

Bulletin of the Green Section of the U. S. Golf Association

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No. 2

SUPPLEMENT

The Proceedings of the First Annual Meeting of the Green Section, Chicago, January 14, 1922.

The morning meeting in the Drake Hotel was called to order at 10 o'clock by the appointed Chairman, Mr. W. A. Alexander. Mr. A. J. Hood was elected as secretary of the meeting.

MR. ALEXANDER: As you are all aware, that is the day that the United States Golf Association meets for its selection of officers at its annual meeting which takes place tonight at nine o'clock in the main room downstairs.

This meeting is primarily and actually the Greens Section of the United States Golf Association. This past year has shown a wonderful progress for the Greens Section. The conception of it was a wonderful thing.

In the past we have looked upon the United States Golf Association as the power to make rules, to conduct tournaments, and to pass upon the different questions pertaining to rules and the sport end of the game. The present, or last year's officials—some of them will not be present this year—conceived the splendid idea of giving something more vital to the association than that, and when you come to think that there is two hundred and fifty millions of money at least, at a reasonable estimate, invested in golf courses in this country, and probably fifty or a hundred men that have actually promoted that great investment, given their time, and any scientific knowledge to the expending of that amount of money for the economies and upkeep of golf courses.

If you or I were to run our offices the way golf courses have been run on the average, we would go to the wall. This Greens Section, in my judgment, having about 400 members out of the 600 golf members of the association, has rendered a service to golf the first year that cannot be overestimated. Please remember that it has been done right out of the clear sky, without any experience, and these men who have devoted their time, without salary or without any pay for their trouble, industriously and intelligently, have started, in my judgment, a movement that will be more valuable to golf in this country than anything that our good association has done since it was born. I hope that you will give the Greens Section this coming year—all of you delegates that are here and all of you that are interested in the grand old game—your very best thought and service, and remember that these men are working for you. If this game is to be kept up then you have got to give the physical part of it the first attention, because if you don't do it, you won't have the grand old game of golf, and that's what we are here for.

It is useless to have a roll call for the delegates present—there are not very many of the Greens Committee proper present—we know who of the Greens Committee are present, but we don't know, of course, the delegates, and the only way to do it is to ask them please to arise one at a time and each to give his name and the club he represents.*

MR. ALEXANDER: The next thing, gentlemen, is to introduce to you the man who has had charge of the affairs of the United States Golf Association—the head of the association for the last year, and for seven years on the committee, first as secretary, then vice-president and president, respectively. This gen-

* Thirty-one delegates, representing as many clubs, were present, and in addition 120 visitors, making the total attendance 151.

tleman has given his whole-hearted time to the game, without stint, and those of you who have been present at the tournaments all over the country know how well he has succeeded and how well he has served you. This gentleman passes out this evening, and is to be succeeded by another man, and I want to say to you that the man who succeeds him will have a pattern set that will give him all he can do. I know because I have witnessed him in action for seven years, and I take pleasure in introducing to those who do not know him, Mr. Howard F. Whitney.

MR. WHITNEY: Mr. Chairman and Delegates of the annual meeting of the Greens Section of the United States Golf Association, I first want to thank Mr. Alexander; it is worth the seven years' work that I have had in this association to have the little compliments he has just paid me now. I often thought that there is more gratitude in working for the game of golf than anything else I have ever worked for in my life. I have made, through the medium of golf, the acquaintances of gentlemen I now number among my most intimate friends, and I want to say to you that no matter how much you do for the game, it will do more for you in the end.

It has been a pleasure to serve in the seven years that I have been with the United States Golf Association, and all the men I have worked with have all given their best for the best interest and welfare of this game, and there is nothing that has been as fine for the golfers of this country as the Greens Section. The golfing people of the country owe a debt of gratitude to Messrs. Piper, Marshall and Oakley, and others too numerous to mention, for what they have done in organizing this Greens Section as a central distributing plant and circulating library as one might say, for the benefit of golfers, aside from the saving of money effected through this information on golf courses.

The fact that this year the association has gained 57 clubs and 6 more, aggregating a total of 63 clubs, which has passed every record during the seven years that I have been an officer of the association stands for itself. The largest previous number we had in any year has been 17. I think that is directly traceable to the Greens Section more than anything else. Now, I have a couple of more effusions to get off my chest during the day, and I don't want to get speakers' cramp.

According to the provisions in the by-laws of this association, the President of the United States Golf Association names and appoints twelve members of the Greens Section. After the Secretary has read these names, I would like to have Mr. Byers, who is going to succeed me as President, make a few remarks for two or three reasons—one is, I think it is good training—I think he will feel easier tonight if he begins here.

SECRETARY: The following members of the Green Committee of the U. S. G. A. have been appointed:

- C. V. PIPER, Washington, D. C., Chairman.
- DR. R. A. OAKLEY, Washington, D. C., Vice-Chairman.
- E. J. MARSHALL, Inverness Club, Toledo, Ohio, Vice-Chairman.
- DR. THOMAS P. HINMAN, Druid Hills Golf Club, Atlanta, Ga.
- JAMES L. TAYLOR, Ekwanok County Club, Manchester, Vt.
- W. D. VANDERPOOL, Morris County Golf Club, New Jersey.
- W. A. ALEXANDER, Old Elm Club, Ft. Sheridan, Ill.
- N. STUART CAMPBELL, Agawan Hunt Club, Providence, R. I.
- FREDERIC C. HOOD, Detroit Golf Club, Detroit, Mich.
- DR. WALTER S. HARBAN, Columbia Country Club, Washington, D. C.
- NORMAN MACBETH, Wilshire Country Club, Los Angeles, Calif.
- ALAN D. WILSON, Merion Country Club, Haverford, Pa.

MR. ALEXANDER: Gentlemen, when I saw Charlie McDonald win the first championship at Newport thirty years ago, about, I thought when I got to Buffalo that I wouldn't see another golfer until I went back to New York or some place in the east again; in other words, I had no idea there were any golfers west of Buffalo. Gradually the seat of empire has wended its way westwardly, but it is principally through the efforts of Silas Strawn, that red-headed old warrior, whom we all love, and by the cooperation and reasonableness of many of our splendid eastern officers of the United States Golf Association, that we got the association to recognize the west by permitting Chicago to hold its first meeting. I was present, and I want to say that I enjoyed it.

Since that time, from year to year, every once in a while some western man was able to show our eastern friends that he could play golf, whether it was at Nassau, the National, or Morristown, or wherever it was, we have always had for the last eight or ten years, and a little longer, somebody who made a good showing. This is not intended, Mr. Whitney and you good men who come from farther east, as anything but a comparison; in other words, we have discovered that it is not confined to any one section. It is not confined to any class of men—rich nor poor. It is confined to men who can play the game, whether it be in the architecture, in the physical construction, in the moral atmosphere, or whatever it may be—the man who can play the game and play it straight—who is a good sport and willing to give and take, and this year we have the evidence that it is progressing westward, because we are going to have for our President next year a western man, if the line begins at Pittsburgh; a man who has served assiduously and industriously and conscientiously for five years on the committee; two years as Vice-President, who knows the game (it runs in the blood of his family, as you all know) and he has the business ability that this association is going to need more and more each year to take care and handle the affairs that come before this association, and they are manifold, as you all know. I take pleasure in introducing Mr. J. F. Byers.

MR. BYERS: Gentlemen, it is a great pleasure for me to see such an out-turning for this meeting of the Greens Section. It must be a great source of satisfaction to Mr. Whitney, as the retiring head of the United States Golf Association, to have accomplished this great feat of bringing into life the Greens Section of the Golf Association. To my mind, it is the greatest achievement that the association has ever made, and one that will, in an economic and scientific way, do more for the game than anything that has ever been attempted. I don't know whether many of you know the early history of the start of the Greens Section.

In 1915, I think it was, Mr. Piper, Mr. Woodward and Mr. Vanderpool went to Washington with the idea of interesting the Department of Agriculture in this endeavor. They met with a rather rude reception, and it was most discouraging, but through the efforts of Mr. Piper, they at that time started a Greens Nursery, which slowly developed and gradually they came to the point where they were able to interest the Department of Agriculture in this great move. I would like to say that great credit is due Dr. Walter Harban, ex-Vice-President of the association, who has worked very closely with Mr. Piper.

In February, 1920, the United States Golf Association passed a resolution bringing this branch of the association into existence, and I do not think anyone can estimate the great value of it. When we are ill, as we are sometimes, we need a doctor. In the past when a golf course had gone bad, or we were trying to start a new one, we have not had a doctor—we have gone on experimenting. It has been estimated that annually the golf clubs spend about twenty-five millions in the maintenance and upkeep of their courses. Of that amount it has been figured that one-third at least has been wasted, for the reason that we didn't have a doctor. Gentlemen, we have a doctor now, and a *good one*, and I think that the money saved and the results that will be attained in the future will be so astounding that the development of the game—it has grown very rapidly in the past—will come in leaps and bounds with the assistance of this Greens Section.

It has been the great desire of this association to bring all parts of the country together; to have uniformity; to bring the East, West, North and South in closer accord, and also in closer accord with Great Britain. I feel that this movement is going to be of great assistance in that line. We have different climatic conditions in the various sections of the country. These gentlemen are scientific and have studied the soils and climates in all parts of the country, and in that way I believe we will come closer together than we have ever been before.

Mr. Alexander spoke of Pittsburgh and questioned whether it was east or west. I feel that we are both. We are members of the Western Association and the National Association, and I think Pittsburgh is very happily situated. I don't think there is anything more to say, except that I do wish to say that the golfers of the country owe a debt to Mr. Oakley, Mr. Piper, Mr. Marshall, Dr. Harban and Mr. Whitney.

MR. ALEXANDER: Now, gentlemen, we have reached the B. T. point—Brass

Tacks. Here's a man sitting on my left that is the most important figure in this section at this moment, because you are all, or many of you, ready to ask him questions; your questions pertaining to your own club and your own interests, and he will be able to answer your questions. The Greens Section has probably done more for this game, and put the association further ahead than anything else. Men like Dr. Harban and Mr. Piper I hope will live to see the fruit it will bear, and if they live two years they will have more fruit than they can gather. These gentlemen are scientific men; they are not only physicians, but they are surgeons. They understand what they are doing, and they are working for you and for me and for this game, without money and without price, giving all the time that is necessary to put the Greens Section where it belongs, and I make the prophecy here and now that in ten years from now, and maybe in less time, the great old game of golf will be relieved of the terrible stigma of being called "a rich man's game," and when that time comes you will find that the Greens Section of the United States Golf Association has accomplished that feat. If it does nothing but reduce the cost of construction and upkeep to such a point that your clerk and my clerk and the boy who can't afford to spend the money that we have, can play golf when he wants to, and brings it down to what you might call "a poor man's game" where he can play with as little cost as possible and keep its dignity as an amateur sport, and keep it clean, and if that can be accomplished, we will be rid of the stigma (and I think I used the word understandingly) that it is a "rich man's game."

I am ashamed of the money that I have in golf courses today, and to think that we cannot do the thing without spending \$100,000. I am going to say that the association is going to find it out, and begin at the bottom and build up, and not at the top building down. We are going to evolve so rapidly it will astound you. We have today an association that will give you the information, and these men deserve your encouragement, and I hope that every one of you men, if you know of a club with a little nine-hole course anywhere that has not become a member of this association (at a cost of \$15.00, and it ought to be \$100.00) that you will see that it joins and put its shoulders to the wheel.

I take pleasure in introducing Mr. C. V. Piper, Chairman of the Greens Section.

Mr. PIPER: I would rather talk to you than read this annual report, but this is a business matter, so I will have to read the annual report so you may know what we have been doing, and as a member of Congress once said, see "where we are at."

(Reads Annual Report of the Greens Section, published in full in the January BULLETIN.)

MR. ALEXANDER: Gentlemen, the Chairman of the Greens Section made reference to the very man that should have access to the BULLETIN and all the information that the Greens Section can give, and nine cases out of ten never sees. It is not so in my case in any of the clubs I belong to, and there are many. And right here I want to pay tribute to that class of men who began straggling over here 25 years ago—young striplings from Scotland, from England and from Australia—awkward, long-legged, long-necked, sleepy-looking young fellows that when you looked at them you said, "Now, that's a fellow I don't know whether I even want to sit in the train with him or not"; in about a week you were sleeping with him. The golf professional, good and bad, has been one of the best friends we have ever had, and if it hadn't been for him and the enthusiasm that he put in us, we wouldn't be here today.

Again, the green-keeper. The man that you elect your chairman and put in charge of your greens, and take him out of his office, his bank, or his profession and he selects a green-keeper, but the chairman goes to Europe, or he goes to his business; every time he sees his green-keeper he tells him he can't do this or that, and doesn't tell him anything that he can do. The one serious trouble about this whole thing is that it is anybody's business—it is anybody's business and nobody's, and that's the reason it is never a concentrated effort—each year brings new officers, and when the new administration comes in, out goes the old bunch; the green-keeper, everybody lauds his efforts up to the first of June, and by September everybody's cursing him. You have got to select your men as you would select a private secretary, or treasurer in your office, and put him where he has an opportunity to learn and serve you, and then cooperate with you.

I can remember when we built golf courses—I built one when I had never heard of such a thing as a golf architect, and I thought it was one of the best on the earth, and it was, by the way. Walter Egan played there; it made Chandler Egan, and did a lot for golf.

But the golf architect has come to stay. He says, "I have got to have so much money and so many men, and then I will do so much for you," and when he gets through he has given you a wonderful golf course, and it costs \$100,000.00, and he has seen that your fairways, your greens, your traps and everything are just as they should be, just as you would take a business, firm or corporation, and he comes back next year and he finds that on the day he left your course began to go down; you spent \$100,000 and it began to disintegrate the day he left you. If you are going to run a golf course like that you will never have a good golf course.

When you get a good green-keeper, keep him; when you get a good mower, or tractor, or seed, or anything from seed to a tractor, keep it. Utilize the information that you have got, and keep what you have, and don't waste the millions that have been wasted on golf courses any more—and that's what this Greens Section is going to help you do.

We have golf architects in this country—there are one or two here today, who are giving us the best that is in them and you should listen to what they have to say, and when you get through with them and they leave you, you should remember what they say and get your money's worth out of it. I can't emphasize it any more emphatically than to say, if it's worth building a course at a great expense, it is your business to see that it is kept up afterward. For example, I will give you one little point. I have friends, one sitting in front of me right now, who say to me, "Mr. Alexander, to maintain your putting-greens pour the seed into them." In talking it over yesterday with Mr. Piper, he agreed with me that 99½ per cent of the seed you put on a putting-green is wasted and lost. Two hundred thousand dollars is wasted for putting-green seed alone in this country every year. That's just one little speck of the information that the Greens Section will be able to give at all times. The time is near when we will have men going from one course to another, just as a sales agent calls all over the country and attends to the jobbing houses. We will go to your golf course and check up with you on the progress that you are making, without price, except your yearly dues, and you will have a steward that will be of more value to you than any green-keeper you have ever had, that will come from this association, and the economies that will evolve out of it cannot be estimated.

The next thing in order will be questions that the delegates or any of the men present wish to ask the Chairman of the Greens Section—the buffer—the man who knows and the man who will tell you to the best of his knowledge, is here to answer any questions you have to put to him, unless there is some other business on your minds that you would like to speak of in connection with this meeting.

QUESTIONS OF DELEGATES

MR. NORTHRUP: I represent the Evanston Golf Club, and was surprised not to hear the Chicago District included in the names on Mr. Piper's report—possibly the reason for Chicago not being in the report is that they are not down yet.

MR. ALEXANDER: It is fair to say, Mr. Northrup, that Mr. Piper wrote me last fall, just as the season closed—too late to organize the Chicago Section of the Greens Section of the United States Golf Association, and I so wrote him that it was too late to organize then.

MR. NORTHRUP: I would have been glad to hear the name Chicago.

MR. ALEXANDER: We will have it; it will be organized this spring, and I promise you it will be a live one. We are not going to sit around and lose the opportunity that is before us; and it is partly my fault—I was very busy, and did not feel very well, and for that reason I did not tackle it.

MR. NORTHRUP: Chicago generally leads in most things, and for that reason I thought we ought to be on the map.

MR. PIPER: It was sleepy old Philadelphia that led in the movement this time.

MR. ALEXANER: The next thing in order, gentlemen, is this notice: "Tickets for the dinner at seven tonight may be procured in Room 18, mezzanine floor. All delegates are requested to secure their tickets after the Greens Section meeting. The committee cordially invites all members of golf clubs belonging to the association to be present at this dinner."

Gentlemen, you are not only to ask questions of the chairman, but if you have anything to offer in the way of discoveries you have made that are for the good of the game or the upkeep of the course, whether you are a professional, delegate, president or keeper of greens of a club, we will thank you to give them to us.

MR. NORTHRUP: I have a few questions; one is, how would you prepare a fairway for seeding?

MR. PIPER: What kind of soil have you got?

MR. NORTHRUP: I am speaking of almost any kind of soil; my idea is, would you plow deeply or shallow, or would you disc and not plow at all, and would you plant your seed very shortly after you plowed, or would you work up your soil for, say, several months before seeding?

MR. PIPER: It makes a whole lot of difference as to the kind of soil; if you have pasture land I would not do any plowing. Ordinarily in preparing land for growing good turf you want to plow the land. There is no advantage in plowing over 5 or 6 inches—there is nothing to deep plowing. Then that should be harrowed over thoroughly, for you want to get a fine, well settled, firm seed bed; then seed—a slight rolling would do no harm. It makes a whole lot of difference as to your soil; if you have poor soil, you should use fertilizer.

MR. NORTHRUP: In certain soils it seems to me it is a good idea to plow and cultivate and recultivate for some little time before seeding.

MR. PIPER: That's always desirable.

MR. NORTHRUP: In other words, it is not a good idea to put your seed in after you plow. How would you prevent the ground from cracking?

MR. PIPER: The ideal way to do that is to get your soil in a condition that it is a light or sandy loam and it won't crack. A heavy clay or gumbo will crack in spite of anything.

MR. NORTHRUP: The weather was rather dry on our course and it cracked very severely, much to the discomfort of our members. I covered it with an inch of sand in the playing season and that kept the moisture and that was there nearly a month and then when it rained it was washed in and our grass came right up fresh and nice.

MR. PIPER: Plowing in with sand or fertilizer is good. At the Grosse Isle course they plowed in 4 inches of cinders. Any material that will break up the stiffness of clay will be good.

MR. NORTHRUP: Do you think the fairway should be played while overhauling; do you think it is possible to prepare the fairway and play at the same time?

MR. PIPER: You can improve your fairway by top-dressing methods, which is very satisfactory and does not interfere seriously with play.

MR. NORTHRUP: We had a good many complaints from our members that they could not get as good scores.

MR. PIPER: You will never get away from complaints of members.

MR. NORTHRUP: Do you advocate the cutting of greens short in hot weather?

MR. PIPER: Keep it short at all times; there is rarely danger of injuring the roots. You can avoid such danger by having your fairway grass an inch high and that's about as short as you can have it and play the course.

MR. NORTHRUP: We were cutting our course just as short as we could, and our grass was green and some of the other courses were considerably burned.

MR. PIPER: The sun alone doesn't hurt the roots.

MR. NORTHRUP: Do you advocate a rolling machine after the mower—a heavy roller in connection with the mowing machine?

MR. PIPER: The problem of rollers is a complex one, and the attitude we take depends on the character of the soil. On heavy clay soil you can overdo rolling—when you get a soil that puddles and bakes you have a very bad soil. On the lighter soils it is almost impossible to overdo rolling. The weight of a heavy roller per square foot is not anything like as much as people imagine.

On putting greens that are kept moist the use of heavy rollers as they formerly used them to keep it flat is very injurious to the grass. That's where the idea came about that heavy rolling is injurious, and it is, under such conditions. The wetness of greens in low spots is due to lack of drainage.

MR. NORTHRUP: We have investigated and tested our seed pretty thoroughly (claimed to be 90 per cent pure) and we find that a good deal of clover is in it. I wonder if you have any idea where it comes from?

MR. PIPER: I think if they abandoned this pavement outside for a few years clover would grow on it. Clover seeds are in every foot of soil, and it rarely comes in grass seed unless you buy mixed grass seed. Clover springs up—the old saying is, "wherever the white man's foot touches."

MR. NORTHRUP: What are your ideas about inoculating the soil where you get your seed; don't you believe seed does better where native grown than bringing it from the east?

MR. PIPER: There are some cases where a change of seed does give advantages, and there are other cases where it gives none. So far as grass is concerned, we do not know of any evidence pointing to advantage in changing seed; where you have peculiar climatic conditions there may be; otherwise there is apparently no advantage whatever.

MR. NORTHRUP: I have one matter that may interest you. In 1920 I got from England 100 pounds of Creeping Bent.

MR. PIPER: From whom did you get it?

MR. NORTHRUP: It was brought over by our professional. I prepared about four acres of ground, seeded in the spring of 1920, and I have just completed harvesting this year's crop, and I have about 2,000 pounds from this 100 pounds. I am rather interested because I got a price of \$150 per 100 pounds the other day for Creeping Bent.

MR. PIPER: Ninety per cent of the seed that you have got out of that crop is Rhode Island Bent. Rhode Island makes up about 60 per cent of the German Seed Bent.

MR. ALEXANDER: I want to see you later about that last matter you mentioned, Mr. Northrup.

DELEGATE: I would like to ask what you consider the best method of watering putting-greens; don't you think a thorough soaking whenever necessary is the right thing?

MR. PIPER: A thorough soaking whenever necessary is the right thing; continual light sprinkling is not.

DELEGATE: We have a running creek and we have dragged that creek—have you any suggestions to get rid of the weeds?

MR. PIPER: The usual way to get rid of ordinary weeds is hard labor—mostly hand labor. I don't see any short-cut to get rid of them. How fast does the creek flow?

DELEGATE: It rises and falls.

MR. PIPER: You can kill the vegetation by running crude oil down the creek. Some poisons will do the same—oil is the cheapest.

DELEGATE: This is still running in the warm weather. Would it do me any good to put in a series of small dams; I mean simply a number of boards 8 or 10 inches wide at intervals on the bottom?

MR. PIPER: Where are the weeds?

DELEGATE: On the bottom; we play across this creek and they bother us in finding the balls that are lost there.

MR. PIPER: Do you lose them in the mud or weeds?

DELEGATE: In the weeds.

MR. PIPER: A very cheap way to kill the weeds is by spraying with arsenite of soda—it is fully explained in one of the BULLETINS—spraying it twice a season will kill all these tops.

DELEGATE: I would like to ask how many clubs in this vicinity are members of this Greens Committee; has any effort been made to get the members in this district to join?

MR. ALEXANDER: We have about 15 to 18 out of 45.

DELEGATE: If we are going to have any benefit from a district Greens Section we should not wait for spring; you said we were going to in the spring.

MR. ALEXANDER: We will start it right away; we have got it lined up

already; we have some of the men selected. I have already asked a man to be chairman of that committee; he is here today.

DELEGATE: Would yarrow make a good substitute for grass?

MR. PIPER: In the East we have two very distinct varieties of yarrow. The European yarrow does not make good turf, while a native one does make exceptionally fine turf. It is, however, subject to a disease in the East that injures it very badly. One of the greens at Pine Valley is half yarrow turf. I would not go to any particular effort to get a yarrow green.

DELEGATE: In 1907 at the National we were attacked by pearlwort and during one year we spent \$5,000 trying to exterminate it. In 1911 we made a wonderful putting surface with yarrow. I thought being so much expense involved keeping and cultivating grasses, if we could get a substitute for grass we could cut out a lot of expense.

MR. PIPER: Mr. Macdonald told me he was going to quit fighting pearlwort, but I urged him to continue as he was certainly gaining on the weed.

DELEGATE: The yarrow did a lot to kill it.

MR. PIPER: It would do no harm to use the good yarrow, by planting plugs of it through the greens.

DELEGATE: We had a condition at ———— this year we never saw before. In the hot weather a small moth appeared on the greens and laid its eggs on a blade of grass and a worm developed like a June beetle, only smaller, and grew to the size of a 3-penny nail and killed the grass, and we tried a number of things.

MR. PIPER: There are quite a number of caterpillars that injure turf (some years worse than others); spray with Paris Green. They feed on the leaves and it will get them.

DELEGATE: We did that and it didn't work. It didn't strike the roots. It wasn't the army worm, it was something like the June beetle—it was a moth and laid its eggs on the grass.

MR. PIPER: I can't understand why Paris Green didn't get them.

DELEGATE: We used Paris Green, Bordeaux, Corrosive Sublimate, and others.

MR. PIPER: When you have any troubles or experiences of this kind, send specimens of the insect to us. Unless we know what the insect is, it is difficult to advise.

DELEGATE: In Philadelphia we had trouble with the grub and we used Sodium Cyanide and it killed the grubs and everything else. We used it on the fairways and greens.

MR. PIPER: The exact proportion used at Merion I have forgotten, but it killed the grub worms over large areas. The grass on the putting-greens was injured slightly, but not on the fairways. Later it all recovered.

DELEGATE: Our greens were burnt a little, but in a week recovered.

DELEGATE: To what extent do you advocate treating the greens for earth-worms? I thought it was overdone in some cases.

MR. PIPER: Whenever the worms are troublesome, go after them; worms are all right, but you don't want them on the putting-greens. Sometimes even on the fairways the whole top of the ground is covered with their casts. This last year at Washington the worms worked very early in the spring and didn't work again until late in the fall.

DELEGATE: Don't you think the encouragement of bird life will solve the problem?

MR. PIPER: Encourage the birds by all means. The robin is the best bird to eat worms.

DELEGATE: Is the use of weed raking devices injurious? I wrote in and was referred to Mr. Taylor and never received any reply. His daughter wrote that he was sick and would reply as soon as he was well.

MR. PIPER: I saw one course in California that is using a weed rake very successfully. The rake is built much like a steel comb. In connection with it the green is first disked each way to cut off runners and then the raking follows. We have hopes that special weed rakes will do much to lessen the cost of weeding.

SENATOR BROOKS: One question that was asked a few moments ago was in regard to rolling of the fairway and cracking soil in hot weather. Our course has some soil which is very heavy, lumpy and almost borders on the gumbo, and we had a great deal of trouble with soil baking and cracking. On the higher

places on rolling ground, these ridges would be particularly dry and hard and brittle.

This last summer we performed some experiments. We have not had time to determine what the results will be, and will tell better in the spring. We built a roller about 30 inches in diameter and about 6 feet long in sections, so that these sections were on a shaft in the center and they were flexible. We make the roller by placing a cylinder of sheet iron on its end on the floor, and the sheet iron was perforated on the outside with holes, and then we would take the lower course of holes, and take about a 20-penny nail and put the nails through the holes in the sheet iron, and then pour in a section of cement and the nails would protrude about $1\frac{1}{4}$ inches; then we would pour another section. We went over the ground and spike rolled these places and immediately you could see that instead of the ground being very hard and brittle, the surface was broken up. Then we would top dress, and before cold weather came that spot was doing very nicely, and was apparently going to produce a great improvement on the fairway.

In some sections I ran the roller once over; others twice, and over had places three times. We took some photographs. When we got through with our brittle ground of the nature very close to gumbo it was all soft and nice and you could play off that ground as well as you could on the fairway which was not in that condition.

MR. PIPER: This work of Mr. Brooks is very important. He has favored us with a full report of his experiments up to date. It is one of those cases where we need two years' results before reaching definite conclusion.

In his experiments there were parts not treated, so he has an exact check on what the treating with the roller accomplished. Practically it amounts to what harrowing does. This whole problem of spiking, forking, and harrowing is a very involved question. You will all recall the old spiked roller that was on the market six or seven years ago. I don't know any club that has continued its use.

It is highly important in trying out any methods of this kind always to leave a piece of untreated ground as a check on your experiment. If you perforate one piece of turf and leave another untreated, you can determine what the perforating accomplishes.

SENATOR BROOKS: I did that. Another thing: We had an experience with fescue. We took a disc harrow and cut both ways and powdered that soil and then top-dressed, and in two years we had a wonderful piece of turf.

MR. ALEXANDER: Mr. Hibbard asked a question about fungus or brown spot. I saw one of his greens go to pieces in about fifteen minutes as the sun came up one morning. From some experiments of our I prophesy that by next year we will have a remedy that will cure it.

MR. PIPER: In regard to the brown-patch, a lot of theories have been advanced. The disease works mainly during the hot, muggy weather of summer. The fungus spreads and makes circles; first small ones 2 to 3 inches in diameter, and in a day or two a foot in diameter. Early in the summer mornings you may see a little mildew around these circles—the outer rim of grass will be of a smoky color. We know the fungus that causes the disease. It lives over winter in the shape of a little black body, which cannot be killed without killing the grass. The only method, therefore, of stopping this damage is not curative, but preventive. We found that by keeping the grass constantly sprayed with Bordeaux mixture from about June 20th through the season, the fungus is kept from becoming active. That's rather expensive, and we have been searching for a cheaper remedy. We have tried out some 30 or 40 chemicals; most of them are out of the question—one or two have possibilities. We treated one area with some salt of soda—it happened to be a commercial soap powder—it killed the grass tops absolutely about the first of August; in about a week it recovered and the patch was never again hit by the brown-patch that season. We suspect that if you get your soil strongly alkaline you may prevent brown spot. It is largely a theory as yet. We will do a lot of experimenting this season, testing out 40 to 50 alkaline salts; some of them doubtless will kill the grass completely. We are seeking some method of treating brown spot less expensive than Bordeaux.

Much to my amazement we found this fall that on the putting-greens in Florida and Louisiana even the redtop and Italian rye grasses were attacked

by a disease, apparently the same as brown patch. It has appeared down there only in the last few years, and it makes their problem of winter greens difficult. Brown-patch, I think, is the most pressing of all turf problems.

DELEGATE: Do you think sweeping the grass early in the morning helps.

MR. PIPER: No. If you could keep the dew off your grass; if it is dry in the daytime and you keep your umbrella over it in the night, you are not likely to have brown patch. The fungus works mostly at night when the grass is wet with dew.

DELEGATE: Could you tell me at what intervals they use the Bordeaux, starting June 20?

MR. PIPER: We tried all kinds of intervals. The main thing is to keep your grass protected all the time. You will have to use Bordeaux after every watering and after every heavy rain. During dry weather you can let it go for a couple of days, but the idea is to keep your grass protected all the time.

DELEGATE: The Greens Committee did a lot of good by suggesting to the various clubs a division of responsibility among green-keepers; Brown will take the first six greens, Smith the next, and so on. Can additional sheets or copies of the BULLETIN be sent to each man on each Green Committee? As it is now the green-keeper and chairman each gets his, and the chairman usually don't like to let it get out of his possession.

MR. PIPER: Any member can get additional copies for \$2.00 per year. The only way others can get it is by subscribing.

MR. STYX: We have a deep well, and the water is alkali, at Ravisloe, Home-wood. With an alkali water, I don't see how we can get the acid green which I understand is the proper condition for the greens for the fescues and bents. I saw the work that was done at St. Louis Country Club and I have a scheme that I wanted to ask you about. Does sub-irrigation work as well for watering the greens as the sprinkling?

MR. PIPER: My present judgment is that sub-irrigation isn't worth its cost; I understand that in St. Louis their opinions are still up in the air about it.

MR. STYX: This scheme of mine is very different from the St. Louis one. The water is brought in by the pipes down below the frost line to the porous tile and the water will come up; you can regulate it by the flow, and then the water is withdrawn again from the ground by a syphon as soon as it reaches the height of your water table, and the tile through which the water would go would be a double section of tiles, so that the tiles could not fill up.

MR. PIPER: It is very interesting, but I haven't a bit of confidence in these sub-irrigation schemes. The soil is a pretty complex mass of material, and to try to regulate the drainage of the soil artificially may lead you into some serious soil trouble; I am rather skeptical about it.

MR. STYX: This summer our old greens were very bad and covered with worm casts; the newer greens were good and there were no worm casts.

MR. PIPER: In regard to the acid-alkali question, the subject is pretty complex. There are certain plants that will grow in a wide range of acid and alkali soils—white clover is an example. The Bents and Fescues grow very good in acid soils, and that's the advantage of acid soil in a putting green. Some years ago we tried to find some short cuts to get soils made acid. I put it up to a soil expert. He said: "We have always been trying to do the other thing—to get them neutral or alkaline." He thought it would be no trouble to get them acid quickly. But in his experiment he found that if he made a soil acid it would after about three months go right back to where it was, as it is the tendency of every soil to go back to its natural condition of acidity or alkalinity.

Much of the use of lime is senseless. Lime used to be the cure-all. We were unable to get any results out of lime at all. I won't say that is always the case, but it usually is. Dr. Harban was formerly a very strong advocate of lime. I finally induced him to leave half of a green without any lime to compare with the other half. Since that time he has not used a pound of lime. In other words, he conducted an experiment, and, guided by the results, he quit using it. There may be conditions in which the use of lime is desirable, but I have not seen them, especially for the bents and fescues. Even bluegrass does not show any such responsiveness as has been imagined.

DELEGATE: Do you think in the vicinity of New York about the 20th of June is the time to start using Bordeaux for brown patch?

MR PIPER: Yes, when the hot, muggy weather starts, then keep using it to prevent brown patch.

DELEGATE: How often?

MR. PIPER: Keep it protected at all times; if it is dry weather two or three times a week is plenty; if it is rainy it has to be done very frequently. After a rain you have to use Bordeaux again; it is a matter of continual protection; brown patch works mighty rapidly.

DELEGATE: Do you spray better with power sprayers than by hand?

MR. PIPER: Power sprayers work very rapidly, and one should use power sprayers where much spraying is to be done.

MR. BARRETT: I am a little bit with Mr. Alexander on this old devil, H. C. L.; as Chairman of the Greens Committee I get the devil when I ask for an appropriation—I am the original robber. We are about as pleasant as a skunk at a Sunday school picnic.

Take the ordinary maintenance account of the greens of the average club, and this will run about \$15,000 a year; most of us exceed it. Put the appropriation at \$15,000; 20 to 25 per cent is used for cutting this healthy grass—not taking care of the diseases. The average course is cut about two or three times a week. The cost of cutting the course for six or seven months is approximately \$3,500, or 20 to 25 per cent of the greens expenditures.

We have at the present time mowers of different varieties and types that were constructed many years back by wonderful mechanics and when there was anything the matter with it, they told you that the team of horses that you used went at too great a speed and wore it out, and you should have only one horse. If you used only one horse he asks you how fast it goes, not as fast as you can run any way, he don't walk $3\frac{1}{2}$ miles an hour and rest 10 minutes every hour; he tells you it must run about 3 miles an hour.

This is the same article that's being sold to our club, put behind or in front of a tractor that can boast of a speed of 12 miles an hour. The consequence is, at the beginning of the season we pay \$500 for a triplex mower and we buy that extra unit—\$100 or \$150—so it won't wear out so fast, and then you go along to the middle of September and get those complaints—"Why isn't that machine overhauled; I am afraid it's all gone." Then we investigate in our way and we find that this mower has just chewed itself to pieces. I don't pick on the salesmen; they are instructed from headquarters and go out and tell the people they don't know the business.

I have four men who have been with us six or seven years and have driven teams. One of them is a graduate and because he owned a Ford car the last few years, we put him on the mower.

They say this triplex only needs oiling once a month; I want to assure you that the man oils it every hour, because he has to get off every hour and let the engine cool. He oils it every hour. The consequence is that we are spending today on oil alone quite a sum; we are buying two or three sets of extras and at the end of the season today we haven't anything. We used to keep mowers going for two or three years with the proper care and replacing of parts that were needed, and today we can't get a set of mowers to last, and I have used two or three different makes. They all go to pieces in the one season. We used to make a machine last three years with \$40 or \$50 spent for repairs.

I think plenty of you will agree with me that we can get no satisfaction from the manufacturers of mowers today to make a mower costing \$1,000 instead of \$500. I am perfectly willing to pay \$1,000 for one every three years instead of buying the \$500 ones that last only one year. We all know the mowers can't run at any such speed as the old Ford wagon that delivers the groceries. They are merely a common casting; they may call them malleable, but they are just a casting; they are not tool steel, and won't stand the friction.

It is possible for this organization to bring pressure upon the manufacturers to make a mower with a proper oiling system that will do this work, and when we do take proper care of it, will at least be economical so you won't have to go before your board every year and ask for another thousand for this or that. We ought to get our organization to do what they can to take care of this.

SALESMAN: I will try to refrain from any business connections so that it

will not be from the standpoint of a salesman, but we have heard that story from quite a few people.

There is one firm and they have on exhibition here their article today, and they have a motor which they will guarantee will do just what that man wants it to do. It is not a triplex motor. They are not intended to go 3 or 4 miles an hour; they will travel most economically between 6 and 8 miles an hour, and will run for three years without repairs of any consequence; they will not cost \$1,000 a set; they will cost \$650 for five mowers, or \$750 for five mowers with their attachments. It can be pushed or pulled.

DELEGATE: How many units does it operate in?

SALESMAN: Five units. We have found the pushing method more satisfactory on a golf course in cutting around the corners and much more simple for the driver, and for that reason they have been made either to pull or push.

The oiling of these motors is not left to the green-keeper or his assistant as the others were; in that there are pockets that will carry at least two weeks' supply of oil that are self-feeding, and, in addition to that on the gearing end of it, they run in an oil-tight gear case, and one feeding or filling at the beginning of the year should carry the motor through the year without any additional feeding, and I think that is just such a mower as this gentleman wants. Practically all the other motors have been cased in a bronze or cast iron bushing and the adjustments of the motor come against that bearing. This motor is encased in a grease-tight housing. The mowers will last him three years as he asks, and any man who knows the Timken roller bearing will appreciate it. The machine can be seen down in the lobby.

MR. ALEXANDER: You understand, of course, that the gentleman that has just spoken is forgiven, but you must understand that this committee cannot recommend any type of machinery or appliances, except if you write in to the chairman he will give you the experience in writing and confidentially. I would guess he has the experience of this Greens Section on any tool or implement that is used for the construction or upkeep of a golf course. You can easily see that it would not do to speak for any article that is on the market in competition with others; it would not be fair, and in the future bear that in mind, please.

I want to say it is the same old story of not taking care of what you have. I am connected with one club in which we have two men whom we keep all winter at \$5.00 a day and they are busy every day of this winter putting everything from a monkey wrench to the tractor in order, and everything in connection with the upkeep in the way of machinery and tools they are held responsible for, and they see that they are in order, and I will guarantee we will take any machine and run it more than one, two or three years, because we take care of it all the time; it is painted or greased, or whatever is necessary.

And that is another thing we are going to develop, just as our friend who could hardly talk at all has said, it is just as much the province of this committee to evolve an improved machine that will take care of our greens—that will last—as it is to evolve a grass or get rid of fungus.

DELEGATE: The brown patch always comes after a thunderstorm.

MR. PIPER: It comes after any rainfall or dampness.

MR. LING: I wanted to say, Mr. Alexander, it is a matter of record that your club in the past four years has bought two units for your triplex machines, of which you have two.

DELEGATE: How are they drawn?

MR. ALEXANDER: Tractor.

MR. LING: Skokie hasn't bought any in the last 5 years.

MR. PIPER: I think it is a matter of personal preference. Two men can take two automobiles; one will wear it out in a couple of months, and the other will make it last ten years.

MR. BARRETT: We did all that you told about, and maybe more, too, but I don't want to dig into this subject to create a demand that the manufacturer do certain things. I took this up with some of our automotive engineers and discussed this bearing surface and had them at the club and showed them the actual conditions and asked them if they could suggest to me an oiling system that we could use on this machine and I would place them on the machine myself.

MR. PIPER: Your soil is a light sandy loam; on such a soil will not the machine wear out a lot faster.

MR. BARRETT: I have taken these machines apart myself, and nobody puts anything over on me from the superintendent down. I can take apart a mower and I know what they look like, and there is no sand in the bearings, I assure you, Professor Piper. I allow that sand will wear out the knives.

MR. PIPER: I was speaking in reference to the farm tractors; a farm tractor won't last anything like as long on a light sandy soil as it will on clay; the sand gets into things.

MR. ALEXANDER: Has anybody got anything else of value to give us?

DELEGATE: I would like to ask a question. Why are you compelled to use the spike roller instead of the old farmer's disc; can't you accomplish the same thing with the farmer's disc instead of the spike?

MR. PIPER: To a certain extent.

MR. BROOKS: Well, Mr. Chairman, if you had been up to the course where we made the experiment last fall, we could have shown you. We took the disc harrow and filled the knives just as sharp as they could be made, and then we put them as nearly vertical as we could get them and had very good results where the ground was comparatively dry. In passing from one of these places to another you go through a hollow where the moisture was retained and the disc would tear and mutilate the grass. We then took a garden harrow and we first had it very nearly vertical and then we dropped it down as near horizontal as we could go, and had exactly the same result as we had with the disc. We then gave up the disc and the garden harrow and tried the puncture proposition, and even the puncture proposition we had to do some experimenting with. We found when the spikes were a bit long on the dry greens they worked perfectly, and in the hollow they would pick up pieces of sod and stick on the roller. We then put a series of slats in between the spikes so as to shorten them, and it worked all right.

MR. ALEXANDER: Before we go any further, I want to announce the meeting at three, and what is to be done at that meeting.

MR. PIPER: At the afternoon meeting there are to be 13 members of the Greens Committee elected by the delegates present. There will be lantern slide illustrations and a description of the Skokie golf course by Mr. Ling, and then we will have more time to talk.

MR. LING: With reference to these landscape slides you called me up about a week ago. It was necessary to run around and pick up little kodak pictures, and I fear they may be disappointing.

MR. ALEXANDER: While Mr. Ling is on his feet, he has a suggestion to create a new motive power to push along this organization. Mr. Ling, I would like to hear from you on that subject.

MR. LING: I presume you are overestimating the value of the suggestion. Up at Skokie we feel there is nothing done for our club that will compare with the Greens Section. We discuss each BULLETIN and they are thumb printed and soiled before we get through with them.

I think that about every club represented has a neighboring municipal or public course, and we are trying to help them out. I think in doing that we are getting the public courses to feel that we are really interested in them. In Glencoe they are starting a municipal course, and we will give them every help we can. Our members go over there, and at a directors' meeting last night the matter came up and I made the suggestion that we take a membership in the Greens Section for the Municipal Golf Club at Glencoe. I believe, if the Greens Section think it advisable, they should send out a letter to every member club suggesting that it pick out some public course or some struggling course and donate a membership, and if they can't, send in the name and let the committee donate that membership. That will double our membership and then by the end of next year we will have so many members we won't know what to do with them all.

DELEGATE: Last year I promoted a club and got 25 or 30 boys interested and got the club going. As Mr. Ling says, why not help to promote the Municipal Golf Clubs? I have been trying to do everything I can with Mr. _____ to put some of these small courses on the map. We have been interested in joining the United States Golf Association, and have been somewhat misled and have been led to believe that the cost is prohibitive. The dues were \$5.00 last year; we had 45 members; we joined the Municipal Golf Association last year and gave \$25.00 for it, and were given to understand that if want to join

the Chicago District, and the United States Golf Association, and the Western, by the time we get through we would have nothing left. If you will enlighten me on this United States Golf Association, I will carry the message back to the members as far as Municipal Golf Club as concerned.

MR. ALEXANDER: I want to give you a bit of information that will interest you. The president or manager (I think he was the president) of a municipal golf course on the North Shore told me that his course at 50c a day week-days and \$1.00 on Sundays, had taken in last year \$40,000! Fifty cents a day! I said: "You must be mistaken." He said: "Positively, no." I said it would take 500 people a day if they had taken in \$40,000. It costs 50 cents to play golf! Don't get an idea you can't have golf cheaply, for you can. This man also told me that Indianapolis has three public courses. Just think of it, a town of about 100,000! I prophesy that these 23,000 acres that we have here of forest preserve will in the near future be dotted with municipal courses—public courses.

Another statement about the cost of golf. You hear clubs say, "We haven't made a cent." I know a golf club that made \$100,000 last year—it has it in bank—Olympia Fields.

DELEGATE: How did they make it?

MR. ALEXANDER: I don't know; I was told by an ardent member of the club; they have three courses built and are going to build another, and have about 1,000 members.

The whole expense of golf will have to come down. The social end of golf doesn't help golf itself any more than whiskey helps a man win a horse race. Let me tell you that that is the thing this Greens Section is going to do more than anything else; it is going to reduce the cost of golf, and if we assist these municipal courses (the suggestion is a splendid one) and can propagate the game among the men who can't afford expensive golf, you are going to get out of that class of men some of the greatest golfers that the country ever saw.

(Meeting adjourned at 12:30 p. m.)

AFTERNOON SESSION (3 o'clock)

The session was called to order by Mr. W. A. Alexander, chairman of the meeting.

CHAIRMAN ALEXANDER: Gentlemen, the first business before the meeting this afternoon is the election of thirteen members of the Green Committee of the United States Golf Association.

I shall ask Mr. Piper, chairman of the Green Section, to outline first what he has in his mind in that regard.

MR. PIPER: Gentlemen, the number of members of the Green Committee is now fixed at twenty-five. Twelve of these are appointed by the United States Golf Association. Their names were read this morning: Piper, Oakley, Marshall, Hinman, Taylor, Vanderpool, Alexander, Campbell, Hood, Harban, Macbeth and Wilson. There are thirteen to be elected this afternoon by the delegates.

Now, I pointed out this morning in my report the great importance of having a good geographical distribution of the members of the Green Committee. It would be very unfortunate to have thirteen members elected from around Chicago—not that Chicago might not be entitled to them, but it would make it very much more difficult to do the work of the Green Committee. You see, it is entirely possible, in these annual meetings, when most of the delegates are from the nearby region, and one who wanted to organize them politically could elect a whole lot of members. I am sure, however, that nobody wants to do that. There are very likely to be some nominations, however, for members of the Green Committee, by the delegates who are here assembled. After those nominations are made, I would like to indicate a list of names of men whom we know thoroughly, who are well scattered geographically, and whom I think would be very desirable men to have on the Green Committee.

I want to do that, however, without interfering unduly with the nominations that naturally will come from the delegates here assembled. I am perfectly frank about this, because we all want to have just as efficient a committee, from every viewpoint, as we can possibly get.

CHAIRMAN ALEXANDER: Now, gentlemen, nominations are in order for the additional thirteen, to those who have already been appointed by the United

States Golf Association. Are there any nominations from the delegates here present? The Chairman has outlined the fact that they have selected some whom they think are suited for your nominations, but that does not interfere with your making a nomination now for any man whom you feel you would like to see put on this committee, whether he be elected or not.

This Green Committee Section does not pretend to know everything that there is to know about the operation of this Green Section any more than it pretends to know everything about golf courses in general.

MR. WHITE: Mr. Chairman, would it be at all out of order to have the Chairman's list first? If so, that might avoid some confusion, and be something of a guide to us.

MR. PIPER: The only difficulty would be, if I suggested thirteen names, and there were some nominations from the floor, and elections, naturally I would have to eliminate some names from the list, and I do not care to do that publicly.

MR. WHITE: Then, Mr. Chairman, I now desire to nominate Mr. W. F. Brooks, of Minnekahda.

CHAIRMAN ALEXANDER: Gentlemen, you have heard the nomination of Mr. W. F. Brooks, of Minnekahda. Those in favor having Mr. Brooks serve upon this committee for the ensuing year signify by saying aye. Contrary; if any, no. Mr. Brooks is elected.

Are there any further nominations?

MR. BARRETT: Mr. Chairman, I would like to inquire whether every delegate present has a vote, whether his club is a member of the Green Section, or not?

CHAIRMAN ALEXANDER: He has.

MR. PIPER: Only the delegates, however.

CHAIRMAN ALEXANDER: Only the delegates, yes. Are there any further nominations, gentlemen? The field is still open. Are there any further nominations?

MR. CHASMAR (Columbia): Mr. Chairman, if there are no further nominations from the floor, I move that the nominations be closed, and the list presented by Mr. Piper, or referred to him, be taken up.

(Motion seconded.)

CHAIRMAN ALEXANDER: Mark you, fair warning, the last call! Are there any further nominations? If not, it is moved and seconded that the list prepared by Mr. Piper be taken up and voted upon. All in favor of that motion signify by saying aye. Contrary, if any, by no. The ayes have it, and it is so ordered.

MR. PIPER: The list that has been prepared is as follows:

C. B. Buxton, Dallas Country Club, Dallas, Texas, at present a member of the committee.

William C. Fownes, Jr., Oakmont Country Club, Pittsburgh, likewise a member of the committee at the present time.

F. L. Woodward, Denver Country Club, Denver, Colorado, also a member of the committee at the present time.

A. H. Campbell, Toronto Golf Club, Toronto, Ontario, a member of the committee at the present time, and selected by the Canadian clubs.

A. J. Hood, Detroit Golf Club, Detroit, Michigan, at present a member of the committee.

W. R. Willett, Louisville Golf Club, Louisville, Kentucky, at present a member of the committee.

Frank B. Barrett, Hollywood Golf Club, New Jersey.

A. C. U. Berry, Waverly Country Club, Portland, Oregon.

Sherrill Sherman, Yahnundasis Country Club.

L. C. Menager, Florida Country Club, Ortega, Florida.

W. C. Ferguson, Glen Echo Country Club, Normandy, Missouri.

W. F. Brooks, Minnekada Country Club, Minneapolis.

That completes the total of 13.

CHAIRMAN ALEXANDER: Gentlemen, you have heard the schedule. I do not think there were thirteen names read, though; only twelve.

MR. PIPER: That is right.

CHAIRMAN ALEXANDER: Then there is room for one more man. Is there a nomination from the floor?

MR. MCCORDIC: Mr. Chairman, I desire to nominate Mr. Ling, of the Skokie Golf Club.

MR. LING: I am sorry, Mr. Chairman, but I must decline with regrets. I have a big job on my hands this year at Skokie as it is.

However, it would give me pleasure at this time to nominate Mr. McCordic, of Indian Hill.

CHAIRMAN ALEXANDER: Gentlemen, you understand the Green Section, with great pains, has selected these men, with a view to the geographical division of the country, so that the Green Section will be balanced. That is what it is after. You have every right in the world to interfere with this program if it is not satisfactory.

Now, you have heard the nomination of Mr. A. E. McCordic, of the Indian Hill Club, now Chairman of the Grounds and Green Committee at Indian Hill. Those in favor of the election of the nominees to serve for the ensuing year will signify by saying aye. Opposed, no, if any, no. The ayes have it, and they are elected members of the Green Section for the ensuing year.

What is the date of the meet, the Open at Skokie, Mr. Ling?

MR. LING: We have not been notified yet.

CHAIRMAN ALEXANDER: The exact date has not been set.

MR. LING: No. In fact, we have not been officially awarded the tournament yet.

CHAIRMAN ALEXANDER: Well, you know you have it. The open tournament of the United States Golf Association will be held at the Skokie Country Club in July. Mr. Ling is Chairman of the Green and Grounds Committee there. There is one thing the United States Golf Association has always done that I am sure you approve of, and that is appropriate sufficient money and furnish sufficient knowledge from whatever sources are available, to see that the course that is favored with the championship tournament has every advantage of preparation.

Mr. Ling has been asked to show some slides, and give us some information about his course, for the benefit of those present today; and he will probably do so again tonight, in order that all may be posted as to the suitability of the Skokie course for this great tournament. We are now to have the pleasure of seeing those slides, and be favored with what Mr. Ling has to say about the course. He has Mr. MacIntosh's representative here, Mr. Bassett, to exhibit the slides.

(Various views of the Skokie course were then exhibited, and explained by Mr. Ling, as follows:)

MR. LING: I guess you gentlemen were all here and heard what I said this morning, about having only a week's time to prepare these slides. We had to run to the members and get little kodak pictures, which were not taken as they would have been if we had gone out and taken views to show the course in the way we would like to show it. Some of the people who took these pictures fancied the trees; some of them preferred the barn; and some of them liked a particular big tree, and just took a picture of the special thing wanted, so that as far as other things are concerned they may seem only incidental. It is also customary, as you know, in making slides to have the photograph retouched, because red takes black, and the sand takes white, and so on; so these are a little rough.

Of course, this will be old stuff to a good many of you who live here in Chicago. We are one of the oldest clubs in the Chicago district. We were established twenty-four years ago. Mr. McCordic, whose name you just heard, was one of the founders of our club. It is twenty miles north of this hotel, about a mile from the lake, and about three-quarters of a mile from Sheridan Road—a wonderful drive out along our north shore for those who come to the tournament by automobile. It is in the village of Glencoe, one-half mile from the railroad station, or five short blocks, and four blocks from the Milwaukee Electric. From a transportation standpoint, we are very well located.

Here you see the entrance to the club grounds. The clubhouse is on a ridge, and the property slopes away to the Skokie marsh. We are what you might call a flat course, like most courses in this district, but we have sufficient rolling ground to make it very interesting, and make good golf.

The course was rebuilt by Donald Ross about eight years ago. He did not leave a hole in the fairway. It was all rebuilt. We threw all of the old cards into the deck, and dealt out new hands, and he did a very good job. But the new ball has come in, and we had to set the tees back, and change the

pitch and in the last four years we have been doing a great deal of work to strengthen the course, and make the game more interesting.

The next view is one of the clubhouse. The clubhouse faces southwest. It is a fireproof building. We have a large locker space, three hundred and fifty lockers. The grill room is an entire floor, and there is no putting on of coats or changing of shoes or anything; which we believe will be very convenient in handling the tournament.

The next view is another of the clubhouse, back a little farther, showing our "ocean." From the third tee to the fence which you see over there, it is at least two hundred yards. It looks like it was about ten feet on the slide. The chap here in the foreground you probably all know. I just happened to recognize him. He is Mr. Gates, President of the Western Golf Association, and one of our enthusiastic members.

Next is a view looking down the eighteenth fairway. You see the first green here. It looks very simple. It is about four hundred and forty yards. About thirty-five yards back from the green are pits, which you can not see. We have a good get-away hole.

The next slide shows the bunkers in the first fairway. This is the tenth fairway, and the eighteenth fairway. The tenth hole is four hundred and forty-two yards. There is some heavy trapping hereabouts. You see also our second hole. From the tee it is a hundred and fifty yards. We have another tee, back a hundred and ninety-five yards. That will be the tee used for the Open. There is heavy trapping in here. There is a piece of fairway between the two traps, about fifteen feet wide. There is only one place you go from this hole to hit the green, and from the 195-yard tee it takes a mighty good shot to carry the distance and stay on the green.

This next one shows the landscape coming up the ninth fairway, and shows what you get into when you slice your ball into the woods and the rough. This looks as though it was about thirty-five yards; it is a hundred and ninety yards from this tee to the green. We also have a tee in here you can not see. This comes up off to the left, and drops down about four feet, and then comes up to the green, sloping up. It looks very simple; it looks as even though Mr. Alexander could stand over here with a niblick, and make it. (Laughter.) But playing it, you will find it different.

I think the next slide shows another view of the same thing. It is an entirely different view. You would not think it was the same green, coming up this way. There is an enormous trap down here, and another one over here, and another one over here. This does not look very wide, but the green is a good liberal width for the shot. Our greens are not oversized. They require a little more accurate approaching than on many courses.

Next you see the tenth hole here, with a big trap, guarding the tenth green, in the woods to catch a sliced ball. This trap is two hundred and five yards from the tee.

Next is coming up the eighteenth fairway, and down the tenth fairway.

Next you see the eleventh hole, 458 yards. You come right down through the woods. A good tee shot—that is, a professional tee shot—will bring you right up where you want to go. The green is above the fairway there, with a big, heavy trap in front of it, and a trap on either side, and is not a very large green for the length of the second shot. The distance there is about 240 yards. That gives you an idea of a typical tee shot. There is a great premium on tee shots on our course. They must be all placed in the right position to have the hole open up for a reasonably easy second shot.

Next you see the twelfth fairway, looking down from the twelfth green, from about fifty yards in front of the tee, back in a corner of the woods. You come in on an angle, in a narrow space. This green is pear-shaped, with heavy trapping all around—a difficult hole.

Next you see the fourteenth hole, the easiest hole on the course, 315 yards, down through some trees, with heavy trapping all around it. The tree here does not come out quite far enough to obstruct the view, or the play, so we put an enormous sand trap in there, and it will give the gallery a lot of entertainment.

Next is our fifteenth green. This is one of the best holes we have, about 450 yards, and the tee shot is very difficult and trying, with traps all the way along, and cross-bunkered to the left. The green is a table green. Since this photograph was taken, there has been heavy trapping all around. It takes

an approach of about 175 yards, or 160 yards, from a good drive to that green, to stay on it.

Now, next you see the only new piece of construction on the course. This is our new seventeenth green. Those of you who are familiar with our course will remember that the seventeenth hole is a straight-away, down through a narrow neck of woods, with traps for a slice, and with traps for a pull, and heavy grass in front of the tee for a long distance, with an approach shot over a wide trap; the distance being about 365 or 370 yards. This is a beautiful hole, and we debated very much about changing it. But it seemed necessary to break the monotony of having the holes about the same length; and after getting the best opinion we could from men who know we asked Mitchell and Duncan, when they were playing our course, where they would place the green to make the hole longer and better; and we found a wonderful place off the present course. We are going to switch over to that, making the second shot a full iron, or brassie, for an amateur player, allowing for a beautiful spoon shot; with the woods along here. The green was built last year, and we got a good stand of grass there last fall, and there is not any reason why it should not be a corking good green for the tournament. But we are playing safe, because this is entirely off the present playing course. The old seventeenth hole stays just as it is, though, and in case this other should not come through, we have the hole here in absolute good shape, anyway.

Our course is sixty-five hundred yards. The professional record is 68. The course has been played at par or under in competition only twice. Twice professionals have played the course in par or under. It has never been played under par by an amateur, and has only been played in par by an amateur once. I notice nobody asks who the amateur was. (Laughter.)

Next you see the eighteenth hole, a wonderful finish, 495 yards. It starts down through the woods—out of bounds on one side, and woods on the other, with big traps for a slice; and after you get through with that, you get up to the tee shot, about 250 yards off from the green. The green is on the hillside. The arrangement here is very nice; traps on one side, out of bounds over here, water over there, and sand over there. Passing through, the space is about thirty yards. It is necessary, to get to this hole in par, to roll up to it and stay on the green.

That is all. (Applause.)

CHAIRMAN ALEXANDER: These slides are extremely interesting. We thank you very much, Mr. Ling.

Now, gentlemen, you are going to have another treat. In every community where there is a district golf association, or where there are several golf clubs, there is always some man in that community who is willing to work, and knows how to work. When a crisis comes, he is ready to take advantage of it, and when a calamity comes, he is ready to make capital out of it. You are going to hear that kind of a man talk.

He happens to be Chairman of the Green and Grounds Committee of the Inverness Club at Toledo, Ohio. When he had some little trouble with bugs—I will not tell you whether it was bugs in the ground, or bugs in the heads of some of the members of his club—that cost him money, he took his trouble and made capital out of it; and out of that trouble, out of that bug, out of that excrescence that came from that bug, originated the Green Section of the United States Golf Association, of which you gentlemen have the privilege of being delegates and representatives today.

It is a perfect joy to me to see the interest that has been taken here today. I only wish the gentleman who is about to speak to us could have been here this morning, when he would have had 150 men to talk to, instead of a lesser number, so that they all could have had the benefit of what he has to say, for it is so rare for those of us who love the game, who love the camaraderie of it, love its physical side, and everything it gives, to meet a man who has it all, that I am perfectly delighted to be able to introduce to you Mr. E. J. Marshall of Inverness, Toledo. (Applause.)

MR. MARSHALL: Mr. Chairman, will you put those last words in writing? (Laughter.)

CHAIRMAN ALEXANDER: They are in writing already, and I will mail them to you, if you will send me the check you agreed to send.

MR. MARSHALL: Mr. Ross, the President of Inverness, is here, and I would like to have you put that statement in writing, telling what kind of a fellow

I am, and give it to him, so that he can take it home, and let somebody else know it. (Continued laughter.)

CHAIRMAN ALEXANDER: That's a bargain! I just want to say to you, Mr. Marshall, that we do not ask you to spare anything or anybody. Go to it. (Laughter and applause.)

MR. MARSHALL: Thank you, Mr. Chairman.

ADDRESS OF MR. E. J. MARSHALL, INVERNESS CLUB, TOLEDO, OHIO
TOLEDO, OHIO

MR. MARSHALL: I really do not know what to say to you, gentlemen. There is one thing, though, that occurs to me before I start to try to say something, and that is this: When you come to play at Skokie this Summer, play just as the gentleman said, and you will come out all right. Make just so many shots, and you will get there. (Laughter.)

I am very proud to see the Green Section develop as it has, and I can not tell you how gratifying it is to find fifty or sixty men, or one hundred-odd, as there were this morning, who are willing to give up their time to sit down and talk about bugs, and worms, and worm exterminators, and beetles, and fungi, and everything else that goes to make up the work of green keeping.

There is one subject in connection with the work of the United States Golf Association that is engaging our attention, and I would like to talk with you a little while, if I may, on that subject. I refer to the cost of golf. You have read a great deal about it. You have read that no one but a rich man can afford to belong to one of the good golf clubs; that the ordinary fellow, the young fellow who really ought to belong, who really ought to make a player out of himself, can not do it, because he is working for a living, and it is beyond him. One of the aims of the Green Section this coming year, and beyond this year, will be to devise ways and means by which the cost of golf can be reduced. We do not know how we are going to do it. We just know that is what we are trying to do.

I want to talk with you briefly, if I may, as to the means by which that may be accomplished. I would like you all to think about it earnestly. I would like you all, when you do think about it, to contribute something that will be helpful in accomplishing that result. It must be done, because there is so much waste at this time, there is so much extravagance at this time, that common sense dictates that we must get down to earth again, and cut the maintenance of golf courses down where it belongs.

One of the things that we must agree upon among ourselves, and one of the things that we must get the players to agree upon, is what constitutes good maintenance. We must set a standard. What it shall be I do not know, but we must set a standard for maintenance.

Last year at Inverness we spent something like \$21,000 for maintenance alone. When we saw a weed in a bunker, we had a fit, and promptly cut it out. Then when my budget was getting low, and when I was fearful of results, and wanted to stop cutting weeds out of bunkers, and cleaning up, and trimming, Old Man Ross jumped on me and said, "No, you must keep your course up." (Laughter.) When we saw a weed in a green, we sounded a riot call, and cut it out, and we spent \$21,000 for straight maintenance, and nothing else.

I have in my pocket reports from two clubs, one in southern Michigan, and one in southern Ohio, two little nine-hole courses in two little towns, which were maintained, one for \$1,500 and one for \$1,800. Now, the standard lies somewhere between the \$1,500 course and the \$25,000 course, say. Just where it is, as I said before, I do not know.

At Inverness we kept a man busy a great deal of the time trimming up the approaches, running a power mower over the approaches, to keep them as slick and clean and dressy as the greens themselves.

Now, what constitutes proper maintenance? Where is the place to stop? When can you say that the course is right for the game? When is your rough right? That is the thing that we must decide. It may be that Inverness is on the right basis, and \$21,000 a year is the right standard. It may be that something short of that is the standard. I want you to think about it, and make up your minds, and talk among yourselves, and figure out where