

Japanese beetle. In 1921 the beetles were flying around the course during July and August in fair numbers and in the fall some slight injury was noted to the turf on the edges of several of the greens. In the spring of the following year, some turf injury showed up in spots on the approaches and fairways, but nothing of an alarmingly serious nature.

During the summer of 1922, the beetles were decidedly more numerous on the course than during the previous year. In the fall, careful examination of the turf on greens and fairways showed a grub population as high as 200 grubs per square yard in certain parts and a general average of about 100 grubs to the square yard. During that season the grubs took some toll on the turf of the greens and fairways, but by careful rolling and top-dressing, and decidedly more than the usual amount of watering, the greens were carried thru the year in fair playing condition but not in as good shape as they would ordinarily have been had the grubs been absent.

In 1923, the beetles were overwhelmingly apparent during June, July and August and the trees surrounding the course were almost defoliated. By the middle of August it was apparent, as a result of numerous examinations, that the greens, approaches and portions of the

fairways were perfectly lousy with grubs. As high as 1,000 grubs to the square yard, more than 100 to the square foot, were found in some of the greens and it can be safely said that the greens infested averaged 500 grubs per square yard.

### Putting Turf Affected

The turf would not have lasted very long under the onslaught of this army of root devourers. However, by that time I had worked out the carbon disulfide emulsion method of treating turf for the control of grubs, and all but one green on the course was treated by this method before the end of August, with the result that 90 to 95 percent of the grubs were killed, the grass came back vigorously and play was not materially interfered with.

The number 5 green, which did not receive the carbon disulfide emulsion treatment, was an interesting object of study during the remainder of the year. The grub infestation in this green ran about 500 to the square yard and by September 10th the grass was dead. The green was torn up, harrowed, smoothed and seeded. Thousands of grubs were exposed as soon as the soil was disturbed, but they simply dug in again after the harrowing was completed. The grass seed germinated nicely and the green had the velvety appearance of newly seeded turf. Within

two weeks this new grass was in turn dead due to the feeding of the grubs on the roots and the green remained in that condition (out of play) until the next year. Had it not been for the carbon disulfide emulsion method, three-fourths of the greens on the Riverton course would have been in the same ruined condition and golf would have been out of the question.

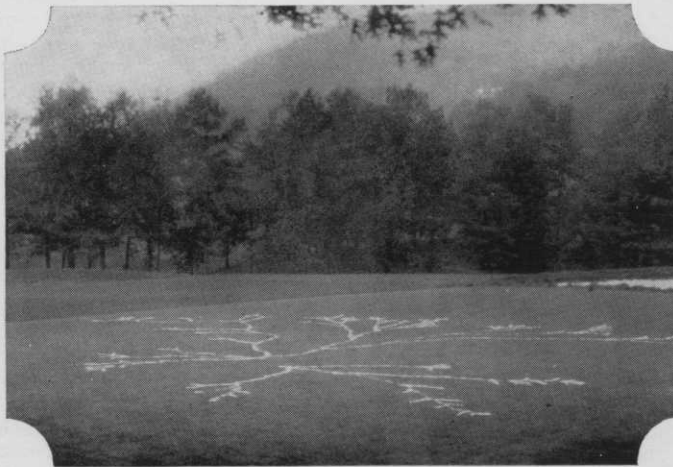
### Not All Greens Suffer

Observation of the greens of the Riverton club, and other clubs, during a period of six or seven years, has shown some interesting traits of the Japanese beetle in connection with its egg laying habits. There are some greens on the Riverton course which have never been infested with grubs to any appreciable extent during all those years. Numbers 8, 13 and 14, in or on the edge of the woods, have always escaped grub injury, accountable in all probability to the fact that the beetle is not a shade loving species and prefers to lay its eggs in open, sunny ground. Number 17, on the other hand, entirely in the open sun, has never to my knowledge

had any real grub infestation and I have spent a great deal of time and thought in trying to figure out why that particular green always proved immune but with no tangible results.

I have just recently examined a course on the north side of Philadelphia and grub conditions there today are the same as the Riverton club contended with in 1923. The greens are in good shape due to the use of arsenate of lead during the past year, but the fairways and tees, totaling 60 acres, have been shot to pieces by the grub of the Japanese beetle. It will cost \$6,000 to grubproof and reseed these fairways. One golf course in the Philadelphia area has to date used 18 tons of arsenate of lead in grubproofing their fairways and the turf is in splendid condition in spite of a heavy beetle population in that vicinity.

In next month's article I propose to discuss the habits of the grub in turf and to begin describing the carbon disulfide emulsion method of controlling grubs in fine turf.



## Lightning Strikes Again —No Permanent Damage

IN THE October GOLFDOM there appeared an illustration of a green hit by lightning. Now another case is brought to our attention. The picture given here shows the fourth green on the Homestead course at Virginia Hot Springs which was struck by a bolt of lightning quite recently. The marks, which extended some 20

feet from the center, disappeared in ten days with no apparent permanent damage to the affected turf.

"The extraordinary thing to me," writes Fay Ingalls, president of the Virginia Hot Springs Company, "is that I have always heard that lightning would strike a tree or any elevated object. You will note that this damage occurred approximately 12 or 15 feet from the cup in which the standard was at the time of the storm. This is quite a large green, about 9,000 square feet."

# Some Sorrows of Pro Selling

*Underdone and Overdone "Salesmanship" as Seen  
by a Veteran Professional*

By GEORGE LAWSON

*Professional at the Redlands (Calif.) Country Club*

I N a recent issue of GOLFDOM the statement was made that the pro is, from his training, unfitted for merchandising. From personal experience extending over a third of a century the statement, so far as it hit me, was only too true. To me the term "salesmanship"—it is really a recent growth—always has had a dubious application.

Apologizing to those who may have a higher idealization of it, it never appealed to me as anything else than hood-winking or hornswogling people into buying something that they neither wanted nor needed. I never gave "salesmanship" any attention on this account. And I wonder how few who aspire to cleverness in the calling think of it as anything else? Will it astonish when I aver that I even had a contempt for being considered a mere salesman, although I had to be one or get off the earth. I couldn't help this mental attitude of mine to the business part of the profession I had of necessity to follow.

My earlier training as a mere maker and repairer of golf clubs utterly unfitted me for the sale of golf equipment of all kinds, and it revolted me to trick people into buying articles that were worthless, unnecessary and beyond their means. Even the customer's financial weight—only guessed at—possessed my mind in every transaction.

I can see now that this was a psychological blunder, and should not have obtruded itself. My untrained mind took me even farther afield—I judged that economy should guide the customer as it guided myself—and, being Scotch, I was a natural economist. I wanted to treat him as I would have had him treat me—the golden rule. In other words, it was "against the grain" to "sell" something to somebody, my idea being that the buyer should know enough to "buy," and that he should even be grateful to me for the privilege of buying from such a safe and sound source. And although the latter feeling may have actuated a goodly number of my customers, especially those old-time golfers who knew what they wanted, it was not good business method. Notwithstanding all this dumbness on my part (GOLFDOM wasn't much out in its judgment regarding one pro at any rate),

I was astounded one day when a friend of mine—a manager in a large hardware concern—catching me in the act of making a sale, told me that I exhibited clever salesmanship.

Was I flattered? Not a bit. Clever or not, all I could say about it was that my efforts were simply directed towards supplying a customer's needs without depriving myself of any legitimate profit in the transaction. It may be that I was a natural salesman, merely lacking the so-



It's a far jump from the bench to sales work, but the pro has to make it if he wants to keep up with the procession. The same integrity that is responsible for the quality of bench-made clubs, is the basic principle of successful selling and bridges the gap between these two phases of the professional's work.

called "technique" that comes from training and practice. It may be that my talk, based on a lengthened experience, was convincing to my friend. I wonder!

### Trading vs. Cash

As may be guessed, I was never free from blunders, chief among which was one which an astute friend described as "trading dollars." I was losing my just profit. When I got next to what he meant I really felt that I would be the better off with a correspondence course in salesmanship. However, on further reflection, I doubted whether I had suffered much. The policy of taking old clubs and balls in trade—a practice that the more successful pros frown upon—fostered custom of a more valuable kind later on. It made customers, and I lost nothing in the long-run. On the contrary, maybe I gained. It was insignificant business for the higher-ups, but for me, in a small club with a nine-hole course, it was good business.

From time to time in my career I have had much unsolicited advice tendered me. Among my customers were some who were really sorry for me. They considered me a greenhorn in a business way, and they were prompted to favor me with suggestions. Among the many pointers from time to time was the well-known one of "moving stock." All I can say about this is that it never moved me. A "moving" of my own devising, though, was to move the shop-worn stuff out of sight for a few weeks and reproduce it again when it had been forgotten, or when the right party popped up, as he was sure to before long.

Another "tip" was to "have a sale"! My idea of that scheme was that unless I had local competition I was merely playing into the hands of the enemy, by whom I meant that well-known individual—often referred to quite opprobriously as the cheap skate—who buys only when he can acquire something for next to nothing. The way I looked at this suggestion was that what I sold at a sacrifice might just as easily be sold at full price later on, there being just so much buying power in the club membership anyway, which, with a few exceptions here and there, I commanded.

### Selling Second-Hand Clubs

For instance, in a small club such as mine, catering to a small community, the practice had to be suited to the field. The pace set was not fast. There was not much style among my clientele, and a

rather circumscribed spending power. When a young man came my way, playing golf as his sole recreation from business, and poor both in funds and time, I would suggest not only economy in equipment but also in club dues. For him the municipal course or the pay-as-you-play course offered the best returns. In the matter of equipment a cheap set of clubs, not necessarily new ones, would serve. I don't believe in cheap new clubs for anyone, but rather in used clubs of substantial make. I never saw a pro yet who didn't have a raft of these on hand for hire or sale at all times. Good players are all the time junking their clubs, and a good set of clubs can be obtained often at less cost than cheap new ones.

This is a form of trade that the city store cannot fill, and should bring as much profit as selling an inferior article. But human nature often interferes here. I have seen many a poor, misguided wight, as poor in judgment as in pocket, spending more on one fancy club than would have bought three or four better but less fantastical ones. How I have pitied him! Nay, how I have advised him, but unavailingly. As I also have that other poor mortal—the one whose pocket-book runs only to reprints but who insists upon banging his lonely dollar away on a Dunlop or a Silver King to lose it or gash it before he had gone more than a couple of holes, when he might have had a couple every whit as good—to him at any rate. The object of the beginner is to play as often as possible, and the one who economizes on golf balls is better able to pay green fees. Green fees, not dollar balls, bring necessary practice.

### Discard Prejudices

To conclude this little ramble over a much-discussed field, while I corroborate the statement that the average pro is unfitted for merchandising, nevertheless I believe there are many exceptions. I have a belief that if the business end of the game had been engineered from the start by American-bred pros—I came across in the golfing Mayflower myself over thirty years ago—I would have an entirely different aspect today. The Big Boys would be receiving remuneration equal to if not away ahead of Babe Ruth in baseball. That they may yet do so is not at all unlikely, but being badly bunkered at present, a business-like niblick is an absolute necessity. The profession is short on loft.

For the pro to become a success in the

"golf business" he must "can" all his prejudices and traditions of the ancient and horrible kind. Provided he is willing to do this, he will have a chance to supersede the tradesmen and shopkeepers, whose encroachment upon his original province is becoming more pronounced every day.

The latter-day professional will fall more readily into the line of reform than the old-timer, who has those same traditions more deeply cemented into his make-up, and who in many instances will rather chuck the job than give up his birthright. In short, if the young pro is willing to

sink his championship ambitions—and he generally is after a few years of futile effort—and stick to business, financial prosperity should follow. But if he has altruistic leanings, is an ardent lover of the game itself and a devotee of the out-of-doors, and plans to spend a lifetime on the links, he will have to suffer the consequences. While gratifying his desires and having a picnic of a time, he will possibly remain poor in pocket. Even giving lessons, at which many pros persevere with some financial success, is in the long-run hard work for little pay. Golf business pays better.

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# How and Why of Fairway Fertilization

By O. J. NOER

WHEN thin turf is not tillering and developing a denser sod, either conditions are not favorable for growth or the supply of plant food is not sufficient to support additional turf plants. If the soil is well drained, in good physical condition, plentifully supplied with moisture and free from harmful agents such as grubs, lack of aggressive growth is almost certain to be due to a lack of sufficient available plant food.

The presence of moss is more frequently an indication of impoverishment than a sign of sour or poorly drained soil. Luxuriant clover may be due to insufficient nitrogen if the turf grasses are not growing actively. The bacteria in the nodules or sack on the roots gather nitrogen from the air so the clover is not dependent upon the soil for its nitrogen supply.

The fallacy of extensive reseeded without fertilization should be recognized. How can the new seedlings survive in competition with established plants if the latter are struggling simply to maintain themselves! In the future more fertilizer and less seed will be the order on established fairways.

## When to Apply Fertilizer

When once obtained it is easier and cheaper to maintain good turf than to periodically renovate poor fairways. Troublesome weeds do not easily establish themselves when the turf is dense, but become a serious problem where the turf is sparse.

Fertilizers are best applied to fairways in the early spring, early fall or late in the season after active growth ceases, and should never be applied during the hot summer months when turf suffers for want of water. Many clubs prefer late fall applications to early spring. At this time the soil is firm and fairways are not cut up by the distributing machine; the arduous summer work is over and sufficient labor is available to complete the work with dispatch. When growth starts in the spring the turf obtains immediate benefits from the additional plant food.

## Plant Food Elements Removed by Turf Grasses

Turf grasses in common with other cultivated crops require only one or more of the plant food elements, nitrogen, phosphoric acid or potash. All soils contain an abundance of the other essential elements.

Freshly cut clippings consist of about 65% water and 35% dry matter. A ton of dry clippings contains approximately 35 pounds nitrogen, 8 pounds phosphoric acid and 25 pounds potash. More than 3500 pounds of dry clippings per acre were obtained from some fertilized plots of blue grass last year. On this basis 60 pounds nitrogen, 12 pounds phosphoric acid and 35 pounds potash were removed from the soil during the year. Usually well fertilized turf contains larger amounts of

plant food than turf grown on impoverished soil, but the above figures probably represent the average amount of plant food removed during a season.

### What Plant Food Elements to Apply

Based on composition a fertilizer high in nitrogen and potash seems best, but the plant food content of the soil, and the rate at which insoluble plant food becomes



The endgate type spreader, attached to rear of wagon box. Fertilizer is fed into the hopper by shovel or poured from bags, and spreads by the machine in a fifteen-foot strip.

available must be considered also. Sands are usually low in all three, while sandy loams, loams and heavier soils may be low in nitrogen and phosphoric acid, but are high in potash. Most of these soils, in fact, contain about 15 times more potash than nitrogen and additional potash is rarely needed.

In exhaustively cropped soils the plant food is frequently locked up in very insoluble compounds, and such soils respond markedly to fertilizer applications. A history of previous cropping and manurial treatment serve as a criterion of soil exhaustion. As a rule farmers in the vicinity of large cities anticipate real estate and golf development and have paid little attention to maintaining fertility. Black soils are not necessarily fertile and may even need nitrogen if they have been heavily cropped. The dark colored humus resists further decay and does not yield sufficient available nitrogen. In case of doubt, simple trials will quickly settle the question of fertilizer needs.

The growth of clover is greatly stimulated by the liberal use of phosphoric acid

and potash, especially if the soil is not very acid. Hence they should be used with discretion.

A fertilizer relatively high in nitrogen, moderate to low in phosphoric acid and with little or no potash will ordinarily give best results.

### Plant Food Losses from Soil

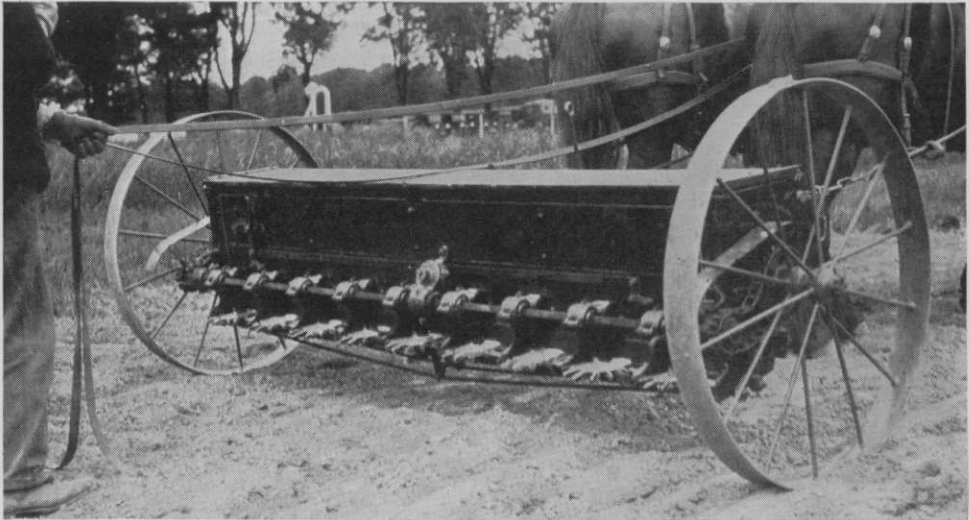
Plant food may be lost from the soil in two ways, either mechanically as a result of surface wash, or as a result of leaching.

Mechanical losses may occur when heavy rains follow immediately after fertilizers are applied, and may be severe on slopes and steep hillsides. The danger is always greatest after a period of dry weather. Moist soil always absorbs water more rapidly than dry soil. Surface run-off is usually greatest following the first rain after a period of drought. It is best to make applications after sufficient rain has fallen to moisten the soil thoroughly.

Losses from leaching occur when excess water passes down through the soil, and, of the three fertilizer elements, are confined to nitrogen. Phosphoric acid and potash are not lost because both are fixed and held by the soil. Sulphate of ammonia and ammo-phos, even the water soluble, are not subject to direct loss. When applied to the soil the ammonia is taken up and held temporarily by the finer soil particles. Most of the nitrogen in organic materials is not soluble in water and is not lost until converted into soluble forms. Only nitrogen in the form of nitrates is subject to loss, but since all other forms of nitrogen are converted to nitrates in the soil, as a result of bacterial activity, the danger of loss exists no matter what the original form of nitrogen applied. During the growing season losses are negligible unless larger amounts of nitrogen, than can be used by the growing turf, are applied. During cold weather when the turf is dormant, bacterial activity in the soil is at a standstill, so there is little danger of loss unless nitrogen in the form of nitrates was applied in the fall.

### Sources of Plant Food

Manure has been widely used and greatly prized, but is now difficult to obtain. If of good quality, it contains about 8 pounds nitrogen, 5 pounds phosphoric acid and 10 pounds potash per ton. About one-half the nitrogen and three-quarters of the potash is water soluble. While the actual plant food content is low, the heavy



This type of distributor will spread a strip 8 to 10 feet wide at the rate of 400 to 5,000 pounds per acre. Two or more different materials can be mixed in the hopper, an advantage not possessed by the endgate type.

applications usually used supply considerable plant food. Unless thoroughly rotted there is danger of introducing weeds and clover. When heavy applications are made the large amounts of soluble potash may further stimulate clover. The benefits resulting from humus are over emphasized and confused with the extended action of the slowly available insoluble nitrogen. To be of real benefit the humus should be incorporated with the soil and this is only possible before seeding. Fall applications are the rule and in the spring considerable work is necessary to remove trash and other debris. Unless obtained at very low cost other materials can be substituted and, if intelligently used, equally good results obtained.

There are a large number of commercial materials to choose from, which may be divided into groups based on the predominant plant food element and the nature of the material.

Nitrogenous fertilizers are grouped into three classes, namely, organic, ammonia and nitrate, pending on the form of nitrogen.

### Organic Materials

Organic fertilizers are waste animal or plant products. The nitrogen content varies considerable and is in organic forms, largely insoluble in water. Before the plant can utilize the nitrogen soil processes must convert it into soluble and

available forms. This is a gradual process so nitrogen is released over long periods, and thus the turf is provided with a uniform and continuous supply. Since bacterial action in the soil is at a standstill during the cold winter months, these materials can be applied in the late fall without danger of loss from leaching.

Organic materials are least apt to burn or injure the turf. They differ in this respect, depending upon the rapidity with which they break down in the soil.

Ordinarily a long period elapses before results show because of the breaking down process necessary which takes place in the soil.

Bone meal has been widely used in the past, but is rapidly falling into disfavor. It contains only about 2.25% nitrogen, and is very high in phosphoric acid, usually 27%. The high cost per ton prohibits sufficiently large applications to provide adequate amounts of nitrogen. The large amount of phosphoric acid and the accompanying lime stimulates the growth of clover. Slowly available nitrogen can be supplied better from other materials.

Dried sheep manure is another material of rather low nitrogen content. It contains about 2% nitrogen, 1.25% phosphoric acid and 2% potash. It is an expensive material, if purchased solely as a source of plant food.

Among the higher nitrogen containing

materials are the following: cottonseed meal with 6% nitrogen, poultry manure with 5% and milorganite with 5½% nitrogen. These materials carry up to 2.5 to 3% of phosphoric acid and potash also.

### Ammonia Containing Materials

The only two materials of commercial importance are sulphate of ammonia and ammo-phos. The former contains 20% nitrogen (25% ammonia) and the latter 16.4% (20% ammonia). Ammo-phos contains 20% phosphoric acid in addition. Both are water soluble, quick acting, and burn the turf when too heavy applications are made. Since the ammonia is taken up by the soil particles, the nitrogen is held temporarily at least in the shallow surface soil where root development takes place. Because of their quick action it is probably best to confine their use to the growing season, and to make several successive light applications to avoid too heavy initial growth. On fairways a slow continuous growth is preferable to a quick spurt.

### Nitrate Containing Materials

The chief nitrate containing fertilizer is nitrate of soda, which contains 16% nitrogen. This is a soluble, quick acting fertilizer which is liable to burn the turf unless applied carefully. The use of nitrate of soda is being discouraged because experimental plots show that it encourages weeds and coarse grasses.

### Phosphate Fertilizers

Acid phosphate is the main and cheapest source of phosphoric acid, and is produced by treating rock phosphate with sulphuric acid to convert the insoluble phosphoric acid into a readily available soluble phosphate. There are three grades on the market containing 16, 20 and 45% phosphoric acid. The fertilizer manufacturer uses acid phosphate as the main source of phosphoric acid in mixed fertilizers. When added to the soil the soluble phosphoric acid is precipitated as a finely divided insoluble phosphate, which readily passes into solution again when needed by the plant. Turf is not easily burned or injured even by relatively heavy applications.

The other two main sources of phosphoric acid have been mentioned, namely, bone meal and ammo-phos. Bone meal is a slowly available material and its use presents no advantages over acid phosphate. Ammo-phos is a high grade source of readily available phosphoric acid. Its

selection and use must be based on a need for both nitrogen and phosphoric acid.

### Potash Materials

The bulk of potash fertilizer comes from Germany and France. Muriate of potash, which is most widely used, contains 50% of potash. While it is water soluble and quick acting, the potash is held by the fine soil particles and is not lost by leaching. Due to its complete solubility there is danger of burning the turf.

### Mixed Fertilizers

Manufacturers make up mixtures containing various amounts of plant food, whose value depend not on the price per ton, but on the relative proportion and total amounts of the different plant food elements present. In expressing the plant food content the first figure represents nitrogen, the second phosphoric acid, and the third potash. Thus a 9-7-3 contains 9% nitrogen, 7% phosphoric acid and 3% potash. For fairways, mixtures containing about twice as much nitrogen as phosphoric acid and low amounts of potash are probably best.

### How Much Fertilizer to Apply

The amount of fertilizer to apply must depend upon the condition of the turf and soil, and the material used. If the turf is thin, usually the soil is poor also and more fertilizer should be used to encourage heavier growth. When a dense turf is obtained it is simply a case of maintenance and smaller amounts suffice. A 10-ton application of manure supplies about 80 pounds nitrogen, 50 pounds phosphoric acid, and 100 pounds potash. Many of the disappointments attending the use of other materials have been due to the small amounts of plant food, particularly nitrogen, which have been applied, and until reasonable applications are made, disappointments will continue.

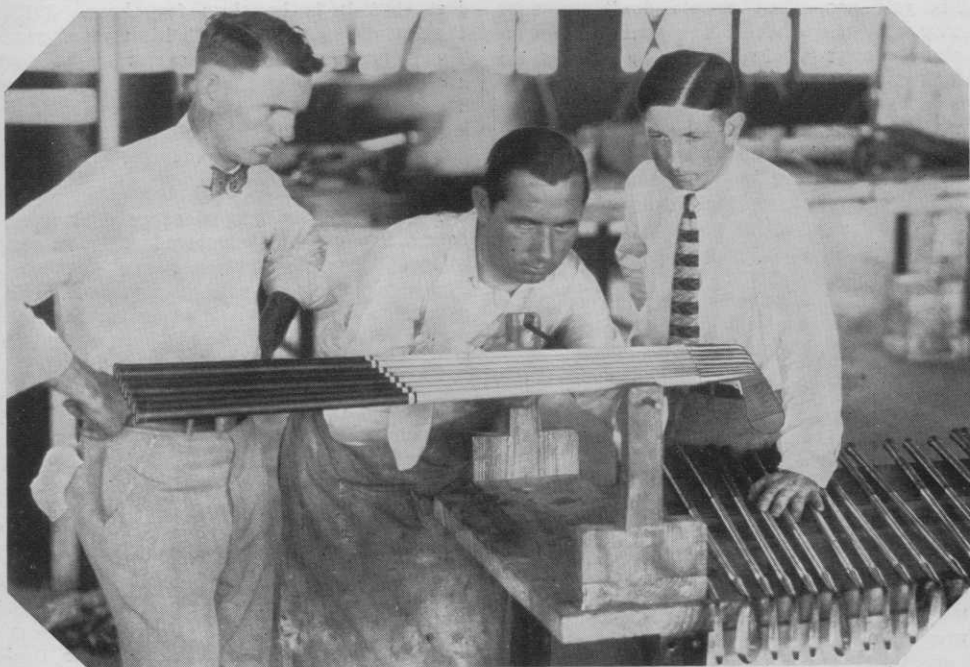
A thousand pounds or more of the better organic materials is not unreasonable. As previously stated, sulphate of ammonia and ammo-phos should be applied in several small applications. Because of their higher nitrogen content and complete solubility, the total applications should be smaller.

### How to Apply Fertilizers

Fertilizers do not move laterally in the soil, so uniform distribution is important. This is best obtained by the use of a good fertilizer distributor. There are two com-

*(Continued on page 29)*





Hagen, Al Link and Glenn Morris are shown here trying to get bench-made quality on a factory quantity scale.

## These Changing Times for the Pro Golfer

By WALTER HAGEN

THESE are changing times in the business of golf. The amazing development of the game during the last decade is quickening the elimination of the unfit and consequently making the business better for those who are doing a thoroughly business-like job of handling their sales, their instruction, and the other interests of their clubs and their members.

Successful business men to whom I have explained the situation have marveled at the progress made by the professionals who have become first class merchandisers by the tedious and expensive process of self-education. Generally the golfing public does not know what progress is being made in this direction and it seems to me that one of the highly important details of this necessary adjustment of the professionals' business to the current time is to acquaint the public with the pro's status as a merchandiser and to win for the pro

complete recognition as the prime factor in the sale of golf goods. Department stores have made enough of a dent in the sales of some professionals to impress upon the pros who have suffered the wisdom of immediately capitalizing their reputations as the dependable and authoritative sources of supply of quality golf goods properly suited to the requirements of each player. Those pros who have done this and established some foundation for their reputations by handling the right goods in the right manner, are making no complaint about outside competition.

It looks to me like the pro has a merchandising problem that in many respects is similar to the situations that confront the public utility companies. You'd think that everyone would want electricity, gas and telephone service, just as you think every club member would buy all the golf goods he possibly could use, solely from

his golf pro. But people don't act that way and the electric companies are constantly engaged in trying to wire more homes, trying to sell more electrical equipment and trying to get the customers to make greater use of the appliances already installed. The gas companies are encouraging more home cooking and more industrial consumption of gas by continuous sales and advertising efforts. The telephone companies are strenuously campaigning to get people to realize that the long distance telephone call is an economy as well as an under-used convenience, and to make telephone users appreciate the handiness of extension telephones in their homes.

Now, in view of these selling efforts of suppliers of necessities of modern life, where can the pro justify any position of merely standing by and waiting for business to come his way. This is the business age of golf and the pro must talk, think, and act business if he is going to keep in step with the prevailing conditions and to make a good living out of his job. The pros who think and are willing to work and study already are cashing in. Others never will awaken.

### The Magic of Selling

Again referring to the public utility field. Until a comparatively short time ago there was no great selling effort made by the telephone companies. The automobile industry since its birth has been distinguished by the most aggressive and best planned selling work in the United States. What has been the result? The telephone business is twice as old as the automobile industry, yet there are more automobiles than telephones in the country. And do you think you can get by without trying your level best to make yourself a first class merchant of golf goods?

The magic of selling, so frequently referred to by men who want to surround selling with a mantle of mystery, is a very simple thing when you get it down to the essentials. It's merely buying right and using ordinary horse-sense and persistence in showing people that the product you have for sale is more desirable to them than the money they'll have to spend for it. If you make the product seem desirable enough they'll not think about the money at all, which makes the selling job easier and pleasanter for all concerned. I am of the opinion that many professionals are discouraged because they think that selling is such a deep and dark sub-

ject that it is hopeless for them. With the intimate contacts with his market that every pro enjoys, selling should be the easiest thing in the world for him. Just keep at it with some intelligence and courtesy and you'll have no difficulty in boosting your sales and income.

### Where Pro Gets Help

I have been impressed often with what seems to me to be misplaced effort in pro shops. Hours and hours are spent in making clubs and only a casual time is spent in sales efforts. It looks to me to be a case of the cart before the horse. I view it this way because I refuse to mourn and see nothing but disaster ahead when I hear the boys say that bench club-making is becoming a lost art. That is tough on the artists, and that's about all, according to my belief. They'll make more money selling, anyway.

Golf club manufacturing, just as other manufacturing, generally can be done better under expert supervision, with careful selection of raw material and skilled employment of specialized machinery than the work can be conducted with the limited resources of the bench. I'm not saying this loosely and with prejudice because I am interested in the manufacturing end of golf as well as in the performing department, but because it is plainly the truth, as any professional who will investigate may verify. The manufacturer of golf goods who has a lot of capital tied up in the preservation or making of a valuable reputation and a profitable and extensive market can, and does, go to the very limit in seeing that each item of his making gets the best that modern methods and talented men can put into it. He checks his results before shipping and he won't let anything go out that isn't 100% O. K. He can, and does, discard anything short of the highest standard for the plain reason that it costs him less to junk it than it might cost him to let it get out on the market and do his reputation and chances of future business an untold amount of damage.

However, I am willing and happy to admit that there remain a goodly number of experts who are working at benches in pro shops. There is a good field for their output, and always will be. They never can make enough to anyway near supply the possible market for bench-made clubs among their own members, and of course will get less income from making clubs than they will from selling clubs, but a