dented with rough marks probably made by a centre punch, and the third having a regular pattern obviously made by mechanical means.

Here in front of me, was the whole history of the guttie—the first, intermediate and final stages of its manufacture.

The very first gutties were made entirely by hand, a suitable piece being first softened in hot water, and then rolled by the palm of the hand on a board until spherical. These balls, when first tried, were far behind the featherie in performance, having a very short and erratic flight. It was discovered by those pioneers that the ball behaved very much better towards the end of a round, but that on being softened in hot water and rolled again so that the dents and cuts were removed, if flew just as badly at the start of the next round.

# Early morning methods

It did not need a great deal of thought to realise that the more marks a ball had the better it flew, and the next step was to make these marks in as regular a pattern as possible by hand, using a pointed hammer

When some enterprising ball-maker introduced a mould he made it smooth,

and hand-hammered the balls after they came from the mould. The next step was to punch marks in the surface of the mould so that the balls emerged covered with rough protuberances—the forerunner of the "bramble" marking.

And finally we attained the patterned mould, which produced a ball complete with lines, checks, or "brambles", according to the fancy of the maker or the fashion of the day

Golf ball manufacture of the mid-20th century is conducted on such precise principles that the depth of the "dimple" or "recess" marking is measured to thousands of an inch, and it has been proved that a certain depth of dimple will give a correct performance, whereas markings shallower or deeper than the optimum will give less satisfactory results.

All this, nevertheless, springs from the experiments of those pioneers who learned the dynamics of the golf ball by trial and error. And those moulds in Busson's shop at Walton Heath, side by side with the boxes of modern, precision-made rubber-core balls, glistening in their coats of sprayed polyurethane paint, remind us of the debt we owe to those ancient craftsmen who hand-hammered the early gutties.

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# GOLF GREENKEEPER APPRENTICESHIP SCHEME

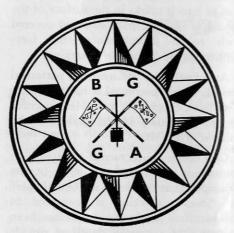
Copies of "The Employers' Guide" issued by the Joint Council for Golf Green-keeper Apprenticeship may be obtained from —

B. M. Wood, Esq., F.C.I.S., Hon. Secretary,

> Joint Council for Golf Greenkeeper Apprenticeship, St. Ives Research Station, Bingley,

Yorkshire.

# News



# from the Sections

# SOUTHERN

By W Mason

Chairman: J. K. GLASS (Thorpe Hall) Hon. Secretary: 18 Albert Road, Hendon, N.W.4. Tel. SUNnyhill 0245

#### Lecture

OUR LECTURE ON WEDNESDAY, 13th November, given by Mr William Finch, International Products, was a very great success. We were pleased to see a good attendance to welcome him. Time went so quickly with all the questions asked and answered that we shall look forward to a return visit later

# January Lecture

Our January lecture will be given by Mr. Philip Marshall, by kind permission of Messrs. Ransomes, Sims, and Jefferies, who write to say he will give a talk on their latest machines, followed by a film show. This should be very interesting and we look forward to another bumper attendance. The date is Wednesday, 8th January, 1964, time 6-30 p.m., and as usual at the Talbot Restaurant, London Wall, Moorgate, E.C.

### New Member

We welcome to the Section, A. Ireland, of Sevenoaks, Kent.



By S. A. Tucker

Chairman. M. Geddes (Royal Portheawl) Hon. Secretary: 36 Clase Road, Morriston, Swansea, Glam.

### John O'Gorman

I AM HOPING THAT BY THE TIME you read these notes, John O'Gorman will be

out of hospital. He has had an operation on his lung and I am sure you will all join me in wishing him a speedy recovery

# New Year Greetings

May you all have a very Happy and Prosperous New Year in your work and play

# SHEFFIELD

By J. J. Dearlove,

Chairman.
G. HERRINGTON
(Lindrick)

Hon, Secretary: 63 Langsett Avenue, Sheffield, 6.

### Entertainment

MR. GLYN VAUGHAN OF RANSOMES, Sims, and Jefferies and Mr J F Crofts of Fearnco Ltd., entertained our members at the Brunswick Hotel, Sheffield, on 27th November

Heavy rain in the late afternoon reduced our numbers but it was good to see a few Golf Club officials present and we hope to see more of them attend our lectures.

Three excellent films were screened, one of which I believe won an industrial film award. This speaks highly of the quality of entertainment. We thank Messrs. Ransomes and Fearnco Ltd., for the wide variety of food and liquid refreshment provided for us.

When giving his vote of thanks, our President, Mr Shardlow hinted that it would be interesting to visit Ransomes Works at Ipswich.

Mr Vaughan immediately extended an invitation to our section and suggested a summer visit would be more suitable owing to the long journey. If anyone is interested in such a trip and will let me know in the next week or so, we can probably decide on arrangements at the A.G.M.

# NORTHERN

Chairman: S. BAILES By J. Parker Hon. Secretary: 8 Goit Stock Terr., Harden, Bingley, Yorks.

# November Lecture

OWING TO INDISPOSITION I WAS unable to attend the lecture held in the White Swan, Leeds, on Tuesday, 12th November, and I am indebted to our President, Mr W Mountain, for the following report.

The first lecture of the winter session was given by Mr J R. Escritt, M.Sc., whose subject was "Around the World with Grass"

There was an excellent attendance of 55 members, one of the largest numbers we have ever had.

Listening to Mr Escritt's lecture, or private talk as he put it, was most fascinating and held every member's undivided attention throughout the whole lecture. In his three weeks' tour of the U.S.A. he talked about "25

hours per day", but we gamed the impression of more like three months travelling from one side of the U.S.A. to the other, and in their trying to convince their method of grass culture being better than the English way, we imagine they would have a hard task when we know Mr Escritt's capabilities and experience at the Research Station.

During question time various members put their queries forward and Mr Escritt replied in his usual capable manner

The vote of thanks was given by the Chairman, Mr S. Bailes, and this was seconded by Mr G. Geddes.

# January and February Meetings

In January we hope to have an "Any Questions" session and on Tuesday, 18th February, Mr I Forbes, of Messrs. Stewart & Co. Edinburgh, will give a talk on "Weeds and Weedkilling" Details of venues and times will be circularised in due course.

## New Member

We welcome to the section Mr I. Peak, of Hessle Golf Club.

### Mr. K. Chamberlain

Keith Chamberlain, of Northcliffe Golf Club, and one of our younger committee members has been appointed Head Green-keeper to Ferndown Golf Club, Bournemouth, and takes up his new position in the New Year I am sure we all wish him good luck in his new venture.

# Grand National Sweep

Once again I have to remind you that you will shortly be receiving books of tickets for our Grand National Sweep. It is hoped that all members will do their utmost to make it a success and so help the funds of our Benevolent Account.



Chairman.
J. SIMPSON
(Ponteland G.C.)

By T Oliver

Hon. Secretary:
Heathery Cottage,
Heathery Lane, Gosforth,
Newcastle-on-Tyne 3.

A LECTURE WAS HELD IN THE clubhouse of Ravensworth Golf Club by kind permission of their Committee on Thursday, 12th December Forty members turned up to hear a most interesting talk by Mr Ian Forbes, of Stewarts of Edinburgh.

The subject, "Weeds and Weedkillers", and results shown with slides and screen kept the members keenly on the alert and following the talk the speaker ably dealt with questions put to him. It was very encouraging to see many new and young members present.

A vote of thanks was proposed by Mr J Simpson, Chairman, to Mr Forbes, heartily endorsed by all present, and also to the Committee of the Ravensworth Golf Club for the use of the clubhouse and for kindly providing sandwiches, etc., which all enjoyed.

### New Members

We welcome to the Section the following new members Kenneth Hoey, Reuben Wright, Michael David Runnacles, Douglas Neil Docherty, William Bleazard.

# **NORTH-WEST**

By V Crabtree

Chairman: T. Brennan (Wilmslow G.C.) Hon. Secretary. 223 Market Street Whitworth, Nr. Rochdale

HAVING GOT OVER CHRISTMAS IF you are English and New Year if you are Scottish, here is a Happy New Year from me to you. Let us once again unite and be British, be an Association, meaning "a Society of persons joined to promote some object" Surely our object is more fully to understand our job and even coerce Mother Nature into yielding more abundantly the grass we desire, the turf of which we are so proud, to join together educationally and socially for the pleasure and mutual benefit of each other

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Many New Year resolutions will have been made, many will by this time have been broken. May I borrow the Salvation Army theme song and apply it to our Association "Come and Join Us", the strength and usefulness of it lies in its unity, its unity depends entirely on you. This game of golf is being played more and more, meaning more and more traffic over our courses, bringing more and more problems in its wake. Perhaps some speaker at a lecture can help, or some fellow-member suggest something you did not know, or perhaps—put the boot on the other foot—you can help one of us with some problem. I will risk being accused of reiteration and say once again, "Come and Join Us"

Lectures

SINCE MY LAST NOTES WE HAVE had a lecture by Mr H. J Lidgate, B.Sc., Chemist to the Sports Turf Research Institute at Bingley, his subject, "Fertilisers", being enjoyed by about 20 members. Thanks to Mr Lidgate were expressed by the Vice-Chairman. Mr D. Pate.

Mr Lidgate were expressed by the Vice-Chairman, Mr D. Pate.
On 9th December, Mr H. Ratcliffe, of Messrs. Rigby Taylor Ltd., gave a lecture on "Fertilisers and other Top Dressings" In his own inimitable style he expounded his facts and theories and answered many questions. Thanks to Mr Ratcliffe for a very enjoyable evening were expressed by the Chairman, Mr T Brennan.

January Lecture

28th January, 1964 (Tuesday) Mr William Finch, N.D.H., of International Toxin Products Ltd., Subject: "Simple Science of Turf Culture"

February Lecture

17th February, 1964 (Monday) Mr D. B. Hargreaves, Managing Director of Wm. Hargreaves & Co. Ltd. Sisis.

March Lecture

9th March, 1964, Mr J D. Joss, D.H. of S.T.R.I. Subject "Turf Topics, What do you know?"

All lectures will be held in the Garrick Hotel, Fountain Street, Manchester, at 7 15 p.m. The Garrick Hotel is situated just behind Lewis's Store, Piccadilly

New Member

We welcome to the Section, Mr E. T. Clarke, and hope his membership will be a long and enjoyable one.

# IN MEMORIAM

We have learned with sorrow of the death at the age of 92 of Mrs. Bridges, wife of Tom Bridges, one of the senior members of our Association. Mrs. Bridges had many friends amongst older greenkeepers and will be sadly missed. We all send our deepest sympathy to the Bridges family.

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Barnton, Edinburgh 4.

General Secretary
R. B. MOFFATT
71 Kelton Street, Glasgow E.2

New Year Greetings

WITH ALL BEST WISHES TO OUR members throughout the New Year

A. Huish (East Section Secretary).

# LECTURES AND FUNCTIONS

JANUARY	
14th	S.G.G.A., Christian Institute, Bothwell Street, Glasgow (F. W Hawtree on "Golf Course Construction"), 7-0 p.m.
15th	As above. Nicoll & Smithbert, Nethergate, Dundee, 7-0 p.m.
16th	As above. Free Gardeners' Institute, Piccardy Place, Edinburgh, 7-0 p.m.
28th	North-West Section Lecture, "Simple Science of Turf Culture", Garrick Hotel, Fountain Street, Manchester, 7-15 p.m.
30th	Sheffield Section, President's Evening.
FEBRUARY	
17th	North-West Section Lecture, Garrick Hotel, Fountain Street, Manchester, 7-15 p.m.
18th	Northen Section Lecture, "Weeds and Weedkilling"
MARCH	
9th	North-West Section Lecture, "Turf Topics, What do you know?", Garrick Hotel, Fountain Street, Manchester, 7-15 p.m.

# LETTERS TO THE EDITOR

Hon. Editor, B.G.G.A. Journal.

Dear Sir,

May I, through the medium of the Journal, say a word or two in answer to an article by Henry Cotton in a National Newspaper, on 1st December, 1963.

He said "Modern greenkeeping, which calls for soft watered greens during the summer, really has produced very wet and spongy putting surfaces just now, in fact many courses are on temporary greens already"

I think what Mr Cotton should have said, is, that Modern Golf calls for—I should say demands—soft watered greens during summer Mr Cotton must also know that the deciding factor on when to use temporary greens falls on climatic conditions which in turn make fine turf vulnerable to heavy damage, and not the calendar It appears to me that Mr Cotton is out of touch with greenkeepers at present and I would suggest—if he can find the time—he attend a debate at one or more of the B.G.G.A. Section meetings, he will most certainly be welcome to the Sheffield Section.

If Mr Cotton is sufficiently interested in greenkeeping, I'm sure he will find the time to read our excellent journal and probably give us greenkeepers the opportunity to put our side of the picture.

Yours faithfully,

(signed) J J Dearlove, Head Greenkeeper, Hillsborough G.C. Hon, Sec., Sheffield Section B.G.G.A.

# SITUATIONS VACANT

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THE SPORTS TURF RESEARCH IN-STITUTE, Bingley, Yorkshire, wishes to appoint an additional Advisory Officer and invites applications. Preference will be given to candidates qualified in Horticulture or Agriculture or equivalent. Salary according to experience and qualifications. Contributory staff pension scheme. Further particulars from the Secretary

### 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.

Brott 20 in. Grass Cutter Sub- Distributors and Stockists required Herts., Surrey, Sussex and Kent. Box No. 135.

# TIME AND MOTION ON THE GOLF COURSE

# Can we achieve more with less effort?

Obstacles.

A T first sight, greenkeeping is not the sort of work which study of the operations involved can simplify. Weather will involved can simplify Weather, soils, competitions, overtime, machinery, all these vary so widely that the systems adopted for each course are not easily comparable. But with smaller staffs producing the same and better playing conditions, it is worth pausing sometimes to consider whether the simple, basic routines are still suited to present circumstances. The greenkeeper will know better than anyone the snags in thinking on these lines and the limits beyond which this kind of analysis cannot be pushed, but the cultivation of an enquiring and experimental attitude may well be rewarding if only through the interest and mental exercise which it stimulates.

One may easily spend more time and effort on a job than is necessary, simply through failing to fetch the proper tool or through starting without thought how it can best be tackled. Habit induces preference for a certain method, not a desire Even when another method is tried, it may be rejected as slower because the trial is too short for camparable proficiency to be developed. Sometimes old systems persist when machines,

manpower or skills have changed.

# Questions

Many work problems are too complicated to be solved in the head as the result of observation. They may require analysis and records. Is it certain that the walking between mowing eighteen greens is reduced to a minimum? Where two or more men are mowing at one time, is it certain that the work is divided to the best advantage? What is the shortest route from the machinery sheds and back, visiting each green on the way? To answer such questions it may be necessary first to record the times and distances travelled.

The same kind of analysis may be extended to bunker-raking, fairway mowing, and all the routine jobs involving time lost in moving between the places of work.

# Commonsense

Mr D. H. Lloyd, Lecturer in Farm Management at Reading University, has recently been studying work from the farming point of view but his conclusions are applicable generally He found that although expert advice had brought many improvements, commonsense observation by the man on the spot could give the same results. He gives eight simple principles which can be applied to any job to indicate whether the method is wasteful. They may well give the green-keeper a new train of thought which will help him to achieve more with less effort from the staff available.

# Eight Rules

- (1) Make sure the work is made easy by ensuring that the worker is comfortable and using simple tools and gravity rather than human effort
- (2) Keep places of work as near together as possible and arranged to avoid unnecessary travelling, with tools handy to the work site
- (3) Arrange travel in straight lines and avoid back-tracking
- (4) When carrying or hauling loads, always take the maximum comfortable load to avoid unnecessary journeys
- (5) Use tools which suit the job
- (6) Balance the efforts of each worker in a team with the others, remembering that large gangs invariably breed wasted time
- 7) Try to finish off each job at the point where the next one will start
- 8) Examine each job to see whether it is necessary, can be done more easily or quickly, or can be combined with other jobs.

(The British Golf Greenkeeper, 1959)

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TO MANUFACTURERS.—In order that our information may be kept constantly up to date, manufacturers or suppliers are requested to forward their latest trade lists, catalogues, and any other confidential information regarding their products. By so doing the Bureau will be able to function to the mutual benefit of all concerned.

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