BOOM ACTIVITIES

Returning prosperity on "different" basis is keynote of annual convention

> J. A. MacGoogan, Youngstown (O.) Club, elected president of C.M.A.



RADICALLY changed conditions in club management accounted for a surprisingly large attendance at the eleventh annual convention of the Club Managers Association of America, held at Hotel Severin, Indianapolis,

Feb. 15-18. Approximately 200 presented themselves for the sessions. They were flood refugees, as the convention had been planned for Louisville and was transferred on short notice when the rampant Ohio swirled about the legs of Fred Crawford, chairman of the Louisville convention committee, and his fellow citizens.

Evidence of a developing boom in club operations was seen by the country, and city-club managers in attendance. They hoped the coming boom would be one in which they might be allowed to exercise expert control. They have been struggling with readjustment problems that followed the collapse of the last boom.

Diagnosing the difficulties experienced by clubs that still have to get on a sound financial and operating basis as the depression departs, brought forth the following observations by the expert man-

High turnover in elected, unpaid club officials and high turnover in managers is preventing adoption of a long-range, closely supervised operating policy;

The effect of changing social conditions on clubs requires accurate analysis and prompt action; and

New aspect of general financing reduces club possibilities for getting revision or easy terms on plant investment issues.

However, the managers did rejoice that

the club field suffered a comparatively light touch of the depression on the older clubs, both country and city. The management and financing problems generally are beyond the managers' control, so the conventioneers devoted the major part of their time to consideration of operating problems.

Most acute among the operating problems is that of rising wages and material costs. In the country club field, a larger volume of house business seems to be the hope of managers in the fight against the operating cost increases. Many interesting items of club special events announcements were shown in displays prepared by J. Fred Smith, energetic young executive who is the association's secretary. Employment of these events and of other business-building material made available by exchange of ideas among the association's members was urged by Fred L. Wood, the managers' president, as the answer to the need for steadier, larger volume of business at

Social Security law application to the club field was straightened out in the minds of many confused managers by the talk of George Podd of Horwath and Horwath. Podd opened the educational conferences on Wednesday and among the numerous experts who have advised man-

agers on the details of the social security legislation's application to clubs, he registered as the master. Podd's illuminating remarks are given in this issue of GOLFDOM. Herman Lewis provided the introduction for the Podd address which was followed by a brisk question and answer session.

Park Akin brought to the rostrum Joseph D. Vehling who presented a most interesting address on food and beverage service at clubs. Among other remarks of Vehling was an advocacy of more wine promotion at clubs. He pointed out that

Fred Wood, retiring president of the Club Managers association, received from E. M. Ries, manager of the Colonial CC, Memphis, Tenn., the gavel that rapped the signals at the eleventh annual convention of the association. The gift was a golf contribution to Wood's souvenirs of office. It was made of Tennessee dogwood, of the selected grade used for golf clubheads. C. F. Work of the Memphis Shaft and Block Co. had the gavel turned.

60% of the world's grapes were American-raised, and confirmed the comment of an authority at the 1936 Managers' convention concerning the American public being afraid of wine drinking because of the mistaken belief that a strict code of wine selection and service was required. Vehling said that since 1914 the influx of trained cooks was stopped and stopped forever. Europe has an embargo on brains, he declared. There is a serious demand for trained cooks because the practice of eating away from home is growing, and to fill this demand American club, hotel and restaurant managers must begin to give considerable attention to chef training. Vehling lauded the work expert club managers are doing in educating the elect in the art of good living.

Air Conditioning Boosts House Volume

Paul Holcombe of the Carrier Corp., was introduced by Peter Hausen, for a talk on air conditioning. The Carrier expert related that air conditioning in restaurants had brought average increases of 35% in number of patrons and 25% in amount of checks. He told of instances at clubs where the summer dinner dance business alone had justified the expense of air conditioning. Holcombe said his company had carefully studied the health effect of air conditioning and had determined that there were no more bad effects from coming out of a properly cooled and conditioned clubhouse onto a hot golf course

than there were from coming from subzero weather into a warm room.

Holcombe told of the necessity of avoiding drafts in air conditioning installations and mentioned some of the factors determining costs. Among these were location, size and layout of rooms, occupancy, glass area, cooling water and electricity costs. He was subjected to a cross-examination by keenly interested club managers, especially those of country clubs where the heavy operating season is during hot weather. One of the points that came up was that of the possible effect on employees' health of frequent change between hot kitchens and cooled restaurants. Holcombe advised correction of kitchen conditions in such cases. He also remarked on the benefits of air conditioning in food preservation at clubs.

> Urges Menus Be Pepped Up

Harry Tully, of Kugler's restaurants, Philadelphia, was led into the clinic on operating problems by Frank Murray. Tully's talk on menu merchandising keynoted the menu as the newspaper of food. He advocated bright paper, colored ink. topical pictures or illustrations of scenes about the club, as features of a club menu that would be attractive and sell food and drinks. He also urged large type and ease of handling of the menus. In making a case for large menus he counseled against making the menu an encyclopedia instead of a selling medium. Tully advised featuring in the menu what the club wanted to sell; either what the chef was long on, or what could be bought at good prices considering quality.

He told his hearers of the powerful effect of menu "riders" attached to one corner of the menu, in selling drinks. He also re-

Club managers at Indianapolis convention again expressed the hope Congress would eliminate the 10% tax on club dues, and regretted that limited association finances prohibit making a clear presentation of the club case.

lated successful experiences with special menus for children on which were printed, "If you eat everything on your plate you may take this menu home with you."

Wesley Bintz, swimming pool engineer, was introduced by Tom Carvey, and plunged into a topic of pressing interest to many country club managers. Bintz is inventor of an ovoid type of pool and told of the construction savings this design provides, along with increased swimmining area. He warned his hearers, "build

MARCH, 1937

a pool that's right, or heaven help you." Bintz said that a 75 ft. long by 50 ft. wide pool was most satisfactory size for representative country clubs and would accommodate about 200 people. He advised strongly against building a pool any shorter than 60 ft. He said that first class outdoor pools for country clubs could be built for from \$10,000 to \$15,000. He set a figure of \$3 a linear foot as a fair average for a plain pool with filtering equipment, diving boards, etc. He mentioned favorably Art Marble as a finish for pools, and in answering questions about pool reconditioning said he'd found Medusa paint was highly satisfactory for the outdoor work.

The Bintz type of pool has locker- and shower-rooms under the rim of the pool. The pool itself is set either above the ground or is partially depressed in the ground. The partially depressed types are

popular with country clubs.

William Norcross, manager of the Essex County CC, in a deft introduction asked that the quality of mercy not be strained toward Herb Graffis, GOLFDOM's editor, who spoke on "Jobs That Have Gone with the Wind." Graffis, surveying the high job turnover condition in the country club field found that club managers, despite their alarm at the frequency with which jobs changed, ran behind golf professionals in being switched in and out. Greatest of all changes was among club elected officials. Least change was among greenkeepers. Whether this was because greenkeepers get the least money or have to contend with acts of Providence more

Each year many house committees have the problem of putting new attractiveness into the locker-room. Too often the architect makes the locker-room—the actual indoor center of club life—a dark and barny enclosure with the orthodox cell-like layouts of lockers, the same hard benches and the same repaired runners.

Here are some suggestions that may help put new life into the old coop:

TOP

The finished concrete foundation for lockers, as shown in the Scioto view, aids cleanliness. Heavy furniture, as shown here, is being replaced by brighter, modern tubular styles in many locker-rooms. It stands the rough use just as well as the heavy wood equipment.

CENTER

Space between the aisles, as shown in the Westmoor view, gets away from the jail appearance of many cramped locker-rooms. It may be possible for you to re-arrange your layout so you'll have a wide-open space or two.

воттом

The Rolling Green locker-room shows how bright colors on lockers pep up a place. The wall benches provide parking for those whose dogs are weary.

Photos from Lyon Metal Products, Inc.







than with direct contact with membership, Graffis did not venture to explain. He offered a summary of investigation of 27 cases of club manager job changes. Reasons given were those received from club officials and provide interesting though not conclusive evidence that club hiring and firing is not done extensively on a business basis.

Leading in reasons given for discharge was getting too "clubby" with members, something that requires special conditions

A "Chapter Relations Committee" is new group in the Manager's organization which has as its purpose the bringing of officials of various chapters into more frequent contact for coordinated work during 12-month interval between national conventions.

or genius to be done with safety. The reason apparently checks with the pro situation because pros, who are in closer personal relations with members than any other department heads, have highest job mortality.

Second reason was negligence in handling conditions with which club manager was acquainted. Mentioned by club officials in this category was failure of the manager to maintain personal appearance and attitude as executive.

Third was failure to acquaint club officials with conditions needing attention. Officials did not comment on whether this was due to managers' ignorance of operating details in his establishment, or to managers' belief that correction of condition required spending money which, if suggested, would throw officials into an uproar. Comment from the convention floor following Graffis' remarks, emphasized wisdom of managers boldly, clearly telling officials what's needed.

Only fourth in the list of reasons given for discharging came lack of ability. Fifth was club officials' admission of politics with a new administration resolved to

Club Managers association membership is recovered from slump. There are now 379 members paid up.

"change everything." Sixth came club opinion that manager was good but not fitted for the particular job for which he was hired. Seventh was clubs not meeting increased salaries offered managers for other jobs (a reason that has been taking good men out of the club management field in increasing numbers lately). Eighth in the list of reasons was "an-

other man offering to work for less money," and ninth was where clubs thought they were not getting enough publicity from the manager's efforts.

Dr. Frank Shipman, Brown-Forman Distillery Co., was presented by Jesse Wetzel. Dr. Shipman spoke on whiskey, beginning with the American days when whiskey was used as a medium of exchange. Grain could not be transported as easily as whiskey in the pioneer days and whiskey did the frontiersmen more good than did money. Home distillation of those days gradually developed into a commerce. The distillation process was generally a matter of guild practice, with the methods being secretly passed on from one generation to its selected successors. Scientists were comparatively late in entering the field. Consequently various types of whiskey were rather sharply localized by grains and other materials available and by local distillation technique. Dr. Shipman described briefly the types and manufacturing methods of whiskies.

He identified as a "good whiskey" a product which required no artificial flavor to make it a good drink. Just what is a

All committee chairmen appointed at Managers convention were furnished with a portfolio enclosing names of committee members and an outline of work expected from each committee.

"good drink" Shipman said, of course depended on personal taste. He impressed on the managers that bad whiskey can never be made good by aging.

A valuable demonstration of skillful meat cutting, to make the most of quality opportunities and to curtail waste, was put on by one of the staff of Wm. Bauer of Cleveland. Bauer made informative comment as the demonstration proceeded. H. W. Dedreaux, in conducting the preliminaries of this demonstration told of the effect the recent drought has had on cattle. He described scientific feeding method and the results in meats. Dedreaux said that it is becoming harder to get good beef but there is not much use for managers to try to chisel on beef prices as lower grade beef will bring a manager nothing but complaints. He advised featuring lamb, as lambs are cheap and of good quality. He also suggested pushing pork and veal, which are at comparatively low prices.

Thomas P. Jones, manager of the Harvard club, Boston, and one of the national authorities of seafood purchasing, prepa-

How Grasses Grow—The Function of Individual Fertilizer Elements—Their Use and Mis-Use

FROM seeding to final maturity, plant growth is a remarkable phenomenon. Every seed contains an embryo plant and a supply of food to start growth. Soon after seeding, germination and growth commence, provided moisture and air are present, and soil temperature is favorable. Water is imbibed first, then appropriate enzymes convert the stored food into soluble compounds which the embryo can utilize. Growth begins with the formation of a rudimentary root; an initial stem and leaf. After that, normal plant functions start.

Perennial grasses build surplus food during late fall, which is stored over winter for use in the spring to initiate new leaf formation. Except for this wise provision of nature, renewed growth year after year would be an impossibility. Hence, during late fall somewhat longer grass is in order to insure adequate food production.

PLANT FOOD SUBSTANCES: Simple substances, such as compounds of nitrogen, phosphorus, potassium, calcium, etc., and even carbon dioxide and water are commonly considered as plant foods. The fact that these are only the raw materials out of which plants elaborate needed food should be kept in mind at all times.

The substances needed in quantity are carbon dioxide, water, oxygen, and suitable compounds of nitrogen, phosphorus, potassium, calcium, magnesium, and sulphur. Of these, nitrogen, phosphorus, and potassium are required in such large amounts that it is often necessary to add one or more to the soil as artificial fertilizers. The others are usually present in the air, in soil, or rain, in sufficient quantities; but occasionally crops respond to additions of calcium, magnesium, and even sulphur.

A second group of substances is needed, but in small amount only. The need for iron has been known for a long time, but recently the NEED for minute quantities of manganess, boron, copper, and zinc has been definitely established. Others may be found essential as this new field is explored further.

In addition, plants contain silicon, aluminum, chlorine, sodium, fluorine, cobalt, nickel, etc.

Any of these, which are not absolutely necessary, enter the plant because of their presence in the soil solution as soluble compounds.

THE LEAF AS A SUGAR PRODUCER: Throughout its active life, the leaf is the great synthetic factory of the plant, remarkably efficient and capable. Adequate sugar production in the leaf is the first link in the chain of processes upon which plant life depends. The sugar produced there is transported to all parts of the plant where it serves as energy material; is elaborated into other carbohydrates, such as cellulose, starch, etc.; or is used in the synthesis of fats, proteins, and other essential products.

Water and carbon dioxide are the raw products from which sugar is synthesized. Of themselves, these two raw materials do not react chemically to form sugar. Synthesis depends upon the presence of chlorophyll, the green substance of leaves, and a source of radiant energy, which is obtained from sunlight. The necessity for light can be demonstrated by placing plants in the dark. Synthesis then ceases, so sugar production is a daytime activity.

Brief mention has been made of the need for oxygen. Like mankind, plants breathe and need the oxygen of air for the normal processes associated with respiration. Very often, in waterlogged soil, ultimate death of roots is due to air exclusion.

Plants need other materials beside sugar. These are the substances obtained from the soil. They enter the plant through the feeder roots, by the process called osmosis. For absorption to take place, these nutrients must exist in the soil water as dissolved salts. The important functions of each element are as follows:

NITROGEN: In turf management, nitrogen is the most important element. It is responsible for green color and active growth, so need for nitrogen is easily detected by simple inspection of the turf. Nitrogen-starved grass never spreads to form dense turf. By stimulating grass competition, nitrogen feeding is an important factor in clover and weed control.

The ABC of TURF CULTURE

Nitrogen starvation is characterized by stunted growth, and sickly yellow colored leaves. An application of soluble nitrogen produces almost instant improvement in color, and causes rapid growth of leaves. Likewise, a fairly close connection exists between the amount of growth, and the amount of nitrogen available. Up to an optimum point, increased growth is roughly proportional to the supply of nitrogen. Soft, sappy tissues result from excess nitrogen.

Most plants prefer nitrogen in the nitrate form, but some probably assimilate and utilize ammonia compounds. In the plant, nitrogen becomes an important constituent of protein.

PHOSPHORUS: From the turf maintenance standpoint, phosphorus ranks next to nitrogen. Its stimulating action on root development is most important. This is especially noticeable on new seedings and accounts for emphasizing the use of phosphate before seeding.

Phosphates are the most efficient nutrients known, so in fertilizers it is customary to use a phosphate compound. In the plant phosphorus is an essential constituent of protein and is abundant in seed.

POTASSIUM: Of the three commonly used elements, potassium is least important in fine turf production, even though it is emphasized for pastures. Its marked ability to increase clover accounts for this difference. On golf courses, clover is looked upon as an undesirable weed, so the use of potash beyond the minimum requirement of grass should be avoided. In a mixed herbage of clover and grass, clover has less capacity to absorb potassium than grass, so in the absence of abundant potash, clover suffers from grass competition. This effect is strikingly shown on the permanent grass plots at Rothamsted, England, where there is notably less clover on the potassium-starved plots.

In plant metabolism, potassium aids in the formation of carbohydrates, such as sugar, starch, cellulose. It gains entrance into the plant as a chloride, sulphate, or nitrate.

CALCIUM: There is reason to believe that calcium is used to precipitate organic acids formed during protein synthesis. Deficiency often leads to stunting and discoloration of the roots. Additions of calcium usually help plants suffering from abnormal nutrition.

MAGNESIUM is an essential constituent of chlorophyll. This accounts for the chlorotic appearance of magnesium-starved plants, which

occasionally occurs in nature. In the Carolinas a chlorosis of tobacco, locally called "Sand Drown", can be corrected by additions of magnesium.

SULPHUR: This element is an essential consituent of protein, and hence needed by all plants. Deficiency is not likely on turf grasses. Besides the sulphur normally contained in ferilizers, some sulphur is brought to the soil dissolved in rainfall.

IRON: Although chlorophyll does not contain iron, it is not produced unless the leaf contains small amounts of iron salt. Leaves of iron deficient plants have a characteristic chlorotic or mottled color.

The terms "complete" or "balanced" are often abused when applied to fertilizers. Because a diversified diet is essential to human well-being, it is argued that plants require balanced feeding also. So far the comparison is strictly true, but the fact that plant roots permeate a medium which may contain an abundance of many of the essential nutrients is ignored. For best growth, fertilizers need contain only soil deficient elements; whereas human diet must be well-balanced to provide all the essentials of life.

As usually used, the term "complete" refers to a fertilizer containing nitrogen, phosphorus, and potassium, yet there are instances where these three elements failed to produce normal growth. "Sand Drown" on tobacco has been mentioned, and unless fertilizer contains magnesium also, satisfactory tobacco is not obtained.

out this sheet and save for permanent reference.

Tear (

"COMPLETE" FERTILIZER DEFINED: Correctly speaking, a complete fertilizer should be defined as one containing a sufficient quantity of any and all the elements needed to correct soil deficiencies. On this basis, phosphate becomes a complete fertilizer where the soil deficiency is limited to phosphorus.

Even if grass always required a "complete" fertilizer, it is hardly reasonable to expect one specific analysis to prove equally satisfactory on all soils. Admittedly, it is easier to follow the lines of least resistance, apply a "complete" fertilizer and thereby hope to correct soil deficiencies, but it is far more satisfactory and certainly more economical to build fertilizer programs on a sounder foundation, namely, one designed to overcome soil deficiencies, taking into account soil type, previous fertilizer practice, and requirements of the particular crop.

(To be continued)

Presented by THE SEWERAGE COMMISSION MILWAUKEE, WISCONSIN
Printed in U.S.A.

MILORGANITE RESTORES TO THE SOIL PLANT FOOD DEFICIENCIES

ration and service, concluded the educational program by presenting on Thursday morning, an excellent practical treatise on giving club menus distinction by properly playing up seafoods. The Jones paper was of particularly timely value to managers because of their Lenten menu problems. Henry Hinton, manager of the Manursing Island club, introduced the Jones contribution to the intensely practical program.

Under the chairmanship of H. J. Foerster, country club managers went into a round table huddle Wednesday morning and held an intimate discussion of several country club problems. These will be covered in detail in April GOLFDOM.

Organization and political affairs of the association were effectively and speedily handled in committee meetings and on the floor of the convention Tuesday and Thursday afternoons. The national association functions as a coordinating body for the sectional chapters, seventeen of which reported details of their activities at the opening session of the convention.

Heading the association for the next twelve months is J. A. MacGoogan of the Youngstown (O.) club. Wayne Miller, Cincinnati CC, is secretary and C. C. Dyer, Houston, Tex., is treasurer. Vicepresidents are to be appointed later.

Entertainment and educational features abounded at the convention. There were sight-seeing and shopping tours for the women visitors. Gala parties were given by Hiram Walker and Seagrams distilling companies. Seagrams were hosts at a buffet dinner dance at the Woodstock club Tuesday, and Hiram Walker put on a fine dinner and dance party at the Columbia club Wednesday evening. The annual banquet of the association, at which Schenleys and the Frankfort distilleries, assisted as hosts, closed the convention entertainment program, Thursday evening.

Chicago DGA Announces \$10,000 Open; Profits Go to Caddies

CHICAGO will have its first \$10,000 Open, July 23-25 inclusive. Course for the event will be determined later. Prize money has been almost entirely underwritten by officials of Chicago District GA clubs. A big drive is to be put on for advance ticket sales, and golf carnival features are to be added as part of the Chicago charter centennial.

Net profits of the tournament will go to caddie welfare. The idea was pushed for two years by Bob Harlow when PGA

THOSE SHEETS OF COUPONS

Have you noticed the gummed coupons in this issue? They are for your convenience in writing advertisers. Simply tear out the coupon, stick it to the address side of a penny post-card, write your name, club and address on the other side of the card and mail. No message required.

No mutilating the pages of GOLFDOM, and

a lot of time saved for you.

tournament bureau manager and registered with Walter Leininger, L. D. Rutherford, Maynard Fessenden and other CDGA officials who launched operations energetically with caddie welfare as the reason for tournament profits.

Massachusetts Recreation Conference Scheduled for March 12-13

COLF and Parks section of the Massachusetts State college annual recreation conference will open Friday, March 12. Graduation exercises of the 1937 winter school for greenkeepers will be featured by an address of Arthur Anderson of the 1927 class on "What This School Has Done for Me," the remarks of Robert Williams on "Why I am Taking the Advanced Course" and two short papers by members of the 1937 class.

Robert A. Mitchell, president of the Greenkeepers' club of New England and Roland H. Verbeck, MSC director of short courses, also will address the opening session of the conference. In the afternoon of the first day Prof. L. S. Dickinson will discuss the Hawthorne Valley system of fairway watering and Prof. George McClure of the Ohio State U. will tell of "The Behavior of Fertilizers in Soils." Addresses will be made by Leslie Cotrell, president of the New England PGA, and Tom Walsh, secretary of the national pro

On the evening program will be:

"Water and the Physical Condition of the Soil," J. N. Everson, M. S. C.; "The Action of Lead and Mercury in Soils," Dr. W. S. Eisenmenger, MSC; "Archery Golf," Mr. Baker, Auburndale, Mass.; "Practical Experience with Rhizoctonia Solani," C. K. Bradley; "More about Fertilizers in Soils," G. B. McClure; "Golf Course Construction and the Greenkeeper," Robert Trent Jones.

On Saturday, March 13, James B. Gill will talk on "Mechanics of Water Distribution on Golfing Areas," and Robert



1937 CLASS FOR GREENKEEPERS AT MASSACHUSETTS STATE COLLEGE
Front row, left to right: Instructor Everson; T. McNamara, Mill-Brook, N. Y.; H. Duval,
Schenectady; T. Newlove, Syracuse; Miss Klaucke, instructor; Director Verbeck; E. Casey,
New Rochelle, N. Y.; and F. Tick, Southbridge, Mass.
Second row: S. Moore, Northampton, Mass.; G. Holbrook, Clinton, Ia.; Prof. Gunnes; R.
Cronin, Glens Falls, N. Y.; W. Lord, Jr., Sidney, N. Y.; A. Ferguson, Claremont, N. H.;
L. Sperry, Wakefield, Mass.; Instructor Gurlock.
Third row: R. Williams, Wauconda, Ill.; A. Berghorn, Ellsmere, N. Y.; R. Mitchell, Schenectady, N. Y.; L. Russell, Woodbrige Hills, Conn.; G. Cornish, Vancouver, B. C.; E.
Thomas, Redhook, N. Y.
Fourth row: Prof. Dickinson; E. Yesberger, Olmstead, Ohio; L. Payson, No. Dartmouth, Mass.;
and W. Mitchell, Syracuse.
Last row: Instructor Treat and A. Smith, Tingsboro, Mass.
Members of advanced course not in group picture: Al Lesperance, Westmoreland, Wilmette,
Ill.; Henry Mitchell, Walpole, Mass.; James Hart, Holyoke, Mass.

Trent Jones on "Golf Course Design and Construction."

Greenkeepers' Club of New England in association with the greenkeepers' organizations of Connecticut, Rhode Island and North Eastern New York will put on an interesting program Saturday afternoon. Sunday morning the annual meeting of the MSC greenkeepers' school alumni association will be held, followed by a question box session.

The Park section program scheduled for

Friday afternoon:

Annual Meeting - New England Park assn., James Dillon, Park Dept., Hartford, Conn., Pres. "New Ideas in Small Buildings, Parking Areas and Parking," Capt. Henry R. Hayes, Metropolitan District commission, Boston; "Hard Surfaced Tennis Courts," W. E. Duncanson, Waltham, Massachusetts.

Numerous entertainment features and inspection of exhibits in the MSC "Cage"

fill out a lively program.

\$300 Northland Among Best of Last Season's "Little" Opens

By JOEL BENNETT

THERE was a golf tournament that didn't have much prize money attached to it put on at the Androscoggin Valley course at Gorham, N. H. last year. It was the \$300 Northland Open. Now \$300 isn't going to attract the Ryder cup team but it did attract just the pros who were

wanted and they agreed that the first Northland Open meant a whole lot more money to them than the \$300 prize money. The event meant a decided increase of golf interest among the natives and the golfing guests of the White Mountain resort district adjacent to Gorham.

In addition to the pro event, there was a pro-ladies competition and a pro-amateur event, making up a three day schedule. Tennis events were held along with the golf competitions so the affair actually was a summer sports carnival for the district. It was started by Ralph Barton of Jefferson, N. H., who supervises almost 40 courses in the White Mountain district.

There was enthusiastic pro cooperation given the event. Pros found that this collective enterprise helped to stir interest in the events at their own clubs, and enabled them to get big fields for the weekly inter-club events which presented prolady events in the morning and proamateur competition in the afternoon.

Amateur prizes in the competition were

selected from pro shop stocks.

The way the White Mountain event worked out suggests to pros in other resort territories that they get together and plan for their districts inter-club competitions that come to a climax in a district golf tournament.

F YOU have an unused upper-level porch on the clubhouse, enclose it by canvas and convert into sunbath compartments for men.

GREENS MEET IS 4-STAR WOW

By HERB GRAFFIS

... attendance, interest and business volume exceeds records of previous conventions

A N ATTENDANCE of almost 700 at the eleventh annual convention and equipment and supply exhibition of the National Association of Green-keepers registered a new high in crowd and interest for these events and

gave convincing evidence that golf is out of the storm. The Wardman Park hotel at Washington, D. C., was unable to supply rooms enough to care for the unexpectedly large attendance for the affair, which ran February 2 to 5, inclusive.

Actual orders and live prospects for business as reported by the exhibitors gave an aspect of pre-depression days to the Greenkeepers' show, and the mere presence of so many greenkeepers and their wives testified to an improved financial picture, inasmuch as many of the greenkeepers pay their own expenses to this educational enterprise, although its results pay off in maintenance improvements and economies primarily for the benefit of the golf clubs and their members.

There was a new note in the program of the educational conference. No one who previously had addressed a greenkeepers' national convention talked at the Washington affair. Four government experts, three state college and experiment station men, a Green Section expert, and practical greenkeeping authorities appeared on a well balanced, valuable program.

A tour of the Arlington Experiment station which had more than 200 green-keepers on their way by nine o'clock on a cold, raw morning and which kept them keenly on the hop around the amazing research establishment of the government and the USGA Green Section, was one of the profitable features of the meeting. Under the direction of Dr. John Monteith, the greenkeepers were toured through the laboratories and greenhouses, and through the experimental plots of the Green Section, where tremendously important research work was evident despite the offseason.

Greenkeepers on the Arlington trip were especially interested in the three-year test on watering, the chemical weed-control plots, the brown-patch control dye demonstration and the demonstration of proper and improper handling of sodium chlorate. A dust explosion was put on as a show for the turf men.

Publicity given the greenkeepers by the Washington newspapers, press services and radio gave hopeful signs that the profession is coming into wider recognition. At a luncheon preceding the opening convention session, President John Anderson of the NAGA and members of the association's executive committee were hosts to the green-chairmen and newspapermen of Washington, Briefly, Anderson outlined the work and the aspirations of the greenkeepers, after which Congressman Donald H. McLean of New Jersey, a former caddie who now owns several golf courses, named the greenkeepers and their combination with the national and states turf research scientists as saving many golf courses from disaster during periods of turf plague visitations and of low club incomes.

Sessions of the educational conference were held in the theater of the Wardman Park. As chairman of the conference, Paul J. Lynch opened proceedings by calling upon Congressman McLean to do his day's second able job of addressing a green-keeping group. This time he referred especially to the definite money value of turf maintenance science as illustrated by control of the Jap beetle threat.

Dr. M. A. McCall, assistant chief, Bureau of Plant Industry, Department of Agriculture, emphasized that science is only good hard common sense and for that reason is to be eagerly accepted by the "practical" man rather than held under suspicion as pure theory. He cited the speed and economy of scientific investigations by experts as compared with the casual, unrelated work of everyday practice, as

1937 OFFICERS and DIRECTORS NATIONAL ASSOCIATION OF GREENKEEPERS OF AMERICA

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supplying the information greenkeepers can most profitably use. In his address on "The Application of Science to Greenkeeping" Dr. McCall related some of the difficulties of investigating underlying causes in greenkeeping, which is concerned with grass growing under artificial environment. He mentioned the time needed for effecting improvements in corn growing and said that in comparison the Green Section and other groups of golf turf scientists have done amazingly quick and sound jobs of research.

He commended the valuable co-operation between the Green Section scientists and greenkeepers and pointed out how a comparatively small amount of money, properly spent in research, effects tremendous

savings in actual field practice.

Dr. James Tyson, of the soils section of Michigan State college, analyzed the golfers' viewpoint of the greenkeepers' problem, tersely. "All golfers want one-putt greens," was Tyson's close-up of the de-

mands made on greenkeepers.

In describing first grade soils for golf courses Dr. Tyson said that the preferred sandy loam should contain between 50% and 80% sand of not too fine character, less than 20% clay, and silt. There should be between 10% and 15% organic matter in surface soil of greens, he said. The soil should have excellent drainage, good aeration, and should be non-packing when hard. Inasmuch as we can't get fairway soil fixed to suit ourselves, grass selection to suit the available fairway soil is an important factor, remarked the Michigan expert.

Tyson told the greenkeepers that certain mixtures of sand, gravel and clay make a strong cement, but is no home for grass. He counseled against any soil arrangement that draws up grass roots. He also warned against letting a layer of sand get under a green's topdressing because twisting and scuffling of players' feet causes the sand to cut off grass roots.

The Michigan professor mentioned the puzzling reactions in soil testing and advised greenkeepers to discuss their soil tests with state and national experts.

Tells of State Extension Work

Charles K. Hallowell, Philadelphia Extension representative, Penn State college, spoke on "Agricultural Extension Service and Its Relation to the Golf Club." Hallowell, Fred Grau and others have done greatly appreciated work in bringing the findings of Penn State's staff of scientists into greenkeepers' service. Hallowell outlined the agricultural background of the extension service and detailed how this work had been expanded to care for demands of greenkeeping.

Work of this sort in Pennsylvania unquestionably is a fore-runner of extension work that will be done for greenkeepers in other states and the Hallowell address decided officials of several sectional greenkeeping organizations to bid for state extension tie-ups this year. The Penn extension man and W. E. Farnham, Philadelphia CC superintendent, told of how the extension service, with state entomologists and agronomists, held an emergency meeting with Philadelphia district course superintendents and took prompt and effective action an a sudden attack by sod webworm and chinch bugs.

There have been scores of addresses on landscaping of club grounds made before greenkeepers' meetings, but none of them scored as accurately and as helpfully as the 1937 national convention paper by Charles H. Connors, ornamental horticulturist of the New Jersey State experi-