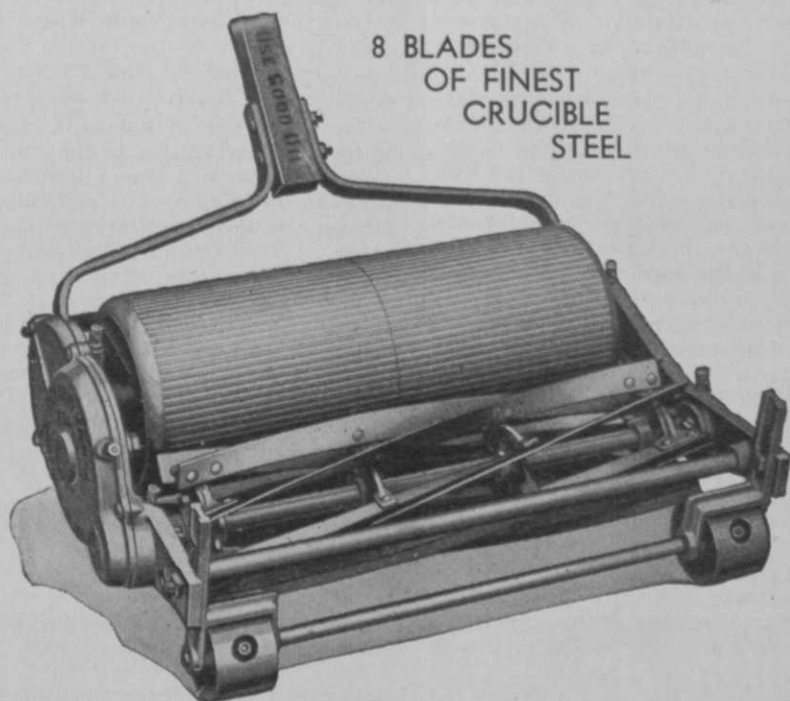


PENNSYLVANIA

Super Roller

PUTTING GREENS MOWER

"THE LAST WORD IN PERFECTION"—
writes a distributor from far-away Australia



8 BLADES
 OF FINEST
 CRUCIBLE
 STEEL

A light-weight, compact, precision machine, with high-speed cylinder, designed for the one purpose of mowing greens smoothly and easily.

Where par of the course is broken, you will usually find Pennsylvania mowers.

The NEW GIANT FAIRWAY, with its 36-inch units, will help reduce mowing costs, and assure better fairways. They are constructed entirely of malleable iron and steel, and guaranteed against breakage under severest mowing conditions of fairways or rough.

Write for complete catalog with prices of Pennsylvania mowers, showing various styles for all conditions and kinds of turf.

PENNSYLVANIA LAWN MOWER WORKS
PRIMOS, DEL. CO., PENNA.

The advertisers pay for your GOLFDOM copies; patronize them.

CODE and REPEAL Are Managers' Meeting Features

WHEN THE Club Managers' Association of America opens its eighth annual convention at Hotel Kansas Citian, Kansas City, Mo., March 5, there promises to be plenty of action for the dough of the fellows who travel to the affair. The session will run three days and will have an exhibition of equipment, food, liquor and supplies in a hall adjoining the convention arena.

Barney O'Grady, cherub-panned and wise young man who heads the association, has a program he intends to bring to definite and profitable conclusion at the Kansas City sessions. O'Grady, manager of the Hamilton club, Chicago, hopes by that time to have the clubhouse code approved by the NRA so the boys can work out their budgets on the basis of actual facts.

The club code business, has been the source of some very dignified sassy words back and forth on a high and gentlemanly plane between the Club Managers' Association and the USGA. The USGA has taken the stand that the private clubs, not being operated for profit, don't come within the scope of the NRA. The Club Managers' Association members, many of whom are city club managers, had too much heat put under them by their bosses to wait and take a chance. Budgets had to be prepared. Some of the city clubs were in keen and direct competition with hotels and restaurants, and the H & R gents having been laid over a barrel and paddled plenty by the code, were going to see to it that the clubs didn't get away with any edge. Private country clubs, competing with each other and daily-fee courses on a basis that was poisonous to the pay-as-you-play plants had dropped their guards. Some of the fee fellows figured they would get even—and how—when there was an NRA showdown on the amateur status of the private clubs.

Chances are that the USGA plea for private club code immunity will be granted by the government. If it is, it will mean that the private clubs will have to go back to the private basis of operation instead of running on a "come all ye" basis as some of them have been doing. This enforced

change will be a good thing eventually as it will remind private clubs to concentrate on private membership solicitation for their financial salvation.

There has been a minimum of publicity put out by the managers' association on the code developments. Maybe the excuse is lack of money. Those who are especially interested in the various phases of the code can find out what the score is by attending the Kansas City meeting.

The 10 per cent club dues tax is coming in for a concerted slug at the convention.

Another live idea that will come to the front at the Kansas City meeting is the prospect of the organization changing its name to "The American Club Association" and permitting club officials as well as managers to join. Officers will be managers of the clubs. This hunch is brilliant and comes from the O'Grady youth. He figures, and correctly, that if the managers can get club officials interested in the association a lot of the managers' troubles will be ended.

O'Grady believes this proposed change in organization would:

1. Make club officers more aware of the value of a good club manager.
2. Make the club officers come to the association for new managers, which will enhance the value of the association in the minds of the managers who belong. ("Make" is O'Grady's own word, but you can't rule a racer off the track for trying.)

Country club managers will have their customary conference, with A. M. Tousley, manager of the Hillcrest CC, Kansas City, in charge.

Naturally, the hot topic will be liquor. What brands, what service equipment, what prices and what the hell, will be discussed in detail. The managers already have enough to talk about on the subject of liquor to keep them exchanging ideas for far more than the maximum code hours.

Some of the managers are suggesting "corkage" charges on liquor brought into clubs by members; in fact some of the clubs are applying this charge. Other clubs have gone to the locker system with

the club doing the wholesaling so high license fees won't have to be paid. Effect of repeal in bringing back to the clubs the food business that formerly went to the speakeasies and roadhouses, changes in eating habits, financing of long-needed improvements with liquor profits, winter operation of country clubs as private taverns and hundreds of other slants having important bearing on club business in 1934 will engage the serious attention of the managers.

Liquor added income may be somewhat offset by the sharp rises in food costs during 1934, an incline that troubled the managers no little in 1933. Clubhouses that need to be restored to prime condition because of the intense and growing interest of women in golf is another major problem with which the managers will cope at Kansas City.

The way these gentlemen will labor away gives a definite promise that the fellow who is anxious to learn is going to get a dividend out of attending the Kansas City rodeo.

It would be a good thing for clubs if their house chairmen could sit in on those sessions. O'Grady's proposal to this end seems due for favorable consideration. Anyway, it's an idea that the PGA and NAGA had better consider for the pros' and greenkeepers' bodies. Issuing associate memberships to the club officials in charge of these departments probably would do something to strengthen the organizations and extend their fields of usefulness.

Sports Goods Show Gives Signs of Big Year

EXHIBITORS at the annual convention of the National Sporting Goods Distributors association this year did more actual business on the dotted line than at any of the previous exhibitions during the four years' history of the event.

There were only a few exhibit spaces vacant at the Hotel Sherman, Jan. 29-31, and golf goods were prominent among the displays. Among leading golf goods manufacturers exhibiting were: American Fork and Hoe; Buhrke; Burke; Crawford, McGregor & Canby; Hillerich & Bradsby; Horton; Kroydon; Schavolite; Spalding; Vulcan; Worthington Ball; Wilson-Western; and L. A. Young.

Among new golf items shown for the first time were the Vulcan equilibrated

The **NEW**
SWEET SHOT
is sold
EXCLUSIVELY
by **PROS!**



75c
LIST

"It is the best Ball I have played in years," wrote a Southern Pro about the Sweet Shot—Worthington's new Ball that is sold **EXCLUSIVELY** by Pros. It gives sensational performance and is especially designed for the low handicap golfer—the hard hitter who wants distance, click and accuracy.

Tommy Armour

It will pay you to stock the Tommy Armour, an outstanding 50c ball that appeals to 90% of golfers. Our 1934 Advertising Campaign is creating a big demand for Tommy Armour Balls.

30 Years of Existence Confined Exclusively to the Successful Manufacture of One Product
Qualify a Company to Claim Leadership in the Field.

Write for Details

MAKE GOLF BALLS ONLY

Worthington Estab 1904

THE WORTHINGTON BALL CO., ELYRIA, OHIO

Just a
"BIRDIE"

for
PUTTING
GREENS



the
GREENSKEEPER
MOTO-MOWER

Here's a powerful putting greens mower of advanced design to meet the needs of the exacting Greenskeeper who takes pride in a perfectly cut green. Last year the mower was thoroughly tried out by golf greenskeepers and proved so satisfactory that it is now included in the Moto-Mower line.

Although still retaining sturdy construction and the desirable necessary features for satisfactory, easy operation, the Greenskeeper is built as lightly as possible. The weight is so perfectly distributed that the ground pressure on the greens is no greater than that of a golfer's foot.

Write today for literature and prices.

THE *Moto-Mower* **CO.**
TRADE MARK

4601 Woodward Ave., Detroit, Michigan

irons and the Hagen honey-center ball.

A number of professionals visited the exhibits and placed orders.

The business done at exhibits indicated clearly a revival of sporting goods business that should be a tip-off to the pros to stir themselves early and actively for 1935 sales.

Judging from this year's performance, this show is a highly valuable and profitable feature. The spot where it continues to miss badly is in not making some provisions for pro representation. It's advertised as "The General Congress of the Sporting Goods Industry," which is a silly statement when you consider that absolutely no official recognition is given by the event to golf professionals.

The absence of pro recognition was emphasized by the statement of representative stores and manufacturers to the effect that none of the new golf goods ever could be sold to any marked extent at the stores unless the pros had given the product their endorsement and marketing debut.

Course Bosses Caddie for Aldermanic Tyros

IAN MACDONALD pro and supt., and Frank Rosso, city engineer, at the new Modesta (Calif) municipal course caddied for the city's four councilmen at the opening of the course. Three of the councilmen never had played before.

"It was a great match," said MacDonald, "and showed that events for people who never have played golf before can provide a lot of fun at a municipal golf course as well as increase the game's popularity."

WHEN CLUBS had waiting lists, it was up to the new member to work out for himself just what his club was going to mean to him. Nowadays, when every new member is pretty much the result of high-pressure salesmanship, the wise club goes out of its way to introduce the new man to the various attractions of the club, in order that he may become "sold" on the organization as rapidly as possible.

ADDING 25 cents to each caddie fee has been found an easy way to finance fairway watering installations by some eastern clubs.

The system has the merit of collecting the cost of the system from people who use the course.

Sarazen Starts Drive for College Golf Courses

By LEONARD F. WILBUR

GENE SARAZEN and Robert T. Jones are in business together to develop more golf in colleges.

The Sarazen is the well known Sarazen of the Westchester and Miami-Biltmore Sarazens but the Robert T. Jones is the Robert Trent Jones of Stanley Thompson and Jones, golf architects and not the Robert Tyre Jones, Jr., of the Atlanta Joneses.

Sarazen and the Thompson-Jones firm have completed a deal with Colgate University to install an 18-hole golf course at the university. Gene is all sweated up over the deal and already has pending negotiations with other universities concerning the construction of golf courses. Colgate has only 949 students but it is figured that with the student play and such additional fee play as may be attracted, the new course will amortize itself a lot quicker than would a football stadium in a much larger school.

That the Sarazen young man, who boasts no degrees from any college or high school, should be the first of the prominent professionals to pounce on the college field as a province for the promotion of golf, is a tip-off that there are a lot of things smart business men don't learn in school. However, Gene is intent on seeing that golf is going to be one of the things the collegians, both boys and girls, do learn, because of the good the game will do them and the good they will do the game.

Big College Market

As GOLFDOM has persistently pointed out, the latest government census figures show that there are about 5,600,000 kids between 16 and 21 going to school in urban communities and the present size of the active golf market is a little less than 2,500,000. Getting these kids sold on golf not only should practically double the golf market in a few years but provide it with some substantial insurance for the future.

After reading this dope in GOLFDOM many in the golf field have nodded O. K.

but haven't gone beyond the "so what" stage with this school market development.

Then along comes the Sarazen lad, on whose brow no square chapeau ever rested and against whose ankles no gown ever swished as he walked with the graduating class at dear old Siwash. But he sees an idea that means money to golf and hopping into his plane he goes to Hamilton, New York, and gets in his promotion licks. These licks are easier to get in these days with CWA and PWA government dough available for golf course construction.

Now as far as the official publicity on the Colgate deal with Sarazen and his teammates Thompson and Jones goes, you can read that:

"The announcement that Gene Sarazen, P. G. A. golf champion and former British and American open title holder, will design his 'ideal golf course' at Colgate University, Hamilton, N. Y., has aroused great interest among Central New York golf enthusiasts. This important news came one morning recently when Sarazen, in a talk before the Colgate student body in Memorial Chapel, announced that he would make the new 18-hole golf course, to be started at Hamilton in the spring, his home course, and that it would be his personal idea in every detail of what an 'ideal course' should be.

"The champion's statement was received with enthusiasm as his visit to the university had been shrouded in mystery until the meeting in the chapel. He conferred with William A. Reid, graduate manager of athletics and mayor of Hamilton, and Stanley Thompson and Robert Trent Jones, golf architects, in inspecting the 147-acre tract where the course is to be built.

"Sarazen revealed that for years he has had hopes of building a course exactly as he wanted it, and that after looking over the Colgate acreage, had reached the conclusion that the land was just the type he wanted for the construction of his model course. Final agreement was reached at

a dinner following a meeting with President George Barton Cutten, architects, prominent Hamilton business men and Mr. Reid.

"In talking to the students and faculty, Sarazen explained that he believed a golf course could be so constructed that it would be of professional calibre fit for the championship players and topnotch amateurs and yet be comparatively easy for the ordinary golfer.

Course Ready in 1935

"He is ready to prove this theory upon his return to Hamilton to supervise the work in the spring. The champion intends to have the course open for play in the summer of 1935.

"Several unique features will be included in the new course. Aside from the fact that the course will be the first one of its kind laid out by Sarazen, every one of the 18 holes will have a twin somewhere in the United States. In other words, Mr. Sarazen will choose his favorite 18 holes from different courses, and include them in the new course.

"Hamilton is about 30 miles from Utica and Syracuse, centrally located in the state. Both Utica and Syracuse have excellent courses but it is certain that the new layout will be in great demand when it is completed. Several big matches will probably be staged there as Sarazen is planning on making the Colgate course his home stand."

The announcement of the new course brings to mind the humble beginnings under which the sport was introduced at Hamilton. In 1910 there were no golf clubs on the campus and a very few brave souls surreptitiously sneaked out into the country to knock the little white pill around as best they might.

In 1914 the Hamilton Golf Club was formed, with Dr. F. M. Jones as chairman. A course was laid out behind the dormitories, and the hazards of this first course consisted of long grass, thorny bushes, stubble and a herd of some thirty cows.

The game has now been on the campus for about twenty years and is at present played on the Seven Oaks Golf Course back of the university. Besides Dr. Jones, the late Dr. M. S. Reid was instrumental in establishing golf at Colgate, and the Pioneer Hole on the present course is dedicated to his memory. Through the efforts of these men, sufficient funds were procured to install the present golfing facilities which students and others enjoy.

Iowa to Have Short Course

March 5 and 6

THE THIRD annual Greenkeepers' Short course will be held by Iowa State College, March 5 and 6. Kenneth Welton of the USGA Green Section will be chief speaker.

An excellent practical program has been arranged by Prof. B. S. Pickett, head of the Dept. of Horticulture and by V. T. Stoutemyer, research assistant.

The tentative program:

Monday, March 5

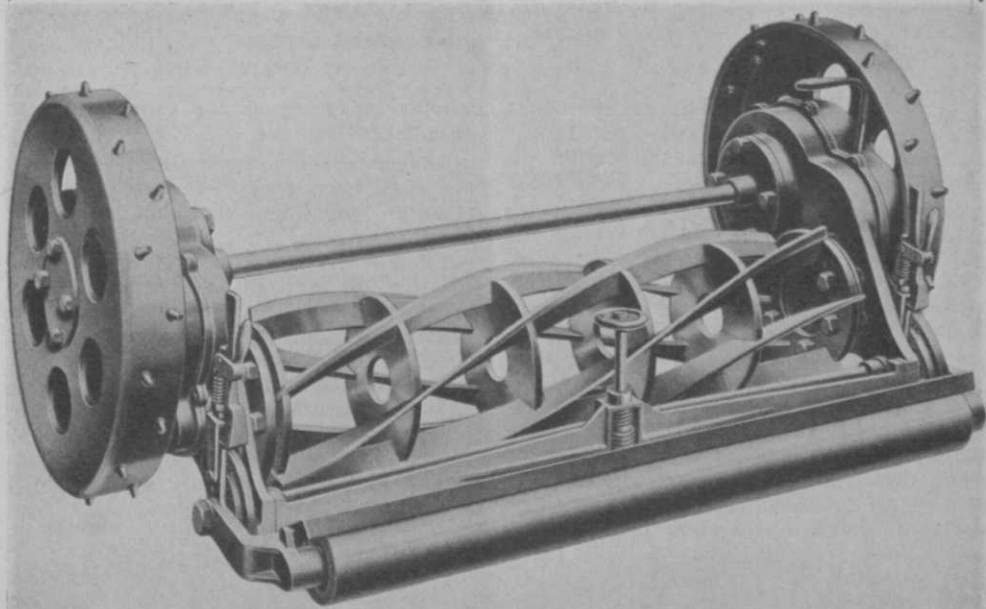
- 9:30 *Welcome*, Prof. B. S. Pickett, Head, Dept. of Horticulture, Iowa State College.
- 9:45 *Tree Planting and Care*—V. T. Stoutemyer, Dept. of Horticulture, Iowa State College.
- 10:30 *New Developments in Weed Control*—Kenneth Welton, USGA Green Section.
- 12:15 Greenkeepers Luncheon.
- 1:15 *The Value and Use of Soil Organic Matter*—Prof. B. J. Firkins, Soils Dept., Iowa State College.
- 2:15 *Soil Conditioning and Drainage*—Kenneth Welton.
- 3:30 *The Present Status of Fertilizer Usage*—O. J. Noer, Sewerage Commission, Milwaukee, Wis.
- 6:30 Greenkeepers Banquet—Address by I. T. Bode, State Fish and Game Warden, Des Moines, Iowa.

Tuesday, March 6

- 9:30 *Getting Acquainted with Turf Grasses*—V. T. Stoutemyer.
- 10:30 *Greenkeeping Problems of Today*—Kenneth Welton.
- 12:15 Greenkeepers Luncheon
The Care and Maintenance of Mechanical Equipment—Prof. E. G. McKibben, Agricultural Engineering, Iowa State College.
- 1:15 *Turf and Soil Insects*—Dr. C. J. Drake, Head, Dept. of Entomology, Iowa State College.
- 2:15 *Beneficial Birds*—Prof. J. E. Guthrie, Dept. of Zoology, Iowa State College.
- 3:15 *Propagation and Growing of Flowers, Trees and Shrubs*—Prof. E. C. Volz, Dept. of Horticulture, Iowa State College.

A registration fee of \$1.00 will be charged for the course. Interested greenkeepers should write Prof. B. S. Pickett, Dept. of Horticulture, Iowa State College, Ames, Iowa, for full details.

GREENKEEPERS! HERE Is the MOWER
You Asked Me to BUILD
E. H. Worthington



It has been designed to overcome operating problems presented to me by the Greenkeeper during the past 17 years.

These CROWN features are NEW

REMOVABLE Fly Knife Reel.
Patent Pending.

GEAR SHIFT for Fairway or
Rough—Regulates height of
cut. Patent Pending.

SINGLE central hand adjust-
ment for Bed Knife. Patent
Pending.

Solid Steel Wheels with RE-
MOVABLE Spuds.

The first GREASELESS ●
Machine.

Unit INTERCHANGEABLE
with standard makes of side
wheel mowers.

SPRING SHOCK ABSORB-
ERS for Bed Knife. Patent
Pending.

Heavy STRUCTURAL TIE
BAR locks unit into a rigid
frame.

New Gang Frame with INTER-
CHANGEABLE Sections.
Patent Pending.

Get the Facts.

CROWN MOWER COMPANY

168 East 74th Street, New York, N. Y.

TURF TROUBLES PROBED

by Jersey Advisory Service

By EDWARD E. EVAUL*

New Jersey Agricultural Experiment Station

DUE TO a drastic reduction in the financial assistance given the New Jersey Agricultural Experiment Station in July 1932 for the continuance of the local experimental turf work, it was deemed necessary that a reorganization be effected in order that all of the essential parts of the work might be continued. In this shuffle my new duties called for the assumption of a new "Turf Advisory Service," sponsored jointly by the Green Section of the New Jersey State Golf Assn. and the New Jersey Agricultural Experiment Station, with an effort made to place this part of our program on a paying basis. Having been associated with the experimental turf work of this station since the turf work began here, an opportunity was offered whereby our experimental findings could be carried directly into the field of application. Despite the fact that at this time the financial condition of the clubs in this area was not rosy, and that greenkeepers' budgets were materially reduced, I was personally pleased with the opportunity offered to be of some material help to them.

After a year and a half trial, it may be said here with all modesty that this service to date has been of considerable value to both the clubs and the greenkeepers utilizing it. The success of such a plan of service is determined largely by the greenkeeper. Without the greenkeeper's good will, confidence and cooperation, the above mentioned advisory service is doomed to fail. Fortunately it has been my privilege to enjoy all of these.

Treatments Vary Widely

Every course visited presents different problems, and each green, tee, and fairway on the course has its own peculiarity. Thus, it takes no "brain trust" to see that if maximum results are to be obtained, no single treatment will meet the needs of all greens, tees, and fairways, regardless of

whether they are on the same course or on different courses.

The metropolitan area this past season has been particularly fortunate in having climatic conditions favorable for the growth of grass. The season was cool and moist for the most part, with an exceptionally good distribution of rainfall despite the fact that August was one of the wettest on record. Temperatures were cool at the beginning and moderate throughout most of the season. There were only two short periods in which the temperatures were relatively high and the rainfall low, but neither of these periods caused loss of turf directly as their duration was broken by timely rainfall.

Good Weather Helps Budgets

On some unwatered and under-fertilized areas, the "chinch-bug" established itself during these periods and was credited with causing some loss of turf. There were three general outbreaks of disease, one of dollar spot just prior to Decoration Day, one of large brown patch and algae just before Labor Day, and one of dollar patch late in the season. Thus, the area was comparatively free from disease and suffered only slight turf injury on greens that were well drained. However, poorly constructed and poorly drained greens showed a considerable loss of turf from large brown patch and algae during periods of heavy rainfall in August. The better constructed greens showed no loss of turf, and were in good playable condition throughout the summer.

More mercury burning of turf was observed in this district this year than ever before. The misuse and abuse as to the rate of application, and a change to the use of inorganic mercury carriers from organic mercury is largely responsible for this condition. The favorable climatic conditions in this area during the past season account in a large measure for the good turf condition of our eastern courses despite budget and labor reductions.

*NAGA Convention address.

In our turf advisory work, an effort has been made to locate soil deficiencies, toxins, and abuses of fundamentals of plant growth, and to correct these conditions before an emergency arises. Soil samples for testing are taken from the courses far enough ahead so that there is ample time for drawing up a definite maintenance schedule. These samples are taken to the laboratory and tested for available or replaceable plant nutrients and toxins. The results of these determinations are recorded and studied.

Foresight Prevents Trouble

After a careful consideration of this data, together with notes made on the course as to the past and present maintenance practices followed, along with vegetation and soil characteristics, a written report of conditions found, and suggestions for their correction or improvement, is made to the greenkeeper in charge.

By following this method of attack, it has been possible to prevent the loss of turf due to excesses or deficiencies of any particular element needed by the plant for its normal growth. In addition, it has provided a method to supplement our present inadequate knowledge of turf and in a measure provided something to take the

place of pure guesswork. However, it has not and will never do away with the good judgment of the greenkeeper. It is merely another tool for his use.

A Research Goal

I firmly believe that the time will come when our research work on turf will establish certain basic limits for the plant foods needed by our various turf grasses grown under widely different soil and climatic conditions. Once these facts have become established, then it will probably be possible to place simplified soil tests for the determination of the amounts of available nutrients and toxins into the hands of practically all the greenkeepers. When this time arrives, these tests will meet a definite need and prove a very important tool.

New Jersey is the first state in the union to have adopted and sponsored a "Turf Advisory Service" for golf clubs. This type of service to date has proved of benefit indirectly to the clubs through the greenkeepers' utilization of the service. They have found it a convenient tool to support their judgment, and it has provided them with some definite data upon which they can base applications.

More Available Plant Food ...

for fewer Dollars

**ORCHARD
BRAND**
Arsenate of Lead

For two generations, standard with American horticulturists, nurserymen and greenkeepers.



VC NEW PROCESS
Fairway

**THE
PLANT
FOOD
FOR
grass**



This high quality impregnated tobacco stem fertilizer is now so close to ordinary materials in direct sale price that **YOU CANNOT AFFORD ANYTHING LESS . . .** Ideal 6-6-4 formula of plant foods plus 1,200 lbs. humus forming organic material per ton.

Economical! YOU USE ONLY 2 LBS. PER 100 SQUARE FEET
FIND OUT ABOUT IT—WRITE:

GENERAL CHEMICAL COMPANY
40 Rector Street, New York City

Fairway Watering Operation to Give You What You Pay For

By ROBERT DUGUID*
Evanston (Ill.) Golf Club

A GREENKEEPER cannot be expected to model his sprinkling methods after the plan followed on some other course any more than he can copy another greenkeeper's fertilizing program. Soil chemicals on courses in the same district can vary to a surprising extent. So, too, drainage and soil texture varies to a degree which requires the individual greenkeeper to work out his own formulas as to quantity and frequency of watering.

As soon as a fairway sprinkling system is put in operation, the greenkeeper should endeavor to arrive at a systematic method of watering. Whether the hose type or the fixed sprinkler outlet type is used, observations should be made as to how long sprinklers ought to be left at a setting to insure adequate penetration and how frequently each fairway should be watered to maintain the proper moisture content.

It is seldom that all fairways of an 18-hole course can be covered properly in one night's sprinkling, so that a division of the course is necessary in two or not more than three parts to be watered on successive nights. Particularly on courses using hose lines from outlets at the edges of fairways it is desirable to make this division with a view to time-saving in transporting equipment from one section to the next. As full time is usually required to sprinkle at night, hose and sprinklers must of necessity be moved by the day force, so that the haul should be as short as possible in order to have the men required for this task available as quickly as possible for other duty.

Don't Pass Watering Dividends

Occasionally, during protracted droughts, it is necessary to supplement night sprinkling with day-time watering. As this naturally causes an appreciable increase in the cost of irrigation it should be kept down to a minimum. However, considerations of economy alone, or even convenience

of member players cannot be used by the greenkeeper as an excuse for permitting fairways to dry up too much. Practically all club officials and members will make concessions when matters are explained properly. A fairway watering system represents a heavy investment, and dry fairways on a supposedly watered course is equivalent to a passed dividend. In other words, the members who paid for the system are failing to derive any benefit from their investment; there are times when that investment can only be protected by an additional outlay for more water than had been estimated originally.

Greenkeepers will usually find that a standard routine of time and frequency application cannot be maintained on the entire course. There is usually a definite difference in the reception and retention of water on different fairways, due to variance of soil texture and surface and sub-soil drainage; accordingly, each fairway has to be considered separately to avoid undesirable conditions resulting from the assumption that uniform watering will produce a uniform effect on all fairways. Watering may have to be increased on some and decreased on others. This can only be determined by intelligent observation.

Cheapness May Gyp You

Purchase and maintenance of good equipment are important in economical operation, bearing in mind that an economy may become a total loss when measured in terms of fairway condition. As in many other businesses, it is a mistake to assume that one is saving money on an originally low-priced article. High grade hose may cost several cents more per foot than second grade hose, but if you have to buy a second length of low-priced hose while the first length of better hose is still serviceable, the saving becomes rather more than dubious.

With fixed sprinkler outlets on fairways, complete coverage cannot be ob-

*NAGA Convention Address.