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### The British Golf Greenkeeper

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### Front Cover Picture

RANSOMES new Motor 5/3 shows its paces in the Paddock at Kempton Park watched from the stand by Ransomes grass machinery distributors.

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# THE

We had some useful discussions with representatives of the New Zealand and Australian Greenkeeping Associations during February.

In Auckland we met Gordon West, President of the Auckland Golf Greenkeepers' Association and Denis Boylan, Secretary of the New Zealand Golf Greenkeeper's Association. New Zealand has its own Research Station and runs a Correspondence Course for young Greenkeepers.

The idea of international co-operation appeared generally acceptable and any help and information which this might bring would be welcomed.

The Auckland discussions were largely exploratory but education was agreed to be the first objective, aided by exchanges of apprentices, technical information and publications. Hospitality and travel assistance to green-keepers visiting other countries would reinforce the scheme.

While in Auckland we visited the Middlemore Course of the Auckland Golf Club, the Grange Golf Course, where the party was joined by Mervyn Andresen, Sonny Kayes, and Sel Hattaway, and the new layout of the Remuera Golf Club.

In Melbourne we talked to Leslie Barlow of Woodlands G. C. Mordialac, south of Melbourne. He is President of the Victoria Curators' Association. He has recently been elected President of the Australian Turf Management Association which is composed of various State Associations. He too, was keen on the idea of international relationships and indeed, had been doing some work on the question himself. It was a similar story in Sydney where we met the President of the New South Wales Golf Greenkeepers' Association and also heard about arrangements they make for training in that State.

Ransomes arranged a day for Greenkeepers at the Foxhills Golf Club near Sydney and something like 150 turned up to hear the Lecture and see the Ransome film. Some of them made a 700 mile round trip to attend this function and certainly the hospitality was outstanding.

The American Golf Course Superintendents' Association is now contacting the remaining Greenkeeping Associations and all are invited to submit ideas and practical suggestions, as to how international relationships might be fostered.





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### THE CONSTRUCTION OF ARTIFICIAL WATER HAZARDS

By: Howard Swan, M.Sc.

Why use artificial water on a golf course at all? Or I would prefer to

put the question, Why not?

Firstly and most important, take the requirement of water conservation for use elsewhere on the course. We are all familiar now with the automatic watering systems for greens and tees, and in some cases for fairways also. Such a system obviously requires a source of water, which could be from elsewhere on the course or else via a mains supply. If one considers that it takes approximately 10,000 gallons of water for a six minute irrigation of a course each day and a mains supply would cost about 40p per 1000 gals (besides any connection charge) so a summer's watering might cost in the region of £700 per year. Quite a sum for supply alone! Obviously, many golf clubs may not have sufficient natural water inflow to maintain such an irrigation system, but many have, and there could be a considerable saving if a 'natural' system is adopted.

Secondly, the creation of artificial lakes does provide an alternative type of hazard to the sand trap, and is, if correctly positioned, a particularly attractive and pleasing part of any course. Many golfers may think that they have perfected their bunker play; it will take them considerably longer to play from water with any satisfaction! Additionally, and somewhat lightheartedly, it does provide the greenkeeping staff with an excellent source of balls for their own game. Seriously, artificial lakes really can

add a new dimension to a wide variety of holes on a course and present a great challenge to the player. The positioning of an artificial water hazard is vital to the course, and there are many aspects which must be considered before a choice of site can be made and construction can begin.

The architect must look first at the location of natural water courses on the proposed site, be they small or large ditches or streams; second at the inflow and outflow capacities of the ditches throughout the site; third their relation to the existing drainage system (if any) on the surrounding land.

Along with this consideration, he must visualise how one or more water hazards will fit in with his initial plans for the overall course layout. A suitable site for a lake may dictate the incorporation of a particular hole at that particular point on the course, and therefore will inevitably contribute towards the overall design.

Then he must look at the proposals for land drainage and irrigation for the total golf course development. Is the lake to be positioned in such a place as to be a good outfall for fairway drains or will it impede their discharge? It is obviously essential that any surface water is drained adequately from the site, and a well-positioned lake can help in this respect and also be maintained in water level by this outfall. Also, it may be possible to use the lake as a reservoir for irrigation should the location be such that the economics

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Worcester Park, SURREY. Tel: 01-337 7791 (10 lines) 01-337 0861. of pumping are not too restrictive. It is unlikely that one could find such an ideal lake position to fulfil all these considerations on every site, but careful consideration of a location is obviously important.

Turning towards the practical side of these hazards, we find essentially

three types of construction.

The first is the simplest cheapest and this is the unlined lake. This type of construction would be related to an existing water course. which is able to maintain a permanent inflow or water in sufficient proportions to fulfil any irrigation requirements, and also an impermeable subsoil. It is a simple method of enlarging a section of stream or ditch to a pleasing irregular shape of a size between 1000-4000 sq. vds., and to a depth of no more than 4-5 feet. Just deep enough to deter the avid golfer from wading in to retrieve his ball!! We were fortunate enough to be able to construct two lakes of this type recently at Ely City Golf Club in nearby Cambridgeshire. The position chosen for the lakes was in an area where the water table was high, and with a combination of a large inflow of water from existing ditches and an impervious subsoil, no lining membrane was necessary. In fact, we found that we were able to maintain a capacity of 200,000 gals. throughout a summer, and a full daily programme of greens irrigation only lowered the water level by 2" and this was quickly replenished.

The second type of lake construction includes the installation of a Butyl or ruberoid lining on the base and walls of the lake to form a water tight seal. The lining is thick and elastic to some degree. It is essentially tailored to a particular size of lake and is laid as one sheet, being held in a trench at the perimeter which is backfilled with soil. Butyl lining is particularly suitable for lakes in which a high quality preparation of

the base is not possible, either because of underwater springs or particularly wet underfoot conditions. It is an immensely strong fabrication and the makers claim a long life span under even the most extreme conditions.

An alternative lining to Butyl is polythene sheeting. This is the type with which I have had most experience and I should like to go into the methods involved in its use. The polythene membrane which we normally use is of a 1000 gauge and combines a fairly strong character with a certain degree of pliability whichever is preferred.

The initial step in construction is the excavation of the lake to the desired contours by bulk earth moving machinery. The subsoil removed here can be utilised elsewhere in the construction of greens and tees etc. (a saving here). After the lake has been roughly contoured to the desired shape, it is necessary to trim and carry out the final shaping with a smaller machine to leave the base and walls in a smooth formation. Before the lining is laid, a small amount of handwork is required to rake over the surface to remove any small flints, stones etc., which could damage the lining. In addition, it is often good practice to blind the raked surface with a little sand to prevent any possible puncturing.

A narrow trench is then excavated around the perimeter of the lake, 12" wide and 12" deep, some 24" from the edge of the lake. This will act as an anchoring trench for the polythene itself.

The lake is now ready to receive the polythene sheeting. This comes from the manufacturer in rolls and is therefore laid in strips from trench to trench. The laying is quite a sophisticated process and we employ a specialist firm to carry this out for us. Each lining strip is joined to the next with double-sided bitumastic



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tape with a considerable overlap as a safety measure. The sheeting is left quite slack on the base of the lake to allow for the weight of backfill and water to take its effect.

Now it is generally accepted that the type of sheeting is not everlasting if left open to sunlight and spiked golfing shoes. Therefore, we recommend that an overlay of between 4"-9" of soil, or sand, is run on top of the polythene as a protective layer. This can be done by manual or mechanical means, the latter being obviously quicker, so long as sufficient care is taken to ensure that the lining is not damaged by either human feet or machine wheels or tracks. Generally however, this can easily be done. This overlay will not only provide protection for the polythene, but will also prevent the rare occurence of water getting beneath the sheet and forcing it up to the surface.

The sides of the lake above the projected water line can then be soiled and seeded to marry in with the surrounding fairways and rough. All that is then necessary is to fill the lake with water if a natural source is not available, and this is quickly done from a hydrant point in the irrigation system. Such a point should be included in a watering system where artificial lakes are to be built as periodic topping-up may be necessary.

One or two more additional points which may be of interest to you:—

1. There is a danger that outfall drains from fairway schemes may come into the lake and possibly flow under the polythene. This is easily remedied by introducing short lengths of alkathene pipe onto the end of the tile drain and bringing it through the polythene. A thermal weld is produced at the point where the pipe breaks the sheet and so perfects the seal.

2. We have found that a blinding

2. We have found that a blinding layer of shingle on top of the soil or sand backfill prevents any

debris floating in the water and so clouding it. A useful fact especially for lakes around the clubhouse which can be planted and stocked with fish.

Now to the economics of all these operations:—

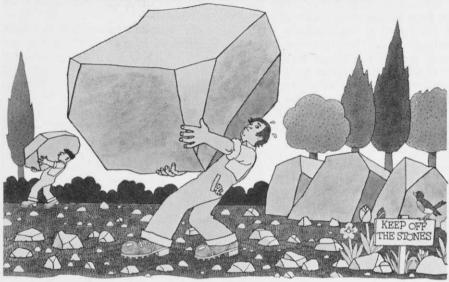
Let us take construction first—say a proposed lake of some 2000 square vards and 5 feet deep. The bulk excavation of this lake would cost about £300 but as already described, such an expenditure can be offset against the earth movement costs of building a green or tee. General trimming and final preparation would run out at £50. Now using Butyl lining, the supply and laying process would cost about 80p-to £1 per square vard, whereas polythene sheeting would be between 25p and 40p per sq. vd. The cost of the backfilling with sand at a depth of 3"-4" would be around £250 and then the water filling is just an incidental.

So using polythene sheeting one could have a fairly large lake or reservoir for about £1,500 or 75p per square yard. Now compare this with a bunker of say 60 square yards. At least £10—£15 to construct, and with good quality sand £50—£60 could be expended in all. Thus £1 per square yard to compare with 75p for a lake.

On the question of maintenance of these hazards, there is a minimal outlay. The occasional topping-up and removal of surface weeds, and perhaps a spray with a selective herbicide, should it be found necessary. But a bunker—a high labour content in maintenance. Raking, cutting the banks and surrounds, and weeding—as regular items and also the replacement of sand probably each season. Obviously, all these can work out at quite a sum taken over a year.

Of course, I am not saying that we should replace bunkers with water hazards, but I feel that there is a strong case on economic grounds alone to include some water hazards

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on a new or existing course during constructional activities.

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### Questions on

### ARTIFICIAL WATER HAZARDS

- Q. Could Mr. Swan develop the commercial aspects that the water would cost the club several thousand pounds a year and with the nationalisation of water with the Water Resources Act, what is that going to mean to the average Golf Club.
- A. When we investigated the economics of the supply alone from the Water Board, they gave us that figure of 40p a thousand gallons, and on the calculations of the average amount that you would use in the summer, then it would work out about that figure. I have really no idea what it might come to following the reorganisation.
- Q. We have just finished constructing a course and introduced a small reservoir around one of the tees and are using this to take water off for an automatic system, and we went through the usual channel of finding liners, touched on a rubberised one which was going to cost around £2,000. So we went for the polythene in the end, but since then I've heard of another product and wondered whether you had had anything to do with it, this bitumastic solution which is pumped in by

tanker as the water is filled up, because we are on chalk which does not hold any water anyway naturally.

A. It is something we have not used. I think on some of the courses in Spain they have sprayed a type of latex onto the surface of the walls at the base of the lake to hold the water. It is something we have not at present used in this country, we have, in fact, only used the two types of lining and we have found, in fact, polythene to be very successful indeed.

Q. Could you enlarge on the thickness of the polythene?

- A. It is a 1000 gauge. I think on the little brochure I gave out it will give the actual thickness (Q. about 4-5 millimetre?). It is not as thick as that. I have some samples so we can look, if the questioner would like to see me afterwards.
- Q. Surely in the long term, an artificial base is bound to suffer from the effects of trees and their roots?
- A. Yes, I would agree, if you have a lot of large trees about, then obviously the roots may go into it. I mean we have not had any evidence of this at all because we have never put a lake in, close to a tremendous amount of very mature trees. We have never had any experience of the polythene being punctured or the butyl being punctured from the outside at all, but I mean theoretically, certainly it is possible; but it is something we have not had any experience of at all.
- Q. In constructing lakes, I always find it a problem to decide how deep to make one's artificial lake, but obviously you don't to make it too deep from the cost consideration. At the same time I am quite sure one must not make it

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too shallow, because if it is too shallow, you do greatly accentuate the week problem, and what sort of happy medium have you found in your experience.

Well, we have found that we have built one or two fairly shallow and we have found that one or two people have gone in. with the polythene lining, and punctured it with their spikes. It has got to be deep enough to deter the golfer from going in after his ball, obviously it has got to be shallow enough not to present too much of a danger problem. The golfers may stay out of it, but there may be children who play around unnoticed by the greenkeeper, who could easily go in and the deeper it is the worse it is from the danger point of view. You have to have a compromise between the amount of water you require to, say, irrigate the course, the capacity required within the lake and some compromise between the surface area and the depth. It all has to tie in with the overall design. Down at Foxhills we have got about 5 foot and we have never built one shallower than about 3'6".

Q. I have been to a golf course which has been recently constructed and they made a lake there, and the banks on the lake were very high. Now when it was completed, it was done with polythene, and when the banks were completed and the banks started to grow, it looked very nice, but after 2 years of the banks being there, they started to slide down the polythene into the lake. This is what has happened and the polythene has been left open. Do you have a solution?

A. The banks must not be constructed more than 1 in 3 because

in order to get the soil to stay on there, you have to have gentle banks. Polythene is a smooth surface itself and therefore it is easy for sand or soil to slip down. Now either you build gentle banks, or if you are in a position not to be able to have gentle banks, as you are, you would be better either not putting soil on the banks which is obviously a bit dicey with polythene, or else using some other type of surface to put on the banks. You can get types of concrete blocks which you can put soil or sand in and seed over the top, which are specially designed for surfaces where soil won't stay on because the angle is so great. This is a possibility. Having used polythene and now you have it exposed, you can either try and put the soil back and make sure it holds, or you have to cover up in some way, so have to use some other form of seeding.

### (Mr. Swan Senior)

If the banks are rather acute or severe then you could fill the bottom of the lake with a greater depth of soil. If the banks are sheer, then you raise the level of your fill inside, so that, in fact, that will hold any slip of soil down the surface of the polythene. Obviously if there is a 45° angle, you can raise the amount of fill on top of the lining by 1' or 1'6" therefore making the water slightly shallower. This then alters the angle of your bank and holds the material from slipping.





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## **HORWOC**

### CUTTING THE FUEL BILLS AND THE GRASS

K. R. Buckeldee

Product Training Manager Ransomes Sims and Jefferies Ltd.

Although the immediate threat of petrol rationing has receded much higher fuel prices now seem certain, and fuel saving in all spheres becomes increasingly important.

Golf clubs must be wondering how they can cut their fuel bills as much as possible and still keep their grass

in good trim.

Ransomes of Ipswich have sug-

gested some answers.

There is not much that can be done immediately at manufacturer level to increase economy, but a great deal can be achieved at the customer/operator/service level. Fuel economy is affected by the state of the machine, and its engine, and its usage.

Most motorists are seeing lower petrol consumption since the introduction of the maximum speed limit

of 50 mph.

A similar saving can be made with a mower by reducing speed, using less h.p. and less r.p.m. In the case of governed engines, a reduced load can be achieved by cutting in a lower gear. The removal of trailing seats is another obvious way to save excess power and therefore fuel.

Cylinder cutters are more efficient users of fuel than rotary or flail cutters, which put higher loads on the

engine.

Frequency of cut can be reduced. Increasing the interval between cuts from say seven to ten days would save fuel. Leaving grass uncut for as long

as 14 days would not, as the extra growth would demand a higher power output and more fuel than two easier cuts.

Fuel can be saved by a slightly higher height of cut, which keeps the blades out of the 'mat', and prevents soil scalping, which demands more work from the engine and therefore more fuel.

Keeping out of the 'mat' and stopping scalping will also have the effect of keeping blades sharper longer, an important factor in fuel saving when the efficiency of the machine itself is considered.

Correct adjustment of chains and belts to prevent slip, and lubrication to keep bearings free, all have their place in keeping fuel consumption down.

Correct cylinder adjustment with only a slight rubbing contact between the two cutting surfaces is also of prime importance. The idea is to make the motor mower as easy to push as a hand mower, that it so demands the least possible power from the engine.

The final area for fuel saving is the engine. Here attention to detail can bring considerable savings. Cleanliness is important. Making sure there are no leaks in taps and pipes and careful filling with no spillage may seem obvious precautions, but savings can be made this way.

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If the air cleaner element is dirty, it has the same effect as running the motor with the choke out, starving it of air, and wasting fuel. Evidence of this is thick black smoke from the exhaust. Excessive use of the choke should also be avoided.

The ignition system is very important. Spark plugs should be clean and gaps correct. Ignition cable and suppressor caps should be checked for cracks, contact breaker points checked for cleanliness and correct gaps, and the ignition timing should be correctly set.

It is not recommended to fit the fuel economisers on sale as no benefits have been found from these when subjected to controlled tests.

Diesel engines have a more precise fuel system, but attention must be paid to fuel injector pumps, injectors, air cleaners and pipework.

The same attention to usage and the efficiency of the rest of the machine as in the case of petrol engines will result in the same fuel saving.

Although rotary and flail mowers are less efficient users of fuel over large areas than cylinder mowers, in small areas where appearance is unimportant, fuel may be saved by leaving grass to grow over a longer period of time and then cutting it down with a mower of one of these types.

If a rotary is used, keeping the blades sharp will save fuel, as will making sure flail shafts are balanced and the flails sharp.

But to maintain an acceptable finish and a proper standard of hygiene in areas of grass used by the public, cylinder mowers are most efficient and the best means of conserving fuel.

There is no single way to cut bills but close attention to detail in the care and maintenance of the machine and its engine, and thoughtful usage will in many cases result in considerable savings.

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Billy Goat has an insatiable appetite for rubbish. No special diet, this machine picks up leaves and grass cuttings, plastic cups, newspapers, cans and even bottles . . then reduces all to a mere

fraction of its original size and holds it in a huge dust-free bag ready for disposal!

Get the facts NOW. Pin this page to your letterhead and post to: ANDREWS LAWN EDGERS LTD., The Garden Machine Centre, Sunningdale, Berks, SL5 0JJ. Telephone: Ascot 21960.

### MEWS

Lloyds & Co. Letchworth Ltd., announce the appointment of SISIS Equipment (Macclesfield) Limited, as Concessionaires for their range of Professional grass cutting machinery, in Scotland.

Information about the products of both Companies can be obtained by contacting the SISIS Scottish Office at 24 The Esplanade, Kirkcaldy. Fife, telephone Kirkcaldy 62325.

Richard Scotcher has been appointed general manager of the recently formed company Ransomes Grass Machinery (Scotland) Ltd, which markets Ransomes grass machinery and other horticultural equipment from branches in Edinburgh and Glasgow. . . .

A major irrigation contract for an automatic scheme at York Race Course has been gained by the Plastic Tube and Conduit Co. Ltd. of Aldermaston, Berks. They are the sole U.K. distributors for the world famous RAINBIRD irrigation and watering equipment, which will be used throughout this scheme. P.T.C. Co. Ltd. have designed the complete system which will be installed at York, as part of their comprehensive design and advisory service, available to all clients whether horse race courses, golf courses, parks or other areas of use.

The scheme has been designed to keep the York course in excellent condition, as far as possible, throughout the racing calendar, providing every possibility of good meetings for the enjoyment of the racegoers. When designing the scheme the P.T.C. had to take into consideration the general



topography of the course, the predominant soil type—clay—the average rain-fall and prevailing weather conditions during the season. With these facts as a basis they have produced a scheme which, with judicious use, will keep a good grass coverage and moisture in the track.

Automatic control of the 12 sections into which the course has been divided will be effected by the RAINCLOX controller. allow the course to be watered at night, the ideal time for maximum benefit, and is also indicative of the labour saving which can be made with the RAINBIRD equipment, as nobody needs to be in attendance during the working period. The RAINCLOX can be set to operate over a 14 day period, selecting the days or nights that irrigation is required: a 24 hour clock is utilized to select the hour at

which irrigation commences. Solenoid valves control each section individually—they can be set to operate for up to 60 minutes, and in one irrigation cycle can be missed altogether or repeated, thus allowing for varying water need in different sections of the course. Applications at the rate of 1/10" to any one section in 18 minutes, or the entire course in 3 hours 36 mins. are possible with this RAINBIRD system.

Manual control can be used when needed, mainly for washing dew or frost from the turf, watering in fertilizer and similar operations.

Work on the scheme will be completed before the start of this year's flat racing season and racegoers attending the York meetings will be able to enjoy the benefits of a course at which irrigation plays a major part in the turf culture programme.

### So why not use an ATCO VARI-GANG MK.II and have two professionals on the job!

When you have cast your professional eye over it we believe you will agree with us that the latest Atco Vari-Gang Mk. Il is professionally made for professional users like yourself.

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Whether a single unit or towed triple is required, higher multiples or even a mounted gang mower, the Atco Vari-Gang Mk. II can fulfill the need perfectly.

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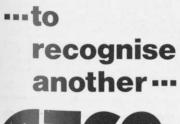
A 15" wheel base ensures that furf undulations can be closely followed with the minimum risk of scalping, however severe they may be.

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ptc

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Sterling Works, Bath Road ALDERMASTON, Berkshire Tel: Woolhampton 2346 Please send details of Rainbird irrigation for golf courses :

Name

Address

BGG/1

## Just a glimpse of the past

**Patrick Smartt** 

The road to the village, a side road, passes between the 1st green on the left, and the teeing ground for the

2nd hole on the right.

A circumstance liable to cause delay in our progress. I have the perhaps unusual habit of stopping to allow golfers to cross the road from one to the other. Besides, the whole length of the 1st hole is visible, and the drives to the dog-legged 2nd, therefore important, can be watched.

Driving along that road in February, my rheumy old eyes looked upon a scene that was so unexpected and pleasurable, I stopped in wonder.

Every golfer had his bag slung over his shoulder. Not a trolley in sight. The years slipped back. It is part of life, that pauses in habit leave a gap in memory. Present custom takes over. We have, except in moments of nostalgia, come to accept the trolley and the absence of caddies. Come to think of it, I have never pulled a trolley. Unable to stop, there had to be a caddie to tee the ball. It was as well that it had to be called a day, before that race has nearly disappeared.

A sudden glimpse of a past world, when golfers had but few clubs in drainpipe bags, carried one farther back than actuality. An old picture had burst into life. It was some time before the mind returned to the immediate, and we drove on again.

A little piece of history revived. Should anyone have suspicions, let it be known, that unlike the Irishman who: "T'ought I was took bad again" when he saw a hare among the runners in a steeplechase, the cause of this delightful return to old golf was the wettest February known. Trolleys had, rightly, been banned.

Thinking on this, memory went back twenty years, and while granting those weeks of rain, I had strong doubts that in that era the course

would have been so soggy.

It is a high course, topping the 700 feet contour at the home green, and a little more from where we start. It was until the early 1960s, a typical heath and heather golfing ground, though with clay not far beneath the surface. The fairways, like those at Walton Heath, and at one time the Old Course at St. Andrews, were of thin growth, meaning tight lies, and therefore skilful execution of the second shots. Worm casts were unknown. Indeed you could play two hours after a downpour.

During a wet spell, members from a course at a nearby town, would come over because theirs was too

muddy.

Changes in a course's nature, not to be confused with architectural alterations, are also handmade. My opinion which doubtless will bring scorn from some greenkeepers, in particular green committees, is that 'progress', or the inverse in the art of shot-making, demands grassy lies for the second shot. No take it as it comes, even after a good drive. The ancients got on with it, even the professionals playing for their living.

Those who have done me the honour of reading my effusions before, will know what is coming. Yes. Those infernal chemicals. Years of application have produced what is unquestionably a good playing surface, but to one old reactionary it is park course golf. It takes longer to dry out, and requires more mowing. There is another cause of this surface water retention. The cutting of the heather. It is seldom recognized that heather roots act as drainage channels.

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There has been no notable improvement in the scores. When there are, it could be attributed with some surety to shorn rough. It is the old question of whether the figures returned on the card take precedence over the fun of accepting a real

challenge.

After that grouse, it is a pleasant surprise to record the unexpected consequence that many bag carrying players enjoyed themselves. My wife, for one, said she had never felt so relaxed. Do not ask me to explain that one. It may be significant that all had to discard some clubs, to lighten the bag. Thus, the favourite ones were chosen, and the difficult ones left out. Apart from the problem, during the round, which to choose from the caboodle of fourteen, they would play better with the clubs with which there is sympathy.

Anyone with a knowledge of golfers will be certain that the whole load will come out, when trolleys are permitted again. A lesson wasted.

There must be gratitude that, contrariwise, modern methods should evoke old golf, even briefly. I was glad: Somehow, it brought the course alive.

### BIG CHANCE FOR WELL-OFF GREENKEEPERS

V.I.P. TOURNAMENT PATRONS FOR  $\pounds 100$ 

Prestige facilities at all professional golf tournaments, and at the Open Championship, are announced today by the Professional Golfers' Association, for a limited number of 50 golf enthusiasts who wish to become Tournament Patrons of the Association.

The privileges, which will cost an annual subscription of £100, will include free entry to all tournaments; reserved parking accommodation; admission to the Clubhouse; a place as guest at the Association's Annual Dinner in London at the end of the season; and a copy of the P.G.A. Annual Tournament Guide with its facts, figures, and pen portraits of professionals who regularly play the Circuit.

The new band of P.G.A. Tournament Patrons will also receive a £26.40 season ticket for the Open Championship—the R. & A.'s topprice ticket—with reserved seating accommodation, and while they are at the Open Championship they will be able to use the P.G.A.'s own Private social marquee.

Colin Snape, Secretary of the P.G.A., in making the announcement, said: "A modest Tournament Patrons' Scheme has existed in the past, but the Association has held it in abeyance in recent years. We believe that what we are offering for £100 is extremely good value to the many golf enthusiasts who attend several of our events and the Open Championship itself during one season.

"Our aim is to give them 'V.I.P. treatment'. They will be easily identifiable on arrival at a tournament by their special badge and permanent car windscreen label. We feel it will be a nopular move, and in granting membership we will work strictly on a first-come-first-served basis with those who apply.

"Our 50 Tournament Patrons will be a quite separate category from the Association's existing Vice-Presidents. Anyone who is interested should write to me here at the P.G.A. Headquarters, Kennington Oval, London S.E.11."

### Golf course watering problems solved! CAMERON IRRIGATION

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With Cameron Automatic Pop-Up Sprinklers plus the Cameron Electronic Con-



trol Panel, you can water your course any time you like, even apply fertiliser and disperse dew - automatically! Save labour, cut costs!

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labour. Cover the average golf green from one position. Adjustable water jet.

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FREE ADVICE. Contact us when you have an irrigation problem. Any time, Write or telephone NOW for details, 24 hour answering service.

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Harwood Industrial Estate, Littlehampton, Sussex. Telephone: Littlehampton 3985 (5 lines)

### WANTED FOR 1st OCTOBER 1974 EDITOR for the BRITISH GOLF GREENKEEPER DUTIES:

Obtaining suitable articles and 1. editing, reviewing and selecting trade information.

Receiving Section Secretaries' Monthly Notes, editing, typing

out and forwarding.

Maintaining List of Members and Subscribers. Adjusting for change of address, cessation of membership etc.

Mailing copies monthly direct to Subscribers overseas. Sending subscription reminders and maintaining records.

5. Maintaining books of accounts.

Producing monthly editorial or suitable news features.

7. Maintaining contact with the publisher and proof-reading.

The present Editor is retiring at the end of this season, after 16 years, and

has notified the Executive Committee of his desire for a replacement.

Up to 1972 the duties included the obtaining of advertising, receiving blocks and despatching, sending out proofs, receiving amendments and incorporating. Sending out accounts monthly and recording payments.

That work is now mostly done by the publisher so the rest is an interesting hobby for anyone interested

### A comprehensive range of superior machines designed and built to suit operators' requirements. For brochure and full details contact us now. ATTERTON & ELLIS LTD Dent. B.G.G. Iron Works, Haverhill, Suffolk. Tel: Haverhill 2312/3

### NEW PRODUCTS

Two new machines for the maintenance of sports grounds and amenity areas, have been introduced by SISIS Equipment (Macclesfield) Ltd.

SISIS Tractor Mounted The Trulevel Roller 6ft, wide, is developed from the principle proved over 30 years on bowling greens. The three rollers mounted in a rectangular frame, ensure constant ground contact of at least two of the three rollers. Thus a true, level surface having once been achieved, can be maintained by this roller combination. By a simple lever mechanism all the weight can be transferred to the centre roller only. A full width brush can be fitted to give a brushed finish to the surface when desired.



The SISIS Tractor Mounted Rake/ Lute/Brush is an 8 ft. wide combination of three necessary maintenance operations on hard porous surfaces, enabling simultaneous working of any combination of these three implements in the one frame. In most instances, this will allow coverage of the area in one pass, reducing the time and labour and also reducing the compaction effect of tractor wheels. The extension frame, which enables the Lute and Brush to be connected to the main frame for simultaneous use, can be purchased separately and added to existing frames of this SISIS category.

New All-British Mower launched by Allen Power Equipment.

New for the 1974 cutting season, the Allen Challenger Mark 6 is a single speed 22-inch Self-Propelled Rotary Mower following in the footsteps of the popular Mark 5 machine.

The only all-British mower in its class, the Challenger Mark 6 features a 171cc Villiers "Vertex" two-stroke engine, large five pint fuel tank, and extra large diameter rear wheels with chain drive.

The very low centre of gravity of the new Challenger, combined with the two stroke engine, makes this machine particularly suitable for bank work.

Also featured on the Mark 6 is the Allen patented aluminium conical cutter disc.

Safety is a prime consideration with this mower, as is shown by all the working parts being totally enclosed by a one piece steel guard, and the micrometer cutting height adjuster, controlled from the operator's position, which allows cutting height to be varied from 1/4".

An entirely new safety device, especially designed to prevent machine damage has been incorporated between the crankshaft and the cutter disc.

Priced at £189.00, the Allen Challenger Mark 6 has a working speed of around three miles per hour, according to the throttle setting.

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### A MAJOR ADVANCE IN TURF DISEASE CONTROL

### by N B Thain, Brand Manager, Pan Britannica Industries Ltd

Groundsmen, like everybody else, will always welcome innovations which make life easier for them. One way of easing their lot is to help them maintain a disease-free turf as easily

as possible.

Three major fungal diseases commonly cause turf diseases in the UK—Fusarium Patch, Corticium (Red Thread) and Dollar Spot. In the past, the groundsman has had few satisfactory methods of controlling these problems. Products available either discoloured the turf or, as in the case of mercurial compounds, they were associated with some degree of risk. Recently, however, a product has become available which has been hailed by groundsmen as a major

step forward in disease control—a broad-spectrum fungicide which not only controls Fusarium, Corticium and Dollar Spot in one go, but does so safely and economically into the bargain. This product—Benlate—is the world's first broad-spectrum systemic fungicide, and extensive trial work over the last few years at the Sports Turf Research Institute has proved its efficacy time and again.

For complete control of the three diseases mentioned, it is recommended that Benlate be applied as soon as disease symptoms appear. Application should be as an overall treatment and not as a spot application. The dose should be repeated at 3-4 week intervals as necessary. The spray is applied at 2 gallons per 1,000 sq. ft. at the following doses: Fusarium—6 oz/1,000 sq. ft. (approx 18 lb/acre); Red Thread and Dollar Spot—4 oz/1,000 sq. ft. (approx 12 lb/acre).

golf course design and construction by

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### Melnor Travelling Sprinklers

There can be few Head Greenkeepers who, given the opportunity, would not jump at the chance of having an automatic watering system installed at their Golf Club. The advantages of automatic watering are numerous, and well known, but many Greenkeepers must regard the possibility of their Club adopting such a system as being highly unlikely.

The basic factor which unfortunately precludes many clubs from installing an automatic watering system is cost. It is estimated that conversion costs per green (in most cases involving the installation of new pipework) could amount to £500/£600 (approximately £9/£12,000 for 18

holes).

Paradoxically, the chance less welloff clubs have of enjoying the benefits
derived from an automatic watering
system, e.g. reducing course labour
costs, becomes increasingly remote as
world commodity and product prices
continue to increase at an alarming
rate. However, it may interest, and
perhaps reassure Greenkeepers, that
an "automatic" sprinkler is available
(at a very reasonable cost) which will
meet many of the criteria laid down
for automatic pop-up sprinkler
systems, i.e. the MELNOR range of
TRAVEL-MATIC SPRINKLERS.

The unique range of TRAVEL-MATIC sprinklers are manufactured by Melnor Industries of the USA and during the past ten years or so, several hundred thousand units have been sold. Although MELNOR produces its own underground sprinkler system,

the TRAVEL-MATICs form part of their very large and comprehensive range of domestic lawn sprinklers. During the past three years in which the TRAVEL-MATIC has been sold in the UK, an increasing percentage of annual sales has been taken up by "professional" users, e.g. Bowling, Tennis, Cricket Clubs, Parks Departments, Growers, etc.

Four models of the TRAVEL-MATIC are available, the basic difference between them being the length of hose the sprinkler will

accommodate, i.e.

	Water coverage
	up to:
Super (model 3803)	
300 ft. of $\frac{1}{2}$ " hose	20,000 ft.
Deluxe (model 3503)	
240 ft. of ½" hose	16,000 ft.
Standard (model 2503	)
150 ft. of ½" hose	10,750 ft.
Compact (model 2203)	
100 ft. of $\frac{1}{2}$ " hose	7,900 ft.

Satisfactory coverage can be achieved at average water pressure (diameter of throw x hose length = area watered). Where conditions are adverse, the self-travelling sprinkler is the only unit that can be adapted to meet the situation.

#### ASSEMBLY

Initial assembly of the TRAVEL-MATIC is simple and straightforward:

 The appropriate length of hose is connected to the TRAVEL-

MATIC drum (by means of brass coupling provided). The hose is then fully wound on.

A shut-off valve is connected to 2.

the free end of the hose.

The required length (and dia-3. meter) of feed hose is connected to other side of shut-off valve.

The free end of the feed hose is 4. connected to the water point and the shut-off valve is sited in the desired position.

### Operation

Having picked up the end of the guide wheel frame, the operator walks forward leaving a trail of hose on the ground behind him.

(The hose pattern laid down will depend on the nature of the area to be irrigated, but can be devious as

one requires.)

On reaching the point where one wishes to commence watering, the following steps are taken:

The width and fineness of spray is selected by adjusting the spray-

arm nozzles.

- 2. The TRAVEL-MATIC's rate of speed is selected by adjustment of the control knob. All models can be set for stationary sprinkling. The Super and Deluxe versions have two forward speeds. while the Standard and Compact versions have only one forward speed.
- 3. The guide wheel is positioned on top of the hose.

The water is turned on.

How the TRAVEL-MATIC Works

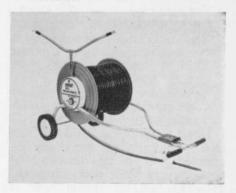
Around the base of the vertical tube, which supports the spray arm and through which the water passes. is a fixed gear. This gear is connected to a series of other gears, the last one being permanently fixed to the sprinkler's hose drum. It therefore follows that the rotation of the spray arm will cause the drum to revolve, (as-

suming that the TRAVEL-MATIC has been set to travel) and thus reel in the hose. In effect, the TRAVEL-MATIC is pulling itself towards the water point and the guide wheel, resting on the hose, ensures that it faithfully follows the laid down hose

Eventually, the guide wheel will make contact with the shut-off valve. effectively stopping the flow of water to the sprinkler, and thus bringing it to a complete halt. By the time the TRAVEL-MATIC comes to rest, the complete hose length will be back on the sprinkler's drum.

Some advantages of the TRAVEL-**MATIC Sprinkler** 

The spray pattern formed by the revolving spray arm results in very even coverage with little variation in the density of application across the width of spray (up to 60 ft.) and fineness of spray, controlled by adjustable nozzles.



- 2. The TRAVEL-MATICs are both easy and quick to set up. Even the largest unit should take less than two minutes to connect up to the water point, run the hose out and turn the water on.
- With its ability to follow any laid down hose pattern, The TRA-VEL-MATIC can be used to irrigate irregular green shapes without excessive water being

laid down due to constant "overlap" (which is a feature of the impact "part circle" sprinkler's

green watering pattern).

4. Whereas the segment, or part circle, sprinklers are, perhaps because of poor water pressure or faulty mechanical action, somewhat prone to dwell or stick at the end of each sweep, the TRAVEL-MATIC can be relied upon to spray evenly due to the constant rotation of the spray arm. This is an important point to bear in mind when one considers the problems arising from unattended, or faulty, sprinklers, i.e. flooding, water wastage.

The value of night time water-5. ing-in providing considerable reductions in water useage (less evaporation and transpiration loss) and allowing full utility of club facilities, is well known, as are the problems in implementing night time watering by means of ordinary portable sprinklers. However, the TRAVEL-MATIC's ability to shut itself off automatically, having completed its task of laying down a precise bed of water over a prescribed provides an economic answer for those clubs who cannot afford to install a fully automatic underground system.

To be worth doing, night watering should be carried out completely unattended and in this context, the Greenkeeper, when considering the TRAVEL-MATIC, should bear in mind the security of those objects left out on the course overnight.

#### Pressure

The number of TRAVEL-MATICs which can be operated at any one time depends on several factors, e.g. the pressure available from the club's water source, the size of TRAVEL-MATIC being used, the diameter (and length) of hose connected from water point to the sprinkler.

The water pressure required to operate the TRAVEL-MATIC in a satisfactory way is a good deal less than is required for most other types of sprinkler, and this can, of course, be useful where water to the greens is provided by public mains. Apart from the hose drum, TRAVEL-MATICs are manufactured from non-corrodible materials. The gears are made from a nylon material.

### NEW PRODUCT

A unique plastic capable of being nailed to wood without splitting is being used to produce letters, numbers and backgrounds for tee boards, and other signs around the golf course.

The plastic, called Duraply is marketed by **Sharman Parker Ltd.** of **Chapel-en-le-Frith, Cheshire.** It is rot-proof, fade resistant, simple and effective to use. If letters or numbers need to be changed a pair of pincers are used to remove the nails, and then the new letters or figures can be nailed on.

By maintaining a small stock of Duraply numbers, letters and backgrounds clubs can now make or alter tee-boards and other signs at a moment's notice with very little cost.

As well as letters and numbers, Sharman Parker are also offering a range of coloured backgrounds.

Further information is obtainable from Sharman Parker Ltd., Smithfield Mill, Market Street, Chapel-en-le-Frith, Stockport, Cheshire, SK12 6JS.

## Situations Vacant

### HEAD GREENKEEPER

The Irvine Golf Club, Bogside, Ayrshire requires the services of a Head Greenkeeper. Generous salary and good accommodation provided. Please reply in writing to:

> The Secretary Irvine Golf Club 151 High Street Irvine Ayrshire KA 12 8AD

### ROYAL BLACKHEATH G.C.

Require experienced Head Greenkeeper. Good salary and accommodation provided. Apply with references to Secretary Court Road, Eltham, London S.E.9.

### HEAD GREENKEEPER

required. Good salary and modern accommodation is offered to experienced man. Apply to:

The Secretary, Scraptoft G.C., Scraptoft, Leicestershire.

### LONDON BOROUGH OF WANDSWORTH

#### Head Groundsman

#### -King George's Sports Centre

Applications are invited from experienced and qualified groundsmen for the post of Head-Groundsman, must be fully conversant with the use of machinery and able to handle labour under incentive bonus conditions, must be able to drive. Preference will be given to the members of the Institute of Groundsmanship.

A working week of 40 hours, 5 day, occasional overtime, rate of pay, G.L.J.C. Group G £27.77 plus  $17\frac{1}{2}\%$  plus C/H rate of £1.40 plus bonus (Average weekly pay £42.50).

#### Foreman

#### -Wandsworth Park

Applications are invited from suitably qualified and experienced person for the maintenance of ornamental and recreational facilities, person must be able to control labour under incentive bonus conditions.

A working week of 40 hours, 5 days with occasional overtime, rate of pay G.L.J.C. Group G £27.77 plus bonus (Average weekly pay £29).

Applications in writing stating age, qualification, experience present and past appointments with names and addresses of two referees to whom reference can be made to the Parks Superintendent, Central Depot, 51-55 Garratt Lane, Wandsworth, SW18 4AA. Please quote reference BGG.

#### FIRST CLASS HEAD GREENKEEPER

Immediate vacancy at busy West London Golf Club.

Rent free house available.

Applicants must have thorough knowledge of modern machinery, handling greens staff etc. Apply to: SUDBURY GOLF CLUB LTD., Bridgewater Road, Wembley, Middlesex HAO 1AL. Tel: 01-902-3713.

## Resident Head Greenkeeper

£2,300

The John Lewis Partnership is to build an 18 hole golfcourse at Cookham, Berkshire

Work on the course is to start shortly. We would want the greenkeeper as soon as possible so that he can be fully involved throughout. He would eventually be responsible for the maintenance of the course and must have a thorough working knowlegde of all that is required to develop and maintain the course to a very high standard.

A modern three-bedroom house adjacent to the proposed course will be provided rent and rates free.

As a member of the John Lewis Partnership, he will be entitled to excellent staff benefits which include:

A profit sharing scheme

Non-contributory pension scheme

Shopping discount in our department stores and Waitrose Supermarkets

4 weeks annual holiday

Please write or telephone for an application form to:

Central Department of Personnel John Lewis Partnership Oxford Street London W1A 1EX Tel: 01-499 2347



The John Lewis Partnership



### Special Occasions

- May 15 East Midland—Spring Tournament — Longcliffe G.C.
  - 15 Southern Spring
    Tournament Home
    Park G.C.
  - 15 Northern Spring Tournament — Harrogate G.C.
  - 16 North-West Spring Tournament, Dean Wood G.C.
- June 5 Southern Annual General Meeting and 18-Hole Medal Dulwich & Sydenham G.C.

12 Northern Section — President's Prize.

- 13 Midland Section President's Match v Greenkeepers at Handsworth—4 p.m.
- 25 Welsh Section Annual General Meeting John Duncan Cup Southerdown G.C.
- July 3 Southern v Midland Match — Crews Hill G.C.
  - 15 Midland Summer Tournament 10 a.m.

and A.G.M. 4 p.m. Habberley G.C.

- Sept. 1 CARL BRETHER-TON BOWL—Handsworth.
  - 6 Southern Buffet/Dance
    —West Essex G.C.
  - 11 Welsh Section—President's Shield—Pennard G.C.
  - 11 Southern Autumn
    Tournament Burnham Beeches.
  - 18 East Midland Autumn Golf Tournament — Chilwell Manor G.C.
  - 18 Midland Section— Autumn Tournament—Handsworth G.C.
  - 30 B.G.G.A. 1974 Annual
- Oct. 1/2 Tournament and A.G.M. Isle of Purbeck G.C. Studland, Swanage, Dorset.

10 Southern Section— Secretary's Match— Stoke Poges G.C.

### **Northern Section**

Chairman:
J. Scott
Wetherby G.C.

Hon. Secretary: W. Heeles

### **Monthly Meetings**

A Slide Show of the many visits to the Highlands was put over to the members at the January meeting by Mr. F. G. Smith. If any Members have never been to Scotland, I feel sure that after seeing these slides, they will make the effort. A very big "thank you" for an entertaining evening.

The February meeting was a Lecture and Slide Show on the many different types of machines in the turf culture field. Our thanks are due to Mr. Burt from Sisis Ltd., also our thanks to Mr. Mountain for supplying

'the eats'.

The March Lecture was on the subject of Trees. Once again we were privileged to have the pleasure of listening to Mr. M. J. Galloway from the Economic Forestry Commission.

### Forthcoming Event SPRING TOURNAMENT

The Spring Tournament will be held at the Harrogate Golf Club on Wednesday 15th May 1974, by courtesy of the Committee.

### **President's Prize**

The President's Prize will be held on the 12th June 1974.



Northern Section Committee

### South Coast Section

Acting Secretary:
N. M. STIMSON
North Wilts. G.C.
Devises.

#### March Lecture

On Tuesday evening, 5th March 1974, an audience of thirty enjoyed a very interesting lecture by Mr. Ted Riley of Ransomes, on the subject of "Turf Maintenance Machines". Emphasis was placed on the use of aerifiers and verticut machines and the topic was illustrated by slides taken during Mr. Riley's recent visit to America. After question time, all members took advantage of the

opportunity to inspect the many

machines on display.

Our very grateful thanks to Mr. Ted Riley for a most successful lecture, and to Mr. Marshall for his invaluable help. We are also indebted to Mr. P. Huxley and staff for the use of their premises at The Dean, New Alresford. We much appreciated the warm welcome we received and the marvellous refreshments which were provided.

### Midlands Section

Chairman: G. HART Hon. Secretary:
R. Goodwin
2 Greenkeepers Cottage,
Ashridge G.C.
Ashridge Park,
Berkhamsted, Herts.

#### Annual Match at Handsworth

The match at Handsworth between the President's team and the Greenkeepers will take place on Thursday evening, 13th June. This match will commence at 4 p.m. and I look forward to seeing a good turn out of Greenkeepers. Please come early so that we can get the game started on time.

### A.G.M.

The Annual General Meeting will take place at Habberley Golf Club, Kidderminster on Monday afternoon, 15th July at 4 p.m. The Annual Summer Tournament will take place over 18 holes starting at 10 a.m. The Habberley Golf Club are again kindly giving the Prizes for this event and I would be pleased to receive entries from all members wishing to play in this event by July 3rd.

#### **Annual Dinner**

The Annual Dinner took place on Friday evening 15th March at the Park House, Sutton Coldfield and was followed by Dancing to the "Fred Key Trio" until midnight. Well over 100 attended this function, and we were very pleased to have Mr. Norman Russell preside

throughout the evening.

After presenting the Loyal Toast, Mr. Russell extended a warm welcome to all present and wished everyone a pleasant evening. George Hart replied on behalf of the Association, while from the Section, Vic Smith welcomed the visitors and members of the trade. Mr. Mike Edwards, Secretary of the Green Committee at Handsworth Golf Club, replied on behalf of the visitors and paid tribute to Greenkeepers for tending the Course throughout the year.

Mr. Russell thanked the Committee responsible for making the arrangements. We are indebted to the donors of Raffle Prizes, and to all present for the grand support given to the Raffle to raise more than £30,00.

### Subscriptions

The Annual Subscriptions are now due for 1974, and should be sent to Mr. Cashmore our Treasurer, at—76, Four Oaks Common Road, Sutton Coldfield, Warwickshire.

There are still a few members who have not yet paid their 1973 subscriptions, and Mr. Cashmore must receive these straight away or the Journal will be cancelled as from now and the unpaid member will not be eligible for any further functions.

### **New Members**

We welcome to the Section, D. Jones, Head Greenkeeper at North Worcestershire Golf Club, C. Gough, Head Greenkeeper at Broadway G.C. who has recently moved from the Welsh Section. D. Hill, Assistant Greenkeeper at Stourbridge Golf Club.

### Southern Section

Chairman: F. W. FORD (South Herts.)

Hon. Secretary: F. W. FORD 68 Salcome Gdns., Mill Hill, NW7 Tel: 959 2847

### March Lecture

Dr. William Meyer, Ph.D in plant pathology and Director of Research in Warrens Turf Nursery, Inc., paid the Section a visit instead of Ben Warren who was unable to travel owing to illness.

Showing a series of projection slides to emphasise various points, he talked about the A34 and A20 Kentucky Blue Grass. Both of these grasses had received top ratings by every Univer-

sity doing turf grass research.

The collection and sale of grass clippings for poultry and livestock feed has been undergoing tests at the California Nursery for about two years, and recent tests have proven that Blue Grass clippings contain more protein content than ALFALFA HAY. Also a chemical known as ZANTHOPHIL is contained in Blue Grass clippings. Zanthophil is in demand as a colouring agent by the poultry industry.

Tests in 1971 and 1972 indicate recovery of about 15 tons per acre, per year. The current market value of dried pelletized clippings is \$ 120.00

per ton.

Question Time revealed that the A34 was first introduced to the U.K. in 1971 and is ideal for Tees. The recommended height of cut is \(\frac{3}{4}\)" and Pat Kirkpatrick who has six tees turfed with A34 has promised to give us a progress report.

The Meeting closed with a vote of thanks to Dr. Meyer, also a very satisfactory Benevolent Fund Draw, largely due to the donation of a bottle of Scotch by Barry Huxley. The Lecture was recorded

### **Annual Dinner**

In good golfing weather 93 played in the afternoon Stapleford on the Old Course at Walton Heath with the following results:-

44 pts C. MITCHELL FOSTER (Maidenhead)—

£10.00 each.

R. HARGREAVES & O. 42 BUCKLAND (West Essex)-£7.50 each.

40 W. WILKINSON & PART-NER (Old Fold)-£5.00 each.

R. CLAYDON & PART-40 NER (Haywards Heath)— ½ Doz. Balls each.

Our congratulations to Fred Dulake on the first-class condition of the Course and our thanks to Phil Marshall and Bernard Diddams for all the work they put in with the cards.

Among the 140 who sat down to an excellent Dinner in the new extension to the dining room, was the Captain of Walton Heath, John Thornhill, who in proposing the Association, welcomed us all to Walton Heath.

The reply for the Association was made by F. W. Ford on behalf of the B.G.G.A. Chairman who was unable to attend, owing to domestic reasons. Stan Morton proposed the toast to the Guests and Mr. Toope of Flackwell Heath replied.

For the splendid meal we have to thank Mr. Jobson, the Steward, and for organising the raffle which followed, Derek Gould, Bernard

Diddams and Andrew Kitch.

### A.G.M. and 18-Hole Medal

This will take place on Wednesday 5th June at the Dulwich & Sydenham Golf Club, Grange Lane, College Road, SE21-

Programme: 12-2 p.m. Tee Off; 4-6 p.m. High Tea; 6.30 p.m.

A.G.M. and Prize Presentation. Closing date 20th May and same

rules apply as for the Spring Tournament.

A reminder that new members may receive H'caps on 36 holes only.

### Diamonds

The Diamond Wedding Anniversary of Bill and Mary Mason was celebrated with family and friends on Saturday 9th March at Cheshire Hall, Hendon, NW4. 60 guests were present on this very happy occasion and greetings telegrams were received from Mr. & Mrs. Hawtree, Mr. Dix and the Southern Section.



### **New Members**

A warm welcome to the following new members whose names are listed below:--

J. W. WILSON (St. Augustines) J. SIVESS (Crawley) R. J. HOR-NEGOLD (Lea Bridge) B. H. MEASUR (Abridge) C. F. G. BORWNING (Downshire) N. GAY (Hugh Page, Sussex Ltd) K. H. AUDSLEY (Hastings) and D. J. KENT (Picketts Lock).

### East Midland Section

Chairman: G. DARBY

Hon. Secretary:
S. FRETTER, Esq.,
4 Queens Drive,
Leicester Forest East,
Leicester

### North-West Section

Chairman:
O. P. JONES, Esq.,
Bramhall Golf Club,
Cheshire.

Hon. Secretary:
H. M. Walsh, Esq.,
Horrobin Cottage,
Old Links Golf Club,
Montserrat, Bolton.
Tel: 40050

### Film Show

A Film Show given by Ransomes Sims & Jefferies was held at Birstall Golf Club on Tuesday 19th March 1974. There was a very good attendance. The speaker was Mr. K. Riley who gave a very interesting talk with the film show. Our thanks to Ransomes Sims & Jefferies, also to Mr. Lee of Leicester Horticultural for arranging this film show. Also our thanks to the Captain and Committee of Birstall Golf Club for allowing us to hold our meeting there.

### Presidents Versus Captains Match

Please do not forget the closing date of 10th June 1974 for all entries for this match.

### Subscriptions

All subscriptions for the year commencing 1st May 1974 are now due; it would be appreciated if you would forward these as soon as possible, to avoid unnecessary paper work.

### **Spring Tournament**

Dean Wood Golf Club, Upholland, Nr. Skelmesdale, Thursday 16th May. 1974.

#### Lectures

Our sincere thanks to Mr. Fairhurst for the very interesting slides and talk on "Fungi Species" which he gave to a very attentive audience. This completes this winter's series of talks.

### **New Members**

We welcome to the section the following new members:—

D. Goodridge, Charters Golf Club, Chester.

H. Smith, Great Lever & Farnworth Golf Club, Bolton.

B. Buckle, Fairfield Golf & Sailing Club, Audenshaw, Manchester.

K. P. Whyte, Didsbury Golf Club, Northenden, nr. Manchester.

A. Higgins, Formby Golf Club, Formby, Lancs.

N. R. Cheetham, Dunham Forest Golf & Country Club, Altrincham, Cheshire.

### Situations Vacant

#### EXPERIENCED HEAD GREENKEEPER

required for 18 holes (6,625 Yds) plus 9 holes par 3 Golf Courses forming part of New Luxury Country Club. New centrally heated accommodation available.

#### ASSISTANT GREENKEEPERS

also required. Must be single. Centrally heated accommodation provided.

All applicants for above positions please write in first instance giving full details of experience and salary required to:—The Administrator, Three Rivers Golf & Country Club Limited, Stow Road, Purleigh, Chelmsford CM3 6RR.

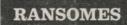
### Quick-change artist

The Ransomes-Hahn Tournament Triplex is a remarkable machine—so remarkable that we call it the world's first Greens Management System. The Tournament Triplex is a 12hp vehicle with hydrostatic drive, which powers four separate turf maintaining operations. Each conversion, from superb greensmowing to utility mowing, to Verti-Cutting, to spiking takes less than a minute—and no spanner! Greens Units A full 67" cut. Each 23", nine-bladed cylinder can be lifted individually.

Utility Units Heavy-duty cutting cylinders and bottom blades for approach and tee mowing. Grass catchers provided with all units. Verti-cut Units Patented twin offset blades remove 'thatch', keep greens in play even in difficult conditions.

Vibra-Spiker Now spiking takes even less time than greensmowing. High-frequency vibration penetrates to a depth of  $1\frac{1}{2}$ " with a minimum of compaction. The combination of this unique quick-change unit feature, full 67" swath for every operation, variable-speed units and individual unit lifts make the Tournament Triplex an investment which no club can ignore. Your local Distributor is keen to impress you with a demonstration. Give him a call.

Ransomes Sims & Jefferies Ltd., Ipswich.





Ransomes-Hahn Tournament Triplex

