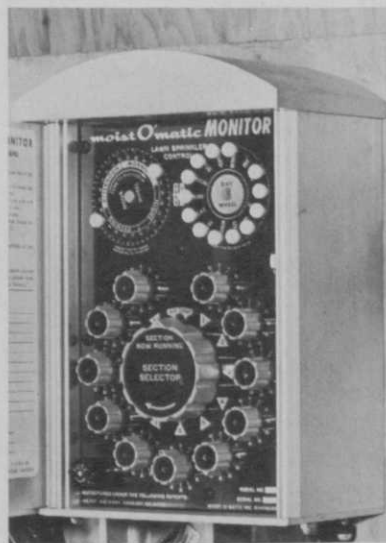


Photo on opposite page was taken before installation of automatic system. Pool was enlarged, a six-inch main trunk line was put in and a pump was added. The conversion was simplified because all the old pipe (photo at top of page) was utilized. The quick coupler connections were removed and replaced with valve-in-head sprinklers. Then it was only necessary to add a control line to the heads. Photo at bottom left shows sprinklers being serviced above ground without excavation. An insertion tool is being used to replace valve through open casing. Photo above is of one of 3 11-station controllers located between fairways.



30 yards

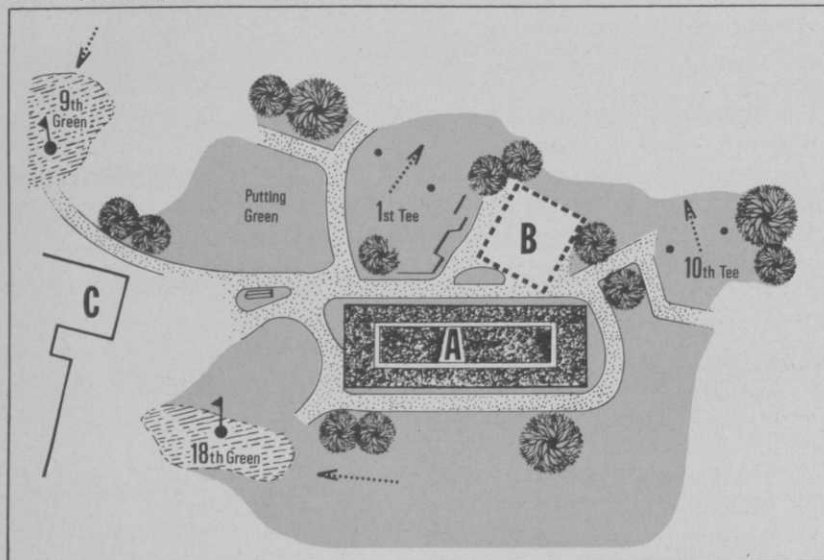
Continued from page 40

a fee, there are time restrictions on their play.

"The club is run as a non-profit enterprise," adds Nick. "We spend any profits we make on improving the course and other faci-

lities. In this regard, I would like to give credit to our golf course superintendent, Nate Squire, who has been with us for the last seven years or so. He's done a fabulous job. Before he came here the course was a cow pasture and today we are all very proud of it.

The layout at Lake Success, below: "A," new pro shop building; "B," site of old pro shop; "C," clubhouse: Nick's new shop overlooks major areas.



"A lot of land was taken away from the course when the Long Island Expressway came through here. In fact, we have only five of the original Deepdale holes left. However, by fully utilizing the land, we came up with not merely 18 holes, but two extra par 3 holes which we can alternate as conditions dictate."

No story about Lake Success would be complete without mentioning the practice facilities of the club. At most places, you charge your bucket of balls and flail away on the range. "If you came into my shop," says Nick, "I would sell you two dozen balls in a plastic bag for a dollar. Once I give you that bag of balls, they're



Unique driving range setup has golfers buy a bag of balls, hit into Lake Success.

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yours. The reason for this is that due to lack of land, our range is Lake Success. You hit off a narrow strip of ground below the clubhouse and each ball finds a watery grave. But this way I don't have to hire anybody to retrieve them and I don't have worry about ball losses."

If there's a moral to this story, perhaps it should be along the lines that even if some conditions are less than ideal, a little ingenious problem-solving can come up with something that does the job. Certainly the new pro shop complex at Lake Success and the unusual driving range are great examples of ingenuity in action. □