Ransomes manufacture the world's finest gang mowers for the man who is interested in cutting large areas of grass in the most economical way.

Ransomes 'SPORTCUTTER' and Ransomes 'MAGNA' gang mowers are the same fundamentally but they each incorporate features for two distinctly different functions. The 'Sportcutter' is designed for mowing on golf courses, parks, estates and sports grounds where regular mowing and rather fine cut is essential.

The 'Magna' is the machine for dealing with very rough areas and is able to stand up to long periods of work under the toughest conditions. 'Magna' is particularly suitable for work on airfields, in orchards, and on pasture-land, dealing with tough grass up to about 8 inches high.
CALL IN FOR YOUR SPARES OR TELEPHONE FOR IMMEDIATE DELIVERY. SPARE PARTS FOR ALL PRINCIPAL MAKES IN STOCK. OUR SERVICE IS UNIVERSALLY KNOWN AS 2 PLUS—WHICH MEANS.

1. EXCHANGE ASSEMBLY SERVICE OF ENGINES, CUTTERS, GEAR BOXES, MAGNETOS, ETC.  
2. EXPRESS WORKSHOP FACILITIES, DELIVERY OF SPARES.

IT'S EXPERIENCE THAT COUNTS

Ransomes
Authorised Service Repair Agents.  
Sales, Spares and Service

Officially Appointed SERVICE DEPOT for

Villiers & JAP
INDUSTRIAL AND AGRICULTURAL ENGINES

Main agents and distributors for Clinton Engines, Spare parts and service exchange assemblies now available from stock.

RELF AND KENDALL
406 BRIGHTON ROAD, SOUTH CROYDON, SURREY. CRO 0578
11 STATION ROAD, NEW BARNET. BARNET 8228


Agents for Dennis, Shanks, Greens, Arco, Lloyds and Allen Motor Scythes.
Consider the postage stamp: its usefulness consists in the ability to stick to one thing till it gets there.

Josh Billings.
Even an **ATCO** appreciates an overhaul

Arrange for the winter overhaul of your ATCO mower now. ATCO will ensure that your machine is returned in good time for another year's efficient, trouble-free mowing.

**INSPECTION AND ESTIMATE ON SITE**
An ATCO engineer will call and inspect your machine on site. He will give you an estimate and arrange for collection and return.

**IMPORTANT**
ATCO's own Service Engineers provide the best possible overhaul for your machine. Every factory-owned ATCO branch is fully stocked with new and re-conditioned spares.

**ATCO**

Contact your ATCO branch or write direct to:-
CHARLES H. PUGH LIMITED, ATCO WORKS, BIRMINGHAM, 9
IT looks as though the "Pitch & Putt" course has finally arrived. Birmingham led the way six or seven years ago just as it did with public courses before the war. Now Northampton, Southampton and Plymouth all have plans afoot and there must be many others. Small area and large playing potential will ensure their success.

Mr. Don Beevers of "Golf Digest" told us last week that many of the 500 odd new courses reported in the United States each year are in fact Par 3 courses. The Speed Links seems not to have made great headway.

Mr. Beevers has been over in Europe getting facts on new courses. He is also a mine of information on U.S. statistics. Did you know, for example, that $1,000,000 passes across the bars of American golf clubs every day? "Golf Digest" has 180,000 readers and must be the most widely read golfing periodical of all. It certainly puts "The Greenkeeper" in the shade.

North-West stalwart, O. P. Jones, showed us round Bramhall in Cheshire last week. He is one of the unlucky ones who have to do a great many unseen operations to keep drainage efficient and the course in play. Evidently he still finds time for all the surface operations as well, in spite of the intensive play which this compact layout endures. Visitors are advised to ask Mrs. Jones for at least one slice of her date and walnut cake. We needed no further proof that the best tradition in baking in this country in now in the hands of greenkeepers' wives.

We visited a golf course recently where two new greens were to be made. The greenkeeper had not been consulted, had not been asked to interest himself in the work, and only knew at second hand that anything was to be done at all. This is a bad way to alter a golf course and must inevitably lead either to practical difficulties, problems of staff relations or, most probably, both.
BARE FACTS

This was his moment. For the first time he was within a fair chance of winning his first major tournament. And after a hard-fought 15 holes in the final of the Match Play Championship against that terribly formidable opponent, Eric Brown, with the match all square, there was Ross Whitehead driving off the 16th tee.

Brown had already driven too far left, leaving an awkward second shot across the dogleg corner to the green. Now we watched Whitehead; he swung in the distance with what looked like perfect steadiness and calmness; and up flew the ball—ruled on the perfect line to the right hand, high side of the fairway. It sailed along towards us, dropped, bounced and began to run to exactly the point most definable in theory as "position A". Two yards short of us it came to rest—on the most horrible patch of bare, hard-beaten ground. It left him a lie for his long iron to the green from which it would take only a real master of method, with nerves of iron, to strike with any certainty the ideal controlled shot straight to the pin-side.

To Whitehead's vast credit, he banged his up safely enough (though it looked a shade thin and faded) on to the green, and went on to lose only at the 19th.

Under Pressure

As the crowd went on up the 16th I stopped behind to examine the spot from which he'd played this shot. There was hardly a divot! Just a slight scuff on the soil. Whitehead, in fact, had had to take the ball almost absolutely clean—at that stage of maximum psychological pressure in his biggest match yet.

It didn't seem fair, then, and it doesn't now. And the evil genius behind that lie, as with so many other horrible brutes of lies nowadays, is—the trolley! What greenkeepers in general feel about trolleys, I don't know. In public they seem nearly always patient and philosophic men—however they may ex-press themselves in private. But—as I seem to remember a correspondent saying in this magazine last year—the trolley has become a real menace in its evil effect on fairways.

The 16th at Walton Heath is not the only hole there badly affected. I was not looking closely at every hole from that point of view at the time, but I did notice that much of the fairway at the long 14th was sadly bare and worn; and off course the problem is general—even on courses where major events are played. At many less famous courses, particularly those on dry heathland, trolley wear has already become a nearly disastrous problem.

John Stobbs

As we all know, what happens is this. Most golfers take much the same path up most holes, especially going off from the tee through the fairway and then coming in again to the green; while any sort of obstruction like a mound, a ditch or a bunker, concentrates them all on the same route, time and time again. For some reason not yet scientifically established (so far as I know), the narrow, hard wheels of a trolley laden with a set of clubs and not much else have a vastly greater capacity for wearing and destroying the springy turf than the feet of a 15-stone man walking. Perhaps it is the fact that feet come down flat and then lift up again, while a wheel, in rolling, forces its way through the turf, continually trying to push it ahead of its own pressure—rather like a skater running along over softening ice, with a bow wave ahead of him. Certainly the resistance to pulling a trolley through turf—which is considerable if you stop and sense it on your hand and which can often become very tiring—can in itself be only a measure of the resistance continually being overcome by the wheel against the turf. Resistance involves pressure and friction—which does the damage!

It follows straight from this, of course,
"Better than anything on the market at the present time"...

Lancashire Golf Club recommends HI-GROW and SEAGROW to all Golf Clubs.

First-hand testimony to the results achieved with HI-GROW and SEAGROW. The secretary writes:

'We consider that Hi-Grow and Seagrow fertilisers are better than anything on the market at the present time. We would have no hesitation at all in recommending Hi-Grow for use on the fairways throughout the growing season. Seagrow has been used on newly made and old established greens and this has produced marvellous results. Our greens have received praise from everyone because of the marvellous results, and the beautiful colour which has been maintained throughout the winter. We have no hesitation in recommending your fertilisers to all golf clubs".

HI-GROW
The top-quality fertiliser with the exceptionally high N.P.K. content—9% N, 9% P, 15% K.

SEAGROW
A seaweed based fertiliser which has achieved spectacular success.

Write for full technical details and highly competitive prices to

PEAKS OF WIGAN
Peaks—Newtown—Wigan—Telephone 44278
that the more a trolley can be designed to run easily behind a player, with least "pull" needed, the less damage it is doing to the turf! In other words, the interest of the greenkeeper in maintaining his fairways in good springy state and the interest of the golfer in the work he has to do pulling his trolley exactly coincide.

**Hard Pulling**

This makes it all the more remarkable—and, as so often in this world, in fact absurd!—that trolleys are still such hard work to pull around over good quality turf. In fact, the thicker the turf the harder the work—and the more damage done! With due respect to trolley-makers (who, after all, can only run their businesses by giving the player what he thinks he wants), the present type of trolley with the small wheels and hard tyres is really designed to run best only on concrete or other hard, smooth surfaces—such, indeed, as the sort of hard-packed worn ground the trolleys themselves create! And that the only ultimate salvation of the turf on our fairways—which had better come quickly, by the look of many of them—lies in some enterprising maker setting out to design one to pull its load over good turf with the minimum possible effort from the puller.

Taking the parallel of the human foot, it looks straight away as if some sort of small scale caterpillar tread (i.e. like a miniscule tank-track) would be the best answer. Instead of moving forward through the grass, this would just lay itself down continually over it and then pick itself up again as the trolley went along. It could best be about 6 inches wide on either side, running for about a foot or so between two rollers (each ball-bearinged to offer minimum friction in traction, of course). The tread could be of soft rubber—or even (why not?) rubber with spikes on it, aerating the surface of the fairway all the time as it went along.

It would be better on the whole if the track itself didn't come off the rollers, break, dissolve or otherwise baffle or annoy the player too much or too often. And at least one roller on each track would need to be on a sprung arm, so that the whole set-up ran easily over irregularities in the ground.

An alternative, of course, would just be a much larger diameter wheel, with a broad sorbo-type or soft pneumatic tyre on it. But one maker brought something slightly in that direction in when he put his first trolley on the market just after the war. The small wheels and hard tyres, cheaper, soon forced him to abandon it.

**Strike Action?**

Golfers, like all other people, even when they admire the best, don't necessarily adopt it—especially if the second best is cheaper. It'll probably take national agreement and legislation—or possibly even a national strike of greenkeepers (what an arresting idea!) to get any trolley improvement adopted all round. And if it isn't ever adopted all round, it'll have little effect.

But golf's a difficult enough game, isn't it, without having to play it off constantly worsening lies.
IT'S GETTING VERY LATE

MOWER REPAIRS
A modern works fully equipped with the latest automatic grinders. A complete range of modern machinery and staffed by experienced craftsmen constantly under the control of a fully competent and diligent works manager devoting his whole time to the supervision of the mower repair department enables us to offer a service

SECOND TO NONE

GOOD REPAIRS— FAIR PRICES—

GOOD SERVICE—

DELAY IS RISKY - BOOK AT ONCE
To avoid disappointment book your repairs NOW. Get your machines collected at once whilst there is still time to enjoy the finest workmanship and ensure that the machines are in your possession for perfect cutting when next season commences.

For Complete Satisfaction - Consult the Specialist

T. PARKER & SONS (TURF MANAGEMENT) LTD.

WORCESTER PARK, SURREY
Telephone: DERwent 7791 (6 lines)

PARKER FOR ALL MAKES AND TYPES

SALES SERVICE SATISFACTION

Ransomes
Official London area distributors for specialist machines

Dennis & Atco
Sales and Service

Hayter
Official Distributors
Sales and Service

SISIS
Official Distributors
Sales and Service
THE PRINCIPLES OF SOIL CULTIVATION

R. W. Sidwell

“What are the real principles underlying the cultivation of the land?”

This article, reprinted from ‘Amateur Gardening’ by kind permission, summarises the problems involved and gives practical tips to the man behind the spade or the machine.

There are few subjects more controversial than that of methods of practical cultivation of the soil. In past times it is safe to say that the majority of experts would have come down heavily in favour of deep as opposed to shallow cultivation. Yet today we have seen the rise of the so-called “no digging” school and we have also seen the arrival of the small rotary cultivators which are supposed to do away with digging, although on many soils the depth at which these implements will work is often only a matter of inches.

Exponents of the various schools of thought on this subject often become very dogmatic in their assertions and in the defence of their theories. Is it possible to make sense out of this controversy? What are the real principles underlying the practical cultivation of the land?

First and foremost let it be recognised that the soil is not just one material the world over. It is a variable substance differing from garden to garden; differing sometimes in the space of a few feet.

The most important factors are texture and structure. Soil texture is a permanent feature of the soil in question. The term is used to denote the relative proportions of coarse and fine soil particles. The coarser particles are termed sand, the intermediate ones silt and the finest clay. Texture is a thing that cannot economically be altered on large areas. A sandy soil remains a sandy soil and a clay soil remains a clay soil regardless of materials normally applied, although the horticultural value of the soils may be greatly improved by good management.

What Structure Means

The term structure is used to signify the condition of the soil, especially the relationship of the soil particles to one another. A clay soil, for instance, may form crumb-like aggregates on weathering if lime is adequate. This is further improved by the addition of organic matter. The process is known as flocculation. The key to good management of clay soils is to aim at producing this condition. Careful timing of cultivations is
of utmost importance if good structure is to be maintained on such soils.

These are fundamental points. We will now see how an appreciation of these helps us to understand the practical problem of soil cultivation. It is a fallacy to suppose that roots penetrate only as far as the cultivations go. Wheat roots will penetrate to a depth of many feet although much of the wheat land may be ploughed to a depth of only 5 to 8 ins., and this applies to many plants, provided drainage is good and the subsoil free from "panning."

Types of Panning

Panning is an important thing. The "plough pan" which is produced by ploughing to the same depth for many years is not likely to worry the gardener very much, but rotary hoe panning is common on certain types of soils, especially those that form a surface crust or "cap" as they dry out. Such soils are often found to have a fairly high percentage of sand, but also possess enough clay to bind the sand grains together. If one has such soil the effect of rotary hoe panning can be demonstrated most effectively by cultivating alternate strips to a depth of about two inches with an ordinary fork and an L-bladed rotary hoe. The differences between the strips after rain has fallen is really most striking. It will be possible to walk on the forked strips without difficulty, but the rotary-hoed strips may be a sea of mud through the water failing to penetrate the pan at the bottom of the cultivated depth.

Chemical Panning on Acid Soil

Chemical panning is an entirely different matter. This is liable to occur on certain types of acid (lime deficient) soils. Aggregates of iron compounds cementing pebbles or gravel together may occur at a depth of a foot or two.
When one attempts to make rules about how to cultivate one is forced to the conclusion that the rules are dictated by the soil in question and the man on the spot is the best judge.

It is probably safe to say that if there is nothing wrong with the sub-soil, deep cultivations will be of limited benefit, but if there is anything leading to impeded drainage or any other hindrance to root penetration then deep cultivation will undoubtedly be of value. A light to medium loamy soil, free from any sub-soil troubles, with a fairly high organic matter content and adequate supplies of lime, can probably be cultivated in any manner the owner chooses and to any depth he cares to go provided it is done deeply enough to give a satisfactory planting tilth. On such soils shallow rotary cultivation often produces all that is required for growing most crops.

When soil is trenched or double dug it may take some years for consolidation to reach its original state. The treading that takes place during work in a crop rarely produces consolidation for more than a few inches down. If this layer is broken up in some convenient way it is probably all that is required. On soils liable to panning the use of straight tines instead of hoe blades on rotary cultivators is desirable.

Effect on Weed Seeds

To many people one of the values of digging is the burial of weeds and refuse. This is of even greater value than is sometimes realised. Shallow rotary cultivation keeps many of the weed seeds within the layer from which they can germinate readily and it is well known that heavy crops of annual weeds usually follow rotary cultivation. When weeds are buried fairly deeply, say 4 to 8 ins., germination does not take place until the seeds are brought nearer to the surface. In fact few weed seeds germinate from a depth greater than about 1½ ins. At the depth of normal digging many weed seeds die in the course of a year or two. On the other hand, very deep burial, say 4 ft. or more, may keep seed dormant for many years.

Spade or Fork?

Perhaps we may close with a few hints on the choice of hand tools for basic cultivations. Whilst the spade is the most popular tool for digging with most people it is far from being an ideal tool. A good flat-pronged three-tined fork is not only lighter in weight, and this is a point of great importance, but it offers less frictional resistance to being pushed into the soil. This becomes especially noticeable on firm stony ground where the output of work may be doubled with the same effort. The somewhat rougher top presented by digging with such a tool provides a better surface for weathering action than smeared chunks left by the spade when digging heavy soils.

On the heaviest clays, why not try to get hold of one of the Evesham pattern two-tined forks. At one time of day, before the tractor had replaced hand labour, many hundreds of acres were dug annually with this tool at speeds that would have made the most skilled spadesman look pathetically slow, and the two-tiner would have done a better job into the bargain. There is no special merit in the square-chopped trench once one has overcome the initial prejudice.
News

from the Sections

NORTHERN

By J. Parker

Chairman:
G. W. Mason
(Halifax West End)

Hon. Secretary:
8 Goit Stock Terr., Harden, Bingley, Yorks.

THE FIRST LECTURE OF THE WINTER session will be held on Tuesday, 13th November, in the Market Tavern, Godwin Street, Bradford, at 7-15 p.m. The speaker will be Mr. B. C. Clayton, M.A., Senior Advisory Officer at the Sports Turf Research Institute. Mr. Clayton will be speaking on general maintenance of golf courses with references to his Continental visits. Your Committee look for your support on what will surely be an interesting evening.

December Social

A Social Evening will be held on Tuesday, 11th December, at the Old Queen's Head, Main Street, Bingley. This will take the form of games and supper, and will also give members a chance to have a general natter over golf course problems and events.

New Member

We welcome to the Section:—Mr. C. Garnett, 425 Harrogate Road, Bradford, 2, who works under Donald Roberts at West Bowling Golf Club. There must be many more Assistant Greenkeepers who are not members of the Association. Come on, Head Greenkeepers, I've plenty of nomination forms for membership.

Change of Address

Mr. S. M. Lemmon has moved to 41 Pelham Road, Cleethorpes, Lincolnshire.

NORTH-WEST

By B. Ellis

Chairman
T. Brennan
Romiley G.C.

Hon. Secretary:
(Wilmstow G.C.)

OUR AUTUMN TOURNAMENT was held at the Bolton Golf Club, Lostock Park, Bolton, on Thursday, 27th September. We were favoured with a fine day, a course that was in excellent condition, and 40 competitors enjoyed a pleasant day's golf.

Our President, Mr. Kinsey, occupied the Chair and thanked the Captain and Council of the Bolton Golf Club for granting us the courtesy of their course and clubhouse and then introduced the Captain to present the Prizes.

The prize-winners were as follows:—1st nett, W. Sumner, 104£, Ransomes Cup and Electric Blanket; Scratch, E. Walsh, 111 gross, Hunter Cup and Tankard; 2nd nett, G. Davey, 105£, President's Cup and Windcheater; 3rd nett, E. Walsh, 111 Musical Cigarette Box; 4th nett, O. P. Jones, 112, Travelling Clock; 5th nett, A. Warhurst, 113£, Ronson Lighter; 6th nett, J. Metcalfe, 114, Pullover; 7th nett, F. Halstead, 115, Colibri Lighter; 8th nett, V. Crabtree, 115£, Plant Tubs; 9th nett, H. Smith, 116, Silver Pencil; 10th nett, W. Burgess, 117, Lighter; Best nett, over 50's, W. Sumner, 104£, Harrogate Cup and Pullover; Visitor's Prize, Mr. S. Cowap; 71 nett, 1 doz. Golf Balls.

The Section Chairman, Mr. T. Brennan, closed the meeting by thanking all who had contributed towards making the day a success, J. Rhodes and his staff for the excellent condition of the course, the Steward and Stewardess for meals, Mr. Payne of Ransomes, and Mr. Grieves of Messrs. Ellis Rees for once again issuing and checking cards. Our thanks are also due to the following who so kindly contributed to our Prize Fund: Messrs. Ransomes, Sims & Jefferies, Messrs. Hunter, Mr. W. Kinsey, Messrs. Rigley Taylor, Mrs A. E. Fyles, Messrs. Pattisson, Messrs. T. Ockleshaw Ltd., Messrs. Wilcox Ltd., Messrs. Ellis Rees, Messrs. May and Baker Ltd., Messrs. En-Tout-Cas, and Mr. V. Crabtree.

New Members

We welcome to our Section the following new members:—D. Carter, Werneth Low Golf Club, Hyde, Cheshire; E. Welding, 21 Cole Avenue, Newton-le-Willows, Lances., and H. M. Walsh, 78 Hadfield Street, Oldham, Lancs.

Lectures

Our first lecture of the winter will be held on Tuesday, 20th November, at the Garrick Hotel, Fountain Street, Manchester, commencing at 7:0 p.m., when Mr. H. J. Lidgate of the S.T.R.I. will talk on "Soils". Will members please note the date as no other notice will be given.
On Monday, 21st January, 1963, we have Mr. B. C. Clayton, M.A., Senior Advisory Officer at the Research Station, whose subject will be "General Practical Maintenance". This meeting will also be held at the Garrick Hotel commencing at 7-0 p.m.

**SOUTHERN**

By W. Mason

**Chairman:**
J. K. Glass  
(Thorpe Hall)

**Hon. Secretary:**
18 Albert Road, Hendon, N.W.4.
Tel.: SUNnyhill 0245

MESSRS. EASTON TRACTORS LTD. have kindly arranged to send along one of their representatives to give us a lecture. The subject, "General Maintenance of Tractors", and we hope that members will make every effort to attend what should be a most interesting evening. As usual, this will be held at the Talbot Restaurant, London Wall, Moor-gate, E.C., on Wednesday, 14th November, at 6-30 p.m.

**New Members**

We are pleased to welcome two new members. L. R. Hilton, The Wybe, Pycombe, Golf Club, Pycombe, Brighton, and P. Marsh, 17 Brownhill Road, Baddesley, Southampton, Hants.

**MIDLAND**

By F. Cashmore

**Chairman:**
G. Hart  
(Gay Hill)

**Hon. Secretary:**
76 Four Oaks Common Road  
Sutton Coldfield, Warwickshire.

OUR TOURNAMENT AT SOUTH Staffs. was a most successful gathering and our thanks are due to all at the Club for their cordial welcome, and the way in which they made us comfortable. There was a shower at mid-day but it did not interfere a great deal with play. Twenty-five members took part and thirteen visitors joined us in the afternoon. The Captain of South Staffs., Mr. Lewis, joined us for lunch and apologised for the fact that, owing to a previous engagement, he could not remain for the rest of the day. Our President, Mr. Carl Bretherton, paid us a visit, but he also had a meeting that evening which prevented him staying for the presentation of the prizes.

The results were as follows:—Clayton Cup and Tea Set, T. Jones, 145 nett; Golf Club, G. Woodward, 154 gross; Golf Jacket, J. Milton, 146 nett; Creet Set, J. Stephens, 147 nett; Golf Shoes, R. Smith, 148 nett; Canteen Cutlery, A. Hastilow, 148 nett; Lighter, W. Barton, 151 nett; 1 doz. Golf Balls, K. Webb, 152 nett; Wallet, H. Drewitt, 152 nett; Glass Dish, E. Benbow, 155 nett; Alarm Clock, A. C. Jones, 155 nett; Table Mats, A. Boraston, 153 nett; Wallet, R. Pugh, 154 nett; Towels, W. Machin, 158 nett; Cigarette Case, V. Smith, 160 nett; Bottle Whisky, W. Handy, 161 nett.

The leg of pork given by Mr. J. W. R. Robinson for the over 50's was won by A. Hastilow. The golf balls given by our President for players with 2's on their cards were won by W. Barton, G. Woodward, T. Jones and R. Smith.

The prizes were presented by Mr. McCandless, the Secretary, and also a past Captain of South Staffs. Golf Club. He said how pleased they were to see us and hoped that we would visit them again. George Hart thanked him and also the Committee of the South Staffs. for allowing us to play there, and making us feel so welcome. He also thanked the indoor staff for excellent meals, etc., Cecil Woodhouse and his staff for the splendid condition of the course, Bill Payne and his helpers for doing their usual job. Incidentally, Mr. Payne was travelling to Bolton that night to help the North West Section in the same way on the following day. George also thanked our visitors, players and members of the Trade who had joined us and helped to make the day so successful. Our thanks also to the donors of our prizes who were:—Thomas Clayton & Sons, British Steel Golf Shafts, Swallow Raincoats, Tudor Mower Services, Lotus Ltd., Righty Taylor Ltd., H. Pattisson & Sons, En Tout Cas Ltd., May & Baker Ltd., Chas. H. Pugh Ltd., Parker & Ballenger Ltd., Woodheads Seeds Ltd., Mr. L. Wheeler, Mr. J. Conlon, Mr. W. F. Payne, Mr. J. W. R. Robinson, and Mr. Carl Bretherton.
Visit to Messrs. Massey Ferguson—
28th November

This visit is limited to 30 members so will those who wish to go, and have not yet let me know, please do so at once otherwise they may be disappointed. We shall all be travelling by coach which will leave the Hall of Memory at 10:30 a.m. We are due at the Chase Hotel, Coventry at 12 noon.

Annual Dinner
Our Annual Dinner will be held at the King's Head Hotel, Hagley Road, Bearwood, on Friday, 14th December, when we are hoping to see all our friends. We shall be having a full Christmas Dinner and some very good artistes have been engaged for the concert, so we are hoping to equal last year's record attendance.

Chairman:
S. TALBOT
(Wollaton Park)

Hon. Secretary:
By S. T. McNeice
Edward Road,
Clarendon Park, Leicester

EAST MIDLAND
By S. T. McNeice

Chairman:
S. T. McNeice
(Wollaton Park)

Hon. Secretary:
Clarendon Park, Leicester

OUR ANNUAL TOURNAMENT WAS held at Willesley Park Golf Club, Ashby-de-la-Zouch on Tuesday, 25th September, by kind permission of the Captain and Committee. The Section Autumn Cup was on show for the first time and competed for over 18 holes Bogey. This was also the first time the Section has held a Bogey Competition which made a very pleasant change. Play was not up to the usual standard although the course was in excellent condition, and the weather was all one could wish for, one of those few sunny, warm days we had this summer.

Prize-winners were as follows:—1st, R. Bowler, Wollaton Park (15) 2 down; 2nd, S. T. McNeice, Leicestershire (12) 4 down; 3rd, F. Drost, Derby Municipal (6) 4 down; 4th J. Carrick, Northamptonshire Co., (9) 5 down; 5th, D. Whitehead, Wollaton Park (24) 5 down; 6th, E. A. Clarkson, Leicestershire (10) 5 down; 7th, F. Oliver, Nottingham City (11) 5 down; 8th, D. Bull, Builwell Forest (7) 7 down; 9th, S. Fretter, Kirby Muxloe (13) 7 down; 10th, G. Dunkley, Northamptonshire Co., (12) 8 down. Ties were decided on last 9, 6, and 3 holes. Vice-Presidents' Section, 1st, A. Booth, Chilwell Manor (scratch) 3 down; 2nd, S. C. Long, Leicester Municipal (2) 3 down.

The Section Chairman, Mr. Stan. Talbot, thanked the Willesley Park Golf Club for granting us the courtesy of the course, Dr. D. G. Kelly, the Captain, for presenting the prizes, the Staff for their hard work in making everything so very pleasant, also a special vote of thanks to our officers and Members of the Trade for their contribution to the prizes.

I should like once more to take this opportunity to thank our old friend Mr. A. J. E. Cook for all the hard work which he put in to make everything go with a swing, also to his very able assistant, Mr. Eric Ramsey, who completed the day by checking the cards.


Change of Address
Mr. P. McCarron, 28 St. Peter's Road, Leicester, has now moved to 39 Devana Road, Leicester.

WELSH
By S. A. Tucker

Chairman:
M. GEIDORES
(Royal Northcwm)

Hon. Secretary:
R. O'GORMAN (local knowledge)

OUR AUTUMN MEETING WAS HELD at the Glamorgan Golf Club, by kind permission of the Captain and Committee, on the 26th September. The weather was not so kind as it might have been but the rain held off and we played 9 holes before lunch and 18 after. The prize-winners were as follows:—1st, J. O'Gorman (local knowledge); 2nd, D. Jones; 3rd, J. R. Williams; 4th, S. A. Tucker. The Nine Hole Competition was
I AM VERY HAPPY TO ANNOUNCE that I have been advised by the Secretary, ROYAL BIRKDALE GOLF CLUB, that his Committee has been pleased to grant the Association the courtesy of their Course for our Annual Tournament in 1963.

The dates arranged are the 12th, 13th and 14th August, and I am sure all members will wish to join me in expressing our sincere thanks to the Committee for this privilege.

ANNUAL DRAW

NEWS OF THE WORLD MATCH PLAY CHAMPIONSHIP, 1962

My congratulations to Mr. W. Dickinson of the Sheffield Section for selling the Winning Ticket.

No claim has yet been made by the seller of the largest number of tickets for whom a prize of £2 10s. 0d. is waiting. I shall be glad if Section Secretaries will notify me of any member whom they think may qualify for this prize.

C. H. DIX
Hon. Secretary and Treasurer.

WELSH SECTION—cont.

won by G. Brennan, 2nd was H. Fry on last 6 holes from A. Price. Hard luck, Arthur, better luck next time!

Subscriptions

Will any members who have not yet paid their subscriptions please do so by the next post to M. Geddes, 23 Fenton Place, Porthcawl, Glamorgan, in order that Mr. Geddes may settle his books for the winter months.

MISCELLANEOUS

Professionals and Greenkeepers having stocks of used golf balls contact Sparkbrook Golf Ball Co., 295 Highgate Road, Stoney Lane, Birmingham, with a view to filling export orders.

FOR SALE

Ransome's OVERGREEN MARK III complete with Spikes, Rakes, Hollow and Split Tines just overhauled and ground, nearest offer to £150. Leicestershire Golf Club, Gartree Road, Leicester.

MAJORCA APPLICANTS

A short list of four applicants was made up at the end of October. Those who have not heard by letter when this notice appears are thanked for their applications. References have been returned. Owing to the particular circumstances of this post, many well qualified persons had to be eliminated.
SOIL FOR GREENS

A reminder for Greenkeepers with constructional jobs on hand this Autumn

Soil is not just so much dirt, but consists of solid, liquid and gaseous matter. It is half solid by volume with about 70 to 80 per cent minerals which is a mixture of sand, silt and clay particles. The other 20 to 30 per cent is organic matter or humus. The non-solid half, or the voids between the particles, is half water and half air. Stated another way, a cubic foot of soil should contain one half cubic foot of solid matter, one quarter cubic foot of water and one quarter cubic foot of air. Such a soil is well ventilated, and an ideal medium for the growth of grass, or any other crop.

The subsoil need not have organic matter, but it should be well ventilated to facilitate drainage, and speed the removal of surplus gravitational water. A system of tile drains should be installed in all greens having a subsoil which does not meet these specifications.

A putting green is more than a place to grow grass. The surface must have enough resilience to hold the ball of a pitched shot and yet be firm enough to have the billiard table trueness. Over-watering is one way to make a grass hold a pitched ball. The better way is to have a good soil structure. The surface will have sufficient resilience to hold the ball, irrespective of its moist content. Then it will not be necessary to resort to the bad practice of over-watering.

The presence of some organic matter in the surface soil is essential to make it slightly resilient and perform other functions connected with growth. It is the energy food for beneficial soil micro-organisms. As the organic matter undergoes decay by them carbonic acid is generated. It is the principal solvent in the soil solution and is responsible for the liberation of the mineral soil nutrients. Organic matter increases water-holding capacity and imparts other benefits of its colloidal nature.

(From an article by O. J. Noer.)
THE 17th exhibition of equipment and materials for turf maintenance, organised by the National Association of Groundsmen, was held in the grounds of the Hurlingham Club on the 3rd and 4th of October, in glorious weather. Although the opening day coincided with the one day railway strike, exhibitors said it had not interfered with business to any great extent.

As usual, there was a most comprehensive display of machinery and equipment which, while giving the opportunity of comparing the numerous types, must have made choosing extremely difficult. Every type for every purpose from the preparation of the ground to the mowing was on view with experts to explain the advantages of each.

Most of the stands were on the cricket ground with those showing heavy equipment round the outside. No. 3, the Parker stand, was almost an exhibition in itself. Apparently there is nothing in the way of machinery, equipment or materials that this firm does not supply and most of it was on view.

**Special Award**

Next was the Hargreaves stand with the well-known “Sisis” range. A new addition here was the 36 inch Super Coulta Seed and Fertiliser Spreader which had gained the “Award of Merit” for the outstanding production of the year.

A little further on J. Gibbs Ltd. had a display ranging from tractors to hand machines and, nearby, Lloyds of Letchworth showed a full range of mowers and other equipment.

Ransomes had their usual comprehensive display of mowers, including the new 24 inch Matador.

The ATCO exhibit was also very comprehensive, with motor mowers, hand models, rotary models and the Atco-scythe and attachments.

In the middle of the ground on stand 40, Craig & Co. showed new and reconditioned mowers and small cultivators, and close by the Burnet Sports Turf Improvement Services were showing “Nitroform”, the long lasting 38% nitrogen fertiliser.

Cannock had a display of grasses for identification and samples of turf showing the effects of Cannock products.

Carters, on an attractive stand, also showed grasses in growth and turf mixtures. The 1962 handbook issued by Carters is both instructive and interesting.

**S.T.R.I.**

The Sports Turf Research Institute information tent, at which representatives of the Institute were in attendance, was attracting much attention all day.

Going from the Cricket Ground, at the corner of Bowling Green Avenue was the Relf & Kendall workshop where actual repairs and renovations were being carried out. Also on view here was a museum piece: a mower dated 1832.

Just opposite, May & Baker were showing the full range of their products.

The Pattisson stand on River Avenue displayed equipment and requisites for golf courses and the number of their products seems to increase each year. One of the new ones this year was the “S.P.” self-propelled turf piercer which was attracting a good deal of attention.

Next door, Frank Keep (1958) Ltd., who supplied fertilisers and dressings, appeared to be very busy.

The Eclipse Peat Company’s “Humull” can now be supplied already mixed with sand and they particularly recommend their “Vitapeat”.

---

**THE SCOTTISH GOLF GREENKEEPERS’ ASSOCIATION**

**THE ANNUAL GENERAL MEETING**

of the North and Midland Section will be held in Nicoll & Smibert’s Restaurant, 2/4 Nethergate, Dundee, on Wednesday, 14th November, 1962, at 7-0 p.m. Election of Office Bearers, etc.

W. RITCHIE,

Secretary.
Old Trafford Cricket Ground, home of Lancashire C.C.C.
One of the first grounds to adopt NITROFORM
and acknowledged one of the finest squares in the country this season.

NITROFORM

the successful, long-lasting
38°/ Nitrogen Fertilizer
for sports turf!

BURNET SPORTS TURF IMPROVEMENT SERVICES
100 Canal Road, Bradford 2, Yorks.
Tel: Bradford 23323
What would the course be like without PARKERS?

Mowers • Motor Scythes, all makes and types • Tractors
Aeration Equipment • Sprayers • Harrows • Sprinklers,
etc., etc. • Mowrah Meal • Lead or Calcium Arsenate
Fertilizers of all types • Grass Seeds of the finest quality
Stock mixtures or to your specification • Loams: Light,
Medium, Heavy, for all purposes, etc., etc.

IMMEDIATE DELIVERIES FROM STOCK

T. PARKER & SONS (TURF MANAGEMENT) LTD

THE SPORTICULTURAL SPECIALISTS

WORCESTER PARK, SURREY. Tel.: DERwent 7791 (6 lines).