Make Your Course Famous For Turf Health With Less Time And Labor — Use ROTOTILLER. Trade Mark Reg. U.S. Pat. Of.



FOR PUTTING GREENS that stay springtime fresh and thriving all season long and for fairways, patch-free, evenly grassed and thriving, use Rototiller — you'll get these better results with less time and less labor.

with less time and less labor. ENGINE DRIVEN, fast revolving tines tear up the ground, doing the work of plow, disc and harrow, in one operation — doing it far better. Once over, it prepares a deep, finely pulverized, completely aerated putting green foundation—fertilizer worked in evenly from top to bottom—ready for planting. And there is no packing down as fast as it's loosened up, no hand-raking necessary. EQUIPPED WITH "MAJOR BUTT'S GOLF COURSE DISCS," ROTOTILLER cuts clean, sharp, narrow slits in the turf, deep enough for ideal aeration, moisture penetration and fertiliz-

EQUIPPED WITH "MAJOR BUTT'S GOLF COURSE DISCS," ROTOTILLER cuts clean, sharp, narrow slits in the turf, deep enough for ideal aeration, moisture penetration and fertilization. With field-mower attachment, it cuts the rough, 42 inches wide at 3 miles an hour. Otherwise, you'll find any number of jobs to keep your ROTOTILLER busy...eliminating quack grass, weeding, tilling and cultivating club-house vegetable gardens.

regetable gardens. FREE BOOKLETS — Profusely illustrated. Please mention approximate areas of greens, fairways and cultivated ground so we can send correct information. Also, let us arrange a demonstration which takes but a few minutes. Address Dept. K-2.



rancid, foul or slimy. No injury to hands or clothing. No soap, alkali or acid. Write for literature and free testing sample. McCLAIN BROTHERS COMPANY, Canton, Ohid

ATTENTION

Copies of Robert Hunter's famous book on golf course architecture, "The Links," are still available at the bargain price of 75c each. Send cash, check or money order to GOLFDOM today! long-term officials. Those clubs that have officials in office for many years are the most efficiently operated in the country because the officials have learned the value of long-term planning and expert work. They do not require that their greenkeeping staff do jobs that properly are within the province of specialists. Competitive bids are asked and carefully weighed on each job that's out of the logical limits of greenkeeping. Consequently, the greenkeeper is not afraid to request that outside experts be brought in on specialized jobs. The greenkeeper thus escapes a responsibility that he should not be asked to assume, and is enabled to concentrate his attention to turf culture.

"This long term planning results in a drastic reduction of the expensive experimentation that so many committees do in the belief that such experimentation justifies the committees' existence."

Soil Tests Are Easy and Informative

By C. F. Greeves-Carpenter

NOT so long ago few except experienced agronomists knew much about soil testing and then, almost overnight, great interest was evidenced, for progressive horticulturists and greenkeepers came up with truly remarkable results in growing plants in soil which was especially prepared and suited to the chemical needs of the plants.

There are, unfortunately, still many to whom the subject is almost a closed book for soil testing often seems too delicate and puzzling. Commercial organizations saw the possibilities in reducing the com-



This is one of the popular soil-testing kits on the market.

APRIL, 1939

plicated procedure necessary to obtain a soil analysis and have prepared soil testing sets which, though not designed to give complete chemical analysis, quite definitely show the greenkeeper the degree of alkalinity or acidity of his soil as well as indicate deficiences in nitrogen, phosphorus and potash. These three chemicals are essential, of course, to all plant growth and, in most instances, it is found that the nitrogen is the most readily depleted plant food.

None of the rapid-method kits on the market is designed to show just how much nitrogen, phosphorus and potash should be added to the soil to bring it up to the required degree of fertility. Instead, the analyses made with one of these sets indicate whether the soil has these three major plant foods available and in sufficient proportion to maintain plant life at its best. If not, the remedy is obvious.

There are some greenkeepers who still follow the practice of adding separate chemicals from time to time, but this procedure is not to be generally advocated as it is very easy to throw the soil off-balance chemically.



Anyone who can read and follow directions can test soil.

If the soil is in good condition and has been properly kept up over a long period of years, it is good policy to test the soil once or twice a year to make sure that none of the important chemicals are being depleted, as well as to check acidity.

The test for acidity is one of the simplest and is considered as the most important by many of the greenkeepers. Most soils are acid in their reaction, and lime is the agent ordinarily used to correct that condition. Lime, in addition to controlling the acid condition, acts as a direct plant food furnishing the needed calcium, pro-





"GUNITE" SWIMMING POOL IN BERMUDA



A very artistic "GUNITE" Swimming Pool, built by us, to our copyrighted design, for the Hotel Bermudiana, Hamilton, Bermuda. It has had several successful seasons.

It is HIGH TIME for YOU to be moving if your Club is to have a new pool the coming summer. A "GUNITE" Swimming Pool is your best bet —and the least costly. It can be built quickly and can be economically operated and maintained. You'll find it a great "pepper-up" of attendance at your Club, and therefore a big money maker. Write us for data proving what a simple matter it is to own a "GUNITE" pool.

CEMENT GUN COMPANY ALLENTOWN, PENNSYLVANIA May 22 at Columbus, O., the Ohio Golf Course Supts, Assn. will hold its annual outdoor demonstration of maintenance equipment. In addition to Ohio greenkeepers, many from Pennsylvania, West Virginia, Kentucky, Indiana and Michigan are expected to attend.

motes bacterial growth and tends to make phosphorus available to the grass roots.

Soil testing sets are complete with test tubes, chemicals, funnels, filter papers, tin rod and a booklet of directions. The directions are not difficult to understand but must be carefully followed if one is to get satisfactory results. Briefly, the procedure with one of the most extensively used sets involves taking a sample of the soil, placing it in a test tube, adding a definite amount of the lime testing solution, shaking the mixture and allowing the soil to settle; all of which takes only a few minutes. A liquid rises to the surface, the color of which is compared with a color chart and from this one is enabled to determine the degree of acidity-alkalinity (pH value) of the soil.

The tests for nitrogen, phosphorus and potash are no more complicated, and the results of the various tests act as a very definite guide to the chemical requirements of the soil. Directions are included so that the pH value may be changed and the deficiencies of the three major plant foods compensated for.

72 Attend Annual Meeting of Connecticut Greenkeepers

SEVENTY-TWO members and guests attended the annual meeting and banquet of the Connecticut Ass'n. of Golf Course Supts., held at Hartford GC, Monday, March 6. The following were elected 1939 officers:

Pres., A. Lentine, Tumble Brook CC; Vice-Pres., H. Grahame, Putnam CC; Secy.-Treas., C. Traverse, Mill River CC; Ass't. Secy.-Treas., G. Moquin, Manchester CC; Board of Directors—C. Baskin, Waterbury CC; F. Emeneger, Fairfield CC; Wm. E. Perkins, Yale CC.

Speakers at the meeting were introduced by A. B. McGinley, sports editor of the Hartford Times, who acted as toastmaster.

Speakers were: J. P. Johnson, Conn. Agr. Experimental Station; Dr. H. B. Sprague, N. J. Agr. Exp. Station; Dr. T. Odland, Dr. Defrance, and F. Emeneger. The next meeting of the Ass'n. will be

held at the Avon CC, Unionville.