

been made to ascertain the grub population, but the appearance and condition of the grass seems to indicate that there has been no grub injury as compared with the check, or untreated plats. Frankly, it is too early to tell whether or not one year's topdressing with poisoned soil will give a grub and wormproof top layer. But if the results in worm control are any indication, it is possible that the continued topdressing with poisoned soil will attain this desired result in the course of two or three years.

In topdressing greens which were poisoned to a depth of three inches before planting, use $2\frac{1}{2}$ pounds of arsenate of lead per cubic yard of topdressing. In topdressing greens which have not been poisoned prior to planting, use 5 pounds of arsenate of lead per cubic yard. The poison should be mixed with a small bulk of soil and then gradually mixed with the remainder of the cubic yard, as outlined above.

Future Experimental Work

Extensive work is now under way on the compatibility of fertilizers with these soil poisons. This work, as well as the work of testing the compatibility of the mercury compounds with these poisons, should be continued. At least one year's work, and probably two years' work, will be required in order to obtain all the necessary data on these points.

The question as to whether a grubproof layer can be built up, on a green already established, by means of topdressing with poisoned soil can not as yet be definitely answered, although the experimental results to date appear favorable. This question can not be entirely answered by means of small experimental plats. Fortunately the greens at the Riverton Country Club and at other country clubs near Philadelphia which are receiving these poisoned soil topdressings can be kept under observation until the desired data are obtained.

During the past year some very interesting results in controlling the June beetle with poisons have been obtained. Observations and results indicate that a method can be evolved whereby this insect can be controlled at a low cost for labor and materials. In view of the promising outlook experimental work along this line should be continued.

ANNUAL REPORT OF THE CHAIRMAN OF THE GREEN SECTION OF THE UNITED STATES GOLF ASSOCIATION FOR THE YEAR 1926

TO THE MEMBERS OF THE GREEN SECTION:

That an organization should suffer such misfortune as the Green Section has during its sixth year and still function efficiently speaks well for its vitality and usefulness. In the loss of its former Chairman, Dr. C. V. Piper, the Green Section has been dealt a blow from which complete recovery is doubtful, and must at best be slow. The long, though temporary absence of his colleague and successor, Dr. Oakley, has of necessity placed a burden on untried shoulders.

Nevertheless, the Green Section's sixth year has been one of accomplishment and growth. Gratifying progress has been made in the control of brown-patch, and previous years of work in the grub-

proofing of turf are pointing to more definite and widespread conclusions than originally were even hoped for.

GREEN SECTION MEMBERSHIP

Number of clubs enrolled on Dec. 31, 1925.....	893
Number of new clubs enrolled Jan. 1, 1925 to Dec. 1, 1925.....	99
	992
Number of clubs withdrawing Jan. 1 to Dec. 1, 1926.....	52
	940
This enrollment of 940 clubs was constituted as follows:	
United States clubs members of the U. S. Golf Assn.....	609
United States clubs not members of the U. S. Golf Assn.....	291
Canadian clubs	31
Other foreign clubs.....	9
	940

The growth in membership of the Green Section, by years, is as follows:

Membership on Dec. 31, 1921.....	287
Membership on Dec. 31, 1922.....	557
Membership on Dec. 31, 1923.....	653
Membership on Dec. 31, 1924.....	802
Membership on Dec. 31, 1925.....	893
Membership on Dec. 31, 1926.....	940

FINANCIAL STATEMENT

A detailed financial statement for the Green Section for the year ending November 30, 1926, has been published in the Report of the Executive Committee of the United States Golf Association. A summary of the figures is here presented:

Cash in bank and on hand, Nov. 30, 1925.....	\$3,771.86
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RECEIPTS

Club dues	15,417.51
Sales of Bulletins and Special Services.....	2,676.74
Contributions for Experimental Work and Research.....	345.00
	\$22,211.11

DISBURSEMENTS

Bulletins and binders.....	\$3,001.67
Field service and office expenses (salaries, traveling, experimental supplies and equipment, stationery, books and periodicals, etc.).....	17,000.26
	\$20,001.93
Cash in bank and on hand, Nov. 30, 1926.....	\$2,209.18

COOPERATIVE EXPERIMENTAL WORK

The time seems ripe for making the cooperative work carried on at the various college experiment stations more extensive, both by increased financial assistance and by more frequent personal contact with the men in charge of these stations. This branch of the Green Section's experimental work should be widened as soon as possible to the point where scientific studies of local problems, peculiar to each important golfing section of the country, are being made. Investigations of value to the South should, for example, be conducted on a much larger scale than has so far been possible. In some sections of the country further experimental work may prove the advisability

of planting pure strains of velvet bent by those clubs desiring turf of absolutely the finest texture obtainable. Experimental work should be undertaken farther west than has yet been done.

At present cooperative experimental work is conducted at New Brunswick and Riverton, N. J., Gainesville, Fla., Madison, Wis., St. Paul, Minn., Lincoln, Nebr., and Manhattan, Kans. Premature publication of the results obtained has wisely been avoided but the time is not far distant when important results may be properly made public, at least from those stations where the work has been carried on for several years.

THE BULLETIN

THE BULLETIN now has a mailing list of 2,600. In addition to the Green Section member clubs on this list appear the names of manufacturers and distributors of golf course supplies and equipment of many kinds, architects, libraries, publications, writers, foreign golf associations, and many individuals well known to the world of golf. Requests for old copies of THE BULLETIN are constantly being received, as a result of which many issues can, unfortunately, no longer be obtained. The publication of several special numbers, each dealing with a single subject, is now advisable and probable in the near future.

THE SERVICE BUREAU

Correspondence with member clubs has been heavy, and analyses of seed, soil, and fertilizers has, as formerly, been no small part of the service rendered by the Green Section. Personal service by visits to clubs has of necessity been far less frequent than desirable.

Local Service Bureaus and Green Sections have for the most part kept in close touch with the Green Section and sought its advice on many questions. At least one new local Green Section has been organized during the year.

THE GREEN SECTION ABROAD

Interest in the Green Section's work is increasing in foreign countries as is evidenced by many applications for subscription to THE BULLETIN by individuals and golf associations, by the publication in several successive issues of one of Great Britain's foremost golfing magazines of articles descriptive and appreciative of the Green Section's attainments, and by personal correspondence.

GREEN SECTIONS IN OTHER COUNTRIES

Concerning the progress made by the Green Section organized a little over a year ago in Great Britain we have as yet learned little.

On the other hand, we are happy to know that the Green Section of the Royal Canadian Golf Association is rendering splendid service, not only to its members but to other Canadian clubs, not only through scientific investigation, its greenkeepers' meetings, and its excellent Bulletin, but by a more personal service than our own Green Section has so far been able to give.

THE FUTURE

It now seems definitely assured that the future of the Green Sec-

tion is not uncertain; that by a still closer union with its parent, its hopes of a wider sphere of usefulness are to be realized; and that, in the future even more than in the past, its ideals will be cherished by that organization which safeguards the true spirit of the game, the United States Golf Association.

H. L. WESTOVER,
Acting Chairman.

Troublesome Weeds of the Rough

By L. W. Kephart and M. W. Talbot

There is today, both in course construction and maintenance, a definite tendency toward the lessening, if not elimination, of the influence of luck in the playing of golf. This fact is deplored by many golfers, particularly those of the older school, if such an expression may properly be used to describe the men whose devotion to the spirit of the game has done so much to popularize it in this country, but in any event the tendency seems to be a very definite one.

Long, skillful, and accurate play is rewarded by both architect and greenkeeper, and wildness punished. Unfortunately, on many courses extreme wildness, particularly from the tee, is often penalized less than the shot which is only a little off the fairway. While this condition is frequently unavoidable on parallel holes because of lack of space, where more acreage is available there is now quite generally an effort to make the punishment fit the crime, at least so far as the condition and quality of the rough is concerned.

So the rough has been shorn of indiscriminate roughness until on the best kept courses it is designed to provide exactly so much handicap for the errant shot, and no more nor any less. Play from it should be increasingly difficult as it recedes from the fairway but should never be impossible.

The ideal rough is, therefore, one that provides a difficult but not insuperable problem: it furnishes a lie everywhere inferior to one on the fairway, and while comparatively cuppy its vegetation is not dense enough to cause frequent loss of balls or serious interference with the backswing.

There are really very few plants common in this country that meet all these requirements, the list being confined very generally to Canada bluegrass, sheep's fescue, and a few of the bunch grasses. All other plants are weeds, so far as the rough is concerned. Even Kentucky bluegrass, the invaluable friend of the fairway, is unsuited for the rough because when long it makes a thick dense mat in which the ball too often sinks out of sight and in which it is impossible to get a fair backswing. Rarely does the native vegetation provide good rough, for it usually consists of Kentucky bluegrass, clover, or of big coarse weeds and vines that swallow a golf ball at one gulp and hold it against the onslaught of any club except a niblic. As a rule the native vegetation can be destroyed and good rough established by scraping away the surface of the ground and sowing fescue or Canada bluegrass. Sometimes, however, the old vegetation persists, in which case a real weed problem exists and must be handled.

During the next few months THE BULLETIN will contain short articles on the Troublesome Weeds of the Rough. These will deal