year, members have to be willing to spend enough at the club to pay for this convenience. What has never been brought up is a "minimum monthly pro shop account." There is justification for that, too, if members want the convenience of a shop. But it never will be seen in this light.

Even though golf's growth has been on the phenomenal side in the last decade, the game can't be considered a mass market operation. The fight for pro-only business proves this. There is a good deal more profit for manufacturers in quality merchandise than there is the low price club and ball lines. The distribution and selling problems in the pro line picture also are a lot different than those in the stores setup.

**Can Get Too Involved**

I have listened to many manufacturing company executives and salesmen discuss their sales experiences and the errors that many pros make in buying. I also have heard of pros getting deeply involved in consignment and delayed payment deals that got them so wrapped up they didn't know where they stood. These are things to be avoided.

If you don't think so, consider the case of a professional at a pretty good club who died a few months ago. When his widow, her lawyer, and a fellow from the bank the departed pro patronized got together and tried to take an inventory of the estate, there were so many screwy deals on purchases, inventory and sales of merchandise that nobody could determine where the woman and her children stood. Somewhere in this fellow's business relations with manufacturers, economics got lost in the rough. Something like this is a temptation for any man in business. One manufacturer tried to help out the pro, but the poor fellow was in so deep at the time of his death, that there simply hadn't been time to get his affairs straightened out.

There is urgent need for concerted study of golf business economics by professionals and manufacturers. It shouldn't be delayed another day if the pro is to have future security, and the manufacturer increasing profits in the years to come. In the past, the pro has been too busy telling the manufacturer what should be done, and the manufacturer has been too busy telling the pro what should be done. Standing on opposite sides of the street and screaming at each other isn't going to solve their problems. What they need to do is go into a huddle.

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Use Computer to Bring Doral Course Indoors

By John D. Lofton, Jr.

Thanks to the ingenuity of Product Investors Corp., Ltd., New York City, the 18 hole Doral Hotel and CC Blue Course in Miami, can now be played indoors.

This seeming impossibility can be accomplished through Golf-O-Mat, a full scale indoor computerized golf installation which permits one player, a twosome or a foursome to play a complete 18-hole course using all the standard shots with a full set of clubs and a free flying ball.

Players tee up for their shots about 18 feet in front of a 9 x 9-foot screen on which is projected a full color view of the fairway. When the ball is hit, the computer measures the distance the ball
would have traveled in milli and microseconds, showing the yardage immediately on the projection screen. At the same time the film advances automatically. If a person hits a 185 yard drive on a 380 yard hole, the next view the player sees is the flag from 195 yards out.

The direction of the ball is indicated by a white or blue spot if the ball lands near the center of the fairway; or a red spot if the ball hooks or slices out of bounds.

Once on the green, the player either puts from a "birdie circle" or from long range. Any ball stopping within 15 feet of the flag is considered within birdie distance. Actual putting is done on a green located in front of the screen. Once the player holes out he pushes a button and a picture of the next hole flashes on the screen.

Golf-O-Mat was introduced in the spring of 1963 and units are now in operation in Portland, Ore., Lake Tahoe, Calif., and Winchester, Mass. According to Robert Hopp, Product Investors president, 50 more Golf-O-Mat units will be in operation by next month.

Merchandise Magnet
(Continued from page 38)

what restricted in his advertising and promotion. He does, however, distribute more than 400 Christmas Shopping catalogs and supplements these with two or three letters a year to members plus a weekly ad in the Lakewood club bulletin. His section in the bulletin lists schedules of club events, gives playing hints and descriptions of merchandise that may be featured in the coming week or weeks.

In his letters, and occasionally in the bulletin, Collins repeats a theme that he
feels perhaps 50 per cent of his members sometimes lose sight of: The pro is not paid by the club... The shop, in all, supports eight people... It has to be maintained on a better than breakeven basis or the pro will be forced to go out of business... Equipment and sports-wear can be bought cheaper outside the club but they aren't accompanied by the free service and small favors that the pro staff constantly performs for the members.

He Owns the Fleet

Besides his two assistants, Travis and Snipes, Collins employs two golf car maintenance men, a caddiemaster, a bag rack attendant and a range supervisor. The Lakewood pro owns 35 golf cars and 24 members own their vehicles. Every car is washed after it is driven 18 holes. Asked why he has invested so much money in a car fleet when he could lease it, Ross Collins' reply is to the effect that if a car manufacturing company feels it can make money by leasing its vehicles there is no reason why a pro shouldn't own them and take the entire rental revenue for himself. Risk, of course, is involved in this policy, but Collins manages to get the cars out for enough 18-hole rounds during the season to make money on them.

Lakewood's club cleaning and storage charge is $1.80 a month. Approximately 400 bags are kept in the racks the year around since Dallas is a 12-month golf town. The club's 300 men and 130 women players, incidentally, play more than 35,000 rounds a year. Unlike many pros who claim that they lose money on the cleaning and storage service, Collins feels that he does a little better than break even on it. The revenue from this operation pays the salary of his rack man and partly defrays the caddiemaster's salary.
The Lakewood pro pays his assistants a commission in addition to their salaries. Both employer and employees prefer this type of arrangement. The assistant pros have an agreement whereby they split the revenue they personally receive from giving lessons even though one may give more than the other. However, Ross Collins estimates that he gives approximately 75 per cent of the lessons at the club, simply because the members request that he instruct them. Collins is one of that slowly growing minority of left-handed teachers.

The Lakewood pro shop carries a continuous inventory of between $15,000 and $20,000. Sales would justify a larger one. But enough equipment and sportswear manufacturers have warehouses in and around Dallas that non-standard merchandise doesn’t have to be kept in stock at the shop but can be picked up within a few hours after the customer has ordered it. Collins, like any good businessman, takes advantage of the convenience of location of the warehouses and estimates that the annual savings of capital he would otherwise have to tie up is quite large.

Cut Down on Details

Collins and his assistants tried several methods of inventory handling and purchase and sales recording before settling on a system that is now used. At one time a perpetual inventory was kept, but it became so involved that it was finally realized that an extra man would have to be hired on a half-day basis to keep it. At the same time, a card index on each customer’s sizes, preferences, etc. was attempted but this, too, was discarded because it was too time-consuming.

Now, a complete shop inventory is taken four times a year with a weekly check being made on such fast moving items as

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Understanding Motives

(Continued from page 26)

will go elsewhere for his satisfaction.

Physical skill training, another psychological aspect of golf, is an area in which psychologists have long been interested and to which they have devoted a great deal of research. We have found that the major principle of learning a physical skill is that of reinforcement, which says that a satisfying action tends to be repeated and that unsatisfying actions tend to be dropped because they are not reinforced by pleasure or reward.

In learning a complex physical performance, such as a golf swing, the individual parts which produce the most satisfying effect usually are retained; those which do not satisfy are discontinued. Of course I'm referring to the rank beginner, whose skill level over the first few lessons follows this predictable pattern. I'm limiting this discussion to the novice, for the ups and downs of the more proficient golfer require a great deal more research before they can be analyzed.

Duties During Lesson

The pro has many different duties during a lesson. One is verbal pre-training in which he begins to familiarize the student with the golf vocabulary and focuses attention on the movements the student will be performing and the feeling he will experience from them. Such verbal pre-training pays off in results.

Other important goals are attained during the verbal pre-training session. The pupil is warmly indoctrinated and favor-
able attitudes are shaped and molded. The instructor gains his student's confidence and, at the same time, learns why he is there and which of his motives must be satisfied.

The pro also has to be an agent of selective reinforcement. That is, he must reward correct actions with praise, thus strengthening them. If a novice were given a driver along with several bushels of balls and left to whack away on his own, he might ultimately come up with a fair golf swing. This, of course, is the hard way. The pro, through long practice, is able to sort out the swing's positive characteristics and praise them, thus reinforcing them. Praise operates much better than reproof in this task, for reproof or punishment does not really produce any changes in skill. However, praise must not be laid on indiscriminately or its value will be diluted.

**Applying Reinforcement Principle**

The instructor also must diminish his role and importance as the lessons continue. He must wean his student by pointing out certain physical reinforcers which always are available for the pupil to fall back on. Most obvious of these is the ball's flight, its distance and path. A long, straight tee shot is an excellent reinforcer. Another is the awareness of how a good swing feels. The student should be attentive to the moves preceding a good shot just as much as or more than the actions that precede a bad one. When this is overlooked, we aren't letting the principle of reinforcement do its work.

Another of the instructor's duties is to serve as an example for his student to imitate. Learning through imitation is a common and effective method of learning a physical skill, but it must be used wisely. Students seldom are built like pros and the instructor's swing and distance often are demoralizing to a novice who is barely getting a few yards off the tee, and with a wicked slice at that.

In the early stages of instruction, imitation should be limited to parts of the total swing and the student allowed to put them together. Imitating should immediately follow the demonstration. This immediacy helps to reinforce the desired movements and also helps to keep the student vigilant and attentive. The pro must emphasize how the swing should feel to the student. The imitator then has two models: the sight of the instructor's example, plus the description of the feeling accompanying a good swing.
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Graveyard Latitude
(Continued from page 48)

to about June 25th they are mowed at 3/16 inches four times a week. In the fall the cut is made at 3/16 three times a week, usually until mid-November. Mowing is alternated from four directions. Cups are changed six times a week during the summer. Four of these changes come on Saturdays and Sundays when something like 500 rounds are played during the two days.

Favorite Tool

Probably as important as any operation in the Twin Oaks scheme is the aerification program. Every green is power spiked on Mondays from May through September. The power spiker probably is Lewis’ favorite tool. “You can’t hope to keep greens reasonably soft if you don’t use it often,” he observes. “And your fertilizer and disease prevention treatments aren’t effective if you don’t provide a way for the materials used in them to be worked into the soil.”

All of Twin Oaks’ greens cover a 7,000 to 9,000 square foot area. As far as is known, the club was the first in Missouri to plant its greens to C-7. Their composition is 70 per cent sand, 20 per cent sawdust and 10 per cent soil. Skeeter Lewis candidly admits that he was dubious of incorporating the unfamiliar sawdust in them when they were being built.

“I had never worked with it before,” he says. “I was afraid that the soil would be too acid.” But Lewis learned how to counteract this in pretty much of a hurry. In the first year the greens were in play he poured 100 lbs. of lime per 1,000 sq. ft. into them — at 10 lbs. per application. The putting surfaces certainly weren’t the pride of Twin Oaks that first year, but thereafter they came around in a hurry.

“When we got the pH reading up to around 6.5,” Lewis recalls, “we were in good shape.”

Three Tests A Year

That first year taught Skeeter that there is no test like a soil test. Now he has them made three times a year, often sending samples to as many as three different testing stations at the same time so that the margin for error is reduced. “I shouldn’t be revealing this,” Lewis says, smiling. “The people who make the tests for me will think I don’t trust them. But a couple fellows who are well known in the turf business say they don’t see why
a supt. shouldn't double check on soil tests and compare their results.”

The Twin Oaks greenmaster goes on to explain that the first thing a supt. should do when he is in trouble is get soil samples and have them tested. There is little or no use in calling in a consultant, he adds, if soil tests made within the last year aren’t available for the consultant to check.

Being the first club in Missouri to plant C-7, Twin Oaks has done much to propagate its growth and use. Several years ago, Lewis established a nursery for growing the strain and since that time he has supplied courses in Arkansas, Oklahoma and Kansas, as well as Missouri, with stolons to plant their greens. Since the nursery is maintained by the Twin Oaks grounds dept., proceeds of C-7 sales go to the club. They average about $1,500 a year.

Compensation Enough

Although recognition of his outstanding ability as a course supt. perhaps was delayed, Skeeter Lewis isn’t the kind of a fellow who is going to borrow any shoulders to cry on. “We’re in an unspectacular business,” he says, “and so it’s taken for granted that we don’t get very many compliments for whatever good work we do. Anyway, I think most members get so wrapped up playing golf that they don’t pay much attention to the condition of the fairways and greens. Actually, I have had quite a few of them go out of their way to tell me how good the course looks. And” Lewis smiles, “they keep renewing my contract every year.”

Skeeter, incidentally, was very much impressed by Arnold Palmer’s knowledge of turf. “We had a 15-minute conversation,” Lewis recalls, “and Arnie casually tossed some terms at me that made me wonder if he hasn’t mixed some fungicides and mowed a few greens in his day. He thought our greens were a little on the slow or soft side, but he accepted my explanation that they couldn’t be cut below 3/16 inches because of the hot and humid August weather. As it was, we lowered the blade 1/16 of an inch for him. But Palmer didn’t have any real kicks. He shot a 61. That was three strokes lower than the old record.”

Skeeter Lewis who pushes the ball around in pretty fair shape himself — he shoots in the 70s — has to play well in self defense. His brother, Charles II, is the pro at Little Rock CC; another brother, Paul, is pro-supt. at a Little Rock...
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munity course; and his nephew, Charles III, is the fellow who knocked Jack Nicklaus out of the 1960 National Amateur at Algonquin in St. Louis, as you may recall. Then, too, there is Skeeter’s son, Jim, Jr., supt. at the Ft. Leonard Wood course in Waynesville, Mo., the last four years, who plays a very good game. So, when the Lewises get together for their annual golf joust, the rivalry is almost as intense as when the celebrated Cupit clan has its annual showdown.

PGA Winter Tournaments

Jan. 3-6—Los Angeles Open, Rancho Muni $50,000
9-12—San Diego Open, Rancho Bernardo $30,000
16-19—Bing Crosby National Pro-Am, Pebble Beach, Calif. $40,500
23-26—Lucky International, Harding Park, San Francisco $50,000
Jan. 30-Feb. 2—Palm Springs (Calif.) Classic $50,000
Feb. 6-9—Phoenix Open, Phoenix CC $50,000
6-9—Panama Open, Panama GC $11,000
13-16—Tucson Open, 49’ers CC $30,000
13-16—Maracaibo Open, Maracaibo (Ven.) CC $10,000
20-23—Caracas Open, Valle Arriba $11,000
Feb. 27-Mar. 1—Greater New Orleans Open, Lakewood CC $50,000
27-Mar. 1—Los Lagartos International, Bogota, Col. $11,000
Mar. 5-8—Pensacola Open, Pensacola, Fla. $30,000
5-8—Puerto Rico Open, Dorado Hilton Hotel & CC $9,000
12-15—St. Petersburg Open, Lakewood CC $25,000
19-22—Doral Open, Doral CC, Miami $50,000
26-29—Azalea Open, Cape Fear CC, Wilmington, N.C. $20,000
Apr. 2-5—Greater Greensboro (N. C.) Open, Sedgefield CC $35,000
9-12—Masters, Augusta National $20,000 (minimum)

Open on Color Film

Available for rental from the USGA, 40 E. 38th St., New York 16, is the 16 mm. sound and color film of the 1963 Open at Brookline. It includes round-by-round action plus the playoff and still flashbacks of the 1913 event in which Francis Ouimet defeated Harry Vardon and Ted Ray. Showing time is 39 minutes.