

LAWN AND GARDEN DEPT.  
Richmond, Virginia



1381 West Third St. - Cleveland, O.

One of our correspondents has said, "all is not bent that creeps." Allow me to say all is not B. P. D. that shows brown patches on our greens. In some cases this disease has proved a strong alibi for a shoddy-looking green. There are several distinctive reasons for brown patches showing on greens, etc. other than the disease itself. I may say that the large irregular brown patch has been more prevalent with us than the round or "dollar" B. P. al.



though the latter has proved more deadly in effect; but I am pleased to say we have not suffered from this form during the past five years.

### Algae Causes Worst Disease

**P**ROBABLY the most troublesome brown patch is caused by what is termed Algae. Where greens are situated in the open on high or sandy ground, especially if there is good drainage, one need not look for Algae so much as on low and shady ground and where drainage is poor. Where such conditions exist and injudicious feeding and watering are practiced together with extremes of weather then one may look for Algae and which is sometimes misconstrued for B. P. D. Other brown patches may be caused by indiscreet handling of certain chemicals in connection with top-dressing or for treatment of worms.

One may often notice rusty or brown patches on greens where there is a mixture of grasses such as South German, bent, etc., and in this case it can often be attributed to one or more of the earlier varieties demanding a rest, i.e., going into a state of dormancy which after all is only nature asserting herself. This generally occurs up here about August. Apparently no feeding will bring about immediate results hence the remedy is to remove such grasses and replace with better turf thereby removing also the brown patch appearances.

Again brown patches are sometimes caused through a scald which often occurs during a spell of hot dry weather. Yet another form may be caused through careless handling of machinery either by over-oiling or greasing as the case may be, allowing these substances to drop about the green which, as every experienced man knows, will permanently kill the parts affected.

The following incident may be of interest to some of my confreres. A fellow greenkeeper in our district asked me over to see his greens stating he had some brown patches but he did not think it was B. P. D. Coming to one of the greens affected I saw numerous brown spots varying in size, also several streaks about one foot long and one inch wide, then larger spots at intervals right across the green. My friend did not think these conditions were caused through carelessness on the part of his

## CONGRATULATIONS and APPRECIATION

*To the National Greenkeepers' Association:*

We did twice as much business at the Louisville Golf Show than at any previous show of any kind. The Greenkeepers literally stormed our exhibit. Most of them who are already using our equipment, brought their friends around.

One night at ten o'clock Mr. Buckner, while passing the Auditorium, heard a great commotion and on investigation found Joe Mayo at our booth surrounded by a bunch of greenkeepers demonstrating to them how Golf King Sprinklers could be thrown all over the building without any damage.

This is the sort of boosting we received at the hands of many greenkeepers and we want them to know it is and has always been appreciated.

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## Convention Story Contest Extended To April 15

Owing to many requests for further time the committee in charge of the cash prize contest for the best stories of the Louisville Convention and Golf Show have extended the time for filing stories to April 15. Stories are limited to 1000 words and the cash prizes are:

First, \$100.00; Second, \$75.00; Third, \$50.00; Fourth, \$25.00. For full details see Page 24 March issue.

greensman but it was evident to me that oil or grease was responsible in some manner. However, on our way to inspect another green we crossed through some rough to the next fairway on both of which we saw several streaks some three to four feet long extending to a foot in width in places. The turf was killed outright. We then came to the conclusion that this damage was caused by an aeroplane dropping oil or grease on its flight (and such is a sign of the times).

### The Subject Of Lime

IF space will permit at this time I would like to dwell once more on the subject of lime as a useful article to use on golf courses and to some extent I am heartened and encouraged by that splendid article by Dr. Sprague of the New Jersey Experiment Station which has been handed to us through the medium of our National Greenkeeper Magazine. I feel sure that if my fellow greenkeepers will peruse that article with the attention it so thoroughly deserves it will tend to remove so much prejudice that has been put on lime with regard to its use

for cultivation of turf. As a matter of fact, I have been asked to procure extra copies of this number, December, 1929, for distribution and by the perusal of that article contributed by Dr. Sprague I am hoping it will explode certain fallacies a great many have been imbued with by "mushroom growth experts."

It must be something in the way of a surprise if not a shock to some of the younger greenkeepers (if not some of the older ones) to have their fetish lowered from its high pinnacle and to see that lime has been lauded as a useful commodity for the culture of healthy grass. Let us take a general survey on broad lines and with an unbiased mind. There is just as much clover today with possible exceptions with acidity and no lime as years ago when lime was used. One of the exceptions referred to is where new turf has been raised by vegetative planting of bent grasses and possibly a more generous treatment accorded. These conditions afford a better chance to control clover than in the past when seeding was the general practice.

Take the past season of 1929. I can assuredly say that I have never seen clover so prolific nor so general as was the case in our neighborhood, here, there and everywhere. No one can aver that the country was broadcast with lime from aeroplanes.

### Lime Increases Bacterial Activity

I THINK it is generally understood that soil bacteria forms a very important part in plant life but the knowledge may not be so general or recognized, that a very sour or acid soil is detrimental to the activity of bacteria. On the other hand lime is instrumental in increasing

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that activity in the soil by neutralizing the sourness therein, thereby giving greater aeration and porosity, two important points in maintaining good healthy turf.

I have often wondered why bent grasses should be singled out amongst other grasses in respect to acidity or alkalinity. To be more explicit, why should bent grasses be considered more susceptible to acid and adverse to alkaline conditions than most grasses? It seems to me that this has been based purely and simply on theory. By following more closely the teachings of Nature one will profit more than by following on the lines of theoretical bunk.

Lime, as we know, leaches or seeps away through the ground by the devious ways of Nature and where the soil is more or less alkaline this substance is precipitated from the higher grounds to the lower and thence on into the various waterways.

Now we may observe that bent grasses thrive and flourish best in the valleys, alongside of streams, in hollows or pockets, etc. and in greater variety than on higher and drier ground. Some forms of bent may be seen growing in shallow water with stolons to the extent of two or three feet in length. We all know that some waters contain a higher lime content than others. The same thing applies to soil, while others are neutral. The inference then is this, that bent grasses in a state of nature are in many cases thriving under alkaline conditions as well as under those of acidity.

There has undoubtedly been too much faith put in the use of sulphate of ammonia as a regular and permanent fertilizer for grass and for controlling of certain weeds and clover as

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well as the conditioning of soils. Why wrap ourselves up in a shroud of mystery respecting the cultivation of grass when it is or should be an open secret if good sound common sense is used with practice and observation and a study of Nature? A few more years, a few more thousands spent, a few more fallacies exploded and we will probably be advised to use fertilizers of an organic nature rather than those inorganic as a saner method to procure good, healthy and durable turf.

In conclusion I would like to add that



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Arsenate of Lead has proved far more effectual in the control of certain weeds than has Sulphate of Ammonia. It is also perfectly safe and effectual to use as a worm exterminator, but here again it is not wise to be too drastic in one's effort to get rid of all the worms, especially on certain soils and where there is but indifferent drainage. To overdo a good thing is a sure way of bringing it into disfavor.

### Praise from New England

In the February issue of its "News Letter" the Greenkeepers Club of New England publishes a report of the National Convention at Louisville from which we quote the closing paragraph:

"We understand that this Show and Conference was the largest that has been held. The whole tone of the Convention was a decided improvement over the one last year. This Convention was indeed very valuable, and we feel that through the cooperation of our Green committee chairman, it was a privilege to attend it. We wish that more of the New England golf clubs could have sent their greenkeepers."

(Signed)

James McCormack, Unicorn  
Frank Wilson, Charles River  
Carlton Treat, Woodland

### The Chairman's Address

By PROF. GEORGE M. MCCLURE



GEORGE M. MCCLURE

**M**R. PRESIDENT, Members of the National Association of Greenkeepers of America and Guests:

This is my first visit to a convention of your association. While I have not heretofore had the pleasure of attending your meetings, yet I have kept in rather close touch with your aims, your progress and your accomplishments.

Your Constitution states that the object of this organization is to advance the art and science of greenkeeping, to collect and disseminate practical knowledge of the problems of greenkeeping

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and to promote fraternalism among its members. Any one of these three objects is, in itself, a sufficient justification for your presence here in Louisville this week. All of you will be amply repaid for coming by the ideas you will gain, the new friendships you will make, and the old friendships you will renew and cement. It is only by taking advantage of the opportunities afforded here this week that the members of an organization such as this can show progress and accomplishment.

Progress in any art or science has a tendency to make that art or science more complicated. The successful greenkeeper of today must have at his command a vast amount of scientific and technical knowledge which was largely unknown to the greenkeeper of fifteen or even ten years ago. A decade ago, the use of bent grasses on greens was in its infancy; brown patch was not generally prevalent; and the fertilizers used on greens and fairways consisted of a few relatively simple materials. The development of the numerous strains of bents and their propagation by the stolon method; the marked increase in diseases of fine turf; the advent of the many new fertilizer materials; the development of specialized machinery; all these have necessarily greatly complicated the work of the greenkeeper and have made greenkeeping a highly technical and specialized profession.

As I see it, we all of us are here this week primarily to gain information and ideas which will make us more efficient at our several jobs. It matters not what the job is.

The program calls for four topics to be discussed each afternoon, and the meetings are scheduled to begin at 2:30 P. M. I believe that three hours devoted to a presentation of the topics and to the discussion each afternoon should be sufficient. If we attempt to devote a longer time than this, I believe that the meetings will tend to lose their "pep".



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# Penn. Greenkeepers Entertain Chairmen

THE Greenkeepers' Club of Western Pennsylvania were hosts to their chairmen at a banquet and meeting held on Monday, March 10 in the Fort Pitt Hotel. There were twenty one greenkeepers and chairmen present and the evening proved very enjoyable and instructive.

Mr. W. R. Murphy, a prominent Pittsburgh attorney and an ardent golfer was toastmaster and was all that a good toastmaster should be. His ready wit and humor kept the ball rolling and produced many laughs.

Mr. James A. Smith of London, Ohio gave a very interesting and educational talk on fertilizer and soil. He explained in detail the action of the bacteria in the soil in making the nitrates available so the plants could make use of it. He also offered his experience and knowledge in helping the greenkeepers of Western Pennsylvania to start a soil testing laboratory where they may have their soil tested not only for acidity but for physical structure as well.

Mr. Smith surely found a place in the hearts of the greenkeepers of the Pittsburgh District and we are indebted to him for many helpful suggestions which he made in his wonderful talk.

Col. John Morley was also present and he gave one of his usual fine talks. He chose as his subject the fraternal side of greenkeeping and brought out many very fine points which found great approval by the green chairman. He was heartily congratulated on his success in organizing the National Association and guiding it through the years of its existence so well.

Mr. Henry Eby, the Allegheny County Agriculture Agent gave a short talk on co-operation and offered his services in any way possible to the clubs of the district. He ended his talk with a little poem on cooperation which brought out the need and the benefits of cooperation and was received with applause.

John Quail, secretary of the National Association of Greenkeepers and also secretary of the Greenkeepers Club of Western Pennsylvania gave a brief outline of what the green-

keepers are doing to better their courses. He pointed out the need of cooperation between the greenkeepers and between the greenkeepers and their chairmen. He lauded the short courses now being offered the greenkeepers and the good they are doing in educating the greenkeepers in scientific lines so they can better carry on their work.

Experiment plots on the greenkeeper's home course were pointed out as a solution for many ills. The Green Section and the state experimental stations hand out many important bits of information and recommendations and as the conditions under which they are discovered may differ greatly on the various courses it is advisable to first try them on a small scale before jumping at conclusions and trying them on the greens.

Several chairmen and greenkeepers expressed their views and it was the general opinion of the chairmen that the greenkeepers are doing more to better conditions than they were being given credit for. They recommended that the greenkeepers keep up their good work and they will surely be rewarded for their efforts.

## What Do We Receive For Our Money?

By HOWARD D. FARRANT

*Excerpt from an editorial in the February issue of "News Letter," published by the Greenkeepers Club of New England*

I HAVE heard this remark in our Club and it is mentioned in all clubs, but I do know as Members of the "Greenkeepers Club of New England," we are getting far more than what we pay.

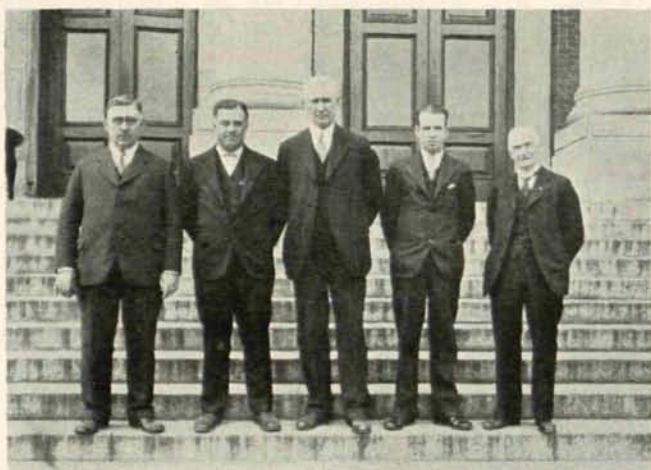
Let us, for instance, check up our outdoor meetings in the summer. There are six, possibly seven, where we inspect the course, have lunch and play golf. The individual pays for his lunch and entrance fee for a golf tournament which goes towards prizes, but who pays for the use of the course? The various clubs have been kind enough to offer their courses, where if we went alone we would pay Green Fees from one to three dollars, which would alone mean six to eighteen dollars in the season saved because we are Members of this club.

At our indoor meetings we have interesting speakers, and this last meeting a free lunch. Aren't we all getting something out of these talks? We have had other dinners and entertainments furnished by the club. There is an equipment day where all the latest in golf course equipment is shown. Doesn't this mean something to us?

\* \* \* and above all else there is the good fellowship, the exchanging of ideas, new friends, and to me this means an awful lot. How can the question be asked—What do we receive for our money?



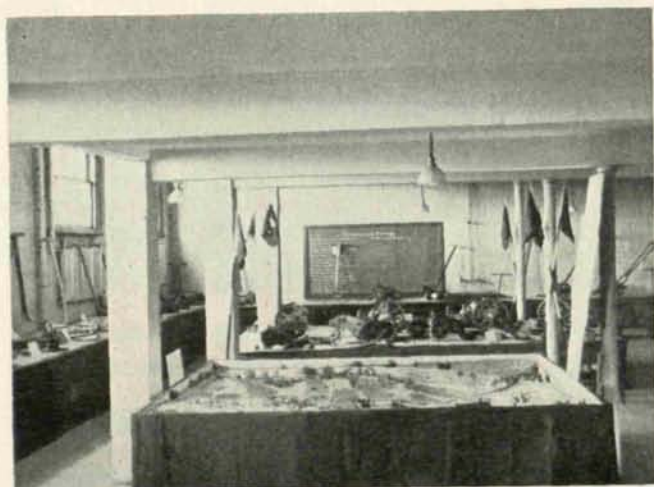
# Amherst Holds Annual Show



GREENKEEPERS ATTEND AMHERST EXHIBITION  
*Fred A. Burkhardt, Cleveland; Carleton Treat, Auburndale; John Shanahan, Brae Burn; Mr. Whitehead, John Morley, Youngstown*

**F**OLLOWING its annual custom the Massachusetts Agricultural College held its annual two-day golf course maintenance exhibition in Stockbridge Hall, Amherst, Mass., March 15-16. This show marks the close of the three-month course for greenkeepers and many of the exhibits are prepared by the students and are extremely interesting.

Mr. L. S. Dickinson, assistant professor of Horticulture was in charge. The Show was attended, as it was last year by the members of the Greenkeepers Club of New England, headed by its president Carleton E. Treat of Auburndale, Mass.



ONE OF THE EXHIBITS AT AMHERST  
*In the foreground is a model of a golf course made by the students*

Upon special invitation of Professor Dickinson, John Morley and Fred A. Burkhardt, president and treasurer respectively of the National Association of Greenkeepers of America, attended the exhibition and took part in the program. They also attended the joint meeting of the Greenkeepers Club of New England and the Connecticut Greenkeepers Association. They report a very enthusiastic attendance and found the New England greenkeepers making splendid progress and very much alive to the present-day problems which confront the men who have charge of golf course maintenance.

Following is the program:

## Saturday, March 15

### DEMONSTRATIONS:

- 11:00 a.m. Botany, Room 114
- 11:30 a.m. Pumps and hose, Engineering Building
- 1:30 p.m. Proportioner (new), Engineering Building
- 2:00 p.m. Cleaning grass seed, Room 114
- 2:30 p.m. Mowers, Room 20
- 3:00 p.m. Fertilizers, Room 114
- 3:30 p.m. Buying grass seed, Room 114
- 4:00 p.m. Greenkeepers' office, Room 114
- 4:30 p.m. Small equipment, Room 12

### SPECIAL MEETINGS:

- 10:30 a.m. Important meeting for commercial men, Room 111
- 5:30 p.m. Auditorium:  
 Welcome By President Roscoe W. Thatcher  
 Mr. Roland H. Verbeck, Director of Winter School
- Motion Pictures:  
 "Laying Lumbricus Low"  
 "Holding the Japanese Beetle"
- 7:30 p.m. Question box, with a pleasant surprise (we hope), Auditorium

## Sunday, March 16

### DEMONSTRATIONS:

- 10:30 a.m. Pumps and Proportioner, Engineering Building
- 11:00 a.m. Grasses, Room 114
- 11:30 a.m. Fertilizers, Room 114
- 2:00 p.m. Equipment, Room 20
- 4:30 p.m. Office of greenkeeper, Room 114

### Special Meetings

- 12. Noon Visit to turf plots, weather permitting. Assemble in foyer
- 2:00 p.m. Joint meeting New England Greenkeepers' Association and Connecticut Greenkeepers' Association, Auditorium
- 2:30 p.m. Open meeting New England Greenkeepers' Association, followed by Question Box, Auditorium



## 1931 Convention Plans

BY JOHN MORLEY, President

*The National Association of Greenkeepers of America*

IN COMPANY of Mr. Fred A. Burkhardt, chairman of the Show committee, Mr. Robert E. Power, Editor of the National Greenkeeper and Mr. H. L. Richey, we visited the city of Columbus, Ohio, for the purpose of securing a suitable hotel and auditorium for our next Golf Show, Conference and Convention. Immediately upon our arrival we were met by Mr. Joseph Williamson and Mr. George Sargent and later by Mr. George Trautman, Director, Division of Conventions and Publicity of the Chamber of Commerce.

In due time we were escorted to view two of the leading auditoriums and held consultations with the managers of the two leading hotels. Owing to the fact that there were several items that require further consideration we are not in a position at this time to state the name of the hotel which will be our headquarters or which auditorium will house the Golf Show. But in all probability we expect to be able to

name them in the next issue of the National Greenkeeper.

During our short stay in Columbus both of the leading hotels were very kind and generous to us. The management of the Deshler-Wallack served us with an excellent breakfast and provided us with a suite of rooms which are the headquarters of Colonel Charles Lindbergh upon his visits to Columbus.

On Saturday evening the management of the Neil House entertained us with an excellent dinner at which were present several greenkeepers and golf club officials from the Columbus district. I took this occasion to thank the Columbus men for their devotion and hospitality and announced the following committee on Entertainment to serve for next year's Convention:

Chairman, Joseph Williamson, Scioto Country Club

Charles Lorms, Columbus Country Club

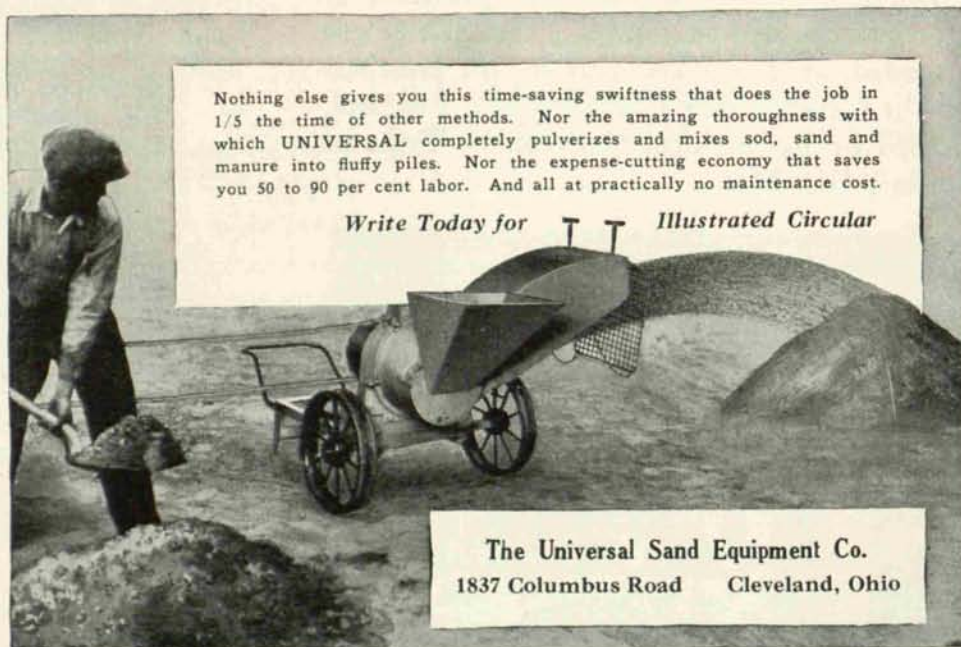
George Sargent, Scioto Country Club

Ed. Hart, Columbus Country Club

Lawrence Huber, Elks Country Club

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# COMPOST MIXER



# Seeds and Grasses

BY L. S. DICKINSON, Assistant Professor

*Department of Horticulture, Massachusetts Agricultural College, Amherst, Mass.*

*Notes on talk given at the Fourth Annual Convention of the National Association of Greenkeepers of America at Jefferson County Armory, Louisville, February 4-7, 1930*

**N**EARLY every one of the State seed laws is a "true label law" which requires all grass seed sold, to be correctly labeled, and their purity and germination stated on the package or label.—(Date of germination test must be stated.)

In labeling grass seed mixtures, all varieties that are five percent or more (by weight) of the entire mixture, must be listed on the package or tag, as well as the purity and germination.

Reliable seed houses would label their grass seeds correctly regardless of seed laws, but neither seed house nor law can be held responsible for errors in planting or that occur when the labels are lost.

## Watch Your Labels

**A** GOLF course in Massachusetts seeded their greens with pure red top and the backs and sides of the greens with South German bent because the labels were lost and the greenkeeper probably thought that the cleaner and brighter colored seed was the bent, because bent costs more than red top, and therefore should be cleaner. Had the greenkeeper realized the difference between the two seeds the expensive error would not have been made.

Either one of two simple tricks will furnish a good indication as to whether a sample is bent or red top. (1) Weigh (or lift in your hands) samples of equal bulk. The heavier sample is quite sure to be red top. (2)

Breathe on the palms and backs of both hands and immediately thrust one hand into one sample and the other into the other sample. The hand having the greater amount of "seed" (chaff) has very likely been into the bag of bent.

Usually the South German bents having a high purity (90% or more) contain comparatively few velvet bent seeds. The small, light velvet bent seeds are blown out in the recleaning process.

## Large Seed—Coarse Grass

**W**ITH very few exceptions the larger the grass seed the coarser the grass. The coarser the grass the shorter its life in close clipped turf. This correlation in size and texture holds within the species.

Red top is the largest of the bent seeds and is the coarsest grass. Incidentally, red top may be considered the exception to prove the rule, for we all know that red top is short lived in golf turf.

Sampling seed from the top of the bag, or from any other section of the bag is very likely to lead to an

error, especially if the bag has been shaken. No sample should be taken until the seed has been thoroughly mixed.

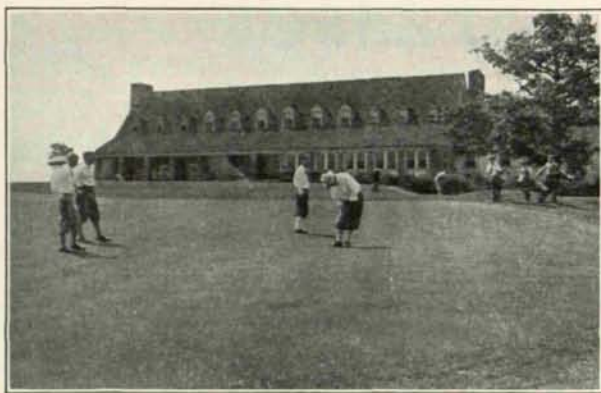
Unless the comparative size and weight of grass seeds is fully realized a mixture such as Kentucky blue grass six parts, red top one part, parts by weight, is misunderstood. The true seed ratio of such a mixture is approximately three Kentucky blue grass and one red



LAWRENCE S. DICKINSON  
*Honorary Member N. A. G. A.*



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top and when purity and germination are considered the ratio becomes about 2.2 to 1. Cultural loss will further change the ratio to approximately 1.8 to .6.

By the same reasoning a mixture labeled 60% Chewings fescue, 25% red top and 15% South German bent, becomes approximately a 1-4-2 ratio.

Kentucky blue grass is sold as a certain grade of seed, for example 21 lbs., 24 lbs., 28 lbs., etc. This grade means that a measured bushel of Kentucky blue grass seed weighs 21 lbs.—24 lbs. or 28 lbs. The same Kentucky blue grass seed can be made to grade (or weigh) any weight from 19 lbs. to 27 lbs. inclusive by "fluffing" or "settling" as is needed.

Weight is not as essential in Kentucky blue grass seed as purity and germination and it usually works out that 24 lbs. grade is the best grade to plant.

### Compare Samples Carefully

IF several samples of seed have been submitted for comparison, care should be taken that the comparison is made on a fair basis. The samples will be marked with name of the firm submitting the sample and the purity and germination that is guaranteed, also a price quotation.

Comparison should first be made on a basis of the cost of a stated number of guaranteed viable seed. This comparison will usually eliminate one or two samples as being "over priced." Should there be several samples that were approximately equal in cost if viable seeds, the seeds should be carefully judged as to their purity. Equal volumes of each sample should be taken, and placed in a bottle or pan and given a number or letter.