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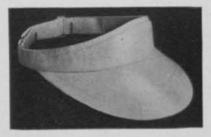
CONGO Model 105 (Left)

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February, 1949



GOLF COURSE ARCHITECTS ELECT OFFICERS

Stanley Thompson, Toronto, Can., was elected pres. and Wm. Langford, Chicago, sec'y-treas. at the annual meeting of the American Society of Golf Course Architects at Hotel Bellevue, Bellaire, Fla., Jan. 12-15. Attending the meeting were: (L to R) R. H. Lawrence, Boca Raton, Fla., Wm. H. Gardon, Boylestown, Pa., Wm. B. Langford, Chicago, Ill., Stanley Thompson, Toronto, Can., Wm. Diddel, Ormond Beach, Fla., Wm. P. Bell, Pasadena, Calif., and Robert Trent Jones, New York. The two other members attending, J. B. McGovern, Wynnewood, Pa., and Robert Bruce Harris, Chicago, were absent when photo was taken.

Problems in Turf Production as I See Them." He said the immediate problem is to provide good usable turf at all times regardless of conditions, stating that there was a greater opportunity for development in the South where so little attention has been paid to turf development. The long-time problems resolve themselves into changing practices so that the end result will be better turf for every purpose. This includes new grasses, new methods of fertilizing, mowing procedure, watering procedure, and other details. He went into detail on winter greens in the South.

He stressed the uniformity of playing conditions, encouraging the use of better bermuda strains which will produce putting surfaces that are identical with bent putting surfaces. This is a goal of the Green Section. He said further that there is no reason why bent grasses cannot be used in a large part of Tennessee for putting greens. He said also that *Poa annua*, if seed were available, would be an excellent substitute for rye grass for winter greens.

One of the significant statements was that Byron Nelson cited the closely mowed bentgrass fairways at Canterbury as the best he had ever played on. He did not know they were bent. At Memphis during the Amateur he said that their fairways were better than Canterbury's. They were bermuda grass heavily fertilized, treated with arsenicals for weed control, and closely mowed, with a minimum of aerification and a minimum of irrigation. He favors the association of cool-season and warm-season grasses throughout a wide belt in the central part of the country.

Conference visitors inspected the beginnings of the turf research program at the University of Tennessee, where a number of grasses have been seeded in 10-foot strips. A number of suggestions were made and the USGA Green section plans to furnish grasses and seeds to the University of Tennessee in a cooperative way on an informal basis.

Richard P. Lord, Agronomist of CAA, Atlanta, Ga., spoke on "Problems in Airport Turfing in the South." He stressed the necessity for load-bearing capacity of the soil and said that pavement and grass are identical in the respect that they tend to hold the soil in place and neither is intended to carry the loads and that neither is any better than the soil on which they are placed. Because of the tremendously reduced cost in providing a grass wearing surface rather than a pavement, there is considerable activity in the direction of studying the problems involved in providing turfed runways for the heavier types of planes. Better measurements are needed in order to achieve the goal. He stressed the closest similarity in the physical soil studies currently being conducted by the Green Section, by CAA and by other soil engineers.

Nitrogen presents the basic problem for all turf throughout the South. Phosphorus is the second consideration. Potash pre-

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sents no problem because to date no response has been obtained on bermuda grass with this element. Calcium is essential not only for its effect on the growth of grass but in its effect on flocculation of clay, which makes it more stable. In one case 269 tons of ground limestone to the acre produced no symptoms of minor element deficiencies but greatly improved the physical soil structure.

Discuss Mowing Costs

Henry Westall, Worthington Mower Co., Asheville, N. C., spoke on mowing and mowing machinery in turf production. He cited some historical developments and brought us up to the present day. A demand for mowing equipment that is out in front of the tractor and which cuts the grass before the tractor wheels mash it down was evident.

A number of questions arose on the cost of mowing and care of grass under different conditions. The answers were not very satisfactory but he cited one cost of 5c an acre for mowing airport turf with a large outfit. He stated that the cost is reduced as the number of units is increased. The problem of how to mow dallis grass was raised and again there was not a very satisfactory answer. This grass produces seedheads many of which escape all modern mowing equipment.

A. V. Trible, Cherokee CC, Knoxville, Tenn., spoke on "Turf Problems as I Have Found Them at Cherokee." He was faced with three basic questions:

- 1. Can you grow bent grass greens at Cherokee? The answer was, "I cannot tell until I have surveyed all of the conditions involved."
- 2. Getting the history of the course and records of what had been done proved to be extremely difficult, emphasizing the need for keeping better records that are available at all times.
- 3. Soil analyses of turf areas reveal some startling cases. The chief one was an excess of clay and silt and the almost complete absence of drainage in the soil. Eleven greens are bermuda grass

1949 CALENDAR OF EVENTS

FEBRUARY

- 3-6-Tucson (Ariz.) Open Inv., El Rio G & CC
- 10-13-Texas Open Inv., Brackenridge Park GC & Ft. Sam Houston GC, San Antonio, Tex.
- 17-20-Houston (Tex.) Open Inv., Pine Forest CC 24-27-Rio Grande Valley Open Inv., Harlingen
- (Tex.) Municipal GC. MARCH

- 3-6-St. Petersburg (Fla.) Open Inv., Lakewood CC.
- 10-13-Miami (Fla.) Four-Ball Inv., Miami Springs CC.
- 14-La Gorce CC, Pro-Am. Inv., Miami, Fla.
- 15-16-Seminole CC Pro-Am., Inv., Palm Beach, Fla.
- 18-21-Jacksonville (Fla.) Open Inv., Municipal GC.
- 31-Apr. 3-Greater Greensboro (N. C.) Open Inv., Starmount Forest CC.

APRIL

7-10-Masters', Augusta (Ga.) National GC.

MAY

- 12-15-Goodall Round Robin, Wykagyl CC, New Rochelle, N. Y.
- 25-31-National P. G. A., Hermitage CC, Richmond, Va.

23-28-British Amateur, Portmarnock, Ireland,

JUNE

4-8-British Open, Deal.

9-11-U. S. Open, Medinah, CC, Chicago dist.

- 14-17-Western G. A. Junior, Univ. of Mich., Ann Arbor.
- 16-19-Western Open, Kellar GC, St. Paul, Minn.
- 20-25-Women's Western G. A. Inv. Open, Oklahoma G&CC, Oklahoma City. 27-July 2—NCAA Championship, Univ. of Iowa,
- Ames.

JULY

- 11-16-U. S. Public Links, El Rancho GC, Los Angeles.
- 27-30-USGA Junior, Congressional CC, Washington, D. C.

AUGUST

- 1-6-Women's Western Junior, Onwentsia CC, Lake Forest, Ill.
- 2-4—Hearst National Junior.
- 2-7-U.S.J.C.C. Natl. Junior Amateur, Houston, CC.
- 8-14-All American, Tam O'Shanter CC, Chicago dist.
- 16-18-Western Junior, Univ. of Mich., Ann Arbor.
- 19-20-Walker Cup Match, Winged Foot, Mamoroneck, N. Y.
- 22-27-Women's Western Amateur.
- 29-Sep. 3-U.S.G.A. Amateur Golf Championship, Oak Hill CC, Pittsford, N. Y.

SEPTEMBER

- 12-17-U. S. Women's, Merion CC, Ardmore, Pa.
- 16-17-Ryder Cup Matches, Ganton, Eng.
- 19-25-Western G. A. Amoteur, Bellerive CC, St. Louis.

and seven contain bent, three of which are solid bent. The plan is to convert all of the greens to bent grass. The problem then arises as to how to keep the bermuda grass out of the bent grass greens. Discussion then centered around the present work being conducted at Oklahoma A & M on this question. On many turf areas he will aerify as often as possible and add sand and peat to relieve the present compacted condition of the soil.

Fred V. Grau conducted the roundtable discussion on turf problems at the end of the meeting.

The main discussions that arose centered around the production of bent grass greens and how to approach the problem of providing uniform putting conditions and putting speed on both bermuda grass and bent grass greens.

Lester Hall from Savannah and James Hamner from Memphis gave their views on this and approached the subject from two different angles. Lester Hall is converting his greens to a fine strain of bermuda grass which can be cut at 3/16inch, as bent grass is cut, and provides a fast putting surface. Hamner using ordinary cotton patch bermuda grass feeds his greens in excess of 16 pounds of nitrogen to 1,000 sq. ft. during the growing season, plus some additional nitrogen on his winter rye grass. He cuts his grass at 3/16-inch also and has provided putting surfaces as good as bent grass. Testimony of the players during the USGA Amateur in June, 1948, is good evidence of this statement.

The annual dinner and the meeting of the Southern Turf Association were held at the Andrew Johnson Hotel in the evening. Noer had to leave so Grau showed Noer's slides and his own which covered Noer's western trip and also included a great deal of the current work of the Green Section.

Marshall Crichton Wins PGA Seniors Championship

The grand old men of professional golf -old only in the sense that they have passed the half-century mark and are qualified for membership as a PGA Seniorhad their day at the PGA GC in Dunedin, Fla., January 14-16 when 67 members engaged in their annual 36-hole medal play championship. Help your players improve their game ... they'll help your club increase income



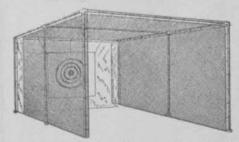
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Marshall Crichton, Durham, N. C. won the test with a score of 73-72-145. He won by one stroke with three tied for second. Placing second were Jock Hutchison, Glenview, Ill., George Smith, Chicago, and Louis Chiapetta, Sylvania, Ohio, with 146. Charlie McKenna, Rochester, N. Y., 1947 champion scored 77-79-156.

Hutchison who tied Johnny Bird of Chicago for the lead at the end of Friday's 18 holes with a one-under par 71, blew a chance to catch Crichton on the last hole when he carded a five on a par four hole, his second shot landing in a trap costing him the extra stroke and a first place tie with Crichton.

High spot in the 36-hole event was turned in by the new champ when he aced the 145-yard sixth hole.

Finishing in a tie for third were Phil Turnesa of New York and Lloyd Gullickson of St. Petersburg, Fla. Retiring pres. Charlie Mayo of Hackensack, N. J., and Johnny Bird tied for fourth money.

Money winners according to age groups were: Chiapetta and Smith, 50 to 54; Crichton, 55 to 59; Hutchinson, 60 to 64; and George Livingstone, 65 and over. Oldest entries in the tournament were Tom Clark, 71-year-old Kansas City pro, who shot a 170 for the 36 holes and 70-year-old Jack Campbell, retired Philadelphia pro who made it in 165.

Club Manufacturers Report 1948 Production Totals

Figures submitted by the National Association of Golf Club Manufacturers and compiled by The Athletic Institute indicate that there were 3,537,306 golf clubs sold between November 1, 1947 and October 31, 1948. Of this total, 2,402,975 were irons and 1,134,331 were woods.

This compared with a total of 3,215,482 clubs sold in the 1947 year, made up of 2,323,615 irons and 891,867 woods.

Inventory of clubs as of October 31, 1948, was 727,573 clubs, of which 556,413 were irons and 171,160 were woods.

This compares with manufacturers' inventories of clubs as of October 31, 1947, of 298,744, of which 225,035 were irons and 73,709 were woods.

In view of the increase in production as well as inventory of October 31, 1948, it appears golf club production in 1949 will be sufficient to meet the demand for the first time since the end of the war.

Phila. Group Exchanges Ideas on Soil Management Practices

Members of the Phila. Assn. of Golf Course Superintendents met December 20 to discuss the general subject of "Soil Management for Good Turf" and to review maintenance practices followed during the past year. The discussion was led by Charles K. Hallowell, Phila. Extension Agent, who was given assist by such experienced hands as William Baskin, Manufacturers CC; Joseph Valentine, Marion GC; Alec Strachan, Old York Road CC, Marshall Farnham, Philadelphia CC; and Charles Wilfong, Green Valley CC.

Principal concern of the group was to determine the proper use, and effectiveness of the Aerifier in the cultivation of turf. Answers were sought to such questions as; What season is the best time to cultivate turf? How many times during the season? What effect does aerifying have on getting plant food and lime better placed? What effect on producing a seed bed in existing turf? Reducing fungus disease? On increasing moisture-holding capacity of the soil and introducing new grasses into fairways and greens?

General concensus was that fall was the best time of year for successful renovation program; planting fairways with bent grass stolons after aerifying is too slow but same method is satisfactory for greens; for undernourished turf, spring is good time to aerify to bring added improvement; and aerification of greens to overcome compaction from watering and traffic is very necessary. Use of tractor on greens is not objectionable if reasonable caution is taken and soil is not too wet. Some air should be let out of tractor tires for best results.

For Younger Members

Knollwood CC (Chicago dist.) to bring costs within reach of desirable younger men, has 30 associate memberships for men 21 to 39 inclusive. In the 21-37 group the associates pay \$150 the first year, \$200 the second year and \$250 the third year. After that schedule of payments is completed these members will have acquired the status of full equity members and will have to pay full annual membership charges irrespective of age. Associate members, age 38, pay \$200 the first year and \$250 the second year. Associate members 39 years old pay \$300 during the year they are eligible for this class.



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Du Pont CC Marks 30th Year By Adding 18-hole Course

The du Pont CC, Wilmington, Delaware, established in 1919, will mark its 30th anniversary by opening a new 18-hole course, which will give it a total of 45 holes. A new clubhouse is also scheduled for opening in the spring.

In addition to these developments, the club will have a new professional, marking the first change in more than 26 years.

Thomas H. Fisher, Scotsman who is better known to thousands simply as "Tommy," is retiring July 31 after celebrating his 65th birthday on July 2. He will be succeeded by Sterling C. (Terl) Johnson, Pennsylvania open champion and a club pro for 18 years.

Thirty-eight-year-old Johnson, who has been pro at the Plymouth CC, Norristown, Pa., for the last 11 years, will report at Wilmington on April 1, when Fisher will be made special assistant to L. E. Therien, club manager, advising on greens and grounds until he retires.

Fisher, who was born at Greenock, Scotland, in 1884, began working as an apprentice clubmaker 50 years ago. He migrated to Philadelphia in 1909. He resumed making clubs at the Aronomink CC in 1919. April 4, 1923, he joined The du Pont Country Club as its first professional and later added duties of grnkpr.

Winter Work Shows Value of Good Shop

This is the time of year when a good repair shop is appreciated. It should be large enough so one can bring in a tractor and a gang of mowers and/or a truck and tractor and still have enough area left to permit three or four workmen to move around freely. The shop should have as many windows as possible, and plenty of overhead lights. It is very difficult for the workmen to accomplish a satisfactory repair job in a dark and crowded room.

I like a shop with a concrete floor with a drain in the center. The reason for this, it is easy to keep clean and it is also more fire-proof. When wood floors become saturated with oil and grease, they become a fire hazard. Around most repair shops on a golf course during the winter months there is very little fire fighting equipment, and under these conditions should a fire start in the shop, it usually ends up as a total loss. —Ray Gerber in Midwest Bull Sheet.

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Park Executives Hold Annual Conference

The Midwest Institute of Park Executives will hold their eighth annual Educational Conference at the park district administration building, 621 Garfield St., Oak Park, Ill. on each Friday evening at 8 o'clock from March 4th to April 1st.

The program includes the following subjects:

- March 4 "Lawn Construction and Maintenance."
- March 11 "Planting Technique of Trees and Shrubs, including Maintenance."
- March 18 "Maintenance of Park Athletic Facilities."
- March 25 "Practical Planning Standards for Park and Recreation Areas."
- April 1 "Proper Care of Park Equipment,"

Speakers who are authorities in their respective fields are being selected for each subject. The conference is open to all park, cemetery, golf course men, nurserymen, and greenkeepers who are interested in all or any of the subjects.

LEARN THE HARD WAY

(Continued from page 48)

they reach for what they need, instead of feeding on the surface applications as they used to do. We give particular attention to the healing of ball marks on the greens, and the careful use of water so there is no chance for the players to track up the greens. Our putting surfaces are true and uniform, giving satisfaction to those who pay the bills, and we all feel pretty good about it.

REDUCE WORK

(Continued from page 48)

One to whom golf course work is theory might say that the greenkeeper should have men trained and responsible for this work so it would be done as routine without the superintendent checking up on it. But such a critic doesn't know the class of labor a superintendent often gets at what the club is willing to pay. The superintendent is lucky to have a few reliable old-timers on his force. If he hasn't, the superintendent will have to



be everywhere at once or risk neglect or injury of the grass.

Rough is coming back as an interesting and fundamental feature of first class architecture. Tree planting and care and the removal of leaves and fallen branches also are becoming more important factors in play at good private clubs. Those additional planning and supervisory details of maintenance increase the demands on the superintendent's time just when he should have more time available for investigating and applying new developments in grass strains, fertilizing and weed-proofing practice to provide his members with the closest possible approach to protection in turf.

In fighting to save time and money not only the elimination of some traps but redesigning contours of other bunkers for machine maintenance is necessary. That's a job for the architectural specialist rather than the greenkeeper and by now the architect either is aware of the requirements of machine maintenance or he never will be.

At most of the better courses which were built some years ago there are serious faults in the drainage system. So at these courses where the superintendent should be devoting most of his specialized knowledge to the complex problems of turf culture he has to give considerable time to being a ditch-diggers' boss. Heaven only knows how much work and time have been lost by greenkeepers looking for sections of the drainage and watering systems because the original maps, if any, were lost before the present superintendent came to the club.

We all talk about elevating the status of the greenkeeper so he'll be recognized for the load of responsibility he carries in maintaining an expensive and complicated plant but we don't give enough attention to considering that the successful members of our clubs have made good in their own businesses by getting their work organized so they escape unnecessary details and can apply themselves to the type of problems and decisions that call for an executive's superior qualifications.

Every greenkeeping superintendent who is at a good club realizes many times that he is swamped by detail thus compelled to sidetrack some considerable improvement he wants to make for the good of his club. His problem is to minim-

