

"FLOREAT KEW"

THE  
JOURNAL  
OF THE  
KEW GUILD,

AN ASSOCIATION OF  
KEW GARDENERS, Etc.

PAST AND PRESENT.

AUGUST, 1934

LIST OF OFFICERS.

*President* : 1933-34 :—Arthur Osborn.

1934-35 :—William Hales, A.L.S., A.H.R.H.S.

*Trustees* : Sir Arthur W. Hill, K.C.M.G., M.A., Sc.D., F.R.S.,  
F.L.S., F.N.Z., Inst., and J. Coutts, Esq., V.M.H., A.H.R.H.S.

*Hon. Treasurer* : L. Stenning, Royal Botanic Gardens,

197, Kew Road, Kew, Surrey.

(To whom all remittances should be addressed.)

*Secretary and Editor of Journal* : E. G. Dunk,

197, Kew Road, Kew, Surrey.

*Members of Committee* :

Retire 1935.

W. Sharp, Durham.  
J. Coutts, Kew.  
C. H. Curtis, London.  
F. S. Banfield (late of F.M.S.).  
W. Gullick, Salisbury.

Retire 1936.

J. S. L. Gilmour, Kew.  
W. Lamberton, Wye.  
J. McPherson, New Zealand.  
W. L. Lavender, Raynes Park.

*Sub-Foreman* : A. J. TAYLOR.

Retire 1937.

G. W. Robinson, Kew.  
A. B. Melles, M.B.E., France.  
C. Jones, Ware, Herts.  
W. H. Judd, U.S.America.

Retire 1938.

A. Osborn, Kew.  
R. S. Lynch, Totnes.  
W. M. Campbell, Southend.  
F. R. Long, South Africa.

*Student-Gardener* : H. DAVIES.

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leading authorities on hardy trees and shrubs, since it has been his lot to deal with vast numbers of the new introductions which have been received from the Far East and elsewhere during recent years, and this work has brought credit to himself, and distinction to Kew.

For three years Mr. Osborn was Chairman of the Mutual Improvement Society and for a decade, the Secretary-Editor of the *Kew Guild Journal*, which he issued with great punctuality.

He is a frequent writer for the horticultural press, and was co-Editor with his two Kew colleagues, Messrs. Coutts and Edwards, of the "Complete Gardener" which has proved a very popular work, and in 1933 another work on "Shrubs and Trees" was published from his pen.

Mr. Osborn regards as one of the red-letter periods of his career, the visit to America in 1930 on behalf of Kew, when he was able to see the collections of the Arnold Arboretum, New York Botanic Gardens, Brooklyn Botanic Gardens, the famous research station of the Boyce-Thompson Institute, and the numerous nurseries and gardens of the Eastern United States.

Mr. Osborn succeeded Mr. J. Coutts as Deputy-Curator of the Gardens, when the latter was appointed Curator, two years ago.

W. HALES, 1934.



THE ANNUAL GENERAL MEETING 1933.

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THE ANNUAL GENERAL MEETING was held on Thursday, May 25th, 1933, at the Clarendon Restaurant, Hammersmith, London, W., at 6.30 p.m. Mr. G. T. Lane, the retiring President occupied the Chair and more than sixty members of the Guild were present.

The Minutes of the 1932 Meeting were read by the Hon. Secretary, together with the Annual Report and Financial Statements.

On the proposition of the Chairman, supported by Mr. H. Davies, it was unanimously resolved that the Minutes of the 1932 Meeting be passed as a correct record of the deliberations of that gathering.

In regard to the Annual Report and Financial Statement for 1932/33, Mr. Coward spoke of the Guild Benevolent Fund, as a very bright spot in the finances of the Guild, and expressed the hope that members would continue to give it their support so that the Fund would be built up strongly against the time when it might have claims upon it. He referred also to the Educational Fund, and intimated that while to date claims for examination fees had invariably been met in full, it might be very necessary in the near future, for the Committee to consider a percentage refund, governed by the number of applications received annually.

Reference was also made by this member to the amount of Two Pounds which had been fixed as the Life subscription, having in mind the changed conditions, and the rate of interest accruing from investments, which of late years had been so appreciably less. He recommended that a definite fund should be created to cover Life subscribers. Much discussion followed the latter statement and it was pointed out that to overcome the difficulty, the amount invested against Life subscribers (now at two-thirds rate) might be considered at some future General Meeting, when a well conceived scheme might be brought forward on the recommendation of the Committee. Such a scheme to bear in mind the desirability of marking down the amount to be invested against Life subscribers at a much lower rate in the printed capital account, without wishing to be free of a definite liability to such subscribers. It was pointed out that such a high rate as two-thirds was a grossly unfair burden to be offset against the assets of the Guild.

On the motion of the Chairman it was resolved that the Financial Statements and the Annual Report be passed. This resolution was carried without dissention.

Mr. C. P. Raffill then proposed that Mr. Arthur Osborn (Deputy Curator of the Royal Botanic Gardens, Kew), be President of the Guild for the ensuing year. This proposal was supported by the retiring President (Mr. G. T. Lane) who, in putting the proposal to the Meeting, referred to Mr. Osborn's work on behalf of the Guild as Hon. Secretary for many years, and his wide knowledge of Kew men. The proposal was enthusiastically adopted, and Mr. Osborn voiced his appreciation of the honour accorded him in a few, but well chosen sentences.



Major Stayner then referred to his remarks of the previous year in connection with the Kew leaving Certificate and said that he still held to his original view that the Certificate as at present awarded did not carry the weight that a certificate awarded on a definite final examination—in the nature of a diploma—would do, but said that he did not now wish to stress the point further. Mr. H. Taylor representing the Kew Students informed the meeting that the matter had been keenly discussed at Kew and that by an overwhelming majority they had decided against any drastic change being advocated in the practice now in vogue.

Among those who spoke on the subject were Messrs. J. Coutts, A. Edwards, G. Wolstenholme, C. R. Gregory, S. Edmondson, L. Richardson and Miss L. H. Joshua. Mr. J. S. L. Gilmour spoke of the present arrangements in reference to the Kew curriculum, mentioning that examinations were held at the conclusion of each series of lectures on particular subjects, and emphasised that the Kew leaving certificate in consequence had a higher value where lectures were concerned.

The discussion was closed, and there being no further business, the Meeting closed with a vote of thanks to the Chairman at 7.25 p.m.

#### THE ANNUAL DINNER 1933.

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THE 1933 ANNUAL DINNER was held on May 25, at the Clarendon Restaurant, The Broadway, Hammersmith, and on this occasion it is pleasing to record that there was a marked increase in the numbers who were present. The highest attendance recorded was in 1924 on the occasion of the British Empire Exhibition at Wembley, when so many overseas members of the Guild were in this country and 149 members were present and Mr. M. T. Dawe, occupied the Chair. It was expected that on this occasion these numbers would be exceeded but, unfortunately, several members who had expressed the hope that they would be able to join us, were prevented for various reasons, and ultimately 148 members of the Guild sat down to an excellent dinner.

The President of the Guild, Mr. Arthur Osborn (the Deputy Curator of the Royal Botanic Gardens, Kew), presided and among those present may be mentioned, Sir Arthur Hill, K.C.M.G., Messrs. J. Coutts, G. T. Lane, F. S. Sillitoe, D. Bliss, W. Hales, W. L. Laverder, J. S. L. Gilmour and A. D. Cotton.

The Loyal Toast was accorded full musical honours, and, following this, the assembly stood in silence for a brief space as an act of remembrance for Absent Friends.

Mr. Arthur Osborn, then introduced the Toast of the Kew Guild with these remarks:—

“ Before presenting the Toast of the Kew Guild which it is my privilege to do this evening, I should like to take this opportunity

of thanking you for the honour you have bestowed on me, through your Committee, in electing me as your President for the coming year. It is an honour which I deeply appreciate. I do feel, however, that my presence in the Chair this evening is due to the modesty of several of the oldest members of the Kew Staff. I refer in particular to Mr. John Aikman, M.B.E., who was the first Secretary of the Guild on its inception in 1893, and who retired on reaching the age limit (as laid down in the Civil Service regulations) last October. There is yet another, in Mr. W. N. Winn who should have been induced to occupy the honoured position as President of the Guild. I suppose birth certificates cannot lie but to those of us who know of Mr. Winn's activity on the tennis courts, it seems difficult to believe that he is retiring early next month.

The Kew Guild has now been in existence for 40 years, and it is 33 years since the first dinner of the Guild was held at the Holborn Restaurant on May 22nd, 1900. Sir William Thiselton Dyer was in the Chair and 100 members of the Guild were present. I myself had been at Kew about a year at this time and I am very pleased to see Messrs. J. Benbow, D. Bliss, W. Hales, J. D. Jones, J. T. Marks, C. P. Raffill, W. C. Smith, H. Spooner and Miss Cope of those who were present at our first gathering, also with us on this occasion.

May I take this opportunity of extending a very hearty welcome this evening to Mr. Joseph Benbow and his good wife; Mr. Benbow was associated for many years with the famous gardens at La Mortola; to Mr. J. D. Snowden, late of Uganda, Mr. L. A. Philpott on leave from Uganda, Mr. L. A. Richardson of Sudan, Mr. A. B. Melles of the Imperial War Graves Commission, and the many representatives of Public Parks Departments throughout the country. A special welcome is extended to Mr. John Gregory who left Kew so long ago as March, 1866, and who, in spite of a recent serious illness, has again joined us. Mr. Gregory took a very active part in the early days of the Guild, he is, I believe, the oldest living Kewite, and is in his 93rd year. Messages of regret at their inability to be present have been received from many Kewites, and among these should be mentioned, the Association of New Zealand Kewites, Mr. Charles Cundy (now in his 86th year) whose advancing years do not permit his being with us; from Mr. R. L. Harrow and Sir David Prain who send their warmest greetings to you all.

Though it took place three years ago you will expect me to refer to my visit to the United States of America and the Kew men I met there. Only those fortunate enough as I was, to meet Kewites in distant lands can fully realise how they hunger for news of Kew and the men of their time.

I still retain vivid memories of that visit. In all I met twenty-four Kewites, sixteen of whom were present at a dinner held at the Hotel Roosevelt in New York City. If there was one thing that impressed itself on my memory more than any other at that meeting, it was the value of the Guild Journal to Kew men overseas. May I, on behalf of those abroad in particular, impress on the Committee the desirability of publishing the Journal regularly and as early as possible each year. The late arrival of the Journal was very much

stressed during my visit to America and when I pointed out it was chiefly a question of finance, I was at once told that life members and those who paid their subscriptions regularly were being penalised and it was suggested that the Committee could easily adopt one of three alternatives :—

- (1) Publish a smaller Journal ;
- (2) Increase the amount of the subscription ;
- or (3) Invite Kew men occupying good positions to give donations to a special Journal Fund.

Your Honorary Secretary has hinted that records have nearly been broken tonight and that I can at any rate help to add another by being as brief as possible. I always feel that the most enjoyable part of this gathering is the meeting with friends of our Student days and the contact with a large number of present day Students with those of other days. I will therefore conclude by asking you to be upstanding and drink to the prosperity and future success of the Kew Guild, coupling with it the name of my old friend Mr. J. Dyfri Jones, whom I first remember as handing me my first week's subsistence allowance of one guinea at the window of the Curator's Office on April 8th, 1899."

Mr. Osborn then presented the annual awards to the successful students.

The Matilda Smith Memorial Prize was secured by Mr. S. Edmondson ; the Dümmer Memorial Prize was awarded to Mr. H. Taylor ; the Hooker Prize (presented annually by the Director) to Mr. S. Edmondson, while the Mutual Improvement Society's Prize was gained by Mr. J. G. C. Mackenzie.

A novel note was struck in this year's musical programme, and the whole of the numbers had been arranged by the Assistant Director (Mr. J. S. L. Gilmour) in co-operation with the Students, other members of the Kew staff, Mr. Frank Folk (now an "old Kewite"), and Mr. Daniels. The programme included part songs, sea shanties, community singing, violin and euphonium solos, and the skirl of the bagpipes was not overlooked.

The usual interval gave all present the fullest opportunity of fraternising.

Mr. J. Dyfri Jones in proposing the toast of "Our President" referred to his association with Mr. Osborn in his early days at Kew, and recollected handing him his first week's "subsistence allowance" from the window of the former Curator's Office. His remarks were in a light vein and the toast was accorded musical honours.

Before the concluding items in the musical programme Mr. Osborn thanked the artistes under the direction of Mr. Gilmour, for the excellent programme they had provided, and proposed a vote of thanks to the Hon. Secretary for the satisfactory arrangements in connection with the annual gathering.

## THE ANNUAL REPORT 1933/34.

THE COMMITTEE have pleasure in submitting for the consideration of the Members of the Kew Guild present at the Annual General Meeting, 31st May, 1934, the Annual Report for the year 1933/34.

The Annual General Meeting was held at the Clarendon Restaurant, Hammersmith, on 25th May, 1933, at 6.30 p.m., when Mr. George T. Lane, A.H.R.H.S., presided over an attendance of some sixty members.

The Meeting was followed by the Annual Dinner at 7.30 p.m., when Mr. Arthur Osborn, Deputy Curator of the Royal Botanic Gardens, Kew, occupied the Chair as President of the Guild for the ensuing year. One hundred and forty-eight members and guests were present, the second largest assembly in the history of the Guild. An entertainment was provided by members of the Guild and their friends.

The members of the Committee who are due to retire are :—

Messrs. W. C. Ibbett, J. Richardson, A. F. Baker, and L. Stenning.

The following are nominated by the Committee to fill the vacancies :—

Messrs. A. Osborn, R. S. Lynch, W. M. Campbell and F. R. Long.

Mr. A. J. Taylor has been elected to represent the Sub-foreman and Mr. H. F. Davies, the Student Gardeners. Mr. Stenning has intimated that he will be willing to continue as Hon. Treasurer for a further year, and the Committee desire to record their appreciation for the able manner in which he has discharged the duties of his office. Mr. E. G. Dunk will continue to be Hon. Secretary and Editor of the Journal. The co-operation of all members of the Guild will be appreciated to enable him to maintain the high standard of the Guild Journal, and in particular changes of status and whereabouts should be submitted to him to assist in keeping the Directory of Old Kewites up to date. Messrs. F. S. Sillitoe and J. D. Snowden have been recommended as Hon. Auditors for the ensuing year.

The T. W. Taylor Memorial Fund appeal realised £76 8s. 6d., a splendid response, which enabled a memorial to be erected in Richmond Cemetery and a substantial balance to be handed to Mrs. Taylor to be disposed of as she may desire. The bank account is being kept open for the time being should any late donations be received. The Committee desire to record their appreciation of the assistance rendered to the Hon. Secretary by Mr. E. Coward in regard to the arrangements for the erection of the memorial.

The 1934 issue of the Journal is practically complete, and part of it is already in the press. Yet again we have to record the valuable support from an increased number of advertisers; without this assistance it will be realised that our financial position would only permit of the publication of a much reduced number.

It would appear that there has been a marked falling off in annual subscriptions during the past year (£19 8s. 3d.) as against the previous year (£33 11s. 0d.), but it should be borne in mind that a big proportion of the latter, was arrears of subscriptions that had been received as the result of correspondence with members who were in default.

In December last, it was brought to the notice of the Committee that Mr. John Gregory, now in his 94th year, was in need of assistance. It was unanimously resolved to grant our old friend 10/- per week from the Benevolent Fund. Members will be pleased to know that Mr. Gregory's health still permits him to take an interest in the horticultural shows, and our assistance at a time of his greatest need has at any rate removed many anxieties from him in his advanced years. The Hon. Treasurer would welcome any donations to the Benevolent Fund.

Since the publication of the 1933 Journal we regret to record the deaths of the following members :—

Messrs. M. Morgenroth, W. Irving, C. E. Weeks, Dr. D. H. Scott, G. W. Butcher, F. Gifford, E. J. Mische and J. Jones.

The receipts for the year amount to £110 19s. 4d. and the expenditure to £95 1s. 8d. and the present available balance to the credit of the General Fund is £85 16s. 0d.

(Signed) J. S. L. GILMOUR,  
*Chairman of Committee.*

24th May, 1934.

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#### THE KEW GUILD BADGE.

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Following the proposal at the Annual General Meeting of 1934, that it was very desirable to change the badge of the Kew Guild and to adopt an official tie and colours, a new design has been drawn up and approved.

The new blazer badge and tie can be obtained from the Hon. Treasurer on prepayment only. The cost of both the blazer badge and tie are moderate and they can *each* be purchased for 2s. 8d., plus postage.

It is hoped to include a coloured plate in our next issue.

## KEW GUILD GENERAL ACCOUNT, 1933-34.

RECEIPTS.			EXPENDITURE.		
	£	s. d.		£	s. d.
Balance from 1932-33 ...	69	18 4	Printing 1933 Journal, half-tone blocks, and book post envelopes ...	67	3 0
Life Subscriptions ...	20	2 0	Hon. Secretary's honorarium ...	15	0 0
Annual Subscriptions and Arrears ...	19	8 3	Hon. Secretary's postages and incidental expenses, together with postages on 1933 Journal ...	8	5 0
Advertisements in 1933 Journal	51	0 9	Hon. Treasurer's postages and incidental expenses ...	11	11
Advertisements in 1934 Journal (prepaid) ...	3	5 0	Printing Notices for Annual General Meeting, 1933 ...	18	0
Dividends on £300 5% New South Wales Stock 1935/55 (less Income Tax) ...	11	5 0	Postages on Annual General Meeting Notices, 1933 ...	17	0
Dividends on £26 6s. 3d. 3½% War Stock ...	18	4	Wreath for late Mr. Walter Irving ...	1	3 6
Special Sales of Journal ...	7	6	New Ledger ...	16	9
Special Donations to Guild Funds ...	3	0 0	Cost of Cable to Association of American Kewites ...	6	6
Balance from 1933 Dinner Account ...	5	6	Balance in Bank ...	85	16 0
Interest on Deposits in Post Office Savings Bank ...	1	7 0			
	<u>£180</u>	<u>17 8</u>		<u>£180</u>	<u>17 8</u>

## CAPITAL ACCOUNT.

LIABILITIES.			ASSETS.		
	£	s. d.		£	s. d.
To 219 Life Subscribers of £1 at ⅓rds. rate ...	146	0 0	£300 5% New South Wales Stock* 1935/55 at par ...	300	0 0
To 237 Life Subscribers of £2 at ⅓rds. rate ...	316	0 0	£26 6s. 3d. 3½% War Stock at par ...	26	6 3
			Valuation of Journals in Stock ...	15	0 0
			Valuation of Typewriter ...	10	0 0
			Balance in Bank ...	85	16 0
			Liabilities to Life Subscribers exceed Assets ...	24	17 9
	<u>£462</u>	<u>0 0</u>		<u>£462</u>	<u>0 0</u>

\*N.B.—This includes the Thomson Bequest of £92 8s. 6d.

## ANNUAL DINNER, May 25th, 1933.

RECEIPTS.			EXPENDITURE.		
	£	s. d.		£	s. d.
To 145 Tickets at 7/- each ...	50	15 0	Deficit on 1932 Dinner ...	1	0 0
			Printing Menu Cards ...	1	5 0
			Clarendon Restaurant (Dinner Account) ...	48	2 0
			Gratuities ...	2	6
			Balance paid to Guild General Funds ...	5	6
	<u>£50</u>	<u>15 0</u>		<u>£50</u>	<u>15 0</u>

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**THOMAS WILLIAM TAYLOR MEMORIAL FUND.**


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RECEIPTS.		EXPENDITURE.	
	£ s. d.		£ s. d.
Total Donations	76 8 6	To cost of Memorial erected in Richmond Cemetery by the North Sheen Monumental Co., Ltd.	39 13 0
		Handed over to Mrs. E. Taylor	36 13 0
		Balance in Bank (to keep account open in event of further donations being received)	2 6
	<u>£76 8 6</u>		<u>£76 8 6</u>

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**THE MATILDA SMITH MEMORIAL PRIZE FUND.**


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RECEIPTS.		EXPENDITURE.	
	£ s. d.		£ s. d.
Balance from 1932/33 Account	4 11 7	Purchase of the 1933 Memorial Prize	2 2 0
Dividend on £50 L.C.C. 5% Stock	2 10 0	Balance in Bank	5 1 10
Interest on Deposit in Post Office Savings Bank	2 3		
	<u>£7 3 10</u>		<u>£7 3 10</u>

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(N.B.—The Assets of this Fund are £50 5% L.C.C. Consolidated Stock, and a Bank Balance of £5 1s. 10d.; Liabilities, Nil.)

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**THE DUMMER MEMORIAL PRIZE FUND.**


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RECEIPTS.		EXPENDITURE.	
	£ s. d.		£ s. d.
Balance from 1932/33 Account	3 14 3	Purchase of the 1933 Memorial Prize	2 2 0
Dividend on £70 Funding Loan at 4%	2 16 0	Balance in Bank	4 10 0
Interest on Deposit in Post Office Savings Bank	1 9		
	<u>£6 12 0</u>		<u>£6 12 0</u>

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(N.B.—The Assets of this Fund are £70 Funding Loan, and a Bank Balance of £4 10s. 0d.; Liabilities, Nil.)

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**THE WATSON MEMORIAL EDUCATIONAL FUND.**


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RECEIPTS.		EXPENDITURE.	
	£ s. d.		£ s. d.
Balance from 1932/33 Account	51 8 0	Refund of N.D.H. Examination fees to Mr. G. F. Wheeler, 1933	4 0 0
Donation: Mr. F. G. Walsingham	1 0 0	Balance in Bank	53 4 6
Dividends on £100 3½% War Stock	3 10 0		
Interest on Deposit in Post Office Savings Bank	1 6 6		
	<u>£57 4 6</u>		<u>£57 4 6</u>

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(N.B.—The Assets of this Fund are £100 3½% War Stock and a Bank Balance of £53 4s. 6d.; Liabilities, Nil.)

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 THE KEW GUILD BENEVOLENT FUND.
 

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RECEIPTS.		EXPENDITURE.	
	£ s. d.		£ s. d.
Balance from 1932/33 Account	79 9 4	Grants to Mr. John Gregory,	
Donations ... ..	Nil.	December, 1933, to April,	
Interest on Deposit in Post		1934 (22 weeks at 10/- per	
Office Savings Bank ...	1 19 4	week) ... ..	11 0
		Balance in Bank ... ..	70 8 8
	<u>£81 8 8</u>		<u>£81 8 8</u>

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The foregoing accounts have been duly checked, compared with Vouchers, Bank Books, Stock Receipts, etc., and found to be correct.

Signed: F. S. SILLITOE }  
J. D. SNOWDEN }

Hon.  
Auditors.

May 24th, 1934.



## THE LECTURES, 1933-34.

**Soils and Manures.**—Lecturer, Dr. H. L. Richardson.

*Distinctions* :—W. J. Corkhill, E. Hooper, M. Stanley, H. Taylor and F. H. Wright.

**Plant Pathology (Insect Pests).**—Lecturer, Mr. C. Potter.

*Distinctions* :—J. Douglas, M. Stanley, H. Taylor and G. F. Wheeler.

**Plant Physiology and Ecology.**—Lecturer, Dr. W. B. Turrill.

*Distinctions* :—J. C. Taylor and R. F. Miles.

**Advanced Systematic Botany.**—Lecturer, Dr. T. A. Sprague.

*Distinctions* :—M. Stanley and H. Taylor.

**Physics and Chemistry.**—Lecturer, Dr. P. Haas.

*Distinctions* :—A. R. Buckley, W. Everett, G. A. Hyland and P. W. Page.

**Plant Pathology (Fungi).**—Lecturer, Mr. A. D. Cotton.

*Distinctions* :—P. L. Bachelor, J. A. E. Blackman, J. G. C. Mackenzie, R. F. Miles, J. R. Spray, F. J. Stayner, J. C. Taylor.

**British Botany Club** (under the supervision of Mr. E. Nelves).

*Dummer Memorial Prize* :—J. C. Taylor.

*Distinctions* :—J. A. E. Blackman, A. S. Elson and W. E. Everett.

**Arboriculture and Forestry.**—Lecturer, Mr. W. Dallimore.

*Distinctions* :—W. F. Downes, R. F. Miles, J. R. Spray and J. C. Taylor.

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(*Editor's Correction* :—The details of Lectures in the 1933 Journal (p. 254) were inadvertently headed "1929-30" instead of 1932-33).

## THE FOOTBALL CLUB, 1933-34.

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AT THE ANNUAL GENERAL MEETING of the Club, held on May 16th, 1933, the following were elected as officers for the 1933-34 season :— Mr. W. W. McKenzie (Hon. Secretary), Mr. J. W. Smith (Captain), Mr. J. R. Hibbert (Vice-Captain) and Messrs. J. Glasheen and W. C. Ward (Members of Committee). It was resolved that the Club should enter into local cup contests during the season, and the outcome of this was that forms were sent in for the Richmond and District Charity Cup and the Twickenham and District Charity Cup Competitions.

Owing to Mr. J. W. Smith leaving the Gardens, a further meeting was held on July 3rd, when Mr. J. Glasheen was elected Captain and Mr. P. Bachelor a member of the Committee.

The draw for the first round of both Cup Competitions resulted in the Club getting a bye into the second round.

The first match of the season was played on September 23rd, our opponents were Isleworth St. Bridgett's F.C., our opponents in the Twickenham and District Cup. The weather was far from being ideal, for it rained heavily throughout the whole of the game. Weather conditions, however, did not upset the team, and we won comfortably by 6 goals to 1.

Our next Cup Tie match was against St. Mary's Recreation Reserves in the Richmond Charity Cup. We played this fixture on our ground at Richmond, and were somewhat unfortunate in losing by the odd goal in five. This meant the end of our interest in the Richmond Cup, but we still looked forward with hopeful anticipation to round three of the Twickenham and District Cup.

Up till January 20th, 1934, we had only won one match and drawn one, but in spite of this our fixture against Whitton F.C. in the 3rd round of the Twickenham Cup, was looked forward to with confidence, but on this occasion we were hopelessly outclassed by a much superior side, and had to admit defeat by the margin of 9 goals to 1. So much for our Cup aspirations!

There can be no denying that the standard of play during the whole season was at a very low ebb. The selection committee were badly handicapped in having to pick teams each week from only 15 possibles (which number included two valuable players—old Kewites—in Messrs. F. Folk and W. Pearce).

The match in the Old Deer Park at Richmond against the R.H.S. (Wisley) F.C., brought out the best in our side. It is very noticeable that every match that is in the nature of a "friendly" annual fixture, always produces a keen contest, especially where new players are concerned. This fixture fittingly ended in a draw 3 goals all, and was a ding-dong struggle to the end. Afterwards, Kew entertained the Wisley team to tea, when all the knocks and bruises were forgotten and the return fixture looked forward to with interest.

It was towards the close of the season when we made our visit to Wisley—having had to cancel a previous fixture as we were unable to get a full team together. Play was keen, but we were opposed to a far different team to that early in the year, for with the new session, they were in the same plight as ourselves, sadly lacking in football talent. Kew won the match by 4 goals to 1. We were entertained to tea by our opponents, and our victory gave us some satisfaction and was the cause of a sing-song in our coach on the return to Kew, for it was one of our very few wins, and against Wisley at that!

Of a fixture list of 23 matches, 16 were played, and of these we won 3 games and drew 1. We had 46 goals to our credit, but had 73 scored against us.

The "supporters' club" at Kew has never yet boasted a large following, but there were occasions during the past season that the players were well supported along the touch-line, and though our results make a poor showing, it is hoped that the coming season will be a more successful one for the Club, and compensate those loyal members who have kept it together during the disappointing season of 1933-34.

W. W. McKENZIE,

*Hon. Secretary.*

April, 1934.

#### THE BRITISH BOTANY CLUB, 1933.

THE ANNUAL GENERAL MEETING was held on March 28th, 1933, in the Lecture Room, when the following officers were elected:—President, Mr. E. Nelmes; Hon. Secretary, Mr. H. Taylor; Committee, Messrs. W. J. Corkhill and J. C. Taylor.

The collecting members were Messrs. J. E. Blackman, T. R. Clarke, H. Cossom, G. Elphick, A. S. Elson, W. Everett, G. Hooper, J. A. N. Scott and J. C. Taylor.

On April 11th, a meeting was held to explain the methods and principles of collecting, drying and mounting, and the excellent collections of the hon. secretary (Mr. H. Taylor) were shown to the members and enabled them to get a good insight into the best type of specimens to collect, etc.

Owing to the reduced number of collectors the two half-day trips were omitted from the programme, but a splendid day was spent on the shingle beach and salt-marshes at Milford-on-Sea. A number of Saturday afternoon and evening trips were held, the latter being particularly well attended both by members and non-collectors.

The exceptionally dry and warm summer proved favourable for drying specimens and little or no trouble was experienced by specimens being spoilt in the press by damping.

The first trip was held on Saturday afternoon, April 15th, the members enjoying a fifteen-mile "hike" in the Claygate district, and over the Epsom Downs, and many specimens were collected, including *Cerastium arvense*, *Ruscus aculeatus*, *Prunus spinosa*, and *Ranunculus auricomus*. A Sunday cycling trip to the Royston district yielded the comparatively rare *Anemone Pulsatilla* and *Senecio campestris*.

The evening excursions along the River, to Teddington Sand pits and Brent Canal were under the guidance of Mr. G. W. Robinson; while Mr. C. E. Hubbard conducted the ramble through the Queen's Cottage Grounds on June 6th. All these evening excursions were well attended, and many specimens were obtained.

On July 4th the annual trip to Milford-on-Sea, Hampshire, proved an interesting and enjoyable outing. The energetic Dr. W. B. Turrill taxed our stamina on the tour of the salt marshes and shingle beach. After partaking of lunch, the scorching sun induced us to take to the water, where we all enjoyed a welcome and refreshing dip, and on our way home we visited Hurst Castle, and listened to an interesting account of its past history. The "bag" for the day was a large and interesting one, and included *Zostera nana*, *Spartina Townsendii*, *Glaux maritima*, *Arenaria peploides*, *Glaucium flavum* and *Geranium purpureum*.

Excursions to Epsom, Headley and Mickleham Downs provided much interesting material typical of the flora of the chalk hills.

Staines Common was visited on August 4th, for the purpose of collecting aquatic flora, which, owing to the abnormally dry season, was scarce, but good specimens including *Ceratophyllum demersum*, *Hottonia palustris*, *Sparganium ramosum* and *Sagittaria sagittifolia* were secured.

At the end of August we lost the services of our capable and enthusiastic honorary secretary (Mr. H. Taylor), and a meeting was held to replace him. Mr. M. Stanley was unanimously elected in his stead, to hold office for the remainder of the year.

The nine collections submitted were all passed as satisfactory; those of Messrs. J. E. Blackman, A. S. Elson and W. Everett gained distinctions and Mr. J. C. Taylor, whose collection was outstanding, was awarded the Kew Guild Dümmer Memorial Prize.

Our thanks are due to Messrs. J. S. L. Gilmour, E. Nelves, G. W. Robinson, Dr. W. B. Turrill and C. E. Hubbard for their assistance so ungrudgingly extended at all times and to all others who have so kindly helped during the past year.

M. STANLEY.

J. C. TAYLOR.

1934

## THE SWIMMING CLUB, 1933.

AT THE ANNUAL GENERAL MEETING, held in the Iron Room on the 16th May, 1933, the following members were elected to hold office for the season :—

C. B. Gibbins	...	...	...	Captain
A. J. Taylor	...	...	...	Vice-Captain
J. G. C. MacKenzie	...	...	...	Hon. Secretary
H. Taylor and G. Wassell	...	...	...	Committee men

At this meeting it was decided to reduce the price of admission tickets to Richmond Baths to threepence, the club to pay the balance of three half-pence on each ticket. It was also decided to award trophies instead of monetary prizes to be competed for in the Annual Mile Championship Race.

The attendances at Richmond Baths were well maintained throughout the season, although, as a result of the very hot summer, many members preferred the river to the crowded baths.

River practice commenced in the Thames in June, six practices being held with an average attendance of ten members. A safety boat manned by Messrs. Douglas, Wheeler or Clark being in attendance on each occasion.

The Annual Mile Championship Race was decided on Friday, 21st July, over the course from Isleworth Gate to Kew Bridge. The officials were :—

Judge : Mr. C. P. Raffill.

Timekeeper : Mr. L. Stenning.

Starter : Mr. J. A. Mingay.

Fourteen competitors faced the starter, a good start being made with Gibbins and Mullins taking the lead followed by Leps. Gibbins and Mullins fought for the first position until the bend was reached when Gibbins went ahead, Leps came up to fill second place and Mullins fell back to finish third.

A dead tide resulted in slow times, but made the performance of a record number of twelve to complete the course, all the more creditable. J. C. Taylor, suffering from a bad attack of cramp and W. J. Corkhill, due to cold, were forced to retire after completing about half the course.

Sir Arthur Hill, was on the landing stage and congratulated the swimmers before they passed through the large crowd of spectators to the dressing rooms. The times and placings were as follows :—

1. C. B. Gibbins	...	...	25 mins. 15 sec.
2. W. Leps	...	...	25 " 30 "
3. A. T. Mullins	...	...	25 " 40 "
4. A. J. Taylor	...	...	26 " 43 "
5. A. S. Elson	...	...	27 " 16 "
6. W. E. Everett	...	...	28 " 40 "

7. H. Taylor	...	...	28	„	47	„
8. R. F. Miles	...	...	28	„	55	„
9. J. G. C. Mackenzie	...	...	29	„	25	„
10. F. H. Wright	...	...	30	„	20	„
11. G. H. C. Vanson	...	...	30	„	45	„
12. W. Pinnion	...	...	32	„	35	„
13. W. J. Corkhill	} Retired.					
14. J. C. Taylor						

The Swimming Dance following the race proved to be most successful both socially and financially, a credit balance of £6 0s. 0d. being realized.

Miss Hill kindly presented the prizes—the silver challenge cup and a replica of the cup to the winner and medals to the second and third.

Sir Arthur Hill, the donor of the silver challenge cup gave the replica to mark the meritorious performance of C. B. Gibbins who won the race for the third time.

The committee desire to thank all members for the way they worked together to make the season one of the most successful experienced since the formation of the club.

J. G. C. MACKENZIE,  
*Hon. Secretary, 1933.*

### THE CRICKET CLUB, 1933.

THE ANNUAL GENERAL MEETING of the Cricket Club was held on May 16th, 1933, when Mr. J. Glasheen was elected Captain for the 1933 season, Mr. L. Stenning Vice-Captain, Mr. J. Smith Hon. Secretary, and Messrs. J. S. L. Gilmour and C. F. Coates as members of the Committee in addition to the other officers.

A fixture list of 25 matches had been arranged, and the prospects for a successful season were bright. It was hoped that during the summer it would have been possible to visit Hull and so play the return fixture with the Sons of Temperance C. C., which match was one of the most enjoyable of the previous season. To our regret, however, it was found that we could not guarantee the number to constitute a full team, in view of the fact that the trip would occupy a whole day and the difficulty too of fitting in with the railway excursions.

The first match of the season was played on April 29th, and resulted in a win for our old friends, St. Lukes C. C.

Six weeks of the season elapsed before we recorded our first victory. This was the occasion of the Annual, Staff versus Students match, which was played on Kew Green on June 19th, under ideal conditions.

The Staff eleven were ably captained by Mr. L. Stenning. Having won the toss, the Students chose to bat first on a wicket that promised many runs and the innings closed with the creditable score of 126, mainly due to the batting of J. Glasheen (38), and W. W. McKenzie (17).

The Staff made a very promising start, but owing to the persistent bowling of J. Glasheen and J. Smith, admirably backed up by keen fielding all round, the innings finally closed at 90, thus giving the Students victory by 36 runs.

As in previous years both teams were entertained to tea on the Lawn Tennis Courts enclosure, by Sir Arthur and Miss Hill.

On June 10th, another match deserving mention in these notes, was played on Kew Green when our visitors were a team of Old Kewites, captained by Mr. C. Jones. Exceptional interest was centred on this match, which was the first of what we sincerely hope will be an annual fixture. By winning the toss, we batted first, and after only a very moderate start, the innings was declared closed at 116 for 8 wickets. The principal scorers were J. Smith (56 not out), and J. Taylor (15).

The Old Kewites made a disastrous start, as their first wicket fell with the first ball bowled. They made a splendid recovery and when their fourth wicket had fallen, 74 runs were on the board and they had every reason to anticipate victory. Hopes of a close finish were quickly dispelled as the last six batsmen provided a "procession," and only contributed 4 runs to the total. The bowling of J. Glasheen (4 for 21) and J. Smith (4 for 35) was exceptionally good. The outstanding batsmen for the Old Kewites were J. E. Farmer (22), and H. S. Patton (16). The tea interval was the occasion for many friends to join the teams at the Rose and Crown, where tea had been arranged for.

The biennial visit to Suttons C. C. at Reading was on June 24th, and as in previous years, the teams were entertained to lunch and tea by Mr. M. A. F. Sutton.

The start of the match was delayed owing to adverse weather conditions, but when play was possible, Suttons batted first. Our bowlers, however, were on the top of their form, while the fielding was the best displayed throughout the whole season. The innings closed at 76, a moderate total on what is without doubt, one of the finest pitches in the country. The bowling analysis was J. Glasheen 1 for 21, J. Smith 5 for 28, B. W. Harborne 4 for 23. With a thunderstorm brewing, the tea interval was taken. Heavy and continuous rain fell and much to the regret of both teams and the many spectators, the match was finally abandoned. The team and those who had accompanied them were later shewn round the extensive trial grounds, where much of interest was to be seen.

Owing to his securing an appointment in the Manchester Parks Department in July, our Hon. Secretary, Mr. J. W. Smith had to vacate the position and we were unfortunate in losing him, as it will readily be recognised that he was a very able all-rounder. Mr. W. W. McKenzie was elected Hon. Secretary in his stead.

A second match was arranged later in the season with the Old Kewites XI. This too, was played on Kew Green, when we suffered defeat by 111 runs to 34.

During the season, 7 fixtures were cancelled and of the remainder, 3 only were won, 4 drawn and 11 lost. It is hoped that 1934 will be more successful.

W. W. MCKENZIE,  
*Hon. Secretary.*

## THE MUTUAL IMPROVEMENT SOCIETY.

### 1932-33 SESSION.

THE ANNUAL GENERAL MEETING was held in the Garden Library on September 20th, 1932, when Mr. C. P. Raffill was chairman, and 37 members were present. The principal business was the election of Officers for the season, and the following were chosen:—Chairman, Mr. C. P. Raffill; Vice-chairman, Mr. G. W. Robinson; Hon. Secretary, Mr. S. Edmondson; Assistant Hon. Secretary, Mr. A. J. Taylor; Committee: Messrs. B. C. Gibbins, H. Hall and J. R. Hibbert. An interesting syllabus had been drawn up, and the session commenced on October 10th, 1932, with an interesting lecture by Mr. J. S. L. Gilmour on "Classification, its Past and Future."

Others, apart from members of the Society, who contributed papers, were Mr. John Coutts and Dr. W. B. Turrill, while Sir Arthur Hill closed the session with an interesting and instructive talk on "Seeds and Seedlings."

Of the seventeen papers read by members, six were illustrated by lantern slides. The papers were generally of a high standard, and as will be seen by the syllabus, the subjects were varied and well chosen, and interest was maintained throughout the session.

The average attendance was 39, and this showed an increase of 1 over the previous session, while 48 individual members participated in the discussions, against 43 in 1931-32.

The Secretary's Report was presented and adopted at a meeting held on April 3rd, 1933, when voting was carried out for the annual prizes. The Hooker Prize (presented annually by the Director) was awarded to Mr. S. Edmondson, and the Mutual Society's Prize to Mr. J. G. C. Mackenzie.

A pleasant summer trip made to Messrs. Sutton and Sons' Trial Grounds at Reading in July, 1933, was much enjoyed, and proved of great interest.



Thus another session came to a close, and before the report of the Society is again published, many of our members will have left Kew to make their mark (we hope) in the gardening world. It is earnestly hoped that the knowledge and experience of public speaking gained at the meetings of the Mutual Improvement Society will assist them in their endeavours, and that they will, if it is required of them, take their places on public platforms with every confidence.

A. J. TAYLOR,  
*Asst. Hon. Secretary 1933.*

S. EDMONDSON,  
*Hon. Secretary 1933.*

# MUTUAL IMPROVEMENT SOCIETY.

## SESSION 1932-33.

*Chairman* ... .. Mr. RAFFILL.  
*Vice-Chairman* ... .. Mr. ROBINSON.

Date.	Subject.	Lecturer.
1932		
Oct. 10	—Classification, Its Past and Future.....	Mr. J. S. L. Gilmour
„ 17	—Exhibition Vegetables, Cultivation of.....	G. F. Wheeler
„ 24	—Lilies (*) .....	Mr. J. Coutts
„ 31	—Questions with Answers.....	
Nov. 7	—Horticultural Education.....	E. W. B. Gale
„ 14	—The Cultivation from Seed of Flowering Plants for Succession in the Conservatory (*) .....	Mr. G. Wassell
„ 21	—Peaches and Nectarines, Cultivation of.....	Mr. J. L. Glasheen
„ 28	—Education, Past, Present and Future.....	Dr. W. B. Turrill
Dec. 5	—Hardy Clematis, Propagation of.....	Mr. W. J. Corkhill
„ 12	—Concerning Corsica (*).....	Mr. H. Hall
„ 19	} Christmas Vacation	
„ 26		
1933		
Jan. 2		
„ 9	—Suburban Garden Planning and Planting.....	Mr. J. A. N. Scott
„ 16	—Cambridge Botanic Gardens (*).....	Mr. F. H. Wright
„ 23	—Stove Plants, Cultivation of.....	Mr. M. Stanley
„ 30	—Sprays and Spraying.....	Mr. H. Taylor
Feb. 6	—Herbaceous Borders .....	Mr. A. J. Taylor
„ 13	—Carnations, Perpetual Flowering (*).....	Mr. F. Eul
„ 20	—A Treatise on Colour.....	Mr. S. Edmondson
„ 27	—Partial Sterilization of Soil.....	Mr. A. E. Harper
Mar. 6	—Trees and Shrubs, Choice Hardy and Half- Hardy (*) .....	Mr. J. R. Hibbert
„ 13	—Vegetation of New Zealand (*).....	Mr. J. G. C. MacKenzie
„ 20	—Bulbs for Forcing .....	Mr. W. C. Ward
„ 27	—Seeds and Seedlings .....	Sir Arthur W. Hill
April 3	—Annual Report.	

\* Lantern Lectures.

NOTES AND GLEANINGS.

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VISITORS TO THE GARDENS DURING 1933.—During 1933, 1,226,057 visitors were admitted to the Gardens, an increase of 157,662 compared with 1932. The total Sunday attendance was 496,172, and on weekdays (other than Students' Days) 619,778, while on Students' Days 110,107 persons were admitted.

The greatest monthly attendance was in April, with 253,826, and the lowest in December, with 7,090 visitors. The highest daily attendance was 69,409 on June 5th (Whit Monday); the lowest was 17 on January 13th.

Other details which may be of passing interest are that 6,225 cameras were brought into the Gardens and paid for during the year; 1,463 invalid chairs and 6,850 perambulators were admitted, in addition to the many holders of season tickets.

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The hot, dry summer of 1933 entailed considerable extra labour in watering, and during the year 45,000,000 gallons of water were used, the maximum weekly consumption being 2,656,000 gallons for the week ending August 14th, while 2,481,000 and 2,189,000 gallons were used for weeks ending September 4th and 11th. The water used is entirely Thames water, through the mains of the Richmond Borough Council supply, and being drawn from below the locks at Teddington would normally only flow out to the sea. In this way the water supply of the Gardens does not prejudice the supply of domestic water to the general public during periods of drought.

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A result of the hot summer of 1933 was the ripening of fruits which seldom reach maturity at Kew, and it may be of interest to record that a good crop of fair-sized fruits of *Diospyros Kaki* (the Kaki or Persimmon) ripened on a wall tree near the Melon Yard and produced sound, well-formed seeds.

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In 1932 a record number of separate consignments of living plants, seeds, etc., were received at Kew and the four-figure entry number appeared for the first time on plant labels. The year 1933, however, eclipsed even this record, for 1,107 consignments were received, an increase of 53 on the previous year.

5,900 packets of seeds of herbaceous and alpine plants and 4,244 packets of trees and shrubs were distributed, an aggregate increase of 353 packets compared with 1932.

Kewites, especially those of the period 1900-02, will be interested to learn that "our" padre, the Rev. W. C. Smith, has recently been appointed Vicar of St. Peter's Church, Regent Square, London, W.C.1. May we take this opportunity of saying how pleased we are to welcome him at the Annual Dinner each succeeding year.

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A social and games section of the Sports Club came into being during the past winter, and has proved a very popular innovation. Tournaments and inter-departmental fixtures were arranged and the enthusiasm shown augurs well for the future. Table tennis, card games, darts, dominoes, etc., are the main relaxations, but it is hoped to introduce other indoor games "as funds permit."

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Among the King's Birthday Honours, we were pleased to note that the M.B.E. had been awarded to Mr. A. D. Cotton, F.L.S., Keeper of the Herbarium and Library; to Mr. F. G. Harcourt, Superintendent of the Department of Agriculture, Dominica, B.W.I., and Mr. W. E. Broadway, Port of Spain, Trinidad. May we extend our congratulations to these well-known Kewites on the recognition of their public-spirited endeavours at all times.

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*Mr. Judd writes from the Arnold Arboretum :—*

"Last August I went out to the Pacific Coast and all the way down through California to Mexico, staying at Sacramento, San Francisco, Santa Barbara, Los Angeles and San Diego. Grevilleas, Hakeas, Banksias, Acacias, Eucalyptus in variety, and Camellias, and in fact every kind of South African, Australian and Chilean shrub grows rampantly. Palms and Olives are everywhere. I visited an orange grove covering 45,000 acres. Many plants I had never seen growing before, and others only under glass at Kew, but I soon became familiar with them. You would have been amused to have seen me "conducting" a party of tourists around some of the gardens at Montecito one afternoon. I really believe that most of them were under the impression that I resided there instead of being, like themselves, on a visit. There are few really first-rate horticulturists in California, and I was very fortunate in making the acquaintance of the more prominent ones. Mr. John McLaren, Superintendent of Golden Gate Park, Mr. E. O. Orpet and Mr. Peter Reidel at Santa Barbara, Mr. Hugh Evans at Santa Monica, Miss Kate Sissions at Pacific Beach and, of course, Miss Alice Eastwood at San Francisco were among those I met. Mr. Robinson at Point Louva, with probably the best collection of Begonias in the world all growing in lath houses, with scarcely any glass, I found well worth visiting.

Of course, I looked up the Old Kewites *en route* in George H. Hecke (1890) and A. R. Gould (1910). The former is no longer Director of the State Department of Agriculture, having retired some time ago. I had a state car placed at my disposal for five days while in and around Los Angeles. The Huntingdon Estate and Gardens at Pasadena are a revelation, Tree Ferns, *Platynerium*, *Cymbidiums*, *Epidendrums*, etc., are quite at home in the open air. I went over the Union Pacific Railroad from Chicago and back by Santa Fé to spend a day at the Grand Canyon. I met Mr. R. S. Lynch of Dartington Hall Estate here and he stayed on for a couple of days.

We have had a very peculiar winter here, the coldest since 1840. On December 26th, we had the worst blizzard for ten years, and it left some 10 inches of snow, which covering must have protected many of the smaller plants from the severe weather. On December 29th, the temperature fell to 17° below zero, and did not rise above 4° below zero all day, while the following night, it fell to 14° below. I am wondering what will happen to a lot of our new introductions from China and elsewhere, for to be below zero for forty-eight hours is without doubt, a severe test for them. On January 1st, 1934, the temperature rose to 56°, a variation of 73° in three days!

We expect a big gathering in New York on March 24th. We don't have to sneak into some spare room for a cocktail now-a-days!

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Mr. C. H. Middleton, N.D.H., is a name that must be familiar to many people in this country, for in addition to his duties as Horticultural Advisor at the County Hall, Kingston-upon-Thames, he is a well-known broadcaster on everyday gardening, and his talks are doubtless of great interest to not only the everyday amateur, but to others also. It was also a pleasure during the past winter to hear Mr. John Adamson, still with his typical accent giving a talk in the Scottish Regional programme. Among others whose services have been at the disposal of the British Broadcasting Corporation we may also mention our President (Mr. Arthur Osborn).

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#### RETIREMENT OF MR. S. A. SKAN.

Following the notice in the last number of the Journal (pp. 250, 251) of the retirement of Messrs. J. Aikman and W. N. Winn, we have now to acquaint our members of the retirement from the post of Botanist in the Herbarium on September 30th, 1933, of Mr. Sidney Alfred Skan. Mr. Skan came to Kew as a Student Gardener on September 19th, 1892, and was appointed an Assistant in the Herbarium on July 16th, 1894. Mr. Skan acquired a unique knowledge of botanical works, and he was looked to as Librarian of the extensive Herbarium Library. He had a wide knowledge too of plant families and contributed many papers on specialised groups to such important works as the "Flora of Tropical Africa," the "Flora Capensis" and the "Index Florae Sinensis."

Mr. Skan intends to spend his years of retirement in the Lightwater district near Bagshot; may we wish him many happy years of retirement.

MR. CHARLES H. CURTIS, V.M.H., J.P., the well-known Editor of the "Gardener's Chronicle," is to be congratulated on being chosen by his fellow councillors to be Mayor of Brentford and Chiswick during the present year.

Mr. Curtis was born at Wimbledon in 1869 and his activities in the horticultural world are well known, but in addition to his work in connection with the "Gardener's Chronicle," he is also Editor of "The Orchid Review," has written and published "Orchids for Everyone," "The Book of the Flower Show," and "Annuals: Hardy and Half-hardy." He has received many decorations and awards for his work and interest in horticulture. He is a Chevalier of the Order of the Crown of Belgium, and has been awarded the Victoria Medal of Horticulture by the Royal Horticultural Society. He also secured the gold medal of the National Sweet Pea Society and the Henry Eckford gold memorial medal. He is also chairman of the United Horticultural Benefit and Provident Society, a position he has held for 31 years. He is an ardent Wesleyan and is educational secretary of the Wesleyan Methodist circuit.

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#### THE BOTANICAL MAGAZINE.

THE DIRECTOR, at the request of the President and Council of the Royal Horticultural Society, has accepted the Editorship of the "Botanical Magazine" in succession to the late Dr. Stapf. This decision has given much satisfaction, as it has long been considered essential that such an important work should be closely associated with Kew and its extensive collections both in the Gardens and Herbarium.

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MAY WE TAKE this opportunity of offering our sincere congratulations to Mr. J. Coutts, A.H.R.H.S., upon his being awarded the Victoria Medal of Honour by the President and Council of the Royal Horticultural Society. Also to the following Kewites who have been recently elected Associates of Honour:—Mr. J. S. Christie, Parks' Superintendent, Camberwell, and Mr. W. R. Mustoe, O.B.E., of Delhi.

## KEW METEOROLOGICAL NOTES 1933.

	Rainfall in Inches.	Temperature (Fahr.)	
		Maximum	Minimum (on grass)
January .. ..	1.51	54°	17°
February .. ..	2.65	57°	19°
March .. ..	2.20	65°	25°
April .. ..	.69	75°	27°
May .. ..	1.71	84°	37°
June .. ..	2.10	91°	36°
July .. ..	2.08	94°	48°
August .. ..	.61	96°	44°
September .. ..	2.38	84°	39°
October .. ..	1.26	70°	27°
November .. ..	1.04	57°	25°
December .. ..	.31	44°	21°
Total Rainfall ..	18.54	—	—

The year 1933 will be remembered chiefly on account of the high sunshine record and the prolonged spell of dry weather during the summer months and towards the close of the year. The total rainfall of 18.54 inches compares with 21.83 inches for 1932, and 23.61 inches for 1931.

## THE TAYLOR MEMORIAL.

Since the publication of the 1933 Journal the following donations to the Taylor Memorial Fund have been received:—

	£	s.	d.
W. H. Tuck ... ..		5	0
S. F. Ovenden ... ..		5	0
W. J. Bean, I.S.O., V.M.H. ... ..	1	0	0
J. W. Cheek ... ..		2	6
W. N. Winn, M.B.E. ... ..	1	0	0
H. Eavis ... ..		1	0
R. O. Williams ... ..	10	0	
L. Stenning ... ..		5	0
W. E. Stewart ... ..		5	0
V. G. Barham ... ..		2	6
(since the publication of the balance sheet 24-5-1934)			
F. G. Preston ... ..		10	0
Previously acknowledged ... ..	72	12	6
TOTAL RECEIPTS	76	18	6

A memorial was erected in Richmond Cemetery (see photograph) and a sum of £36 13s. 0d. was still available. The Guild Committee decided that it would meet the wishes of all subscribers if this was handed over to Mrs. Taylor, to be used as she may so desire. A further small balance has accrued as the result of a further donation, and for the time being the account is being kept open should other amounts still be forthcoming.

The inscription on the memorial reads as follows :—

In loving memory  
of a devoted husband and father  
THOMAS WILLIAM TAYLOR, A.H.R.H.S.,  
Curator of  
The Royal Botanical Gardens, Kew,  
who died March 4th, 1932,  
aged 53 years.

*He was one of the Trustees of the  
Kew Guild, by the Members of which  
Organisation this Memorial has been  
erected in affectionate remembrance.*

“ FLOREAT KEW.”

### WEDDING BELLS.

- Mr. James Brown to Miss Eva M. Finch, at St. Paul's Church, Ealing, W., April, 1933.
- Mr. Harry Hall to Miss Winifred Watts-Huggett, at Richmond, Surrey, July 1st, 1933.
- Mr. L. Stenning to Miss Irene Kirby, at St. Mary's Church, Sunbury-on-Thames, September 9th, 1933.
- Mr. H. W. Kemp to Miss Edith Gladys Gerrish, at St. Paul's, Kingston-upon-Thames, September 23rd, 1933.
- Mr. H. M. Holloway to Miss N. Nain, at St. George's English Church, Barcelona, Spain, October 7th, 1933.
- Mr. T. A. Arnold to Miss W. E. Bardrick, at St. Paul's, St. Albans, January 20th, 1934.
- Mr. H. P. Robinson to Miss Betty Hawkins, at Bradwell-on-Sea, Essex, April 2nd, 1934.

## BOOK NOTES.

TREES AND SHRUBS HARDY IN THE BRITISH ISLES (VOLUME III.),  
by W. J. Bean, I.S.O., V.M.H.

It has been one of the aims of every Kewite to be the possessor of Mr. Bean's popular and exhaustive work on Trees and Shrubs Hardy in the British Isles, Vols. I. and II., and few prize awards made on behalf of the Kew Guild and the authorities at Kew, have departed from the practice, that these volumes should be purchased for the purpose. Now, however, the long awaited Volume III. is available, embracing the newer introductions of Wilson, Purdom, Forrest, Farrer, Kingdon Ward and a host of others. Suffice to note in these few lines that more than 150 Rhododendrons alone are described, while there are few families to which additions have not been made. Species which can be grown in the milder and more favoured districts of the south and west are also referred to at length. The book, which is published by John Murray, Albemarle Street, London, W., price 36/-, is finely illustrated with 64 photographs, and should be in the possession of all those who have the companion volumes.

Mr. Bean is to be warmly congratulated on the completion of a work that will long remain the standard reference book on the subject of Trees and Shrubs.

OUTLINES OF A SMALL GARDEN.—This little book, published by Cassell and Co., Ltd., London, 320 pages, with 16 half-tone illustrations, is from the pen of Mr. C. H. Middleton, N.D.H., and was written in response to the requests of many of those who have listened to his broadcast talks on every-day gardening topics.

Its contents include garden planning and design, fencing and hedges, a suitable selection of trees and shrubs, climbers, etc., for the small garden; making of new lawns and the renovation and care of old ones; the planning and planting of the hardy flower border; annuals, biennials, rock plants, roses and bulbous subjects—to mention but a few chapters. Vegetable cropping schemes, salads, herbs, etc., together with fruit of all kinds suitable for the small garden are all referred to, as are enemies of the garden and of fruit trees. A chapter—which brings an interesting little book to a close—gives hints and advice to the man-in-the-street (and it is essentially for him that the book is intended) on mistakes and how to correct them when preparing exhibits for local horticultural shows.

In conclusion, the author says: "Above all, enter into a show in a spirit of sportsmanship, and do not grumble if you miss the prize. Judges are but human, and perhaps sometimes when your exhibit really warrants it, you will not be awarded the prize: on the other hand you may occasionally win one when you do not deserve it at all. So keep your biggest smiles for the losing efforts and try again."



## “ LOGGING ” IN NIGERIA.

Situated in the Benin District, and on what is known as the Benin Sands, the concessions which are referred to in this brief article, cover some 200 square miles of rain forest, and my company has exclusive rights to fell all classes of timber. The trees are divided by the Forestry Department into eight classes, which do not, however, follow any botanical grouping, but are classified solely according to their value commercially. Each group has a fixed royalty per tree which has to be paid to the Colonial Government before the trees can be felled. Of these royalties, a proportion is retained by the Forestry Department for re-afforestation work, etc., and a sum is paid to the local villages and chieftains.

Before felling commences, each tree is stamped by a Forest guard, and duly numbered. Each species has a minimum girth limit for felling purposes. The following are the more important trees which are felled for export :—

*Triplochiton scleroxylon* (Obeche), *Khaya ivorensis* (Lagos Mahogany), *Entandrophragma cylindricum* (Sapele-wood), *Lovoa Klaineana* (African Walnut), *Chlorophora excelsa* (Iroko), *Guarea Thompsonii* (Obobo), and small quantities of *Diospyros crassifolia* (Ebony). Other species that are prominent here are :—*Gossweilerodendron balsamiferum* (Agbar), *Piptadenia africana* (Ekhimi), *Cylicodiscus gabunensis* (Okan), *Lophira alata* var. *procera* (Ironwood), *Terminalia superba* (Afara), *Daniellia Ogea* (Oziya), *Brachystegia eurycoma* (Okwen), *Distemonanthus Benthami* (Ayanran), and *Celtis integrifolia* (Okhia).

The latter list is of secondary timbers that have not yet been exploited, but a Timber Utilisation Board has been set up to encourage their export, and an expert recently sent out from Princes Risborough, has made an exhaustive report on the possibility of placing them on the English and other markets. In view of the shortage that will occur in a few years with supplies of such desirable timbers as Lagos Mahogany and Obeche, it is undoubtedly essential that outlets should be found for other species at present almost unknown but equally as desirable, provided that the market is not swamped with excessive quantities.

Great damage has been done to the forests in the past owing to indiscriminate farming by the natives. The native system of farming is simply to cut clearings in the forests and burn the ground in the dry season. After the land has been farmed for one season with such crops as Yams and Cassava, it is allowed to remain fallow for about nine years, until the scrub has grown up, when, if the land was productive previously, it is again used. This system of farming naturally means that vast tracts of forest are destroyed every year and even if trees remain standing on the farm lands, they quickly die owing to lack of shade. Fortunately the Forestry Department have realised the danger of this practice and large Forest Reserves have been demarcated and farming is not allowed here, except in

certain areas, and only under the close supervision of the Forestry officers. Enumeration surveys have also been made showing the frequency of the more important timber trees, and experimental plantings are made to ascertain the best methods of the regeneration of the Forests.

The method of tree felling is for a platform to be made round the tree around the buttress, and the tree felled, by from two to four boys with axes. After felling, the tree is sawn into logs varying from 20 to 30 feet in length, each log is inspected after sawing, and if suffering from any serious defect, is rejected. Certain species are squared with axes, and smoothed off with adzes; logs are then numbered and stamped with the Government hammer by a Forest Guard attached to the concession. The logs are then hauled out over wooden rollers by manual labour to the nearest light railway, usually a distance which varies from 1 to 2 miles. On reaching the rail track, the logs are jacked on to bogies and pushed down the line to the nearest deep water, about 15 miles away. They are then rafted together and floated to the nearest port for shipment to England and other countries.

Great harm has been done to the timber trade of Nigeria in the past, owing to logs of very inferior quality having been shipped, and thus spoiling the market, and it would undoubtedly be of great advantage if a system of compulsory inspection and grading were enforced throughout the country.

One of the principal timbers exported is *Triplochiton scleroxylon* (Obeche). This timber is shipped in the round, principally to Germany, where it is cut by rotary saws and used in the manufacture of plywood. The principal defects in this timber are due to ring shake, which often go through a whole tree and render it useless. This species also suffers severely from the attacks of Grubs or Beetles. The beetle attack can only be detected after the tree has been felled, and whole trees are often affected, holes being bored which are sometimes  $\frac{1}{2}$  an inch in diameter. Another borer which does much damage is the Pin-worm, which attacks the sapwood to a depth of several inches. To avoid this, rapid removal from the site is essential after felling, as the warm, humid conditions prevalent in the forest areas, are ideal for the spread and development of the pest.

There is a big demand for Lagos Mahogany (*Khaya ivorensis*), which is usually shipped as square logs, and though not subject to ring shakes is very apt to split. Sapele-wood (*Entandrophragma cylindricum*) has only a very limited export market, and only striped logs are in demand for use as veneers.

The local natives, especially the Benin Tribe, are extremely clever in distinguishing the various species. Each, has a different tribal name and the natives appear to distinguish the trees by the colour and characteristics of the bark, sap and smell.

A local peculiarity of the Forests in this area are a number of plains known as the Sobo Plains. These appear between belts of very high bush and often extend for several miles. In all probability they may be the remains of an old river which has changed its course. Apart

from a coarse type of grass, these plains are absolutely devoid of vegetation, and yet, they are surrounded on all sides by some of the heaviest forest in the country. "Logging" in this part of the world depends to a very great extent on the proximity of deep waterways, and in this we are very fortunate in having two good deep rivers, namely the Jameson and Ethiope. These rivers both arise from freshwater springs and are fed by seepage from the Benin Sands. The water is extremely clear and deep, having pools of over 30 feet depth in some places. The bed of both rivers is of white gravel and it is possible to see to the bottom quite easily, which makes for ideal diving and bathing; rather the reverse of most rivers in Nigeria, which are usually very sluggish and dirty.

R. A. PATON,  
Kwale via Sapele,  
Nigeria. 1934.

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#### LANDSCAPE GARDENING.

Have you read Mr. Richard Sudell's latest work on Landscape Gardening, Planning—Construction—Planting? This excellent book should be in the hands of all who are interested in horticulture. It is published by Messrs. Ward Lock and Co. Ltd., at 21s., and contains 8 plates in colour, over 200 excellent photographs and more than 100 diagrams and plans. It is a volume of 480 pages and is well written, treating the subject in detail. Its chapters include the history of the English garden, choice of site and survey, planning and construction. Formal gardening as well as natural gardens are dealt with, water gardens, the orchard, lawns, garden ornaments and even town and roof gardens are discussed in full. Gardens of lands other than our own are the subject of more than seventy pages in the concluding chapter and will be read with interest.

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A SHORT SURVEY OF THE MANCHESTER PARKS.

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The name Manchester generally conjures up visions of industrialism; yet much of this Lancashire City's drabness is relieved by an extensive and enterprising Parks system.

Thanks to the foresight of past and present Committees, Mancunians are able to enjoy some two thousand acres of Parks and Recreation Areas. From a horticultural point of view Manchester offers little encouragement owing to the prevalence of dense winter fogs and a polluted atmosphere. Nevertheless, the floral displays in many of the larger Parks are surprisingly effective and greatly appreciated by the citizens.

For many years the name of Mr. W. W. Pettigrew, V.M.H., was associated with Manchester, and under his administration the Department made rapid progress. It is very gratifying to know that he should be succeeded by Mr. J. Richardson, another able Kewite.

As early as the year 1845, a movement was set on foot by a number of private townsmen to provide public pleasure grounds, and two parks were laid out and presented to the City, namely, Philips Park and Queen's Park. They were provided by public subscription and were laid out on "formal lines." In those early days they were designated "public walks," and were used chiefly as such.

In recent years this policy has been entirely changed, and in order that the public may enjoy the health-giving virtues of sport and recreation, games facilities are provided in practically all the parks.

Whitworth Park, taken over from the Trustees of the late Sir Joseph Whitworth, is the only one of the large group where no adult games are allowed. This Park is purely ornamental, and situated on the fringe of a densely populated area within the City. It is well and freely patronised by the children.

Heaton Park, once the home of the Earl of Wilton, covers an area of 635 acres. It is the premier Park and playground although situated a few miles from the centre of the City. Most of the young apprentices start their careers here under the able supervision of Mr. J. J. Graham, the Assistant Superintendent. Indoor fruit, vines and peaches, a relic of manorial days, a rosery and an Old English Garden (where trials of bedding plants and grasses are carried out) provide unique scope for the young men.

The White Heather Camp, situated in a part of this Park, provides a splendid summer holiday for thousands of poor city children. Another interesting feature of this Park is a secluded area allotted to the blind people, enabling them to indulge in suitable games without intrusion.

The two golf courses are very popular. Last year's figures show that 62,643 players patronised them, while 60,716 used the miniature railway. In the late summer the Dahlia display in the Old English Garden is one of the principal features of the Department.

Another notable display is very popular at Philips Park. Here, in the "Valley," nearly 50,000 Tulip bulbs are planted in formal beds, and they are a fine sight when in flower. In fact, they are so striking that a Sunday in mid-May is known locally as "Tulip Sunday." The Tulips are then at their best and the Park is full of admirers. Philips Park is in a very congested area and is hemmed in by gasometers, railways and tall chimneys.

By way of contrast Boggart Hole Clough can offer large patches of Daffodils and Crocuses in natural settings. This is Manchester's third largest Park, and with its winding paths and wooded ravines (or cloughs) it is a pleasant change from formality.

One of the most frequented Parks is Platt Fields, for it provides extensive recreational facilities. In addition to 70 tennis courts and a boating lake, it has numerous football and cricket pitches as well as four bowling greens, golf putting greens, and a bathing pool. This Park was once the estate of the Carill Worsley family, and it is interesting to note that a certain Lt.-Col. Worsley, born in 1622, was Manchester's first M.P., and is said to be the man who carried out Cromwell's famous order, "Remove that bauble."

In the district known as Moss Side there is Alexandra Park, which, when first acquired, was situated outside the City boundaries, and this fact caused much discussion when the land was bought from Lord Egerton in 1868. A prominent feature of this Park is the Cacti Collection presented by Mrs. Charles Darrah. Although it is a formally laid out Park, it possesses unique features, including a large and well-planted Rock Garden, and one of the oldest crown bowling greens in the Manchester Parks. All the Municipal decorations are carried out from the greenhouse department in this Park.

In 1925 two new Parks were laid out, namely, Fog Lane and Chorlton Park. In both instances Kew men were given charge of the work. Both Parks contain well-stocked shrubberies and rose gardens, which thrive well as they are situated in a cleaner atmosphere than the ones previously mentioned.

The Municipal Nursery, situated at Carrington, provides the bulk of bedding plants used throughout the Department. Recent figures show that about a million and a half bedding plants are raised for this purpose, while large quantities of trees and shrubs are sent out each winter to furnish the Street Tree Department, Housing Estates and Parks. A good deal of re-planting has to be done each winter in those Parks situated near to the heart of the City and in the manufacturing areas. It is almost impossible to coax evergreens to grow; consequently there is a big demand for the more common deciduous shrubs, all of which are provided by the Nursery.

A recent valuable gift to the City is Wythenshawe Hall and Park. This stately old English mansion, dating from the year 1300, stands in about 250 acres of land, which offers great possibilities for future horticulture development, being comparatively free from smoke and fumes. The policy is to maintain the present lay-out as a typical English Home Park, eliminating adult games, and to preserve the many rare specimens of trees, shrubs, and hybrid rhododendrons.

A novel feature connected with this estate is the Parkways adjoining the new Housing Estate, comprising two arterial roads with an approximate length of seven miles. Already a considerable portion of one of these roads has been planted by the Parks Department. The average width is about 250 feet, only 40 feet of which is devoted to traffic. On either side are paths with bold groups of trees and shrubs planted along the entire roadway. Spring flowering bulbs have been freely used, and every possible advantage is taken of the undulating character of the ground to produce natural effects.

It is impossible to deal with all the individual activities of so large a Department. The following attendance figures for the past year will, I hope, convey a general impression of the pleasure derived from the Parks and Recreation Grounds:—

Bowling Greens	...	...	...	370,771
Tennis Courts	...	...	...	259,783
Putting Greens	...	...	...	122,687
Boating Lakes	...	...	...	234,877
Bathing Pools	...	...	...	105,121
No. of Band Performances	...	...	...	400

W. B. PRITCHARD,

*Whitworth Park.*

1934.

## THE INTERNATIONAL PEACE GARDEN.

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Someone said "It is by precedent that civilization makes progress," It is equally true that precedent may retard progress. There are precedents that are good and those that are bad, but the former will always advance our civilization. The precedent of an International Peace Garden upon an International boundary is a good one. It is better to build a fortress of friendship than one which exhibits distrust and suspicion.

To-day with few exceptions the frontiers of nations are fortified against the invasion of other powers. This practice has been maintained since mediæval and even ancient times, and fear, absolute fear, has taken the place of trust among these nations. Nations have yielded to this fear until the thought that neighbouring nations design their destruction has become an obsession.

It is the writer's desire to tell briefly about the Peace Garden project. The idea originated in 1928 and was introduced to the public on August 7th, 1929. The necessary lands, some 3,000 acres, fifteen hundred acres in each country, were donated by Manitoba (Canada) and North Dakota (U.S.A.), on December 2nd, 1931, at a meeting held at Toronto. A bill sponsored by Representative Thomas Hall passed the United States Congress and Senate in 1930 approving of the use of certain lands in North Dakota for Peace Garden purposes. In 1932 a bill (No. 151) introduced by Representative McManus passed the North Dakota legislature to authorize, on behalf of the State the use of Lands granted by the United States Government. In 1932, a bill (No. 78) introduced by Hon. D. G. McKenzie passed the Manitoba legislature granting the use of the land in that province. As the lands granted by the United States Government were only 640 acres, or a single school section, another bill (No. 152), was introduced to the North Dakota Legislature by Representative McManus to appropriate \$11,200 to purchase the remaining land on the American side. This passed the legislature during the spring of 1933. This is the first time in the history of the world that bills have passed through any legislature granting lands for the purpose of an International Peace Garden.

In order to establish the garden a fund of \$5,000,000 is being raised by public subscription. School children as well as adults are asked to participate and the names of subscribers are kept as a record, the children's in volumes separate from the adults. It may with truth be said that children of other nations have never been privileged to set the example that the children of Canada and the United States are setting to-day, and we invite the children of the British Isles and the people to join those of North America in raising this great memorial to the friendship of nations. It is quite possible that 20,000,000 children will subscribe, and when this happens it will be without precedent in the world's history.

The project has the approval of both the American and Canadian Governments. Each have exhibited an exceedingly helpful attitude. The boundary Commissioners and the Customs' authorities have smoothed out the way in the removal of obstacles to such purpose that negotiations with these departments have been most pleasant. The Canadian Department has already established a Customs House at the boundary and the United States will shortly follow suit. The Manitoba and the North Dakota Governments, the latter aided by the United States Government, have completed the Highway upon which the garden is located. This Highway, known as the Canada to Canal, at present extends from Bowsman's Lake in Manitoba to the Panama Canal. It is destined to eventually extend from Churchill to Cape Horn and will become the longest north and south Highway in the world. With the last twenty miles or so completed the Highway will be shown in red upon the maps as U. S. No. 3, and Manitoba Provincial Highway No. 25, extending north and south across the boundary.

The International Peace Garden has recently been indicated on the maps of Manitoba and of North Dakota and will likely in due course appear on the map of North America. The road completed, traffic will increase rapidly, and the port of entry at the Peace Garden will soon become the most important on the prairies.

What will the postal address of the garden be? Perhaps Canusa (Can. U.S.A.) or Britusa, (Brit(ain)U.S.A). Such an International name would be symbolic of the project and of the friendship which it is intended to memorialize. This, however, is a matter for the future.

On July 14th, 1932, the Peace Garden area was dedicated in the presence of a crowd estimated at between 75,000 and 90,000 people. 15,000 automobiles were parked. The Honourable R. B. Bennett and President Hoover sent messages approving of the project. Hon. T. G. Murphy acted for Hon. Mr. Bennett and Gov. Shafer of North Dakota for Mr. Hoover. Archbishop Thomas of Brandon, Monseigneur Campeau of Willow City and the Rev. Mr. Hallet of Grand Forks, North Dakota, officiated at the dedicatory services. A cairn was unveiled which bears the words, "To God in His Glory, we two nations dedicate this Garden and pledge ourselves that as long as men shall live we will not take up arms against each other." What a pledge! As we think of Europe and the Orient to-day we are inclined to say that all efforts toward peace are futile. Perhaps not. One day the nations of Europe may take the same pledge and somewhere on their battle scarred and blood drenched frontiers other gardens of peace will arise! If such were not possible there would be no hope for this old world.

The Turtle Mountain region is the watershed of Manitoba and North Dakota. It is a beautifully undulating plateau which rises out of the seemingly endless prairie. At one point an elevation of slightly over 3,000 feet is attained. The contours of the area lend themselves to the development of landscape gardening in all its forms. There are sheltered areas galore there; there are scenes of pastoral loveliness, and pervading all is an atmosphere of majesty which fills the breast with reverence and the mind with wonder.



The plateau is sixty miles long by forty wide, and according to Mr. Dan E. Willard, a renowned Geologist: "It is a unique remnant of an older landscape of the continent of North America. It is approximately the centre of the continent. It is crossed by the International boundary between the United States and Canada. The unique character of the landscape to-day is due to the work of ice of the glacial period. The hills and basins that give charm to the region are the result of ice action. The hills are 'dumped' hills or 'dump' moraines deposited when the ice of the great continental ice-sheet melted. The region is that of a typical terminal moraine. The ice of the great ice-sheet was hundreds of feet thick. In its slow restless movement southward it carried vast quantities of earth material. These earth materials are what make up the hills. Stones of all sizes from huge boulders to tiniest grains of sand and particles of clay were carried by the ice. When the ice melted all this earth material was thrown down, dumped, forming the hills. Where there is a hollow or basin less earth was dropped. Possibly a huge block of ice stood there and when it finally melted there was nothing but water. If the basin is situated right—if more water gathers in the basin than evaporates—then there is a lake."

The Turtle Mountain Plateau is filled with beautiful lakes and sloughs, some of which during dry years are dried up. On June 2nd, 1931, the writer flew over the area in an aeroplane kindly placed at his disposal by the State of North Dakota, and took two or three photographs, one of which revealed some fourteen bodies of water. Again on July 14th, 1932, the pleasure of seeing this lovely spectacle was enjoyed from the air, this time in a Winnipeg 'plane. In the centre of all this loveliness is the Peace Garden area, 1,800 acres of which will be available for development at once. The remainder of the 3,000 acres to be developed when and if conditions permit.

On November 9th, 1933, at a meeting held at Bismarck, North Dakota, the International Peace Garden Inc., appointed an executive committee with full power to develop the Garden, and during January, 1934, at a meeting held in New York, set up a fully international directorate. The executive committee are all western men who live in Manitoba and North Dakota, and can thus be readily called together at short notice.

Those of us who have been privileged to work and to study at Kew, know how beauty appeals to the heart; how people are attracted by the unexcelled loveliness of this great botanical garden. We know that the beauty and usefulness were not developed over night. They had no mushroom growth. Kew has endeared herself to the hearts of the millions who have visited her and has become a part of the lives of all who have worked within her boundaries and have tended her floral treasures.

To Kew, as much as to any other factor we owe the inspiration of the International Peace Garden, and let us not forget that this great memorial to peace is the one which not only links Canada in friendship with the United States, but also the British Empire. This great garden will arise as a challenge to all nations. We say to them, "Have you the courage to do as Canada and the United States have done; have you the courage to drop your hatred, prejudice, and

envy, to cease dragging the world down to ruin through war and the destruction of human life and resources; have you the courage to forgive and forget the past and to build upon your boundaries the only kind of forts which will endure; forts of friendship, a peace garden; a friendly defence which will not repel and which will forever tend to remove fear and suspicion from the hearts and minds of all the people of the world?"

It may be of interest to readers to learn that on the day of the dedication of the Peace Garden many congratulatory messages were received, and important addresses given. Lord Bessborough, Governor-General of Canada, sent the following:—

"I send my sincere good wishes for the success of the International Peace Garden and hope that it may prove a lasting benefit to both Nations."

From Hon. Herbert Hoover, at that time President of the United States came the following:—

"I extend to your association and to the citizens of Canada and the United States gathered to dedicate the International Peace Garden, my hearty congratulations on this beautiful embodiment of your ideals, it is both touching and rich in future promise that this garden is being made possible principally by popular contributions from the school children of both countries. Thus it will not only symbolize more than a century of Peace between neighbours but will also grow in significance with the growth in understanding of their share in sustaining the historic friendship between our two great nations."

Hon. T. G. Murphy, Minister of the Interior, who was appointed by Hon. R. B. Bennett, Prime Minister of Canada, said:—

"I have not a written message from the Right Honourable R. B. Bennett, but I am authorized to convey to you in person his congratulations and good wishes for the continued success of the International Peace Garden; and to express the hope that the Peace that has lasted between the two countries and which is symbolized by the establishment of this International Peace Garden, may last as long as the area itself."

Mr. Murphy described the occasion as "unique in the annals of history." The two nations had lived more than 100 years in an atmosphere of peace, harmony, good will and mutual understanding. "We commemorate these sentiments to-day by dedicating for all time to come this area as an International Peace Garden," said the minister.

H. J. MOORE, 1934.

## REMARKS ON EDUCATION.\*

The word "education" is derived from the Latin verb *educare*, to rear, bring up (children, young animals). The Latin word is related to *educere*, to lead forth, which is sometimes used nearly in the same sense. It would be interesting, had we time, to trace the changes in meaning associated with the history of the word "education." In its original meaning, as derived directly from the Latin, it is now obsolete. On the other hand there has been a gradual extension of its use from designating only the training of the young to include training at any time of life. The New English Dictionary gives the following definition, amongst others: "The systematic instruction, schooling or training given to the young in preparation for the work of life; by extensions, similar instruction or training obtained in adult age. Also, the whole course of scholastic instruction which a person has received." It is further worth noting that some writers have used the word to mean "culture or development of powers, formation of character, as contrasted with the imparting of mere knowledge or skill."

It is impossible in a short talk to deal adequately with such a subject as education taken in the sense of the definitions just quoted. I propose, therefore, to say little about the history of education, whether in general or in this country, but to deal mainly with the present and immediate future of adult education, and to finish with a very brief prophetic glance at the more distant future. Even within these limitations a somewhat arbitrary selection of material is essential, and, though I want to give you what I believe to be broad views in education, I hope more especially to give you suggestions applicable to your own immediate or future needs. You must forgive personal reminiscences and if you disagree with some of my conclusions, let us argue them out in the discussion. I am no authority on the general principles of education, but with experience as student and teacher, I do think it advisable for every intelligent adult to consider something of what is involved in modern education and still more to know how modern research is modifying methods and ideals in such a manner as to affect every individual.

It is a truism to say that one's education never finishes. Apart from that, some of you are in your first year as student-gardeners, and may be glad to receive a few hints for making the best use of your time at Kew. All of you will sooner or later be leaving Kew for posts carrying some responsibility. Some of you will attain positions where you may have to advise junior members of your staff. Some of you, no doubt, will beget families. For your own sake or for the welfare of those you advise or control it is most desirable that you should consider deeply what education can be at its best and how that best can be attained.

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\* From a talk given to the Student-Gardeners by Dr. Turrill.

There is no real evidence that man's mental powers have become either greater or less within historic times. That we know more of most subjects than the ancients knew is not due to increase in individual brain-power, but to the accumulation of experience. We can only learn by experience, but he is a wise man who learns as much as possible from the experience of others. That experience and knowledge can be passed on from one generation to another is due to man's faculty for speech and to his invention of writing, and much later of printing. Without these aids it is doubtful whether man would have evolved a society philosophically very different from an ant's nest or a bee-hive. Looking back over the history of education one realizes something of our debt to the past and one becomes a little more hopeful for the future. Man's life on earth has been, geologically speaking, a very short one. That he has succeeded in mastering his own destiny to the stage of our present civilization makes it just possible that he may in the distant future really become lord of all he surveys, the more so that physicists now tell us that the universe is finite.

If we consider education as the training of our powers to obtain and profit by experience in such a manner that we realize our true selves, we need not be disheartened when we read of those prodigies of learning who, in past times, knew all that was known. That was not really a great deal, and even Aristotle or Francis Bacon, with the knowledge at their command, would have failed hopelessly in an examination set and marked by a modern schoolboy in his teens.

This leads us to consider immediately one very important aspect of education. Experience is now so wide, accumulated knowledge is now so great that some degree of specialization is imperative if a student intends to gain any desired end. There is little doubt that up to the age of 14 to 16 there should be a minimum of specialization in the education of a boy or girl. A broad education should include a thorough grounding in the three R's, arithmetic being interpreted as mathematics, a general knowledge of the mother tongue and of at least one other language, and an introduction to scientific method with plenty of practical work. Any specialization in these or other subjects should only be allowed on the advice of a trained psychologist applied to the individual student.

When, however, we come to older students, the problem of specialization is more difficult to solve, and in general terms is, perhaps, insoluble. Every student must settle the matter for himself. Usually it is desirable to steer between the Charybdis of becoming a "Jack of all trades and master of none" and the Scylla of attaining the position of a very narrow specialist. Often it is best, dropping the metaphor, to specialize in one subject and yet to retain a breadth of view which at least enables one to appreciate much of what happens in the world at large and most of what affects one directly. Man is a social animal, and to ignore that fact is at least fatal to happiness and to making the best of life. We must try to understand the standpoints of our fellows. Moreover, the suggestion of specialization plus a wide receptive mind has the great advantage of increasing one's value as a specialist.

It is a fact that many of the great discoveries being made to-day in science are on the border-lines where two or more "sciences" meet. That all knowledge is one is an educational platitude, but its corollary that apparently unconnected facts often fit into queer places is equally true. To abstract a little more concretely: you will acknowledge that acquaintance with geology, plant physiology and surveying is of great assistance in horticulture. The systematic botanist who ignores ecology and genetics is becoming out-of-date, and will, one day, be obsolete. No scientist to-day can really afford to be ignorant of several foreign languages. Exactly how a student should apportion his time between specialization and what may be termed a continuation of general education is his own individual concern. You are, however, strongly urged to consider the matter carefully and to formulate a scheme suited to your own conditions.

The desirability of method in education is acknowledged by the use of time-tables, set courses, and syllabuses. In adult education, which is much more self-education than is school training, there is a risk of vagueness in aim and of wandering into delectable side-tracks. A rigid adherence to a set time-table is usually not advisable but a general spacing out of the time you have available for study is essential. This theory of method applies not only to education but to everything in life. You cannot achieve your best in work or play if you are a mere opportunist, if you follow your impulses and desires without regard to a general scheme. No modern building is erected before an architect has prepared most elaborate plans. You are both architect and builder of your own personality, within the limits set by the material supplied by your inheritance. Surely it is worth while preparing and carefully following plans for the consummation of such an important edifice. I know of more than one intellectually brilliant student who has failed to justify his brain-power solely because he was unmethodical. There is no time now to suggest details, but may I recommend two books which you will find well worth reading and assimilating:

John Adams: *The Student's Guide*, and

C. A. Mace: *The Psychology of Study*.

We have now to consider the relationship of student and teacher. You will know that very interesting experiments have been, and are being made, with the education of children, in which the pupils are given much more freedom in choosing subjects and methods of study than is usually allowed at an early age. Some of the principles underlying these experiments are excellent. Such are the desire to develop responsibility and the individuality of character. There is, however, a danger of their being carried too far with the loss of training in discipline and in team-work both of which have their uses. Perhaps a middle course is both the best and the most practicable. Certainly with adult students the teacher should aim at making himself more and more dispensable to his students. The better the teacher the more quickly should the student be able to take over the task of teaching himself. Obviously a good teacher must really know his subject, but still more must he be enthusiastic about it and com-

municate his enthusiasm and interest to his students. The whole secret of successful teaching is summed up in that word interest. If the teacher can really make the student interested the rest "must follow, as the night the day."

There is the second person in this relationship—the student. In a large class there are always some students who intellectually or temperamentally will not or cannot respond even to the best teaching. With them the teacher of a class can do little or nothing. The success of an average student depends about three quarters on the student and one quarter on the teacher. A student finds it easiest to work at a subject in which he has an initial interest, and it has been said that one should study only subjects in which one has an interest. That I believe is wrong. If you agree to follow a scheme in your studies, as you may agree is desirable, you are bound to tackle subjects which at first seem to be difficult and uninteresting. Again, the secret of successful learning, as much as the secret of successful teaching, is in the word interest. When you have to learn a subject find its interest to you. You can be sure it has one. If you take this dictum to heart, "find the interest in every part of your studies," you will become a successful student. Work on this principle throughout your life, "like the work you've got to do not merely do the work you like," and you will bless me as the source of much happiness.

You will expect me to say something about examinations which loom so large in the educational system of to-day. It is remarkable that the educational theorists nearly all harp on the bad points of some examinations, and then condemn the whole system, while the practical teachers usually believe that examinations of the right sort and rightly conducted have very much to be said in their favour. Examinations can easily be abused, and are abused in more ways than one. Let us consider the pros and cons taking the latter first. The worst features of examinations are probably seen in school examinations and in subjects where the examination is a purely written one. Overworking for an examination is the fault of the teacher, parent, or (adult) student, and is, in this country, very rare. It is invariably due to bad methods of preparation. Cramming is generally bad, though it is useful sometimes to know how to cram. It is, however, possible so to set an examination, at least in some subjects, that the merely crammed student fails. This is above all true in those subjects to which a practical examination is attached to written papers coupled with a viva voce examination. It is urged, rightly, that many examination syllabuses are too narrow, too antiquated, and restrict too much the freedom of the teacher and student. Again, this is the fault not of the examination system as a whole, but of the boards of examiners who through indolence or ignorance have neglected their duties. As a student and a teacher I am convinced that examinations properly used, properly set, and properly conducted have high positive values. Some of these are worth discussing. An examination syllabus is a guide to the teacher and the student. It serves as a rough outline map to reduce loss of time and energy through wandering down by-paths. It tends to prevent one part of a subject being given undue importance and to enable the student to pick out his weak points and to strengthen them. In

working to a syllabus the student learns something of the value of method. That an examination is coming provides a stimulus to the student and a means of urge to the teacher. Many examinations can now only be taken with the approval of the teacher. Finally, the diploma or degree obtained by examination is a hall-mark set on the student's knowledge and ability. The value of the hall-mark depends on the examination and the position gained, but even a matriculation certificate cannot be obtained without the persevering use of some brains. For good or for ill there are an increasing number of both professional and business posts, applicants for which must have examination certificates or diplomas or university degrees.

Examination results alone are not altogether satisfactory in choosing a person for a given post. It has, however, been proved experimentally that they are more satisfactory than the personal interview alone, especially when the interviewers are untrained in psychological methods. This leads us to consider briefly a recent development in education, that of psychological testing.

Psychology, the study of the mind, will probably become the most important of all sciences. We are often told that the proper study of mankind is man—and woman. Psychology is yet in its infancy, but results already obtained are of tremendous importance to the teacher and student, to the employer and employee. Let us refer to a few applications of psychology. Without doubt there is a huge waste of money on so-called education. By this I do not mean that teachers are paid too much or even that less money should be spent on education, but that a great deal is wrongly spent in trying to educate in a standard manner and in set subjects those who cannot benefit from such education. One of the most inaccurate of statements is that all men are born equal. Anyone who is acquainted with Mendelian principles will tell you that, with the exception of the small group of "identical twins," the chance of two individuals, even if brothers or sisters, having the same inheritance in so heterozygous a species as man is very small indeed. Variety is, of course, the very spice of life and, so long as it is not too peppery, is a good thing. It is, however, a fact that must be taken much more into account than has so far been done in education. The psychologist, by experiment, can tell with considerable accuracy not only the general intelligence of a child or of an adult, but also what are his special abilities. Such knowledge will be turned to more and more use in the future. In education, in placing a boy or a girl in a job, or in selecting adult applicants for special posts it is becoming easier to correlate round pegs and round holes and square pegs and square holes. Eventually it should be possible to make sure in advance that the peg is neither too large nor too small for a given hole of the right shape. At present selective education is applied within too narrow limits. Mental defectives and backward children are given special tuition—not entirely a good thing—and through scholarship examinations a percentage of the brighter children are given opportunities of higher education which otherwise they might not have had. The greater number of children and the greater number of adults fall neither into the mental defective nor into the brilliant category. Remembering

that a broad education in some half-a-dozen subjects is really essential, it does seem desirable that additional subjects should be chosen in relation to the inherent talents of the individual. Several large educational committees, notably those of London and Birmingham, conduct annually psychological examinations on hundreds of school children. The Institute of Industrial Psychology is doing valuable work for adolescents and adults.

It is interesting to note that the results obtained by psychological testing agree in a high degree with those obtained by the best of the more orthodox methods of examination, as far as correlation is possible, but that they give far more valuable details. Compared with the results of haphazard interviewing, they are much more reliable. While much applied psychology is still in the experimental stage, it does appear that the accumulating results, the improving methods, and the increasing number of trained psychologists and of those willing to learn from them, will strengthen many of the weak places in our educational system.

A few weeks ago I heard the Parliamentary Secretary to the Board of Education say that in this country there were over a million adult students attending evening classes. He expressed the opinion that this was something of which we should be ashamed. I did not entirely agree. The fortunate student who "finishes" his education at Oxford or Cambridge does not perhaps obtain the best, the whole best, and nothing but the best of what we mean by education. We may regret not having had the opportunity of a university education in this narrower sense, but let us look at our assets. We can only learn by experience, and there are some things we can only learn by first-hand experience. The university student lives twenty-four hours every day, but so do we. He lives in rather artificial and temporary surroundings. Elementary education is compulsory in this country and the break which a boy or girl experiences when leaving school and starting a job in real life is postponed for the university student at least till he is out of his teens. The break may be more gradual for the university student, but it comes at an age when many of his contemporaries have learnt to fend for themselves, to be independent and self-reliant from practical experience. My point is that those who, from force of circumstances, have to forego a residential university education but who, while earning their living, or at least training themselves practically for so doing, extend their theoretical education by attending evening classes or in other ways, may in the long run prove themselves the better educated, if self-realization be the aim of education. Facilities for higher education are now so developed that few can excuse themselves on grounds of lacking all opportunity. It is for every student to utilize his assets, not to hide them under a bushel. Do not forget that talents are developed by use. Find your talents, use them; find out for yourself. One of the most useful lessons I ever learnt was taught me by a small girl. My wife and I were travelling on a G.W.R. train in winter. There was a thick fog which had already made the train very late. As we were stopped at a station an argument arose as to where we were. One said we were at Oxford, another at Culham, another that we had



not yet reached Didcot. The little girl piped up: "Get out and see." You are travelling on life's train, it will pay you occasionally to ascertain for yourself where you are. Would-be teachers are not always unanimous. Your own experience is of more value than the guesses of others.

May I interpolate one matter here? I think it is a great pity that the apprenticeship system has dropped so much out of English life. That it needed modifying and bringing into line with modern requirements is true, but that so many boys and girls expect or are expected to earn something additional to their keep, immediately on leaving school, is one cause of the superabundance of unskilled labour and of unemployment. Technical education is really of increasing importance and in that nothing is better than the training obtainable from a good employer who knows his work and is willing to keep and train the apprentice for the value of his labour. It does seem to me that an up-to-date scheme for apprenticing boys and girls to a trade or profession suitable to their inherent abilities combined with attendance at continuation classes, not all on technical subjects, would in time help to solve many of our national problems.

Another aspect of education which demands more thought than has yet been given to it is education for leisure. Working hours are much shorter for the majority of people than they have ever been before. Yet how few know how to use their leisure for retaining health, conserving wealth, or gaining happiness. As a purely business matter, if you wish to obtain riches and have no scruples, put your capital into popular amusements—cinemas or dog-racing syndicates. Unless the mass of our people are to sink to the level of a Roman populace crying, if not for gladiatorial combats or for Christians to be thrown to the lions, at least for continual emotional stimuli of an increasingly degenerate type, they must be taught the value of leisure. There is little time to develop the theme here, but the women's institutes, of which nearly five thousand are now scattered through our countryside, point to one method which with various modifications might be widely extended.

I have said nothing of education and health. There is little need in this audience. You are engaged in one of the most healthy of all occupations and, indeed, are a healthy-looking sample of young men. The individual student must, of course, have sufficient and proper recreation; that is his concern or that of his parents or teachers. On the other hand, the student should take care that his recreation really does fulfil its purpose. I fail to see, for example, that the mania for speed is anything more than a disease. Gambling is worse; it is unscientific. There are so many forms of indoor and outdoor recreations which, used wisely, reinvigorate the mind and body that no student can reasonably say none suits him.

I promised to conclude with a few remarks on the future of education. Speculation is sometimes an amusing game, sometimes it is a paying game, but it is always risky. The logical fantasies of Bertrand Russell or the less adventurous prophecies of H. G. Wells on education in the future at least makes one think.

These writers have, in my opinion, not given due weight to the manifold aspects of human nature, and by over-stressing certain outlooks, have ignored important premises.

The following are visible trends in education or possibilities reasonably certain of realization. The school-leaving age will gradually be raised to 17 or 18. Later there will come a reaction against standardization and selected boys and girls will leave school at about 14 for specialized industrial or other training, others will continue a general training to 18, and still others will be passed on for university training, irrespective of their social status or the circumstances of their parents. I do not think that the State will, in this country, ever become so omnipotent in education or in other matters as is suggested by Bertrand Russell. English universities are not tied to the State to the same degree as are universities in Germany, Italy, and Russia. The English mind is too individualistic ever to rest content under an extreme form of communism. Nevertheless, in some important ways we are becoming more socialistic and class distinctions are receiving less and less support from the existing scheme of education.

In adult education there is bound to be more and more specialization. The division of old or the formation of new professional chairs at the universities, the recognition by name as more or less independent sciences of bacteriology, pedology, genetics, cytology, etc., the establishment of new degrees or diploma courses, such as the B.Comm. and the B.Pharm., and the multiplication of school and college text-books dealing with a limited field of knowledge, are among the signs of ever increasing specialization. For a long time to come nothing can stem this tide. The stimulus of the unknown makes specialization and training for specialization inevitable, since human nature is naturally adventurous.

Experiment is so largely replacing observation as the dominant scientific method that an increasing number of experiments in education are bound to be made. New methods, new aids, and new aims will be tried and will be accepted or rejected on the results. As a pragmatist, I believe this is the only way advance can come. How far the cinema, wireless, and television will assist our education depends more on education by other means than on their technical development. Already their potentialities for good or for evil are very great. If the public using them demand education and recreation, as distinct from merely emotional amusement, from them they can and will be provided.

Finally, may I hope that you will develop some of the suggestions I have made? There is no royal road to learning, but there are many different roads. As students you have to walk one of them, and it is worth while to make a wise selection. Study yourselves. Recognize your limitations and learn how either to overcome them or to get round them. Balance for yourselves the cultural advantages of a wide education and the more abstract advantages of specialization. Above all, strive to realize yourselves in pressing forward towards an ideal in which selfishness and altruism are indistinguishably merged.



## ANKOLE TO MONGALLA.

In March, 1930, when stationed in Mbarara, Ankole, Uganda, I received a telegram from Headquarters instructing me to proceed to Kampala, as I was required to go to the Southern Sudan in order to report on the possibilities of coffee cultivation in areas where *Coffea robusta* was indigenous in the forests. An account of the full tour which followed the receipt of these instructions would occupy too much space, so I propose to give only a brief account of the journey as far as Juba, the station on the River Nile from which the steamers now leave for Khartoum instead of from Rejaf.

*Mbarara to Masaka.*

Mbarara is the administrative centre of the Ankole District, which is composed mainly of one of the several small native kingdoms which help to make up the Uganda Protectorate. The ruling classes are the Bahima, a pastoral tribe which rely for their subsistence mainly on their large herds of long-horned cattle, while the cultivation of food and other crops devolves chiefly on the Bairo, formerly a subject or slave race. For the most part Ankole consists of a series of undulating plains, interspersed with high hills which are covered mainly with knee-high grasses (*Andropogon*, *Hypparrhenia*, *Themeda*, *Setaria*, *Chloris*) dotted here and there with stunted trees and thorny scrub, the latter often clustered on the numerous ant-hills which stand from five to fifteen feet above the general ground level. The most prevalent trees are *Erythrina tomentosa*, thorny *Acacia* spp., and arborescent candelabra-shaped *Euphorbia*. Smaller trees and shrubs are species of *Capparis*, *Cadaba*, *Maerua*, *Grewia*, *Gymnosporia* and *Rhus*, though the area immediately surrounding Mbarara itself has been completely denuded of trees, except such as have been specially planted. It is primarily a stock raising country of the type known in Africa as "game country," and parts are well stocked with Zebra, Antelope, Buffalo, etc., while lions are plentiful though naturally these animals are not common near frequented roads or habitations. The area traversed to reach Masaka, which is 93 miles from Mbarara, is a comparatively dry region of low rainfall averaging about 35 inches per annum, and most of the streams dry up during the dry season, though during the rains, parts of the road are often flooded and sometimes impassible. Hence this district is only sparsely populated and little cultivation is seen. After crossing the Masaka District boundary the vegetation is somewhat more luxuriant, the grasses often reaching from five to six feet in height, though largely of the same genera already mentioned, and the trees and shrubs are higher and less stunted. Open woodland is now frequent and includes species of *Albizzia*, *Annona*, *Ficus*, *Bersama*, *Lannea*, *Markhamia* and *Steriospermum*. The country is also more densely populated and cultivations are more frequent. However, it is not until some ten or fifteen miles from Masaka township that "Elephant-grass country" is reached. This reed-like grass (*Pennisetum purpureum*) is especially characteristic of those parts

of Uganda bordering Lake Victoria where there is a good deep clayey loam soil and a rainfall averaging 45 inches or more per annum, though it is not confined to the Lake region. The streams are now fringed with Closed Tropical Rain Forest containing large spreading trees of species of *Albizia*, *Canarium*, *Croton*, *Macaranga*, *Polyscias*, *Pseudospondias*, *Maesopsis*, *Symphonia* and *Trichilia*. Banana plantations, cotton and food plots, in the midst of which are set well-built round and oblong shaped grass-thatched huts, are dotted almost side by side as we are now in Buddu county, one of the most thickly populated areas of Buganda Province. Before entering Masaka itself we cross a very wide swamp, filled with *Cyperus Papyrus*, by means of a well-built though somewhat narrow causeway which hardly permits of two cars to pass. Such swamps are common throughout Uganda and not infrequently during rainy seasons the water rises above the roads and washes parts of them away making crossing dangerous and sometimes impossible, until the water has subsided and repairs have been effected. On this occasion, however, we reached Masaka without mishap in time for an early lunch, having taken about four hours to do the journey.

#### *Masaka to Kampala.*

The natives of the Masaka District, and the greater part of Buganda Province, are mainly Buganda, an intelligent agricultural race whose chief food crops are Bananas (Plantains) and Sweet Potatoes, though Maize, Sorghum, Beans and Cassava are largely grown. Cotton and Coffee are the principal export crops. Even before the advent of cotton cloth they clothed themselves fairly well with cloths made from the bark of *Ficus* spp., strips of which are beaten out and then sewn together with fibre. Bark cloth trees are still very plentiful in the banana groves and cultivations around their houses while bark-cloth is still made though less commonly used.

From Mbarara to Masaka we have come mainly east, but now we turn northwards though still slightly inclined east by north. Bukakata, the port for Masaka lies on our right and we travel at no great distances from the Lake and occasionally get a glimpse of its waters gleaming in the sun. With the exception of the flat sandy plains on each side of the wide mouth of the Katonga River (the boundary between Masaka and Entebbe Districts) which is studded with scrub-covered ant-hills forming a Dune or Strand plant association, we pass through a succession of hills covered with Elephant grass which is overtopped here and there by solitary trees. At frequent intervals are sluggish streams, flowing in the valleys between the hills, which are bordered by Tropical Forest of the type already mentioned, though generally larger and more luxuriant. The Wild Date Palm (*Phoenix reclinata*) is frequent alongside these swamps and also in patches of the forest. In the latter is also found the Raphia Palm (*Raphia Monbuttorum*). It is pleasant to escape the heat of the afternoon tropical sun for a few minutes, as we pass beneath the high green canopy of giant forest trees, but we are unable to dwell upon its beauties, for we must now keep a sharp look-out for native-driven motor lorries and charabancs which dash down hill in free-wheel and appear unexpectedly around hidden corners.

Elephant grass lands are not very good stock-rearing lands, though the young grass itself makes good fodder. However, such lands are usually broken here and there by stony hills, sandy alluvial plains, or shallow lands overlying rock, where thrive shorter grasses more suitable for grazing lands, such as those already mentioned in Ankole.

As we approach Kampala, native houses and banana groves become closer and closer to each other until at last they seem to merge together into one vast plantation. Scattered among the bananas and rising above them are seen innumerable *Ficus* spp., Bark-cloth trees, and here and there solitary or grouped forest trees which have been preserved for shade, fuel and other purposes, the most frequent being *Spathodea nilotica* with large handsome scarlet and gold tulip-shaped flowers; *Markhamia platycalyx*, a useful timber tree with smaller yellow flowers; *Canarium Schweinfurthii*, an immense spreading "Incense-Tree," which yields a fragrant resin as well as an edible fruit; *Garcinia Buchanani*, a shiny-leaved ever-green tree which furnishes a small acid edible fruit and *Dracaena fragrans*, an arborescent species 20 to 30 feet high, with main stems one foot or more thick and immense panicles of yellowish-white flowers which are followed by yellow berries. A smaller species, *Dracaena ugandensis* with very fragrant flowers is commonly planted to form hedges around the native plantations and for this purpose is often associated with a cylindrical-stemmed *Euphorbia* (which is probably identical with *E. Tirucalli*), *Coleus barbatus*, *Moschosma urticifolium* and *Jatropha curcas*.

Before entering Mengo, the native capital, which joins up with Kampala, we observe nearby on the left of the road the Namirembe (Church of England Missionary Society) and Rubaga (French Father's Catholic Mission) Cathedrals, both imposing edifices of burnt brick faced with stone, the former surmounted by a copper dome and the latter having three square towers, which have been erected in comparatively recent years to replace less permanent structures. As we pass through Mengo we note, also on the left, the immense reed fence of dried "Elephant-grass" which surrounds the native king's residence, though the house is hidden from view. We also note the quarters of his native body guard, consisting of several orderly lines of neat grass thatched round huts. Kampala town itself, as we look down upon it from Mengo, appears to be one mass of iron-roofed buildings of various hues but mostly red or dull white, as we approach it from the bazaar or business quarter, and the residential quarter being beyond is hidden from view. Actually, apart from the bazaar, it is a picturesque town set in the midst of a series of hills which almost surround it, except for one side where there is an outlet towards the lake for the streams which run through the valley and along which run also the road and railway to Luzira or Port Bell, the port for Kampala. We reach our destination soon after 4 p.m. and welcome a cup of tea after a good run of nearly 190 miles from Mbarara which we have covered comfortably in about 8 hours.

#### *Kampala—Masindi via Hoima.*

After a few days to complete arrangements, during which it was necessary to visit Entebbe to obtain the necessary credentials from

the Secretariat and having obtained sanction for the hire of a good car complete with a Swahili native driver for the tour, I left Kampala on April 2nd. Mrs. Snowden remained in Uganda and I took with me only one native servant in addition to the driver already mentioned. We made good progress for the first 30 miles when suddenly a tyre burst. Fortunately we kept to the road and pulled up quickly without difficulty. We had spare tyres with us and in fifteen minutes were off again. The vegetation for the first 36 miles is very similar to that already described between Masaka and Kampala and the country is well populated. From here onwards, however, until Mile 126, where we leave the Hoima road and meet with similar vegetation once more, we pass through a fairly long stretch of drier country which is very sparsely populated in the more arid areas. In this area "Elephant-grass" is frequently absent and is replaced by shorter 3-5 feet slender grasses, with here and there open woodland in the valleys, or hydrophilous thorny *Acacia* and *Erythrina* near streams.

From Mile 50 to 60 is a very dry area with Thorn Scrub including arborescent candelabra-shaped *Euphorbia*, thorny *Acacia* and Caparidaceous bush. On the left of the road is also a conspicuous Palm strand of the Fan Palms (*Borassus flabellifer* var. *aethiopicum*) an uncommon palm in this part of Uganda though frequent near the lakes, especially near Lake Kioga. The grasses here are mainly species of *Andropogon*, *Hyparrhenia*, *Cymbopogon*, *Panicum*, *Setaria* and *Chloris*, mostly from knee to thigh deep. At mile 104 a halt was made for lunch and then we continued through gradually increasingly luxuriant vegetation until finally, as we turned into the Hoima—Masindi road we were passing through "Elephant grass" lands alternating with Closed Fringing Forest once more. From Hoimi to Masindi the country is well populated and, in addition to food crops and cotton, tobacco is being successfully grown by the natives. These are the Banyoro, a race related to the Baganda but generally of less intelligence except where they have been in contact with European ideas. We reached Masindi, 168 miles from Kampala, at 2.15 p.m. just in time to escape a heavy tropical thunderstorm. Here we put up at the hotel for the night and, after having had a hot bath and some tea, I was able to do a little botanizing before dusk. Masindi is the Provincial headquarters of the Northern Province. It is not a large station but is important as being on the main route between Lake Kioga and Lake Albert, and thence to the Kilo Gold Mines in the Belgian Congo. The railway run their own road transport between the Lakes and thus connect up with the Lake steamers and railways to the coast.

#### *Masindi to Lira.*

As we had a long journey before us next day, we had an early breakfast and left Masindi at 6.50 a.m. The 58 miles between Masindi and the Atura ferry is comparatively flat country, thinly populated, and covered mainly with open Woodland vegetation of varying height and density. The dominant trees are species of *Annona*, *Albizzia*, *Acacia*, *Bauhinia*, *Erythrina*, *Ficus*, *Combretum*, *Terminalia*, *Grewia*, *Dombeya*, *Rhus*, *Stereospermum* and *Kigelia*. Frequent shrubs are species of *Acanthus*, *Dombeya*, *Peucedanum*, *Sarcocephalus* and



*Vernonia*. Large thistle-like *Echinops* and species of *Lissochilus* are also numerous. Grasses include *Pennisetum purpureum*, *Beckeropsis unisetata*, *Panicum maximum*, *Setaria sphacelata*, *Andropogon* spp. and *Hyparrhenia* spp. We arrived at the ferry at 8.55, but it was 9.15 before we had embarked the car as on our arrival, the ferry, a crude arrangement of planks across two large dug-out canoes, was on the opposite side. Using long poles, the natives first pushed us along the bank up stream, then turned across and allowed the current to help us down stream and across to the opposite side. On arriving there we found the bank high above the ferry. Fortunately, the S.W.S. "Stanley" was tied up alongside and we were able to borrow porters to help us in pulling the car up two planks on to the shore. By this time it was quite hot, and I was glad of a refreshing drink with the Captain of the "Stanley" before starting off again at 10.5 a.m.

We now entered a thickly populated district in which much clearing and cultivation has almost denuded the country of trees. Such remnants of vegetation as these are indicative of the same species and climate as those met with between Masindi and the Nile, though probably owing to the greater frequency of grass fires, the soil appears to be more sandy. The people here are Nilotics, a sturdy but less handsome race than either the Baganda or the Banyoro and generally less intelligent. They wear little or no clothing except where frequent contact with traders, usually connected with the advent of the cotton industry, has led to a more liberal use of cotton cloth. Cotton and food cultivations are frequent but we now miss the Banana groves as these natives rely mainly on *Eleusine* and *Sorghum* millets for their food. Perennial food crops, such as bananas, are unsuitable for this soil and climate, but *Cassava* does well and is largely grown as a famine reserve crop. Now and then, in less populated areas, we pass through quite thick woodland and occasionally, as between 27 and 32 miles from Atura, we pass Palm Strands of the *Borassus* palm, with their bunches of fan-shaped leaves at the tops of bare stems, standing high above the grasses of the sandy strands which they seem to favour. These palm poles are much favoured for house building as they resist the ravages of the "White Ants." No "Elephant grass" is met with this side of the Nile (unless it be an occasional clump near streams) the dominant grasses being *Hyparrhenia* spp. *Panicum maximum*, *Setaria sphacelata* and *Chloris Gayana*. The country we pass through now is mainly flat and not much above the level of Lake Kioga. After a time it becomes very monotonous and uninteresting, and we are glad to reach Lira (the Administrative Headquarters of Lango District) just after noon, having covered some 101 miles from Masindi. Fortune favoured us here and we found Mr. Davis, one of our Agricultural officers, at home, who provided us with a most welcome lunch.

#### *Lira to Kitgum.*

Apart from a few Government offices, bungalows for the staff, and a small Asiatic bazaar, there is little of note in Lira. We pushed on again at 1.10 p.m., through almost flat sandy "black cotton soil" country very similar to that already met with between



Atura and Lira. A short distance out we passed a few rocky outcrops near one of which, Ngetta, is the District Agricultural Experiment Station. Native cultivations are frequent and alternate with either dwarf Scrub or thin Woodland. Among the latter at about Mile 18, some Shea Butter trees (*Butyrospermum niloticum*) were noted. We now ran into a heavy thunderstorm which speedily made the unmetalled roads in this district very soft and treacherous. At about Mile 27 we reached the Aswa River (a large stream which eventually joins the Nile beyond Nimule) and traversed a temporary bridge (since replaced by a permanent steel one) which threatened momentarily to hurl us into the rushing stream below. We heaved a sigh of relief on landing safely at the other side, but we soon found that the road here was much worse and eventually at Mile 37 we skidded off the centre and became stuck in the mud at the side. I and the boy got out, and by dint of much pushing and low gear work, we managed to get the car on firm ground once more. From now onwards, we skidded dangerously from side to side like a drunken man in our efforts to keep on the harder centre of the road, parts of which were now immersed under water from the pouring rain. At Mile 42 we safely negotiated a shaky bridge over the Agugga River (a tributary of the Aswa). The vegetation was now (Mile 42-65) Thorn Scrub alternating with thin woodland in parts, but *Albizzia spp.* appeared absent from the latter and there was little or no native population and cultivation. A few miles farther on the road was somewhat better and we passed through rather thick woodland alternating with much cultivation. Among the woodland from Mile 69 to Mile 72 were noticed scattered clumps of the tufted bamboo (*Oxytenanthera abyssinica*). The road continued to improve and we passed through much cotton cultivation and native food crops before entering a large cleared and grass-covered area in the midst of which Kitgum is set, arriving at the Government Rest House at 4.40 p.m., after a journey of 190 miles from Masindi. Although feeling very tired, a quick wash and brush up freshened me sufficiently to enable me to pay a visit to the District Commissioner's house to explain my visit (Kitgum not being in telegraphic communication, he had received no information regarding it) and enquire the state of the road ahead, which he told me was not very good, as heavy rains had already fallen between Kitgum and Torit.

#### *Kitgum to Torit.*

Kitgum is one of the most northerly of Uganda's administrative stations, and there are usually only three or four European officers stationed there, including a doctor. The natives wear very few clothes, the men usually only just a small loin cloth and the women a small apron or less. We were up early next morning, as we were hoping to reach Juba that day, but having to prepare our own breakfast prevented us leaving before 7 a.m. After leaving the township we continued to pass through a comparatively flat country with sandy soil which here is more reddish. There was very little vegetation left as grass fires had already swept over the district, hence the numerous ant-hills were more exposed and formed the

most prominent feature of the landscape. In the vicinity of Mussini, about Mile 14, is a fairly large village, and here a few lone specimens of weak and dejected-looking Banana plants were observed, evidently making a hard fight against adverse conditions. Farther on we passed through a patch of thin woodland, among which were noted a few *Combretum*, *Acacia*, *Albizzia* and *Odina* spp., but as we travel farther on the country becomes much drier with outcrops of ironstone rock here and there and a very poor shallow sandy soil elsewhere supporting a vegetation of thin Thorn Scrub. From Madi Opi, about Mile 29, it is even drier and vegetation more thorny. We are now approaching the most easterly corner of the Imatong Range, protruding ridges of which rise abruptly from the plain on our left, and show on this side mostly bare rock with occasional stunted trees and shrubs in crevices where they have gained a foothold. Pockets of more fertile soil in the plains below are usually indicated here and there by the presence of a few native huts surrounded by cultivated food plots. Between Mile 30 and 42 is a very dry patch with outcrops of ironstone and quartzite rocks and a scrub vegetation including thorny *Acacia*, arborescent and candelabra-shaped *Euphorbia*, a solitary stunted *Tamarindus indica*, shrubby *Dombeya*, species of *Aloe*, *Sansevieria* and *Asparagus*, *Hyparrhenia Ruprechtii* and *Lissochilus mediocris*. At Mile 42 we passed the Uganda-Sudan boundary and a couple of miles farther on we ran into heavy rain. Near Tereteinia the soil conditions are better and there is a fair population scattered about among *Acacia* Thorn country with here and there occasional Fan Palms. Rain was now falling heavily, and the road was bad, as evidently there had been heavy rains in this area for some days. These storms had washed the light loose surface soil into any low-lying depressions in the road, and, after floundering through several such muddy dips, we suddenly stuck in the middle of an extra large pool of black muddy "cotton soil" and water. The back wheels whizzed round furiously, but we only sank deeper into the mud until the smell of burning rubber from the friction of the mud on the back tyres made the driver stop the engine. Investigation showed that we had sunk in the mud until the car was resting on the running board between the mudguards. There were no people near where we were stuck, which was a desolate dreary part about 55 miles from Kitgum. Fortunately, it was still early, being 9.30 a.m., so the driver set off to walk back to Tereteinia, some 5 miles back, to try and get help. It was still raining heavily, but I and the boy tried to turn the water off the road to drain the pool of water, though our efforts were unsuccessful as there was not sufficient fall to get the water away. After noting the dominant grasses here, which proved to be *Hyparrhenia Ruprechtii*, *Chloris Gayana* and *Sporobolus pyramidalis*, we retired to the car and decided to have some lunch while we waited for the driver to return.

Soon after noon, a party of tourists, whom we had left at Kitgum, arrived in one of Motor Tours cars driven by one of their expert European drivers. As we were stuck in the middle of the road it was impossible for them to pass. The driver told me that they had already had trouble and had been off the road themselves and had to

put chains on the back wheels. We thought that he might get round us by getting off the road and traversing some ground on the higher side of the road. After we had scouted round to find the best route, he made an attempt, but only succeeded in getting stuck in the mud a few yards off the road. Fortunately my driver now arrived with some natives and they were able to help him get his car back on to the road again.

We now turned our attention to our own car, but even with some twenty or thirty men heaving, pushing and pulling, and the engine running, we were unable to make the car budge. The position was now becoming alarming. The party of tourists included two ladies and they had to reach Juba next day in order to catch the steamer, while none of us were anxious to spend the night in this barren spot. Just when things seemed hopeless, however, a powerful car from Kenya, which had been one of those on safari with the Prince of Wales in the Sudan, arrived on other side of the mud pool. Strong ropes were available and, with the Kenya driver's consent, these were tied to the front of both cars (it was not safe for him to try and turn his car round). All the porters and both drivers got ready and, when the word was given, both engines roared, the Kenya one in reverse, ours full speed ahead, natives pushing and shouting, we shot out of the mud pool safely to comparatively firm ground amid shouts of joy and expressions of relief. After thanking the Kenya driver for his help we stood aside to watch his demonstration of the best manner of "shooting" through these mud pools, of which, apparently he had had much experience. He had good chains on both driving wheels and, with his engine in low gear, and revolving at full speed, he shot through the mud before the car had time to sink in. While our own driver put chains on the back wheels of our car (chains retard speed and wear the tyres, hence presumably the reason he had not put them on before) the Motor Tour's cars also passed safely over and, after being assured that we were now alright, went on ahead of us.

All this time it had been steadily raining, but after we got away at 2.45 p.m. (we had been stuck in the mud for over 5 hours) the rain stopped, but the road was simply awful. The two cars which had already passed over before us had ploughed deep wheel tracks in the soft surface. Fortunately, the chains on the wheels held and kept us from sticking fast. However, we had not done many miles before we came up with Motor Tour's car stopped in front of a convoy of small lorries, one of which was stuck in the middle of a bridge over a stream (probably the River Kos). As there were about six Europeans with the convoy and they did not need our help we and Motor Tour's decided to try fording the stream alongside the bridge. Motor Tour's car crossed first without mishap so we followed suit and also landed safely though we bumped rather badly as I think that the driver crossed at too great a speed. Progress was still slow and difficult until about Mile 55 from Kitgum when the sun came out quite hot and the road began to dry up. There was little change in the vegetation which was mainly Thorn Scrub with here and there a few Fan Palms or sometimes low Woodland among which were occasionally noted *Tamarindus indicus* and *Kigelia* sp. with long thick,

sausage-like fruits. We passed through native villages fairly frequently at intervals of from 5 to 15 miles and noted large herds of cattle and flocks of sheep and goats, in fact, too many for the grazing available at the time of our visit. After passing Mulongore (Mile 76) we began to leave behind the Imatong Range which had been more or less close on our left continually since crossing the Uganda-Sudan boundary. Near Sunnat (Mile 89) branching Fan Palms (The Doum Palm, *Hyphaene thebaica*) were noticed for the first time on the journey but were of fairly frequent occurrence between here and the Nile at Juba. We had now descended below 3,000 feet altitude and were away from the beneficial influence of the Imatong range in a somewhat hotter and drier climate, though the change was almost imperceptible and there were still plenty of populated villages and livestock. The road became very bad again at Mile 99, where it passes through "black cotton soil" and Thorn Scrub vegetation and did not improve again before reaching Torit. After another twenty miles of slow driving we pushed on faster as darkness was now falling. It was quite dark before we had completed the intervening ten miles to the township, so, none of us having any knowledge of the station, we decided to stay at Motor Tour's Rest Camp three miles beyond. On reaching there, we were thankful to obtain hot food and drink and a hot bath before turning in for a much needed rest. The Swahili driver had suffered most from strain and travelling on bad roads as hitherto he had driven mainly on the comparatively good and well-metalled Uganda roads. Although we had only covered 133 miles from Kitgum the bad road and delay *en route* had made the journey appear much longer.

#### *Torit-Juba.*

Next morning we were not on the move quite so early, but by 8 a.m. we left the Rest Camp for Torit township to obtain petrol and interview the District Commissioner. He informed me that I was to proceed to Juba, as the Governor of Mongalla Province was there, and not at Mongalla, the provincial headquarters. After advising us where to get petrol (which was then very scarce, and I doubt if we should have got any without his help) we filled up in the bazaar and left at 9.5 a.m. Torit itself is a fairly large administrative station with a large native population in addition to the bazaar and Government buildings. The country between Torit and Juba is comparatively flat and low-lying, and in parts the road is being raised up to prevent flooding. It is also being metalled and eventually will prove a good road, but on account of these alterations we frequently had to travel on tracks alongside the road which sometimes twisted about quite a lot to avoid tree stumps and other obstacles. There was little change in the general character of the vegetation from that of the previous afternoon. Thorny Scrub or Acacia Woodlands sometimes mixed with other trees such as *Tamarindus* and *Kigelia* and occasionally strands of the Borassus Palm in sandy stream valleys. Up to near Mile 41 from Torit there was a fair scattered population but here we ran into an unpopulated Tsetse Fly belt and for several miles I and my boy were kept busy trying to drive out or kill those which entered the car in search of a meal. Fortunately, we escaped with a few bites though the flies were evidently very hungry and not easily

driven off. At Mile 56, some clumps of *Oxytenanthera abyssinica* were observed, though they were rather weak specimens, near a dried up stream bed. At Mile 61 we suddenly heard a rattling under the car and pulled up to find that the main leaf of one of the front springs had broken, most probably owing to damage caused the previous day when fording the stream. This was at 11.30 a.m. and after binding it up with rope as best we could, we set off again just after noon. We now had to proceed cautiously as we did not want to get stranded altogether. Fortunately, we met with no further mishap and eventually reached the Nile ferry at 1 p.m. There had been no further change in the vegetation, the few trees near the river bank being thorny *Acacia* spp. and *Kigelia* sp. After a short wait we crossed by the steam ferry which took about ten minutes crossing over. Juba is a comparatively new town on or near the site of Gondokoro, and the hotel is a fine modern building with excellent accommodation, situated a mile or two from the ferry. It is, however, very hot in Juba and I should not like to stay there long. Between Kampala and Juba according to our reckoning, we had covered 580 miles in three and a half days and but for our delay between Kitgum and Torit, should have covered the distance easily in three days. Night travelling was not attempted as it is usually dark by 6.30 p.m. After being allotted a room and having had a wash and change, I was glad to sit down to a comfortable, though rather late, lunch. At the hotel I was fortunate in meeting Mr. Davis of the Sudan Department of Agriculture who was able to arrange for me to see the Governor of Mongalla on his steamer next morning (Sunday), when we were able to fix up the itinerary of my tour in Mongalla Province which occupied over a month and an account of which must be left over for some other occasion.

J. D. SNOWDEN,  
(1933).



## THE ASSOCIATION OF KEW GARDENERS IN AMERICA.

## THE ANNUAL DINNER, 1934.

Evidence of the fraternal spirit and good fellowship that prevails amongst Old Kewites was again very apparent at the pleasant gathering at the Roosevelt Hotel, in New York City, on Saturday evening, March 24th, 1934. After a splendid dinner at 7 p.m., at which much conviviality prevailed, Montague Free, who acted as a genial host, welcomed the members and their guests, numbering in all forty, of whom twenty-five were past Kewites. Felicitations by way of cable passed between the President of the Kew Guild (Arthur Osborn) the Hon. Secretary (Ernest G. Dunk) and ourselves, and the President no doubt had happy recollections of a similar occasion in 1930, when he was the guest of the evening.

We were extremely fortunate to have as our guests, Sir Frederick William Moore and Lady Moore, of Glasnevin. Sir Frederick spoke highly of Kew and its men in the realm of horticulture, and especially of their accomplishments in the United States. He recalled his first visit to Kew with his father in 1876, and of meeting Sir Joseph Hooker and old John Smith, the Curator, and of the many capable men along the line since those days, commenting on the honourable way the Royal Botanic Gardens, Kew, have been conducted by such practical men as Nicholson, Watson, Bean, Taylor, Coutts and others. Lady Moore, with her charming manner, endeared herself to all who came in contact with her, and related some very entertaining stories of Sir Frederick and his father before him, at Glasnevin, and remarked in what capable hands the Gardens there, were to-day under the direction of J. W. Besant, and spoke highly of recent Kew men who had worked at Glasnevin and had helped thereby to be a credit to themselves.

Mr. Richardson Wright, Editor of "House and Garden," expressed his pleasure at again being a guest, and stated that he was very anxious to see a scheme inaugurated in England, whereby successful participants could be sent out to the United States and by being employed in various centres over a given time, acquire a knowledge of American methods of horticultural practice. The Secretary endorsed this suggestion and said that this would be an excellent procedure if it could be worked out reciprocally, as many young men in the United States would be glad indeed to receive an English training for two years. Mr. J. Lambert stressed the necessity for more trained men in the United States. Mr. Downer gave a very lucid and entertaining history of the Kew Guild and its early vicissitudes and the freak ideas that have tried to attach themselves to it, most of which have been lived down, and in spite of all, still functions, as we sincerely hope it will continue to in the way its originators intended it should, which is especially patent to the larger number of its members that reside outside the British Isles. Mr. T. H. Everett added considerable humour to the occasion by his rendering of the poem entitled, "The Blue Apron," which appeared some years ago in the Journal of the Kew Guild. Dr. C. Stuart Gager, Director of the Brooklyn Botanic Garden, rendered compliments to Kew in the way it has helped the development of the garden at Brooklyn, in the

person of Mr. Montague Free during the past twenty years. The most interesting innovation was a roll call of those present, each member standing in turn, and stating his year of leaving Kew, and where now located and in what capacity.

Kewites meet on these occasions who are entirely unfamiliar with each other. It was resolved to meet again in 1935, on the Saturday night of the International Flower Show, at the Hotel Roosevelt.

Those present included :—C. J. Agate, R. Barton, H. M. Blanche, J. Brown, S. R. Candler, A. W. Close, G. Coombes, Mr. and Mrs. E. S. Dodd, Mr. and Mrs. H. E. Downer, L. Durchanek, J. Ellis, Mr. and Mrs. T. H. Everett, Mr. and Mrs. M. Free, W. J. Ing, A. J. Jennings, W. H. Judd, J. Lambert, E. J. Mische, H. F. Riebe, R. L. Roehrs, J. A. Semple, J. Sharps, E. K. Thomas, Mr. and Mrs. A. J. Thornton, Mr. and Mrs. J. H. Watts; the guests were Sir Frederick William Moore, Lady Moore, Richardson Wright, Dr. and Mrs. C. Stuart Gager, Dr. H. A. Gleason (Curator of the New York Botanic Garden), Mr. Medlock, Mrs. J. C. Vallance and Miss Dixon.

The report of the Hon. Treasurer showed :—

Balance held in trust (First National Bank of Boston)

March 25th, 1933	...	...	...	...	\$ 35.52
Interest to October 1st, 1933	...	...	...	...	.94

Balance in hand March 24th, 1934	...	...	...	\$ 36.46
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Expenses :—

Typing	...	\$ 1.20	
Postages	...	\$ 1.50	
Cable to			
England		\$ 1.77	
3 Guests to			
Dinner, March			
24th 1934	...	\$11.25	\$ 15.72

Balance in hand, March 27th, 1934	...	...	...	\$ 20.74
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WM. H. JUDD,

*Hon. Secretary-Treasurer.*

## In Memoriam

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WILLIAM GRANT CRAIB, M.A., F.R.S.E., F.L.S.

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The death of Professor W. G. Craib at Kew last summer, came as a very great shock. As was his custom, Professor Craib, accompanied by Mrs. Craib, was spending several weeks of his summer holiday working on the Flora of Siam in the Herbarium, when he was taken ill and died suddenly on September 1st. He was buried at Richmond, on September 5th, the funeral service being held at St. Luke's, Kew Gardens.

Craib was born at Kirkside, Banff, in 1882, and studied at the Banff and Fordyce Academies, and later at Aberdeen University, where he took his M.A. in 1907, with special distinction in botany. In 1908 he was appointed to the temporary post of Acting Curator in the Herbarium at the Royal Botanic Garden, Calcutta. When the post of the Assistant for India in the Herbarium at Kew fell vacant in 1909, Craib was appointed, which post he held for seven years. During that period he was engaged in work on the floras of India and China and commenced what proved to be the great research work of his life, a comprehensive systematic investigation of the Flora of Siam.

Craib left Kew in 1915, having been appointed Lecturer in Forest Botany at Edinburgh. Here he also took up work for the Air Board, and during that difficult time he put in very long days, Sundays included, on timber problems. It was in 1920 that Craib succeeded Professor J. W. H. Trail in the Chair of Botany of Aberdeen, a post which he filled with conspicuous success. He was also Keeper of the Cruickshank Botanic Garden. As far as his teaching and other duties permitted, he gave himself up wholeheartedly, evenings, week-ends and holidays, to the botany of Siam, and in the very numerous works and papers which he published, upwards of 700 new species were described. Aberdeen was maintained, moreover, as one of the few centres where students were trained for research in systematic botany, and many of his students visited the Kew Herbarium with a view to extending their experience in this branch of botany.

The above is a very brief outline of Professor Craib's career; a full account will be found in the *Kew Bulletin*, 1933, pp. 409-412.

Craib married in 1917, Miss Mary Beatrice Turner, of Acton, and Mrs. Craib has always been a loyal and warm supporter of Professor Craib in his work. In the pre-War days at the Herbarium, he was greatly esteemed, being noted for his industry, sound work, and his readiness to help the younger members of the staff. His classical training was a special asset in this connection. Although he was of a retiring nature his dry humour made him very popular amongst



those who knew him. He always retained an affection for Kew and his loyalty to the Establishment was most marked. At his home in the North, Tillydrone House, Old Aberdeen, Craib, in spite of having lost a leg in an accident, took great interest in his garden, and both he and Mrs. Craib always accorded a generous Scottish welcome to visiting botanists and specially to any of his old friends from Kew. A. D. C.

#### CHARLES E. WEEKS.

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Many Kewites, and among them, those who served at Kew during the difficult years of the Great War, will learn with regret of the death of Mr. Charles E. Weeks, on March 13th, 1934, at Clacton, Essex, at the age of seventy-seven years.

Mr. Weeks was born on August 31st, 1856, and, on leaving school, entered James Veitch and Sons' nurseries. He was for many years in charge of the soft-wooded department at Chelsea, and afterwards at the Feltham nurseries. His total service with Messrs. James Veitch and Sons extended over a period of forty-five years. Shortly after the outbreak of the War he came to Kew (on December 21st, 1914), and, except for a brief period, remained until March 4th, 1922. He was sub-foreman in charge of the Propagating Pits for a while, but he will be remembered for his valuable work as sub-foreman of the Decorative Department, where his wide knowledge of plants was so useful at that time. He retired from the horticultural profession on relinquishing his post at Kew in 1922, and went to live at Clacton, where he and Mrs. Weeks celebrated their golden wedding on April 10th, 1932. At Clacton he soon became a well-known personality, and took a great interest in local affairs. He leaves a widow and two daughters, to whom we extend our deep sympathy in their loss.

#### EMIL T. MISCHE.

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Mr. Emil T. Mische, one of the few native-born American Kewites, passed away in New York City on April 23rd, 1934, following a brief illness of pneumonia.

He was born in Syracuse, New York State, in 1874, and after leaving school went to work at the Missouri Botanic Garden at St. Louis, under the late Dr. Trelease. While here he made up his mind as to his future career and his desire to work at Kew, the Arnold Arboretum, and in later years for the celebrated firm of landscape architects (Messrs. Olmsted Brothers at Brooklyn in Massachusetts). At the Chicago Exposition in 1893, he met George Nicholson, and this led to his going to Kew in October, 1896. That winter we find he was an enthusiastic member of the Kew Mutual Improvement Society and he was awarded a prize for "his contributions of help and usefulness to the welfare of the Society."

When his time at Kew was nearing its close, it became a simple matter for him to be recommended to the Arnold Arboretum, whence he came in November, 1897, and from which institution he later joined the nearby firm of Olmsted Bros., and devoted the rest of his career principally to landscape gardening.

In 1905 he was appointed Superintendent of Parks for the City of Madison, Wisconsin, where he stayed until 1915, and for the next two years held a similar position at Portland, Oregon, relinquishing his position (in 1917) to start in business on his own account in that city and to continue there for eleven years.

While at Madison (in 1905) he became a member of the American Society of Landscape Architects, and in 1920 he was elected a Fellow of that Society. He was active in the Pacific Coast Chapter of this organisation from its inception in 1919 until 1930, holding the office of President during 1929 and 1930. During the World War he was made a special investigator for the Town Planning Department of the United States Housing Corporation. In 1917 we find that he became a life member of the Kew Guild, and since he came to the Eastern American States again in 1930, has been an active supporter of the Association of Kew Gardeners in America, and attended the last four meetings and annual re-unions. He left Portland, Oregon, in 1928, and spent a year or so at Los Angeles, California, returning to Boston in the fall of 1930 to renew his acquaintance with the firm of Olmsted Bros.

I first met Mische when he and Fred Cole, another old Kewite from Seattle, Washington, dined with me on the evening of September 6th, 1930, and on September 9th, we spent the evening with Dr. E. H. Wilson, only a few weeks before he passed away. Wilson had not seen Mische since they were together at Kew in 1897, when they shared the same room in Gloucester Road, and Wilson remarked how he was kept awake by Mische's "tonsililar music"! It certainly was very interesting to hear those two talk about old times and the happenings of the intervening thirty-three years.

Soon after his return to Boston, he was appointed chief assistant in the construction of Fort Tryon Park in New York City, and which, when completed by Messrs. Olmsted Bros., is to be presented to that city by Mr. John D. Rockefeller, Junr.

Mische was a very likeable man, always jolly, and a good companion, and it gives me much pleasure to recall that I spent part of the day with him in New York on March 23rd, looking over the new Park, in the development of which he was so interested, and that he was with us at the annual dinner on the following day. At that time he was full of life and enthusiasm, and little did we realise how soon he would be called to the Great Beyond.

The funeral service was held at the Wadsworth Avenue Baptist Church in New York City on Wednesday, April 25th, when several old Kewites paid their last respects to a devoted friend and colleague. He leaves a son, in the nursery business in Tualatin, Oregon, to whom we extend our sympathies.

W. H. JUDD,  
*Arnold Arboretum.*

## JOHN WILKIE.

We learn from the Middlesex County Times of February 10th, 1934, of the death of Mr. John Wilkie, at the age of 96 years.

He was formerly Clerk of the Works at St. James's Palace, from which position he retired in 1903, and had been associated with Kew and Richmond Park previously. Mr. Wilkie was an ardent Roman Catholic, and acted as honorary clerk of the works during the building of the Roman Catholic Church of Our Lady of Loreto and St. Winifred at Kew at the special request of the architect, the late Canon Scoles.

## WALTER IRVING, A.H.R.H.S.

The news of the death of Mr. Walter Irving on April 23rd, 1934, must have come as a shock to many Kewites.

Mr. Irving was born at Wickham Market, Suffolk, on August 3rd, 1867. He received his early training under his father, who was head gardener to the Duke of Hamilton at Easton Park. He left here to gain further experience at Sefton Park, Slough, and later went to "The Grange," Old Windsor. Subsequently he changed to a position with Messrs. Lee at their nurseries at Hammersmith. Belvoir Castle was his next situation, and from these famous gardens he came on to Kew on October 20th, 1890. For details of his career at Kew I would refer our readers to the Journal of the Kew Guild, Vol. IV., pp. 555 and 679, suffice to record in these lines that his abilities at Kew were recognised and in due course he was appointed to the charge of the Herbaceous and Alpine Department in succession to Mr. Daniel Dewar, and a change in status in June, 1922, saw him ranked as an Assistant Curator.

During his long period of service at Kew he was responsible for the reconstruction and replanting of the Rock Garden and this has always been one of the most pleasing features of the Gardens.

He was a quiet, unassuming man, a staunch friend, and many old Kewites have cause to remember with sincere gratitude his kindness and ready help at all times ungrudgingly given.

He was a well-known contributor to the horticultural Press, and among his other publications should be mentioned *Saxifrages*, *Rock Gardening*, and *The Book of the Unheated Greenhouse*.

On his retirement in August, 1928, Mr. Irving went to live at "Kewense," Lightwater, Surrey. Mr. Irving was President of the Kew Guild in 1927-28, and in 1930, the Council of the Royal Horticultural Society made him an Associate of Honour in recognition of his work among herbaceous and alpine plants.

The funeral service was held at Lightwater Parish Church, and many of his colleagues were present, including Messrs. Dallimore, Osborn and S. A. Skan.

We extend our sympathies to Mrs. Irving in her untimely loss, and are sure that all Kewites would wish to be associated in this expression of our regret.

MAX MORGENROTH.

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We learn that Mr. Max Morgenroth, of Bamberg (Bavaria), Germany, died on March 27th, 1932. He was born at Bamberg on June 15th, 1873, and early in life (at the age of 12 years) his eyesight caused much concern, and on medical advice he ceased to attend school and found that an occupation which took him entirely into the open air was his best chance of recovery from the malady which afflicted him. So he became a gardener in his native town. His eyesight improved and he returned to school later. The love of horticulture was awakened in him, and on finally leaving school he went to the municipal gardens at Munich, where he remained for a few years before proceeding to the University of Geneva to study botany and kindred subjects. A chance trip to England with one of his instructors gave him his first glimpse of Kew. During this visit he made enquiries as to the opportunity of entering the Gardens as a student, and after a time he secured a position in a large garden at Richmond. A year later, on September 12th, 1898, he came to Kew, and remained until September 9th, 1899. During his stay here he was well liked by the other students, and the news of his passing is spoken of with regret by many of his time.

On leaving Kew, on November 9th, 1899, he proceeded to France and secured a position in the famous gardens of the Rothschild family at Ferrière, near Paris, and also at Cannes. He remained in these gardens for two years, and later returned to his native country. For three years before his death he suffered from a painful illness that proved fatal on March 27th, 1932.

He was a life member of the Guild, and was much respected. To his widow and family we desire to extend our sympathy in the loss of a loving father and husband.

JOSEPH JONES, O.B.E., A.H.R.H.S.

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It is with much regret that we learn, as we go to press, of the death of Mr. Joseph Jones, former Curator and Agricultural Superintendent of Dominica, which occurred with tragic suddenness on the morning of May 1st, last. Mr. Jones rose in apparently good health, but was stricken with a series of apoplectic fits, to which he succumbed before noon.

He was buried in the Military Cemetery in the Lime Experiment Station, which he established and laboured in for so many years, in compliance with his own desire.

Mr. Jones went to Dominica in March, 1892, and retired in 1925. It was generally recognised that the Botanic Gardens at Dominica were the most beautiful in the smaller West Indian Islands.

A fuller account of Mr. Jones's life and work will appear in our next issue.

FREDERICK GIFFORD.

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We regret to record the death of a veteran Kewite and nurseryman in Mr. Frederick Gifford, at his home in Hornchurch, Essex, on December 11th, 1933, at the age of 84.

He first entered Kew on February 2nd, 1873, and left June 6th, 1874. For many years he carried on a nursery business in Tottenham, and later took over the Montague Nursery at Hornchurch, Essex.

GERALD WILLIAM BUTCHER.

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The news reached us early in the year of the death of Mr. Gerald William Butcher. Mr. Butcher was born on November 3rd, 1887, and from early days his interest in horticulture was manifest. He began as a garden boy, and later went to the famous gardens at Leonardslee, Horsham, Sussex. He entered Kew on February 6th, 1911, was promoted to be sub-foreman of the propagating pits on March 11th, 1912, and left on April 29th, 1912, to become Assistant Editor of the *Journal of Horticulture*.

He was one of the pioneers of the allotment movement which was given such impetus during the years of the Great War. In 1921 he became a Justice of the Peace and a member of the Sussex County Council. His life and activities were centred in Hartfield, Sussex. He was a lecturer of repute, and in the Kew Guild Journal for 1925, there is an account of his interest in the work carried on in H.M. Prisons in connection with gardening and nature study. He was a frequent contributor to the horticultural press and gardening correspondent to the *Daily Express* from 1929 until the time of his death.

DUKINFIELD HENRY SCOTT, M.A., Ph.D., D.Sc., F.R.S.

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Dr. Scott was Hon. Keeper of the Jodrell Laboratory from 1892 to 1906, and died on January 29th, 1934. It is recorded that Dr. Scott used to ride over daily from Wimbledon across the Common and Richmond Park, and thence along Sandycombe Road (then known as Sandy Lane, and indeed a pleasant country lane), to Kew, and stabled his horse close to where Messrs. Newen's shop now stands.

He was Assistant Professor of Botany under Professor Daniel Oliver, at University College, London, and later at the Royal College of Science, where he remained until 1892. Feeling a desire for freedom for his botanical researches he resigned his professorship at the college and accepted the post of Honorary Keeper of the Jodrell Laboratory—a post which was specially created for him and one to which he brought great distinction.

He married Miss H. V. Klaassen in 1887, a very happy union which was sadly terminated by Mrs. Scott's death in 1929.

While at Kew, he carried out the official duties connected with the post and for a time employed his own private assistant, the first being Mr. W. C. Worsdell, while Mr. L. A. Boodle was another of his assistants who eventually succeeded him as Assistant Keeper of the Laboratory.

He published many important papers while at Kew, the earlier ones dealing mainly with the anatomical structure of living plants, but as time went on his interest turned to the structure of Fossil plants and more especially those of the carboniferous period, on which he was the chief authority of his day.

Dr. Scott was elected a Fellow of the Royal Society in 1894, a Fellow of the Linnean as early as 1880, and from 1902-1908 he filled the office of Botanical Secretary, and was President of the Society from 1908 to 1912. On two occasions, in 1896 and again in 1921, he was President of the Botanical Section of the British Association.

Sir John Farmer thus wrote in *The Times* on February 3rd, 1934 :

" Scott was not only a scientific man of universally recognized eminence, but he was also an 'influence.' Very tenacious of well-considered views, he was nevertheless by no means an obstructive critic, and there are many of his colleagues who will recall discussions, never acrimonious but always well informed and helpful, on those branches of the science which he had made specially his own. His name is assured of a permanent and honoured position in the literature of his subject, and his memory as a man will ever be affectionately cherished by those who enjoyed the privilege of his friendship."

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#### HERMANN LARSEN and WILLIAM MANNING.

As we close for press two other well known Kewites in Mr. Hermann Larsen (who left Kew, March, 1898), and Mr. William Manning (who left, September, 1871), have joined the Great Majority. We shall include " In Memoriam " notices of our late associates in our next issue when more details will be available.



## KEW STAFF (JUNE 1934).

(The Names of Life Members are preceded by an Asterisk).

		Entered Kew.
<b>Director</b> .....	*Sir Arthur W. Hill, K.C.M.G., M.A., Sc.D., D.Sc. (Adelaide), F.R.S., F.L.S., F.N.Z. Inst.....	1907
<b>Assistant Director</b> .....	J. S. L. Gilmour, M.A., F.L.S. ....	1931
<b>Economic Botanist</b> .....	H. C. Sampson, C.I.E., B.Sc., F.L.S....	1927
<b>Assistant Botanist</b> .....	B. L. Burtt .....	1931
<b>Clerk (Higher Grade)</b> .....	S. F. Ormsby.....	1923
<b>Clerical Officer</b> .....	Arthur Hearn .....	1932
<b>Keeper of Herbarium and Library</b> .....	*A. D. Cotton, M.B.E., F.L.S. ....	1904
<b>Deputy Keeper of Herbarium</b> .....	Thomas A. Sprague, D.Sc., F.L.S.....	1900
<b>Botanist</b> .....	*Miss Elsie M. Wakefield, M.A., F.L.S.	1910
" .....	William B. Turrill, D.Sc., F.L.S. ....	1909
" .....	John Hutchinson, F.L.S.....	1904†
" .....	Cecil V. B. Marquand, M.A., F.L.S....	1923
" .....	V. S. Summerhayes, B.Sc.....	1924
" .....	Miss M. L. Green, B.A., F.L.S.....	1912
" .....	F. Ballard, B.Sc.....	1929
" .....	N. Y. Sandwith, M.A.....	1924
" (Temporary) .....	C. E. Hubbard.....	1920†
" .....	E. W. B. H. Milne-Redhead, B.A.....	1929
" for India.....	C. E. C. Fischer.....	1925
" for South Africa.....	R. A. Dyer, M.Sc.....	1931
<b>Botanical Artist</b> .....	Gerald Atkinson.....	1922
<b>Assistant Botanist (Library)</b> .....	Ernest Nelves.....	1920†
<b>Assistant (Temporary Technical)</b> .....	Miss Ada F. Fitch.....	1892
" " " .....	Miss Mabel I. Skan.....	1919
" " " .....	Miss S. K. White.....	1929
" " " .....	Frederick C. Woodgate .....	1922
" " " .....	James H. Turner.....	1928†
" " " .....	A. K. Jackson.....	1931
<b>Temporary Assistant Botanist</b> .....	A. R. Horwood, F.L.S.....	1924
" " " .....	H. K. A. Shaw, B.A.....	1925
" " " .....	Miss C. I. Dickinson, B.A.....	1929
<b>Clerical Officer</b> .....	M. C. Prior.....	1932
" .....	W. Walker.....	1929
<b>Preparer (Herbarium)</b> .....	E. E. Knowles.....	1924
" .....	J. R. Jones.....	1924
" .....	A. W. Olding .....	1925
" .....	D. Saville.....	1920†
" .....	G. Tidy.....	1927
" .....	C. F. Norman.....	1927
" .....	T. P. Flynn.....	1928
<b>Assistant Keeper, Jodrell Laboratory</b> .....	C. R. Metcalfe, M.A., Ph.D. ....	1930
<b>Keeper of Museums</b> .....	*William Dallimore, V.M.H.....	1891†
<b>Botanist</b> .....	*John Henry Holland, F.L.S.....	1895†
" .....	F. N. Howes, M.Sc.....	1926
<b>Preparer</b> .....	Laurence J. Harding.....	1913
<b>Curator of the Gardens</b> .....	*John Coutts, V.M.H., A.H.R.H.S. ...	1896†
<b>Assistant Curators :—</b>		
Herbaceous Department.....	George William Robinson.....	1922†
Arboretum .....	*Arthur Osborn.....	1899†
Decorative Department.....	A. S. Wilson.....	1932†
Tropical Department.....	Lewis Stenning.....	1925†
Temperate Department.....	*Charles P. Raffill .....	1898†
<b>Clerk (Higher Grade)</b> .....	Reginald F. Williams.....	1923
<b>Clerical Officer</b> .....	Ernest G. Dunk.....	1914†
" .....	W. D. H. Prior.....	1933
<b>Clerk</b> .....	Frank C. Aldridge.....	1931
<b>Shorthand Typist</b> .....	Miss G. Pond.....	1929
" .....	Miss A. E. Barnes.....	1931
" .....	Miss H. B. Judge.....	1930
" .....	Miss G. Rockell.....	1928
<b>Sergeant-Constable</b> .....	Joseph Sealy.....	1903
<b>Packer and Storekeeper</b> .....	Harry W. Ruck.....	1907†
<b>Assistant Superintendent of Works</b> .....	T. W. Yates.....	1933

† Formerly a Student Gardener at Kew.



## SUB-FOREMEN AND ARBORETUM PROPAGATOR.

<i>Department.</i>	<i>Name.</i>	<i>Entered Kew.</i>	<i>Previous Situation.</i>
Arboretum .....	Charles F. Coates	—	—
Rock Garden .....	George Wassell.....	11 Jan., 1932	Parks Department,
Ferneries .....	Geo. E. Wolsten- holme .....	11 Nov., 1929	Birmingham.
Propagating Pits	James L. Glasheen	5 Oct., 1931	Marsden Nurseries, Ashstead
Temperate House	Wm. W. McKenzie	3 Mar., 1930	R.H.S. Gardens, Wisley
Herbaceous.....	James C. Taylor ...	9 Jan., 1933	Botanic Gardens, Glasgow.
Flower Garden ...	Gerald F. Wheeler, N.D.H.	23 Jan., 1932	Dartington Hall, Totnes.
Decorative .....	Arthur P. Walby ...	28 Apr., 1930	Parks Department, Beckenham
Temp. House Pits	John R. Hibbert	30 Nov., 1931	Balcombe Place, Balcombe, Sussex.
Orchids & Range	C. Brian Gibbins ...	31 Mar., 1930	Hyde Park, London, W.
Palm House .....	Arthur J. Taylor...	29 Feb., 1932	Mereworth Castle Gardens. Loddon Gardens, Twyford.

## STUDENT GARDENERS.

<i>Name.</i>	<i>Entered Kew.</i>	<i>Previous Situation.</i>
Leslie P. Bachelor.....	9 May, 1932	Parks Department, Heston & Isleworth.
Henry J. Buck .....	8 June, 1932	Greenford Green, Middlesex.
Arthur R. T. Buckley ...	10 July, 1933	Dartington Hall, Totnes.
Thomas R. Clark .....	24 Oct., 1932	Parks Department, Salford.
Jean Commeau .....	28 May, 1934	Luxembourg Gardens, Paris.
Harry A. Cossom .....	24 Apr., 1933	Parks Dept., Cardiff.
Henry F. Davies .....	16 Oct., 1933	Garden Supplies Association, London, E.C.1.
George Dean .....	14 May, 1934	Parks Department, Burnley.
William F. Downes .....	10 July, 1933	University College, Reading
George P. W. Dumke...	3 Apr., 1934	Botanic Garden, Berlin-Dahlem.
George G. Elphick.....	7 Dec., 1931	Ford Manor Gardens, Dormansland.
Frank H. Eul .....	23 May, 1932	St. Edward's School, Oxford.
Walter E. Everett .....	9 Jan., 1933	"Hi-Esmaro," New York, U.S.A.
John W. Ewart.....	19 Feb., 1934	Botanic Gardens, Christchurch, New Zealand.
Joseph Fisher .....	11 May, 1931	Highdown, Goring-by-Sea.
Guy W. G. Freeman...	9 Apr., 1934	John Waterer's Nurseries, Bagshot, Surrey.
Cornelius van Ginkel...	30 Aug. 1933	Ecole Nationale d'horticulture, Versailles.
George E. Gough .....	12 Oct., 1931	Parks Department, Salford, Lancs.
Gordon E. Groves .....	23 Oct., 1933	Botanic Garden, Cambridge.
Joseph Heppell .....	30 Apr., 1934	Exton Park, Oakham, Rutland.
Robert D. Hogg .....	3 Apr., 1934	Botanic Garden, Cambridge.
Bernard M. E. S. Hoogstad	3 Oct., 1933	Rijks Tuinbouwschool, Boskoop, Holland.
Ernest G. Hooper.....	4 Oct., 1932	Dartington Hall, Totnes.
George A. Hyland.....	24 July, 1933	Parks Dept., Manchester.
Arthur W. J. Ivey .....	10 Apr., 1933	Woburn Abbey Gardens.
Alan G. Kennelly.....	6 Feb., 1933	Brackenhill Gardens, Bournemouth.
Gordon J. Leith .....	23 Oct., 1933	Parks Department, Swansea.
John G. C. Mackenzie ...	7 Mar., 1932	Botanic Garden, Dunedin, New Zealand.
John E. May.....	13 Mar., 1933	Dartington Hall, Totnes.
John Offley .....	8 Jan., 1934	St. John's College, Cambridge.
Percy W. Page .....	18 Sept. 1933	Bodnant, Tal-y-Cafn.
Ian R. Robbie.....	7 May, 1934	Parks Department, Salford.
Jack A. N. Scott .....	10 Aug., 1932	Messrs. Secretts, Twickenham, Middlesex.
Frank L. Simmonds .....	3 Nov., 1930	Orwell Park, Nacton, and Berlin Botanic Gardens
Joseph R. Spray .....	8 Aug., 1933	Parks Department, Southend-on-Sea.
Terzo Viale .....	1 Mar., 1934	La Mortola, Ventimiglia, Italy.
Bernard B. Wass.....	13 Nov., 1933	Aldenhall House Gardens, Elstree.
Donald V. Wells.....	11 Dec., 1933	Parks Department, Portsmouth.
Richard Vaughan-Williams	27 Feb. 1933	Messrs. Strachan & Evans, Ltd., Wrexham.

Garden Boys :—M. H. Dunk; G. Sealy; E. F. Bundy; C. J. Jackman; F. C. Brinsley  
H. J. Dean; P. L. J. Fysh.



## OLD KEWITES.

*(The Names of Life Members are preceded by an asterisk).*

<i>Name.</i>	<i>Left Kew.</i>	<i>Present Position and Address†.</i>
*Abbot, James M.....	Sept., 1898 ...	F., Park Farm, Woking Village, Surrey.
Adams, R. ....	Apr. 1903 ...	St. Joseph's Hospital, Burlington Lane, Chiswick.
Adamson, John.....	July 1909 ...	N., Moniaive, Dumfriesshire.
Agate, C. J.....	Apr. 1926 ...	33, Hicks Lane, Great Neck, Long Is., N.Y., U.S.A.
Aikman, John, M.B.E.....	Oct. 1932 ...	40, Mortlake Road, Kew.
*Aikman, Miss M. G.....	Nov. 1924 ...	40, Mortlake Road, Kew, Surrey
*Alcock, Mrs. N. L., F.L.S....	Nov. 1918 ...	Dept. of Botany, Royal Botanic Garden, Edinburgh.
Alcock, R. M.....	Mar. 1930 ...	H. G., Hailey, Ipsden, Oxon.
*Allen, C. E. F.....	Feb. 1904 ...	Supt. Agric., Port Darwin, N. Territory, Australia.
Allison, B. W.....	Jan. 1930 ...	Asst. Supt., Parks Dept., Salford, Lancs.
*Allt, W. S.....	Jan. 1911 ...	Cold Spring, New York, U.S.A.
Ashton, A. H. G., M.A.....	June 1925 ...	British Museum (Nat. Hist.), S.W.7.
*Anderson, A. W. C., N.D.H. (N.Z.) .....	Feb. 1926 ...	S., Parks and Reserves, Timaru, N.Z.
*Anderson, J. R.....	Oct. 1905 ...	Supt., John Blodgett Estate, Grand Rapids, Mich., U.S.A.
*Anderson, J. W.....	June 1910 ...	Minneopa, Cynwyd, N. Wales.
Andrews, C.....	Oct. 1922 ...	F., Tresco Abbey, Scilly Islands.
Archer, Sydney.....	Mar. 1895 ...	
*Arden, Stanley.....	June, 1900 ...	c/o National Bank of Australasia, Adelaide, S. Australia.
*Armbrecht, Otto.....	Jan. 1898	
Armstrong, James.....	Mar. 1893	
*Armstrong, Robert.....	Oct. 1897	
*Arnold, George.....	Oct. 1894 ...	Essex.
*Arnold, T. A.....	Jan. 1931 ...	c/o Municipality Buildings, Kimberley, South Africa.
*Arthur, Alec.....	April 1899 ...	U.S.A.
Ashlee, T. R.....	April 1910 ...	Univ. of Idaho, Moscow, Idaho, U.S.A.
Astley, James.....	Nov. 1898 ...	Vancouver, B.C., Canada.
Atkins, L. G., N.D.H.....	Oct. 1931 ...	The Lodge, King's Court, Forty Lane, Wembley Park.
Attenborough, F.....	Feb. 1896 ...	H. G. Annesley Ho., Villa Rd., Nottingham.
*Aubrey, A. E.....	April 1910 ...	12, Monk Hopton, Bridgnorth.
Augull, Karl.....	July 1902 ...	N., Latvia Dobeh, Vecvagar, Russia.
*Badgery, R.....	Aug. 1906 ...	Smallack Drive, Crown Hill, Devon.
*Baggesen, Niels.....	Dec. 1900 ...	Hardy Plant Nursery, Pembury, Tunbridge Wells.
Bailey, A. G., B.A.....	Dec., 1915 ...	Dept. Agric., Kenya Colony.
Bailey, Thomas.....	Sept. 1892 ...	Ravenscourt Park, W.6.
*Baker, A. F.....	April 1920 ...	Asst. Supt. of Parks and Fst., Box 288, King's Pk., Bloemfontein, S.A.
*Baker, E.....	Oct. 1920 ...	Supt., Parks Dept., Hackney, N.
Baker, G. A.....	Jan. 1911 ...	N., Buller Road, Laindon, Esses.
Baker, Wm. G., A.H.R.H.S.	Dec. 1887 ...	C., Bot. Gardens, Oxford.
*Balen, J. C. van.....	Mar. 1919 ...	P. W. Dept., Union Buildings, Pretoria, Union of S. Africa.
Bally, P.....	Aug. 1916 ...	
*Band, R.....	Oct. 1908 ...	c/o., 24, Clarence Road, Kew Gardens, Surrey
*Banfield, F. S., F.L.S.....	May 1927	

† *Abbreviations* :—H.G., Head Gardener ; F., Foreman ; N., Nurseryman ; M.G., Market Gardener ; C., Curator ; D., Director ; M., Manager ; B.G., Botanic Garden ; S., Superintendent, etc.