appear harder than it really is” was the doctor’s contention and I heartily agree.

I doubt that MacKenzie would have approved of the frequency that one encountered the white faces of Merion. The doctor was a strong advocate of the “fewer the traps the happier the dub” slogan. Since the doctor has gone on, I decided that I would look into the dub's emotional reaction toward Merion, so I sought out a friend of mine, Joe Klump, who is a member of the Merion club. “Do you enjoy playing this course, Joe?” said I. He hesitated a moment as if trying to decide if he should really come clean. “Well, to tell you the truth,” said he, “I like the west course better. I play it fifteen strokes less.” I am sure there was a rejoicing in heaven if the doctor heard that remark.

Coincident with Joe Klump's remark, I was interested to hear what Grantland Rice had to say about Merion. Grantland, you know, is one of the founder-fathers of the Augusta National, the trapless wonder in golf architecture. When I heard Al Espinosa greet him with “What do you think of the course?” I flapped my ears to get the answer. “I like this type of course; it makes the boys play golf,” said Grant. If anyone loves a clean victory it is Rice. He likes to see a title won the sportsman's way—well earned. I could understand too why he would like both Merion and the Augusta National, although extremely contrasting types of architecture. He was considering Merion in the light of championship play. He knew that to falter was to fall on this tightly trapped course. With Augusta, his fondness is in light of average play, for although it demands great shots from the expert, it is more sympathetic with the dub.

Another opinion I was interested in was A. W. Tillinghast's, creator of Fresh Meadow and Winged Foot. “It's a great course,” said he, as we scammed after Sarazen with the melee. “I would prefer it didn't have these bent greens. This type of trapping is my own belief for good architecture.”

Now I shall express my opinion of Merion. We architects are creative artists, therefore we are bound to differ in our ideas. We all have confidence in our own ability and feel the fruits of our labors are something to revel in. It is you, the golfing public, that is the best judge of a great course and a great artist. As a championship course, I thought Merion was practically perfect. For the home club of 300 average members, I feel that it is on the stiff side. I would ease the strain by alternate routes and greater latitude in some of the traps. You will find that at some of our creations such as Banff, Jasper Park and the Royal York. But, in keeping with Merion, I would like always to give you those artistic dabs of beauty, Merion's "white faces."

Municipal Golf Shows Good Gain in Revenues

FROM MANY POINTS come figures showing municipal golf course play this year is speeding toward new records.

At Indianapolis, Ind., play for the first six weeks of the season at the six muny courses jumped from last year's figure of $15,335 to a new record for the period of $22,432. On the basis of increased income more hose was bought to provide adequate watering for the scorched courses.

The Dallas (Tex.) muny courses during May boosted the season's receipts to $21,681.90, an excess of $2,207.68 over operating costs. This balance goes into course improvements.

Patronage at the Portland (Ore.) muny courses has increased recently to such an extent the bureau of parks now is in a position to meet all interest charges on the outstanding utility certificates of the property and to retire $3,000 in certificates.

Art Callan, nationally-known muny golf booster of Portland, comments on the local situation by advising GOLFDOM:

"We attribute this increased revenue to three things: (1) Good management coupled with a curtailment of unnecessary overhead; (2) the benefit of improved course at Eastmoreland through work done prior to the National Public Links tournament last year, and (3) to putting into effect of a 15c rate for high school students, 18 years and under.

"Any city that has the possibility of holding a National Public Links tournament, should be ready and willing to extend the invitation, as it is not only of benefit to municipal golf, but also to private clubs, as we have always considered public links an incubator for membership to the private clubs."
Fertilizers Give Differing Results In Section's Test Gardens

By JOHN MONTEITH, JR., and KENNETH WELTON

The demonstration turf gardens of the Green Section, located for the past 5 years on golf courses in various U. S. localities, have offered an excellent opportunity to test the effects of different fertilizers on grass growing on different types of soil under different climatic conditions. The gardens, as described in a recent article in GOLFDOM, contain a series of 15 plots for the testing of fertilizers on turf maintained at putting green length. Eleven of these plots were fertilized at monthly intervals from April to September with materials supplied by the Green Section. Four of the plots received no fertilizer. These latter were "check plots," so situated that every fertilized plot was beside an unfertilized check plot. This arrangement made it possible to observe readily the actual improvement of the turf resulting from the use of a fertilizer by comparing it with the adjacent turf which depended entirely on the supply of plant food in the unfertilized natural soil.

The putting green fertilizer tests were made on German mixed bent turf, with the exception of the garden at the Country Club of Virginia, where Metropolitan creeping bent was used. Rates of application were figured on a nitrogen basis. Quantities used for a full-strength application contained 1/10 lb. of nitrogen for a plot of 100 sq. ft. This is at the rate of 1 lb. of nitrogen to 1,000 sq. ft., which is the amount carried in 5 lbs. of sulphate of ammonia, in 16% lbs. of the complete fertilizer with an analysis of 6-12-4, or in 33 1/3 lbs. of bone meal analyzing 3 per cent of nitrogen. During July and August, rates of applications were cut in half to reduce danger from burning. Therefore in six applications during the year each fertilized plot received % lb. of nitrogen (5 lbs. to 1,000 sq. ft.). Knowledge of the relative effects of different fertilizers, when compared on the nitrogen basis, enables anyone to determine by simple arithmetic the values of fertilizers according to his local conditions.

Type of Mixed Fertilizer Used

The complete mixed fertilizers used in the tests contain sulphate of ammonia, phosphate of ammonia, superphosphate, muriate of potash, and sand. No organic material was used in their preparation. The sand was used as an inert filler to add weight to make up the desired propor-

| TABLE 1 |
| Putting Green Fertilizing Ratings, on German Mixed Bent Turf Green Section Demonstration Gardens |

<table>
<thead>
<tr>
<th>1929</th>
<th>1930</th>
<th>1931</th>
<th>1932</th>
<th>1933</th>
<th>Aver. %</th>
</tr>
</thead>
<tbody>
<tr>
<td>6-12-4</td>
<td>82</td>
<td>84</td>
<td>82</td>
<td>88</td>
<td>84</td>
</tr>
<tr>
<td>12-6-4</td>
<td>84</td>
<td>82</td>
<td>81</td>
<td>86</td>
<td>82</td>
</tr>
<tr>
<td>Sulphate of ammonia</td>
<td>82</td>
<td>78</td>
<td>79</td>
<td>76</td>
<td>73</td>
</tr>
<tr>
<td>Phosphate of ammonia</td>
<td>80</td>
<td>80</td>
<td>74</td>
<td>77</td>
<td>77</td>
</tr>
<tr>
<td>Activated sludge</td>
<td>73</td>
<td>71</td>
<td>72</td>
<td>72</td>
<td>73</td>
</tr>
<tr>
<td>Poultry manure</td>
<td>76</td>
<td>69</td>
<td>66</td>
<td>77</td>
<td>70</td>
</tr>
<tr>
<td>Sulphate of ammonia and compost</td>
<td>72</td>
<td>71</td>
<td>73</td>
<td>69</td>
<td>69</td>
</tr>
<tr>
<td>Urea</td>
<td>75</td>
<td>69</td>
<td>67</td>
<td>71</td>
<td>68</td>
</tr>
<tr>
<td>Lime and sulphate of ammonia</td>
<td>69</td>
<td>72</td>
<td>66</td>
<td>67</td>
<td>70</td>
</tr>
<tr>
<td>Nitrate of soda</td>
<td>66</td>
<td>63</td>
<td>65</td>
<td>59</td>
<td>54</td>
</tr>
<tr>
<td>Bone meal</td>
<td>65</td>
<td>62</td>
<td>57</td>
<td>58</td>
<td>61</td>
</tr>
<tr>
<td>Check 4-C (no fertilizer)</td>
<td>48</td>
<td>39</td>
<td>43</td>
<td>35</td>
<td>37</td>
</tr>
<tr>
<td>Check 5-A (no fertilizer)</td>
<td>39</td>
<td>38</td>
<td>43</td>
<td>38</td>
<td>36</td>
</tr>
<tr>
<td>Check 6-C (no fertilizer)</td>
<td>38</td>
<td>38</td>
<td>38</td>
<td>38</td>
<td>41</td>
</tr>
<tr>
<td>Check 5-E (no fertilizer)</td>
<td>43</td>
<td>35</td>
<td>40</td>
<td>34</td>
<td>37</td>
</tr>
</tbody>
</table>
USGA Green Section demonstration turf garden at Pine Valley GC, Clementon, N. J. This garden is planted on sand where absence of plant food in soil accentuates differences in turf on the plots due to addition of various fertilizers.

If the strength of a 12-6-4 fertilizer is reduced by the addition of an equal amount of inert material, such as sand, it gives double its weight of a 6-3-2 fertilizer. Since all the fertilizers were applied on a nitrogen basis, only half the quantity was used of the 12-6-4 as of the 6-12-4 fertilizer. Therefore this quantity would carry as much fertilizer as would have been carried in a 6-3-2 applied at the same rate as the 6-12-4. The difference in the fertilizers applied to these two plots is therefore merely a difference in proportions of phosphoric acid and potash. The 12-6-4 formula was used on the plots in preference to the diluted 6-3-2 formula merely because the modern trend of fertilizer formulas is in favor of the more concentrated mixtures to save freight charges on inert materials. The fertilizers for all gardens were weighed and packed by the Green Section staff. The materials for all the gardens therefore came from the same source and were analyzed to determine the exact amount of plant food each contained before they were packed for the gardens.

The plots were rated as outlined in the previous article in GOLFDOM. These ratings were consolidated for each year; then the total rating for each plot was divided by a figure representing a perfect rating for each plot on all gardens, to determine the percentage of the highest rating that would be possible with this system. These percentages are grouped in Table I for each of the 5 years, and at the extreme right the average for the 5 years.

Referring to the table, it will be seen that, during the 5-year period, the four inorganic fertilizers gave the best results. Of these, the two complete fertilizers headed the list. The one point difference in the percentage of these two plots is insignificant when one considers that there was a difference of two points in the ratings of the check plots. In comparing these two fertilizers it should be remembered that in order to make the nitrogen equal on both plots twice as much of the 6-12-4 fertilizer was used as in the case of the 12-6-4.

The sulphate of ammonia and phosphate of ammonia plots produced the same results and rated six points lower than the best complete fertilizer. The two mixed fertilizers contained sulphate of ammonia and phosphate of ammonia, and the same amount of nitrogen was supplied to all four plots; therefore the higher ratings of the two complete fertilizers can be attributed either to the combination of sulphate of ammonia and phosphate of ammonia or to the addition of superphosphate and muriate of potash. The high rating of the sulphate of ammonia plot in this series of gardens simply adds further evidence as to the value of this fertilizer in turf culture in spite of the fact that it contains no phosphorus or potash. The high rating of the sulphate plot confirms
the evidence of past experimental work and clearly demonstrates its value for fine turf even though it has been subjected to some criticism since it was realized that it could prove harmful if used in excess.

**Poultry Manure, Sludge Equal**

The activated sludge and poultry manure tankage plots gave the same results over the 5-year period. Poultry manure tankage could not be procured in 1933, so pulverized poultry manure was substituted in the last year of the experiments. Activated sludge and poultry manure are of an entirely different origin and it is interesting to note how similarly the grass responded to these two fertilizers.

The sulphate of ammonia and compost plot received a rating well below the plot which received sulphate of ammonia alone. In figuring the nitrogen for the plot receiving sulphate of ammonia and compost it was figured that half of the nitrogen would come from the sulphate of ammonia and half from the compost. The sulphate of ammonia was furnished by the Green Section but the compost was furnished by each club where the garden was located. Each sample of compost was not analyzed and therefore there was some variation in the amount of nitrogen supplied by compost in the different gardens. However the amount that was prescribed was estimated on the analysis of an average compost; therefore on the garden on which a richer compost was used the ratings were somewhat higher than on the garden where the compost was especially poor, but the average for all gardens balanced these differences. The nitrogen in the compost is not as available as in sulphate of ammonia, which no doubt accounts for the lower rating of the sulphate of ammonia and compost mixture than in the sulphate of ammonia alone.

The Urea plot placed in the center of the list.

Lime and sulphate of ammonia rated well below the sulphate of ammonia alone. In this plot enough lime was used to more than neutralize the acid residue from the sulphate of ammonia. It is well recognized that lime is distinctly beneficial when added to soil which has had too much sulphate of ammonia added by many or excessive applications. In these gardens the lime was added the first year and was added repeatedly each year thereafter; thus in the gardens there was no accumulation of acid resulting from previous applications of sulphate of ammonia. The need for lime, which is apparent on many golf courses where sulphate of ammonia has been used for a long time, was not apparent in these gardens. Rating of this plot compared with the sulphate of ammonia plot bears out the observations made at the Arlington turf garden and other experimental gardens to the effect that even though lime is beneficial in correcting certain unfavorable conditions in soil, it is not wise to use it in excess.

The nitrate of soda and bone meal plots had the same average over the 5-year period. It will be noted that these two fertilizers had ratings well below any of the other fertilized plots.

The four check plots rated much lower than the fertilized plots. It will be noted that there are only 2 points difference between the ratings of the four check plots over the 5-year period. The 2 point difference however calls attention to the variations that occur in any testing area even though every effort was made to select areas in which the conditions would be uniform throughout. The 2 point difference in the check plots also emphasizes that one should not put too great emphasis on the difference of 2 or 3 points in any of the plots. Such slight differences may be caused by a variation in the soil in the testing areas.

**Fertilizers Group Themselves**

In checking over the average percentage in the above table it is interesting to note that the fertilizers are rated in a few groups. The two mixed fertilizers are only one point apart. There is a jump of five points in the next two fertilizers which are the well known ammonia salts used for golf turf maintenance. Then there is another jump of six points to a group of four fertilizers containing organic materials. These four have a difference of only two points between them. The plot receiving lime and sulphate of ammonia is rated close to this group. There is then a drop of eight points to the nitrate of soda and the bone meal plots. These two fertilizers, like the combination of lime and sulphate of ammonia which was used in the plot just above the nitrate of soda in the list, have a tendency to make the soil more and more alkaline in reaction. It is interesting to note that the bone meal and nitrate of soda plots were rated just about half way between the unfertilized plots and those which received the highest ratings in this series.
Peoria (Ill.) CC where some of the most modern course maintenance is used under the able supervision of Elmer Biggs, pro-supt., also claims to have the oldest operating golf course equipment in the country. The Peoria course is the second oldest in Illinois, having been originally built in 1897 under the direction of F. M. Birks who still is an active member of the club.

The two mules, Dink and Jack, are 37 and 35 years old respectively. They have been at work on the course since they were infant mules and still earn their keep mowing the rough on the hilly course.

Their jockey, Lije Alexander, shown at the helm in this picture, has been with the club for 28 years. He still is active as gardener on the clubhouse grounds except when the rough requires his attention and that of Dink and Jack. Principal item in the mules' maintenance is chawing tobacco, which is furnished by Lije out of his private stock.

In bygone days—before the employment of motorized fairway mowing equipment on the Peoria course, Dink and Jack hauled fairway mowers and developed such proficiency in ducking golf balls that even in their advanced years Biggs makes money betting that any sharpshooter can stand 150 yards away from either or both of these mules and drive balls at them without registering a hit. Lije maintains that neither of the mules has been hit by a ball during the 28 years he has been their pilot, although thousands of balls have whistled by so closely that the strain has begun to tell on Lije, who in his 72d year, complains that he has his moments when "he feels like slowing up somewhat.

Lije was one of the astonished spectators who saw Harry Hampton, veteran Beverly professional, hole out a 65-yard approach from the brick sidewalk alongside the golf course at the eighteenth during the Western Open. Hampton won a case of Hiram Walker whiskey for this eagle. When Lije was informed of the prize won by Hampton his comment was: "My goodness how I wish I had took up golf!"

The best test of a fertilizer is its ability to produce results over a period of years. The ratings that came from these gardens cannot therefore be considered conclusive evidence as to what these fertilizers will do on the golf courses over a long period of years. In this connection it is interesting to compare the ratings of the sulphate of ammonia plot with one of the two plots above it. The sulphate of ammonia plot received a lower rating in the last two years than it did the first two. The two mixed complete fertilizers, on the other hand, even though they contained sulphate of ammonia, continued to give fairly uniform results over a 5-year period.
These results are quite comparable to those obtained at Arlington and other experimental turf gardens. Judging from results obtained on these latter gardens one can assume that the sulphate of ammonia ratings in these demonstration gardens would be somewhat lower if they were continued a number of years. It is also probable that a light application of lime in 1932 or in 1933 to the sulphate of ammonia plot would have resulted in decidedly better ratings of this plot. On the other hand a great excess of lime would probably have had a depressing effect, such as is noticeable in the plot which received both lime and sulphate of ammonia each year.

Lack of Association Interest Handicaps Golf

Failure of golf clubs to join their sectional and national associations is a handicap to the growth of the game and its fullest enjoyment by its present players, says Jack Wilson of the Salina (Kan.) CC.

Wilson is of the opinion that golf club officials are negligent in the duty they owe their members by refusing to extend lively co-operation to the associations.

He sets forth his case as follows:

“In a recent issue of Golfing an article giving the number of golf courses by states showed Kansas in fifth place. Recently the state tournament was played and of the 283 courses in the state only 13 were members of the state association with legitimate right to have their members represented in the tournament. Does this indicate the unity and co-operation there should be in a state enjoying fifth place in the nation’s golf course ranking?

“The one-day tournaments that flourished throughout the state during the depression now are going dead. It is my belief that these tournaments were run primarily on a mercenary basis and patronized eagerly by pot-hunters. Now there seems to be a condition favorable to the establishment of tournaments on a sporting, rather than commercial, platform. The pot-hunters made the circuit of the one-day events but were missing from the state tournament.

“Golfers deserve the protection of sportsmanship that they would be given by membership in a strong state association, but interest in this phase is so lacking there is not one member club in the state association from among five grass green courses that one of the state’s cities boasts. In the present condition of the state association its annual tournaments keep going to the same few towns and a great opportunity to develop golf interest is missed.

“It may cost the club some money to be host to a tournament. The course may require some work that costs money. Even so, the increased interest, new life in membership campaigns and greater pleasure of the members warrants the expense.

“The caddie problem at the state tournament in Kansas is something to worry about also as the traveling caddies are so bad that clubs are forced to ask for police protection while the nomadic young irresponsibles are in town. With a state association able to function widely you could look for more and better local caddies.

“The entry of the Trans-Mississippi tournament showed only 14 cities represented. Does this not indicate that some one has been asleep in not developing more good golf talent in the smaller towns?

“It is my conclusion that if the state associations were given more co-operation and memberships from clubs that should be members there would be far more golf in the United States, a more interesting competitive situation, and that the individual clubs themselves would benefit substantially.

Riverdale Fee Course in N. J. to Have $3,000 Open

Riverdale CC, near Westwood in the northern part of Bergen County, N. J., is to have its first Open tournament Sept. 13-15. There will be $3,000 in pro prize money and a big prize list for amateurs. There will be 15 pro prizes ranging from $600 for first to $55 for fifteenth.

John Handwerg, president of Riverdale, is confident that the tournament will attract considerable interest to the club and spread its fame as one of the country’s fine fee courses. The establishment is 6,440 yards with 72 par. It is five years old and has an automatic high-pressure watering system. Orrin Smith was designer of the course. It is 16 miles north of the George Washington bridge and 28 miles from Newark.
NOT LONG AGO at a maintenance equipment demonstration conducted by the Midwest Greenkeepers Assn. I said to one of the association officials responsible for the affair that it looked like a pretty good thing.

"It's all O. K. as far as it goes," he replied, "but it is away short of what we need for the same sort of valuable research service to greenkeeping that is being supplied by the Green Section and other bodies on fertilizer, diseases and other turf factors.

"These demonstrations give us a chance to see the new equipment in operation for a brief time and are of value in allowing greenkeepers who are trained machinery experts to catch some new idea on the run, but seldom can I get enough out of them to help me make up my mind definitely on the desirability of buying any of the equipment I am seeing demonstrated for the first time."

We walked over and watched power greens mowers being demonstrated.

"Now here is a case that points out what I mean," said my friend. "All of these mowers are great improvements over the first power green mower I saw demonstrated and I will say from my own experience that any sound power green mower today is a major item in a maintenance economy campaign that has to maintain high standards of course condition.

"But would any greenkeeper here—or any chairman—rush back to his club and recommend the immediate purchase of a power green mower on the basis of this demonstration performance?"

Tests Now Inconclusive

"Of course they wouldn't. There are many of these fellows whose courses should have power greens mowers, but not one of them will be pushed into action by this bare performance of cutting this practice green. What would help all concerned would be to have these demonstrations at the conclusion of actual working tests on golf courses with records of performance in complete detail and observations of the working of the mowers also matters of record so the reports could be studied by greenkeepers prior to the final examination. Then we would be helping ourselves, our clubs and the manufacturers.

"As it is, our oversight or lack of organization in this respect is costing us considerable money; first, in the delay in adopting sound labor-aiding devices and secondly in delaying the perfection of the new ideas and adding to the manufacturers' development costs by not being prepared to submit helpful, scientific field reports on the performance of machines. Handling this is one of the big jobs the greenkeepers can do, but how they can do it, has me stopped!"

I made some notes on this chat, intending to talk over the subject with other greenkeepers.

A letter came in from C. C. Worthington recently which revived my interest in the matter discussed at the demonstration meeting. Mr. Worthington wrote:

"In reading the interesting and instructive articles to be found in your magazine, I am constantly surprised that so many writers, otherwise informed on the subject, seem to be unaware of the dominant position that the motor mowing of greens has acquired in bringing about reductions in the cost of golf course maintenance. These writers emphasize the importance, not to say the necessity, of keeping expenditures today at the lowest point consistent with approved standards of upkeep. But this serves only to make it more difficult to understand why they omit including in their estimate of possible retrenchment what these machines can do to assist in their plans.

"It is of course well known that up to fairly recently reliance upon motor-driven machines for this green service would have been more or less of a risk, for those that were then being offered by a few manufacturers were shown in actual practice to be unsatisfactory."
mowing for greens should be adopted with care and with some misgivings. This conservative attitude of many of the greenkeepers was to be expected in view of these failures and their efforts to maintain the high standard of greens that prevails today in so many of the clubs, should of course, be upheld to the utmost. But I am of the opinion that the time has arrived when this conservatism should not be imposed as a barrier to examination and test of the accomplishments which have in the past few years so wonderfully advanced the art.

"The time is ripe, it seems to me, for serious determination on the part of experts of exactly what these power machines will actually do and to what degree they may be relied upon by greenkeepers to meet whatever requirements are imposed. An authoritative and conclusive result could be easily reached in this way and the fact be definitely settled whether the claims made for these machines are based upon positive experience and demonstration, or upon hopes.

"In view of the immense savings resulting from their work, this removing of their status out of the realm of uncertainty and establishing it to the satisfaction of those endeavoring to economize, is something that all who are identified with golf course upkeep should. I think, wish to encourage.

"What time would be better than this, or what subject more important, if it be true that the time of any force employed on the greens and on similar work now depending upon hand mowing, may be reduced 40 or 60 per cent? What investigation could be conducted that would promise more in the direction of economy, or be of greater aid in the general advance of the golfing interests?

"The answer that has been made to this that the standard of upkeep would suffer by such a change, can no longer be made. The standard is improved. The actual mowing of the greens is as perfect as any done by hand. The auxiliary work of rolling, spiking and topdressing, together with the approaches, sweeping, and raking, is all done better by the power element and in a fraction of the time it takes to do it by hand.

"It is only because the standard of upkeep will be improved that the manufacturers of this class of machinery are willing to back the success of the installation and it is only because I feel that the saving in time brought about by the advent of this improved practice is so large and timely, and the best standards so conserved, that I venture to make this suggestion and to ask you, on what grounds these machines accomplishing so much in this major department of golf course expense, should appear to be slighted or ignored in the writings of many who in other respects doubtless keep abreast of the times?"

What's to Prevent Testing?

From time to time this matter of testing equipment has been presented to GOLFDOM by manufacturers and we have pointed out that our position is such that we could not properly fit into any testing and endorsement operation in connection with devices having such widely varying conditions of operation. Approval or absence of approval would be suspected, probably, as being somewhat dependent on advertising in GOLFDOM and we wouldn't want to lay ourselves open to any jam of this kind.

A tentative basis for appraising fairway mowers was suggested a couple of years ago by Prof. Dickinson, but got nowhere as several major points were pronounced simply matters of opinion which had no bearing on the performance of the mowers in actual service under certain conditions.

When power green mowing was new reference was made to one of the devices in the Green Section Bulletin, whereupon there was complaint registered by other manufacturers that inasmuch as no reference had been made by the Bulletin to their new devices, it might be considered discrimination or at least injudicious to give publicity to any one manufacturer's equipment.

By the above citations you will see that it is impractical for GOLFDOM, the Green Section or state agricultural schools with greenkeeping departments to pass on equipment performance. Consequently, if the greenkeepers and manufacturers think that the matter could be handled in a way to do some mutual good, it's up to the manufacturers and greenkeepers associations to work out something.

Progress has been made in determining the proper seeding, fertilizing, watering and disease treating methods to employ under given conditions. It may be possible to extend in value the pioneer work done in scientific testing of maintenance machinery performance.

HENRY COMSTOCK, general chairman of the Buffalo Junior Chamber of Commerce PGA championship committee, was for two years. He served one term as president of the Intercollegiate GA of America. He won the Western New York amateur golf championship in 1923-25-29.
"It's three years old—and good as new!"

To be sure, you can buy hose for a few pennies less, but when you measure the cost by years of service GOODYEAR EMERALD CORD is dollars cheaper.

Because this famous hose stands up season after season, many leading courses will use no other. It is the world's finest quality hose—rich green in color— with these exclusive features:

- **Double-double cords,** each closed and meshed in specially compounded Goodyear rubber. Extra strength to hold the pressures. Extra strong flat-ribbed cover to withstand hard scuffing. Non-kinking—and a real beauty in looks.

In these budget-pinching times, doesn't this economical, extra-long service appeal to you? To receive specifications and complete data, write Goodyear, Akron, Ohio, or Los Angeles, California.

MADE BY THE MAKERS OF GOODYEAR TIRES

GOODYEAR
EMERALD CORD
Red Run Installs Modern Bar

RED RUN GOLF CLUB, Royal Oak, Mich., has just installed the service bar shown here in its Men's Grill.

The bar, built in an alcove at one end of the Grill, occupies a space 13 feet wide with ample depth between the bar and backbar. The face of the bar is rustic in appearance, the top is of polished mahogany, and the interior is of stainless steel construction. Stations are provided for two bartenders, with a mutually handy beer-drawing equipment in the center which, besides its two beer faucets, contains one ice water faucet and a seltzer water faucet. This two-station arrangement makes it possible to care for peak business on tournament days and for special parties.

A side door provides service direct to the men's locker room, while a service window at the end of the alcove is used to give similar easy access to a beer garden which the club has built beneath the trees at one end of the clubhouse.

The bar, including interior and backbar, was designed and installed by the Liquid Carbonic Corp., Chicago, and is receiving a big play from Red Run's members.