MIDWEST BREEZES

Welcome **Oscar Miles** back to the Chicago area. Oscar is the new superintendent at the Butler National G.C.

Oscar was the former Supt. at Olympia Fields C.C. prior to **Warren Bidwell**. After **Oscar** resigned from Olympia Fields C.C. he accepted the position as Supt. at Broadmoor C.C., Indianapolis, IN. I am sure he will do an excellent job for Butler National. He has the credentials and we wish him the best.

The greens at Butler National have had all the old sod removed with the exception of ¼ inch of the thatch. They have all been reseeded with the peneagle strain of bent the last week in August and hope they will be playable this fall, if weather conditions are favorable. Good luck.

Randy Wahler, former Supt. at Glen Flora C.C. has resigned and accepted the position as Supt. at Knollwood C.C.

This **editor** had the pleasure of visiting with **Art Benson Jr.** Supt. at the beautiful Butterfield C.C. **Art Benson** gave me a tour of the golf course and club grounds and I found it in excellent condition.

On Sept. 5th at Chicago Golf Club something very interesting took place. The crew started off their morning mowing greens as usual except for one crew member who wasn't looking forward to mowing no. 7 green that day because she had to cut it side to side which takes about 45 minutes to an hour. So she decided to make time go faster in a very unique way. She counted every single step she took - 3,200 steps. She estimated one of her steps was equal to two feet. So she walked 1¼ miles on one green! Amazing, isn't it!!

Editor's note - "She" is the editor's granddaughter .

The Chicago area has just experienced one of the wettest months in its history of record keeping over 8½ inches of precipitation. The normal for this month is a little over three inches. Some contrast.

The heavy rains during the later part of August created some extra problems at the Butler National Golf Club. The new seeding on the greens has some erosion. Problems of this kind are never welcome.

We all thank Art Clesen, Inc.; Chicago-Toro IL Lawn Equipment Inc.; and Turf Products Ltd. for the halfway house food and refreshments.

Paul N. Voykin had a lip Leukoplahia operation and was out of kissing action for nearly three weeks.

The editor has watched many golfers at various times executing different shots. At Shoreacres C.C. during the golf match I experienced one made by **Bruce Sering**, Supt. at Glen View Club. Bruce does not pertain to be a scratch golfer and this was proved by trying to get his ball out of a sand trap with a wood club. He ended up throwing the club farther than the ball went and then looking in the bushes for the club. Too bad wife Barbara could not have been a witness at this time.

The M.A.G.C.S. was honored to have G.C.S.A.A. Pres. **Mel Lucas** at our Sept. 8 meeting. Also **Palmer Maples** and **James Wyllie**. We hope they visit us more often.

Our Oct. 6 meeting will be held at Woodmar C.C.

Hi Ray,

I'm sure Autumn will be the tonic to all - eviate hot summer blues.

"AUTUMN BLESSINGS"

With Summer's pressure in the past,
And Autumn here to play.
How wonderful to smile again,
And welcome every day.
Relax, enjoy, have some fun,
You've earned a bit of cheer.
It's time to harvest your rewards,
Octoberfest is here.
Few will pat you on the back,
For the efforts you have shown.
But it's nice to know you've paid the price,
To sit upon the throne.

Superintendently,
Kenneth R. Zanzig
Green Garden C.C.

GCSAA CRESTS, EMBLEM PATCHES AND GLASSWARE NOW AVAILABLE

The crests, emblems and glassware each display the GCSAA logo. The crest is made with gold bullion and has three clutch back fasteners for easy application and removal from jacket pockets. They can be purchased for a cost of $9.25 each. The emblem patch is a multi-purpose cloth patch; it can be worn on a golf hat, pocket or sleeve. The cost for these are $2.25 each. The glassware consists of a set of eight 14 oz. tumblers and can be purchased for $18.00 per set.

Descriptive brochures and order forms for these items will be mailed to all GCSAA members within the next month. However, if someone is wanting to purchase an item now they can do so by enclosing a check with their request and mailing it to GCSAA Headquarters, 1617 St. Andrews Drive, Lawrence, KS 66044.

Things I run onto while looking up other things. The Gleneagles Golf Course is one of the most famous courses in Scotland, but it has nothing to do with the bird (eagle) for the original spelling was Glen Eglais. The word Eglais means church in Gaelic; consequently the name Gleneagles refers to the "glen of the church."

Charles E. [Scotty] Stewart

COMING EVENT

21st Illinois Turfgrass Conference and Regional Show
December 16-18, 1980
Prairie Capital Convention Center
Springfield, Illinois

TURFGRASSES SELECTED BY THE PROFESSIONAL MEET MANY CRITERIA

One of the marks of a professional in the turfgrass business is the ability to mix the various strengths of different turfgrasses and provide the client or customer with an outstanding combination. These men and women combine grass seed so the final turfgrass meets the criteria for each project, considering terrain, use and climate.

As these turf specialists scan the varieties, three turfgrass seeds continue to curry favor. They are Fylking Kentucky bluegrass, Glade Kentucky bluegrass and Ram I Kentucky bluegrass. All three elite bluegrasses have characteristics that make them particularly suitable for mixes. Their ultimate product is a lawn that is beautiful, more disease and drought resistant and geared to hang in there as young adult trees grow bigger.

Each of these bluegrasses has an interesting story behind its discovery. Glade Kentucky bluegrass was found strongly persisting in shaded areas near the New York State Capitol building. A Rutgers selection, Glade was carefully tested to see if it would establish quickly and form a dense, deep-green turf as the original plants did. Not only was it successful in the tests, it also proved to have above average resistance to Fusarium blight and powdery mildew, both very destructive diseases to many turfgrasses. These factors helped Glade prevail even in up to 60% shade.

Fylking Kentucky bluegrass was discovered in Sweden. Translated, the name means, **"Great numbers standing in a field"**, and it was selected because the grass plants produced a thick luxurious, low-growing, fine-textured turf. Fylking was thoroughly tested in this country and Canada, where it proved to be tough with improved resistance to many diseases and with a greater tolerance for drought, heat, cold, smog and foot traffic. It has been touted as the great backbone for any seed mix. These were some of the reasons it was selected as the official grass for the grounds of the Spokane World's Fair in 1974.

Ram I was found growing on a putting green at a golf club in Maine. Like Fylking, it grows vigorously even when mowed short. Under vigorous testing at Rutgers, Ram I showed that it too had superior qualities and could thrive, even in some shade.

Most Professional researchers, sod growers and buyers who seek out superior quality turfgrass seed opt for a special mix of grass seeds such as these three. Each will provide varying strengths in different areas so that the golf course superintendent, the park manager or the homeowner won't experience any single disease wiping out his beautiful turf.

The chances are good when you see a well-planned lawn that greens up earlier in the spring, holds its color longer in the autumn, survives the summer semi-drought conditions and even looks great in the shade, you've spotted a lawn planned by a professional who recognizes the difference between the old models, and the newer improved elites such as Glade, Fylking and Ram I Kentucky bluegrasses.

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The Front Line's 72" mower deck is made of 12-gauge carbon steel, reinforced and arc welded. It has a multi-disc PTO clutch, direct drive to the deck gear box with a sealed and lubricated shaft drive. The hydrostatic transmission is driven by two continuously engaged "A" section belts with self-adjusting tension.

There's no need to worry about overloading the Front Line's engine. The combination of our high torque engine and specially designed mower deck allows you to mow tall weeds and fine grass.

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The Front Line's cut in fine grass is so smooth, you won't believe it was made with three separate blades. That's because the blades overlap 1½" to reach every inch of grass in the full 72" swath. Also, the cutting height is adjustable to eight positions, from 1" to 4½" in half-inch increments.

Operating the Front Line couldn't be easier. With individual front wheel brakes, and wheel-type steering controlling a single rear wheel, you get tight maneuverability and better control on varying terrain.

The Front Line's mower deck makes your job easier, too. It extends more than a foot to one side, so you can trim right up to fences or trees. And it lifts hydraulically for transport over curbs. What's more, a large capacity fuel tank lets you work up to 6 hours between refills.

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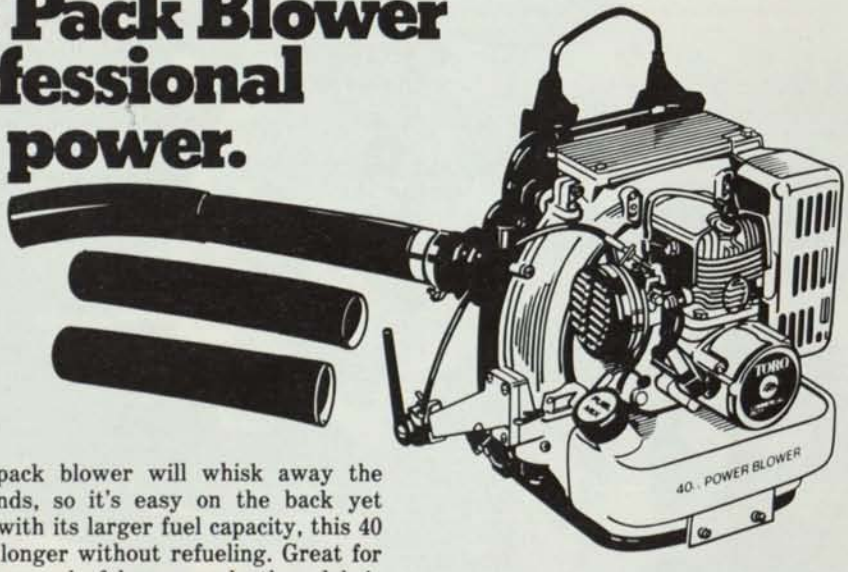

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THE FERTILIZER FACTS AND FICTION OF BLENDED VERSUS GRANULATED

For those who make a livelihood by maintaining fine turf, as well as the do-it-yourself homeowner who is particular about his picturesque lawn, high quality fertilizer is indispensible. This means the right nutrients must be present. It also means good storage, handling and spreading properties. Here is where the manufacturer's skill and integrity are paramount. As it is with most things, there is the right and wrong way to manufacture fertilizer.

Companies selling ammoniated or granulated turf fertilizers sometimes point an accusing finger at blended products and claim they are inferior. In many cases, this has been a fair accusation but with others it was a way to divert scrutiny of their own products.

Generally, dry blended fertilizer is made specifically for bulk farm spreading and crop use. Farm fertilizers tend to be high in phosphorous and potash and low in nitrogen. Almost the opposite is required by turf. As a consequence, most blenders combine Ammonium Nitrate (33⅓-0-0) or Urea (45-0-0) with Triple Super Phosphate (0-60-0), Diammonium Phosphate (18-46-0), Muriate of Potash (0-0-62), and limestone. Some of these raw materials are high in salt content and are immediately available. Because of the large volume of fertilizers needed by farmers, cost is an important consideration. Blenders tend to buy the best deal in price and sometimes sacrifice uniformity in particle size. Fertilizers lacking particle uniformity would not be recommended for turf.

The quality and analysis accuracy of ammoniated or granulated fertilizer is almost entirely dependent upon the manufacturer's facilities and the plant superintendent. The best superintendents or ammoniating foremen are those having the experience and know-how of when and how much of each ingredient to add to get an acceptable granule. It is a skill learned over the years that not everyone can master. If ammoniated products are not dried properly in production or are not able to "cure" (chemically react) in bulk storage they may harden after they are bagged, thus making application difficult and tedious.

It is very rarely true that each granule in an ammoniated product contains the same analysis as printed on the bag. The larger granules tend to be high in phosphate and the smaller are high in potash. Many times, the fines are 100% potash. Most farm grades are easy to ammoniate because they are high in phosphate content. Phosphoric acid helps the granulation process and produces a harder granule. An easy analysis to ammoniate would be a 1-2-1 ration, such as 5-10-5. The higher the nitrogen and potash and the lower the phosphate, the more difficult the ammoniation process.

The home lawn analysis, 20-10-5, has been popular for a long time, not because it is a good ratio for grass, but because its high phosphate content makes it easier to granulate. A 25-5-10 analysis would be a very difficult fertilizer to manufacture and in some plants it would be impossible. A high concentration analysis like 25-5-10 or 33-3-10 doesn't allow room in the formula for the chemical reaction needed to create the necessary granulation action. That is why a low analysis high phosphate product can be hard, free flowing, uniform and dust free. On the other hand, a high analysis, low phosphate fertilizer might be inconsistent in particle size with a soft surface that cannot withstand transportation and wears down causing a dusty product. Some companies will make a base grade and blend nitrogen with it to form a high nitrogen analysis with better spread-ability. In this case, you have a blended product of nitrogen and base.

The key to a good blended product is uniformity in particle size. If the manufacturer buys raw materials with uniform screen size as a prime consideration, uses good judgment and housekeeping to eliminate dust, and screens the finished product, an excellent non-segregating free flowing fertilizer can be the result. A company that uses these practices had a better analysis test record in one state than its ammoniating competitors.

Certain unique forms of nitrogen such as I.B.D.U. and sulfur coated urea as well as chelated sources of iron and other trace elements cannot be ammoniated because the heat of the process destroys their slow release and available properties. These important nutrient sources have to be blended with a base product to be available in a complete fertilizer. Careful planning of a blended product can produce a beautiful combination of uniform prills that will be dust free, hard surfaced, nonsegregating and excellent for broadcast application.

Because of environmental controls and the high cost of building and maintaining a large ammoniation plant, fewer are in existence. Today there are only 200 ammoniating plants versus 5,000 blend plants in the USA.

In determining which type of fertilizer is best - the blend on the granulation, the following are the important points to use in making your judgment:

1. Who are you buying it from? Are they reputable? Do they stand behind what they sell?
2. Who is the manufacturer? Will they be here tomorrow? Are they capable of producing a consistent quality fertilizer?
3. Does the product meet your nutritional requirements? Does it have the desired ratio of nitrogen, phosphorus and potash? Does it include water insoluble nitrogen? Does it contain the secondary and micro or trace nutrients you need? Does it contain the type of nitrogen and potash you prefer?
4. Will it spread properly? If for golf greens, are the particles fine enough so that the mowers will not pick them up? If for large turf areas, are particles uniform and large enough for broadcasting?
5. Is it manufactured in such a way that it won't segregate and streak the turf? Is it uniform in particle size? Will the product flow easily through the spreader?

If all the above questions are answered with "yes" then compare the cost. If the product meets all of the above requirements to your satisfaction and the cost is competitive, then buy it whether it is a blend or granulated.

MAKE GRASS STAND UP FOR IT'S ROOTS!

Roger A. Brown
The Andersons, Lawn Fertilizer Section

How many times have we heard an employee make a statement in regards to a promotion, that he felt should have come to him rather than to another one of his group of employees. Possibly the reason was the person who received the promotion always realized that **THERE IS NO SUBSTITUTE FOR HARD WORK.** Keep this in mind and you may be the next in line for a promotion!

PRO OR AM?

Patrick Smartt

It would not be inaccurate to say that golf architects (I know three, though not closely) in general view golfers, in particular committees, as morons. Golfers, in their turn, incline to regard the architect as an invention of the devil, and the committee morons for calling upon him. They dislike paying out money for a task they consider could be carried out by themselves.

I have in mind alterations to existing holes. It should be obvious that the planning of a new course out of virgin woodland, or using to their best advantage the sweeps and folds of commonland can be left only to the professional designer. He has three primary qualities: knowledge, experience and imagination. He can see the wood for trees.

Though, to adapt the words of P. G. Wodehouse (I think in reference to bishops), the incidence of insanity among architects is not high, two of these gentlemen, of different firms and editors of different journals, have accepted my effusions. I put that forward as the reason for my presumption in discussing the make-up of golf holes. I have been on both sides of the fence. During 25 years in the colonies (an archaic word), in the absence of anyone else I was invited on three occasions to 'improve' holes, thus becoming, may I be forgiven, an amateur architect. The bush had already been cleared, inevitably in dead straight tram-lines . . . no imagination.

A good golf hole is one that makes the useful player scratch his head a bit when on the tee. His drive must be placed so that the green, if not the flag, should be 'open house' for the second. But, *and this is important*, the ordinary club member who is not looking for and unlikely to achieve a four, must have an alternate route so that he may enjoy his game; which when all is said and done, is the reason why he pays a subscription. And that surely is the practical idea of a hole. It is possible for a single, intelligently sited bunker to govern the tactical play of a hole.

In this discourse I should mention, with the purpose of my editor retaining his reason, that there is a clause in most journals to the effect that the editor does not necessarily agree with his contributors' opinions.

It is interesting to take a look at some old courses that have not altered over the years. It can be that even the old diehards would agree with certain changes. I believe that the first act of an architect would be to abolish a large number of bunkers. These in the old days were placed to punish the poor players. A stupid policy, for in that category he has quite enough on his hands in reaching the hole at all. Those pointless bunkers, those ancient barrows planted with primness on either side of the fairway . . catch the sliced or pulled drive, and repeated some way from the green to trap the inferior second. They are, so far as the good striker is concerned, redundant. Today he can carry them. Fill them in. They cost money in upkeep. Let the long-handicap player when he errs, which is often, finish in the rough; that will give him plenty of food for thought. The erasing of bunkers should be left to an architect, otherwise you have conflict in the club between the habitual slicers and the habitual hookers.

It is the good player who should be challenged, both in his thinking and his strokemaking. He must be forced to calculate risks: by how much dare he cut off a corner, will it or will it not pay him to go for the pin with his next? He should be made to think on every stroke in the round.

There is a school, small, may Allah be praised, who wish to replace rough grass, heather or bracken — with trees. In earlier days a ball in the rough could be counted as costing half a stroke. With trees it depends which side of the tree the ball strikes.

The only bad hole is one that is featureless and dull. Luck? We hear too much of so-called unfairness. Bernard Darwin when writing on this asked: "Do we wish to raise the game to the bloomless heights of chess?" I confess to a weakness for blind holes — fun and luck. I can, however, picture what would happen to the professional designer who introduced one into his plan. And yet life consists of wondering what lies on the other side of the hill.

There is a delusion that a good player can lay out a good hole. There was a famous amateur international, a good friend of mine now dead, who for no apparent reason layed down a green close to the existing one. I paced its area one day. Seven paces wide, 12 from front to back. He did me the honour of asking what I thought of it. My reply was that given a medium or long iron to this unwatered green, I would bet against Henry Cotton at his best leaving the ball on that green more than three times in 20 attempts. It was never used.

I recall a course which was altered by a famous professional. The members, who contributed to the cost, now find it takes half an hour longer to complete the round. There is a new short hole, a feature of which I cannot fathom. The teeing-ground is at the top green defended immediately in front by a stream. An out-of-bounds fence on the *left*. Just over the water hazard and a sentinel over the left entrances to the green stands a tree. The right-hand side is open, calling for a downhill chip. So far, so good. But just beyond that tree is a bunker. What for? One or the other is dispensable. That is an isolated case. If alterations are to be made, I come down heavily on the side of the Pro architect against the Am.

There remains one question. Provided the course is not one of those that caters for professional tournaments, or upkeep is a burden, why not leave things as they are? In short, committees are not elected to change a course.

The British Golf Greenkeeper

PUTTING GREENS
Grooming The Surface

By James T. Snow
Northeastern Agronomist, USGA Green Section

SOMETIMES IT seems that the art of turfgrass management is becoming more and more a science. With a host of insects and diseases to learn about, a large number of turfgrass cultivars to sort out, and many types of fertilizers and pesticides to evaluate, it is easy to understand how golf course superintendents can become absorbed in their efforts to produce turf, rather than to develop a playing surface for golf. Maintenance programs and budgets are sometimes too heavily weighted in favor of production, and little consideration is given to following through on the details which make a beautiful playing surface out of a healthy stand of turf.

The putting green is a good example. Only half the battle is won if healthy grass is maintained through severe winters and hot summers, attacks of insects and diseases, and the traffic created by thousands of rounds of golf each year. The other half involves constant grooming in order to produce a consistently smooth and true putting surface. The art of turfgrass management can be developed to the fullest to achieve finely groomed greens. Fortunately, many techniques are available to assist the superintendent in this quest.

ONE OF THE best techniques for maintaining well-groomed greens happens to be one of the most basic. Greens should be cut frequently with a properly adjusted, sharp mowing unit. This may seem quite obvious, but it is, nonetheless, a very common error. To begin with, each cutting unit should be carefully set and then checked routinely to ensure that the proper adjustment is maintained. Although a low cutting height is not essential for producing a well-groomed surface, other methods for reducing thatch and grain buildup will have to be followed more often on greens cut a 1/4 inch or higher. Most superintendents who use both triplex and single-unit mowers for greens maintenance find that the triplex units must be set about 1/16 inch lower than the single unit mowers in order to produce the same effective cutting height. The greens mower should be in good running condition, and the rollers and cutting units should be in proper alignment.

The need to maintain sharp edges on the cutting reel blades cannot be over-emphasized. Dull mowers produce a rough, leafy cut, and putting quality suffers. Cutting reels should be back-lapped several times each month in order to maintain a high-quality cut, especially when greens are topdressed frequently. Bedknives should be replaced several times during the season, depending upon the frequency of the aerating, topdressing and mowing programs.

Finally, only a program of frequent mowing will produce the expected consistency in a high-quality putting surface. Mowing three or four times each week is not enough, especially during the peak growing periods. Grass leaves lengthen considerably on days when the greens are not mowed, and the blades then tend to lie over, rather than be cut off cleanly. Leafiness and grain

develop under this schedule of infrequent mowing. Most superintendents find that they must mow five to seven times a week for best results.

A NUMBER OF accessories are available for the putting green mower; when they are used routinely, they help reduce or prevent the buildup of grain and excess thatch. The easiest of these to use are the devices which are permanently attached to the mower itself and, therefore, are used each time the greens are mowed. Perhaps the best known is the Wiehle roller, a special grooved roller which is used in place of the traditional solid unit on the front of the mower. This grooved roller has less of a tendency to mat the grass down before it is cut than the solid roller; the result, therefore, is a cleaner and closer cut.

Some models have accessory brushes mounted to the, frame that project in front of the mower. These brushes, made of wire or thin metal strips, fluff up the turf, especially the prostrate-type growth, before it is mowed. While the brushes will show an immediate effect on grainy greens, regular use is necessary for the best long-term results. A comb works in a similar manner. It is simply a bar with rubber teeth, mounted between the front roller and the bed-knife on the mowing unit. The teeth project into the turf and fluff it up before it is cut.

The combs, brushes and Wiehle rollers are all relatively inexpensive and should be used in conjunction with each other and with other grooming techniques. Of the three, the brushes produce the most vigorous action, but they should be used sparingly during hot weather or other stress periods.

PERHAPS THE most effective means of grooming the putting surface is through regular vertical mowing, usually referred to as verticutting the greens. It involves the use of specialized mowing units with vertical cutting blades which cut down into the turf surface. This technique is based on the fact that the vertical blades will cut through and remove decumbent blades, thereby producing a smoother, truer surface. The secret of this operation is to set the units so that the blades are very shallow, just nicking the surface of the turf. If you can see the grooves the machine is making, it is cutting too deeply. Many golf course superintendents use 1/16 inch as their guide for this operation. It is recommended that verticutting be done several times a month, if possible, especially during the spring and fall when weather conditions are favorable. Some superintendents verticut as often as once a week, going in two directions each time.

An increase in verticutting in recent years is due primarily to the development of the triplex putting green mower. Special vertical mowing units can be used on these machines, making this operation easy, fast and convenient. It takes no longer to verticut greens than it does to cut them with standard reel units. Golf courses with two triplex mowers are able to follow up verticutting immediately with regular mowing, producing no inconvenience to the golfers. Courses which prefer to uses single unit mowers sometimes purchase a triplex solely for verticutting.

Vertical mowing units which attach to the triplex are fairly expensive, but they do have other uses; they can be used on tees and collars for grooming or for thatch control. They are sometimes used to develop a good seedbed in overseeding operations, or when renovation is necessary after turf is lost during winter or some other stress period.

A discussion of grooming greens would not be complete without mentioning the benefits of topdressing. Besides all the biological and chemical factors it contributes to the turf, topdressing also plays a major role in the development of a desirable putting surface. Best results are obtained when light quantities of topdressing are applied frequently. Several benefits result from this type of program. First, the grass is forced to grow more upright, resulting in a cleaner cut and reduced leafiness and grain. Second, the dragging operation, which usually follows the topdressing application, lifts many of the surface runners which are removed with mowing. The more often the greens are topdressed, therefore, the more grooming will occur. A lack of resources to purchase extra equipment or to topdress frequently is no excuse not to groom. Some superintendents do an excellent job of controlling grain and leafiness by simply dragging mats across the greens before the are mowed, accomplishing much the same effect as brushes. This is certainly an easy and convenient alternative which could be used by any club.

The best greens are developed through good agronomic practices which keep the turf consistently healthy and the constant use of grooming techniques which provide smooth, true putting surfaces, regardless of their actual speed. In spite of budget or labor restrictions, every club should groom its greens. Priorities may have to be better defined, but the greens, where half the strokes of a par round of golf are allotted, should receive the full attention of the golf course superintendent and the club. It is always helpful to remember that, despite the problems encountered in growing and maintaining turf, the interests of the golfer in the playing of his game must be always be served.

USGA GREEN SECTION RECORD

W A N T E D

Golf Course Superintendent at Lincolnshire Country Club, Crete, Illinois 60417. Attn. Jack Battaglia.
This is a 36-hole Golf Course.

Things I run into while looking up other things. In the year 1775 Alexander Cumming, an English inventor, patented a flush mechanism for toilets and exactly 100 years later Thomas Crapper perfected the flush toilet.
Charles E. [Scotty] Stewart